

SELLICK CONSULTANTS PTY LTD



Job Title:	Multi-Unit Residential Development
Job Location:	Block A, Section C, Precinct 3, Yarralumla
Client:	Doma
Reference #:	201001





Project Details

Project No: Project Manager:

Sellick Consultants Reference:

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Precinct 3 – Yarralumla Brickworks

Report Issued to

The Manager of TCCS – Design Review & Coordination Transport Canberra & City Services GPO Box 158 CANBERRA ACT 2601

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Revision	Issue	Prepared By	Approved By	Date
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INTRODUCTION

Sellick Consultants Pty Ltd on behalf of Doma Group have prepared this Waste Management Report for the proposed multi-unit townhouse development on Block a, Section C, Precinct 3, Yarralumla. This report has been prepared in accordance with The Development Control Code for Best Practice Waste Management in the ACT 2019 (DCC 2019).

This report considers the following:

- The proposed development residential waste and recycling generation; and,
- Waste and recycling operation procedures that will be adopted to service the development.

1.1 PROPOSED DEVELOPMENT

The proposed development will be comprised of a multi-unit building with three residential floors with a total unit yield of 22 units. The development also includes basement carparking.

Please refer to Annexure D for the Architectural Site Plan of the proposed overall development for further reference.

1.1.1 RESIDENTIAL LAND USES

Based on the below yield schedule the proposed development will consist of the following apartment allocations.

Table 1 Proposed Development Residential Yield

Apartment	1 Bedroom or Studio	1 Bedroom + Study	2 Bedroom	3 Bedroom	4 Bedroom	Total
No.	0	0	0	22	0	22

2.0 WASTE AND RECYCLING GENERATION RATES

The Development Control Code for Best Practice Waste Management in the ACT 2019 (DCC 2019) provides residential waste and recycling generation rates. These rates have been applied to the proposed development, as indicated in Table 2.

Table 2 – Residences' Waste and Recycling Generation Rates

	Weekly Waste Generation Rate (Litres)	Weekly Recycling Generation Rate (Litres)
1 Bedroom	80	70
1 Bedroom + Study	90	80
2 Bedrooms	100	90
3 Bedrooms	120	110
4 Bedrooms	140	120



Green Waste is in accordance with TCCS allocations:

- Multi-Unit residence with ground floor private open space
 - One (1) 0.24m³ MGB per 300m² GFA (rounded up)
- Multi-Unit residence without ground floor private open space
 - One (1) 0.24m³ MGB per 50 units (rounded up)

Refer Annexure A for the Multi-Unit Residential Development Shared Waste and Recycling Allocation Calculator.

2.1 WASTE AND RECYLCING HOPPER/MGB NUMBERS

The above generation rates from Section 2.0 have been applied to the proposed development as indicated below. Please refer to Annexure F for the combined waste generation and the allocated bins.

2.1.1 RESIDENTIAL ENCLOSURE

Table 3 - Residential Waste, Green Waste and Recycling Generation

	Waste							
Туре	No. of Units	Waste/ Unit/ Week (Litres)	No. of Bins	Bin Size (m ³)	No. of Collections	Compaction (1:x)	Weekly Generation (m ³)	Weekly Capacity (m ³)
4B	0	140			3/1-1= 1		0	
3B	22	120	1	112		13-13-13	2.64	
2B	0	100	3	1.1	1	1	0	3.3
1B + S	0	90		X			0	
1B	0	80	13/t	ORZ			0	
Total Units	22		347	THE	477		2.64	3.3

	Recycling							
Туре	No. of Units	Waste/ Unit/ Week (Litres)	No. of Bins	Bin Size (m³)	No. of Collections	Compaction (1:x)	Weekly Generatio n (m ³)	Weekly Capacity (m ³)
4B	0	120		A.		1B2 II	0	1 14
3B	22	110	14		the let l		2.42	4 11
2B	0	90	3	1.1	1	1	0	3.3
1B + S	0	80		1 ALLANT		AWRS A	0	I. I.I.
1B	0	70	EL	A			0	
Total Units	22			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21 III	R.	2.42	8



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Green Waste							
Туре	Breakup	No. of Units	GFA (m²)	No. of Bins (0.24m ³)	No. of Collections per Week		
Shared	With PoS	0		0	0		
	Without PoS	22	N/A	1	0.5		
Total Units	1111111111	22	10	1	0.5		

Refer Annexure C for Civil Waste drawings.



3.0 WASTE AND RECYCLING OPERATIONS MANAGEMENT PLAN (OMP)

The operation for collecting waste and recycling from the resident generation to TCCS collection is considered within this section and detailed in Annexure F.

3.1 HOPPER STORAGE

3.1.1 RESIDENTIAL ENCLOSURE

The residential waste enclosure is located on the ground floor on the eastern corner of the building. The building has no chutes, so residents will have access to the waste enclosure.

This enclosure has the following MGB's/Hoppers as per Section 2.1 above:

- Waste
 - Three (3) x 1.1m³ waste hoppers
- Recycling
 - Three (3) x 1.1m³ recycling hoppers
- Green waste
 - One (1) x 0.24m³ MGB

Refer Annexure C for Civil Waste drawings.

3.2 WASTE AND RECYCLING TRANSFER FROM GENERATION TO COLLECTION

3.2.1 RESIDENTIAL ENCLOSURE A

As required in C14 of the DCC 2019, convenient access to waste and recycling facilities has been provided for residents in the building. Residents will manually carry waste, recycling and green waste from their dwellings to the waste enclosure located on the ground floor. The longest path of travel from the furthest unit to the waste enclosure is 75m. The building manager will be responsible for moving hoppers from the waste chute rooms to the shared waste and recycling RORO compactors located within the community title for a centralized waste and recycling collection.

The Building Manager will be responsible for rolling green bins from the residential waste enclosure to the kerb along the internal circulation roadway for collection once a fortnight. The maximum roll out distance for green bins from the residential waste enclosure to the kerbside is 125m. The Building Manager will then transfer the empty bins back to the waste enclosure.



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3.3 RESPONSIBLE PARTIES FOR CLEANING AND MAINTENANCE OF STORAGE FACILITES

3.3.1 RESIDENTIAL ENCLOSURE

As per DCC 2019, all equipment required for the transfer of waste and recycling, inclusive of hoppers, will be provided by the developer, operated, and maintained by building management at no cost to the Territory.

3.4 COLLECTION OPERATIONS

3.4.1 **RESIDENTIAL ENCLOSURE**

Please refer to Annexure F for the EDP Waste Overview Report detailing the overall waste collection operations.



4.0 MINIMUM SUBMISSION REQUIREMENTS

4.1 MULTI-UNIT RESIDENTIAL DEVELOPMENTS

Refer below for the submission requirements for onsite collection for multi-unit residential developments:

Table 4 - Minimum Submission Requirements for Multi-Unit Residential Developments

Number	Submission Requirement	Requirement Met
R1	Each development application must include a completed copy of all relevant Parts of the WRMP	All relevant parts of the WRMP have been provided as part of this report, please refer to Annexure B.
R2	Development application submission documents must include plans, elevations, sections and written descriptions or specifications for collection services, as applicable, showing:	Please refer to Annexure E.
R2.1	The location and dimensions of the waste and recycling storage facility with tabulated calculations to demonstrate the adequacy of this space.	Please refer to Annexure F.
R2.2	Tabulated waste and recycling generation rates per dwelling (i.e., bedrooms) in accordance with Table 7.1	Residential waste and recycle generation have been calculated using the generation rates provided in Table 7.1 of the DCC 2019, please refer Annexure A.
R2.3	A method statement describing how waste and recycling must be transferred from each dwelling to the waste and recycling storage facility.	Please refer to Annexure F.
R2.4	The location of any waste and recycling chutes (if included in a proposed development) and the location and dimensions of any waste service compartment on each floor of the building; it must include tabulated calculations to demonstrate the adequacy of these facilities.	N/A
R2.5	The location of the designated collection point, hopper pad or both for the collection and emptying of the Territory's waste and recycling bins.	Please refer to Annexure F.
R2.6	The path of travel for moving bins from the waste and recycling storage facility to the designated collection point; it must indicate dimensions, clearances and gradients, where applicable.	Please refer to Annexure F.
R2.7	The path of travel for collection vehicles if collection occurs on site; it must indicate all clearances, travel, turning and maneuvering paths, ramp access, clearances in all directions and pavement details, where applicable.	Please refer to Annexure F.

5.0 CONCLUSION

The proposed developments waste and recycling management process has been undertaken in accordance with the relevant part of the Development Control Code for Best Practice Waste Management in the ACT 2019. Steps outlined in the report have been taken to minimize risks and handling associated with development waste and recycling management for both building management and Territory contractors.

The waste and recycling management process for the development is recommended for TCCS approval.



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ANNEXURE A – MULTI-UNIT RESIDENTIAL DEVELOPMENT SHARED WASTE AND RECYCLING ALLOCATION CALCULATOR



Multi-unit residential development Shared waste and recycling allocation calculator

	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit	0	80	0	0	70	0
1 bedroom with separate study room	0	90	0	0	80	0
2 bedroom unit	0	100	0	0	90	0
3 bedroom unit	22	120	2,640	22	110	2,420
4 bedroom unit or greater	0	140	0	0	120	0
Total calculated waste			2,640			2,420

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	ed waste volume Waste hopper quantity			Sorvice frequency*
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
2,640	0	0	1	Weekly

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

Calculated waste volume	Waste hopper quantity			Sorvico froquencu*
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
2,420	3	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
0	0	

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

*Note 2: Developments where sufficient waste is generated as per the above may be entitled to three (3) times a week collection only in those areas where three (3) times a week collection is already provided. Availability of this limited service is subject to operational considerations and may not be available in all areas. Three (3) times a week collection requires Place Coordination's approval in writing at the pre-application stage. In cases where a three (3) times a week collection cannot be provided, the development must be able to accommodate sufficient waste and recycling storage space to accommodate twice a week collection.



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ANNEXURE B - WASTE & RECYCLING MANAGEMENT PLAN (PROFORMA)



PROJECT APPLICATION DETAILS – COVER SHEET

This section of the Waste and Recycling Management Plan must be completed by all applicants when lodging a submission for a Development Application, Design Acceptance, or Operational Acceptance.

Note: The Submission must be complete and include **all the elements for the WRMP** TCCS will not accept incomplete Submissions or Submissions from individual consultants for separate elements of the WRMP. Assessment will not commence until a complete Submission has been received.

SITE DETAILS

Project Title:

Description:

DEVELOPER'S/CLIENT'S DETAILS

Name of entity:	Contact Person:
Address:	
Phone Number:	E-mail:
APPLICANT'S DETAILS	
Company name:	Contact Person:
Address:	Phone Number:
Email:	

LODGEMENT STAGE

Development Application:	Yes	No	N/A	
Design Acceptance:	Yes	No	N/A	
Operational Acceptance:	Yes	No	N/A	

PROJECT DETAILS (CHECK ALL RELEVANT BOXES)

Single Dwelling and Dual Occupancy Dwellings Multi-unit residential development – individual MGBs with kerbside collection (Section 2.1a) Multi-unit residential development – shared MGBs with kerbside collection (Section 2.1b) Multi-unit residential development – bins with on-site collection (Section 2.1c) Commercial, public and industrial development (Section 2.2) Mixed-use development (Sections 2.1 and 2.2) Demolition, Excavation and Construction (Section 3)



PROJECT APPLICATION DETAILS – COVER SHEET

The Cover Sheet Checklist provides a brief overview of the Submission. All relevant WRMP forms and associated documentation must also be submitted with this application. The Design Solution will be either Performance-based (Perf) or Deemed-to-Satisfy (DtS) – if a combination of both then select Performance.

CHECKLIST						
WASTE MANAGEMENT COMPONENT	DESIGN SOLUTION COMPLIANT (check one bo		ox)			
(DCC Reference)	Perf	DtS	Yes	No	N/A	Office use
Performance solutions approved at Pre-Application stage						
Non-standard collection requiring ACT NoWaste approval						
Indoor storage spaces for each dwelling						
Path of travel from dwelling to waste enclosure or <i>designated collection point</i>						
Path of travel from waste enclosure to <i>designated collection point</i>						
Facilities and path of travel are <i>accessible</i>						
Waste service compartments						
Performance of <i>chutes</i>						
On-site storage facilities						
Compaction equipment – includes <i>compactors</i> and <i>bin compactors</i>						
Ancillary waste equipment – bin lifters, <i>carousels</i> etc						
Loading areas or <i>designated collection points</i>						
Unobstructed kerb space at <i>designated collection points</i>						
Internal circulation roadways						
Swept path clearances – certified by qualified engineer						
Vertical and horizontal clearances, including trees						
Operations management plan						
Mixed use - separation of residential and non-residential						
C&D, Excavation – type/volume or tonnage						
C&D, Excavation – on-site/off-site management						
C&D, Excavation – vehicle access						
Supporting drawings and documentation						
Submission requirements addressed						

Work As Executed records (Operational Acceptance)



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(A) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

Controls for these developments are included in Part 3.2.5 and Part 3.5 of the DCC. Submission requirements are stated in Part 3.5.4. Where appropriate, provide plans showing details to support the application.

This section applies to the following:

- Development applications for new multi-unit residential developments
- Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services
- Development applications for new mixed-use developments that include multi-unit residential developments.

STORAGE FACILITIES

CONTROL C1 OF DCC – INDOOR WASTE AND RECYCLING STORAGE SPACE

Location and dimensions of indoor waste and recycling storage space for each dwelling type

(Provide tabulated calculations of the total waste and recycling generated per week as per Table A4.2)

Description

Drawing Reference Numbers

Development satisfies control C1 of the DCC: Yes

CONTROL C2 – EXTERNAL WASTE, RECYCLING AND GREEN WASTE STORAGE AREA

Location and dimensions of waste, recycling and green waste storage area

(Refer to **Table 3.3** for mandatory submission requirements. Use Tables **A4.5** and **A4.5** to calculate waste and recycling storage requirements for the development. Refer to **A4.3** and <u>www.tccs.act.gov.au/recycling-and-waste/collection/green-bin-program</u> for green waste storage requirements, if applicable for this development)

Description

Drawing Reference Numbers

Development satisfies control C2 of the DCC:

No

No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

Yes



SECTION 2 - DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(A) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

PATH OF TRAVEL

CONTROL C3 – ACCESSIBLE PATH OF TRAVEL

Path of travel for moving bins from the *waste, recycling* and *green waste storage area* to the *designated collection point*.

(Refer to R2.3 of Table 3.3 for mandatory submission requirements)

Description

Drawing Reference Numbers

Development satisfies control C3 of the DCC: Yes No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

DESIGNATED COLLECTION POINT

CONTROL C4 AND C5 - DESIGNATED COLLECTION POINT (KERBSIDE)

Location of designated collection point (kerbside), including dimensions of available kerb frontage and indicative presentation layout of MGBs on kerbside

(Refer to R2.4 of Table 3.3 for mandatory submission requirements)

Description

Drawing Reference Numbers

Development satisfies control C4 and C5 of the DCC: Yes

No



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(A) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY

CONTROL C23 (PART 5.3) - SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE

Identify how *residential* and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use *residential waste* and recycling bins

(Refer to R4 of Table 5.2 for mandatory submission requirements).

Description

Drawing Reference Numbers

Development satisfies control C23 of the DCC: Yes No



SECTION 2 - DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(b) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBs COLLECTED AT KERBSIDE)

Controls for these developments are included in Part 3.2.4 and Part 3.6 of the DCC. Submission requirements are stated in Part 3.6.4. Where appropriate, provide plans showing details to support the application.

This section applies to the following:

- Development applications for new multi-unit residential developments
- Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services
- Development applications for new mixed-use developments that include multi-unit residential developments.

STORAGE FACILITIES

CONTROL C1 – INDOOR WASTE AND RECYCLING STORAGE SPACE Generation of waste and recycling for each dwelling type

(Provide tabulated calculations per dwelling type per week, as per **Table A4.2**)

Description

Drawing Reference Numbers

Development satisfies control C1 of the DCC:

No

Yes

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

CONTROL C6 – EXTERNAL WASTE AND RECYCLING STORAGE FACILITY

Location and dimensions of waste and recycling storage facility or mini-enclosure

(Refer to **Table 3.3** for mandatory submission requirements. Use Tables **A4.5** and **A4.5** to calculate waste and recycling storage requirements for the development. Refer to **A4.3** and <u>www.tccs.act.gov.au/recycling-and-waste/collection/greenbin-program</u> for green waste storage requirements, if applicable to this development)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C6 of the DCC:	Yes	No
Development satisfies Part 7.2.3 or 7.2.4 or both of the DCC	Yes	No



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(B) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBS COLLECTED AT KERBSIDE)

PATH OF TRAVEL

CONTROL C7 – ACCESSIBLE PATH OF TRAVEL

Accessible path of travel for carrying waste and recyclables and for moving bins between the *waste and recycling* storage facility or minienclosure and: (i) the entrance of each dwelling; and (ii) the designated collection point (Refer to Table 3.5 for mandatory submission requirements)

Description

Drawing Reference Numbers

Development satisfies control C1 of the DCC: Yes No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

OPERATIONS MANAGEMENT PLAN

CONTROL C8 – OPERATIONS MANAGEMENT PLAN

Description of the process to present bins for collection and to return bins to the waste and recycling storage
facilities. Include documentation to be presented to the owners corporation.
Description

Development satisfies control C8 of the DCC: Yes No



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(b) - MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBs COLLECTED AT KERBSIDE)

COLLECTION POINT

CONTROL C9 AND C10 - DESIGNATED COLLECTION POINT (KERBSIDE)

Location of *designated collection point (kerbside)*, including dimensions of available kerb frontage and indicative presentation layout of MGBs on kerbside

Description

Drawing Reference Numbers

Development satisfies control C9 and C10 of the DCC: Yes No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY

CONTROL C23 (PART 5.3) – SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE Identify how *residential* and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use *residential* waste and recycling bins

Description

Development satisfies control C23 of the DCC: Yes No



SECTION 2 - DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(C) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBS, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

Controls for these developments are included in Part 3.2.4 and Part 3.7 of the DCC. Submission requirements are stated in Part 3.7.4. Where appropriate, provide plans showing details to support the application.

This section applies to the following:

- Development applications for new multi-unit residential developments
- Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services
- Development applications for new mixed-use developments that include multi-unit residential developments.

STORAGE FACILITIES

CONTROL C1 – INDOOR WASTE AND RECYCLING SPACE Generation of waste and recycling for each dwelling type

(Provide tabulated calculations per dwelling type per week, as per Table A4.2)

Description

Drawing Reference Numbers Development satisfies control C1 of the DCC: Yes No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

CONTROL C11 – EXTERNAL WASTE AND RECYCLING STORAGE FACILITIES

Location and dimensions of external waste and recycling storage facilities

(Provide calculations to demonstrate adequacy of space, including dimensions, cross-sections and height of the waste and recycling storage facility. Refer to Table 3.8 for mandatory submission requirements. Use Tables **A4.5** and **A4.5** to calculate waste and recycling storage requirements for the development)

Description

Drawing Reference Numbers

Development satisfies control C11 of the DCC:

No

Yes

DEVELOPMENT CONTROL CODE 9 for Best Practice Waste Management in the ACT 2019



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

Development satisfies Part 7.2.3 of the DCC: Yes No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

How will waste be transferred from each dwelling to external storage area? Description

Drawing Reference Numbers

PATH OF TRAVEL

CONTROL C12 – ACCESSIBLE PATH OF TRAVEL

Accessible path of travel for carrying waste and recyclables and for moving bins between the waste and recycling storage facilities or waste service compartments and: (a) the entrance to each dwelling; and (b) the *designated collection point*

(Provide plan of travelling distance, clearance and gradients. Refer to **Table 3.8** for mandatory submission requirements)

Description

Drawing Reference Numbers Development satisfies control C12 of the DCC: Yes

Development satisfies control C12 of the DCC: Yes

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

No



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(C) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBS, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

MULTI-UNIT DEVELOPMENTS – WASTE AND RECYCLING CHUTES, COMPACTION EQUIPMENT ETC OMPLETE EITHER CONTROL C13 OR C14 OR C15

CONTROL C13 - CONVENIENT ACCESS TO WASTE SERVICES - 3 RESIDENTIAL FLOORS OR LESS

Location and details of any waste service compartments and other waste and recycling equipment that form part of the waste management system

(Provide calculations to demonstrate adequacy of space. Refer to Table 3.8 for mandatory submission requirements)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C13 of the DCC:	Yes	No
Development satisfies Part 7.3 of the DCC:	Yes	No



SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

CONVENIENT ACCESS (CONTINUED) – COMPLETE EITHER CONTROL C13 OR C14 OR C15

CONTROL C14 - CONVENIENT ACCESS - 4 RESIDENTIAL FLOORS AND ABOVE

Location and details of any waste service compartments and other waste and recycling equipment that form part of the waste management system

(Provide calculations to demonstrate adequacy of equipment. Refer to **Table 3.8** for mandatory submission requirements)

Description

Drawing Reference Numbers

Location and details of any waste and recycling chutes

(Provide calculations to demonstrate adequacy of equipment. Refer to **Table 3.8** for mandatory submission requirements)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C14 of the DCC:	Yes	No
Development satisfies Part 7.3 of the DCC:	Yes	No



SECTION 2 - DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(C) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBS, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

COLLECTION POINT

CONTROL C15 – DESIGNATED COLLECTION POINTS

Location of designated collection points or hopper pads

(Refer to Table 3.8 for mandatory submission requirements)

Description

Drawing Reference Numbers		
Development satisfies control C15 of the DCC:	Yes	No
Development satisfies Part 7.2.3 or 7.4 or both:	Yes	No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

VEHICULAR ACCESS

CONTROL C16 - UNOBSTRUCTED ACCESS TO DESIGNATED COLLECTION POINTS

Path of travel for collection vehicles (if collection occurs on site)

(Provide details of travelling distance; clearance in all directions; loading heights and widths; and turning and manoeuvring paths, ramp access, clearances, gradients and pavement details including compliance with **AS2890.1-2004**. Refer to **Table 3.8** for mandatory submission requirements)

Description

Drawing Reference Numbers		
Development satisfies control C16 of the DCC	Yes	No
Development satisfies Appendix 7 of the DCC:	Yes	No



SECTION 2 - DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY

CONTROL C23 (PART 5.3) - SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE

Identify how residential and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use *residential* waste and *recycling bins*

(Refer to **R4** of **Table 5.2** for mandatory submission requirements)

Description

Drawing Reference Numbers

Development satisfies control C23 of the DCC: Yes No



DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 - COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

Controls for these developments are included in Part 4 of the DCC. Submission requirements are stated in Part 4.4. Where appropriate, provide details on plans to support your application.

- Development applications for new commercial, public or industrial developments
- Development applications for alterations or additions to existing commercial, public or industrial development if there is an effect on the provision of waste and recycling management
- Development applications for new mixed-use developments involving commercial, public or industrial development.

WASTE AND RECYCLING GENERATION

CONTROL C17 - WASTE AND RECYCLING GENERATION

Waste and recycling generated by each proposed activity within the development, including quantities, bin types and storage requirements

DESCRIPTION						
Premises Type	Floor Area (m2)	Generation Rate		Waste (L/	Recycling	Number of
		Waste	Recycling	week)	(L/week)	Bins and Sizes

In completing this table, refer to Appendix 5 – Waste and Recycling Generation Rates for Commercial, Public and Industrial Developments

Development satisfies Appendix 4, if includes *residential* component Yes No N/A



DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 - COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

WASTE AND RECYCLING STORAGE FACILITIES

CONTROL C17 AND C18 - EXTERNAL WASTE AND RECYCLING STORAGE FACILITIES

Location of *individual waste and recycling storage facilities* (C18) including any *waste and recycling storage sections* (C17) and refrigerated waste storage for the entire development

(Provide calculations to demonstrate adequacy of space. Refer to Table 4.2 for mandatory submission requirements)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C17 and C18 of the DCC:	Yes	No
Development satisfies Appendix 5 of the DCC:	Yes	No
Development satisfies Part 7.2.3 of the DCC:	Yes	No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

PATH OF TRAVEL

CONTROL C19 – ACCESSIBLE PATH OF TRAVEL

Accessible path of travel from the point of origin or holding area to the waste and recycling storage facilities

(Provide details of clearances, gradients and mitigation of odour and noise impacts. Refer to **Table 4.2** for mandatory submission requirements)

Description

Drawing Reference Numbers

Development satisfies control C19 of the DCC:

No

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

Yes



DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 - COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

DESIGNATED COLLECTION POINT

CONTROL C20 – DESIGNATED COLLECTION POINT Location of *designated collection points* or *hopper pads* or both (Refer to **Table 4.2** for mandatory submission requirements)

Description

Drawing Reference Numbers

Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter to* provide the service:

Path of travel for moving bins from waste and recycling storage facilities to the designated collection point

(Provide plan of travelling distance, clearance and gradients. Refer to **Table 4.2** for mandatory submission requirements) **Description**

Drawing Reference Numbers

Path of travel for collection vehicles (if collection occurs on site)

(Provide details of travelling distance, clearance, turning and manoeuvring paths, ramp access and pavement details to demonstrate compliance with TCCS Design Standards of Urban Infrastructure and the DCC)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C20 of the DCC:	Yes	No
Development satisfies Appendix 7 of the DCC:	Yes	No



DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 - COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

WASTE CHUTES, COMPACTION OR OTHER EQUIPMENT

CONTROL C18 - WASTE CHUTES, COMPACTION OR OTHER EQUIPMENT

Location and details of any waste chutes

(Provide calculations to demonstrate adequacy of equipment. Refer to **Table 4.2** for mandatory submission requirements)

Description

Drawing Reference Numbers Location and details of any waste and recycling service lifts (Provide calculations to demonstrate adequacy of equipment)

Description

Drawing Reference Numbers

Location and details of any waste compaction equipment

(Provide calculations to demonstrate adequacy of equipment. Refer to **Table 4.2**, in particular **R2.7** and **R2.8**, for mandatory submission requirements)

Description

Drawing		
Reference		
Numbers		
Development satisfies control C18 of the DCC:	Yes	No
Development satisfies Appendix 7.3 of the DCC:	Yes	No



SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

Requirements for these developments are included in Part 6 of the DCC. Submission requirements are stated in Part 6.6 of the DCC. Where appropriate, provide details on plans to support your application.

Note: A WRMP is *not* required unless the proposed demolition or excavation activities generate more than 20m³ of waste for the whole development.

This section applies to the following:

- Demolition All Development applications involving demolition where the quantity of demolition material will be greater than 20m³ for the whole development
- Excavation All Development applications involving excavation where the quantity of excavated material will be greater than 20m³ for the whole development
- Development applications for new mixed-use developments that include multi-unit residential developments.

WASTE TYPES AND QUANTITIES

CONTROL C24 - DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE TYPES AND QUANTITIES

Specify demolition, excavation and construction waste materials by type and volume or tonnage

This information can be shown in **Table 3.1** (Demolition Waste) or **Table 3.2** (Construction Waste) or both which can be found over leaf. Refer to **Table 6.2** for mandatory submission requirements.

Description

ON-SITE MANAGEMENT OF DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE

CONTROL C25 - ON-SITE MANAGEMENT OF WASTE

Nominate on-site sorting and storage areas for demolition, excavation and construction waste materials. Show these details on a draft site plan

(Refer to Table 6.2 for mandatory submission requirements)

Description

Drawing Reference Numbers

Describe the work method, practices and specific procedures to be adopted to maximise the reuse and recycling of waste materials

(Refer to Table 6.2, in particular R2.2, for mandatory submission requirements)

Description



SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

Identify access for demolition and construction wa	aste collection	vehicles	
(Refer to Table 6.2 for mandatory submission requirement	ents)		
Description			
Drawing Reference Numbers			
Details of waste or recycling storage containers, or	r both, to be si	tored outside leased bou	ndaries
(Separate approval is required from Public Land Use, Ci	ty Services (via)	Access Canberra Phone 132	881)
Description			
Drawing			
Reference			
Numbers			
Development satisfies control C25 of the DCC:	Yes	Νο	



SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

RESUSE AND RECYCLING OF DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE

CONTROL C18 - WASTE CHUTES, COMPACTION OR OTHER EQUIPMENT

Details of reuse and recycling potential (on-site or off-site, or both) for demolition, excavation and construction waste **Description**

This information can be shown in **Table 3.1** (Demolition Waste) or **Table 3.2**, or both (Construction Waste). **Tables 3.1** and **3.2** are over leaf.

Drawing Reference Numbers

Name and location of approved licensed sites for recycling, or reprocessing, or landfill, or all of these, for the disposal of demolition, excavation and construction waste materials

Description

This information can be shown on **Table 3.1** (Demolition Waste) or **Table 3.2**, or both (Construction Waste). **Tables 3.1** and **3.2** are over leaf.

Development satisfies control C25 of the DCC: Yes No



Transport Canberra and City Services SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

TABLE 3.1 - DEMOLITION WASTE

				ON-SITE			OFF-SITE				DISPOSAL AT LANDFILL								
Type of Material Generated	Estimated		Actual (to be provided at WAE)		Proposed Reuse and Recycling On-site	Estimated		Act to be pro WA	ual ovided at \E)	Name of Receiving Recycling Outlets or	Estimated		Actual (to be provided at WAE)		Name of Landfill Site	Estimated		Actual (to be provided at WAE)	
	Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)	, ,	Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)	Reuse Sites or Both	Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)		Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)
Excavation Material																			
Bricks																			
Concrete																			
Timber (specify)																			
Plasterboard/Gyprock							INC		PLI	JADLE									
Metals (specify)																			
Cardboard																			
Plastics																			
Mixed Waste																			
Other (specify)																			
Total																			
Percentage of Total																			

TABLE 3.2 - CONSTRUCTION WASTE

ON-SITE								OFF-SITE	OFF-SITE DISPOSAL AT LANDFILL										
Type of Material Generated	Estimated		Acto (to be pro WA	ual ovided at E)	Proposed Reuse and Recycling On-site	Actu Estimated (to be pro WA		tual rovided at Nam (AE) Recy	Name of Receiving Recycling Outlets or Rouse Sites or Both	Estimated		Actual (to be provided at WAE)		Name of Landfill Site	Estimated		Actual (to be provided at WAE)		
	Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)		Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)	Reuse Siles of Both	Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)		Vol (m ³)	Wt (T)	Vol (m ³)	Wt (T)
Excavation Material																			
Bricks																			
Concrete																			
Timber (specify)																			
Plasterboard/Gyprock																			
Metals (specify)																			
Cardboard																			
Plastics																			
Mixed Waste																			
Other (specify)																			
Total																			
Percentage of Total																			

22 DEVELOPMENT CONTROL CODE for Best Practice Waste Management in the ACT 2019



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ANNEXURE C – CIVIL WASTE DRAWINGS

WASTE REQUIREMENTS

RESIDENTIAL	
-------------	--

NO. OF BEDS	NO. OF UNITS	WASTE/UNIT /WEEK (LITRES)	TOTAL WASTE (m³)	BIN SIZE	NO. OF COLLECTIONS PER WEEK	WEEKLY CAPACITY (m³)
4B	0	140	0.00			
3B	22	120	2.64			
2B	0	100	0.00			
1B+S	0	90	0.00	3 x 1.1m ³	1	3.30
1B	0	80	0.00			
TOTAL	22		2.64			

RECYCLING REQUIREMENTS

RESIDEN	ΓIAL					
NO. OF BEDS	NO. OF UNITS	RECYCLING/UNIT /WEEK (LITRES)	TOTAL RECYCLING (m³)	BIN SIZE	NO. OF COLLECTIONS PER WEEK .1m ³ 1	WEEKLY CAPACITY (m³)
4B	0	120	0.00			
3B	22	110	2.42			
2B	0	90	0.00			
1B+S	0	80	0.00	3 x 1.1m ²	1	3.30
1B	0	70	0.00			
TOTAL	22		2.42			







					-
				Scales	North
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А	FOR DEVELOPMENT APPROVAL	07.09.2023	MN	COPYRIGHT: The contents and information contained in thi	is docum
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ANNEXURE D – ARCHITECTURAL SITE PLAN





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ANNEXURE E – ARCHITECTURAL WASTE DRAWINGS





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ANNEXURE F – EDP WASTE OVERVIEW REPORT



SELLICK CONSULTANTS PTY LTD EDP WASTE OVERVIEW



Job Title:Canberra BrickworksJob Location:Blocks 1, 7 & 20 Section 102 YarralumlaClient:Doma GroupReference #:191148





Project Details

For the Attention of:

Alex Moulis

Doma Group Unit 4/3 Sydney Avenue Barton ACT 2600

Project No:

191148

Sellick Consultants Reference:

Blocks 1, 7 & 20 Section 102 Yarralumla, ACT Canberra Brickworks

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Revision	Issue	Prepared By	Approved By	Date
А	Estate Development Plan	Ross Costello	Bernie Cusack	07/06/2021
В	Estate Development Plan	Ross Costello	Bernie Cusack	17/06/2022
С	Estate Development Plan	Bernie Cusack	Bernie Cusack	01/08/2023



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APPENDICES

Appendix A: Estate Plans Appendix B: Estate Waste Management Plans Appendix C: Swept Paths Appendix D: Residential Waste Calculations Appendix E: Waste Collection Equipment Specification



1.0 INTRODUCTION

Sellick Consultants Pty Ltd on behalf of Doma Group has prepared this Waste Management Report for the proposed estate (including proposed multi-unit developments – MUD) on Blocks 1, 7 and 20 Section 102 Yarralumla. This report has been prepared in accordance with The Development Control Code for Best Practice Waste Management in the ACT 2019 (DCC 2019) where applicable. The purpose of this report is to present the proposed waste management strategy for the estate and future developments to TCCS to enable estate development plan (EDP) application endorsement of the proposal from a waste management perspective.

This submission is unique on account of the proposed community titling sub-division and incorporation of MUD waste servicing into the community title, along with having the same developer for the estate and individual MUDs. The proposal creates a single Territory collection point for waste collection of all MUDs in the community title. This design feature has been adopted to optimise MUD amenity and quality whilst optimising waste servicing efficiency for The Territory. Being an integrated waste management strategy at the estate and MUD block level, it is presented as a performance-based solution for waste management.

1.1 PROPOSED DEVELOPMENT

The proposed estate (refer drawing CIV-02-00 in Appendix A) consists of a subdivision comprising of individual residential house blocks, multi-unit development sites, and a single commercial site as summarised below.

SECTION	BLOCK	USE
A	A to q	Residential house blocks
В	a	Publicly accessible park
	b	Community facilities for
		community title
	с	Heritage core - commercial
	d	MUD
	e	Publicly accessible park
С	a to e	MUD
D	a and b	MUD
	c to y	Residential house blocks

A community title is to be created over the MUD sites and open spaces. Refer drawing CIV-05-00 in Appendix A. It is noted that for Block c Section B (the commercial heritage core) an access easement is to be created for access to the proposed residential waste RORO compactors.

1.2 RESIDENTIAL LAND USES

The development residential land uses consist of 8 different multi-unit residential blocks and single unit residential blocks. The multi-unit residential blocks range from ten units to 134 units, with a combined total of 340 units. All multi-unit sites are part of the community title and will have a centralised waste and recycling collection location within the community title for collection by the Territory Contractor. Transfer of residential waste from each MUD site to the centralised waste location will be the responsibility of each building manager. The single dwelling house blocks are



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proposed to have kerbside collection undertaken by the Territory Contractor. The yield for the development is broken down in Table 1 below.

Table 1 – Proposed Development Residential Yield

SITE	NUMBER OF UNITS
Section B Block d	134
Section C Block a	22
Section C Block b	44
Section C Block c	10
Section C Block d	35
Section C Block e	43
Section D Block a	21
Section D Block b	31
Individual house blocks	40
SUBTOTAL	380

2.0 WASTE AND RECYCLING GENERATION RATES

The Development Control Code for Best Practice Waste Management in the ACT 2019 (DCC 2019) provides residential and commercial waste and recycling generation rates.

2.1 Residential

The residential rates, indicated in Table 2 below, and commercial rates in DCC 2019 Table 5.1, have been applied to the proposed development.

Table 2 – Residences' Waste and Recycling Generation Rates

APARTMENT	WEEKLY WASTE GENERATION	WEEKLY RECYCLING GENERATION
	RATE (LITRES)	RATE (LITRES)
1 BEDROOM	80	70
1 BEDROOM + STUDY	90	80
2 BEDROOMS	100	90
3 BEDROOMS	120	110
4 BEDROOMS	140	120



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Generation for each precinct being collected at the centralised collection location is shown in Table 3 below.

SITE	WASTE m³/week	ALLOCATED BINS	COLLECTION FREQUENCY	RECYCLING m ³ /week	ALLOCATED BINS	COLLECTION FREQUENCY
Section B Block d	14.24	7x1.1m ³	Twice Weekly	12.9	6x1.1m ³	Twice Weekly
Section C Block a	2.64	3x1.1m ³	Weekly	2.42	3x1.1m ³	Weekly
Section C Block b	4.76	3x1.1m ³	Twice Weekly	4.32	2x1.1m ³	Twice Weekly
Section C Block c	1.20	2x1.1m ³	Weekly	1.10	1x1.1m ³	Weekly
Section C Block d	4.46	3x1.1m ³	Twice Weekly	4.06	2x1.1m ³	Twice Weekly
Section C Block e	4.20	4x1.1m ³	Weekly	3.82	4x1.1m ³	Weekly
Section D Block a	2.52	2x1.1m ³	Weekly	2.31	2x1.1m ³	Weekly
Section D Block b	3.72	4x1.1m ³	Weekly	3.41	3x1.1m ³	Weekly
TOTAL	37.74	1x16m ³ RORO*	Weekly	34.34	1x16m ³ RORO*	Weekly

Table 3 – Summary of Residential Waste and Recycling Generation and Collection

*Roll-On Roll-Off compactors (RORO) are proposed to utilise 3:1 maximum compaction.

For the community title, the total volume of waste exceeds 36.0m³. Under the DCC 2019 it is required to service the site using Roll-on Roll-off compactors (RORO). Whilst the volume of recycling generation is just under 36.0m³, it is proposed to have recycling collected by RORO compactors also. This will provide greater collection efficiency for the Territory and greater amenity for the residents in the following ways:

- Zero manual handling for the Territory contractor.
- Single collection operation for Territory contractor per stream.
- Single weekly waste truck collection movement through the site for each waste stream.
- No interaction of residents with Territory waste/recycling collection operations.
- No disruption of resident vehicular access to basements and garaging of resident's vehicles.
- Colocation of residential waste collection with commercial servicing screened by buildings.

Refer to Appendix D for detailed breakdown of waste and recycling generation.



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2.2 Commercial

Commercial waste generation and collection details are outlined in Table 4 below.

COMMERCIAL USE	WASTE	ALLOCATED BINS	COLLECTION FREQUENCY	RECYCLING	ALLOCATED BINS	
FOOD AND BEVERAGE	56.69m ³ / week		1 1 2	11.60m³/ week		a a
OFFICE	3.76m ³ / week			4.70m ³ / week	0.0	
RETAIL	2.26m ³ / week	10m ³ RORO Compactor*	Three Times Weekly	2.26m ³ / week	10m ³ RORO Compactor*	Weekl
GYM & WELLNESS	0.54m ³ / week			0.68m ³ / week		To h
TOTAL	63.61m ³ / week			19.59m ³ / week		

Table 4 -Summary of Commercial Waste and Recycling Generation and Collection

*Roll-On Roll-Off compactors (RORO) are proposed to utilise 3:1 maximum compaction.

Commercial tenancies will have shared waste and recycling RORO compactors that will be collected by a private waste management contractor organised by the site manager. A separate waste enclosure is provided for commercial waste facilities independent of the residential waste facility.

3.0 WASTE AND RECYCLING OPERATION MANAGEMENT PLAN

Waste and recycling generated from multi-unit precincts is proposed to be transferred to a single centralised enclosure located within the community title with a right of access provided for building managers and the Territory contractor to access. The building manager for each development will be responsible for waste transfer to the RORO compactors in the enclosure for collection by the Territory contractor.

3.1 INTERNAL RESIDENTIAL WASTE MANAGEMENT

Each residential MUD is to be designed in accordance with DCC 2019.

Waste is proposed to be managed by the MUD designated building manager. Residents of each precinct will be responsible for transferring waste and recycling from their units to the designated communal collection point within their development by way of chutes or direct deposit into hoppers.

Hoppers from each MUD will be taken by the building manager from the MUD waste enclosure to the central community titled waste enclosure within the heritage core. Transport of 1.1m3 waste and recycling hoppers will be facilitated by using a bin trailer (allowing multiple hoppers to be transported at a time) provided to the community title by the estate developer - refer Figure 1 below for trailer example. It is noted that the trailer and vehicle towing the trailer will have to be registered vehicles to travel on the road (Brickworks Way – Road 01) between the waste enclosure and MUDs.

Two RORO compactors are proposed to be located at the central waste and recycling enclosure location, one each for waste and recycling. Hoppers transferred from the precincts will be emptied into the RORO compactors, using a mechanical bin lifter, before being returned to the MUD of origin.



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Each MUD will be provided with sufficient float hoppers to ensure continuous waste servicing for residents during waste transfer periods.

Figure 1: Aluminium Trailer from SPACEPAC Solutions



Single dwelling residential blocks are proposed to take standard residential MGB's from their storage locations within the block to their fronting road for kerbside collection by the Territory contractor. Each block is a maximum 75m away from the kerb location, with travel grades less than 1:10 for each dwelling.

Refer EDP Waste Collection Plan – Residential – CIV-24-00 in Appendix A.

3.2 SITE ACCESS

Road 01 within the estate provides vehicle access to MUDs as well as the Heritage Core (Block c Section B) containing the central waste enclosure. An internal access laneway (Road 05) provides access to the central waste enclosure, where the RORO compactors reside. A right of access to the waste enclosure is provided for waste collection vehicles and building managers to ensure access to the enclosure for both building managers and the Territory contractor. The collection area has been designed to allow waste collection and loading vehicles to do a three-point turn within the designated loading area, allowing vehicles to enter and exit the waste collection area in a forward direction.

Road 07 as well as Road 03 (accessed through Bentham Street for the northern section and Denman Street for the southern section) provides kerbside waste collection vehicle access to the single dwelling residential blocks. Verge space along Roads 03 and 07 facilitate MGB placement for kerbside collection. Cul-de-sacs have been designed with an 8.5m radius turning head in accordance with the Estate Development Code (EDC).



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3.3 TERRITORY COLLECTION OPERATIONS

Territory collection operations will consist of two different collection requirements, combined collection for multi-unit precincts and kerbside collection for single dwelling residential blocks.

Collection for the multi-unit residential sites within the community title will consist of one 16m³ waste RORO and one 16m³ recycling RORO, each weekly. Collection will occur at the central waste enclosure within the Heritage Core. The proposed collection location for the RORO compactors has been designed to be separate and independent from the Heritage Core commercial waste enclosure. A right of access is provided to ensure access to the waste enclosure.

Collection for the single dwelling residential blocks is proposed to be by standard kerbside collection by the Territory's designated contractor. Single dwellings residential blocks are proposed to be collected off the proposed Road 03 and Road 07.

Territory collection operations are proposed as deemed to satisfy under the DCC 2019, with the use of RORO compactors to be presented to TCCS prior to development application for pre-development application approval.

3.4 COMMERCIAL COLLECTION OPERATIONS

Commercial waste and recycling storage for the Heritage Core precinct is proposed to be in the centralised commercial waste enclosure, adjacent but separate to the residential RORO compactor collection location. The collection area is sized accommodate the commercial RORO compactors for combined waste and recycling streams.

Waste and recycling from the commercial tenancies is to be transported from each tenancy to the waste and recycling storage enclosure by the tenants. Collection of waste and recycling RORO compactors is proposed to be by a designated private waste collection contractor.

4.0 CONCLUSION

The proposed development's waste and recycling management process has been undertaken in accordance with the relevant parts of the Development Control Code for Best Practice Waste Management in the ACT 2019, noting requirement for RORO pre-approval as a performance-based solution by ACT NoWaste outlined.

The waste and recycling management process for the estate development is recommended for Pre-Development Application endorsement by TCCS.



APPENDIX A

Estate Plans



 i	Status	NOT	OR (CONST	RUC	TION	
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	Т	EDP SUBMISS	ION		31	1.07.2023	MN
	S	EDP SUBMISS			10	0.07.2023	MN
I	R	EDP SUBMISS			22	2.06.2023	
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APPENDIX B

Estate Waste Management Plans

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APPENDIX C

Swept Paths

APPENDIX D

Residential Waste Calculations

	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit	1	80	80	1	70	70
1 bedroom with separate study room		90	0		80	0
2 bedroom unit	151	100	15,100	151	90	13,590
3 bedroom unit	188	120	22,560	188	110	20,680
4 bedroom unit or greater		140	0		120	0
Total calculated waste			37,740			34,340

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper quar	ntity	Sarvias fragmanaut
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
37,740	0	0	0	Compactors are required

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

Calculated waste volume	Wa	ste hopper quar	er quantity		
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency	
37,740	0	0	0	Compactors are required	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
34,340	11	Three times/week (see note 2)

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)					
Calculated recycling volume	Recycling hopper quantity	Sorvice frequency*			
(litres/week)	1,100L	Service frequency			
34,340	17	Twice weekly			

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit	1	80	80	1	70	70
1 bedroom with separate study room		90	0		80	0
2 bedroom unit	90	100	9,000	90	90	8,100
3 bedroom unit	43	120	5,160	43	110	4,730
4 bedroom unit or greater		140	0		120	0
Total calculated waste			14,240			12,900

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper quai	ntity	Convice frequency*
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
14,240	0	2	1	Twice weekly

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

14					
	Calculated waste volume	Waste hopper quantity			Somion from unnov*
	(litres/week)	1.5 m ³	2 m ³	3m ³	Service irequency
	0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
12,900	6	Twice weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)					
Calculated recycling volume	Recycling hopper quantity	Sonvice frequency*			
(litres/week)	1,100L	Service frequency			
0	0				

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit		80	0		70	0
1 bedroom with separate study room		90	0		80	0
2 bedroom unit		100	0		90	0
3 bedroom unit	21	120	2,520	21	110	2,310
4 bedroom unit or greater		140	0		120	0
Total calculated waste			2,520			2,310

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper quai	ntity	Service frequency#
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
2,520	0	0	1	Weekly

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

Calculated waste volume	Wa	ste hopper quar	ntity	
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency*
0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
2,310	3	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)					
Calculated recycling volume	Recycling hopper quantity	Sorvico froquency*			
(litres/week)	1,100L	Service frequency			
0	0				

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	W	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week	
1 bedroom or studio unit		80	0		70	0	
1 bedroom with separate study room		90	0		80	0	
2 bedroom unit		100	0		90	0	
3 bedroom unit	22	120	2,640	22	110	2,420	
4 bedroom unit or greater		140	0		120	0	
Total calculated waste			2,640			2,420	

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper qua	ntity	Comico fraguenout	
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency	
2,640	0	0	1	Weekly	

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

14					
	Calculated waste volume	Wa	Waste hopper quantity		Somion from unnov*
	(litres/week)	1.5 m ³	2 m ³	3m ³	Service irequency
	0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
2,420	3	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)					
Calculated recycling volume	Recycling hopper quantity	Sorvico froquency*			
(litres/week)	1,100L	Service frequency			
0	0				

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

N N		/aste (litres/week)		Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit		80	0		70	0
1 bedroom with separate study room		90	0		80	0
2 bedroom unit	26	100	2,600	26	90	2,340
3 bedroom unit	18	120	2,160	18	110	1,980
4 bedroom unit or greater		140	0		120	0
Total calculated waste			4,760			4,320

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper quar	ntity	Comico for more st		
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency		
4,760	0	1	1	Weekly		

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

Calculated waste volume	Wa	ste hopper quar	ntity	Samiaa fraguanaut
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency"
0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
4,320	4	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)						
Calculated recycling volume Recycling hopper quantity Service frequency						
(litres/week)	(litres/week) 1,100L Service frequency					
0	0					

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	Waste (litres/week)			Recycling (litres/week)			
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week	
1 bedroom or studio unit		80	0		70	0	
1 bedroom with separate study room		90	0		80	0	
2 bedroom unit	35	100	3,500	35	90	3,150	
3 bedroom unit	43	120	5,160	43	110	4,730	
4 bedroom unit or greater		140	0		120	0	
Total calculated waste			8,660			7,880	

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper qua	ntity	Comico fromuent		
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency		
8,660	0	1	1	Twice weekly		

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

<u> </u>				· · · · · · · · · · · · · · · · · · ·		
Calculated waste volume	Wa	ste hopper quar	ntity	Comico fromuent		
(litres/week)	1.5 m ³	2 m ³	3m ³	Service irequency		
0	0	0	0			

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
7,880	8	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)						
Calculated recycling volume Recycling hopper quantity Service frequency:						
1,100L Service irequency						
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-	Recycling volume greater than 22,001 Recycling hopper quantity 1,100L 0					

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	Waste (litres/week)			Recycling (litres/week)		
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week
1 bedroom or studio unit		80	0		70	0
1 bedroom with separate study room		90	0		80	0
2 bedroom unit		100	0		90	0
3 bedroom unit	31	120	3,720	31	110	3,410
4 bedroom unit or greater		140	0		120	0
Total calculated waste			3,720			3,410

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Wa	ste hopper quai	ntity	Somioo fromuonout		
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency		
3,720	1	1	0	Weekly		

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

Calculated waste volume	Wa	ste hopper quar	ntity	Comico francos est	
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency"	
0	0	0	0		

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
3,410	4	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)						
Calculated recycling volume Recycling hopper quantity						
(litres/week)	1,100L Service frequency					
0	0					

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

	Waste (litres/week)			Recycling (litres/week)			
Type of units by size	Number of units	litres/week per unit	Total litres/week	Number of units	litres/week per unit	Total litres/week	
1 bedroom or studio unit		80	0		70	0	
1 bedroom with separate study room		90	0		80	0	
2 bedroom unit		100	0		90	0	
3 bedroom unit	10	120	1,200	10	110	1,100	
4 bedroom unit or greater		140	0		120	0	
Total calculated waste			1,200			1,100	

*NB: Standard allocations updated as of 1 February 2019

*NB: If the calculated waste volume in litres/week exceeds 36,000, compactors MUST be used.

Shared waste allocation calculated as per assumptions above

Calculated waste volume	Waste hopper quantity		ntity	Service frequency#
(litres/week)	1.5 m ³	2 m ³	3m ³	Service frequency
1,200	1	0	0	Weekly

Scenario 2 (only applicable to total calculated waste volume greater than 22,351 litres/week)

<u> </u>				,
Calculated waste volume	Waste hopper quantity		ntity	Convice frequency.*
(litres/week)	1.5 m ³	2 m ³	3m ³	Service irequency
0	0	0	0	

Shared recycling allocation calculated as per assumptions above

Calculated recycling volume (litres/week)	Recycling hopper quantity 1,100L	Service frequency*
1,100	1	Weekly

Scenario 2 (only applicable to total calculated recycling volume greater than 22,001 litres/week)					
Calculated recycling volume	Recycling hopper quantity	Service frequency*			
(litres/week)	1,100L				
0	0				

*Note 1: This calculator does not apply if the option of shared MGBs with kerbside collection is available.

APPENDIX E

Waste Collection Equipment Specification

Replaces all previous versions

PO Box 1468 Auburn St. Wollongong NSW 2500 Phone: 1300 763 444 ABN 98 002 454 462 Email: sales@spacepac.com.au P3

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Suitable for:

- Insulated food trolleys (eg: Versigen, Cambro, Rubbermaid, Carlisle)
- 820/120/240/660/1100 ltr Plastic Council wheelie bins
- General use for transport of goods
- Hospitals, Aged care, residential and commercial applications

Size:

2/4/6/8 bin, also custom sizes to suit your application. Designed Speeds: 5km to 20km/hr maximum Not for highway use. Unless with "Blueslip" option

T:/Broch/PDF/Trailers/Spacepac-Aluminium-Trailers_ver2_3pg_np

PO Box 1468 Auburn St. Wollongong NSW 2500 Phone: 1300 763 444 ABN 98 002 454 462 Email: sales@spacepac.com.au P3

Effective 20th December 2018

SPACEPAC ALUMINIUM TRAILERS

FEATURES

Heavy Gauge Aluminium construction fully welded

- Inline 700 mm models will fit through standard doorways.
- Engineer designed, lightweight yet extremely robust and easily cleaned.

Non Slip - Rear Ramp

• Can be pushed by one person or towed with Spacepac / Emoveit Battery Electric Tugs

Draw-bar pre-drilled to suit standard connections types:

- 50 mm towbar hitch Towhitch supplied if required
- Drop-in pin hitch 20mm to 25mm Hole
- Pintle hitch 50mm Ring

Adjustable height to suit different towing methods.. ie: Tugs, Utes etc'

> Drop down jockey wheel for use when not being towed.

Illustrated with optional conditional registration kit

Adjustable height heavy duty drawbar pre-drilled to suit standard connection types: 50 mm towbar hitch Or Drop -in pin hitch.

8 Inch Alloy Wheels with Holden precision bearings & Highway grade 6 ply tires designed to resist side loads on ramp. Complete with Wheel Guards for protection and road safety.

1200mm Rear Ramp complete with high quality gas struts & positive locking

All prices/specifications subject to change without notice.

PO Box 1468 Auburn St. Wollongong NSW 2500 Phone: 1300 763 444 ABN 98 002 454 462 Email: sales@spacepac.com.au P3

Effective 20th December 2018

Replaces all previous versions

SPACEPAC ALUMINIUM TRAILERS

OPTIONS

Divider plus twin ramp for moving food trolleys

Conditional registration kit including Tail & Brake lights, Indicators, Reflectors & Number plate light.

Optional Divider with twin ramp & Reverse camera with 7 inch screen mounted on the vehicle's dashboard.

Pedestrian Model with optional infill panels & pedal lock

DESIGN SUGGETIONS:

T:/Broch/PDF/Trailers/Spacepac-Aluminium-Trailers_ver2_3pg_np


POTTINGER

NEW!

falconic

MULTIPRESS MP 1.9/1.4/1.0



- \rightarrow + 20% more filling weight
- \rightarrow Reduction of transport costs
- \rightarrow Universal deployment
- ightarrow Paint quality as in the car industry
- ightarrow Silent hydraulic pump
- ightarrow Optimum safety for operato
- → Communication with machine

POTTINGER

- → Online configuration of machin and location
- → Optimum management of your container pool

ECONOMIC SUCCESS

depends on several factors

Improved capacity – up to 20% more fill volume

due to the newly developed press geometry. Tapered press bottom, curved press plate, high quality piston guiding and improved press geometry ensure an effective retention system. Up to 20% higher compaction!



Large filling opening

The double build-up prevention by means of retaining tines and a 152 mm high trash holder in combination with the immersion depth of the compressing ram of 334 mm keeps the pressing area free and permanently available.

Type MP 1.4: 1050 x 1860 mm → 1,4 m³ / stroke

Type MP 1.9: 1450 x 1860 mm → 1,9 m³ / stroke







MULTIPRESS MP 1.9/1.4/1.0

Universal deployment and variable equipment that is easy to retrofit

 Regardless of whether ground, ramp or building loading – additional equipment can be bolted on for quick and easy adaptation to any disposal location.





Tipping device

Preparation provided as standard no welding needed for retrofitting. Optionally hydraulic comb lift.

Operation

Phase adapter and connection for remote control are supplied as standard.

Side-hung or top-hung rear door

The back wall is easily converted from a side-hung door to a top-hung door. Standard 8-point locking system for leak tight seal.

The hook on the back can be used for hoisting it on to the lorry.







SAFETY is top priority

Safety unlocking device with door catch system

The operator is always outside of the danger area when opening the door. Through a special door catch system, people who are not in the field of vision remain, protected.





OPTIONAL: Bulky waste model – reinforced construction for bulky waste

The following components are reinforced on this model:

- ightarrow Piston guide, piston and yoke
- ightarrow Side walls of the container
- ightarrow Floor cleaner on the piston head as standard

HYDRAULICS und ELEKTRICS

Easy to access and clearly laid out. Accident prevention as no climbing aids are required. Easy to service thanks to ergonomic working position.









MULTIPRESS MP 1.9/1.4/1.0

Building-feeding

Taylormade solutions for the space-saving filling of your PÖTTINGER machines from inside of a building.

By their innovative design, the individually adapted length of the chutes and different filling possibilities they can be perfectly integrated in modern architecture.





Tipping devices

For the decentralised collection of waste in DIN standard containers.

Tipping devices can be either attached to a press container or are available as stationary or mobile solutions. Thus, waste can be collected during operation in 80 to 1100 litre DIN standard containers and then filled into the press by means of the tipping device.





Quiet-running pump

The Pöttinger MULTIPRESS containers are equipped with a quiet-running pump as standard. At idle, the machine noise level is under 59 dBA.



MULTIPRESS MP 1.4 - 1.9

Optimum press technology in contemprary design

••••

- **01** | Modular construction all parts screwable
- **02** | Hood over intake opening comfortable operation
- **03** | Foldaway front hook
- **04** | Connector with 16 poles for additional operation panel
- **05** | Automatic phase changing
- 06 | Stability
- 07 | Combined poliamide rolls
- **08** | Gliders for piston (inside)
- **09** | Inclined press floor [inside]
- **10** | Concave front plate ROC 401 [inside]
- 11 | Sealings at maintenance door, hood and rear door
- 12 | Sand blasting RA 2,5 / powder coating primer plus top coat at least 120μ
- 13 | Rear door convertible top hanged / side hanged
- 14 | Rear hook for transporting the machine
- **15** | Ratchet spanner for rear door in safe position
- **16** | Door catch system
- 17 | Hour counter
- 18 | Low noise gear pump standard f-59dbA

Technical Data 1.4	MP 16-1.4	MP 18-1.4	MP 20-1.4	MP 22-1.4	MP 24-1.4
Volume Container	16 m³	18 m³	20 m³	22 m³	24 m³
Length (without hook)	5650 mm	6050 mm	6450 mm	6850 mm	7250 mm
Length (with hook)	5850 mm	6250 mm	6650 mm	7050 mm	7450 mm
Width x height	2460 x 2704 mm	2460 x 2704 mm			
Filling height	1400 mm	1400 mm	1400 mm	1400 mm	1400 mm
Volume per stroke	1,4 m³	1,4 m³	1,4 m³	1,4 m ³	1,4 m³
Height of press ram	700 mm	700 mm	700 mm	700 mm	700 mm
Press opening W x H	1860 x 1050 mm	1860 x 1050 mm			
Filling opening W x H	1860 x 1753 mm	1860 x 1753 mm			
Compaction force	340 kN	340 kN	340 kN	340 kN	340 kN
Pressing cycle	40 sec.	40 sec.	40 sec.	40 sec.	40 sec.
Motor	5,5 kW	5,5 kW	5,5 kW	5,5 kW	5,5 kW
Fuse slow	16 A	16 A	16 A	16 A	16 A
Electric connection	400 V, 50 Hz	400 V, 50 Hz			
Unladen weight	4797 kg	4947 kg	5097 kg	5247 kg	5397 kg
Container conical	conical à 100 mm	conical à 100 mm			





falconic

The essential tool for an efficient work organisation.



Technical Data 1.9	MP 16-1.9	MP 18-1.9	MP 20-1.9	MP 22-1.9	MP 24-1.9
Volume Container	16 m³	18 m³	20 m³	22 m³	24 m³
Length (without hook)	6050 mm	6450 mm	6850 mm	7250 mm	7650 mm
Length (with hook)	6250 mm	6650 mm	7050 mm	7450 mm	7850 mm
Width x height	2460 x 2704 mm				
Filling height	1400 mm				
Volume per stroke	1,9 m³	1,9 m³	1,9 m³	1,9 m³	1,9 m ³
Height of press ram	700 mm				
Press opening W x H	1860 x 1450 mm				
Filling opening W x H	1860 x 2153 mm				
Compaction force	340 kN				
Pressing cycle	40 sec.				
Motor	5,5 kW				
Fuse slow	16 A				
Electric connection	400 V, 50 Hz				
Unladen weight	5060 kg	5210 kg	5360 kg	5510 kg	5660 kg
Container conical	conical à 100 mm				

MULTIPRESS 1.0

MULTIPRESS 1.0 Skip

If there is limited space available or if being used with skip vehicles



Due to the container volumes from 8 to 12 m³ and the width of 2 m, the **MULTIPRESS 1.0** suits to narrow surrounding areas.

The press technology contains all advantages of the big brother and characterizes due to its efficiency, high compaction ratio and durability.

Skip	MP 8-1.0	MP 10-1.0	MP 12-1.0
Volume Container	8 m³	10 m ³	12 m ³
Length (without hook)	4200	4700	5200
Length (with hook)	-	-	-
Width x height	1950 x 2400 mm	1950 x 2400 mm	1950 x 2400 mm
Filling height	1270 mm	1270 mm	1270 mm
Volume per stroke	1 m³	1 m³	1 m³
Height of press ram	550 mm	550 mm	550 mm
Press opening W x H	1000 x 1450 mm	1000 x 1450 mm	1000 x 1450 mm
Filling opening W x H	1580 x 1450 mm	1580 x 1450 mm	1580 x 1450 mm
Compaction force	300 kN	300 kN	300 kN
Pressing cycle	24 sec.	24 sec.	24 sec.
Motor	5,5 kW	5,5 kW	5,5 kW
Fuse slow	16 A	16 A	16 A
Electric connection	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz
Unladen weight	3250 kg	3450 kg	3650 kg
Container conical	conical à 80 mm	conical à 80 mm	conical à 80 mm

MULTIPRESS 1.0

MULTIPRESS 1.0 Roll-off container



Special version as wet waste press

as an underground garage model.

Mixed waste and also waste with a high moisture content can be ideally compressed. The sloping pressing floor and the special high level difference (300 mm Trashholder) between the pressing floor and the container floor guarantee that the equipment remains clean. In addition, the **MULTIPRESS 1.0 roll-off container** is also available



Roll-off container	MP 10-1.0	MP 12-1.0	MP 14-1.0	MP 16-1.0
Volume Container	10 m³	12 m³	14 m³	16 m³
Length (without hook)	4960	5460	5960	6460
Length (with hook)	5200	5700	6200	6700
Width x height	1950 x 2440 mm	1950 x 2440 mm	1950 x 2440 mm	1950 x 2440 mm
Filling height	1270 mm	1270 mm	1270 mm	1270 mm
Volume per stroke	1 m ³	1 m³	1 m³	1 m ³
Height of press ram	550 mm	550 mm	550 mm	550 mm
Press opening W x H	1000 x 1450 mm	1000 x 1450 mm	1000 x 1450 mm	1000 x 1450 mm
Filling opening W x H	1580 x 1450 mm	1580 x 1450 mm	1580 x 1450 mm	1580 x 1450 mm
Compaction force	300 kN	300 kN	300 kN	300 kN
Pressing cycle	24 sec.	24 sec.	24 sec.	24 sec.
Motor	5,5 kW	5,5 kW	5,5 kW	5,5 kW
Fuse slow	16 A	16 A	16 A	16 A
Electric connection	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz
Unladen weight	3390 kg	3550 kg	3720 kg	3880 kg
Container conical	conical à 80 mm	conical à 80 mm	conical à 80 mm	conical à 80 mm



OPTIMIZE YOUR LOGISTICS



with **falconic**, the control module for your press container.

falconic offers everything you need to work more efficiently in our digital world:

- ightarrow GPS Tracking and visualization of container location
- ightarrow Online configuration of machines and installation sites
- → Automatic adoption of site specific parameters when changing the containers [e.g. type of material, amount of press strokes...]
- → Running statistic of all machine related data (e.g. amount of emptyings, starting sequences, error messages etc.)
- \rightarrow Information about machine equipment
- ightarrow Connection to already existing scheduling and invoicing programs possible
- ightarrow Data transfer from container to Web interface
- ightarrow Automatic adaption of the rotating direction of the motor



Online-adjustment of containers and location sites:

- ightarrow Pre-full and full announcement 50 100%
- → Personalized container status announcements (Email/SMS) to
 - Technical/Service department
 - Scheduling department
 - Client (machine location)
- ightarrow Predictive service
- ightarrow Amount of strokes at pressing cycle
- ightarrow Position of press ram
- → Adjustment of press related to type of material

falconic The mode of operation



falconic RETROFIT - possible for all Pöttinger machines and machines from other manufacturers



THE 7 QUALITY MARKS





STABLE EXECUTION + 200%



LOAD TESTS



OPTIMUM MATERIAL GLOW, GEOMETRIE OF THE PRESS



INNOVATVE DESIGN



TEXTILE COVERINGS WITH CAMO DESIGN



FALCONIC -KEEP AN EYE ON EFFICIENCY

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