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# **TRAFFIC IMPACT ASSESSMENT**

## 34-36 BARDO RD, NEWPORT NSW 2016

Proposed Senior Housing Development

Prepared for:	Built Property
Date Prepared:	May 2020
Revision:	1.1
Northern Beaches Council Development Application #:	TBA



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### INTRODUCTION

AusWide Consulting was engaged by Built Property to prepare a Traffic Impact Assessment with Car Park Certification as requested by the Northern Beaches Council at 34-36 Bardo Rd, Newport NSW 2016.

This report will assess the implications of the existing development modifications on existing traffic, parking and transport conditions surrounding the site. The following items have been included in the subsequent sections of this report:

- ♦ A Traffic Impact Assessment for the proposed development;
- A Parking Demand Assessment of the proposed development;
- ♦ A Car Park Certification Assessment of the proposed development;
- ♦ Conclusions of the above findings.

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

### **BACKGROUND AND EXISTING CONDITIONS**

The subject site is located on Bardo Rd in the suburb of Newport which is approximately 31km south-east of Sydney's CBD and is located within the Northern Beaches Council. The use of the land immediately surrounding the subject site is primarily residential in nature, which mainly comprises of dwellings. Development in the area is typically characterised by low-medium density-built forms that are generally residential buildings. The subject property is bounded by Bardo Rd to the south with existing developments in the surrounding directions.

Bardo Rd is a local road under the Council jurisdiction. The road cross-section at the site includes two unmarked lanes (eastbound and westbound) with pedestrian footpaths on both sides. The subject area is situated within the R2: Low Density Residential zone.

Figure 1: presents an aerial view of the subject site showing surrounding suburbs

Figure 2: presents an aerial view of the subject site showing surrounding roads and businesses



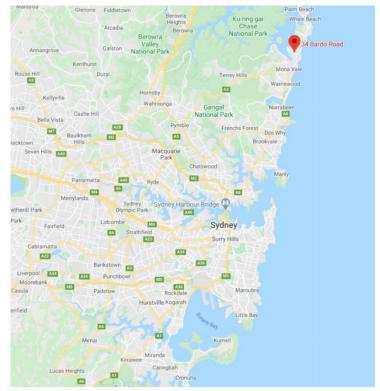


Figure 1: Location of the subject site, source: Google Maps



Figure 2: Aerial view of subject site, source: Google Maps



### **PUBLIC TRANSPORT**

The subject site is in an area that has reasonable access to bus services that are within walking distance of the site. The closest bus stop to the site, Gladstone St bus stop, is 394.1m away which is an approx. 5-minute walk. This bus stop only provides 1 route with several services throughout the day. Figure 3 below displays the public transport map around the site and the following table will summarise the services.



Figure 3: Site Public Transport Map



						Destination	5	Number of Service		
e	Location Distance from		Walking time [m	Origin	ripti		AM	PM		
Service					Desc		Peak	Peak	Off peak	
Š					Dest	Route Description	(7-9	(4-6	On peak	
		SL	Wa			Ro	am)	pm)		
	BUS SERVICES									
				Palm Beach	Manly		9	9		
199	Gladstone St and King St bus	450	6		wally		9	5	4 services	
	stop			Manly	Palm Beach	1	9	8	per hour	

Table 1: Public Transport - bus service details



### PROPOSED DEVELOPMENT

The proposed development for site at 34-36 Bardo Rd, Newport NSW 2016 is for 12 senior housing developments.

Through observation of site plans and information from the client, the following information is provided;

- 12 dwellings for seniors are to be developed on-site.
- Each dwelling will have 3 bedrooms.
- 6 bicycle parking spaces will be available on-site.
- 24 dedicated parking spaces will be available on-site as well as 4 visitor parking spaces. A total of 28 parking spaces will be provided by the development.



### NUMBER OF CAR PARKING SPACES REQUIRED FOR THE DEVELOPMENTS

Through observation of the Northern Beaches Council's DCP (Pittwater DCP 21-2014), the car parking requirement for the development is outlined.

The table below summarises the rates obtained from the guide as well as the car parking requirement for the proposed land use.

Land Use	Given Rate from Council DCP	Car Parking Required	Dedicated Parking Spaces Provided	Car Parking Short fall
Multi-Dwelling Housing	2 or more bedroom dwellings will require 2 parking spaces each PLUS separate visitor parking is to be provided at a rate of 1 space per 3 dwellings.	With 12 dwellings (each having 3 bedrooms) to be developed, the car parking requirement is 28 spaces.	28	No car parking shortfall

#### Table 2: Proposed Development Car Parking Requirement Summary

As observed in the table above, the proposed development requires 28 car parking spaces to meet the requirements set by the Northern Beaches Council (Pittwater DCP 21-2014). With 28 dedicated parking spaces available for the site, there is a no resulted shortfall. As there is no shortfall of parking spaces for the site, a car parking demand survey is not required.



### TRAFFIC IMPACT ASSESSMENT

Within the RTA Guide to Traffic Generating Development (2002), the site is classed under "Housing for Aged and Disabled Persons". This document provides an evening peak hour vehicle trip and daily vehicle trips rate. The rates given are;

Daily Vehicle Trips = 1 - 2 per dwelling Evening peak hour vehicle trips = 0.1 - 0.2 per dwelling

As the proposed development has 12 dwellings, the expected daily vehicle trips can be calculated to be a minimum of 12 trips and a maximum of 24 trips and the evening peak hour vehicle trips will be a minimum of 1.2 trips and a maximum of 2.4 trips. These rates are likely to vary on a day to day basis and also depending on the number of residents that own a car. However, the trip generated from the site is expected to be low.

When assessing these rates using the RTA Guide, it is evident that the vehicle traffic generation of the proposed site is considerably low. It is expected that the vehicular traffic generated by the site will distribute across the road network in the vicinity. It was perceived that these rates are in fact negligible and are not anticipated to generate any significant adverse impacts on the local road network.



### **CROSS UTILISATION TRIPS**

Considering the land use of the proposed development and the locality, it is not expected that the trips to this facility will have cross purposes with the surrounding industries and services. The trips towards this site is expected to be direct trips and as a result, there is no expectation of cross utilisation.



### CONCLUSIONS

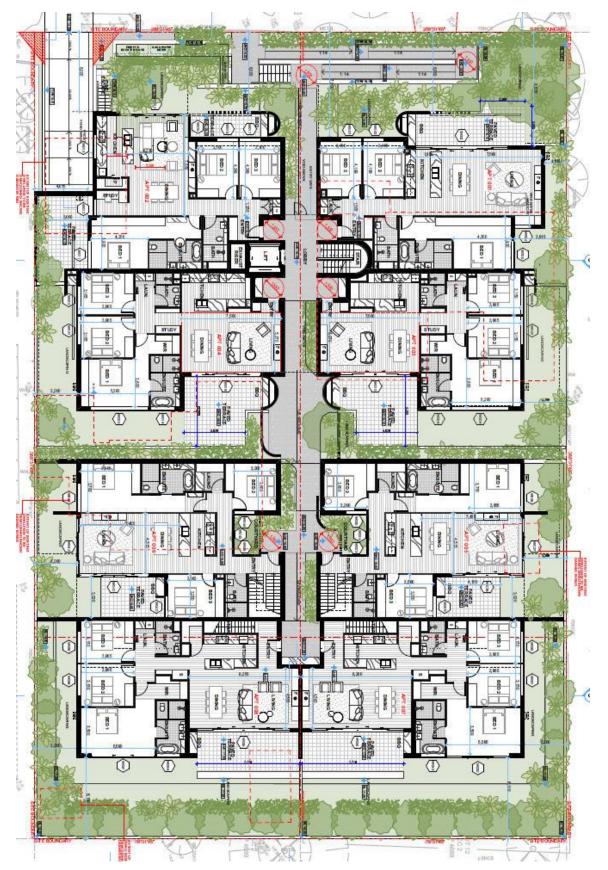
Based on the assessment presented in this report, it is considered that:

- The proposed development for the site at 34-36 Bardo Rd, Newport NSW 2016 is for 12 elderly dwellings.
- The site has reasonable access to the local area and greater Sydney region through public transport. The closest bus stop to the site is located 450m away (6-minute walk) and provides several services throughout the day. Therefore, residents can decide to utilise public transport.
- Considering the proposed site location and land use, it is unlikely that the trips to and from the site will be cross-utilised. It is expected that the trips to the site will be direct.
- ✤ The proposed development changes will generate additional, but low levels of trips throughout the day. It is expected that the site will generate approx. 12 24 trips per day and 1.2 2.4 trips during evening peak hours. These trips are may vary depending on the number of vehicles residents own however it is expected that these trips can be accommodated at the nearby intersections without affecting intersection performance or increasing delays and queues.
- Using the recommended parking rates presented in the Northern Beaches Council's Pittwater DCP 21-2004, the site would require 28 parking spaces to be compliant with the requirement. As the development proposed to have 28 dedicated parking spaces for residents and visitors, there is no shortfall.
- The development and car parking plans are compliant with standards set by the Northern Beaches Council's DCP. The development's car parking dimensions meet the requirements set by the council and the sight distance for both vehicles and pedestrians are both within the requirements by AS/NZS 2890.1. It is also expected that Bardo Rd will have low levels of pedestrian and vehicular traffic, producing no safety hazards for either.

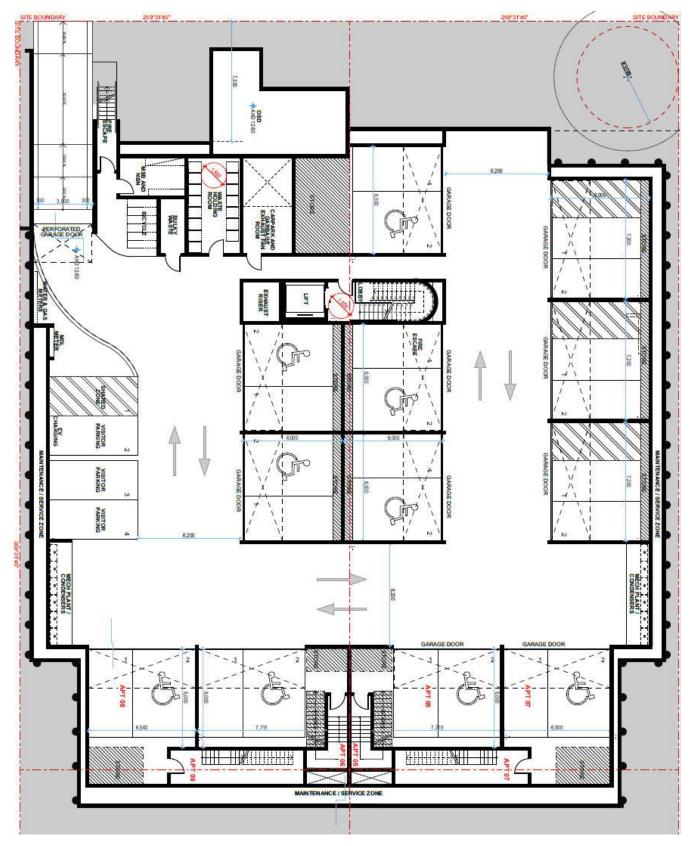
In conclusion, this study indicates that the development is not envisaged to have adverse impacts on the surrounding traffic or parking conditions. As such, the proposed development should be endorsed in a traffic and parking context.



### **APPENDIX A – SITE FLOOR PLANS**

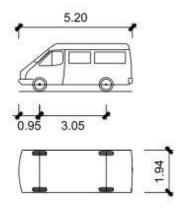






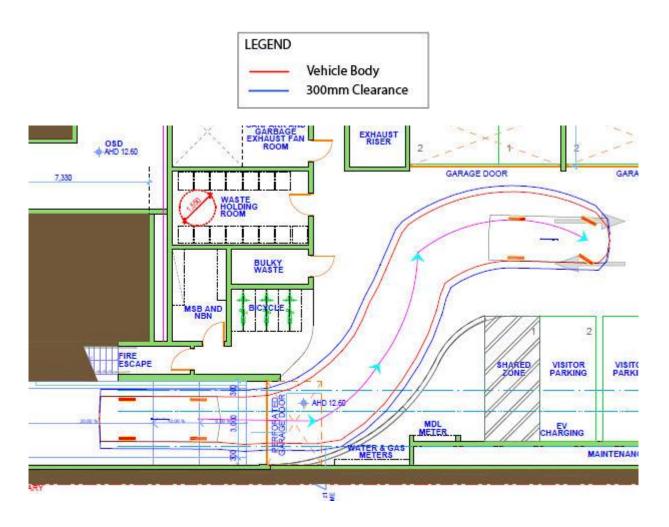


### **APPENDIX B – SWEPT PATH DIAGRAMS**

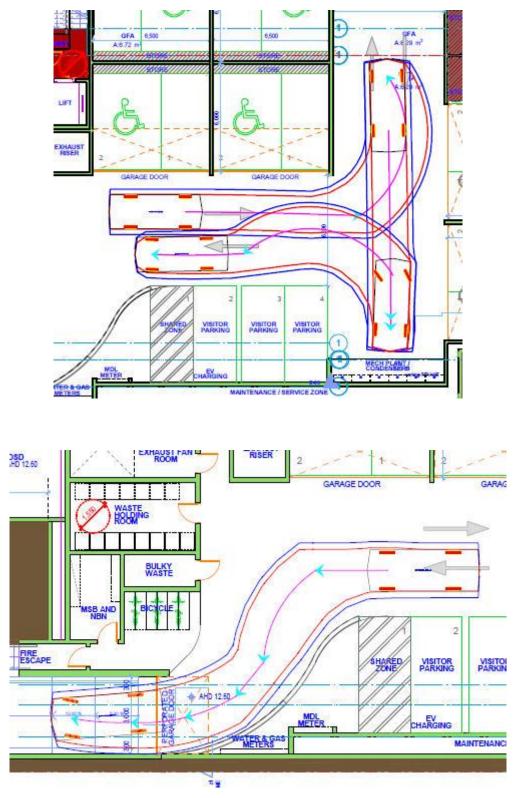


#### B99 Vehicle (Realistic min radius) (2004)

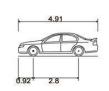
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	6.520m











#### B85 Vehicle (Realistic min radius) (2004)

4.910m
1.870m
1.421m
0.159m
1.770m
4.00sec
5.750m



