

Proposed Indoor Bouldering Gym

**Shop 1, 1-3 Moore Road,
Freshwater**

TRAFFIC AND PARKING ASSESSMENT REPORT

15 July 2019

Ref 19367

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1. INTRODUCTION

This report has been prepared to accompany a Development Application to Council for a proposal to establish an indoor bouldering gym at Shop 1, 1-3 Moore Road, Freshwater (Figures 1 and 2).

This application seeks approval for the change of use of the Shop 1 ground floor level tenancy within the Freshwater Village Plaza from a former local IGA supermarket (which ceased trading in October 2018) to an indoor bouldering gym.

The proposed works include the installation of new climbing walls within the former supermarket sales area whilst converting the former back-of-house area into a stretching/warm-up area with new amenities. The existing mezzanine floor area will include the refurbishment of the existing bathrooms and the demolition of the internal partition walls. The proposed bouldering centre seeks to operate 7 days a week, with patrons typically staying up to 2 hours.

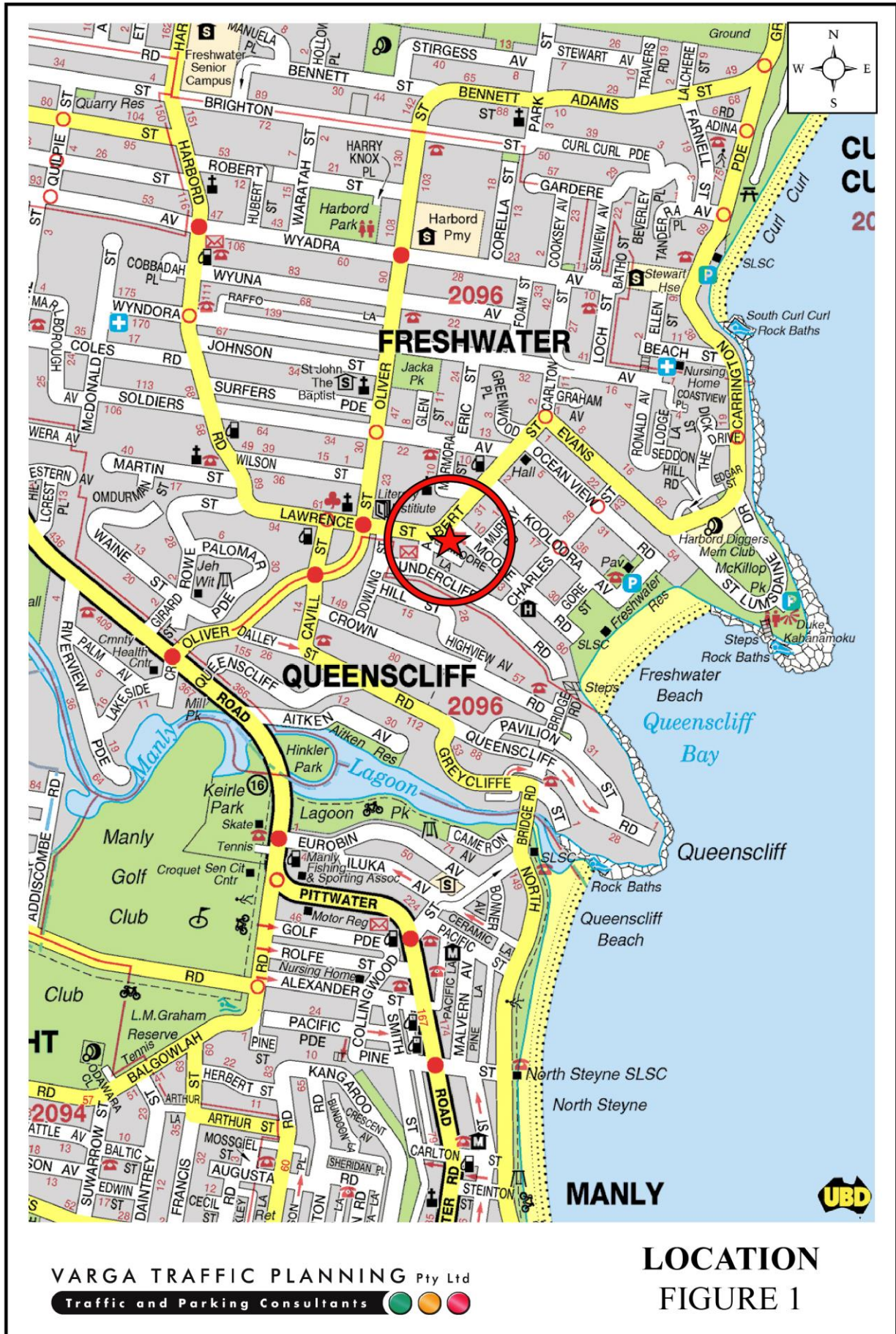
Off-street parking for the proposed indoor bouldering gym is to be provided within the existing lower ground and roof top car parking areas, in accordance with Council's requirements.

In traffic and parking terms, the proposed bouldering gym represents a *far less* intensive use than the former IGA supermarket, such that the development proposal is not expected to result in any unacceptable traffic or parking implications.

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 in the vicinity of 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
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site as well as on-street parking availability in the vicinity of the site.



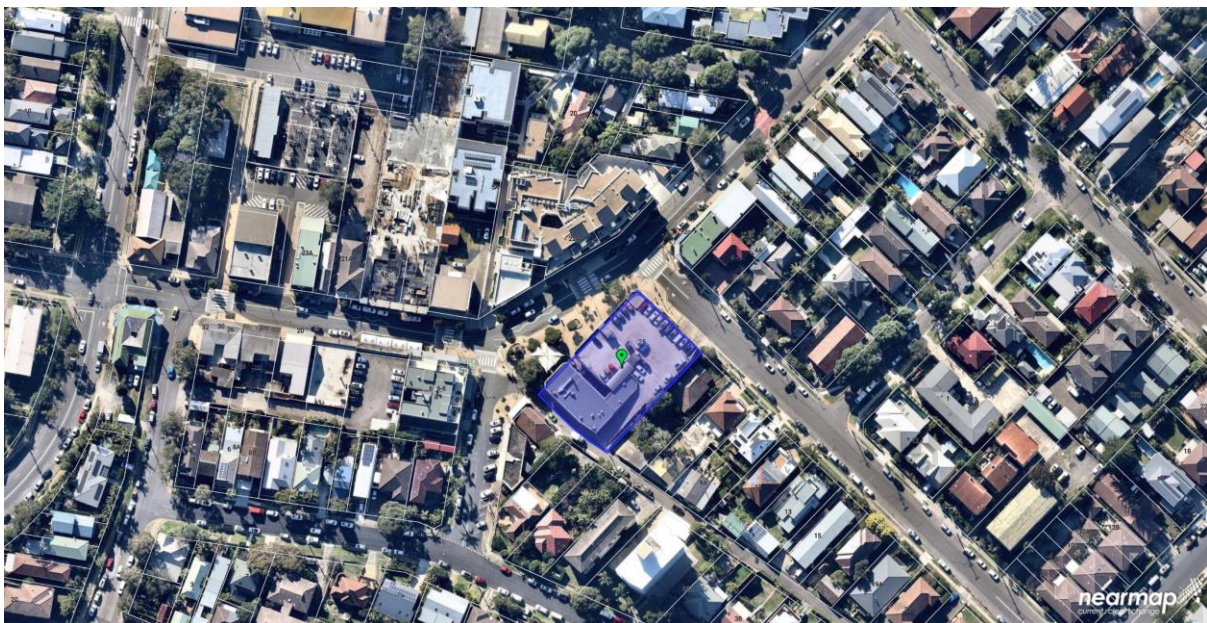


2. PROPOSED DEVELOPMENT

Site

The subject site is located on the southern side of Albert Street, extending between Moore Road and Moore Lane. The site has a street frontage of approximately 57m in length to Albert Street and approximately 35m to both Moore Road and Moore Lane. The site occupies an area of approximately 1,800m².

The subject site is located within the Freshwater town centre and is zoned *B2 Local Centre* under the *Warringah LEP 2011*. A recent aerial image of the site and its surroundings is reproduced below.



The subject site is currently occupied by the Freshwater Village Plaza, a local shopping village with a total of 26 strata units, comprising a number of retail shops including a bakery, butchery, pharmacy, pizzeria, Indian restaurant and homeware store, plus a number of commercial suites including a dental clinic. The cumulative floor area of the existing shopping village is approximately 2,390m².

The subject tenancy, Shop 1, was previously occupied by an IGA supermarket, with a cumulative gross leasable floor area of approximately 674m² as follows:

Basement storage:	21m ²
Ground floor supermarket sales area:	495m ²
Ground floor back-of-house:	139m ²
First floor office:	19m ²
TOTAL EXISTING GLFA:	674m²

Off-street parking for the existing shopping village on the site is provided for a total of 89 cars, comprising 52 spaces (including 3 disabled spaces) within the lower ground level and 37 spaces within the rooftop car parking area. A 2-Hour parking limit applies to the car parking spaces located within the existing development.

Vehicular access to the lower ground car parking area is provided via an entry/exit driveway located off Moore Road whilst access to the rooftop car parking area is provided via an entry/exit ramp located off Moore Lane, as shown in the images below.



Loading/servicing for the existing shopping village is currently undertaken by a variety of light commercial vehicles ranging from courier sized vans and utilities up to and including 8.8m long MRV trucks. A dedicated loading dock is located adjacent to the lower ground entry/exit ramp along Moore Road, as shown in the image on the previous page, such that trucks reverse off Moore Road into the servicing area. Once loaded/unloaded, the trucks exit the site in a forward direction.

Proposed Development

The development proposal involves the internal alterations and additions to the existing Shop 1 tenancy on the site to facilitate its conversion to a new indoor bouldering gym. Key features of the proposed works are as follows:

- conversion of the former ground floor supermarket sales area to a workout space which includes the installation of bouldering walls (with ~300m² of wall area) and fall mats
- conversion of former ground floor back-of-house area into new stretching/warm up area, as well as installing new amenities, including accessible bathrooms
- refurbishment of the existing first floor amenities and removal of partition walls

There will be *no change* to the existing floor area of Shop 1, existing pedestrian access points or the remainder of the shopping village.

Proposed Operational Characteristics

As noted in the foregoing, the proposed bouldering centre seeks to operate 7 days a week, as follows:

Monday to Friday: 6am to 10pm

Weekends/Public Holidays: 9am to 10pm

The centre is expected to employ up to 5 staff, with between 1 and 3 staff members on-site at any given time.

The proposed indoor bouldering gym expects to accommodate between 100-150 people throughout the course of the day, with an expected *maximum* number of 40-50 people at any given time, including staff. Experience at similar climbing gyms indicates that patrons typically stay on-site for approximately 2 hours. By way of comparison, customers of the former IGA supermarket would likely have remained on-site for between 15 minutes and 1 hour.

The peak time for climbing gyms is typically between 5pm – 9pm on weekdays – i.e. at the end of the working day – whilst on weekends the peak is dispersed over a 6-hour period between say, 12pm – 6pm. A schedule of the anticipated patrons throughout a typical week is reproduced in the table below.

Expected Number of Patrons		
Time	Weekday	Weekend
6:00 am	0	0
8:00 am	5	15
10:00 am	5	15
12:00 noon	10	30
2:00 pm	20	30
4:00 pm	30	30
6:00 pm	40	10
8:00 pm	15	5
TOTAL	125	135

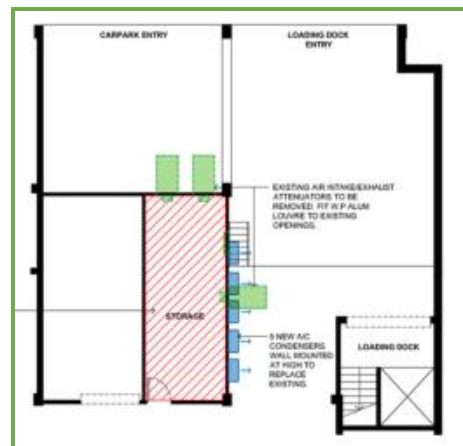
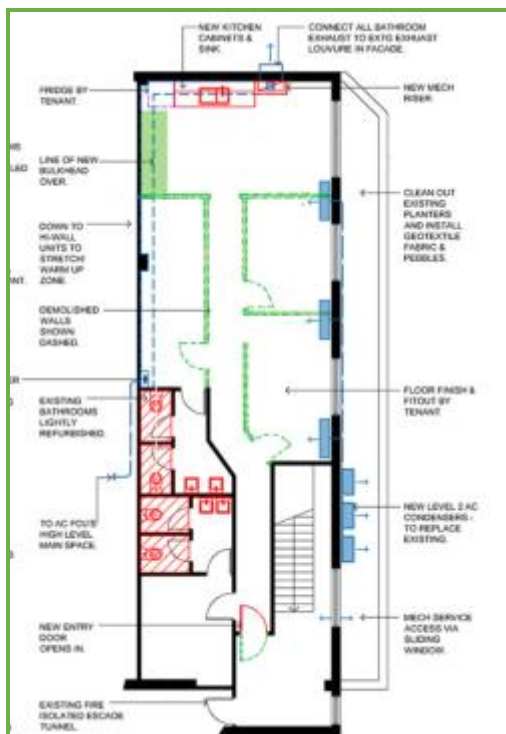
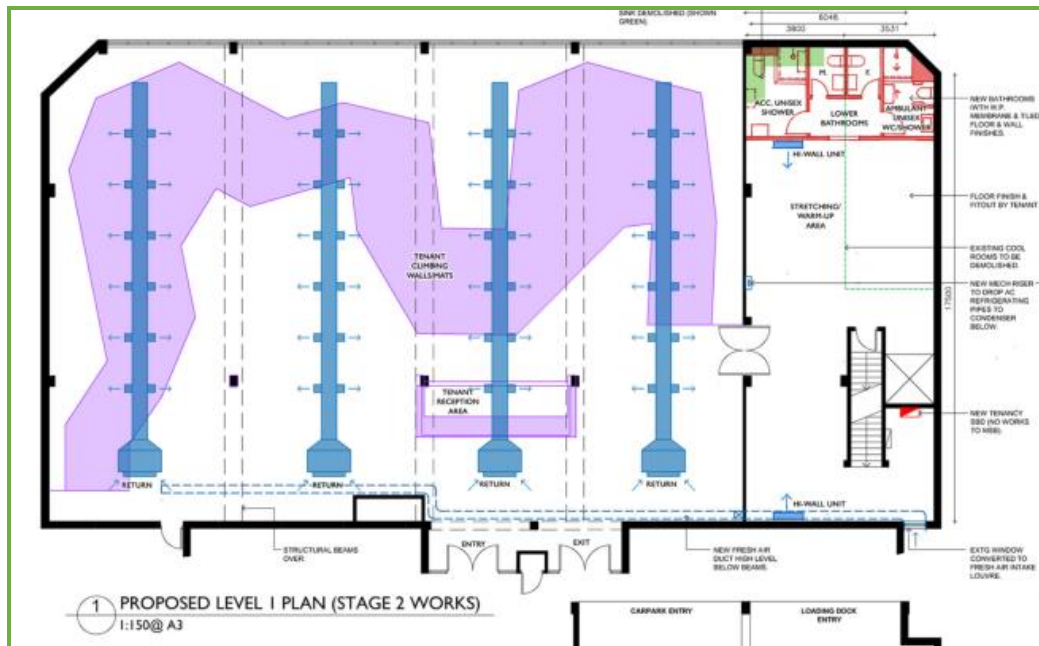
In order to provide a safe environment for climbers, bouldering gyms aim for approximately 36m² of wall space per climber. Based on a total wall space of just under 300m², the proposed centre can accommodate in the order of 8 climbers at any given time, with the remaining patrons waiting their turn and/or spectating.

The target market of the proposed bouldering centre is late teens and adults, such that there will *not* be any children's parties held at the centre.

Travel to/from the centre will be via private vehicle or bus however active modes of transport will also be encouraged including running, walking and cycling. In this regard, end-of-trip facilities, including showers and bike racks will also be provided.

The existing vehicular access and off-street car parking areas are to remain *unchanged*. Furthermore, the pedestrian access points to Shop 1 are also to remain *unchanged*; separate entry and exit double door located on the ground floor level and lift/stairs access via the lower ground car parking level, directly into the tenancy.

Plans of the proposed bouldering centre are reproduced below.



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.

Pittwater Road is classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Manly to Church Point. It typically carries two to three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. Kerbside parking is permitted at selected locations outside of commuter peak periods.

Harbord Road, Oliver Street and Lawrence Street (west of Oliver Street) are classified by the RMS as *Regional Roads* which perform the function of *collector routes* through the Freshwater area. They typically carry one traffic lane in each direction with kerbside parking generally permitted.

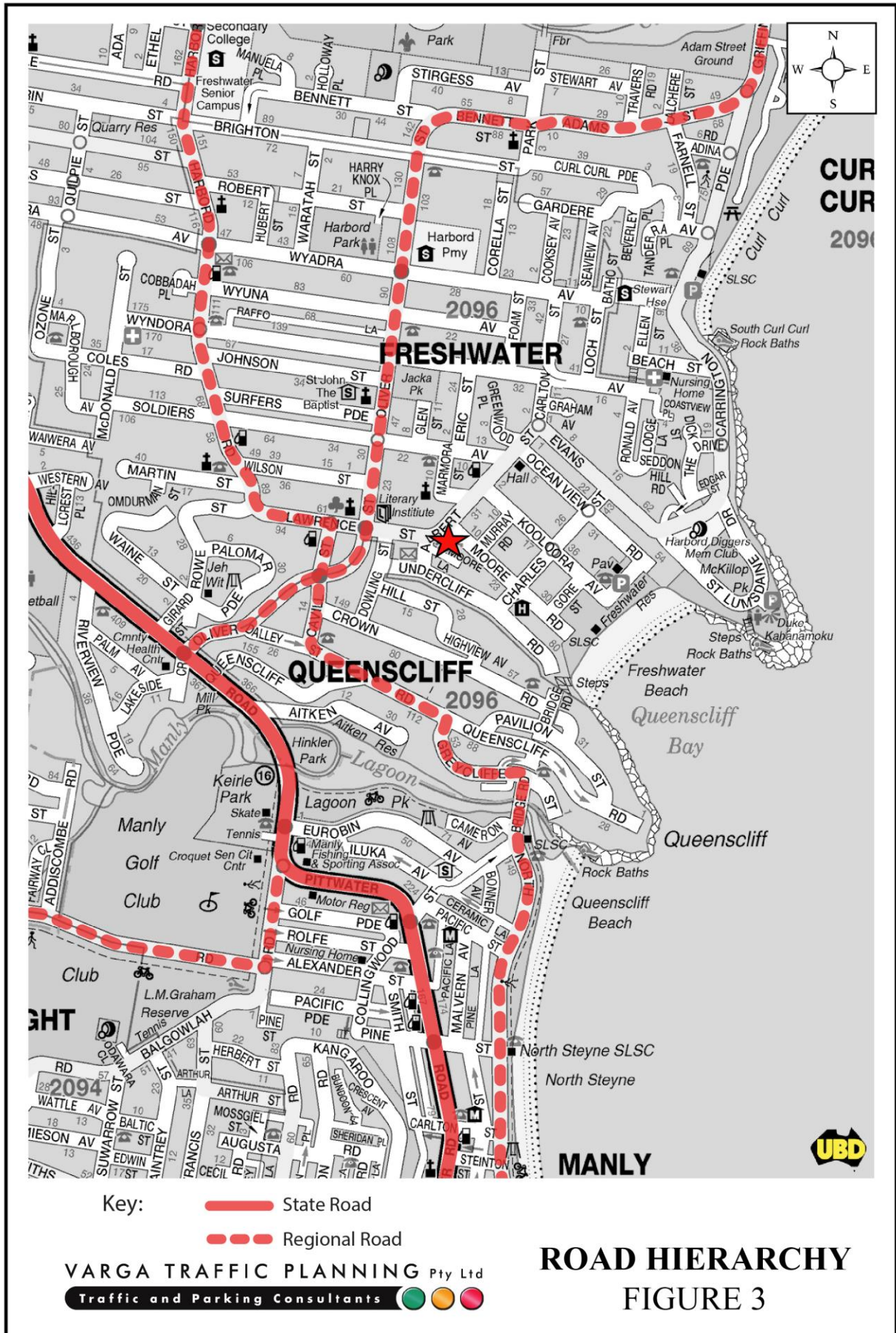
Albert Street and Moore Road are local, unclassified roads which are primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of both roads.

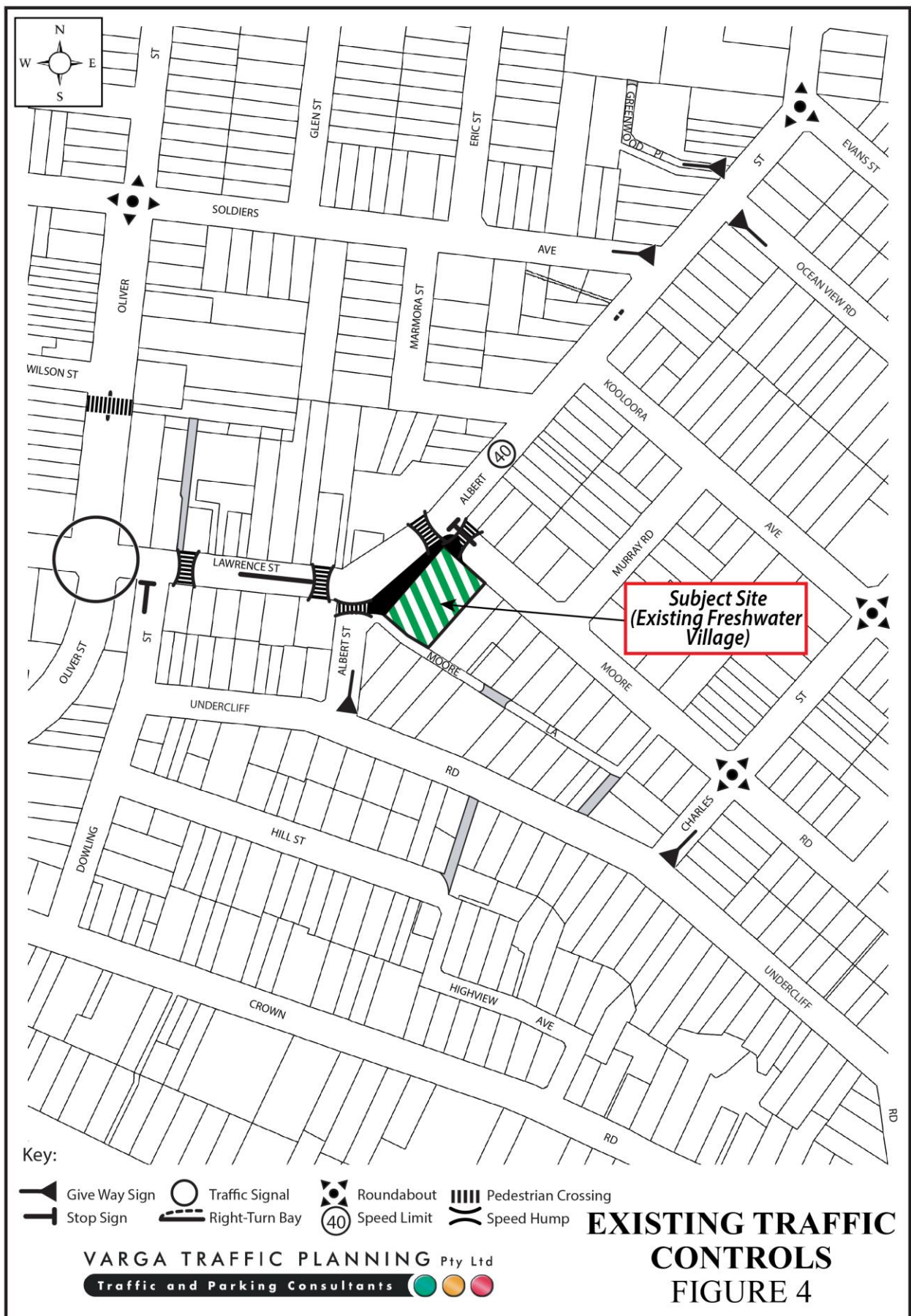
Moore Lane is a local, unclassified service lane which is primarily used to provide rear vehicular and pedestrian access to properties fronting Albert Street, Undercliff Road and Moore Road.

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 local roads in the vicinity of the Freshwater Village Plaza including Moore Road, Albert Street and Moore Lane





- **TRAFFIC SIGNALS** in Lawrence Street where it intersects with Oliver Street
- **RAISED PEDESTRIAN CROSSINGS** located throughout the Freshwater town centre including two along Lawrence Street, two along Albert Street and one on Moore Road, directly outside the site
- **GIVE WAY SIGN** restriction in Albert Street where it intersects Undercliff Road
- a **ROAD CLOSURE** located midway along Moore Lane, east of the site, which precludes vehicular through movements Albert Street and Moore Road.

Existing Public Transport Services

The existing public transport services available in the vicinity of the site are illustrated on Figure 5.

There are currently three bus routes operating within 400m walking distance of the site, with the closest bus stops located on both sides of Moore Road, adjacent to the site, which is serviced by the E65 *express* bus service.

In summary there are approximately 280 bus services travelling past the site on weekdays, decreasing to approximately 190 bus services per day on Saturdays and approximately 180 services on Sunday and public holidays, as set out in the below:

Bus Routes and Frequencies							
Route No.	Route	Weekdays		Saturday		Sunday	
		IN	OUT	IN	OUT	IN	OUT
136	Manly to Chatswood	80	84	63	64	60	61
139	Warringah Mall to Manly via South Curl Curl	32	35	30	29	29	29
E65	City Wynyard to South Curl Curl (EXPRESS)	22	23	-	-	-	-
TOTAL		134	142	93	93	89	90



Projected Traffic Generation

The traffic implications of the development proposal primarily concern the effects of the *additional* traffic flows generated as a result of the development and its impact on the operational performance of the adjacent road network.

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

However, the RMS *Guidelines* do not nominate a traffic generation rate for indoor bouldering gyms, referring only to traditional gyms such as *Fitness First*. For the purpose of this assessment therefore, reference is made to the expected operational characteristics of the proposed bouldering gym, as detailed in Chapter 2 of this report, as follows:

- the proposed bouldering gym will have an anticipated peak from 5pm – 9pm on weekdays and 12pm – 6pm weekends
- the proposed bouldering gym expects to accommodate approximately 100-150 customers throughout the course of the day, with a maximum of 40-50 patrons on-site at any one point in time, including staff
- experience at similar climbing gyms indicates that patrons typically stay on-site for approximately 2 hours.

For the purposes of this assessment it has also been assumed that the average vehicle occupancy rate will be *1.5 persons per car*, noting that some patrons/staff will drive to the centre individually whilst others will drive to the centre in groups.

Based on an expected maximum capacity of up to 50 people on-site at any given time, including staff, the peak parking demand could be in the order of 34 cars. If the average length of stay is approximately 2 hours, the proposed bouldering gym could be expected to generate in the order of 34 peak hour vehicle trips during the weekday evening peak period – i.e. 17 trips TO and 17 trips FROM.

By way of comparison, the RMS *Guidelines* nominates the following traffic generation rate for the former supermarket use on the site within the subject tenancy, Shop 1:

Retail – Shopping Centres – Thursday (vehicle trips per 1,000m²)

$$V(P) = 155A(SM) + 22A(OM)$$

Application of the above traffic generation rate to the former IGA supermarket within the subject tenancy yields a traffic generation potential of approximately 81 vehicle trips per hour during commuter peak periods as set out below:

Former IGA Supermarket Traffic Generation Potential

Supermarket (495m ²):	77 <i>evening</i> peak hour vehicle trips
Back-of-house office and storage (179m ²):	4 <i>evening</i> peak hour vehicle trips
TOTAL TRAFFIC GENERATION POTENTIAL:	81 <i>evening</i> peak hour vehicle trips

As can be seen, the proposed bouldering gym is expected to generate *approximately half* as much traffic when compared to the former IGA supermarket. Furthermore, the proposed bouldering gym will require minimal on-going servicing/deliveries such that truck movements associated with Shop 1 will be essentially *eliminated*.

In any event, that projected level of traffic activity as a consequence of the development proposal is minimal 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 6 and comprise:

- 1 HOUR / 2 HOUR PARKING restrictions along both sides of Albert Street, between Moore Road and Marmora Street
- ½ HOUR PARKING restrictions along the western side of Albert Street, between Moore Road and Undercliff Road
- 1 HOUR ANGLED PARKING restrictions along the eastern side of Albert Street, between Undercliff Road and Moore Lane
- a TAXI ZONE located on the eastern side of Albert Street, immediately north of the Moore Lane intersection, directly outside the site
- NO STOPPING restrictions elsewhere along the eastern side of Albert Street in the vicinity of the site (Australian Post Vehicles Excepted), including along the site frontage
- 1 HOUR PARKING restriction along the northern side of Moore Road and along a small portion on the southern side of Moore Road, in the vicinity of the Albert Street intersection
- NO PARKING restrictions along the southern side of Moore Road, in the vicinity of the site access and loading dock driveways
- BUS ZONES located on both sides of Moore Road, immediately east of the site
- generally UNRESTRICTED KERBSIDE PARKING elsewhere outside the vicinity of the Freshwater town centre.



Off-Street Parking Provisions

The off-street parking requirements applicable to most development types are specified in Council's *Warringah Development Control Plan 2011 – Part H Appendices, Appendix 1: Car Parking Requirements* document.

However, the *WDCP 2011* does not nominate a traffic generation rate for indoor bouldering gyms, referring only to traditional gyms such as *Fitness First*. As per the traffic assessment in Chapter 3 of this report, for the purpose of the parking assessment, reference is again made to the expected operational characteristics of the proposed bouldering gym, as detailed in Chapter 2 of this report, as follows:

- the proposed bouldering gym will have an anticipated peak from 5pm – 9pm on weekdays and 12pm – 6pm weekends
- the proposed bouldering gym expects to accommodate approximately 100-150 customers throughout the course of the day, with a maximum of 40-50 patrons on-site at any one point in time, including staff
- experience at similar climbing gyms indicates that patrons typically stay on-site for approximately 2 hours.

Again, for the purposes of this assessment it has also been assumed that the average vehicle occupancy rate will be *1.5 persons per car*, noting that some patrons/staff will drive to the centre individually whilst others will drive to the centre in groups.

Based on an expected maximum capacity of up to 50 people on-site at any given time, including staff, the peak parking demand could be in the order of 34 cars. It is pertinent to note that the *peak* parking demand is expected to occur for just a two hour period on a weekday evening. At all other operational times, the gym's parking demand is expected to be *lower*.

By way of comparison, Council's *WDCP 2011* nominates the following off-street parking rates for the former supermarket use on the site within the subject tenancy, Shop 1:

Shop (including retail/business premises and neighbourhood shops)

1 space per 16.4m² GLFA (6.1 spaces per 100m² GLFA)

Office/business premises

1 space per 40m² GFA

Application of the above parking rates to the former IGA supermarket within the subject tenancy yields an off-street car parking requirement of 35 parking spaces.

Supermarket (495m ²):	30 spaces
Back-of-house office and storage (179m ²):	5 spaces
TOTAL:	35 spaces

The above assessment therefore confirms that there will be adequate parking provided on-site for the proposed bouldering gym.

Conclusion

The foregoing assessment has determined that the proposed bouldering gym could be expected to generate *approximately half* as much traffic movements during peak periods as the former IGA supermarket on the site.

Furthermore, the site's existing on-site car park is expected to adequately cater for the proposed bouldering gym's peak operational periods whilst also *eliminating* truck deliveries altogether.

In the circumstances, it is reasonable to conclude that the proposed bouldering gym will not have any unacceptable implications in terms of road network capacity or off-street parking/loading requirements, and is therefore recommended for approval.