

TRAFFIC IMPACT AND PARKING ASSESSMENT

FIRE STATION BOARDING HOUSE 3 WILLIAM ST, FAIRFIELD NSW

PREPARED FOR H&F BUILDING P/L

IN COORDINATION WITH MODE ARCHITECTS

> DATE: 26TH JULY 2018 OUR REFERENCE: 170822 BY: BENJAMIN VANMIDDE



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1 INTRODUCTION

1.1 GENERAL

Greenview Consulting has been engaged by the client to undertake a review of traffic and parking at the subject site. This report must be read in conjunction with the other Development Application documents and other relevant information, including:

- Architectural Drawings by Mode Architects
- Fairfield Town Centre DCP 2013 Appendix 5 "Parking Requirements"
- SEPP 2009 "Affordable Rental Housing"
- RTA Guide to Traffic Generating Developments (October 2002)

This purpose of this report is to:

- Describe the site and the proposed development scheme;
- Describe the road network serving the site and the prevailing traffic conditions;
- Assess the adequacy of the proposed parking provision;
- Assess the potential traffic implications;
- Assess the suitability of the proposed vehicles access, internal circulation and servicing arrangements.

2 EXISTING CONDITIONS

2.1 SITE DESCRIPTION

The subject site is located in between William St and a small laneway, refer **Figure 2.1**. The site is currently occupied by a one-story fire station that functions as a boarding house with 11 boarding rooms.



Figure 2.1 Site Location



The site includes the following lots: Lot 3 Sec 2 DP 3035 & Lot 1 DP 308061. The total area occupied by the subject site is approximately 960m².



Figure 2.2 Site Frontage from William St Image courtesy of Google Maps (Streetview, capture date Sep 2017)

2.2 EXISTING ROAD CONDITIONS

The Roads & Maritime Services (RMS, formally RTA) broadly classifies all roads into three administrative classes: state, regional and local. A detailed description of each administrative class is provided in "NSW Road Management Arrangements" (December 2008), however in general:

State Roads are the major arterial links throughout NSW and within major urban areas. They are the principle traffic carrying and linking routes for the movement of people and goods within the Sydney, Newcastle, Wollongong and Central Coast urban areas and which connect between these urban centres, the major regional towns, the major regions of the State and the major connections interstate.

Regional Roads are routes of secondary importance between State Roads and Local Roads which together with the State Roads, provide the main connections to and between smaller towns and districts and perform a sub arterial function in major urban areas.

Local Roads comprise the remaining Council controlled roads which provide for local circulation and access.

William St is a local road with 1 lane of traffic in each direction, no median divider and parking along both sides of the road in some sections. The posted speed limit is 40km/hr.

Hamilton Rd is a series 7000 Regional road west of Barbara St but a local road otherwise; in the site vicinity it has 1 lane of traffic in each direction, a line-marked median divider and parking along both sides of the road in some sections. The posted speed limit is 40km/hr.



Harris St is a local road with 1 lane of traffic in each direction, a line-marked divider and parking along both sides of the road in some sections. The posted speed limit is 40km/hr.

2.3 EXISTING ROAD FEATURES

The existing road features which apply to the road network in the vicinity of the site are illustrated in **Figure 2.6**. These include:

- A roundabout at the intersection of Harris St and Barbara St;
- A roundabout at the intersection of Harris St and Ware St;
- A town centre speed limit of 40 km/hr applies to much of the local area.



Figure 2.3 Existing Road Features



2.4 TRAFFIC DATA

We have obtained traffic data along The Horsley Dr from the RMS AADT Mapping system, as shown below in **Table 2.1**. The nearest RMS station is approximately 600m from site, on The Horsley Dr near Fairfield St.

	2015 Daily	2016 Daily	2017 Daily	2017	2017
				AM Peak	PM Peak
Northbound	20,974	20,692	21,959	5,120	6,909
Southbound	21,286	20,663	20,512	5,598	5,768

Table 2.1 RMS Traffic Data at Station ID 66240

2.5 PUBLIC TRANSPORT

The nearest train station is Fairfield Station (350m and 5-10 minute walk). This station is on the T2 (Inner West / Leppington) and T5 (Cumberland) lines which provide direct access to Sydney CBD.

The nearest bus stations on Hamilton Rd (180m to the south) provide access to the following routes:

- Route 802 [Parramatta to Liverpool and vice versa]
- Route 804 [Parramatta to Liverpool via Hinchinbrook and vice versa

These services run relatively frequently.

2.6 SOCIAL & DEMOGRAPHIC INFORMATION

2016 Census Data (refer www.censusdata.abs.gov.au) was used to construct a community profile of the suburb of Fairfield. The most relevant census data categories are reproduced in **Table 2.2**; we have also provided values for NSW to allow general comparisons to be made.

Fairfield residents closely reflect the NSW average household in employment rates, with a slightly smaller number of registered motor vehicles. Fairfield workers are more likely to travel by car to work as opposed to using public transport.

Category	Fairfield%	NSW%		
Employment				
Worked Full-time	53.1	59.2		
Worked Part-time	27.0	29.7		
Unemployed	14.6	6.3		
Travel to Work				
By car (as driver or passenger)	66.8	64.6		
By public transport	21.8	16.0		
Number of registered motor vehicles per dwelling				
0	18.3	9.2		
1	41.6	36.3		
2	23.1	34.1		
3+	11.7	16.7		

Table 2.1 Demographic information	Table 2.1	Demographic	Information
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3 PROPOSED DEVELOPMENT

3.1 PROPOSED DEVELOPMENT DESCRIPTION

The development as currently proposed consists of:

- Conversion of the existing Fire Station from 11-room boarding house to a retail premise (115m²);
- B. Construction of a new boarding house at the rear of the site, with 1 level of basement parking and 31 boarding rooms.

It is currently proposed that the development will have one entry/exit point from the rear laneway, refer **Figure 3.1**.



Figure 3.1 Proposed Entry / Exit Point



3.2 ONSITE PARKING PROVISIONS

We have assumed that the parking will be assessed as follows:

- A. Retail component: Fairfield Town Centre DCP 2013 Appendix 5 "Parking Requirements";
- B. Boarding house component: SEPP 2009 'affordable housing' Division #3 Boarding houses.

The applicable parking rates are as follows:

- Fairfield Town Centre DCP 2013 "Business Premise" 1 space / 100m² of leasable area;
- SEPP2009: 0.2 space / room, noting the boarding house is for a social housing provider and within an accessible area.

Туре	Number	Rate	Spaces Required
DCP / SEPP			
Retail Component [115m ²]	115	1 / 100m ²	1.2
Boarding House component	31	0.2 / room	6.2
		Subtotal	7.4
		TOTAL REQUIRED	8 spaces

Table 3.1 Parking Requirements

The proposed development incorporates **8** on-site parking spaces. Hence, the on-site parking and onstreet parking available for the proposed development is adequate.

3.3 PEDESTRIAN ISSUES

There is a formal pedestrian footpath along both sides of William St, and these will be maintained under proposed conditions. Provided that adequate site distances are provided at the site entrance as per AS2890.1, we generally do not foresee problematic pedestrian issues at the subject site.



4 TRAFFIC GENERATION

4.1 TRAFFIC GENERATION

The RTA *Guide to Traffic Generating Developments,* October 2002, Section 3 - Land Use Generation (Section 3.3.1) does not provide traffic generation for boarding houses specifically, but the following are a good reference guide:

A. High Density Residential Flats [sub-regional]: 0.29 peak hour trips per dwelling

B. Housing for aged / disabled persons:

0.1-0.2 peak hour trips per dwelling

We have assumed a peak hour trip rate of 0.25 trips per dwelling for the boarding house component of the development. We have assumed the retail component will generate a similar peak hour trip rate to office / commercial premises, which equates to 2 trips per 100m² of floor area.

The traffic calculated to be generated by the proposed development is shown in the **Table 4.1** below.

In order to calculate the net impact of the development, we have calculated the traffic generated by the existing boarding house using the same guidelines as for the proposed boarding house.

	Weekday Daily vehicle trips	Weekday Peak hour vehicle trips		
Existing	[11 boarding rooms]	[11 boarding rooms]		
	11*2.5 = 27.5 vt	11*0.25 = 2.8 vt		
Proposed	[Retail 115m2]	[Retail 115m2]		
	1.15*20 = 23 vt	1.15*2 = 2.3 vt		
	[31 boarding rooms]	[31 boarding rooms]		
	31*2.5 = 77.5 vt	31*0.25 = 7.8 vt		
	TOTAL = 101 vt	TOTAL = 10.1 = 11 vt		
Net change	101 – 28 = +73 vt	11 – 3 = +8 vt		
		1		

 Table 4.1 Traffic Generated Under Proposed Conditions

vt = vehicle trips

We do not believe the above calculations indicate a significant additional burden on the existing traffic network, and as such, we do not believe the development as proposed will have a significant effect on traffic in terms of the traffic efficiency, amenity, safety, or road pavement life.



5 CONCLUSIONS

We conclude that:

- We do not believe that the proposed development will have a significant impact on traffic in the local network.
- We do not believe the development will have a significant effect on traffic in terms of the traffic efficiency, amenity, safety, or road pavement life.
- The proposed development achieves the required number of parking spaces via a combination of onsite and offsite (on street) as per the parking requirements outlined in Table 3.1.
- A construction traffic management plan (CTMP) and traffic control plans (TCPs) will be prepared at construction stage following the development approval process.

Yours faithfully, For & on behalf of Greenview,

Roll

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