

CARPARK AND DRIVEWAY CERTIFICATION OF AN APPROVED COMMERCIAL DEVELOPMENT

433-437 Canterbury Road in Campsie

Prepared for: Sheesha Pty Ltd

N221831A (version 1d)

January 2025

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ACN 600201583



1. INTRODUCTION

Motion Traffic Engineers was commissioned by Sheesha Pty Ltd to prepare a car park certification of an approved commercial development at 433-437 Canterbury Road in Campsie for a Section 4.55 application for the childcare section.

Car parking is provided on the lower ground and three basement levels with vehicle access and egress via Canterbury Road. A loading bay is located on the lower ground for a small length waste truck.

Reference is made to AS2890.1 (2004), AS2890.2 (2018) AS2890.6 (2009) and Council's Development Control Plan for compliance.

The following Development Consent Conditions (DA-286/2022/D) are referred to:

2.27

The design, layout, signage, line marking, lighting and physical controls of all offstreet parking facilities must comply with the minimum requirements of

Australian Standard AS/NZS 2890.1 Parking facilities Part 1: Off-street car parking, AS/NZS 2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities and AS/NZS 2890.6 Parking facilities Part 6: Off-street parking for people with disabilities. The details must be submitted to and approved by the certifier before a construction certificate being issued.

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Furthermore, for internal driveways with a gradient exceeding 10% (1 in 10), longitudinal profiles of all vehicular driveways and ramps shall be submitted for approval by the certifier before the issue of the construction certificate. The maximum grade of the driveway/ramp shall not exceed 25% and shall comply with AS 2890 parking series. The profile shall be drawn at a reduction ratio of 1 to 25 vertical and horizontal and shall be related to the datum used for the issue of the footway design levels and shall also show the road centre line levels, Council issued footway design levels and gutter levels. Council's Car Clearance Profile in Council's Development Engineering Standards, (Plan No. S 006) shall be used to design the profile.

MET

2.7

Before the issue of the relevant construction certificate, a suitably qualified engineer must review the plans which relate to parking facilities and provide written evidence, to the certifier's satisfaction, that it complies with the relevant parts of AS 2890 – 'Parking Facilities - Off-Street Carparking' and Council's



development control plan.

MET

2.8

Where a boom gate or barrier control is in place, the visitor spaces must be accessible to visitors by the location of an intercom (or card controller system) at the car park entry, installed at least 6 metres recessed into the site, when measured from the property boundary with the street. The intercom is to be wired to all units.

The intercom must comply with Australian Standard AS 1428.2: Design for access and mobility - Enhance and additional requirements - Building and facilities Sections 22 and 23.

MET

2.9

The minimum number of seventeen (17) bicycle parking spaces is to be provided for the development.

Note: The layout, design and security of bicycle facilities must comply with the minimum requirements of Australian Standard AS 2890.3 – 'Parking Facilities' Part 3: Bicycle Parking Facilities and 'Austroads Bicycle Parking Facilities: Guidelines for Design and Installation.'

MET

2.33

Sight triangles are to be marked on relevant plans, being provided at the intersection of the driveway and the property boundary in accordance with AS 2890.1: 'Figure 3.3 – Minimum Sight Lines for Pedestrian Safety'. A splay extending 2 metres from the driveway edge along the front boundary and 2.5 metres from the boundary along the driveway shall be provided to give clear sight lines of pedestrians from vehicles exiting the site and is to be kept clear of any obstacles. Any structures, plantings or fencing within these triangles is to be a maximum height of 600mm to ensure sight lines are kept clear of any obstacles. This shall be illustrated on plans submitted with the construction certificate.

MET



2.34

Sight distance to approaching traffic on this section of Canterbury Road should be assessed using Figure 3.2 of AS2890.1-2004. This is to provide sight distance for vehicles coming out of the exit driveway and assess if No Stopping signage is to be provided across the driveway and street frontage. The Applicant is to apply to the Canterbury Bankstown Traffic Committee and if required a report will be prepared and be subject to recommendation by the Traffic Committee at the cost of the Applicant. The Applicant is to apply for the parking restrictions a minimum of three months prior to occupation of the premises.

MET

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2. DRIVEWAY/RAMP

The details of the ramp from the ground level into lower ground parking from the perspective of the inbound movement for description purposes are as follows:

- Separate entry and exit lanes are provided and are divided by a median island
 - The inbound driveway is 5.9 metres wide at the boundary
 - The outbound driveway is 4 metres at the boundary
 - The inbound driveway narrows to 5.9 metres on the two-way ramp
- Gradients along the centreline of the ramp are as follows:

Straight Section

•	2 percent	for	5 metres
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• 5 percent for 2.8 metres

Inside edge

- 15.4 percent for 8.4s metres
- 15.4 percent for 2.6 metres
- 15.4 percent for 12.17 metres
- 8.33 percent for 3 metres

Centre line

• 11.7 percent for 8.6 metres



- 10 percent for 5.76 metres
- 12.5 percent for 12.58 metres
- 8.33 percent for 3 metres

Outside edge

- 10 percent for 11.42 metres
- 6.67 percent for 8.23 metres
- 10 percent for 1.76 metres
- 11.76 percent for 8.43 metres
- 8.33 percent for 3 metres

A convex safety mirror is located on the curved ramp. The ramp complies with AS290.1 and AS2890.2.

The details of the ramp from the lower ground level into Basement 1 parking from the perspective of the inbound movement for description purposes are as follows:

- The ramp is 5.5 metres wide between kerbs
- Gradients along the centreline of the ramp are as follows:
 - 12.5 percent for 2 metres
 - o 25 percent for 10.1 metres
 - 12.5 percent for 2 metres

Convex safety mirrors are provided at the top and bottom of the ramp.

3. CAR SPACES

The details of the car parking area are as follows:

Basement 1

- The car parking aisle is 6.1 metres wide minimum
- The general 90-degree car spaces are minimum 2.4 metres wide with a length of 5.4 metres
 - Car spaces against a wall have an additional clearance
- The disabled car space is 2.4 metres wide and 5.4 long
 - A shared zone with the same dimensions has been provided
 - A bollard with a compliant setback has been provided within the shared zone
- Blind aisle extensions are provided
- Column setback and length comply



4. SWEPT PATHS

A swept turning path analysis is performed using a B85 car with 4.9 metres in length and B99 car with 5.2 metres in length, and a small rigid truck waste truck SRV as set in the Australian Standards to confirm that vehicle movements are adequate.

The following Swept Paths have been performed:

• Truck movements to and from the loading bay

All swept paths show adequate manoeuvrability.

The swept paths are provided in the Appendix A of this report.

5. CAR SIGHT DISTANCE

The car driver's vehicle sight distance requirement to enter the external road is stated in Figure 3.2 of AS2890.1.

The sight distance varies according to the speed of the external road. Canterbury Road has a sign-posted speed limit of 60 km/hr.

The minimum vehicle sight distance required is 65 metres. Site measurements showed that the minimum sight distance looking right for a left turn movement.

The pedestrian sight distance as set out in Figure 3.3 of AS2890.1 is met as well.

6. TRUCK SIGHT DISTANCE

The truck driver's vehicle sight distance requirement to enter the external road is stated in Figure 3.3 of AS2890.2.

The sight distance varies according to the speed of the external road. Canterbury Road has a sign-posted speed limit of 60 km/hr.

The minimum vehicle sight distance required is 83 metres. Site measurements showed that the minimum sight distance looking right for a left turn movement.

The pedestrian sight distance as set out in Figure 3.4 of AS2890.2 is met as well.



7. CONCLUSIONS AND RECOMMENDATIONS

The car parking area and driveway is overall compliant with Australian Standards and Council's DCP.

