

14 September 2023

P2470 WA LAHC Lismore East TIA

Land and Housing Corporation
C/- Webber Architects
Hunter Street
NEWCASTLE NSW 2300

Attn: Luke Keating

Dear Luke,

Proposed Residential Development, 195-197 Dibbs Street, East Lismore, NSW.

Further to your request, we have now completed our site work and reviewed the documentation provided for the proposed residential development at 195-197 Dibbs Street, East Lismore. We provide the following assessment of traffic, parking and access to support a development application to Lismore City Council.

This assessment has been prepared with consideration to the following documents:

- Austroads Guidelines;
- Guide to Traffic Generating Developments (published by Transport for NSW);
- State Environmental Planning Policy (Housing) 2021;
- Lismore Development Control Plan;
- Australian Standard AS2890 (Parking Facilities).

Background

The subject site is located at 195-197 Dibbs Street, East Lismore on the corner of Walker Place and Dibbs Street as shown in Figure 1. It is two lots, each with a single residential dwelling with two driveways, one on each street frontage.

The lots are zoned R1 Residential.



Figure 1 - Location of the subject site within the context of the local road network.

Road Hierarchy

Dibbs Street is a local collector road within the residential area of East Lismore. In the vicinity of the site it has a width in the order of 6.5m and widens to 11 metres to the north of the site. It has a posted speed limit of 50km/h. It has no kerb or gutter but a grass swale for drainage and grass verges. There are street-lights but no footpaths. Parking is permitted along both sides of the street with normal restrictions at intersections and driveways.

At its northern end Dibbs Street provides access to local schools, aged care developments and St Vincents Private hospital. It connects with Ballina Road at a 4 way intersection however no through movements are permitted with Dibbs Street operating as a T-intersection with Ballina Road having priority. Ballina Road provides a route connecting to the various local streets and the centre of Lismore CBD. At its southern end Dibbs Street connects with Wyrallah Road, a southbound route to Woodburn and the Pacific Highway. This intersection is a 5 way off set give way controlled intersection with Wyrallah Road being the priority road.

Walker Place is a short cul de sac with a mix of single and multi dwelling developments. It has a width in the order of 5.5 metres and a turn head to allow for garbage trucks etc to turn around. Parking is permitted along Walker Place. There is no footpath or kerb and guttering except within the turn head where there is kerb and guttering.

Walker Place intersects with Dibbs Street at a simple T-intersection with Dibbs Street having priority.

Walker Street is a local street, offset from Walker Place, providing local connection to residences and a route to the east.



Photo 1 Dibbs Street looking south showing typical cross section with subject site to left of photo



Photo 2 Walker Place showing length and cross section. Subject site to right of photo.

Roadworks, Traffic Management Works and Bikeways

At the time of the site there were no roadworks proposed or occurring in the immediate locality of the site. Ongoing road repairs were being undertaken throughout Lismore as a result of flood events.

No traffic management works or cycleways are currently proposed in this location.

Current Traffic Volumes & Travel Patterns

As part of the project work, traffic surveys were completed at the intersection of Dibbs Street and Walker Place to observe the current operation and determine the existing traffic demands along each of these roads. These surveys were completed during in the morning on Tuesday 1st November 2022. This time was selected as it reflected peak demands associated with the local road network, allowing commuter demands and trips associated with local schools etc. A summary of the peak hour traffic volumes through this intersection is provided in Figure 2.

The surveys during the morning peak (8-9am) showed flows on Dibbs Street along the site frontage to be 203 vph two way (114 northbound 89 southbound) with flows on Walker Place much lower being 3 trips (2 trips eastbound, 1 westbound).

Heavy vehicle flows on Dibbs Street were relatively high being 4% of through traffic and were mainly trucks for light industry with several buses and a garbage truck.

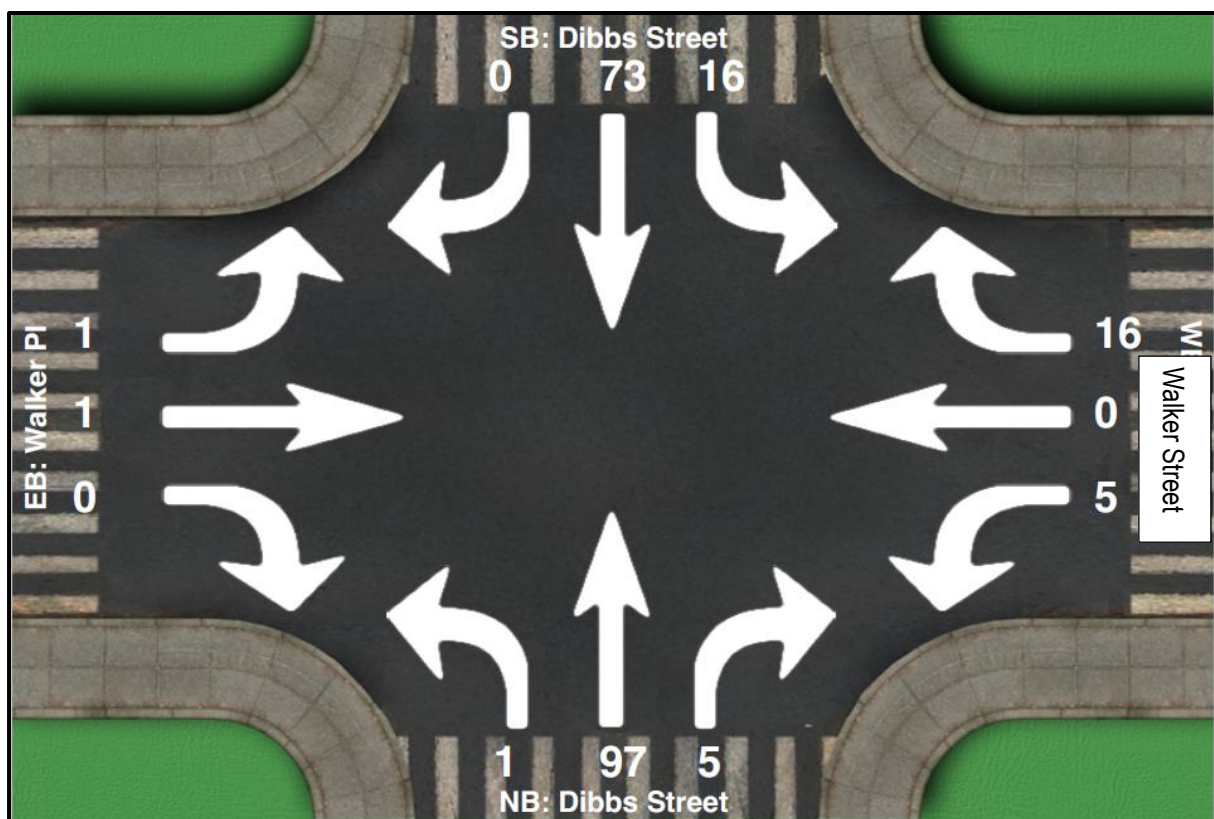


Figure 2 - Surveyed traffic volumes at Dibbs Street and Walker Place and Walker Street (8.00-9.00AM)

Transport for NSW (TfNSW) Guidelines indicate that peak hour traffic volumes typically represent in the order of 8-12% of the total daily traffic demand. Applying the average value of 10% this indicates that daily flows on Dibbs Street in this location could be in the order of 2100 vehicles per day (vpd) with flows on Walker Place being low in the order of 50 vpd.

Based on the GtTGDs the two dwellings on the site could generate peak hour trips of 2 trip in the peak hour and up to 18 trips per day. No traffic associated with the site was noted during the traffic surveys.

Road Network Operation

Observations on site indicate that the local roads operate well with minimal delays and congestion.

Dibbs Street, which operates as a collector street providing connection between the civic precinct of Lismore and the residential areas to east of the town carries two way hourly flows of 203 vph. Based on the GtTGD, collector

streets with direct access to residential properties have a maximum environmental capacity of 500 vph, with a desirable goal of 300 vph. As per the traffic volumes outlined above, Dibbs Street operates well within this limit with flows less than 300vph.

Traffic Safety and Crash History

A review of crash data published online by TfNSW during the 5 year period between 2017-2021, indicates there have been no accidents within the vicinity of the site nor at the intersection of Dibbs Street and Wyrallah Road.

A review of the local road network shows that the roads are well laid out and visibility at the various intersections meets Austroads requirements. It is considered that there are no specific road safety concerns in the locality of the subject site.

Pedestrians and Cyclists

Pedestrian Facilities – There are no footpaths within the immediate vicinity of the site with people able to walk on the grass verge or along the edge of many local streets.

Cycling Pathways – local streets are quiet offering suitable routes for cyclists.

Local schools are within walking and cycling distance of the site.

Minimal pedestrian movements were observed in the locality during the survey period.

Public Transport

Train Services – None, with the closest station being Casino 30 minutes to the west.

Bus Services – Bus services are provided by Northern Rivers Busline with route 683 -Lismore Heights Circle along Walker Street connecting to local shops and services. Service run hourly Monday to Friday between 7am and 6.30pm, Saturday hourly between 8am and 5.45pm with 4 services Sunday 9am-5.50pm.

There is a bus stop on Walker Street 75 metres south east of the subject site.

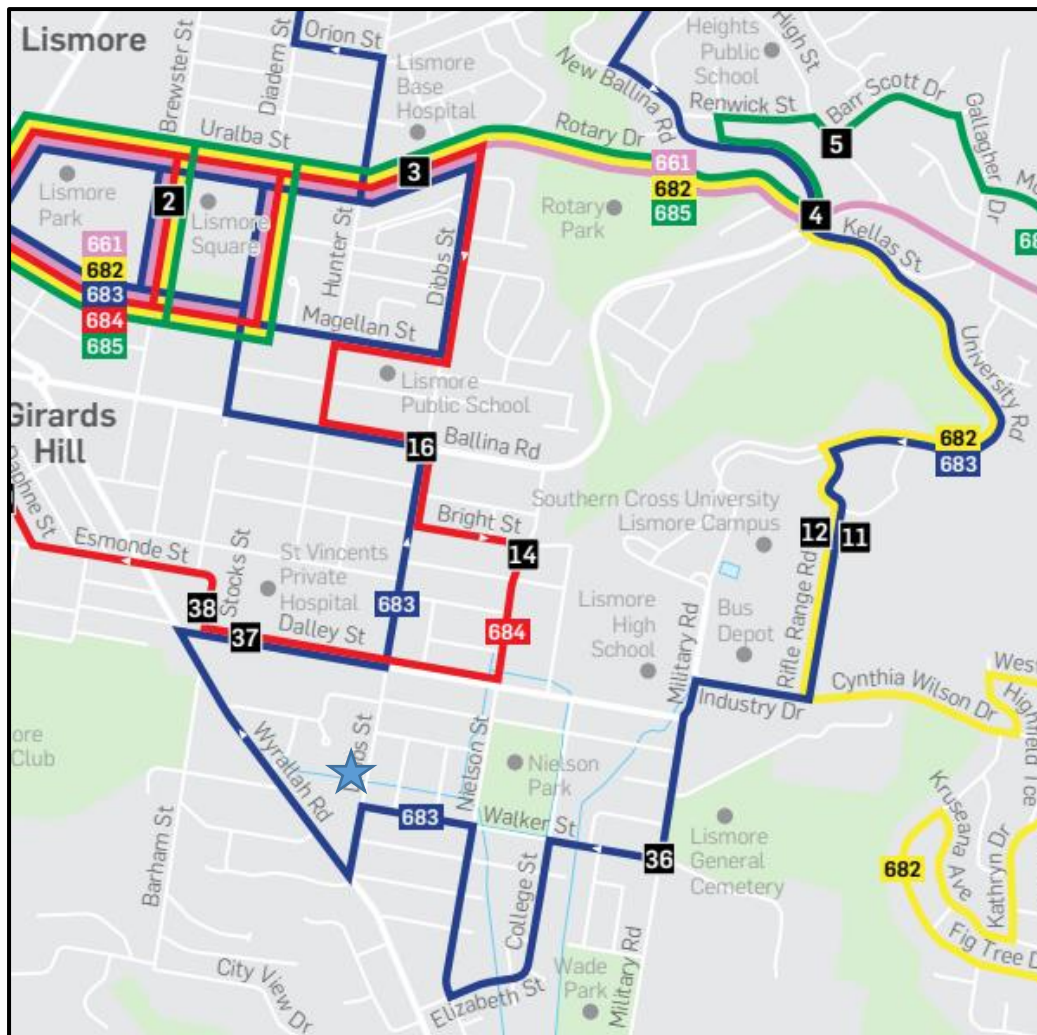


Figure 3 Bus Routes within vicinity of site (★)

Development

The concept plans allow for the construction of a multi-dwelling housing development on behalf of Land and Housing Corporation (LAHC) providing:

The proposed development provides 6 units being a mix of 4 units with 2 bedrooms and 2 units with 3 bedroom units with 7 parking spaces, one being adaptable.

The carpark is accessed from a new driveway off Walker Place with a width of 3000mm, widened at the crossover to 5000mm.

The project includes kerb and guttering and footpaths along both site frontages as well as widening along Dibbs Street to allow for on street parking.

Review of Car Parking

Lismore DCP does not nominate a parking rate for affordable housing.

Rate for residential flat buildings: 1 per 1 bedroom unit, plus 1.5 per 2 bedroom unit, plus 2 per 3 bedroom unit, plus 1 per 5 units visitor parking

In accordance with the Housing SEPP 2021, affordable housing developed by LAHC can provide parking at the rate:

(e) for development on land that is not in an accessible area—the development will result in at least the following parking spaces—

- (i) for each dwelling containing 1 bedroom—0.5 parking spaces,
- (ii) for each dwelling containing 2 bedrooms—1 parking space,
- (iii) for each dwelling containing at least 3 bedrooms—1.5 parking spaces

The site is not in an accessible area as defined by the Housing SEPP.

Allowing for 6 units with 14 bedrooms the parking requirement is 7 spaces.

There is no visitor parking required per the Housing SEPP.

Parking has therefore been provided in accordance with the Housing SEPP.

Parking Layout

AS/NZS 2890.1:2004 specifies the following requirements for residential car parking (User Class 1A):

- Minimum dimensions of 2.4m wide by 5.4m long (additional clearance is to be provided to spaces bounded by walls or columns)
- Minimum parking aisle width of 5.8m (to be increased to 6.1m where parking is provided on one side of the aisle only and the other side bounded by a wall or other vertical obstruction)
- Where the parking aisle results in a dead-end, the parking aisle is to extend at least 1m beyond the end of the last parking space and the last space widened by at least 300mm.
- Disabled parking in accordance with AS2890.6 – minimum width 2.4m with 2.4m shared space adjacent.

Access

Driveway Location

Access to the site is currently provided with a driveway off both Dibbs Street and Walker Place.

The driveway as shown off Walker Place allows for all turn movements into and out of the site. Given the dead end nature of this street traffic flows are anticipated to be right in and left out.

The traffic flows associated with the site shall be low, being in the order of 3 trips two way in the peak hour.

Flows on Walker Place are very low given the short length and lack of through traffic movements. There is therefore negligible delay for right turns into the site.

Sight Distances

The driveway is located within a 50 km/h posted speed zone. For this speed limit AS/NZS 2890.1:2004 nominates sight distance requirements of 45 metres minimum, 69 metres desirable.

Walker Place offer a straight and level alignment providing suitable forward visibility for road users.

From Walker Place the sight distance is to the intersection with Dibbs Street being in the order of 30 metres. Whilst this is less than the minimum requirement for a 50km/h road, vehicles in this location will be travelling at less than the posted speed limit having only just turned into Walker Place. Similarly, the short length of Walker Place (64 metres) does not see vehicles travelling at the posted speed as they approach the access and the intersection with Dibbs Street.

Driveway Layout

The driveway, whilst not allowing for two cars to pass, is consistent with AS2890 being less than 30 metres long. As there is a bend at the end of the driveway there is no direct line of sight between the site entry and the carpark. Signage shall be included in the carpark for exiting vehicles to hold and Give Way to entering cars with visibility supported by the inclusion of a vehicle safety mirror, the widening of the driveway profile and landscaping being less than 0.5m.

Given the low number of trips (3 per hour) the likelihood of there being two opposing vehicles is very low. As the parking is for residents only all users will be familiar with the arrangements. If a vehicle approaches the access whilst a vehicle is exiting any delay for the entering vehicle will be minimal as the exiting movement is anticipated to be left out. Traffic demands on Walker Place are very low (3 vph in the AM peak) and so no queues would be expected. As a worse case the crossover does provide a width of 5000mm which could allow two vehicles to pass if required.

All vehicles will be able to enter and exit the site in a forward direction.

Servicing

Site servicing demands are expected to be low being occasional deliveries and weekly waste collection.

Waste collection shall be by Council kerb-side collection consistent with other medium density developments in the vicinity.

Occasional deliveries are typically by van which can park on street. Similarly rare deliveries from larger trucks can be on street per the existing situation for these lots and other houses in the street.

Traffic

Affordable housing is assessed at the rate of 0.4 trips per unit in the peak hour (GtTGDs).

For the proposed development of 6 units the traffic generation in the peak hour is therefore 3 trips per hour.

Allowing typical residential allocation of 80% outbound/20% inbound in the AM peak and the reverse in the PM this would see 2 trips outbound and 1 trip inbound in the AM peak. This makes no allowance for existing trips associated with the site.

Daily trips (30) would be split equally inbound and outbound across the day.

Traffic would have an origin/destination consistent with the traffic surveys with demands equally to the north and south.

Trips would be distributed across a number of different routes.

Given peak hour flows on Dibbs Street of 203 vph, the development flows could increase two way flows to 205 vph. This is well within the environmental capacity of a collector road of 300 vph desirable, 500 vph maximum.

Flows on Walker Place are much lower, being 3 vph with an environmental capacity of 200 vph desirable, 300 maximum. The impact of the additional development flows are well within this.

From this it can be seen that the local road network has adequate capacity to accommodate both the proposed development as well as background growth over the coming 10 years. Background growth is not anticipated to be high given the mature nature of the surrounding residential area.

As flows on local streets are low and traffic can distribute across numerous routes, the impact at any one intersection is minimal.

Conclusion

The proposed development has been assessed and should be approved on traffic, parking and access grounds.

The access can be provided taking into consideration AS2890, as can the parking for the site with on site management measures to support the visibility between the driveway and carpark.

The parking supply is in accordance with the Housing SEPP 2021 for affordable housing developed by the LAHC.

Bus services along Walker Street provide connection to local shops and services with schools within walking distance of the site.

The additional traffic associated with the site will be minimal and within the environmental capacity of the local streets. The impact of this traffic across various routes reduces its impact on individual roads and intersections.

Overall, it is concluded that the development be recommended for approval on the grounds of traffic, parking and access.

Please feel free to contact our office on 4032 7979 should you require any additional information.

Yours sincerely,



Sean Morgan

Director

Attachment A: Site Photos



Photo 3 –Dibbs Street looking north, subject site to left of photo and road widening to the north of the site



Photo 4 –Walker Place showing typical cross section with lot 197 to right of photo



Photo 5 – Intersection of Walker Place and Dibbs Street

