

Proposed Residential Development

**95 Bower Street and 29, 31 & 35 Reddall Street,
Manly**

TRAFFIC AND PARKING ASSESSMENT REPORT

20 June 2019

Ref 19053



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1. INTRODUCTION

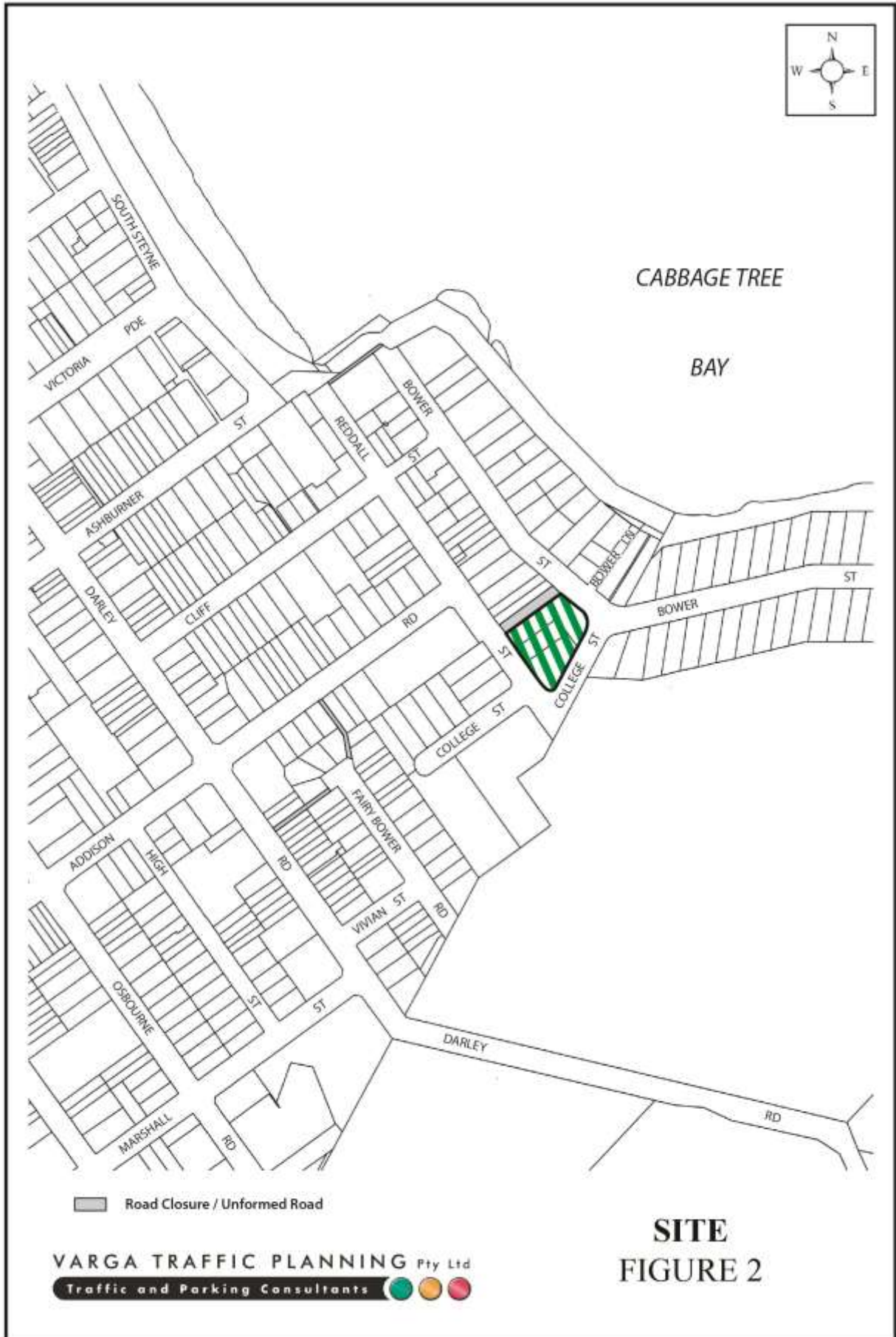
This report has been prepared to accompany a development application to Northern Beaches Council for a residential development proposal to be located at 95 Bower Street and 29, 31 & 35 Reddall Street, Manly (Figures 1 and 2).

The proposed development involves the demolition of the existing residential dwellings on the site to facilitate the construction of a multi dwelling housing and two residential apartment buildings.

Off-street parking is to be provided in separate basement car parking areas beneath each building in accordance with Council 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, and the traffic conditions on that road network
- 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 an amalgamation of four lots bounded by Bower Street, College Street, Reddall Street and residential properties to its northwest located in the suburb of Manly.

The site has street frontages approximately 63 metres in length to Reddall Street, approximately 66 metres in length to College Street, approximately 26 metres in length to Bower Street and occupies an area of approximately 3,160m².

The subject site is currently occupied by four residential dwellings. Properties N° 95 Bower Street and N° 29 Reddall Street each have a vehicular crossover off its frontage road, property N° 35 Reddall Street has two vehicular crossovers off Reddall Street, and property N° 31 Reddall Street does not have any vehicular crossovers.

A recent aerial imagery of the site and its surroundings is reproduced below:



Courtesy of Nearmap Imagery 2019

Proposed Development

The proposed development involves the demolition of the existing residential dwellings on the site to facilitate the construction of a multi dwelling housing and two residential apartment buildings.

A total of 4 terrace houses and 19 residential apartments are proposed in the new buildings as follows:

	Building A	
3 bedroom terrace houses:	4	
TOTAL TERRACE HOUSES:	4	
	Building B	Building C
2 bedroom apartments:	3	4
3 bedroom apartments:	6	5
4 bedroom apartments:	0	1
TOTAL APARTMENTS:	9	10

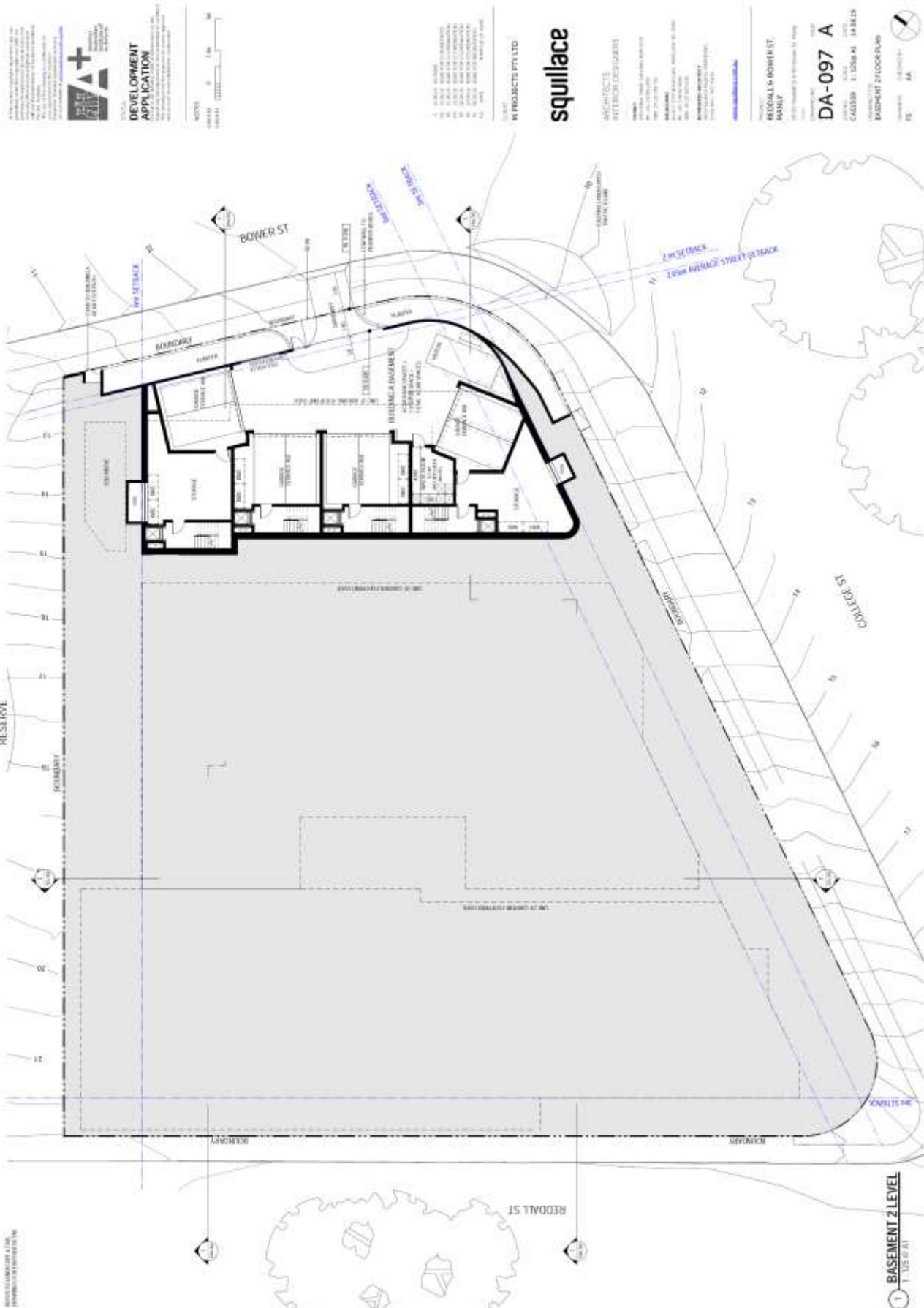
Off-street parking is proposed for a total of 9 cars for the terrace houses and 44 cars for the residential apartments in accordance with Council requirements.

Vehicular access to the basement car parking area beneath the terrace houses is proposed to be provided via a single-lane, two-way vehicular entry / exit driveway located towards the eastern end of the Bower Street site frontage.

Vehicular access to the basement car parking areas beneath the residential apartment buildings is proposed to be provided via an entry / exit driveway located towards the southern end of the College Street site frontage.

Garbage collection will continue to be undertaken by Council's waste contractor, with bins stored on site and brought out onto kerbside locations on collection days as presently occurs.

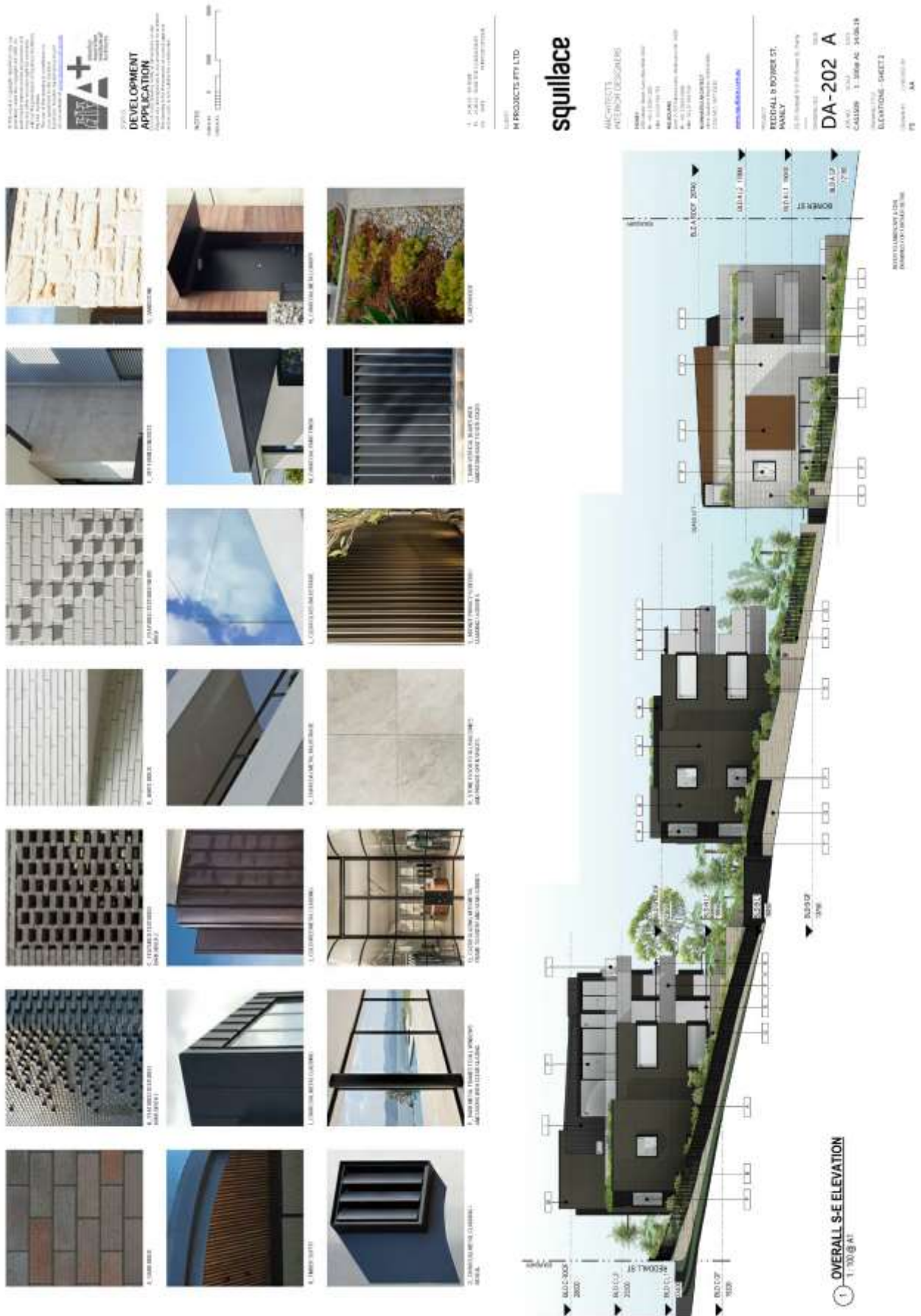
Plans of the proposed development have been prepared by *Squillace* and are reproduced in the following pages.



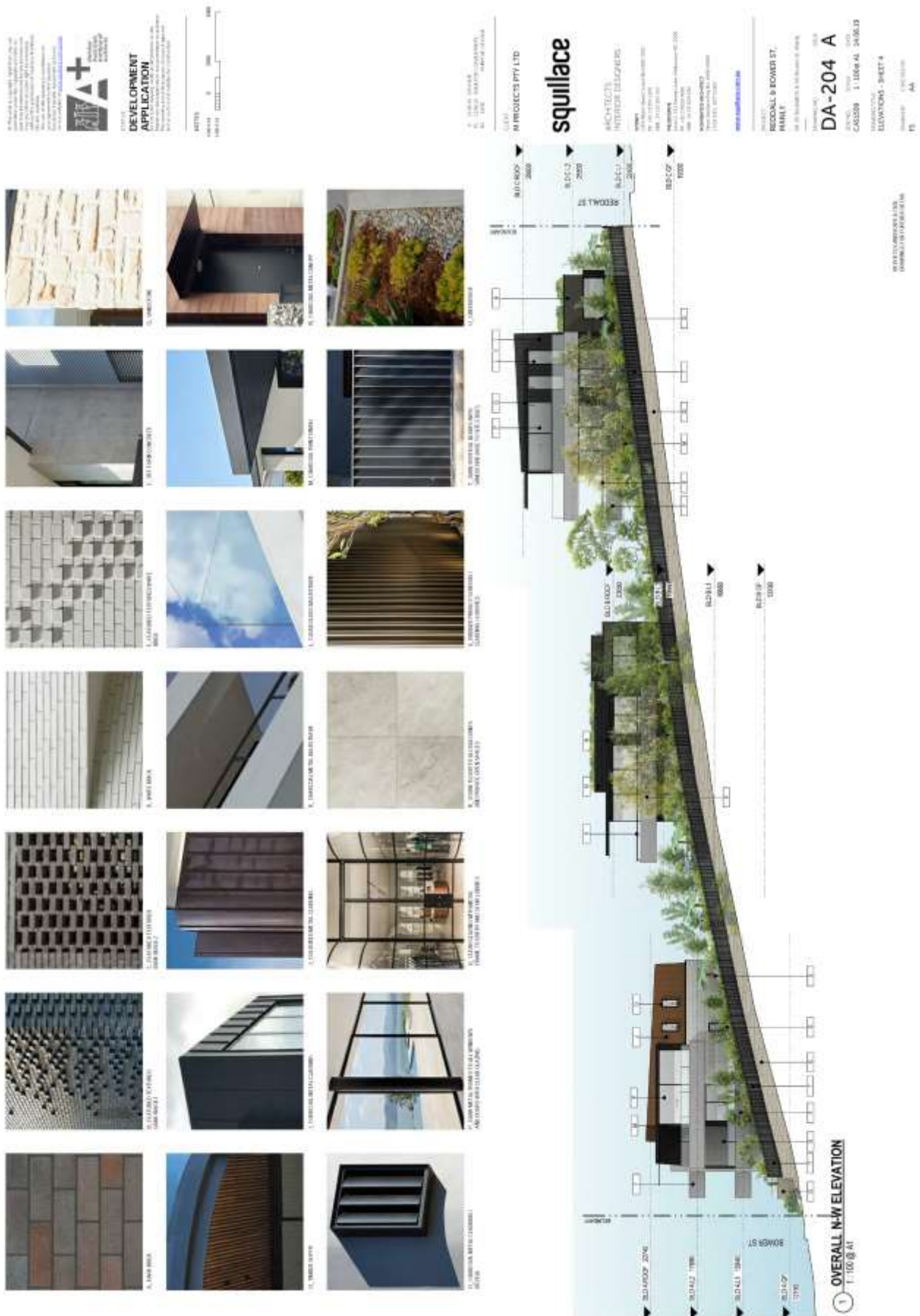




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3. TRAFFIC ASSESSMENT

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.

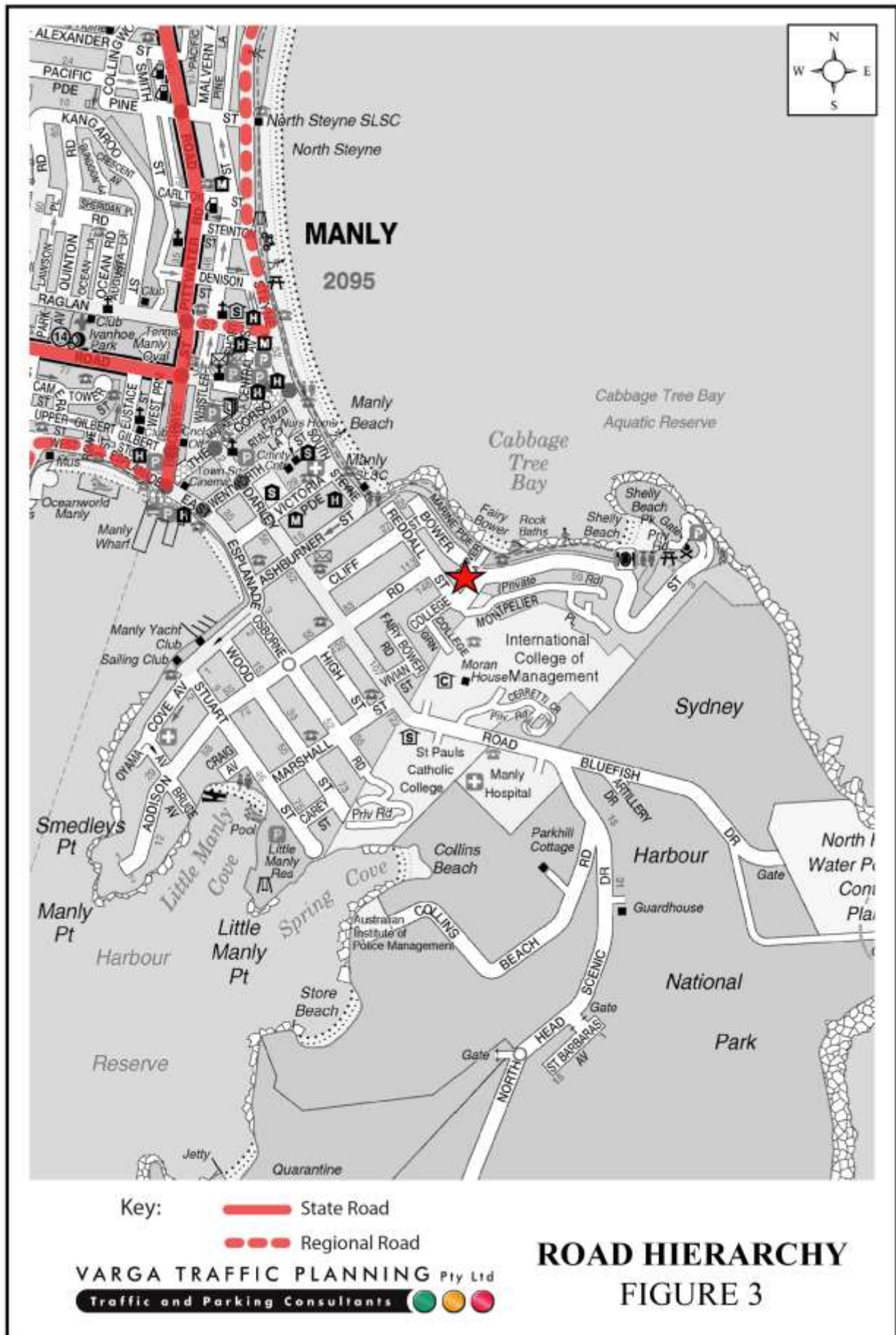
Belgrave Street is classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Pittwater Road to Sydney Road. It typically carries one traffic lane in each direction with kerbside parking generally permitted on one side of the road.

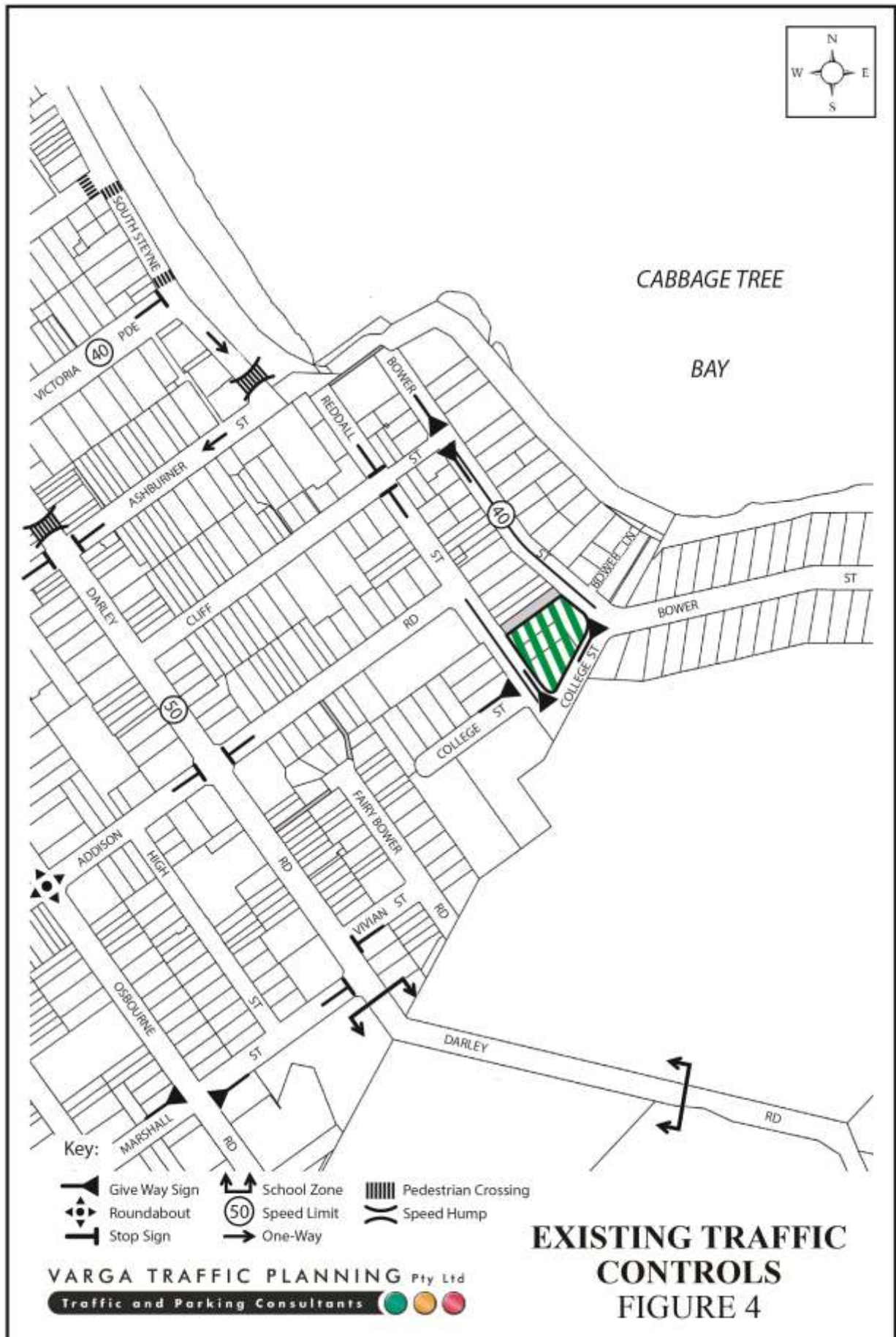
Bower Street, College Street and Reddall Street are local, unclassified roads that are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of these roads.

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 40 km/h SPEED LIMIT which applies to Bower Street
- a 50 km/h SPEED LIMIT which applies to College Street, Reddall Street and most other local roads in the area
- a ROUNDABOUT in Addison Road where it intersects with Osbourne Road
- GIVE WAY SIGNS in Bower Street on Approach to Cliff Street
- STOP SIGNS in Reddall Street on Approach to Cliff Street
- a ONE-WAY restriction in South Steyne in the south-easterly direction
- a ONE-WAY restriction in Ashburner Street in the south-westerly direction.





Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network during the AM and PM commuter peak periods.

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)* and the updated traffic generation rates in the RMS *Technical Direction* (TDT 2013/04a) document.

The RMS *Guidelines* and *Technical Direction* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

Medium Density Residential Flat Building

Up to 2 bedrooms:	0.4-0.5 peak hour vehicle trips per dwelling
3 bedrooms or more:	0.5-0.65 peak hour vehicle trips per dwelling

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

Definition

A *medium density* residential flat building is a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing.

Application of the above traffic generation rates to the 4 terrace houses and 19 residential apartments outlined in the development proposal yields a traffic generation potential of approximately 13 vehicle trips per hour (vph) during both the AM and PM peak hour.

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 (or decrease)* in traffic generation potential expected to occur as a consequence of the development proposal.

The RMS *Technical Direction* nominates the following traffic generation rates which are applicable to the existing development:

Low Density Residential Dwellings (Sydney Areas)

0.95-0.99 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the four existing residential dwellings on the site yields a traffic generation potential of approximately 4 vph during both the AM and PM commuter peak periods.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 9 vph during both the AM and PM peak hour 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:	13 vph
Less Existing Traffic Generation Potential:	-4 vph
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	9 vph

That projected nett 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 are illustrated on Figure 5. Key features of those parking restrictions are:

- 2 HOUR PARKING on both sides of Bower Street
- 2 HOUR PARKING on the eastern side of College Street
- NO PARKING / BUS ZONE on the western side of College Street
- 2 HOUR PARKING on the southern side of Reddall Street
- generally UNRESTRICTED PARKING on the northern side of Reddall Street.

Off-Street Car Parking Provisions

The off-street parking requirements applicable to the development proposal are specific in the *Manly Development Control Plan 2013, Schedule 3, Part A1, Parking Rates and Requirements for Vehicles* document in the following terms:

Residential Flat Buildings & Multi Dwelling Housing (in LEP Residential Zones)

- 1 resident parking space for each dwelling (irrespective of number of bedrooms); plus
- 0.2 resident parking spaces for each 2 bedroom dwelling; plus
- 0.5 resident parking spaces for each 3 (or more) bedroom dwelling, and plus
- 0.25 visitor parking space for each dwelling (irrespective of number of bedrooms).

Application of the above parking requirements to the 4 terrace houses and 9 residential apartments outlined in the development proposal yields an off-street parking requirement of 7 car spaces for the terrace houses and 9 car spaces for the residential apartments as set out below:



	Terrace Houses (×4)	Residential Apartments (×19)
Residential:	6 spaces	26 spaces
Visitors:	1 space	5 spaces
TOTAL:	7 spaces	31 spaces

The proposed development makes provision for a total of 9 off-street car parking spaces for the terrace houses and 44 off-street car parking spaces for the residential apartments, thereby satisfying Council's car parking code requirements.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions and aisle widths.

Off-Street Bicycle Parking Provisions

The off-street bicycle parking requirements applicable to the development proposal are specified in *Manly Development Control Plan 2013, Schedule 3, Part A2, Parking Rates and Requirements for Bicycles* document in the following terms:

Dwellings

Secure storage area capable of accommodating at least two adult sized bicycles

Other development which generates requirements for vehicular parking

Bicycle parking stands are required at a minimum rate of one stand for every three car parking spaces with a minimum provision of one stand for each premises.

The proposed development makes provision for a total of 15 off-street bicycle parking spaces within the basement car parking area as well as vehicle garages for the terraces that are capable of storing two adult sized bicycles each, thereby satisfying Council's bicycle parking requirements.

Conclusion

In summary, the proposed parking facilities satisfy the relevant requirements specified in Council's DCP as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking implications.