Proposed Industrial Development

#### 35-39 Carter Road, Brookvale

#### TRAFFIC AND PARKING ASSESSMENT REPORT



29 November 2024

Ref 24250



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#### TABLE OF CONTENTS

1.	INTRODUCTION
2.	PROPOSED DEVELOPMENT
3.	TRAFFIC ASSESSMENT
4.	PARKING IMPLICATIONS

### APPENDIX AARCHITECTURAL PLANSAPPENDIX BSWEPT TURNING PATH DIAGRAMS

#### LIST OF ILLUSTRATIONS

- Figure 1 Location
- Figure 2 Site
- **Figure 3** Road Hierarchy
- Figure 4Existing Traffic Controls
- **Figure 5** Existing Parking Restrictions

#### 1. INTRODUCTION

This report has been prepared to accompany a Development Application to Northern Beaches Council for the proposed industrial warehouse facility located at 35-39 Carter Road, Brookvale (Figures 1 and 2).

The proposed development involves the demolition of the existing warehouse building and mechanical workshop on the southern portion of the site (No. 37-39 Carter Road) to facilitate the construction of a new industrial building comprising 8 new light industrial tenancies, each with an ancillary office space. The proposed works will also involve the alterations and additions to the retained portion of the two-storey industrial building located on the northern portion of the site (No. 35 Carter Road).

Off-street car parking is proposed for a total of 27 cars across two levels, which includes an above ground car parking area, in accordance with Council requirements.

Vehicular access to the proposed parking and loading facilities is to be provided via two new entry/exit driveways on the southern end of the Carter Road site frontage. In this regard, the existing vehicular access to warehouse units No. 1-3 will be retained via separate rollers doors off West Street.

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, and assigns that traffic generation to the road network serving the site
- assesses the traffic implications of the development proposal in terms of road network capacity

- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street parking and loading provided on the site





#### 2. PROPOSED DEVELOPMENT

#### Site

The subject site is located on the southern corner of Carter Road and West Street intersection. The site is rectangular in shape and has street frontages of approximately 39.5m in length to Carter Road, 50.3m in length to West Street, and occupies an area of approximately 2,047.67m<sup>2</sup>.

The site is currently zoned *E4 General Industrial* as defined in the *Warringah Local Environmental Plan 2011*, and is currently occupied by 3 industrial buildings, as illustrated in the recent aerial image of the site and its surroundings is reproduced below.



Source: Nearmap (Dated Sun Apr 7 2024)

No. 35 Carter Road is currently occupied by *Auto Body Smash Repairs*, an auto-repairs shop comprising a two-storey industrial building with a cumulative floor area of approximately 706m<sup>2</sup>. Informal off-street parking is provided for 10 cars in an outdoor first-floor hardstand area, with vehicular access provided via an entry/exit driveway off the southern end of the Carter Road site frontage.

No. 37 Carter Road is also currently occupied by *Auto Body Smash Repairs*, comprising a single-storey industrial building with an estimated floor area of approximately 450m<sup>2</sup>. An outdoor hardstand area is located in front of the building and is used to provide informal off-street parking, with vehicular access provided via an entry/exit driveway located off the northern end of the Carter Road site frontage.

No. 39 Carter Road is currently occupied by a single-storey warehouse building, with an estimated floor area of approximately 391m<sup>2</sup>. An outdoor hardstand area is located at the rear of the site and is used to provide informal off-street parking, with vehicular access provided via an entry/exit driveway located off the southern end of the Carter Road site frontage.

#### **Proposed Development**

The proposed development will involve the alterations and additions to the southern end of the existing warehouse and mechanical workshop buildings located at No. 37 & 39 Carter Road to facilitate the extension of the warehouse area, as well as constructing a new first floor warehouse level.

The proposed works will result in 8 new light industrial tenancies, each with an ancillary office space, resulting in an overall building area of  $2,001.54m^2 - i.e.$  a *nett increase* of  $454.54m^2$ , as follows:

#### **Overall Floor Areas**

Existing - Ground floor warehouse (3 units):	445.08m <sup>2</sup>	(excluding 67.2m <sup>2</sup> of loading area)
Proposed - Ground floor warehouse (3 units):	494.02m <sup>2</sup>	(excluding 67.2m <sup>2</sup> of loading area)
Proposed - Ground floor mezzanine (3 units):	$102.72m^2$	
Existing – Level 1 warehouse (1 unit):	$122.03m^2$	(excluding 22.4m <sup>2</sup> of loading area)
Existing – Level 1 mezzanine (1 unit):	$43.23m^2$	
Proposed - Level 1 warehouse (5 units):	616.03m <sup>2</sup>	(excluding 89.6m <sup>2</sup> of loading area)
Proposed - Level 1 mezzanine (5 units):	$178.43m^2$	
TOTAL AREA:	2,001.54m <sup>2</sup>	

In this regard, the existing auto-repairs workshop, *Auto Body Smash Repairs* located within the northern end of the site (Tenancies IN01 - IN03 & IN07) are to be retained generally *unchanged*, noting the approved operating hours are also to remain *unchanged*.

In addition, an ancillary café will also be located on the ground floor with a cumulative floor area of 22.98m<sup>2</sup>.

Off-street parking is proposed for a total of 27 cars (including 2 disabled spaces) at various locations throughout the site, including 13 spaces on the ground floor level and 14 spaces within the upper floor level, in accordance with Council's requirements. Each of the units will have direct vehicular access via the internal circulation roadway, with dedicated parking spaces located directly outside each of the respective units.

Vehicular access to the proposed parking and loading facilities is to be provided via two entry/exit driveways on the southern end of the Carter Road site frontage. In this regard, the existing vehicular access to warehouse units No. 1-3 will be retained via separate rollers doors off West Street.

Loading/servicing is expected to be undertaken by a variety of light commercial vehicles such as the *Hyundai iLoad* and similar "white vans", up to and including 6.4m SRV trucks with a height clearance of 3.5m., in accordance with *AS2890.2*.

Each of the proposed light industrial units have been designed to accommodate a 6.4m long SRV truck, with the *exception* of Warehouse Tenancy IN10, which is intended for light industrial uses where loading will be *minimal*, if any.

Plans of the proposed development have been prepared by *Figgis & Jefferson Tepa Architects Pty Ltd* and are reproduced in **Appendix A**.

#### 3. TRAFFIC ASSESSMENT

#### **Road Hierarchy**

The road hierarchy allocated to the road network in the vicinity of the site by Transport for New South Wales (TfNSW) is illustrated on Figure 3.

Pittwater Road is classified by TfNSW as a *State Road* and forms part of the A8 road corridor, linking the A3 Mona Vale Road in the north at Mona Vale to Warringah Freeway in the south at North Sydney. It typically carries three traffic lanes in each direction in the vicinity of the site, including a dedicated bus lane in both directions. Opposing traffic flows are separated by a central median island, and both sides of the roads are subject to clearway restrictions in commuter peak periods.

Warringah Road is classified by TfNSW as a *State Road* and forms part of the A38 road corridor, linking the A8 Pittwater Road in the east at Dee Why to the A1 Pacific Highway in the west at Roseville. It typically carries two traffic lanes in each direction in the vicinity of the site, with additional lanes provided at key intersections. Opposing traffic flows are separated by a central median island.

Harbord Road / Cavill Street / Queenscliff Road / North Steyne is classified by TfNSW as a *Regional Road* and functions as a north-south collector route through the area, linking Pittwater Road in the north at Dee Why to Belgrave Street in the south at Manly. It typically carries two traffic lanes in each direction in the vicinity of the site.

Pitt Road / Abbott Road / Winbourne Road / Beacon Hill Road is classified by TfNSW as a *Regional Road* and functions as an east-west collector route through the area, linking Griffin Road in the east at North Curl Curl to Warringah Road in the west at Beacon Hill. It typically carries two traffic lanes in each direction in the vicinity of the site.

Carter Road and West 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 Carter Road, and angled parking is generally permitted on the southern side of West Street in front of the subject site.



#### **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 60 km/h SPEED LIMIT which applies to Pittwater Road, Winbourne Road, and Harbord Road
- a 50 km/h SPEED LIMIT which applies to Carter Road, West Street and all other local roads in the area
- a 40 km/h SPEED LIMIT which applies to Abbott Road between Harbord Road and Fay Street
- a 40 km/h SCHOOL ZONE SPEED LIMIT which applies to all roads in the vicinity of Northern Beaches Secondary College
- TRAFFIC SIGNALS in Harbord Road where it intersects with Pittwater Road, Winbourne Road, and Abbott Road
- a ONE WAY westbound restriction on West Street between Harbord Road and Carter Road
- STOP SIGNS in West Street where they intersect with Carter Road and with Pittwater Road
- a STOP SIGN in Carter Road where it intersects with Winbourne Road
- a CENTRAL MEDIAN ISLAND in Pittwater Road which prevents right-turn movements to/from side streets/driveways, including from West Street
- a SIGNALISED PEDESTRIAN CROSSING in Pittwater Road, between Victor Road and Federal Parade



#### **Projected Traffic Generation**

The traffic implications of development proposals 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 the development proposal is provided by reference to the Transport for NSW's publication *Guide to Transport Impact Assessment Version 1.1, Chapter 5 – Land Use Trip Generation (September 2024)* document.

The TfNSW *Guide to Transport Impact Assessment* document notes that it replaces the *Guide to Traffic Generating Developments v2.2 (October 2002)* and the updated traffic generation rates in the *Technical Direction TDT 2013/04a (August 2013)* document.

The TfNSW *Guide to Transport Impact Assessment* is based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the development proposal:

#### **Business Parks**

AM: 1.11 peak hour vehicle trips/100m<sup>2</sup> GFA

PM: 1.00 peak hour vehicle trips/100m<sup>2</sup> GFA

The TfNSW *Guide to Transport Impact Assessment* does not however nominate a traffic generation rate for cafes, referring only to drive through coffee outlets. Therefore, for the purposes of this assessment, the traffic generation rate of "5.0 peak hour vehicle trips/100m<sup>2</sup> GFA" nominated in the TfNSW *Guide to Transport Impact Assessment* for "restaurants" has been adopted with respect to the café component of the development proposal.

Application of the above traffic generation rate to the development proposal yields a traffic generation potential of approximately 24 vehicle trips per hour (vph) during the weekday AM peak period and approximately 21 vph during the weekday PM peak period, as set out below:

	AM	PM
Industrial (2,001.54m <sup>2</sup> GFA):	22.2 vph	20.0 vph
Café (28.33m <sup>2</sup> ):	1.4 vph	1.4 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	23.6 vph	21.4 vph

#### **Projected Future Traffic Generation Potential**

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 of the site expected to occur as a consequence of the development proposal when compared with the existing development on the site.

Application of the above traffic generation rate for *business parks* to the existing floor area of 1,547m<sup>2</sup> yields a traffic generation potential of approximately 17 vph during the weekday AM peak period and approximately 15 vph during the weekday PM peak period.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of approximately 6 vph during both the weekday AM and PM peak periods, as set out below:

Projected Nett Increase in Peak Hour Traffic Gener	ation Potential		
of the site as a consequence of the Development Proposal			
	$\mathbf{A}\mathbf{M}$	PM	
Projected Future Traffic Generation Potential:	23.6 vph	21.4 vph	
Less Existing Traffic Generation Potential	-17.2 vph	-15.5 vph	
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:	6.4 vph	5.9 vph	

That projected increase in the traffic generation potential of the site as a consequence of the development proposal is *minimal*, and will clearly not result in 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 and comprise:

- NO PARKING restrictions along the northern side of West Street between Carter Street and Harbord Road
- NO STOPPING restrictions along both sides of Harbord Road
- 1 HOUR PARKING restrictions along both sides of West Street (west of Carter Street)
- 2 HOUR PARKING restrictions along the western side of Carter Street (north of West Street)
- BUS ZONES at regular intervals along both sides of Winbourne Road and Harbord Road
- generally UNRESTRICTED PARKING elsewhere along the road network, including along the site frontage

#### **Off-Street Parking Provisions**

The off-street parking requirements applicable to the development proposal are specified in Council's *Warringah Development Control Plan 2015 Appendix 1 Car Parking Requirements* document in the following terms:

#### Industry

1.3 spaces per  $100m^2$  GFA (including up to 20% of floor area as office space component. Office space component above 20% determined at office rate)

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#### Office

1 space per 40m<sup>2</sup> GFA

It is noted that the *WDCP 2015* does not nominate a car parking requirement for cafes. While the café will be open to the public, the vast majority of their customers will likely be staff from the proposed development as well as other industrial developments in the area, such that they are not expected to generate any significant level of associated parking demand.

As such, no additional parking will be required for the café component of the development. Nevertheless, provision has been made for a café car parking space.

Application of the above parking requirements to the various components of the development proposal yields an off-street car parking requirement of 26 spaces, as set out below:

Car Parking Requirements	
Industrial (2,001.54m <sup>2</sup> GFA):	26.0 spaces
Café (28.33m <sup>2</sup> ):	0.0 spaces
TOTAL PARKING REQUIREMENT:	26.0 spaces

The proposed development makes provision for a total of 27 off-street parking spaces, comprising 26 industrial spaces and 1 café space, thereby satisfying the Council's car parking 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.

#### Loading/Servicing Provisions

The proposed development is expected to be serviced by a variety of light commercial vehicles such as the *Hyundai iLoad* and similar "white vans", and trucks up to and including up to and including 6.4m long SRV trucks subject to a height clearance of 3.5m.

Each of the proposed light industrial units have been designed to accommodate a 6.4m long SRV truck, with the *exception* of Warehouse Tenancy IN10, which is intended for light industrial uses where loading will be *minimal*, if any.

The proposed access driveway and manoeuvring areas has been designed to accommodate the *swept turning path* requirements of these trucks, allowing them to enter and exit the site in a forward direction at all times, as shown in the attached *swept turning path* diagrams in **Appendix B**.

The geometric design layout of the proposed loading facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of loading bay dimensions, garage door opening widths, and service area requirements for SRV trucks.

#### Conclusion

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in Council's *DCP 2015* as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.

### APPENDIX A

#### **ARCHITECTURAL PLANS**



1 200

### PROPOSED LOWER GROUND FLOOR PLAN 1:100



4 200









СМ	CONVEX MIRROR AS PER TRAFFIC ENGINEER'S REPORT
DB	DISTRIBUTION BOARD
DFH	DUEL FIRE HYDRANT
DP	DOWN PIPE
	DEMOLITION
	EASEMENT
EV.	ELECTRONIC VEHICLE CHARGING STATION
EX.	EXISTING
- <b>\$</b> +xx.xx	EXISTING LEVEL
->	FALL TO FLOOR WASTE
FC	FIBRE CEMENT SHEETING
FG	FIXED GLASS
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FS-X	FIRE STAIR NUMBER
FW	FLOOR WASTE
HWU	HOT WATER UNIT
MRS	METAL ROOF SHEETING
MSB	MAIN SWITCH BOARD
MC	METAL CLADDING
NBN	NATIONAL BROADBAND NETWORK
NGL	NATURAL GROUND LEVEL
SC	STRUCTURAL COLUMN AS PER ENGINEER'S DETAIL
SFL	STRUCTURAL FLOOR LEVEL
SM	SEWER MAN HOLE
SP	SPANDREL PANEL
ST	STORAGE
SWP	STORMWATER PIT
TRS	TRANSLUCENT ROOF SHEETING
VC	PHOTOVOLTAIC CELL SYSTEM
VP	VENT PIPE
WC	WATER CLOSET
W/S	WASTE STORAGE

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DESCRIPTION



#### PROJECT **BROOKVALE INDUSTRIAL** FOR AVAKIAN HOLDINGS (NSW) PTY LTD AT 35-39 CARTER STREET BROOKVALE NSW 2100 DRAWING TITLE PROPOSED FIRST FLOOR PLAN ARCHITECT DRAWN JC CL **NOT FOR** TRUE NORTH $\bigcirc$ CONSTRUCTION DRAWING NO. ISSUE 3857 DA 112 01 - WIP SCALE

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Nominated Architect: Jeffrey Chan NSW ARB No. 10967

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### Suite 203, 70-76 Alexander St | CROWS NEST NSW 2065

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SECTION B 1:100 2

FHR	FIRE HOSE REEL	
FS-X FW	FIRE STAIR NUMBER	
HWU	HOT WATER UNIT	
MRS	METAL ROOF SHEETING	
MSB	MAIN SWITCH BOARD	
MC	METAL CLADDING	
NBN	NATIONAL BROADBAND NE	TWORK
NGL	NATURAL GROUND LEVEL	
SC	STRUCTURAL COLUMN AS	PER
SFL	ENGINEER'S DETAIL STRUCTURAL FLOOR LEVE	L
SM	SEWER MAN HOLE	
SP	SPANDREL PANEL	
ST	STORAGE	
SWP	STORMWATER PIT	
TRS	TRANSLUCENT ROOF SHEE	ETING
VC	PHOTOVOLTAIC CELL SYST	EM
VP	VENT PIPE	
WC	WATER CLOSET	
W/S	WASTE STORAGE	
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CONVEX MIRROR AS PER TRAFFIC ENGINEER'S REPORT

ELECTRONIC VEHICLE CHARGING STATION

DISTRIBUTION BOARD

DUEL FIRE HYDRANT

DOWN PIPE

DEMOLITION

EASEMENT

EXISTING

EXISTING LEVEL

FIXED GLASS

FIRE HYDRANT

FALL TO FLOOR WASTE

FIBRE CEMENT SHEETING

FINISHED FLOOR LEVEL

Work in progress 28/11/2024









## FIGGIS + JEFFERSON TEPA ARCHITECTS FIGGIS + JEFFERSON TEPA PTY LTD Suite 203, 70-76 Alexander St | CROWS NEST NSW 2065 E studio@figgis.com.au T 02 9438 5555 W www.figgis.com.au Nominated Architect: Jeffrey Chan NSW ARB No. 10967 This drawing is protected under the Copyright Act 1968 and is the copyright of Figgis and Jefferson TEPA. Do not reproduce, modify or transmit this drawing without the permission of Figgis and Jefferson TEPA. Do not scale this drawing. Use figured dimensions only. Confirm all dimensions and levels on site prior to commencement of any work, preparation of shop drawings or fabrication of components. PROJECT BROOKVALE INDUSTRIAL FOR AVAKIAN HOLDINGS (NSW) PTY LTD AT 35-39 CARTER STREET BROOKVALE NSW 2100 DRAWING TITLE **SECTIONS (2)** ARCHITECT DRAWN JC CL **NOT FOR** TRUE NORTH $\bigcirc$ CONSTRUCTION DRAWING NO. ISSUE 3857 DA 301 01 - WIP SCALE

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WC	WATER CLOSET	
	WASTE STORAGE	

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#### **APPENDIX B**

#### SWEPT TURNING PATH DIAGRAMS



















