



183-185 Military Road, Neutral Bay

Transport Assessment

Prepared for: **Equitibuild Pty Ltd**

23 November 2022



PROJECT INFORMATION

Project Name:	183-185 Military Road, Neutral Bay
Client:	Equitibuild Pty Ltd
Project Number:	2292
Prepared By:	JMT Consulting

DOCUMENT HISTORY

Document Title	Revision	Date issued	Author
183-185 Military Road transport assessment	Draft	10.11.22	JM
183-185 Military Road transport assessment	Issue	23.11.22	JM

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Executive Summary

JMT Consulting was engaged by Equitibuild Pty Ltd to undertake a transport assessment to support a Planning Proposal for the site at 183-185 Military Road, Neutral Bay. The proposal seeks to amend the North Sydney Local Environmental Plan to increase maximum height and density controls on the site, facilitating the future development of a mixed-use site including retail, commercial and residential floor space.

Key findings of the transport assessment are as follows:

- Vehicle access (including service vehicles) to the site for general vehicles would be maintained via Military Lane.
- Bicycle parking on the site for all uses will be delivered in accordance with the parking rates outlined in the North Sydney DCP, with the final number of spaces to be determined at the Development Application stage of the project.
- Up to 25 public/commuter bicycle spaces would be provided as part of the proposal which will provide a benefit to the broader community of Neutral Bay and encourage cycling as a mode of transport not just to the subject site but also the broader town centre.
- The Planning Proposal would provide significantly reduced levels of car parking when compared to that permitted under North Sydney Council controls. This aligns with advice provided by Council to consider how the proposal could support public and active transport modes by limiting on-site car parking numbers.
- The traffic generation potential under the Planning Proposal, given the reduced car parking rates adopted, is lower when compared to the approved development consent for the site under DA 307/18. North Sydney Council and Transport for NSW considered the traffic impacts of the current development consent to be acceptable and therefore the Planning Proposal, with reduced levels of peak hour traffic when compared to the DA, with consequently achieve an acceptable traffic outcome.
- Travel demand management measures have been suggested to improve the mode share of public transport and active transport. These items should be considered further at subsequent stages of the project.

In the above context, the traffic and transport impacts arising from the Planning Proposal are considered acceptable.

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1 Introduction

1.1 Background

JMT Consulting was engaged by Equitibuild Pty Ltd to undertake a transport assessment to support a Planning Proposal for the site at 183-185 Military Road, Neutral Bay.

1.2 Site location

The extent of the site is shown in Figure 1 below. Located within the North Sydney LGA, the site is zoned B4 (mixed use) and has a site area of approximately 1,300m². It is adjacent to the key Military Road transport corridor and bounded by Rangers Road, Yeo Street and Military Lane.



Figure 1 Site location

1.3 Existing development consent

In October 2019, under DA 307/18, North Sydney Council provided development approval for the demolition of existing buildings and construction of shop top housing with associated basement car park on the subject site. More specifically the current approval allows for the construction of a five-storey building with basement level car parking, retail and commercial on the first two (2) levels and residential use on the remaining three (3) upper levels.

Traffic analysis undertaken at the time of the application considered a traffic generation potential of approximately 29 vehicle trips per hour during the commuter peak periods.

1.4 Report purpose

This report has been prepared to summarise the traffic and transport implications of the Planning Proposal. Specifically the assessment considers the following items:

- Existing transport conditions, including:
 - Surrounding road network
 - Vehicle site access
 - Car parking
 - Loading and servicing arrangements
 - Public transport provision
 - Pedestrian and cycling network
- Proposed site access arrangements
- Proposed vehicle loading and servicing arrangements
- Proposed parking rates to be adopted as part of a future development application for the site, including indicative parking numbers based on the reference scheme prepared by AJC Architects
- Additional traffic movements resulting from the Planning Proposal and impacts to the adjacent road network
- Public transport, walking and cycling measures

2 Existing Transport Conditions

2.1 Road network

To manage the extensive network of roads for which councils are responsible under the Roads Act 1993, Transport for NSW (TfNSW) in partnership with local government established an administrative framework of *State*, *Regional*, and *Local Road* categories. State Roads are managed and financed by TfNSW and Regional and Local Roads are managed and financed by councils.

Regional Roads perform an intermediate function between the main arterial network of State Roads and council controlled Local Roads. Due to their network significance TfNSW provides financial assistance to councils for the management of their Regional Roads. Key State and Regional roads which provide access to the site are illustrated in Figure 2 below, which demonstrates the site is very well connected to the surrounding road network.

The site is primarily serviced by Military Road which is classified as a State Road. Regional Roads in the vicinity of the site include Spofforth Street, Belgrave Street, Ernest Street and Rangers Road to the south-east of the site. The site is also serviced by local roads managed by Council including direct frontage to Yeo Street.

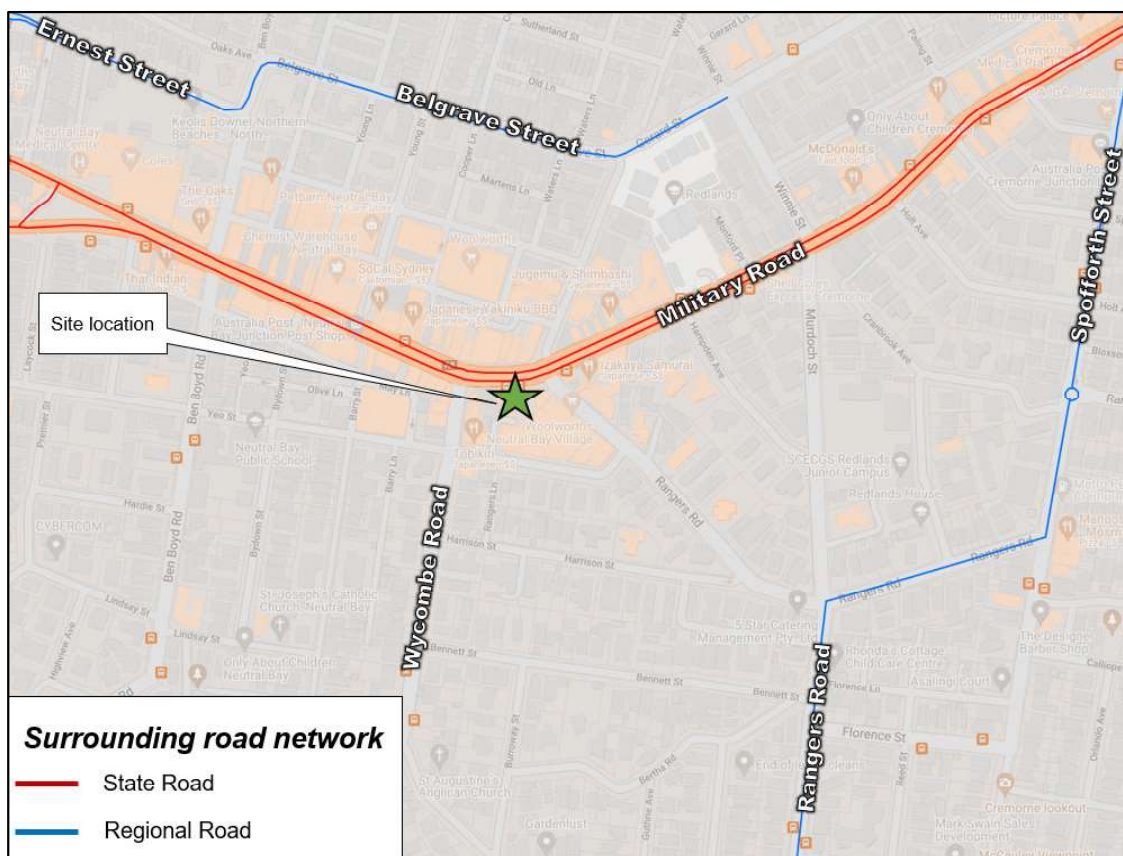


Figure 2 Existing road network

2.2 Existing site uses and site access

No 183 Military Road is currently occupied by a retail premises with an approximate cumulative floor area of 200m². No 185 Military Road is currently occupied by a mixed-use building comprising a ground floor retail component with a cumulative floor area of 485m² and a commercial component on the levels above with a cumulative floor area of 1,160m².

Access to the car park is provided via a driveway from Military Lane as shown in Figure 3 below.

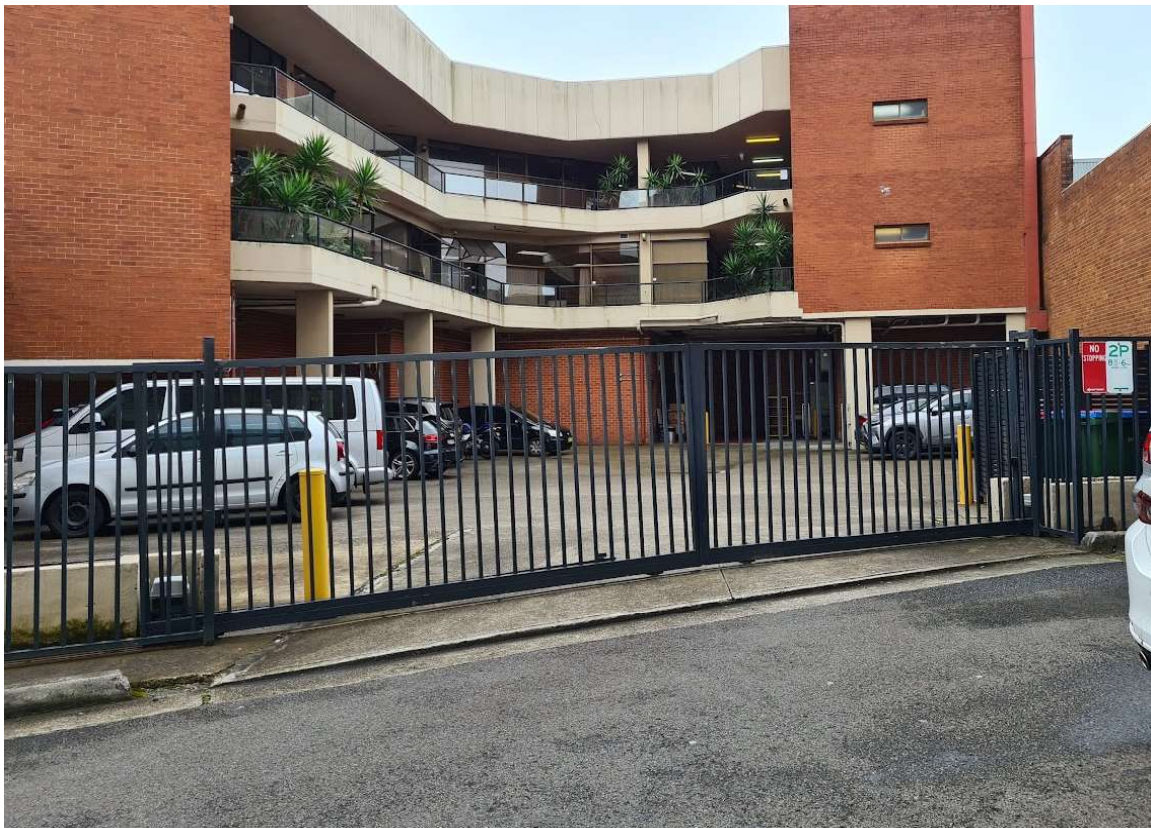


Figure 3 Existing site access from Military Lane

2.3 Public transport services

The site is located adjacent to the Military Road corridor which is one of Sydney's busiest and most important bus corridors - served by an established bus network that caters for a wide range of trips. The current bus network contains a variety of all-stops, limited stops and express services, joining and leaving the corridor at several locations. A number of bus stops are located directly opposite the site on Military Road as well as Wycombe Road as illustrated in Figure 4.

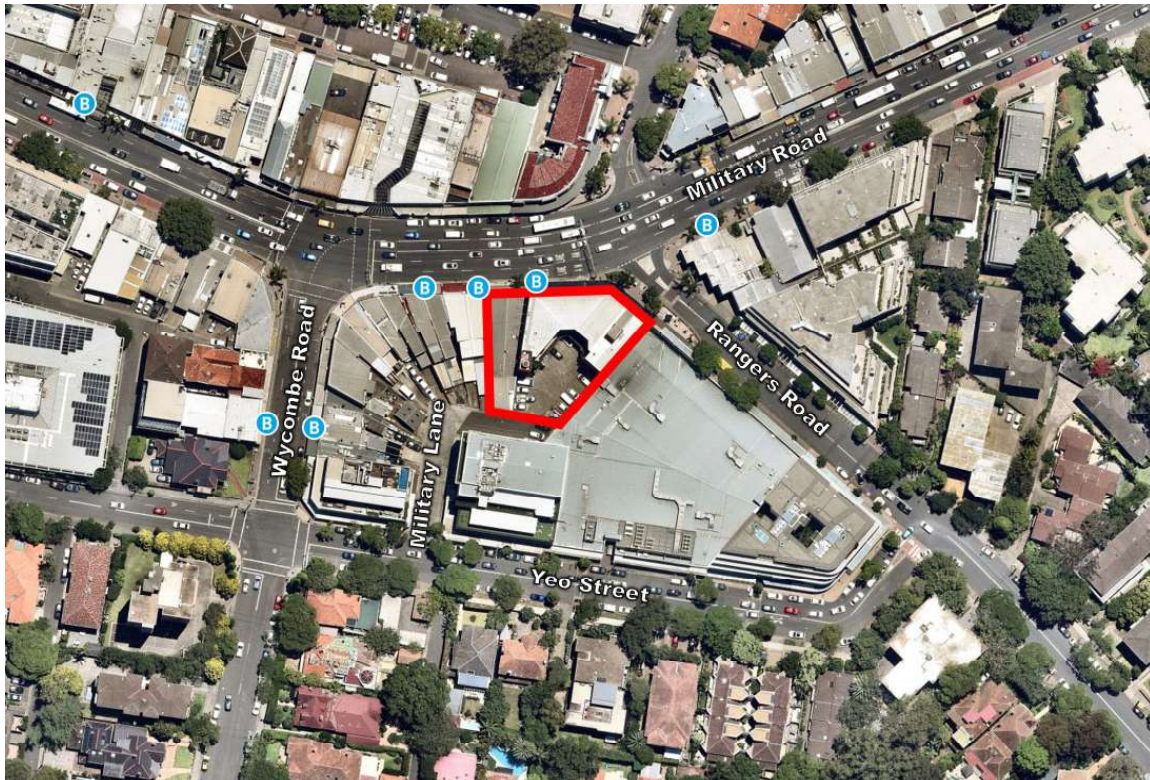


Figure 4 Existing bus stops servicing the site

A full list of the extensive bus network servicing the Military Road corridor is provided in Table 1.

Table 1 Military Road bus services

Route No.	Route (To / From)	Typical Frequency
143	Manly to Chatswood	Weekdays: 15-30 minutes peak only Weekends: No services
144	Manly to Chatswood	Weekdays: 10-15 minutes peak / 15 minutes off peak Weekends: 15 minutes
151	Mona Vale to City Queen Victoria Building (QVB)	Weekdays: Late night – early morning service Weekends: Late night – early morning service

Route No.	Route (To / From)	Typical Frequency
168	North Balgowlah to Milsons Point	Weekdays: 40-60 minutes Weekends: No services
169	Manly to City Wynyard	Weekdays: 30 minutes peak / 1 hour off peak Weekends: 60 minutes
173	Narraweena to Milsons Point	Weekdays: 4 AM peak services only Weekends: No services
178	Comer Heights to City Wynyard	Weekdays: No peak service / 30 minutes off peak Weekends: 15-30 minutes
180	Collaroy Plateau to City Wynyard	Weekdays: No peak service / 30 minutes off peak Weekends: 30 minutes
188	Mona Vale to City Wynyard	Weekdays: 3 morning services only Weekends: 2 morning services only
225	Cremorne Point Wharf to Neutral Bay	Weekdays: 13-15 minutes peak / 30 minutes off peak Weekends: 30 minutes
228	Clifton Gardens to Milsons Point	Weekdays: 35-40 minutes peak / 1 hour off peak Weekends: No services
229	Beauty Point to Milsons Point	Weekdays: 1 hour all day Weekends: No services
230	Mosman Wharf to Milsons Point	Weekdays: 15-20 minutes peak / 30 minutes off peak Weekends: 30 minutes
243	Spit Junction to City Wynyard	Weekdays: 20 minutes peak / 1 hour off peak Weekends: 30 minutes
244	Chowder Bay Mosman to City Wynyard	Weekdays: 20 minutes peak / 30 minutes off peak Weekends: 1 hour
245	Balmoral to City Wynyard	Weekdays: 15 minutes peak / 1 hour off peak Weekends: 1 hour
246	Balmoral Heights to City Wynyard	Weekdays: 2-10 minutes peak only Weekends: No services
247	Taronga Zoo to City Wynyard	Weekdays: 30 minutes Weekends: 30 minutes
248	Seaforth to City Wynyard	Weekdays: 20 minutes morning peak only Weekends: No services

Route No.	Route (To / From)	Typical Frequency
249	Beauty Point to City Wynyard	Weekdays: 3 morning peak services only Weekends: No services
257	Chatswood to Balmoral	Weekdays: 15-30 minutes peak / 15-30 minutes off peak Weekends: 30 minutes Saturdays & 30 minutes Sundays
263	Crows Nest to City Bridge St	Weekdays: 10-15 minutes peak / 40 minutes off peak Weekends: 1 hour 10 minutes
B1	Mona Vale to City Wynyard	Weekdays: 2-7 minutes peak / 8-12 minutes off peak Weekends: 8-15 minutes
E54	Mona Vale to Milsons Point	Weekdays: 5-10 minutes peak / 30 minutes off peak Weekends: No services
E50	Manly to Milsons Point (Express)	Weekdays: 10 minutes morning peak only Weekends: No services
E65	South Curl Curl to City Wynyard	Weekdays: 5 minutes morning peak only Weekends: No services
E66	Allambie to City Wynyard	Weekdays: 13 minutes morning peak only Weekends: No services
E68	Brookvale to City Wynyard	Weekdays: 15 minutes morning peak only Weekends: No services
E69	Manly to City Wynyard	Weekdays: 6 minutes morning peak only Weekends: No services
E71	Manly to City Wynyard (Express)	Weekdays: minutes peak only Weekends: No services

2.4 Public transport accessibility

A key indicator of the level of public transport accessibility a site contains is the number of locations accessible within a 30 minute public transport catchment. A key objective of the Greater Sydney Commission's Greater Sydney Region Plan is to deliver a 30-minute city where jobs, services and quality public transport spaces are in easy reach of residences.

As illustrated in Figure 5 a number of key employment centres across Sydney can be reached within 30 minutes public transport travel time of the site, including Central / Redfern, Sydney CBD, North Sydney CBD, St Leonards, Chatswood and Manly. The highly accessible nature of the site will facilitate the use of public transport, particularly the Military Road bus corridor.

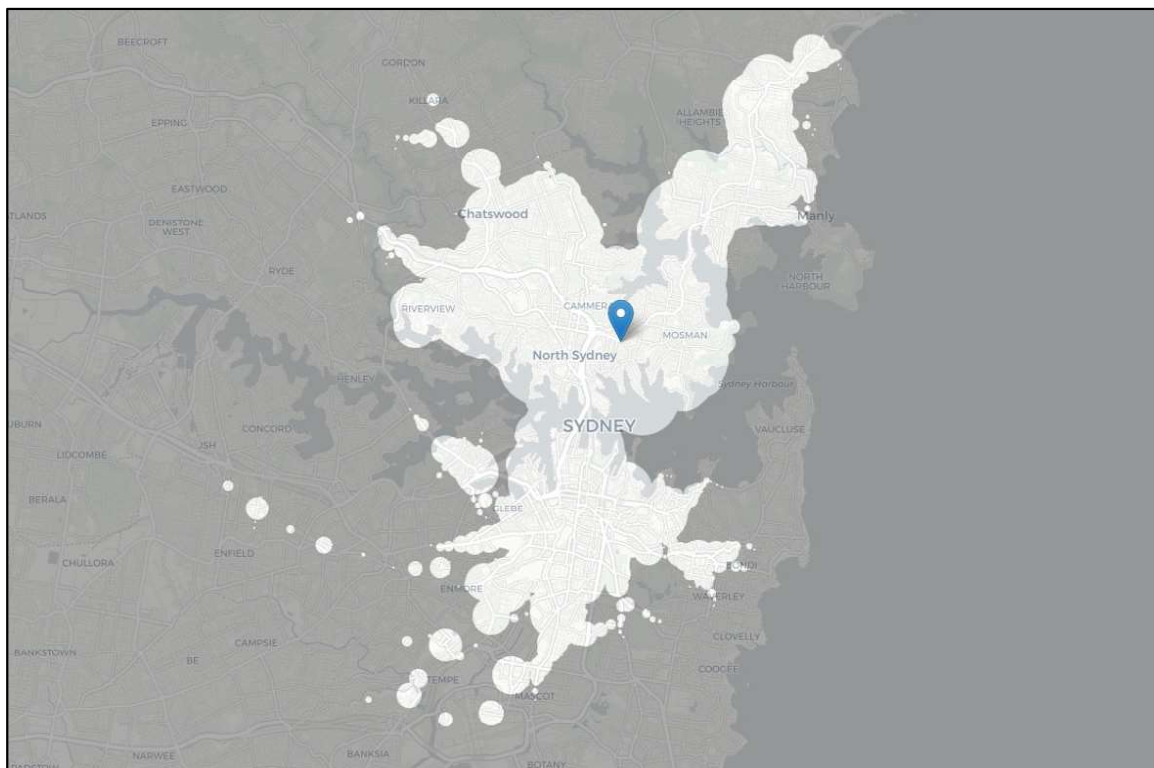


Figure 5 30 minute public transport catchment from site

Source: <https://www.mapnificent.net/sydney>

2.5 Walking and cycling

Good quality footpaths are provided along all streets in the vicinity of the site. This includes signalised pedestrian crossings on all legs of the signalised intersections at Military Road / Wycombe Road and Wycombe Road / Yeo Street. A zebra crossing is also provided adjacent to the site across Yeo Street near the intersection with Rangers Road.

There is a developing cycleway network in the vicinity of the site as illustrated in Figure 6 below. The site is located on the 'Route 5' cycleway as identified in the North Sydney Integrated Cycling Strategy, which will ultimately provide a connection between the North Sydney CBD and Mosman via Neutral Bay.

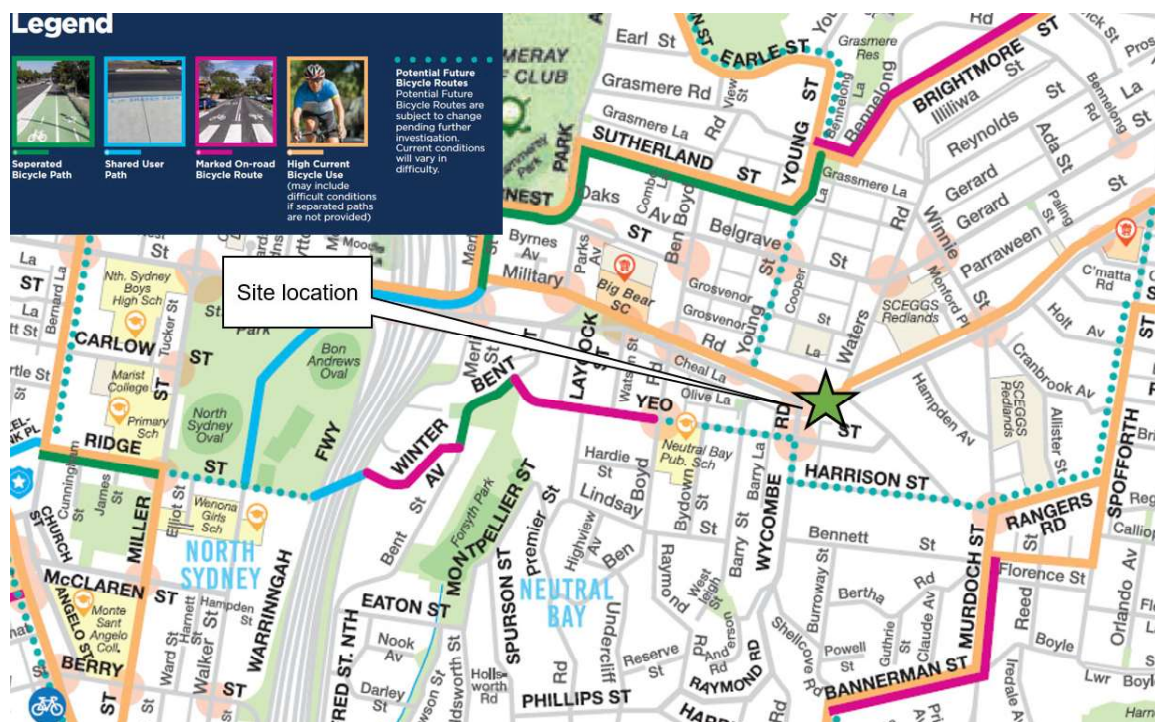


Figure 6 North Sydney cycling network

Source: North Sydney Council

3 Transport Impact Assessment

3.1 Site access arrangements

Under the reference scheme prepared by AJC Architects, all vehicle access (including B99s and service vehicles) would be obtained from Military Lane as per existing arrangements. A loading dock would be provided within the site capable of accommodating a Medium Rigid Vehicle (MRV), with cars accessing a basement level car park. It is envisaged, subject to further detailed planning to be undertaken as part of a subsequent Development Application (DA), that a single driveway crossover would be provided for the entire development.

3.2 Car parking

3.2.1 Residential car parking

An assessment of car parking requirements for the proposal against requirements set out in North Sydney DCP has been undertaken as detailed in Table 2 below. This analysis demonstrates that the proposed parking provision of 36 spaces under the reference scheme is consistent with the maximum permissible parking provision allowable under the DCP.

Table 2 Residential car parking provision

Type	No. of units	DCP parking rate (B4 zones)	Max. no. of spaces under DCP	Car spaces provided
Studio	0	0.5 / unit	0	36
1 bed	15	0.5 / unit	8	
2 bed	19	1.0 / unit	19	
3 bed	9	1.0 / unit	9	
Total			36	

3.2.2 Non-residential car parking

The North Sydney DCP notes a maximum parking rate of 1 space per 60m² GFA for non-residential land uses within the Neutral Bay centre. The reference scheme provides for approximately 3,400m² of non-residential uses including retail, office and community uses. Based on this quantum of floor space up to 57 car parking spaces could be provided for these uses.

Given the ancillary nature of the uses to be provided within the site, which will primarily service the local 'walk up' population rather than act as a 'destination' for visitors outside of the immediate area, reduced car parking rates for the non-residential uses are proposed at this stage of the proposal. This reduction in car

parking for non-residential uses aligns with Council's approach (as per the North Sydney Transport Strategy) to minimise the amount of on-site parking and support sustainable forms of transport within future developments. The reduction in non-residential car parking is also considered suitable given the site's excellent public transport access and availability of nearby public car parking facilities.

3.2.3 Summary of proposed car parking

The proposed level of car parking for the site is outlined in Table 3, which indicates that the Planning Proposal would provide significantly reduced levels of car parking when compared to that permitted under North Sydney Council controls. This aligns with advice provided by Council to consider how the proposal could support public and active transport modes by limiting on-site car parking numbers.

The parking numbers are based on the reference scheme prepared by AJC Architects for the purposes of the Planning Proposal. It should be noted that the reference scheme is conceptual in nature and further investigations will need to be undertaken at subsequent stages to confirm the final parking number and layout. The final car parking requirements and provision for the site will be confirmed at the Development Application (DA) stage of the project.

Table 3 Car parking summary

Use	Quantum	Units	Max. number of spaces under DCP	Car spaces proposed
Residential	43	Apartments	36	36
Non-residential	3,413	m ² GFA	57	21
Total			93	57

3.3 Bicycle parking

The North Sydney Council DCP outlines minimum bicycle parking requirements for new developments. Table 4 below summarises the potential bicycle parking provision based on the reference design prepared for the Planning Proposal. This will be confirmed at the DA stage of the development.

Table 4 Potential bicycle parking requirements

Land Use	No. of units / GFA	User Type	Potential bicycle parking requirement	
			Rate	Number
Residential	43 units	Residents	1 per unit	43
		Visitors	1 per 10 units	4
Commercial	1251m ²	Staff	1 per 150m ²	8
		Visitors	1 per 400m ²	3
Retail	1173m ²	Staff	1 per 200 m ²	6
		Visitors	1 per 300m ²	4
Total				68

For residents and staff bicycle parking will be located in a secure location only accessible via key or swipe card. This will either be in individual storage units (Class 1 facility) or a large secure bicycle parking room within the site boundary (Class 2 facility). For retail and residential visitors class 3 bike parking (i.e. bike rails) will be provided in a publicly accessible location with good passive surveillance.

In addition to bicycle parking for staff and residents up to 25 public/commuter bicycle spaces would be provided as part of the proposal. This public bicycle parking facility will provide a benefit to the broader community of Neutral Bay and encourage cycling as a mode of transport not just to the subject site but also the broader Neutral Bay Town Centre.

3.4 Green travel plan

3.4.1 Background

A Green Travel Plan (GTP) is a package of measures put in place by the development occupants to try and encourage more sustainable travel. It is a means for a development to demonstrate a commitment and take a pro-active step towards improving the environmental sustainability of its activities.

More generally, the principles of a GTP are applied to all people travelling to and from a site. Government authorities are placing increasing emphasis on the need to reduce the number and lengths of motorised journeys and in doing so encourage greater use of alternative means of travel with less negative environmental impacts than the car.

3.4.2 Objectives

The main objectives of the GTP are to reduce the need to travel and promotion of sustainable means of transport. The more specific objectives include:

- High mode share for public transport, cycling and walking to work journeys;
- Ensuring adequate facilities are provided at the site to enable the tenants and visitors of the development to commute by sustainable transport modes;
- Reduce the number of car journeys associated with business travel;
- Facilitate the sustainable and safe travel of occupants; and
- Raise awareness of sustainable transport amongst tenants of the development.

3.4.3 Potential measures

A suite of potential measures is described below to be implemented as part of the GTP, which can be developed further as the Planning Proposal progresses.

Table 5 List of potential GTP measures

Action	Responsibility
Cycling	
Provide sufficient cycle parking to meet needs, which is easily accessible and secure	Developer
Provide adequate cycle parking facilities for visitors	Developer
Ensure cycle parking is clearly visible or provide signage to direct people to cycle bays	Building manager
Produce a map showing cycle routes and bike stands in the area	Building manager
Supply a communal toolkit for staff consisting of puncture repair equipment, a bike pump, a spare lock and lights.	Building manager
Promote the participation in annual events such as 'Ride to Work Day'	Tenants

Action	Responsibility
<i>Walking</i>	
Identify tenants living near work that may be interested in walking to work	Building manager
Identify through the travel survey what incentives might need to be put in place for non-walkers to consider a mode shift	
<i>Public Transport</i>	
Develop a map showing public transport routes in the area	Building manager
Put up a noticeboard with leaflets and maps showing the main public transport routes to and from the site	Building manager
<i>Carshare / Carpooling</i>	
Establish a car pooling program to help people find someone to share in their daily commute.	Building manager and tenants
Develop a map showing car-share spots in the area to encourage staff and visitors to use a shared car (e.g. GoGet) if they are required to drive	Building manager and tenants
<i>General actions</i>	
Promotion including: <ul style="list-style-type: none"> • Allow staff the flexibility to commute outside peak periods to reduce overall congestion and travel time. • Identify a tenant/champion to complete travel coordinator duties • Provide a welcome pack upon initial occupation of each tenant which includes details around sustainable travel options 	Tenants

3.4.4 Monitoring and review

In order for the GTP to be effective, it must be reviewed on a regular basis. It is important to ensure that the GTP is meeting its objectives and having the intended impact on car use and transport choices. The GTP should be reviewed on a yearly basis by undertaking travel surveys. It is recommended that the mode shares are first reviewed at least 18 months after occupation, to allow activity levels to settle at the site.

3.5 Forecast traffic generation

3.5.1 Non-residential traffic generation

The proposed non-residential component of the development is expected to primarily serve the local walk-up catchment and passing along Military Road, especially during the commuter peak hours. Given the context of the site as well as the limited parking space proposed for the non-residential component, it is assumed that the generation for these uses will be low, and the adopted traffic generation rates directly linked to the quantum of car parking provided.

Transport for NSW published a Technical Direction that described vehicular trip rates for commercial developments. Comparable commercial developments have been considered in order to understand the likely traffic generation resulting from the site. Four sites were selected given their similar proximity to nearby public transport as well as similar car parking rates, which were sites located in North Sydney, Chatswood, Macquarie Park and Parramatta.

The average peak hour trip rates per parking space for the surveyed locations were estimated to be 0.40 and 0.25 trips per parking space during the AM and PM network peak hour respectively. The surveyed data for these sites is highlighted in Table 6 below.

Table 6 Peak hour vehicle trip generation per parking space

Surveyed location	North Sydney	Chatswood	Macquarie Park	Parramatta	Average
AM peak hour trips	51	47	119	185	100
PM peak hour trips	44	36	72	75	57
Parking spaces	136	150	269	402	239
AM peak hour trip rate	0.38	0.31	0.44	0.46	0.40
PM peak hour trip rate	0.32	0.24	0.27	0.19	0.25

Source: Roads and Maritime, Technical Direction 2013/14

As a conservative assumption, potentially due to the higher traffic generation in the PM peak hour associated with retail uses, the adopted traffic generation rates for this analysis as follows:

- AM peak hour: 0.40 vehicle trips per parking space
- PM peak hour: 0.80 vehicle trips per parking space

3.5.2 Residential traffic generation

The forecast traffic generation for the residential uses has been determined based on the Sydney wide average traffic generation rates for high density residential uses as published by TfNSW which are as follows:

- AM peak hour: 0.15 vehicle trips per unit
- PM peak hour: 0.19 vehicle trips per unit

3.5.3 Total traffic generation

Considering the various uses envisaged within the Planning Proposal the overall increase in traffic generation is summarised in Table 7 below.

Table 7 Net traffic generation

Use	Quantum	Unit	Traffic Generation Rate		Traffic Generation	
			AM Peak Hour	PM Peak Hour	PM Peak Hour	Sat Peak Hour
Residential	43	apartments	0.19 / unit	0.15 / unit	8	9
Non-residential uses	20	parking spaces	0.40 / space	0.80 / space	8	16
Total					16	25

3.6 Road network impacts

Based on the proposed mix of uses and parking numbers considered under this Planning Proposal a future development of the site may generate a maximum of 25 vehicles movements during the weekday commuter peak hour.

As previously outlined in Section 1.3 of this document, the traffic analysis supporting the approved development of the site from 2019 under DA 307/18 assessed the impacts of a site development which generated approximately 29 vehicle trips per hour during the commuter peak periods – 16% more than that envisaged under the current Planning Proposal. Traffic impacts of this magnitude were assessed by both Council and Transport for NSW (TfNSW) and deemed to be acceptable as per Council's assessment report dated 24 September 2022.

Accordingly, given the traffic generation potential under the Planning Proposal is **lower** when compared to the approved development consent for the site, the traffic impacts of the Planning Proposal are deemed to be acceptable.

4 Study Findings

This transport assessment report has been undertaken by JMT Consulting to support a Planning Proposal for the site at 183-185 Military Road, Neutral Bay. The proposal seeks to amend the North Sydney Local Environmental Plan to increase maximum height and density controls on the site, facilitating the future development of a mixed-use site including retail, commercial and residential floor space. Key findings of the transport assessment are as follows:

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