Proposed Residential Development

23-27 Marshall Street, Bankstown

TRAFFIC AND PARKING ASSESSMENT REPORT

9 November 2015

Ref 15703



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1. INTRODUCTION

This report has been prepared to accompany a Development Application to Bankstown City Council for a residential development proposal to be located at 23-27 Marshall Street, Bankstown (Figures 1 and 2).

The proposed development involves the demolition of the three existing dwelling houses on the site to facilitate the construction of a new residential development in accordance with the *SEPP (Affordable Rental Housing) 2009.*

Off-street car parking is to be provided in a new single-level car parking area in accordance with the *SEPP* requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- reviews the public transport services located within close proximity to the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the north-western corner of the Marshall Street and De Witt Street intersection. The site has street frontages approximately 45m in length to Marshall Street, 40m in length to De Witt Street and occupies an area of approximately 1,838m².

The subject site is currently occupied by three dwelling houses, each with a separate vehicular access driveway off either Marshall Street or De Witt Street.

Proposed Development

The proposed development involves the demolition of the three existing dwelling houses on the site to facilitate the construction of a new residential apartment development.

A total of 32 *affordable rental housing* residential apartments are proposed in the new building as follows:

32
29
3

Off-street car parking is proposed for a total of 33 cars in a new single-level basement car parking area in accordance with the *SEPP* requirements. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the northern end of the Marshall Street site frontage.

Plans of the proposed development have been prepared by *Zhinar Architects* and are reproduced in the following pages.

VARGA TRAFFIC PLANNING PTY LTD



VARGA TRAFFIC PLANNING PTY LTD



3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Stacey Street and Fairford Road are classified by the RMS as *State Roads* which provide the key north-south road link in the area, linking Padstow to Bankstown. They typically carry two to three traffic lanes in each direction in the vicinity of the site, with turning bays provided at key locations.

Canterbury Road is also classified by the RMS as a *State Road* which provides the key eastwest road link in the area, linking Bankstown to Hurlstone Park. It typically carries two traffic lanes in each direction in the vicinity of the site, with turning bays provided at key locations.

Chapel Road South and Macauley Avenue are classified by the RMS as *Regional Roads* which perform the function of *collector routes* through the local area.

Marshall Street and De Witt Street are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of both roads.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Chapel Road South and also Macauley Avenue
- a 50 km/h SPEED LIMIT which applies to Marshall Street, De Witt Street and all other local roads in the area





- TRAFFIC SIGNALS in Macauley Avenue where it intersects with Marshall Street
- STOP SIGNS in Marshall Street where it intersects with De Witt Street
- a GIVE WAY restriction in De Witt Street where it intersect with Chapel Road South.

Existing Public Transport Services

The existing public transport services located in close proximity to the site are illustrated on Figure 5.

There are currently seven bus routes travelling along Chapel Road South, with the nearest bus stop located approximately 300m walking distance west of the site, including the high-frequency intra-regional *Metrobus M90 & M92* services. *Metrobus* services operate seven days per week, with weekday services every 15 minutes (every 10 minutes during the morning and afternoon peak) and weekend services every 20 minutes.

In total there are approximately 580 bus services travelling along Chapel Road South on weekdays, decreasing to approximately 300 bus services per day on Saturdays and approximately 250 services on Sunday and public holidays, as set out below:

Bus Routes and Frequencies							
Donto No	Route	Weekdays		Saturday		Sunday	
Route No.		IN	OUT	IN	OUT	IN	OUT
487	Bankstown to Canterbury	26	26	20	20	9	9
922	East Hills to Bankstown	30	29	14	14	10	9
923	East Hills & Panania to	39	37	14	14	10	10
	Bankstown						
924	East Hills & Panania to	24	24	10	10	11	9
	Bankstown						
962	Bankstown to Miranda	32	31	18	19	9	10
M90	Liverpool to Burwood	70	75	37	38	44	37
M92	Sutherland to Parramatta	73	71	39	38	35	38
TOTAL		294	293	152	153	128	122



The abovementioned bus services connect to train services at numerous railway stations in the south and south-western Sydney areas including Bankstown, Campsie, Canterbury, East Hills, Revesby, Panania, Padstow, Sutherland, Miranda, Caringbah, Cronulla, Burwood, Strathfield, Liverpool, Parramatta, Rosehill and Lidcombe Railway Stations. Furthermore, Bankstown Railway Station is located approximately 15 minutes walking distance north of the site.

The site is therefore considered to be well served by public transport services.

Projected Traffic Generation

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rate which is most applicable to the development proposal:

High Density Residential Flat Buildings in Sub-Regional Centres

0.29 peak hour vehicle trips per dwelling

The RMS Guidelines also make the following observation in respect of high density residential flat buildings:

Definition

A *high density residential flat building* refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. *High density residential flat buildings* are usually more than 5 levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.

Factors

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pickup/set-down activities. Application of the above traffic generation rates to the 32 residential apartments outlined in the development proposal yields a traffic generation potential of approximately 9 vehicle trips per hour during commuter peak periods.

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase* in traffic generation potential of the site.

Application of the "dwelling house" traffic generation rate nominated in the RMS *Guidelines* to the three existing dwelling house on the site yields a traffic generation potential of approximately 3 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential the site of approximately 7 vph as set out below:

Projected Nett Increase in Peak Hour Traffic Generation Potential				
of the Site as a Consequence of the Development Proposal				
Projected Future Traffic Generation Potential:	9.3 vehicle trips			
Less Existing Traffic Generation Potential:	-2.6 vehicle trips			
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	6.7 vehicle trips			

That projected increase in traffic activity as a consequence of the development proposal is *minimal*, consistent with the zoning objectives of the site and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site comprise:

- generally UNRESTRICTED kerbside parking along both sides of Marshall Street, De Witt Street and throughout the local area, including along both site frontages
- BUS ZONES located at regular intervals along both sides of Chapel Road South.

Off-Street Parking Provisions

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The off-street parking requirements applicable to the development proposal are specified in *State Environmental Planning Policy (Affordable Rental Housing) 2009* in the following terms:

Division 1 In-fill affordable housing

Standards that cannot be used to refuse consent

(2) General

A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:

- (a) **parking**
 - if:
 - (i) in the case of a development application made by a social housing provider for development on land in an accessible area, at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms, or
 - (ii) in any other case-at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms

Application of the above higher *SEPP (Affordable Rental Housing) 2009* parking rates (i.e. *not* a social housing provider) to the 32 apartments outlined in the development proposal yields an off-street car parking requirement of 31 parking spaces.

The proposed development makes provision for a total of 33 off-street parking spaces, including 2 disabled spaces, thereby satisfying the *SEPP* requirements.

The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 - 2004* in respect of parking bay dimensions, ramp gradients and aisle widths.

In summary, the proposed parking facilities satisfy the relevant requirements specified in the *SEPP (Affordable Rental Housing) 2009* as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking implications.