David Pavey Pty Ltd trading as

Pavey Consulting Services

Specialising in

- Traffic Impact Assessments and Transportation Planning
- Road Safety, Traffic Management Plans and Traffic Control Plans
- Civil and Structural Design
- Project Management and Contract Administration
- Mediation and Government Relations

14 LAVENDER CLOSE,

GILLIESTON HEIGHTS

Proposed 82 Place Child Care Centre

]Traffic Impact Assessment

Revision 1.0

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Authorised SafeWork NSW - Prepare a Work Zone Plans - No TCT1017730

NSW Department of Planning and Environment Secretary's approval as suitably qualified person to prepare the Traffic Management Plan (TMP)

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1. INTRODUCTION

Pavey Consulting Services was commissioned by Allwin Homes to prepare a Traffic Impact Assessment (TIA) for approval of a proposed 82 place childcare centre development at 14 Lavender Close, Gillieston Heights NSW 2321.

The following items have been included in the subsequent sections of this report:

- Public and active transport accessibility at the site;
- Number of car parking spaces required for the development;
- Expected traffic generation rates and their impact on the surrounding road network; and
- Conclusions of the above findings.

During the course of preparing this assessment, the subject site and its environment have been inspected, all relevant traffic and parking data has been collected and analysed.

2. BASIS OF TRAFFIC IMPACT ASSESSMENTS

This Traffic Impact Assessment (TIA) has been prepared in accordance with the relevant governmental assessment requirements, guidelines and policies, and in consultation with the relevant Government Agencies.

- The TIA has been developed in accordance with:
- Austroads Guide to Traffic Management Part 3 Traffic Studies and Analysis;
- Austroads Guide to Traffic Management Part 12 Traffic Impacts of Developments; and
- NSW Roads and Maritime Services (RMS) Guide to Traffic Generating Developments (2002).

3. BACKGROUND AND EXISTING CONDITIONS

The site is located along the cul-de-sac termination end of Lavender Close, Gillieston Heights NSW 2321. It is located approximately 500m west of Cessnock Road and 3.7 kilometres south of the New England Highway & Cessnock Road roundabout. Maitland Town Centre is approximately 4.5km north of the site and the suburb of Cliftleigh is approximately 3km south of the site.

The site is currently undeveloped and consists of an existing bitumen driveway, a sandstone block wall, fencing and a few stockpiles. The lot is situated in a R1 – General Residential Zone as per the Maitland City Council Local Environmental Plan 2011.

The immediate surrounding area predominantly consists of residential lots in the same R1 zone to the east and rural properties located in a RU2 – Rural Landscape zone to the west.

Figure 1 on page 6 provides an overview of the area, and its surrounding land uses whilst **Figure 2** also on page 6 provides an aerial view of the immediate area surround the subject site. **Figure 3** on page 7 provides a street view of the site.

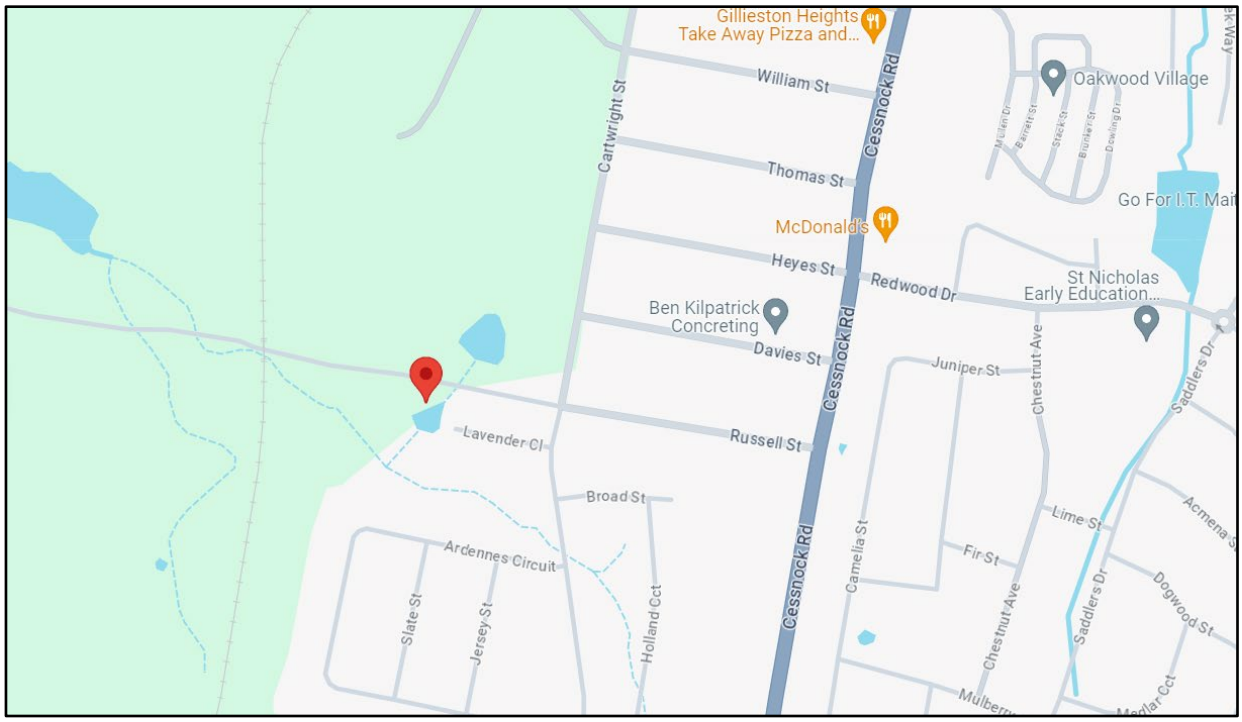

Figure 1: Location of the Subject Site (© Google 2024)

Figure 2: Aerial View of the Subject Site (© Google 2024)

Figure 3: Street View of the Subject Site (© Google 2024)

5. PUBLIC TRANSPORT

The subject site has access to the Rover Bus Service which operates along Cessnock Rd. The closet bus stop is within 500m of proposed development

6. WALKABILITY

The locality was assessed for nearby features that would encourage staff and visitors to walk/cycle. Reference is made to the 20-minute walking catchment area outlined in **Figure 4** (below).

The 'walkability' of a site is a measure of its proximity to other facilities by walking and can be ascertained from *www.walkscore.com*. The subject site is rated as “Car Dependent” (meaning that almost all errands require a car). However, the majority of clients i.e., children will either be picked up or dropped off by parents/ carers on the way to and from work as they commute to Armidale or walk from the adjacent residential areas. **Figure 3** (below) indicates that the walking catchment of the proposed development is with an existing and developing residential area.

Figure 4: 20 Minute walking catchment area (Source - www.walkscore.com)

7. PROPOSED DEVELOPMENT

The Development Application is for a proposed Long Day Care-Centre.

The centre will offer care for up to 108 children ranging in age from birth to five years.

The Centre will cater for children up to school age with the space has been divided into:

- 12 nursery spaces;
- 20 toddler spaces; and
- 50 preschool spaces.

In accordance with the NSW Government Child-Care Guidelines, the Centre will also have a laundry, kitchen, staff room, staff toilets as well as offices and meeting rooms for the staff.

Hours of operation

The operating hours for the proposed Centre will be 6:30am to 6:30pm.

Number of Staff

Up to 12 staff will be employed at the centre when operating at capacity with a maximum.

8. CAR PARKING DEMAND ASSESSMENT

Council Requirements

Maitland City Council Development Control Plan 2012 Chapter 2.9 Parking has the following objectives with respect to parking supply.

To ensure that convenient off-street parking provision is provided that is sufficient for the expected type, volume and turnover of traffic likely to be generated by developments. This includes:

a) car parking by customers, clients, patients, employees, students, residents, visitors, etc., as appropriate; and

b) parking for other vehicles as appropriate, including motorcycles, scooters and bicycles, as well as expected service and delivery vehicles, while recognising any historic deficiencies in the provision of parking on individual sites.

Under Table 1 of Chapter 2.9, the minimum parking spaces required are as follows:

- Carpark – 1 space per FTE employee plus pick up/set down area based on size of facility.

Based on 82 child placements and 13 staff, a minimum of 13 car spaces plus a drop off zone and a further 3 bicycle parking spaces are required.

Transport for NSW Guidelines

RMS guide to Traffic Generating Developments provides the following advice for Childcare Centres:

- A centre can provide pre-school care, long day care, before / after school care or a combination of the above.
- Off-street parking must be provided at the rate of one space for every four children in attendance.
- Parking must be provided in a convenient location, allowing safe movement of children to and from the centre.
- Consideration could be given to reducing the parking required if convenient and safe on-street parking is available.

Research carried out by TfNSW *(RMS Land Use Traffic Generation - Data and Analysis 21 - Child Care Centres*) notes that the following rates may be applicable to this development:

- Centres with 70 to 100 children – 1 space per 6 children

This proposal is for a Centre with capacity for 82 places and accordingly 14 spaces are required at this site.

Overall Parking Requirement

The proposed development is providing:

- 20 carpark bays within the site,
- A dedicated turning bay to assist manoeuvrability in the carpark ,
- Wheel stops will be installed at each car space to ensure that cars cannot drive onto the pedestrian path at the front of the Centre, and
- The car parks noted as 'Visitors' parks in front of the Centre are the designated pick-up and drop off parking.

Therefore, the design complies Council's DCP a d TfNSW recommendations with respect to car parking spaces.

9. CAR PARKING DESIGN

AS2890.1 Off Street Car Park sets out the standard for car parking bay sizes and aisle widths for 90-degree parking whilst AS 2890.6 2009 Off Street Parking for people with disabilities sets out the requirements for disabled parking.

Compliance with AS 2890.1 Off Street Car Parking:

- The facility would be User Class 1A.
- As set out in Figure 2.2 (AS2890.1) the minimum dimensions are as follows:
  - Width: 2.4m,
  - Length: 5.4m, and
  - Aisle width: 5.8m.

On review of the documents received, it is confirmed that the car park area conforms to the requirements of AS 2890.1 Off Street Car Parking.

10. TRAFFIC IMPACT ASSESSMENT

Based on the RTA Guide to Traffic Generating Development (2002) and its technical updates, it is evident that trip generation rates given for a Childcare Centre (Long Day Care) land use are as follows.

Table 1 Peak Hour Trip Generation

Peak Times	No of Children	Weekday Peak Hour Vehicle Trips / child	Peak Hour Traffic Generation
6.30am – 7.30am	30	0.8	24 vehicles/hr.
7.30am – 9.00am	52	0.8	27 vehicles/hr.

3.00pm – 4.00pm	40	0.3	12 vehicles/hr.
4.00pm – 6.00pm	42	0.7	15 vehicles/ hr.

Based on the above tables, the maximum peak hour vehicle trips generated from the site will be 24 vehicular trips per hr in the early morning drop off period.

Many trip-ends associated with the Childcare Centre will also be drop-in trips; for example, a motorist dropping off a child or children as part of a trip to a school and/or on the way to work as part of their regular commute.

The Australian Bureau of Statistics' latest issue of the Childhood Education and Care document indicates that 78.8% of all children attending formal care present due to parent / carer work-related reasons. If all these parents / carers dropped their child off as part of their regular commute to work only 21.2% of generated trips would be potentially new.

Therefore, the peak hourly new trips generated by this development would be of the order of 6 vehicles per hour and consequently will have an insignificant impact on the surrounding road network.

11. CONCLUSIONS

Based on the assessment presented in this report, it is considered that:

- The proposed development is an 82 space Long Care Child-Care Centre;
- The site has great access to the local areas and is adjacent to Cessnock Rd a major connection between Kurri and Maitland.
- The site is located within a walkable catchment of and existing and developing residential area;
- When considering the land use and location of the site, trips to and from the site are likely to be cross utilised with trips to the surrounding areas particular as part of the 'journey to work' trips of the parents;
- The proposed development will generate additional, but low-medium levels of trips throughout the day. The total peak hour vehicle trip rate from the development has been assessed at6 vehicle trips/hr during the late afternoon time, which is considered to be insignificant;
- The proposed development provides ample car parking on-site with parking meeting the recommendations of RTA Guide to Traffic Generating Development (2002) and its supplements, other NSW Government Guidelines for Childcare facilities as well as the requirements of the Council's DCP; and
- The car parking for the for the proposed development meets the relevant Australian Standards AS/NZS 2890.1 and AS/NZS 2890.6 requirements.

In conclusion, this study indicates that the proposed development is not envisaged to have adverse impacts on the surrounding traffic or parking conditions. Therefore, the proposed development should be supported on traffic and parking grounds.

12. Appendix A Site Plan