

Queensland

PO Box 272 | Spring Hill QLD 4004 ABN 96 067 593 962

P 07 3839 6771 E mail@ptt.com.au WWW.PTT.COM.AU



3 March 2025

Stockland Development Pty Ltd Level 36 South Tower 525 Collins Street Melbourne VIC 3000

Attention: Matthew Hyams

Dear Matthew,

RE: AURA PRECINCT 14 - PROPOSED CHILDCARE CENTRE **RESPONSE TO FURTHER ISSUES**

INTRODUCTION

This report has been prepared by PTT, as requested by Stockland Development Pty Ltd, in response to a further issues letter issued by Economic Development Queensland (EDQ), dated 19 December 2024. The information request relates to a proposed childcare centre, located on Tyndall Circuit, Banya (application reference: DEV2-241569). The site is within Precinct 14 of the Caloundra South Priority Development Area (PDA). A response has been provided to Item 2 of the information request, which relates to car parking provision.

PLANS AND DOCUMENTS

DEVELOPMENT APPROVAL

Approval no: DEV2024/1569

10 April 2025

referred to in the PDA

Date:

ITEM 2: CAR PARKING

Item 2 of the information request states:

"The proposed reduction in on-site car parking spaces from 44 to 37 is not supported, as it is considered too high of a reduction. The site is a new, purpose-designated, and unconstrained location, and the parking requirements outlined in the Plan of Development are expected to be met as closely as possible as reliance on on-street parking is not acceptable due to the anticipated high demand from residential and educational uses.

A reduction of up to 10 percent will be considered, requiring a minimum of 40 spaces to be provided on-site. The proposal must be redesigned to meet this requirement."







CAR PARKING DEMAND

DETERMINING AN APPROPRIATE MEASURE OF PARKING DEMAND

With regard to identifying an appropriate on-site parking supply, Austroads' Guide to Traffic Management Part 11: Parking Management Technique (2020) states the following:

"Conventional practice is not to provide parking supply to meet demand on the busiest day of the year as this approach would be uneconomical because parking supply would exceed demand for all but one day of the year. Likewise, it would be inappropriate to link the supply of parking to the demand on an average day as this would mean that there would be insufficient parking available on half the days of every year. Instead accepted practice is to adopt a level of supply to satisfy the parking demand that will only be exceeded for a number of hours or days each year. This demand is most often taken to be equivalent to the 85th percentile hourly utilisation level experienced throughout the year."

Accordingly, it is considered reasonable that the proposed development provides sufficient on-site parking to accommodate at least the 85th percentile peak parking demand, rather than the maximum parking demand which could conceivably occur.

SUITABILITY OF PARKING DEMAND DATA

The childcare centre survey data sourced from the Planning and Environment Court matter¹ and presented in PTT's original traffic engineering assessment for the subject development (dated 11 November 2024) indicate:

- on average, the five surveyed childcare centres were operating at about 93% of their approved capacity on the day of the survey
- an 85th percentile parking demand of one space per 3.42 children in attendance, or one space per 3.74 approved places. This includes both the staff and visitor parking demands

This data above is considered a reasonable measure of the likely parking demand at childcare centres in the Sunshine Coast Local Government Area (LGA), because it:

- is collected locally on the Sunshine Coast
- is recent data (ie collected in 2021)
- has been accepted by three expert traffic engineers in the Planning and Environment Court as sufficient to determine a suitable parking provision for a new childcare centre development

Notwithstanding this, the subject site is located in an area with vastly better active travel infrastructure than most of the Sunshine Coast LGA. For instance:

- the vast majority (if not all) of roads in the local area have footpaths on at least one side, with footpaths on both sides of major roads and all roads fronting the subject site
- there are mid-block pedestrian links where appropriate
- there are off-street two-way cycle paths along most major roads in the area, including along the site's eastern frontage, with signalised or raised priority (ie wombat) crossings provided where these paths cross intersections
- visitor and secure staff bicycle parking is proposed on-site to cater for and promote cycling

¹ GG PropCo No 3 Pty Ltd vs Sunshine Coast Regional Council & Ors, appeal number 2909 of 2020



Additionally, our previous experience with educational and community use developments in the Caloundra South PDA indicates that the proportion of trips undertaken by active transport in the PDA is significantly higher than in the Sunshine Coast LGA as a whole. Therefore, the car parking demands of developments in the PDA (including the subject proposal) are likely to be lower than that of comparable developments in the broader LGA.

On this basis, it is expected that above parking demand rates, as well as the parking rates contained in Council's Transport and Parking Code, may overstate the parking demands of the proposed development.

ATTENDANCE DATA

Attendance data has previously been sourced from the Goodstart Baringa childcare centre, located 4.5km north-east of the subject site. The childcare centre has capacity for 132 children and attendance data for a four-week period in November 2021 was obtained. The data indicates:

- an average attendance of 106 children (ie 80% of the approved capacity)
- an 85th percentile attendance of 112 children (ie 85% of the approved capacity)
- a maximum attendance of 117 children (ie 89% of the approved capacity)

This attendance data gives additional confidence that the 'design' attendance rate of 93% (ie 112 children) adopted in PTT's original assessment is reasonable (or perhaps conservative) and consistent with Austroads' Guide to Traffic Management.

PROPOSED DEVELOPMENT

PARKING PROVISION

The proposed development layout has been revised to provide one additional car parking space, for a total of 38 spaces. This represents a surplus of five spaces compared to the expected demand (ie 33 spaces), based on the above parking demand survey data. As shown in Table 1, even when considering an occasional case where the proposed development operates at capacity, there would still be surplus of three parking spaces compared to the forecast demand (ie 35 spaces). Therefore, the proposed parking provision is considered adequate.

Table 1: FORECAST PARKING DEMAND

USE	SCALE	ATTENDANCE	Parking demand rate	DEMAND
Design Case Maximum:				33 spaces
Childcare	120	93%	1 space per 3.42 children attending	33
Centre	children		1 space per 3.74 approved places	32
100% Attendance Case Maximum:				35 spaces
Childcare Centre	120 children	100%	1 space per 3.42 children attending	35
			1 space per 3.74 approved places	32



PARKING DESIGN

The revised car parking design remains consistent with the requirements of AS2890.1² and AS2890.6³, in terms of minimum parking space and aisle dimensions, and is typified by:

- regular parking spaces dimensioned 2.6m wide by 5.4m long (or 2.6m wide by 10.8m long in tandem spaces)
- PWD space dimensioned 2.4m wide by 5.4m long, with an adjacent 2.4m wide shared area
- parking aisles dimensioned a minimum 6.2m wide
- an end of aisle treatment comprising a 1.0m long aisle extension beyond the last parking space,
 with a dedicated turnaround bay
- wheel stops in all parking spaces located adjacent to pedestrian pathways to prevent parked vehicles from encroaching over the pathway

The revised plan of development is attached. Swept path analyses of passenger vehicle (ie B85 and B99) manoeuvring have been undertaken to demonstrate two-way passing around the bend in the parking aisle and turnaround at the end of the aisle. As demonstrated in Figure 1 and attached in PTT Drawing Number 25-367-001, the revised layout is sufficient to facilitate these manoeuvres.



Figure 1: VEHICLE MANOEUVRING ON-SITE

² Australian Standards AS2890.1:2004 Parking Facilities Part 1: Off-Street Car Parking

³ Australian Standards AS2890.6:2022 Parking Facilities Part 6: Off-Street Parking for People with Disabilities



QUEUING PROVISION

As outlined in the submitted traffic engineering assessment, AS2890.1 recommends that sufficient queuing space be provided at site accesses in order to allow a free influx of traffic which will not adversely affect traffic or pedestrian flows on the frontage road. The 95th percentile vehicle queue is considered to be a suitable measure of a design queue length and was calculated to be equal to one vehicle (ie 6.0m) during the critical (ie morning peak hour).

With the proposed conversion of the VAN bay into a regular car parking space, minor changes to the layout have been made to maintain a minimum 6.0m queuing provision between the site boundary and the first on-site parking space. Therefore, the revised layout provides sufficient queuing provision in accordance with AS2890.1 recommendations.

SERVICING

To facilitate the above changes, the dedicated VAN loading bay has been removed. This is not expected to have a significant adverse impact on the ability to safely and conveniently service the site, for the following reasons:

- the servicing demands of childcare centres are typically very low and, based on our previous experience, most servicing of childcare centres is undertaken outside the peak periods
- according to AS2890.1, most vans and light commercial vehicles are adequately represented by the standard B99 vehicle (ie a large passenger vehicle) and are able to make use of regular car parking spaces. As such, a dedicated VAN bay is not necessary to facilitate servicing by a VAN
- outside the peak morning and afternoon drop-off / pick-up periods, the demand for short-term parking at the site is likely to be minimal and there would be ample spare capacity for a VAN to park on-site
- in the occasional event that servicing occurs during the peak periods, it is expected that there would still be a surplus in on-site parking compared to the forecast demand

Therefore, the proposed servicing arrangements are considered adequate.



CONCLUSIONS

This report has addressed Item 2 of EDQ'S further issues letter, in relation to a proposed childcare centre in Precinct 14 of the Caloundra South PDA (application reference: DEV2-241569). The main points to note are:

- the proposed on-site parking provision has been increased to 38 spaces
- this represents a surplus of five spaces compared to the forecast 85th percentile parking demand (ie 33 spaces) and three spaces compared to the forecast demand under an occasional 100% attendance scenario (ie 35 spaces)
- additionally, when considering the high standard of active transport infrastructure in the local area,
 the parking demands of the proposal may be lower than forecast
- the proposed parking design complies with AS2890.1 and AS2890.6 requirements, in terms of minimum parking space and aisle dimensions, and vehicle manoeuvring has been demonstrated
- the proposed queuing provision is sufficient to accommodate the forecast 95th percentile vehicle queue, in accordance with AS2890.1 recommendations
- the proposed changes to the layout are not expected to have a significant adverse impact on commercial vehicle servicing of the site

If you have any questions regarding the issues discussed above, please do not hesitate to contact us.

Yours sincerely,

James Gannon

Director (RPEQ 22233)

SITE AREA 3415m²

GFA

BUILDING TYPE 1

922m²

1,119m² 32.8%

SITE COVER

AREA PERCENTAGE OF SITE AREA

LANDSCAPING AND PLAYSCAPING

LANDSCAPING AREA PLAYSCAPE AREA

OCCUPANTS

0-24 MONTHS OLD (INFANTS) 24 24-36 MONTHS OLD (TODDLÉR) 30 OVER 36 MONTHS OLD (PRE-KÍNDY) 66 **TOTAL CHILDREN**

EDUCATORS 20

CARPARKING

NUMBER OF STANDARD CARPARKS 26 NUMBER OF ACCESSIBLE CARPARKS NUMBER OF STAFF CARPARKS 11 **TOTAL** 38 NUMBER OF BICYCLE PARKS 10

(APPLIES FOR CALOUNDRA SOUTH DEVELOPMENT SCHEME)

The total floor area of all storeys of a building, including mezzanines, measured from the outside of external walls or the centre of a common wall, excluding area used for:

(a) building services
(b) ground floor public lobby

- (c) a public mall in a shopping complex
- (d) the parking, loading and manoeuvering of motor vehicles
- (e) private balconies whether roofed or not.

2. SITE COVER

(APPLIES FOR CALOUNDRA SOUTH DEVELOPMENT SCHEME)

The proportion of the site covered by buildings, including roof overhangs.

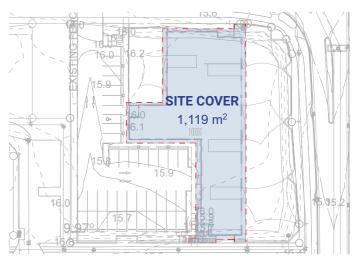


Site Area

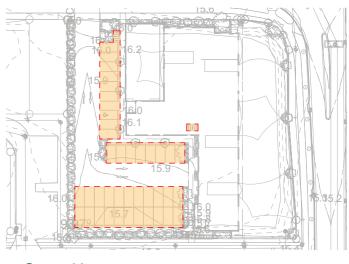




Landscape



Site Cover



Carparking





