



TRAFFIC IMPACT ASSESSMENT (TIA)

Proposed Additions and Alterations for Freshwater Surf Club Kooloora Avenue, Freshwater

Reference: 16.397 r01v01
Date: March 2023

Suite 2.08, 50 Holt St
Surry Hills, NSW 2010

t: (02) 8324 8700
w: www.traffix.com.au

DOCUMENT VERIFICATION

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Project	Kooloora Avenue, Freshwater			
Client	Northern Beaches Council			
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r01v01	22/03/2023	Justin Pindar	Justin Pindar	

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1. INTRODUCTION

TRAFFIX has been commissioned by Northern Beaches Council to undertake a traffic impact assessment (TIA) in support relating to proposed alterations and additions to the Freshwater Surf Life Saving Club (FSLSC) development located at Kooloora Avenue, Freshwater. The subject site is located within the Northern Beaches Council Local Government Area (LGA) and has been assessed under that Council's controls. This statement documents the findings of our preliminary investigations.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE) prepared separately.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site at Kooloora Avenue, Freshwater is located approximately 12.2 kilometres northeast of Sydney central business district (CBD) in a regional context and adjacent to Freshwater Beach to the west, in a local context. The site is located within the area bounded by Gore Street to the north, Moore Road to the west, Kooloora Avenue to the east and Freshwater Beach to the south.

Vehicular access is currently provided via Kooloora Avenue providing access to existing FSLSC boat and equipment storage facilities within the subject site. Onsite parking for staff and visitors is not currently provided.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**. Reference should also be made to the reduced plans presented in **Appendix A**.

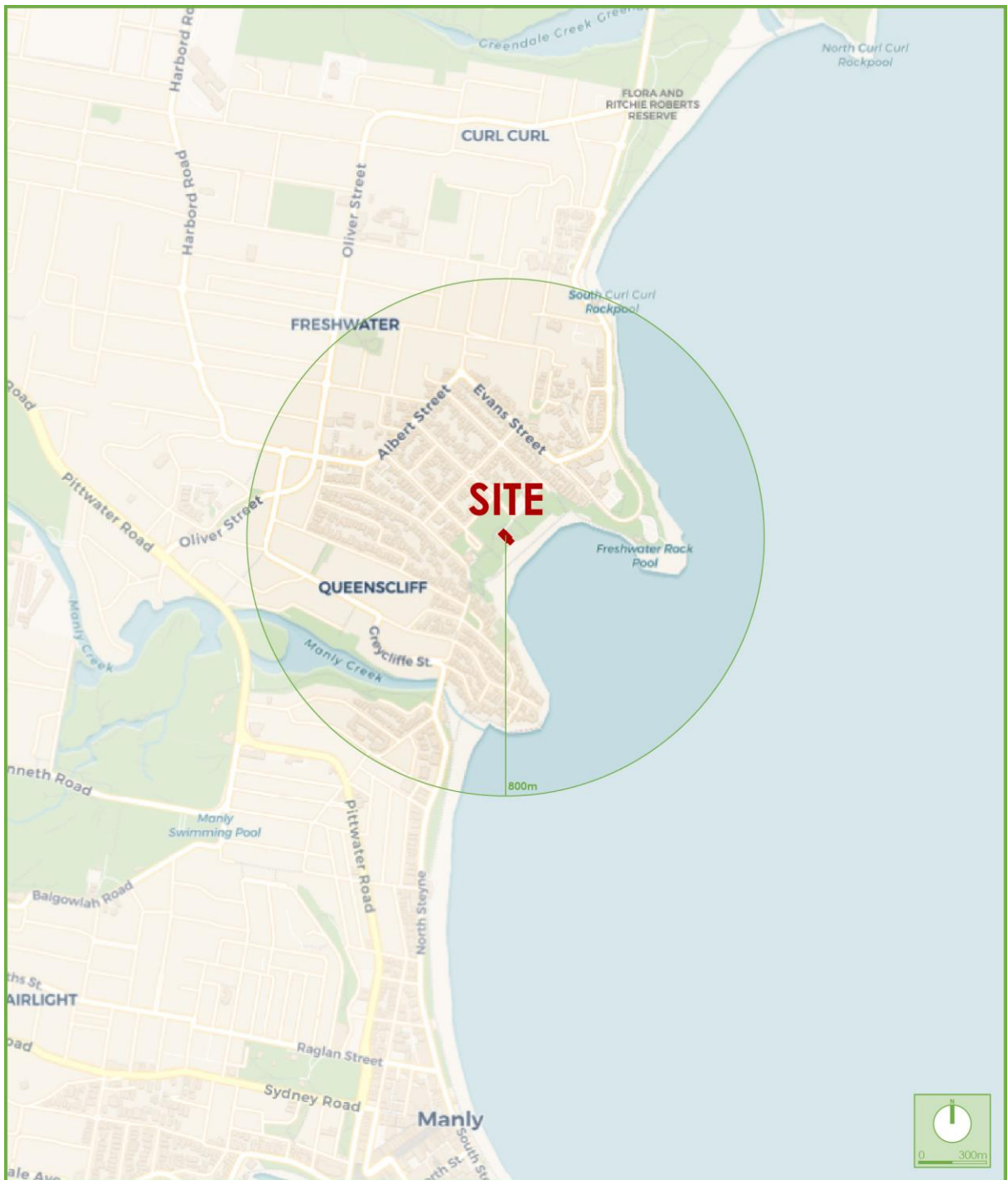


Figure 1: Location Plan



Figure 2: Site Plan

3. EXISTING TRAFFIC CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- **Albert Street:** a TfNSW Regional Road (RR 7343) that traverses northeast-southwest between Evans Street in the northeast and Undercliff Road in the southwest. Albert Street is subject to 50km/h speed zoning in the vicinity of the site and accommodates a single lane of traffic in each direction within an undivided carriageway. On-street parking is generally provided along both sides.
- **Kooloora Avenue:** a local road that traverses northwest-southeast between Freshwater Beach Parking Area in the southeast and Albert Street in the northwest. Kooloora Avenue is subject to 50km/h speed zoning and accommodates two-way traffic flow within an undivided carriageway. Kooloora Avenue generally permits on-street parking along both sides.
- **Gore Street:** a local road that traverses northeast-southwest between Kooloora Avenue in the northeast and Moore Road in the southwest. It is subject to 50km/h speed zoning and carries a single lane of traffic in each direction. Gore Street permits unrestricted parking along its western side and restricted parking along its eastern side.
- **Moore Road:** a local road that traverses northwest-southeast between Albert Street in the northwest and Moore Road Parking Area in the southeast. It is subject to a 50km/h speed zoning and is subject to two-way traffic flow within an undivided carriageway. On-street parking is generally permitted along both sides of Moore Road in the vicinity of the subject site.

It can be seen from **Figure 3** that the site is conveniently located with respect to the local road network with access provided to the north, south and west using local, regional and sub-arterial roads, thereby dispersing traffic across the surrounding road network and minimising traffic impacts.

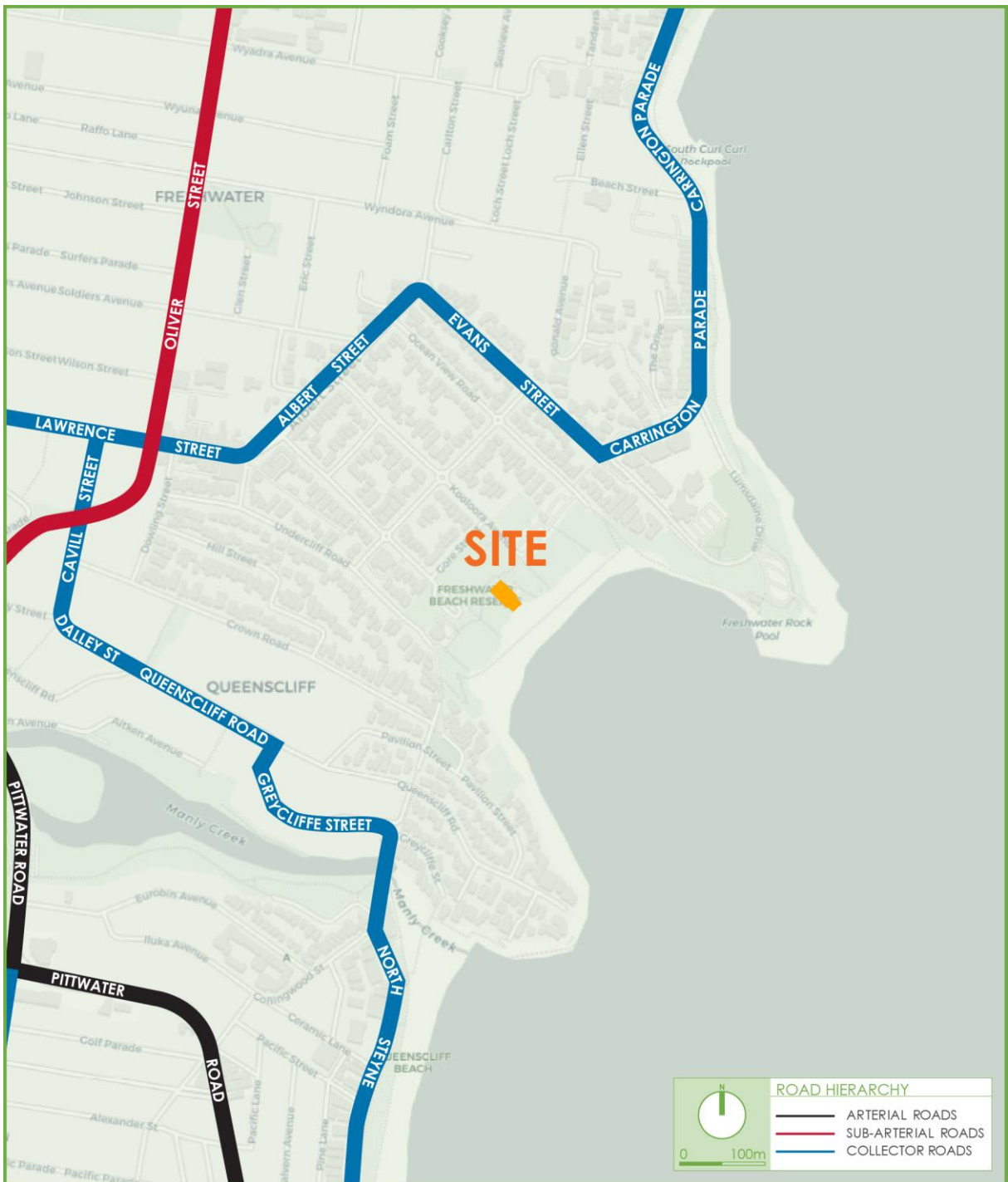


Figure 3: Road Hierarchy

3.2 Public Transport

The existing bus services that operate in the locality are shown in **Figure 4**. It is evident that the development benefits from good bus services with bus stops provided in each direction being situated within 400 metres of the site. These services are summarised in **Table 1** below:

Table 1: Bus Service Frequency and Destinations

Bus Route	Destinations
165X	South Curl Curl to City Wynard (Express Service)
167	Warringah Mall to Manly

Further information regarding bus frequencies is available from the Transport for NSW information website: <https://www.transportnsw.info>



Figure 4: Public Transport

3.3 On-Street & Off-Street Parking Conditions

In order to determine the parking demand in the locality on a typical busy weekend (the most critical time for assessment purposes), on-street and off-street parking surveys were conducted within proximity of the subject site. This parking survey was conducted on Friday 3rd March between 5:00pm and 9:00om and on Sunday 5th March between 10:00am and 4:00pm. This time includes peak times for beach users on a typical weekday and on a typical weekend. The on-street and off-street parking survey areas are summarised below:

On-Street Spaces

➤ Kooloora Avenue (North)	16 spaces
➤ Kooloora Avenue (South)	15 spaces
➤ Charles Street (East)	5 spaces
➤ Moore Road (north)	10 spaces
➤ Gore Street (West)	14 spaces
➤ Gore Street (East)	40 spaces
Sub-Total	111 spaces

Off-Street Spaces

➤ Moore Road Parking Area	45 spaces
➤ Freshwater Beach Carpark	196 Spaces
Sub-Total	241 spaces
TOTAL	352 spaces

The survey results are summarised in **Chart 1** and **Chart 2** below. Reference should also be made to the parking survey results presented in **Appendix B**.

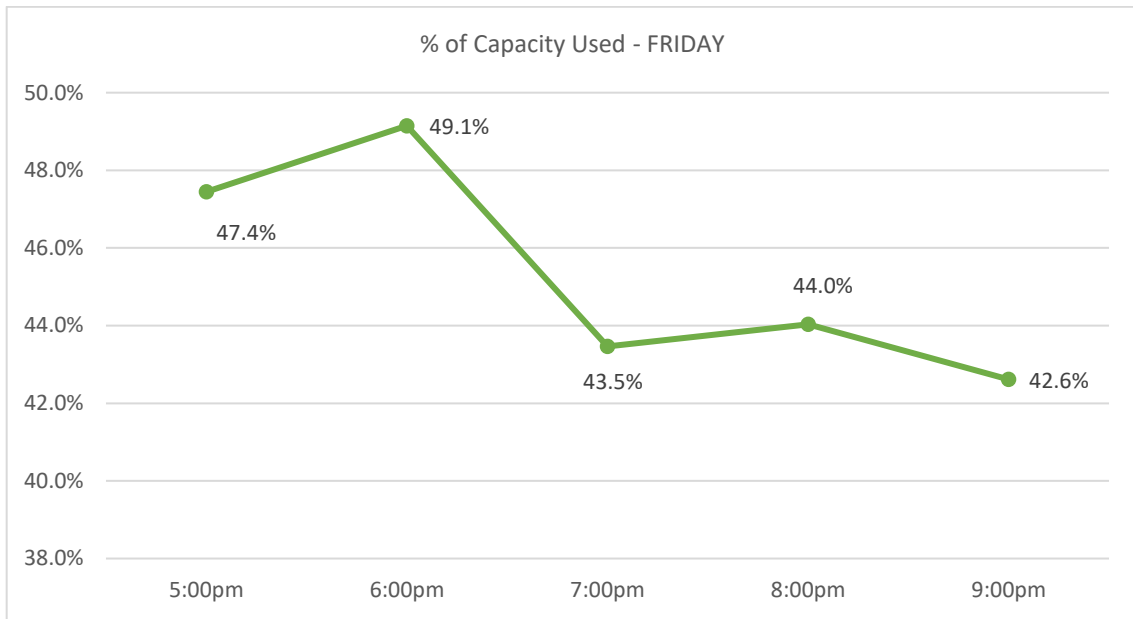


Chart 1: On-Street Parking Demand in the Locality – Friday

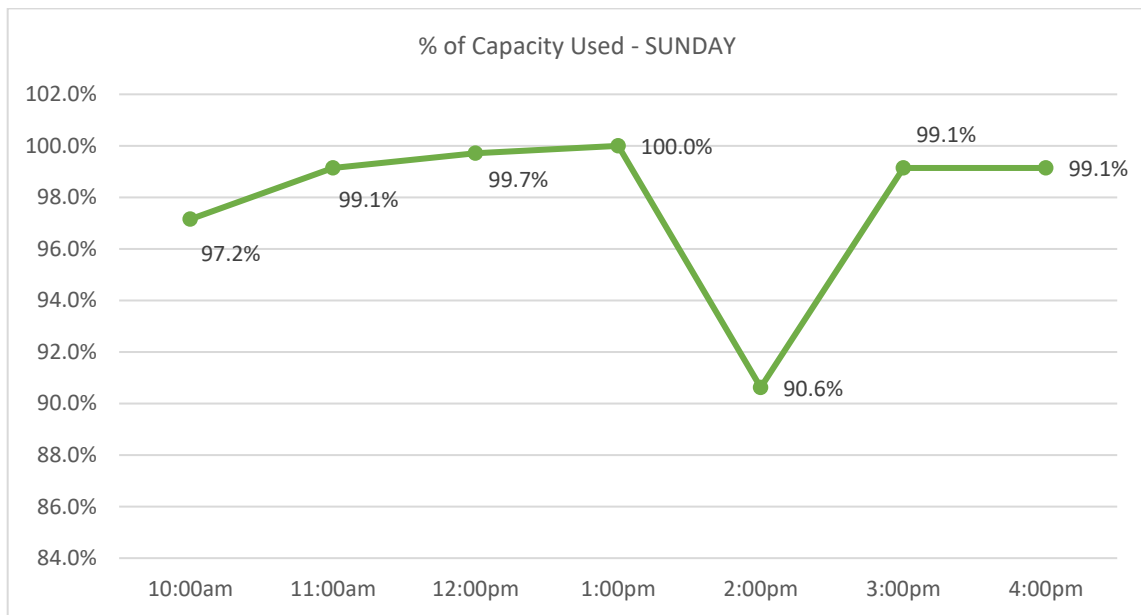


Chart 2: On-Street Parking Demand in the Locality – Sunday

It can be seen from **Chart 2** that the maximum demand for parking occurred on Sunday afternoon at 1:00pm, with 352 spaces (100%) occupied. The survey also demonstrated parking demand was at near 100% capacity on Sunday between the hours of 11:00am – 1:00pm.

The maximum demand for parking on Friday occurred at 6:00pm, with 167 spaces (49.1%) occupied. The survey also demonstrated parking demand peaked between the hours of

5:00pm-6:00pm on Friday with an average parking demand of 48.3% (170 spaces) and an average capacity of 51.7% (182 spaces).

It is noteworthy that the weather on Sunday 5th March (the day of the survey) was sunny with a maximum temperature of 28 degrees Celsius, representative of a typical summer's day when demand for parking at a public beach location such as Freshwater Beach is expected to be extremely high. These survey results show a very high demand for on-street parking within the vicinity of the site under existing conditions. However, it is emphasised that these demands are arguably above the 85th percentile demand level used for design purposes, so that there is increased parking availability not only through the week on weekdays, but also throughout the year as shown by the survey results undertaken on Friday 3rd March which demonstrates a much lower demand for parking in comparison. That is, the above survey results from Sunday 5th March reflect a worst-case scenario that arguably should not be used as a basis for assessment.

The parking impacts of the proposed development are discussed in detail in **Section 5**.

4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the Statement of Environmental Effects prepared separately. In summary, the development for which approval is now sought comprises alterations and additions to the existing FSLSC building including:

- To the existing 1935 building,
 - refurbishment of and improvements to the existing internal and external building fabric, and
 - extension of the existing Level 2 decking
- To the 1986 Clubhouse extension,
 - Level 1 - expansion of the existing basement storage area
 - Level 2 - removal of existing public changerooms and amenities, increase in size recreation hall, provision of a restaurant and café, and new toilet facilities for use in conjunction with the clubhouse public spaces
 - Level 3 - new training rooms, gymnasium, and refurbished Caretaker's Apartment
 - Installation of a new roof, a passenger lift serving all three levels and other alterations to provide equitable access.
- Existing 2009 Clubhouse Entry and Heritage Room
 - Demolition of existing structure and construction of a new infill building to provide a new club entry along with a multi-purpose hall, a double height space to be used for functions and exhibitions, including as a Museum of Surf in the northern beaches of Australia.
- Additions and Alterations of all existing buildings and structures within the subject site consisting of:
 - Relocation and expansion of the Heritage Room.
 - Demolition of unsympathetic additions to the west of the site.
 - Relocation of public toilets and change rooms and replacement with north facing beach front public cafe and restaurant accommodation designed for 12 months a year operation.
 - Expansion of Club gymnasium and ancillary training rooms.
 - Reconfiguration of the Public Hall internally, to make the footprint more useable and to increase capacity.
 - Provision of new and accessible public toilets.

- Reduction in size of caretaker's accommodation and adaptive reuse of the spaces as additional meeting and training rooms for use by the Club and the Public.
- Provision of the following:
 - +168m² Restaurant GFA (equivalent to +168 patrons)
 - -21m² Café GFA (equivalent to -21 patrons)
 - +1 indoor badminton court.
- No changes are proposed to the existing (approved) vehicular access arrangements in relation to FSLSC storage equipment and boats. Onsite carparking is not proposed in relation to the proposed modification as per existing arrangements.

The parking and traffic impacts arising from the development are discussed in **Section 5** and **Section 6**. Reference should be made to the plans submitted separately to Council which are presented at reduced scale in **Appendix A**.

5. PARKING REQUIREMENTS

5.1 Car Parking

5.1.1 Council's DCP

The *Warringah Development Control Plan (DCP) 2011 Part H Appendix 1 – Car Parking requirements* sets out rates car parking rates for the relevant land use components in relation to the subject refurbishment at the rates shown in **Table 2** below:

Table 2: DCP Car Parking Requirements

Land Use	Unit of Measurement (+/-)	Parking Rate	Nominal Parking Requirement
Restaurant	+168 seats	Whichever is the greater of: <ul style="list-style-type: none"> 15 spaces per 100 m² GFA, or <u>1 space per 3 seats*</u> The above rate may be reduced if there is, in the consent authority's opinion, suitable available parking in the vicinity during the operating hours of the proposed development.	+56
Café (take away food and drink premises)	-21 seats	Drive-in take-away food outlet with on-site seating: <ul style="list-style-type: none"> 12 spaces per 100 m² GFA or greater of: 1 space per 5 seats (internal and external), or <u>1 space per 2 seats (internal)*</u> 	-10.5 (11)
Badminton Court**	+ 1 court	3 space per court	+3
Total Nominal Spaces Required			+48

** Underlined rate applies in this instance

*Badminton court is considered equivalent to a tennis court in terms of parking demand given that a maximum of 4 players can play at any one time. Therefore, the tennis court parking rate provided in the DCP has been adopted for the purpose of this assessment given that no badminton court parking rate is provided in Council's DCP.

TRAFFIX has been advised that the proposed restaurant and café capacity is limited to accommodating a maximum of 1 patron per 1m² based on Building Code of Australia (BCA) requirements. In summary, it can be seen in **Table 2** above that the proposed modification results in a nominal demand for an additional 48 car parking spaces in strict accordance with Council's DCP requirements. However, the subject development is incapable of providing any off-street parking spaces, which is the present case and is dictated by the building and site

constraints. Notwithstanding, this outcome is considered acceptable in these circumstances for the reasons discussed in **Section 5.1.2** following.

5.1.2 Reasons for Non-Provision of Parking

The development is considered supportable on traffic engineering grounds based on the following reasons:

- In reference to the Passenger Transport Act 1990, a site is classified as being in an accessible area with the following definition:

“Land that is within 400m walking distance of a bus stop used by a regular bus service that has at least one bus per hour serving the bus stop between 06.00 and 22.00 each day from Monday to Friday (both days inclusive and between 08.00 and 18.00 on each Saturday and Sunday”.

As outlined previously, the subject site is located within 400m walking distance of multiple bus stops that provide regular services to key centres, as well as providing connections to major railway stations, such as City Wynard and Warringah Mall.

- The parking assessment is based on a worst-case scenario that is arguably above the 85th percentile design level. Hence, in practice, on-street parking demands throughout the week and at other times of the year will be less, with ample parking availability. In particular, the site is located within proximity to Freshwater Beach, an area subject to fluctuations in terms of parking demand, based on seasonal variations whereby demand for parking is typically highest during the warmer months of the year (November to March) and significantly lower during the colder months of the year (April to October). It is noteworthy the parking surveys were undertaken on a weekend in early March with warm and sunny weather conditions, when demand for parking is typically highest. Therefore, the survey results should be considered a worst-case scenario and it is expected that demand for parking would be significantly lower during the colder month of the year (typically between April and October).
- Council's nominal DCP requirement for 48 spaces is a generic requirement that applies across the entire LGA. It does not therefore consider the specific characteristics of the subject site, and the fact that a high proportion of patrons are locals who live in the local area and are expected to walk to the subject site or patrons who are already at the beach thereby not generating additional parking demands above existing levels. This situation draws comparisons with other beachside suburbs located within the Northern beaches LGA which permit restaurants and cafes to operate without providing any parking spaces to

limit the number of cars brought into areas which experience high pedestrian volumes such as in Manly Corso and Town Centre.

- A first principles assessment demonstrates that parking demand is more likely to be in the order of 17 additional spaces in relation to the proposed modification. This is based on a maximum of 147 additional café/restaurant seats provided above existing levels as shown in **Table 2** (+168 restaurant seats – 21 café seats), assuming an 85% average restaurant/café seating occupancy, an 80% arrival rate by private vehicle (assuming 20% of patrons arrive by uber/taxi), a vehicle occupancy rate of 3.5 patrons per vehicle and an estimated 50% of patrons being locals expected to walk to the restaurant/café or beachgoers who are already present in the locality. Therefore $(147 \text{ seats} \times 0.85 \text{ restaurant/café occupancy} \times 0.8 \text{ vehicle arrivals}) / 3.5 / 2 = 14 \text{ spaces}$. That is, the DCP requirement for 48 spaces is likely to be an overestimate and the actual demand would be in the order of 17 spaces comprising 14 additional restaurant/café spaces and three (3) additional badminton court spaces.
- As mentioned in **Section 4**, the subject site currently accommodates an existing building that covers the entirety of the site. Therefore, it is considered unfeasible to provide any new off-street carparking spaces within the bounds of the existing site. The fact that Freshwater Surf Life Saving Club provides a service to the broader community is also a matter that should be given some weight.
- The proposal to provide no off-street carparking will in any event achieve a sustainable planning outcome and is consistent with State Government policy. In practice, the majority of visitors will walk or use taxis/uber and the high demand for parking in the locality generally will reinforce this behaviour. Conversely, provision of any additional parking will unduly encourage private car usage.
- The subject development is a prime candidate to take advantage of the implementation of a Green Travel Plan (GTP) and Travel Access Guide (TAG) in order to encourage travel using more sustainable modes of transport for both staff and visitors. Any requirement for a Green Travel Plan to be implemented can be conditioned as part of an appropriate Condition of Consent pending a future DA approval.

For the reasons discussed above, the provision of no parking spaces is considered supportable in the circumstance.

5.2 Bicycle Parking

Council's DCP does not provide bicycle parking rates for restaurants or cafés, and none are provided in response as is permitted by Council's DCP. However, should there be a

demonstratable demand for bicycle parking spaces, it is noted there is ample space within the subject development to provide bicycle parking spaces, if required.

5.3 Refuse Collection and Servicing

No changes are proposed to the existing refuse collection and loading arrangements via Kooloora Avenue and the subject modification is expected to continue to operate satisfactorily in this regard.

6. TRAFFIC AND TRANSPORT IMPACTS

The Roads and Maritime Services Guide to Traffic Generating Developments provide trip generation rates for restaurants (including cafes) and tennis courts (badminton court equivalent) in accordance with the following vehicle trip rates:

- Restaurant: Evening peak hour vehicle trips = 5 per 100m² GFA.
- Badminton Court: Evening peak hour vehicle trips = 3 per court

Application of the above vehicle trip rate to the +147m² of restaurant / Café GFA and +1 badminton court results in the following additional vehicle trips:

- +11 vehicle trips during the weekday evening peak (+6 in, +5 out).

The above increase in vehicle trips is well within perceivable tolerances. Therefore, no external network improvements will be required to facilitate the proposal and no unacceptable impacts are predicted on road capacity or local amenity.

7. CONCLUSIONS

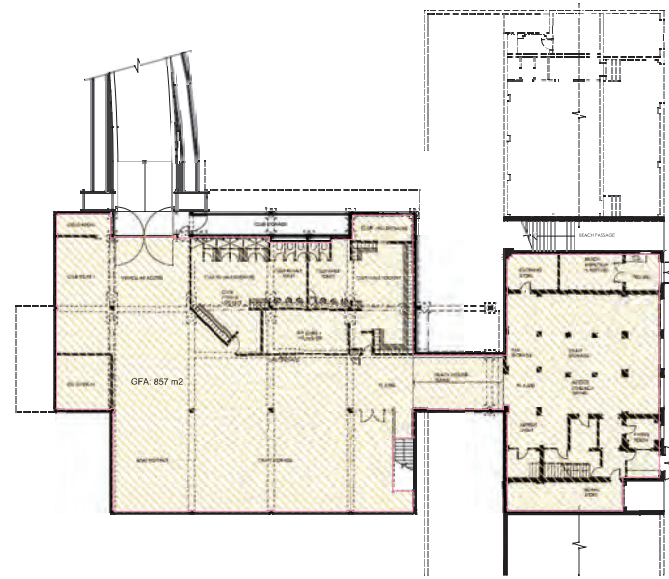
In summary:

- TRAFFIX has been commissioned to undertake a Traffic Impact Assessment (TIA) seeking approval for alterations and additions to the existing FSLSC which proposes modifications as outlined in **Section 4**, comprising +168m² restaurant GFA (+168 seats), -21m² Café GFA (-21 seats) and an additional indoor badminton court.
- The subject site is served by good bus services that are located within 400 metres of the subject site, providing connectivity to South Curl Curl, City Wynard, Warringah Mall and Manly.
- The proposed development (additional floor space) generates a nominal demand for an additional 48 parking spaces under Council's DCP as discussed in Section 5.1.1. However, this is a generic rate that is for LGA wide application and does not take account of the specific attributes of the site and its operations as discussed in Section 5.1.2, so that the demand is expected to reduce to about five 17 spaces based on a first principles approach.
- Surveys of on-street and off-street parking in the immediately locality within a 200 metres walking distance of the subject site undertaken on peak weekdays and weekend days in March 2023 (covering 352 spaces) demonstrate a 100 percent on-street parking occupancy at 1:00pm on Sunday 5th March 2023 and a 49.1 percent on-street parking occupancy on Friday 3rd March 2023.
- Importantly, this parking assessment reflects peak summer demands that are higher than the 85th percentile demand throughout the year. In practice, the on-street parking availability throughout the week and at all other times of the year will be less, with ample parking availability.
- Traffic impacts associated with the proposed works are expected to be negligible, with an additional 11 vehicle trips per hour (6 in, 5 out) generated during the weekday evening peak, which will have no noticeable impacts to surrounding streets.

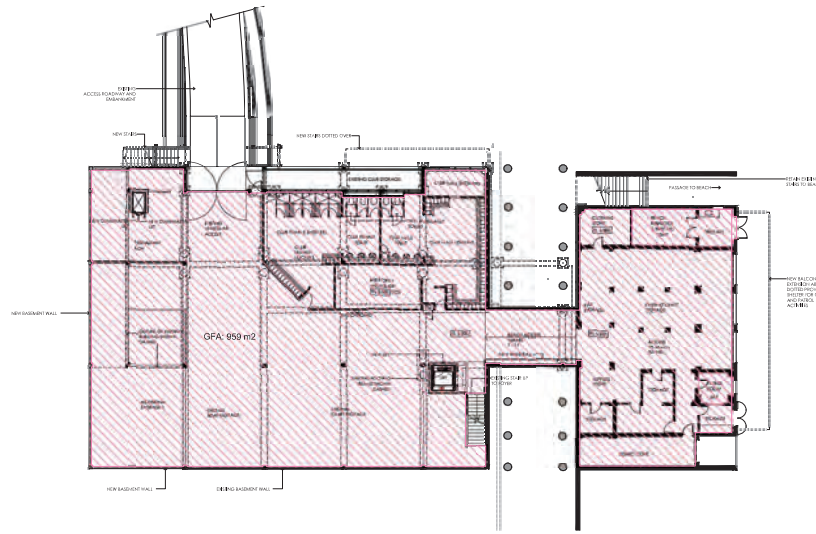
This traffic impact assessment therefore demonstrates that the subject application is not only supportable on traffic planning grounds it provides an opportunity to increase utilisation of more sustainable modes of transport for the reasons discussed.

APPENDIX A

Reduced Plans



EXISTING LEVEL 1



PROPOSED LEVEL 1

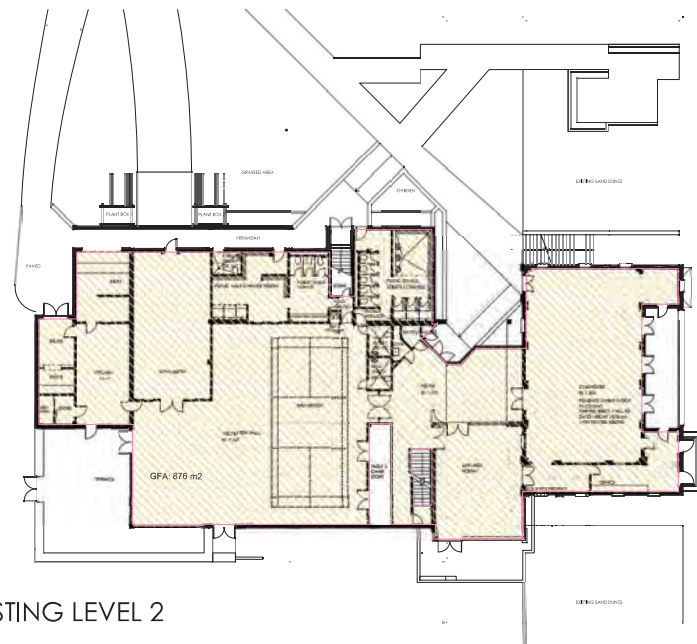
LEVEL 1 GFA SCHEDULE

EXISTING	GFA
STORAGE	
CLUB LOCKERS & FACILITIES	
RESTAURANT BOH	
FIRST AID & PATROL	
TOTAL GFA	857

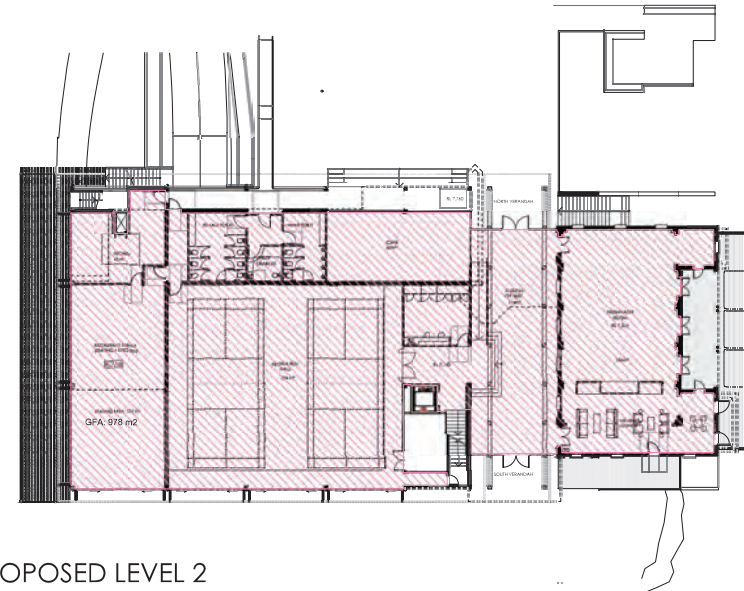
LEVEL 1 GFA SCHEDULE

PROPOSED	GFA
STORAGE	
CLUB LOCKERS & FACILITIES	
RESTAURANT BOH	
FIRST AID & PATROL	
TOTAL GFA PROPOSED	959

LEVEL 1 USES DON'T CHANGE, WITH AN INCREASE IN STORAGE



EXISTING LEVEL 2



PROPOSED LEVEL 2

LEVEL 2 GFA SCHEDULE

EXISTING	GFA
MUSEUM OF SURF & ENTRANCE	
OFFICE & RECEPTION	
GYMNASIUM	78
RECREATION HALL	
CLUB ROOM & LOUNGE	
RESTAURANT	0
CAFE	83
TOILETS	
STORAGE	
TOTAL GFA	876

LEVEL 2 GFA SCHEDULE

PROPOSED	GFA
MUSEUM OF SURF & ENTRANCE	
OFFICE & RECEPTION	
GYMNASIUM	
RECREATION HALL	
CLUB ROOM & LOUNGE	
RESTAURANT	168
CAFE	62
TOILETS	
STORAGE	
TOTAL GFA PROPOSED	978

NEW FACILITIES ARE PROVIDED TO LEVEL 2

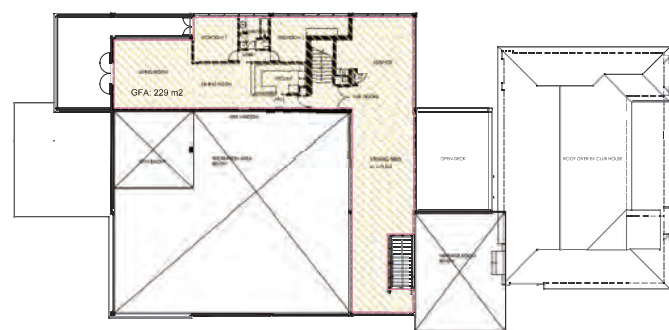
LEVEL 3 GFA SCHEDULE

EXISTING	GFA
CLUB STAFF FACILITIES	
CARETAKER'S APARTMENT	
GYMNASIUM	0
HALL & WALKWAY	0
TOTAL GFA	229

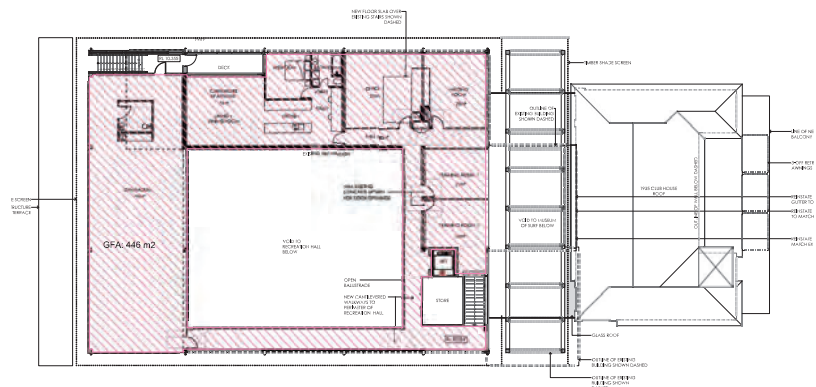
LEVEL 3 GFA SCHEDULE

PROPOSED	GFA
CLUB STAFF FACILITIES	
CARETAKER'S APARTMENT	
GYMNASIUM	79
HALL & WALKWAY	80
TOTAL GFA PROPOSED	446

NEW FACILITIES ARE PROVIDED TO LEVEL 3



EXISTING LEVEL 3



PROPOSED LEVEL 3

APPENDIX B

Survey Results



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob.0418-239019

Client : Traffix
Job No / Name : 7818 FRESHWATER Surf Club Parking
Day/Date : Friday 3rd March 2023



Area	Location	Capacity	1700	1800	1900	2000	2100
A	Kooloora Ave North / Side	9	6	7	6	6	6
B	Kooloora Ave North / Side	7	3	5	4	2	4
C	Kooloora Ave South / Side	10	6	6	2	2	1
D	Kooloora Ave South / Side	5	2	3	2	2	2
E	Charles St East / Side	5	5	5	4	5	5
F	Moore Rd North / Side	8	8	7	8	8	8
G	Moore Rd North / Side	2	2	2	2	2	2
H	Moore Rd South / Side	11	11	11	11	11	11
I	Gore St West / Side	14	4	5	5	4	5
J	Gore St East / Side 90 degree	40	14	27	28	30	25
Car Parks							
1	Southern	45	38	45	41	42	43
2	Northern	126	68	50	40	41	38
	Dirt / Grass Area	70	0	0	0	0	0
Total of Vehicles Parked		352	167	173	153	155	150
Number of Vacant Spaces			185	179	199	197	202
% of Capacity Used			47.4%	49.1%	43.5%	44.0%	42.6%



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob.0418-239019

Client : Traffix
Job No / Name : 7818 FRESHWATER Surf Club Parking
Day/Date : Sunday 5th March 2023



Area	Location	Capacity	1000	1100	1200	1300	1400	1500	1600
A	Kooloora Ave North / Side	9	9	9	9	9	9	9	9
B	Kooloora Ave North / Side	7	7	7	7	7	7	7	7
C	Kooloora Ave South / Side	10	10	10	10	10	9	10	10
D	Kooloora Ave South / Side	5	5	5	5	5	5	5	5
E	Charles St East / Side	5	5	5	5	5	4	5	5
F	Moore Rd North / Side	8	8	8	8	8	8	8	8
G	Moore Rd North / Side	2	1	2	2	2	2	2	2
H	Moore Rd South / Side	11	11	11	11	11	11	11	11
I	Gore St West / Side	14	14	14	13	14	14	14	14
J	Gore St East / Side 90 degree	40	40	39	40	40	40	39	39
Car Parks									
1	Southern	45	45	45	45	45	45	45	45
2	Northern	126	124	126	126	126	125	125	125
	Dirt / Grass Area	70	63	68	70	70	40	69	69
Total of Vehicles Parked		352	342	349	351	352	319	349	349
Number of Vacant Spaces			10	3	1	0	33	3	3
% of Capacity Used			97.2%	99.1%	99.7%	100.0%	90.6%	99.1%	99.1%



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. Mob.0418-239019



Client : Traffix
Job No / Name : 7818 FRESHWATER Surf Club Parking
Day/Date : Friday 3rd & Sunday 5th March 2023

