Design Note

Mount Pleasant Apartments

Prepared for Ragence Investments Pty Ltd c/- maarch architects

15 September 2026

Project Number: WMP26124

Assets | Engineering | Environment | Noise | Spatial | Waste

DOCUMENT CONTROL

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1 Introduction

This report provides a summary of the waste measures that require consideration in the development design to achieve an efficient waste management system. Please note, this document is not the Waste Management Plan.

Please review the report and provide us with bin size and collection frequency preferences to be included into the Waste Management Plan, along with the latest design (in PDF/CAD format) of the Bin Storage Area and the waste collection point with swept path analysis showing waste collection vehicle entry/exit paths.

Should you have any queries please don't hesitate to contact the undersigned:

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2 City of Melville Services

Based on the City of Melville's *Waste, Recycling and Food Organics Garden Organics (FOGO) Collections for Multiple Dwellings, Mixed Use Developments and Non-Residential Developments LPP1.3* (2023), Talis understands the following services are available for residential properties:

- The City provides a 3 bin system to collect 240L refuse, 360L recycling and 240L food organics garden organics (FOGO);
- The City typically provides a fortnightly/weekly collection of refuse, recyclables and FOGO bins; and
- 660L refuse bins and 1,100L recycling bins may be used where the provision of smaller bins is not suitable, serviced onsite only. The use of these bins and frequency required may be used upon request and approval.

3 Waste Generation

The following section describes the quantity of bins required for the Bin Storage Area, based on the City's LPP 1.3.

3.1 Bin Storage Area Calculations

The quantity of bins required in the Bin Storage Area have been calculated based on the number of residential apartments, as follows:

- Studios – 2;
- Two-Bedroom Apartments – 21; and
- Three-Bedroom Apartments – 1.

Table 3-1 shows the waste generation rates which have been applied to the development. The number of bins required for the Bin Storage Area are calculated based on these waste generation rates.

Table 3-1: Waste Generation Rates

Tenancy Use Type	City's Guideline Reference	Refuse Generation Rate	Recycling Generation Rate	FOGO Generation Rate
Studios	1 Bedroom	40L/week	60L/week	10L/week
Two-Bedroom Apartments	2 Bedrooms	60L/week	80L/week	20L/week
Three-Bedroom Apartments	3 Bedrooms or greater	70L/week	120L/week	30L/week

3.2 Bin Sizes

Table 3-2 shows the typical dimensions of the bins which may be utilised at the development. It should be noted that bin sizes may vary slightly depending on the supplier.

Note: bins should not be stacked in rows and should be provided with a minimum 50mm clearance on all sides (between bins, against walls etc.) when sizing the Bin Storage Area.

Table 3-2: Typical Bin Dimensions

Dimensions (mm)	Bins Sizes			
	240L	360L	660L	1,100L
Depth	735	885	850	1,245
Width	580	600	1,370	1,370
Height	1,080	1,100	1,250	1,470
Approximate footprint (m^2)	0.43	0.53	1.16	1.7

Reference: City of Melville's LPP1.3

3.3 Bin Storage Area Requirements

The quantity of bins required for the Bin Storage Area is outlined in Table 3-3. This is based on the bin capacities in Table 3-2, and collection frequencies of up to once each week.

Table 3-3: Bin Requirements

Collection Frequency	Bin Sizes			
	240L	360L	660L	1,100L
Refuse (1,410L/week)				
One / week	6	-	3	2
Two / week*	3	-	2	1
Recyclables (1,920L/week)				
Fortnightly	16	11	6	4
One / week	8	6	3	2
Two / week*	4	3	2	1
FOGO (470L/week)				
One / week	2	-	-	-
Two / week*	1	-	-	-

**Increased in collection frequencies subject to City approval*

4 Waste Storage Design Considerations

4.1 Internal Bins

It is recommended that under-bench bins for general waste, recycling and FOGO, be incorporated into the kitchen of each residential apartment design to ensure the correct waste separation and alignment with the City's 3-bin system.

The City provides 8L kitchen caddy liners to the residents to assist with the in-house collection and transfer of organic material into their FOGO bins. An under-bench kitchen caddy is preferred to be incorporated into the kitchen design to accommodate the 8L kitchen caddy liners. Where this is not possible, a 7L countertop kitchen caddy can be provided by the City, however space and provision for this must be accommodated.

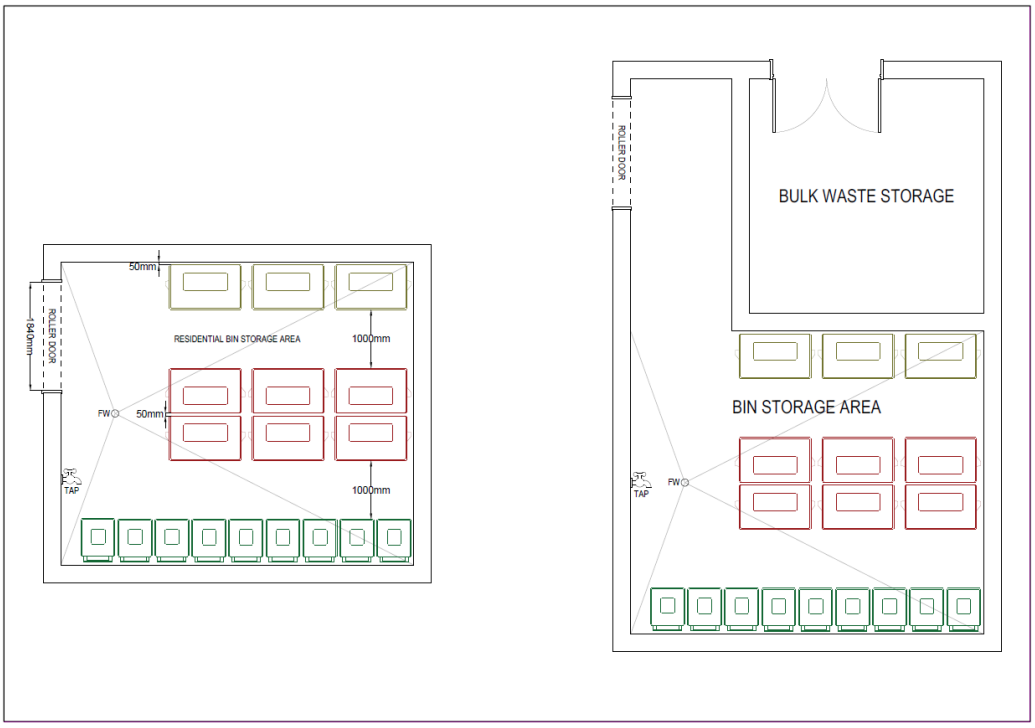
4.2 Bin Storage Area

Bin Storage Areas should be constructed to satisfy the City's Requirements, as follows:

- Provided with a tap and connected to an adequate supply of water. The tap is to be in a position so that it will not be susceptible to being damaged by the bins being removed for collection;
- Constructed of brick, concrete, corrugated compressed fibre cement sheet or other material of suitable thickness;
- Designed to incorporate suitable levels of waste and recycling storage facilities for the containment of a minimum of one week's waste and recycling;
- Having walls not less than 1.8 metres in height and having an access point of not less than 1 metre in width for staff to access the area and fitted with a self-closing gate;
- Access point for collection is to be of suitable size for the size of bins used and the collection method proposed;
- Containing a smooth and impervious floor of not less than 75 millimetres in thickness and provided with an adequate liquid refuse disposal system;
- Where located within a building, the bin store is to be ventilated in accordance with Australian Standard 1669.2: The Use of Ventilation and Air Conditioning in Buildings (as amended)
- Conveniently located for disposal of waste and recyclables by staff;
- Not readily accessible by the public;
- Adequate aisle width (1 metre) for easy manoeuvring of bins;
- No double stacking of rows of bins; and
- Appropriate signage that identifies what items are and are not accepted in the refuse and recyclable bins, any hazards or potential dangers, and any relevant points of contact for the waste system.

The Bin Storage Area should be adequately sized to accommodate the preferred quantity of bins, at the designated collection frequency, with adequate room for staff/cleaners to easily access all bins and to allow bins to be easily moved around and serviced, refer Diagram 1.

Diagram 1: Example Bin Storage Area



4.3 Bulk Waste

Bulky waste can be a significant issue within developments with a high residential turnover where residents are required to dispose of various unwanted household items regularly.

Space should be allocated for temporary holding of bulky wastes not suitable for collection using the bin system and includes any internal and external household items such as sofas, fridges, television sets and mattresses.

The City requires all residential developments to provide a bulk waste area to allow temporary storage until scheduled collection is organised by the strata manager/body corporate. A minimum area of 4m^2 is to be provided, or 0.5m^2 per dwelling, whichever is greater. If apartments are provided with an allocated storage room which could be utilised for the temporary storage of bulk waste, a smaller bulk waste store of at least 5m^2 can typically be justified.

The area allocated for the temporary placement/storage of bulky waste should ideally be situated within or adjacent to the Bin Storage Area and easily accessible by staff and specialty waste collectors, refer Diagram 1.

5 Waste Collection Design Considerations

Residential waste must be collected by the City.

As the Proposal is located within the M15 Zone of the Canning Bridge Activity Centre, the development must provide for all management of waste wholly within the development site. No on-street waste collection areas are permitted within this zone.

For onsite collections, the following requirements are to be satisfied:

- Suitable location for collection;
- Where applicable, a minimum floor to ceiling clearance (including pipes and other services) of 4.0m in height;
- Minimum access way of 4.0m in width;
- The development is structurally capable of supporting the addition of a 25T waste collection truck;
- On-site manoeuvring space to allow for entry and egress in a forward manner for a truck with a minimum length of 10m;
- A maximum of a three-point turn is permitted for on-site manoeuvring. Swept paths are to be indicated on the proposed development plans;
- Ramps and driveway gradients are to cater for vehicles with a minimum of 10m in length;
- Suitable arrangements for the City to access the bin service area; and
- Bin collection points are to be within a 20m radius of the truck laydown area.

The City typically agree to ferry bins to the waste collection vehicle and return them to the Bin Storage Areas or any presentation points if the truck can park in close proximity (within 20m) to the bin store and are provided with key/PIN code access to all necessary security gates and access doors.

Please see APPENDIX A for specification sheets of the rear loader vehicles that the City operates for refuse ($24m^3$) and recycling ($16m^3$).

Swept path analysis should be conducted by a certified traffic engineer to ensure a collection vehicle can safely service the development. A copy of the swept path analysis should be provided to Talis for inclusion in the WMP.

APPENDIX A
City of Melville Truck Specifications

CHASSIS MODEL	DE ELITE 2 RHS 6X4 EURO 5 (RFS FUPS)
BODY MODEL AND SIZE	REAR LOADER 24m3 COLLECTOR SERIES II CS RP - ESTIMATED
SUB FRAME SPEC	N/A
AVERAGE PACK DENSITY (Kg/m3)	354

	TOTAL (Kg)	FRONT AXLE (Kg)	REAR AXLE (Kg)
CAB CHASSIS MASS	7580	4270	3310
BODY INSTALLATION MASS - INCLUDES HYD OIL	6115	817	5298
BODY SUBFRAME MASS	85	20	65
DRIVER MASS	100	105	-5
FUEL MASS	166	93	73
ADDITIONAL OPTIONS MASS	250	-142	392
TOTAL TARE MASS	14297	5164	9133
NHVR GML, NT AND WA COMPLIANCE			
ESTIMATED PAYLOAD MASS	8500	1329	7171
TOTAL VEHICLE MASS ESTIMATE LOADED	22797	6493	16304
LEGAL AXLE LOADS	23000	6500	16500
NHVR CML & HML, NT WITH RFS AND WA AMMS 1 & 2 COMPLIANCE			
ESTIMATED PAYLOAD MASS	8500	1329	7171
TOTAL VEHICLE MASS ESTIMATE LOADED	22797	6493	16304
LEGAL AXLE LOADS	23500	6500	17000
MAXIMUM POTENTIAL PAYLOAD MASS	9203		
OPTIMISED FOR BEST PAYLOAD WITH MOST SUITABLE STD WB.		(TABLE V11.3)	10/12/2018
ADDITIONAL OPTIONS INCL.: RL SII TUCKAWAY LIFTER, 12mm FLAT BAR. REAR LOADER VOLUME INCL.: BODY & DOOR			

REAR LOADER OPTIONS			
DESCRIPTION	TOTAL (Kg)	FRONT AXLE (Kg)	REAR AXLE (Kg)
TOOLBOX DOUBLE	40	20	20
RL SII BIN STOP FRAME (BASIC)	39	-21	60
RL SII BIN STOP FRAME (PNEUMATIC)	45	-25	70
RL SII CANOPY	116	-56	172
RL SI/SII BIN STOP FRAME (FOR HEAVY DOOR ONLY)	18	-10	28

NOTES

1 WEIGHTS AND MEASUREMENTS ARE THEORETICAL / ESTIMATED ONLY AND ARE SUBJECT TO MANUFACTURING TOLERANCES.

2 THE LOAD CENTRE OF MASS IS AN ESTIMATE ONLY. THIS WILL VARY THROUGHOUT THE LOADING CYCLE AND WILL BE ENTIRELY DEPENDENT ON THE MAKE UP OF THE LOAD STREAM.

3 CALCULATIONS INCLUDE 200 LITRES OF FUEL AND A 100 DRIVER.

4 THE FRONT LEGAL AXLE LOAD IS BASED ON THE VEHICLE BEING FITTED WITH AN ECE R93 FUPS BAR AND A CAB COMPLYING WITH ECE R29. VEHICLE OWNER TO CONFIRM AXLE WEIGHTS WITH STATE AUTHORITIES AND VEHICLE SPECIFICATION WITH THE MANUFACTURER.

5.** MAXIMUM POTENTIAL PAYLOAD CAN OCCUR ONLY WHEN THE AXLE LOADS ARE FULLY EXPLOITED. THEREFORE ESTIMATED PAYLOAD DUE TO DISTRIBUTED MASS IS A MORE CONSERVATIVE ESTIMATE.

6 THE VOLUME BREAK DOWN IS AS FOLLOWS:

BODY (EX BLADE)	=	21.64 m3
HOPPER/REAR DOOR	=	01.60 m3
TOTAL	=	23.24 m3

7 THE ADDITION OF OPTIONS OVER AND ABOVE THE STANDARD SPECIFICATIONS MAY IMPACT ON THE MAXIMUM PAYLOAD THAT THE VEHICLE CAN LEGALLY CARRY.

8 NHVR COVERS EVERYWHERE EXCEPT FOR NT AND WA WHICH HAVE SEPARATE COMPLIANCE LAWS

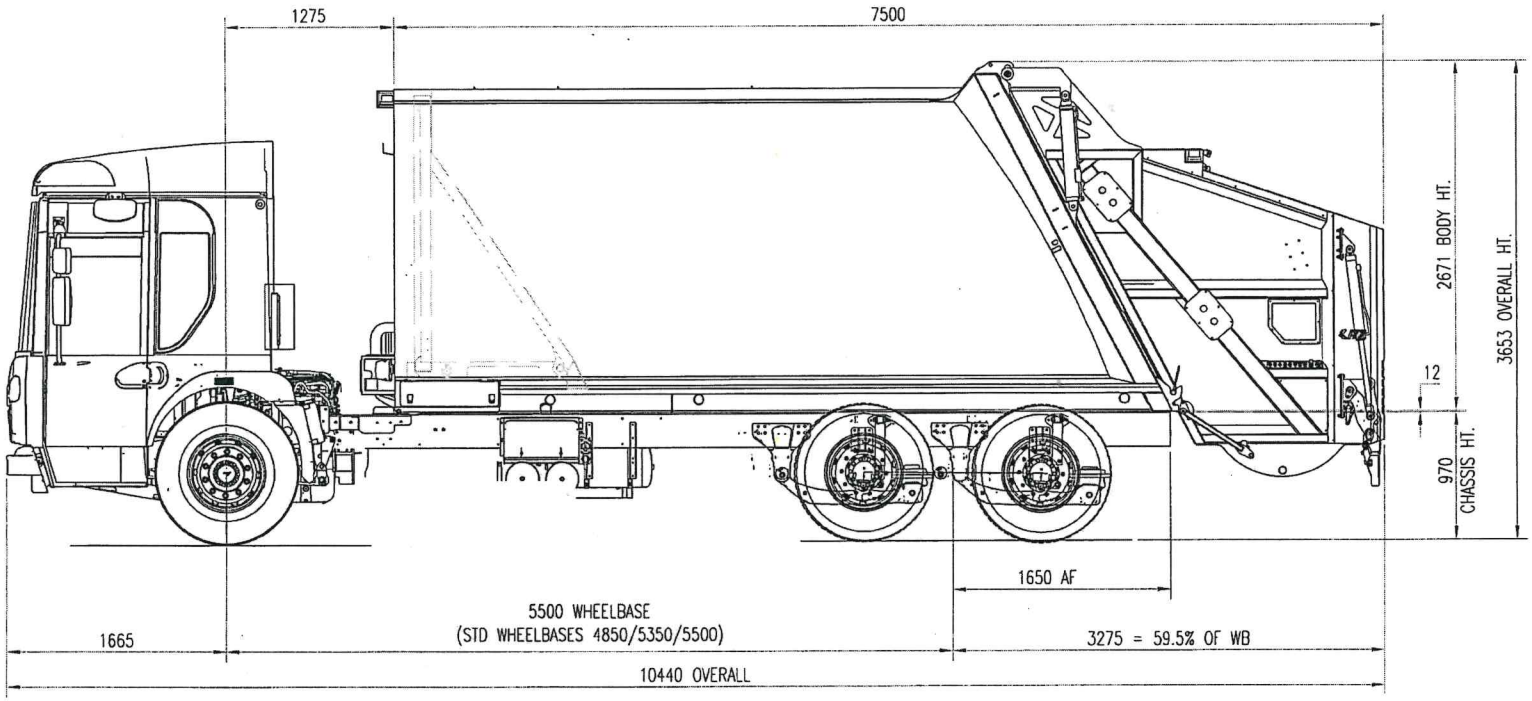
PTO NOTES

REFER TO THE LATEST "SPK-ENG-56-020 RL PTO SPEC" ON THE PORTAL

ADDITIONAL NOTES

BODY POSITION = 1275 (NO STD AVAILABLE) / OVERHANG = 59.5% (AU) / WHEELBASE = 5500 (AU) ORIGINAL
INCREASED LEGAL AXLE LOADS MAY BE AVAILABLE, CONFIRM WITH VEHICLE MANUFACTURER AND STATE AUTHORITIES

RELEASED
(SUITABLE FOR SALE)



DUE TO ON-GOING PRODUCT DEVELOPMENT, SUPERIOR PAK RESERVES THE RIGHT TO ALTER PRODUCT SPECIFICATIONS WITHOUT NOTICE

SUPERIOR PAK

A4 | SHEET 1 / 1

PDS	APP	MLP	17/06/2015
ECN	CHK	MLP	17/06/2015
GA	DWN	MR	17/06/2015

TITLE:
SPECIFICATIONS
RL SERIES II REAR LOADER
24m³ RAISED PROFILE MODEL (RP)
DE ELITE 2 6X4 (EURO 5) RFS FUPS

DRAWING No: RL15240164900

REV H

CHASSIS MODEL	DE ELITE 2 RHS 6X4 EURO 5 (RFS FUPS)		
BODY MODEL AND SIZE	REAR LOADER 17m3 COLLECTOR SERIES II CS LP - ESTIMATED		
SUB FRAME SPEC	N/A		
AVERAGE PACK DENSITY (Kg/m3)	500 (MAX.)		
	TOTAL (Kg)	FRONT AXLE (Kg)	REAR AXLE (Kg)
CAB CHASSIS MASS	7520	4270	3250
BODY INSTALLATION MASS - INCLUDES HYD OIL	5250	426	4824
BODY SUBFRAME MASS	72	18	54
DRIVER MASS	100	106	-6
FUEL MASS	166	95	72
ADDITIONAL OPTIONS MASS	250	-141	391
TOTAL TARE MASS	13359	4774	8585
NHVR GML, NT AND WA COMPLIANCE			
ESTIMATED PAYLOAD MASS	8500	1225	7275
TOTAL VEHICLE MASS ESTIMATE LOADED	21859	5999	15860
LEGAL AXLE LOADS	23000	6500	16500
NHVR CML & HML, NT WITH RFS AND WA AMMS 1 & 2 COMPLIANCE			
ESTIMATED PAYLOAD MASS	8500	1225	7275
TOTAL VEHICLE MASS ESTIMATE LOADED	21859	5999	15860
LEGAL AXLE LOADS	23500	6500	17000
MAXIMUM POTENTIAL PAYLOAD MASS	10141		
OPTIMISED FOR BEST PAYLOAD WITH MOST SUITABLE STD WB.		(TABLE V11.3)	10/12/2018
ADDITIONAL OPTIONS INCL.: RL SII TUCKAWAY LIFTER, 12mm FLAT BAR. REAR LOADER VOLUME INCL.: BODY & DOOR			

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6 THE VOLUME BREAK DOWN IS AS FOLLOWS:

BODY (EX BLADE)	=	14.88 m3
HOPPER/REAR DOOR	=	01.60 m3
TOTAL	=	16.48 m3

7 THE ADDITION OF OPTIONS OVER AND ABOVE THE STANDARD SPECIFICATIONS MAY IMPACT ON THE MAXIMUM PAYLOAD THAT THE VEHICLE CAN LEGALLY CARRY.

8 NHVR COVERS EVERYWHERE EXCEPT FOR NT AND WA WHICH HAVE SEPARATE COMPLIANCE LAWS

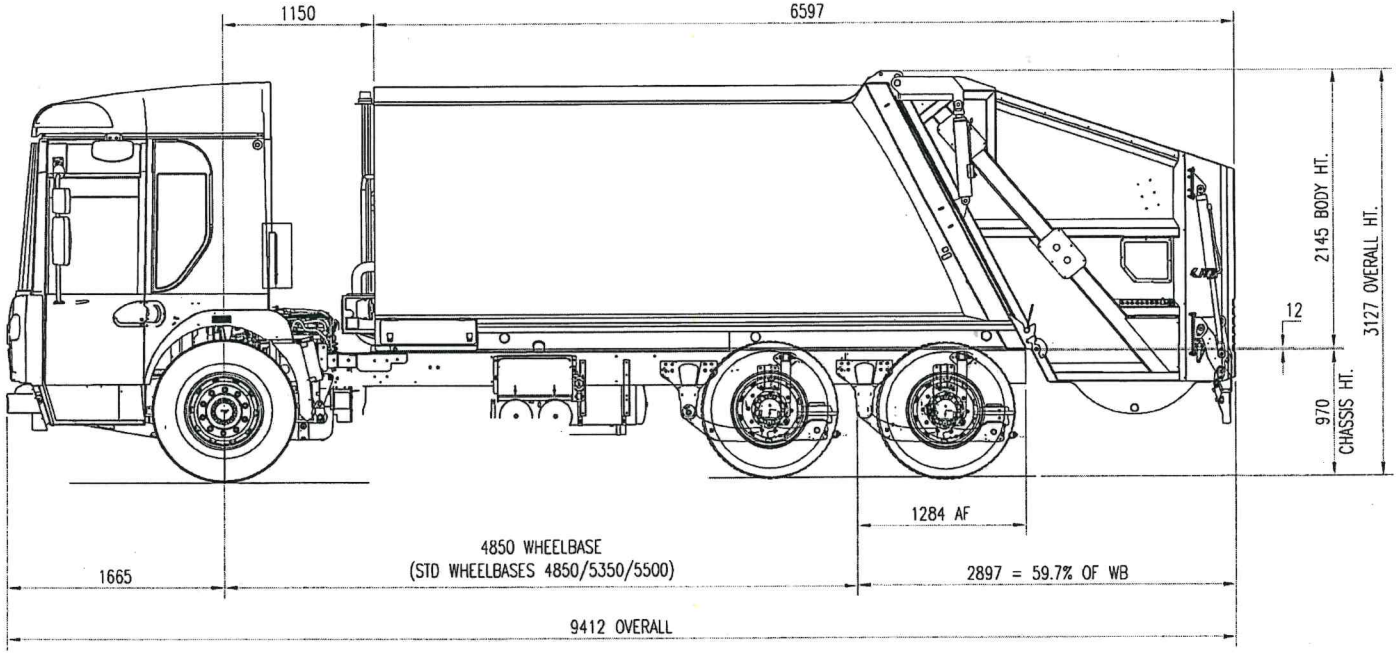
PTO NOTES

REFER TO THE LATEST "SPK-ENG-56-020 RL PTO SPEC" ON THE PORTAL

ADDITIONAL NOTES

BODY POSITION = 1150 (NO STD AVAILABLE) / OVERHANG = 59.7% (AU) / WHEELBASE = 4850 (AU) ORIGINAL
INCREASED LEGAL AXLE LOADS MAY BE AVAILABLE, CONFIRM WITH VEHICLE MANUFACTURER AND STATE AUTHORITIES

RELEASED
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A4 | SHEET 1 / 1

DWN	MR	25/05/2015
CHK	MLP	25/05/2015
APP	MLP	25/05/2015
PDS		
ECN		
GA		

TITLE:
SPECIFICATIONS
RL SERIES II REAR LOADER
17m³ LOW PROFILE MODEL (LP)
DE ELITE 2 6X4 (EURO 5) RFS FUPS

DRAWING No: RL15170164901

REV E

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