



Assets | Engineering | Environment | Noise | Spatial | Waste

Waste Management Plan

130 Wellington Street, Mosman Park

Prepared for Australian Development Capital Pty Ltd

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Project Number: TW20042



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Executive Summary

Australian Development Capital Pty Ltd is seeking development approval for the proposed mixed use development located at 130 Wellington Street, Mosman Park (the Proposal).

To satisfy the conditions of the development application the Town of Mosman 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
Residential - Building A & B					
Refuse	9,360	1,100L	5	Two times each week	Town of Mosman Park
Recycling	3,540	1,100L	2	Two times each week	Town of Mosman Park
Residential - Building C					
Refuse	3,840	1,100L	2	Two times each week	Town of Mosman Park
Recycling	1,140	1,100L	1	Two times each week	Town of Mosman Park
Commercial					
Refuse	22,322	1,100L	7	Three times each week	Private Contractor
Recycling	6,398	1,100L	2	Three times each week	Private Contractor

The Town will collect residential waste directly from the Bin Staging Area utilising the Loading Dock.

A Private Contractor will collect commercial waste directly from the Bin Staging Area utilising the Loading Dock.

All waste collection vehicles will have the ability to enter and exit the development in forward gear.

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



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1 Introduction

Australian Development Capital Pty Ltd is seeking development approval for the proposed mixed use development located at 130 Wellington Street, Mosman Park (the Proposal).

To satisfy the conditions of the development application the Town of Mosman 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.

The Proposal is bordered by Turnbull Way and Wellington Street to the north, Manning Street to the east, Samson Street to the south and residential properties 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 and recyclables) at the Proposal. Specifically, the WMP demonstrates that the Proposal is designed to:

- Adequately cater for the anticipated quantities of waste to be generated;
- Provide adequately sized Bin Storage Area, 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

The following section shows the waste generation rates utilised 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 residential apartments, townhouses and the floor area (m²) of the commercial tenancies at the Proposal. The Proposal consists of the following:

Residential:

- Apartments – 76, with breakdown as follows:
 - Building A & B:
 - One bedroom apartments – 7;
 - Two bedroom apartments – 25; and
 - Three bedroom apartments – 20.
 - Building C:
 - One bedroom apartments – 3;
 - Two bedroom apartments – 18; and
 - Three bedroom apartments – 3.
- Townhouses – 7.

Commercial:

- Supermarket – 809m²;
- Restaurant/Café – 265m²;
- Shop – 208m²;
- Shop – 96m²;
- Shop – 62m²;
- Shop – 80m²;
- Shop – 190m²;
- Restaurant/Café – 153m²;
- Recreation (Private) – 150m²; and
- Shop – 194m².

It should also be noted that:

- The Supermarket has their own back of house and manages waste through their internal processes governed by national waste collections contracts, and therefore has not been included as part of this report; and
- The Townhouses will have their own individual set of bins based on the Towns standard residential service, therefore waste calculations for the Townhouses have not been included in the below sections.

2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the following better practice guidelines:

- Western Australian Local Government Association's (WALGA) *Commercial and Industrial Waste Management Plan Guidelines* (2014);
- WALGA *Multiple Dwelling Waste Management Guidelines* (2014); and
- City of Melbourne's *Guidelines for Preparing a Waste Management Plan* (2015/2017).

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. This includes the following measures:

- A 'restaurant' waste generation rate has been utilised for the Restaurant/Café tenancies. It is considered highly unlikely that both tenancies at the Proposal will operate as formal restaurants, however, this generation rate has been used as it is the highest of all food and beverage tenancy types and is therefore overestimating the volume of waste to confirm the Proposals waste management capacity; and
- Seven days of operation has been assumed for all commercial tenancies. This is considered to be an over estimation as it is not uncommon for food and beverage tenancies to close operations post weekend trading, resulting in an over estimation of waste volumes generated. Therefore, it is expected that once the Proposal is operational the quantity of commercial bins required may be reduced which will free up space within the Bin Storage Area/Bin Staging Area.

Table 2-1 shows the waste generation rates applied to the proposed tenancies at the Proposal.

Table 2-1: Refuse and Recyclables Waste Generation Rates

Tenancy Type	Guidelines	Guideline Use Type	Refuse Generation Rate	Recyclables Generation Rate
Residential				
One bedroom apartment	WALGA	1 Bedroom	80L/week	20L/week
Two bedroom apartment	WALGA	2 Bedroom	160L/week	40L/week
Three bedroom apartment	WALGA	3+ Bedroom	240L/week	120L/week
Commercial				
Restaurant/Café	WALGA	Restaurant	660L/100m ² /day	130L/100m ² /day
Shop	WALGA	Retail shop (non-food) > 100m ²	50L/100m ² /day	50L/100m ² /day
Shop	WALGA	Retail shop (non-food) < 100m ²	50L/100m ² /day	25L/100m ² /day
Shop	WALGA	Retail shop (non-food) < 100m ²	50L/100m ² /day	25L/100m ² /day
Shop	WALGA	Retail shop (non-food) < 100m ²	50L/100m ² /day	25L/100m ² /day
Shop	WALGA	Retail shop (non-food) > 100m ²	50L/100m ² /day	50L/100m ² /day
Restaurant/Café	WALGA	Restaurant	660L/100m ² /day	130L/100m ² /day
Recreation (Private)	Melbourne	Gym	10L/100m ² /day	10L/100m ² /day
Shop	WALGA	Retail shop (non-food) > 100m ²	50L/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. The below sections show the waste generation volumes for the residential apartments (Building A & B and Building C) and the commercial tenancies.

2.3.1 Residential Waste – Building A & B

Building A and Building B cores/waste chutes terminate into a shared bin store, therefore, waste generation calculations for both buildings have been combined.

Building A & B residential waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown Table 2-2. It is estimated that Building A & B residential apartments will generate 9,360L of refuse and 3,540L of recyclables each week.

Table 2-2: Estimated Waste Generation – Building A & B

Residential Building A & B	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/Week)
Refuse			
One bedroom apartments	7	80	560
Two bedroom apartments	25	160	4,000
Three bedroom apartments	20	240	4,800
Total			9,360
Recyclables			
One bedroom apartments	7	20	140
Two bedroom apartments	25	40	1,000
Three bedroom apartments	20	120	2,400
Total			3,540

2.3.2 Residential Waste – Building C

Building C residential waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown Table 2-3. It is estimated that Building C residential apartments will generate 3,840L of refuse and 1,140L of recyclables each week.

Table 2-3: Estimated Waste Generation – Building C

Residential Building C	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/Week)
Refuse			
One bedroom apartments	3	80	240
Two bedroom apartments	18	160	2,880
Three bedroom apartments	3	240	720
Total			3,840
Recyclables			
One bedroom apartments	3	20	60
Two bedroom apartments	18	40	720
Three bedroom apartments	3	120	360
Total			1,140

2.3.3 Commercial Waste

Commercial waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-4. It is estimated that the commercial tenancies at the Proposal will generate 22,322L of refuse and 6,398L of recyclables each week.

Table 2-4: Estimated Waste Generation – Commercial

Commercial Tenancies	Floor Area (m ²)	Waste Generation Rate	Waste Generation (L/Week)
Refuse			
Restaurant/Café	265	660L/100m ² /day	12,243
Shop	208	50L/100m ² /day	728
Shop	96	50L/100m ² /day	336
Shop	62	50L/100m ² /day	217
Shop	80	50L/100m ² /day	280
Shop	190	50L/100m ² /day	665
Restaurant/Café	153	660L/100m ² /day	7,069
Recreation (Private)	150	10L/100m ² /day	105
Shop	194	50L/100m ² /day	679
Total			22,322
Recycling			
Restaurant/Café	265	130L/100m ² /day	2,412
Shop	208	50L/100m ² /day	728
Shop	96	25L/100m ² /day	168
Shop	62	25L/100m ² /day	109
Shop	80	25L/100m ² /day	140
Shop	190	50L/100m ² /day	665
Restaurant/Café	153	130L/100m ² /day	1,392
Recreation (Private)	150	10L/100m ² /day	105
Shop	194	50L/100m ² /day	679
Total			6,398



3 Internal Transfer of Waste

To ensure that waste is managed appropriately at the Proposal, it is important to allow for sufficient space to accommodate the required quantity of bins within the Bin Storage Area/Bin Staging Areas. The quantity, size and design of these areas are described in the following sections.

3.1 Residential Apartment Internal Bins

To promote positive recycling behaviour and maximise diversion from landfill, the residential apartments will have room to accommodate two under counter/kitchen type bins for the separate disposal of refuse and recyclables. The resident, or their authorised representative, will take the contents of these internal bins to the Proposals waste chute system, as described below.

3.1.1 Waste Chute System

To assist with efficient disposal of waste to the Bin Storage Area/Bin Staging Area, a dual chute waste system will be utilised within each of the Proposals main building cores. 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 residential apartment level, have self-closing doors with a 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. Where chute systems are installed, it is best practice for bins to have reinforced bases for bin longevity. Property managers are to bear the cost of reinforcing bin bases.

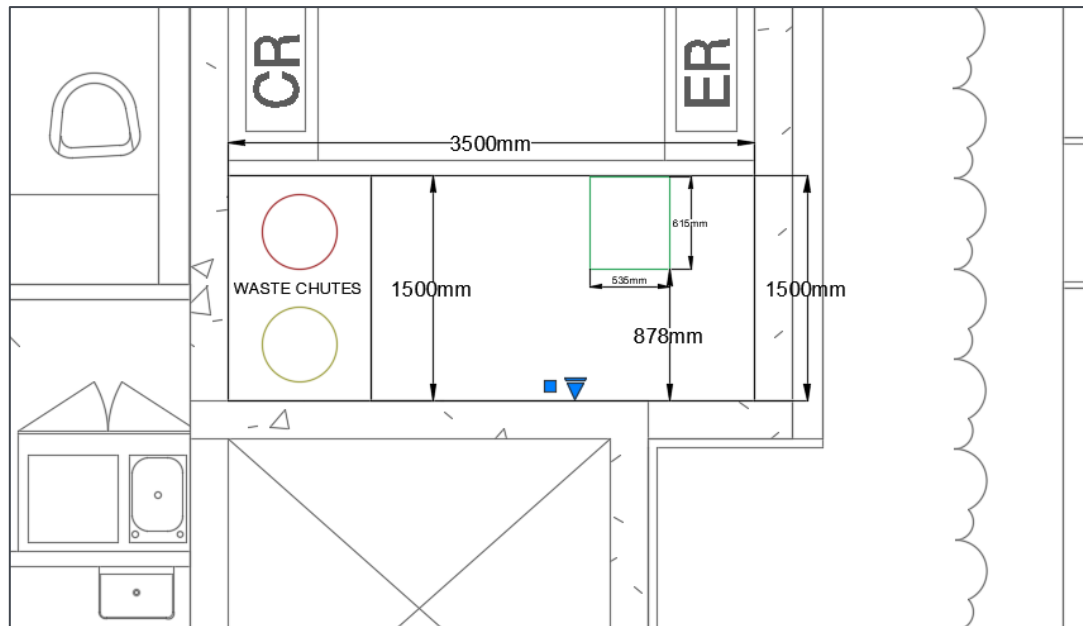
To increase operational efficiency, the Proposal may utilise a linear/carousel track system at the terminus of each of the waste chute systems to increase operational efficiency. Track systems can be designed to accommodate 2-4 bins which can be automatically or manually rotated to ensure the effective capture of waste material exiting the chute system. It can also be designed to send the building 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 building manager/caretaker would be required to manually swap full bins with empty bins on the track system, as necessary.

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 building manager/caretaker will provide training materials for all new residents on how to use the waste system (typically within a new resident/tenant's handbook). The building 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 indicates the Proposals waste chute room for a typical residential floor. The waste chute room on each level could also be used to temporarily house large cardboard items, bulky waste materials or bins for food organics that should not be placed in the chute system to reduce the likelihood of blockage in the waste chutes.

Diagram 1: Example of a Typical Residential Waste Chute Room



3.1.2 Provision for Food Organics Garden Organics (FOGO)

In the future it is expected that the Town may introduce 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 additional 240L FOGO bins, should the development be required to separate food waste for collection in the future.

Kitchen caddies would be used in each residential apartment to collect FOGO, which will then be taken by residents to the chute rooms on each residential floor for depositing into the communal 140L/240L lime green lidded FOGO bins (refer Diagram 1). These chute rooms/FOGO bins will be located in close proximity to each building core and lifts so that they are easily accessible by residents.

It is anticipated that these bins would be transferred by the building manager/caretaker to the Bin Staging Area on collection days and returned following collection. This will also allow the building 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. The Town will assess the FOGO bin numbers and collections in the future, as required.

3.2 Commercial Internal Bins

The commercial tenancies will have a minimum of two internal bins to facilitate the separate disposal of refuse and recyclables. These bins will be transferred by the tenants, staff or cleaners to the Bin Staging Area utilising the dedicated service pathways/corridors during the appropriate hours as determined by building management.

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

4 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Area/Bin Staging Area, as discussed in the below sections.

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	Bin Sizes			
	240L	360L	660L	1,100L
Depth (mm)	730	848	780	1,070
Width (mm)	585	680	1,260	1,240
Height (mm)	1,060	1,100	1,200	1,300
Area (mm ²)	427	577	983	1,327

Reference: SULO Bin Specification Data Sheets

4.2 Building A & B Bin Requirements

As discussed in Section 2.3.1, Building A & B waste chutes terminate into a shared space, therefore, bins required for these buildings have been consolidated within a central store, Building A & B Bin Storage Area located within the Basement.

To ensure sufficient area is available for storage of the bins, the amount of bins required for Building A & B 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 from the Proposal.

Based on the results shown in Table 4-2, Building A & B Bin Storage Area has been sized to accommodate:

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

Table 4-2: Bin Requirements for Building A & B Bin Storage Area

Waste Stream	Waste Generation (L/week)	Number of Bins Required			
		240L	360L	660L	1,100L
Refuse	9,360	20	13	8	5
Recycling	3,540	8	5	3	2

The configuration of these bins within this Bin Storage Area is shown in Figure 2. It is worth noting that the number of bins and corresponding placement of bins shown in Figure 2 represents the maximum requirements assuming two collections each week of refuse and recyclables. Increased collection frequencies would reduce the required number of bins.

4.3 Building C Bin Requirements

To ensure sufficient area is available for storage of the bins, the amount of bins required for Building C residential apartments 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. Note, these bins will be consolidated within the Bin Staging Area on the Ground Floor.

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

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

Table 4-3: Bin Requirements for Building C

Waste Stream	Waste Generation (L/week)	Number of Bins Required			
		240L	360L	660L	1,100L
Refuse	3,840	8	6	3	2
Recycling	1,140	3	2	1	1

The configuration of these bins within the Bin Staging Area is shown in Figure 3. It is worth noting that the number of bins required for Building C and corresponding placement of these bins represents the maximum requirements assuming two collections each week of refuse and recyclables. Increased collection frequencies would reduce the required number of bins.

4.4 Commercial Bin Requirements

To ensure sufficient area is available for storage of the bins, the amount of bins required for the commercial tenancies were modelled utilising the estimated waste generation in Table 2-4, bin sizes in Table 4-1 and based on collection of refuse and recyclables three times each week from the Proposal. Note, these bins will be consolidated within the Bin Staging Area on the Ground Floor.

Based on the results shown in Table 4-4 the Bin Staging Area has been sized to accommodate:

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

Table 4-4: Bin Requirements for Commercial Tenancies

Waste Stream	Waste Generation (L/week)	Number of Bins Required			
		240L	360L	660L	1,100L
Refuse	22,322	32	21	12	7
Recycling	6,398	9	6	4	2

The configuration of these bins within the Bin Staging Area is shown in Figure 3. It is worth noting that the number of bins required for the commercial tenancies and corresponding placement of these bins represents the maximum requirements assuming three collections each week of refuse and recyclables. Increased collection frequencies would reduce the required number of bins.

As discussed in the above sections, it is proposed that the Bin Staging Area will contain both residential and commercial bins awaiting collection. The commercial bins may be separated by a lockable gate/screen to ensure that commercial and residential wastes are not cross contaminated, should it be required. The gate/screen would be easily accessible by commercial tenants using a proximity access key. Accessibility to the proximity key will be managed by the building manager/caretaker.



Prominent stickers/signage will be applied to all commercial bins within the Bin Staging Area to ensure the Town's residential bins can be easily distinguished from the commercial bins during servicing.

4.5 Bin Storage Area/Bin Staging Area Design

The design of the Bin Storage Area/Bin Staging Area will take into consideration:

- Smooth impervious floor sloped to a drain connected to the sewer system;
- Taps and floor waste for washing of bins and storage/staging areas;
- Adequate aisle width for easy manoeuvring of bins;
- Doors self-closing and vermin proof;
- Doors 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 into 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.

In addition to the above, it is proposed that:

- The Bin Staging Area will be noticeably labelled so all service providers can clearly differentiate between commercial and residential bins.
- Prominent stickers showing the private service providers contact details will be applied to all commercial bins to ensure the Town's residential bins are clearly distinguishable from the commercial bins during servicing;
- The building manager/caretaker will monitor signage for damage and replace as necessary; and
- Access to the commercial bins may require the use of a proximity key to restrict entry by unauthorised persons. The building manager/caretaker will manage the issue of proximity keys to service providers and commercial tenants.

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



5 Waste Collection

The following sections describe the waste collection methodologies for the development.

5.1 Residential Waste Collection Plan

5.1.1 Residential Apartments

The Town will service the residential apartments and provide a total of seven 1,100L bins for refuse and three 1,100L bins for recyclables. The Town will collect refuse and recyclables two times each week utilising their rear loader waste collection vehicle. In the future, the Town may also provide 240L FOGO bins, should the development be required to separate food waste for collection.

The Town's rear loader waste collection vehicle will service the residential bins onsite, directly from the Bin Staging Area on the Ground Floor (refer Figure 3).

Bins from Building A & B Bin Storage Area will be ferried by the building manager/caretaker to the Bin Staging Area for collection, via the dedicated service pathways/corridors. Bins will be lifted/lowered between the basement and ground level utilising the dedicated refuse lift. To assist with the ferrying of bins between Building A & B Bin Storage Area and the Bin Staging Area, an automated bin mover/tug may be utilised to mitigate occupational health and safety concerns.

The ability for waste collection vehicles to access the Proposal and the Loading Dock in a safe and efficient manner has been assessed by qualified traffic engineers and shown below in Diagram 2 (medium ridged vehicle) and Diagram 3 (small ridged vehicle).

The Town's rear loader waste collection vehicle will travel with left hand lane traffic flow on Wellington Street and turn into the Proposal in forward gear via Turnbull Way, complete a reverse point turn within the development and pull into the Loading Dock for servicing, as shown in Diagram 2. The use of the Loading Dock will ensure there is no obstruction to traffic flow whilst servicing the Proposal.

During servicing, the Town's waste collection staff will transfer bins to and from the rear loader waste collection vehicle and the Bin Staging Area. The transfer path is level, of smooth surface and will be kept free of obstacles. Adequate operating space (approximately 2m) will be available at the rear of the vehicle to facilitate servicing. The Town will be provided with key/PIN code access to any security access gates to facilitate servicing, if required.

Once servicing is complete the Town's rear loader waste collection vehicle will exit in a forward motion, turning onto Wellington Street moving with traffic flow, as shown in Diagram 2.

The appropriate bins will be returned to the Building A & B Bin Storage Area by the building manager/caretaker following servicing.

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.

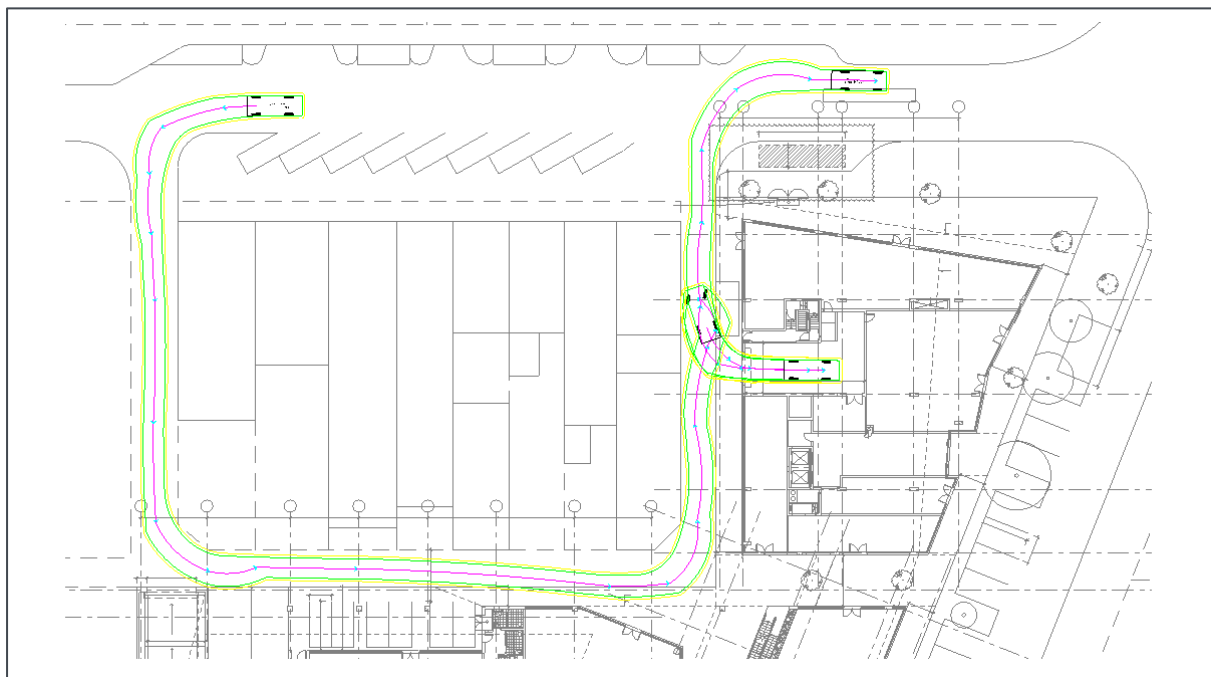
The above collection plan will be incorporated into the Proposal's Strata/Building Management Statement to ensure waste collection functions effectively in perpetuity.

Diagram 2: Medium Ridged Vehicle (MRV) Waste Collection Swept Path



Reference: Flyt Transport Consultancy

Diagram 3: Small Ridged Vehicle (SRV) Waste Collection Swept Path



Reference: Flyt Transport Consultancy

5.1.2 Residential Townhouses

As discussed in Section 2.1, it is proposed the seven Townhouses located on the Ground Floor fronting Samson Street will have their own individual set of bins based on the Towns standard residential service.

The Town will provide each residential townhouse with one 120L bin for refuse, one 240L bin for recyclables and bins for garden organics/FOGO if required in the future.

The Town will collect refuse once each week and recyclables once each fortnight from Samson Street utilising the Town's side arm waste collection vehicle.

Bins will be presented by residents on collection days with the wheels and handles facing away from the street. The bins will remain clear (1m) of obstructions such as cars, power poles, signs and street trees, and will be placed so as not to obstruct pedestrians, footpaths or bike lanes. Bins will be lined up neatly and in a single row, with sufficient space (50cm) between each bin to facilitate collection by the Town's side arm waste collection vehicle, refer Diagram 4.

Residents will return the bins to their respective Townhouse as soon as possible on the same day following collection.

Each townhouse has a discrete, dedicated Bin Storage Area in the front courtyard.

Diagram 4: Townhouse Bin Presentation



Reference: <https://www.mosmanpark.wa.gov.au/technical/waste-and-recycling/bin-collection>

5.1.3 Residential Bulk Waste Collection

Given the streetscape adjacent to the proposal, placement of bulk waste on the verge for collection would be considered undesirable. Instead the building manager/caretaker will be responsible for the removal of bulk waste generated by residents.

Each apartment at the proposal has an allocated storage room for the temporary storage of bulky wastes. This will assist with the reduction of illegal dumping of bulky wastes at the Proposal.

Residents will liaise with the building manager/caretaker on the methods for removing bulk waste and notify accordingly. The building manager/caretaker will arrange for a private contractor to attend site to remove the waste to an appropriate waste management centre.

Appropriate signage will be provided in the waste chute rooms to provide building manager/caretaker contact details so residents can contact the manager, as required.

5.2 Commercial Waste Collection Plan

A private contractor will service the commercial tenancies and provide seven 1,100L bins for refuse and two 1,100L bins for recyclables. The private contractor will collect refuse and recyclables three times each week utilising their rear loader waste collection vehicle.

The private contractor's rear loader waste collection vehicle will service the commercial bins onsite, directly from the Bin Staging Area on the Ground Floor (refer Figure 3).

The ability for waste collection vehicles to access the Proposal and the Loading Dock in a safe and efficient manner has been assessed by qualified traffic engineers and shown below in Diagram 2 (medium ridged vehicle) and Diagram 3 (small ridged vehicle).

The private contractor's rear loader waste collection vehicle will travel with left hand lane traffic flow on Wellington Street and turn into the Proposal in forward gear via Turnbull Way, complete a reverse point turn within the development and pull into the Loading Dock for servicing, as shown in Diagram 2. The use of the Loading Dock will ensure there is no obstruction to traffic flow while servicing the Proposal.

During servicing, the private contractor's waste collection staff will transfer bins to and from the rear loader waste collection vehicle and the Bin Staging Area. The transfer path is level, of smooth surface and will be kept free of obstacles. Adequate operating space (approximately 2m) will be available at the rear of the vehicle to facilitate servicing. The private contractor will be provided with key/PIN code access to any 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 onto Wellington Street moving with traffic flow, as shown in Diagram 2.

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 above collection plan will be incorporated into the Proposal's Strata Management Statement to ensure waste collection functions effectively in perpetuity. The building manager will inform private contractors of their obligations under the Strata Management Statement and the building manager will ensure waste collection measures are conveyed to successive private contractors.



6 Waste Management

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

- Monitoring and maintenance of bins and the Bin Storage Area/Bin Staging Area;
- Cleaning of bins and Bin Storage Area/Bin Staging Area, when required;
- Monitoring and maintenance of waste systems and equipment;
- Exchange full bins with empty bins at the terminus of the waste chute systems, as required;
- Ferrying of bins to and from the Building A & B Bin Storage Area and the Bin Staging Area on collection days;
- Rotation of empty and full commercial bins to ensure commercial tenants will always have access to forward facing bins for easy disposal of waste;
- Ensure all residents and tenants at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor resident and tenant behaviour and identify requirements for further education and/or signage;
- Monitor bulk waste accumulation and assist with its removal, as required;
- Regularly engage with residents and tenants to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the Town and private contractors to ensure efficient and effective waste service is maintained.

The key objectives of the WMP will be incorporated into the Proposal's Strata Management Statement to ensure waste management at the Proposal functions effectively in perpetuity.

The Owners Corporation will be informed of the obligations under the Strata Management Statement and ensure the waste management practices described upon approval is conveyed to successive owners of the residential apartments, townhouses and commercial tenancies. The Owners Corporation will inform staff, tenants and residents of their obligations or any modifications to the system that were approved by the Town.



7 Conclusion

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

The Town will collect residential waste directly from the Bin Staging Area utilising the Loading Dock.

A Private Contractor will collect commercial waste directly from the Bin Staging Area utilising the Loading Dock.

All waste collection vehicles will have the ability to enter and exit the development in forward gear.

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



Figures

Figure 1: Locality Plan

Figure 2: Building A & B Bin Storage Area

Figure 3: Bin Staging Area



LEGEND

Site Boundary

Cadastre

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LOCALITY

0 5 10 15 20 km

LOCALITY

130 Wellington Street
Mosman Park, WA 6012

Australian Development Capital

0 10 20 30 metres

Coordinate System: GDA 1994 MGA Zone 50
Projection: Transverse Mercator, Datum: GDA 1994
Scale @ A3: 1:800

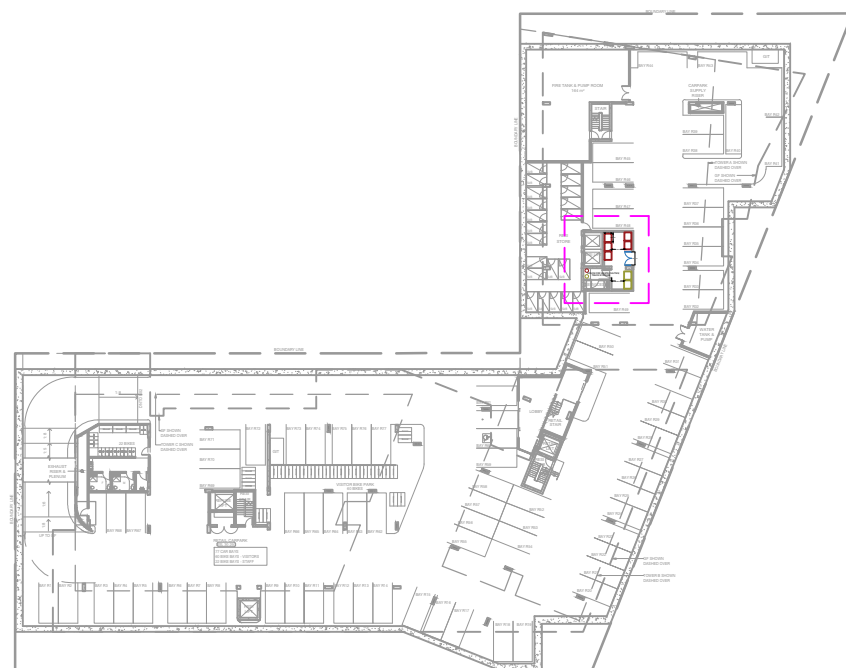
Prepared:	F Walker	Date:	29/04/2020
Reviewed:	D Patel	Revision:	A
Project:	TW20042		

Figure 01

Tregonni Data source: Roads - MRWA, 2019. Imagery: Landgate, 2020.

Document Path: \\server\\Talis\\SECTIONS\\Waste\\PROJECTS\\TW2020\\TW20042 - 130 Wellington Street, Mosman Park WMP\\5 GIS\\Maps\\TW20042_01_Locality_RevA.mxd

BUILDING A & B BIN STORAGE AREA

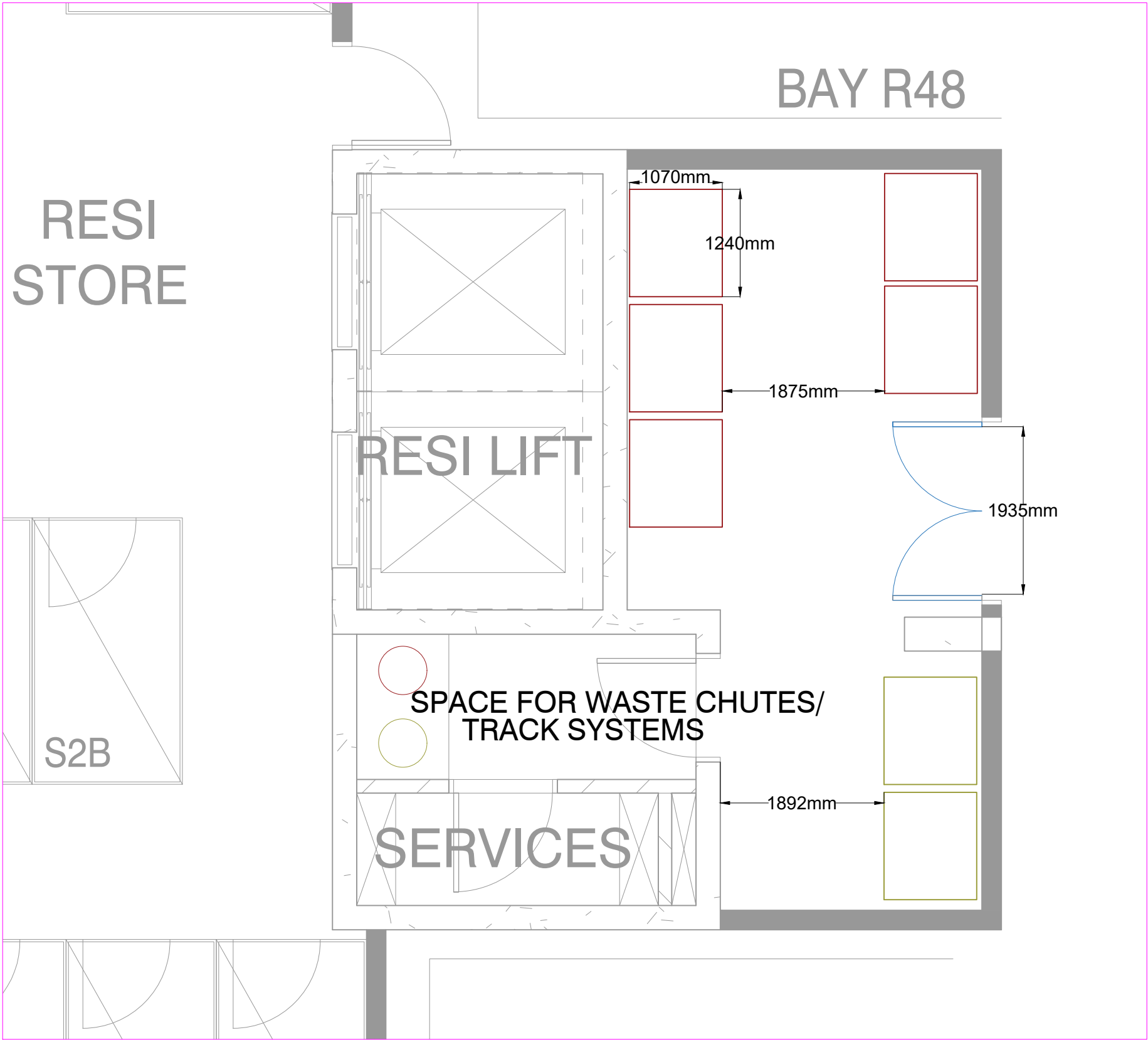
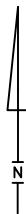


BASEMENT 01

Legend:

Bin Storage Area

- 5 x 1,100L refuse (1,070mm x 1,240mm)
- 2 x 1,100L recycling (1,070mm x 1,240mm)



NOTES

- This drawing is the property of Talis Consultants Pty Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
- All levels refer to Australian Height Datum.
- DO NOT SCALE, use figured dimensions only, if in doubt please contact Talis Consultants.

No.	Date	Drawn By	Check By	Amendment / Issue	App.
B	18/03/21	RH	DP	SECOND ISSUE	RH
A	05/10/20	RH	DP	FIRST ISSUE	RH

Project:

130 Wellington Street, Mosman
Park

Title:

Building A & B Bin Storage Area

Drawn by:	RH	Job No:	TW20042
Checked by:	DP	File No:	TW20042DWG001
Approved by:	RH	Fig. No:	002
Scale:	NTS	Rev:	B
Date:	18/03/21		

WELLINGTON STREET

BIN STAGING AREA

LOADING DOCK

EGRESS CORRIDOR

ROLLER SHUTTER

REFUSE LIFT

SAMSON STREET

GROUND FLOOR

Legend:

Bin Storage Area

- 7 x 1,100L residential refuse (1,070mm x 1,240mm)
- 3 x 1,100L residential recycling (1,070mm x 1,240mm)
- 7 x 1,100L commercial refuse (1,070mm x 1,240mm)
- 2 x 1,100L commercial recycling (1,070mm x 1,240mm)

SM BOH
145 m²

SPACE FOR WASTE CHUTES/
TRACK SYSTEMS

RESI
STAIR

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