

Proposed Toyota Showroom

**61 Darley Street,  
Mona Vale**

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**TRAFFIC AND PARKING ASSESSMENT REPORT**

6 March 2023

Ref 22644

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## **1. INTRODUCTION**

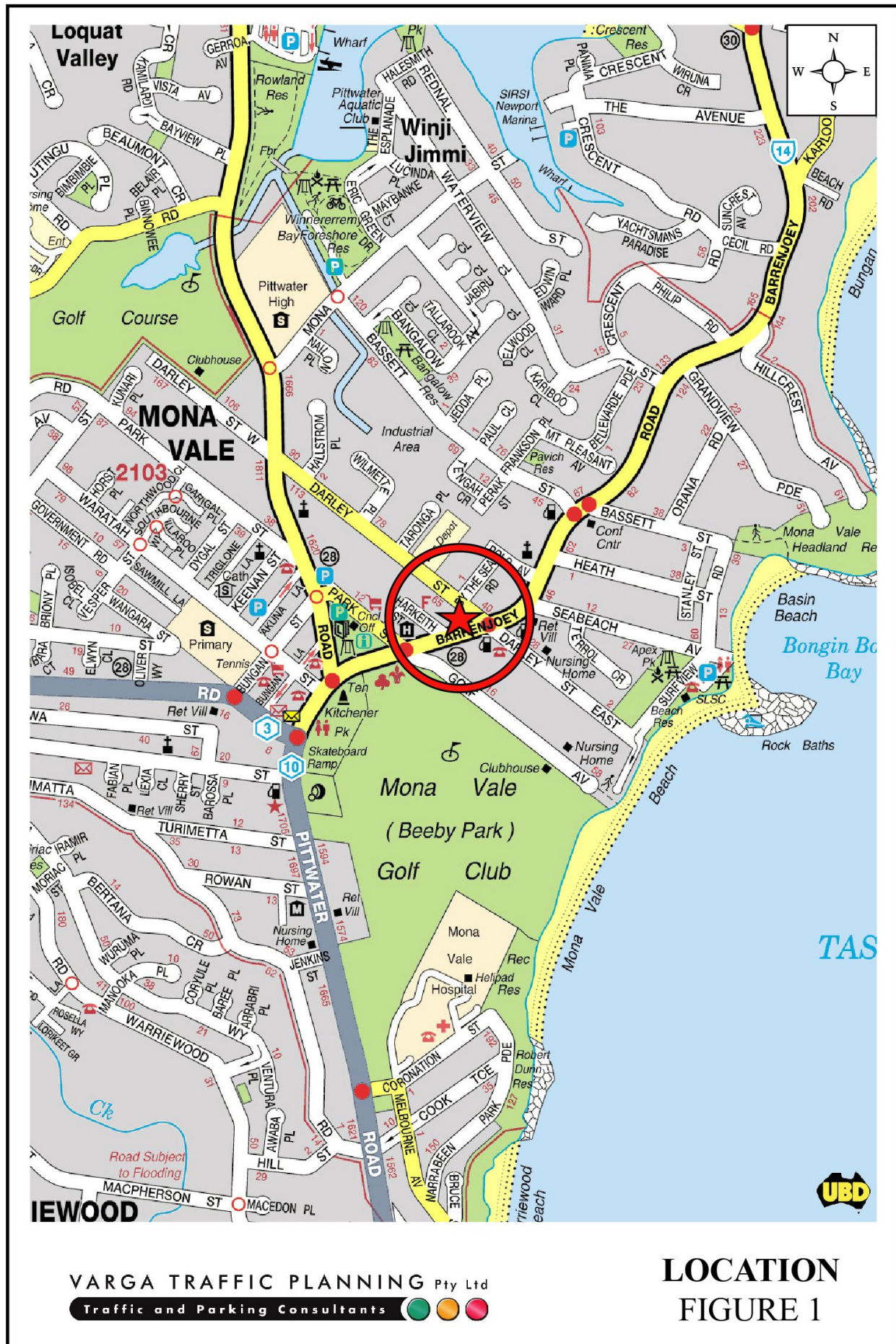
This report has been prepared to accompany a development application to Council for a proposed Toyota showroom development to be located at 61 Darley Street, Mona Vale (Figures 1 and 2).

The proposed development involves the demolition of existing structures on the site to facilitate the construction of a new motor sales showroom.

Off-street parking is to be provided in a basement car parking area in accordance with Council's requirements. Vehicular access to the site is to be provided via a new entry/exit driveway located towards the northern end of the Darley Street site frontage.

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
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.







## 2. PROPOSED DEVELOPMENT

### Site

The subject site is located on the eastern corner of the Barrenjoey Road and Darley Street intersection. The site has street frontages approximately 30m in length to Darley Street and approximately 34m in length to Barrenjoey Road. The site occupies an area of approximately 1032m<sup>2</sup> and is zoned *IN2 – Light Industrial*.

A recent aerial image of the site and its surroundings is reproduced below.



Source: MetroMap

The site is currently occupied by an existing car yard and dealership with an ancillary building. Vehicular access to the site is currently provided via an entry-exit driveway located towards the northern end of the Darley Street site frontage.

### Proposed Development

The proposed development involves the construction of a new two-storey Toyota dealership comprising two showroom areas, on the ground floor and level 1, with ancillary office rooms for sales and other administration purposes.

Off-street parking is proposed for a total of 18 cars in a new basement car parking area in accordance with Council's requirements.

Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the northern end of the Darley Street site frontage, in approximately the same location as the existing driveway.

A delivery bay is provided at the top of the basement ramp, for customers to receive deliveries of their new car. The delivery bay will also provide access to the ground level showroom area. Additionally, a car lift is proposed to provide display vehicles with access to both showroom areas from the basement car parking area.

Display vehicles will to be driven to the site independently, where they are to be displayed in one of the showroom areas using either of the abovementioned access arrangements.

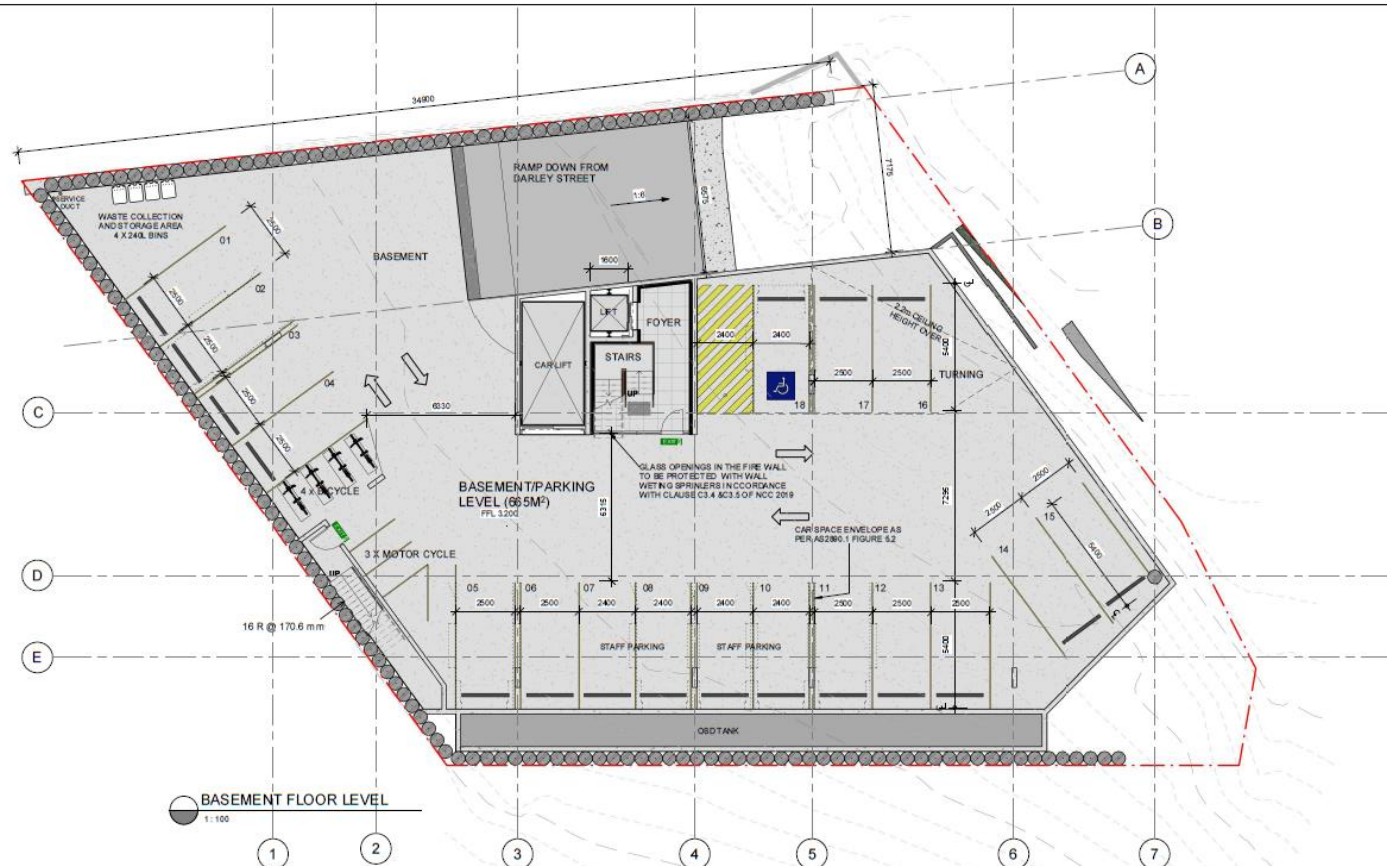
Plans of the proposed development have been prepared by *Williams River Steel* and are reproduced in the following pages.



1	FOR DEVELOPMENT APPLICATION		08 02 2023
BRUE	DESCRIPTION	DATE	
<p>25 OLD PUNT ROAD, TOMAGO, NSW 2322</p> <p>PHONE: 02 48620000 EMAIL: <a href="mailto:info@wrs-ns.com.au">info@wrs-ns.com.au</a>          FAX: 02 48620004 WEB: <a href="http://www.williamsriversteel.com.au">www.williamsriversteel.com.au</a></p>			
PROPOSED TOYOTA SHOWROOM			
<p>Lot 4 DP 836792          61 Darley Street, Mona Vale</p> <p><b>AMG</b></p>			
DEVELOPMENT APPLICATION			
NEW TOYOTA SHOWROOM			
DRAWN:	CW	CHECKED:	CW
JOB NO: JNS1310		DATE:	08.02.2023
PAGE 551		SCALE: 1:1000	DATE: 08.02.2023
A1	SHEET: A200	ISSUE: 1	



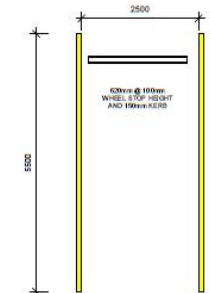




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ALL DISCREPANCIES SHALL BE REFERRED TO THE DESIGNER FOR DECISION BEFORE PROCEEDING WITH THE WORK. ALL DIMENSIONS RELAYED TO SETTING OUT AND OFF SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATIONS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.

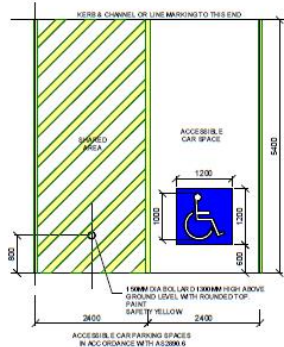
#### PARKING DETAILS



ALL PARKING TO COMPLY WITH:  
AS/NZS 2885.1:2004 PART 1 OFF STREET PARKING

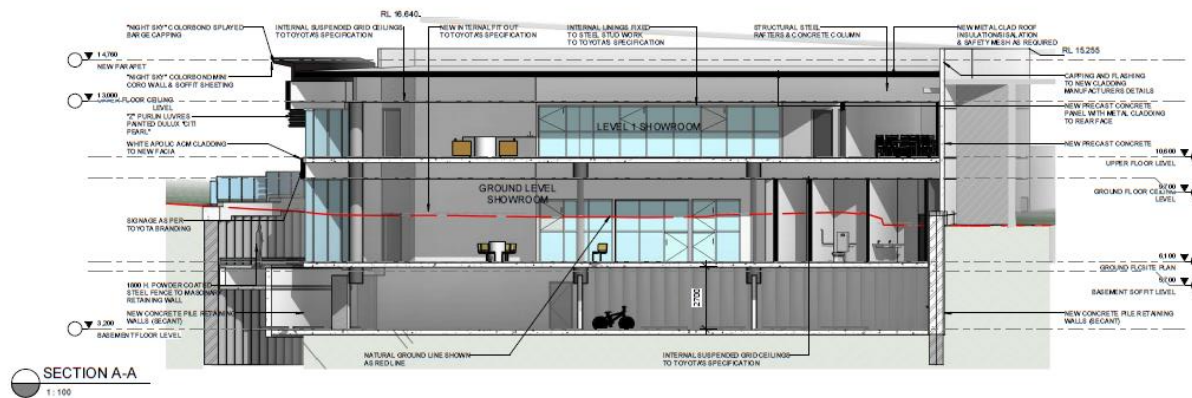
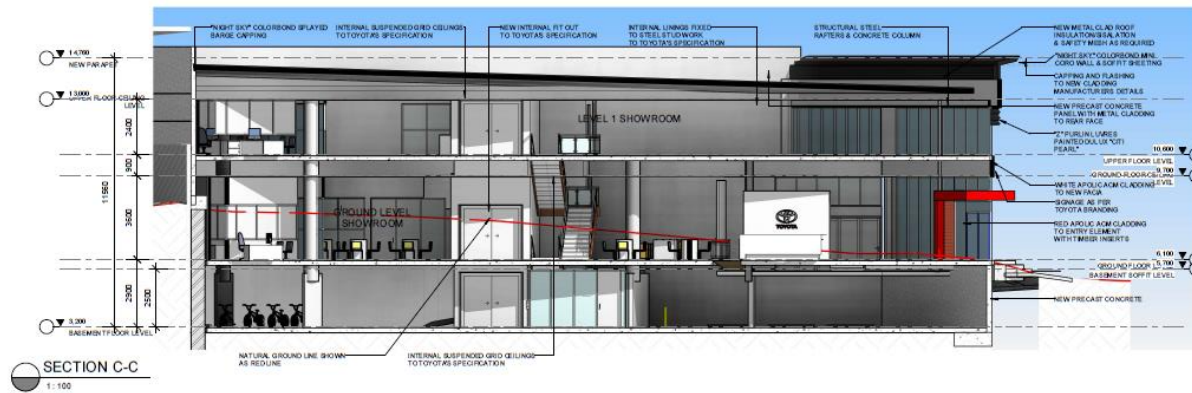
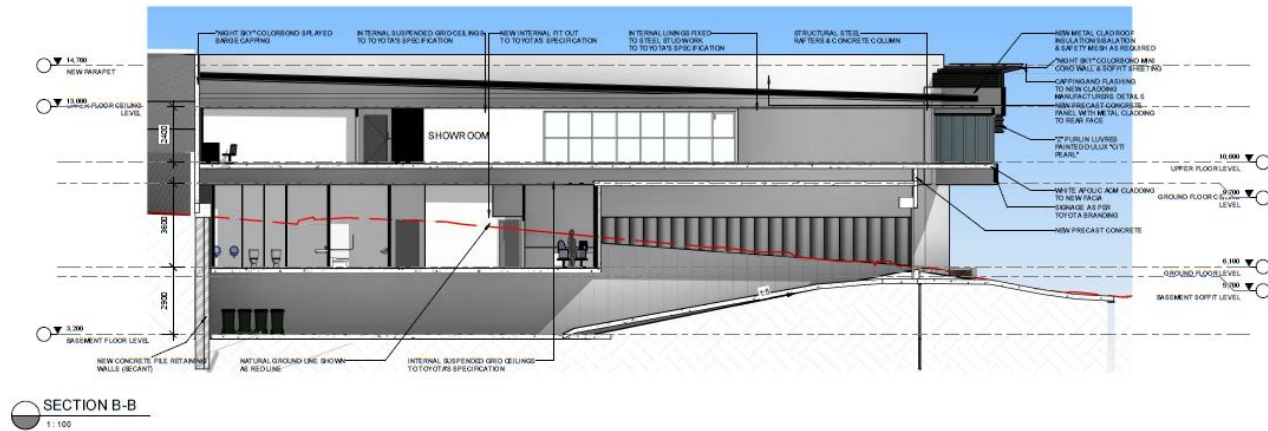
#### CARPARKING CALCULATIONS

**SHOWROOM**  
VEHICLE SELLER OR HIRE PREMISES:  
1 SPACE PER PER 10M<sup>2</sup> OF AREA REQUIRED.  
SHOWROOM UPGRADE DEVELOPMENT HAS A AREA OF 600M<sup>2</sup>.  
**WORKSHOP:**  
VEHICLE REPAIR STATIONS:  
2 SPACES, PLUS ONE SPACE PER 10M<sup>2</sup> OF AREA REQUIRED.  
TOTAL SHOWROOM CARPARKS REQUIRED = 6  
TOTAL WORKSHOP CARPARKS REQUIRED = 15  
TOTAL PARKS REQUIRED = 15  
TOTAL PARKS PROVIDED = 15



1 FOR DEVELOPMENT APPLICATION 08/02/2023		
ISSUE	DESCRIPTION	DATE
<p><b>WILLIAMS RIVER STEEL</b> There is a Difference 25 OLD PUNT ROAD, TOMAGO, NSW 2322</p> <p>PHONE: 02 49050000 EMAIL: <a href="mailto:info@williamsriversteel.com.au">info@williamsriversteel.com.au</a> FAX: 02 49050069 WEB: <a href="http://www.williamsriversteel.com.au">www.williamsriversteel.com.au</a> AUSTRALIA WIDE 1800 363 123 WEB: <a href="http://www.greensteel.com.au">www.greensteel.com.au</a></p>		
PROPOSED TOYOTA SHOWROOM		
Lot 4 DP 835792 61 Darley Street, Mona Vale		
AMG		
DEVELOPMENT APPLICATION		
NEW TOYOTA SHOWROOM		
DRAWN:	CW	CHECKED: CW
JOB No. JN613100	DATE: 08/02/2023	SCALE: 1:100
PAGE: A1	SHEET: A202	ISSUE: 1





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ISSUE	DESCRIPTION
<p>25 OLD PUNT ROAD, TOMAGO, NSW 2322</p> <p>PHONE: 02 49650000 EMAIL: <a href="mailto:info@williamsriversteel.com.au">info@williamsriversteel.com.au</a>            FAX: 02 49650000 WEB: <a href="http://www.williamsriversteel.com.au">www.williamsriversteel.com.au</a>            AUSTRALIA WIDE 1300 861 131 WEB: <a href="http://www.precastpanels.com.au">www.precastpanels.com.au</a></p>	
PROPOSED TOYOTA SHOWROOM	
Lot 4 DP 835792 61 Darley Street, Mona Vale	
AMG	
DEVELOPMENT APPLICATION	
SECTIONS	
DRAWN: CW	CHECKED: CW
JOB NO: JN613100	DATE: 08.02.2023
PAGE: 1	SHEET: A500
SCALE: 1:100	ISSUE: 1

### **3. TRAFFIC ASSESSMENT**

#### **Road Hierarchy**

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

Barrenjoey Road is classified by TfNSW as a *State Road* and provides the key north-south road link in the area, connecting Mona Vale and Palm Beach. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island and turning bays provided at key locations.

Pittwater Road is also classified by TfNSW as a *State Road* and provides another key north-south road link in the area, connecting Brookvale and Church Point. It typically carries one or two traffic lanes in each direction with turning bays provided at key locations. Kerbside parking is generally permitted on both sides of the road subject to signposted restrictions.

Mona Vale Road is classified by TfNSW as a *State Road* and provides the key east-west road link in the area, connecting Mona Vale and Pymble. It typically carries two traffic lanes in each direction with turning bays provided at key locations. Kerbside parking is permitted at certain locations subject to signposted restrictions.

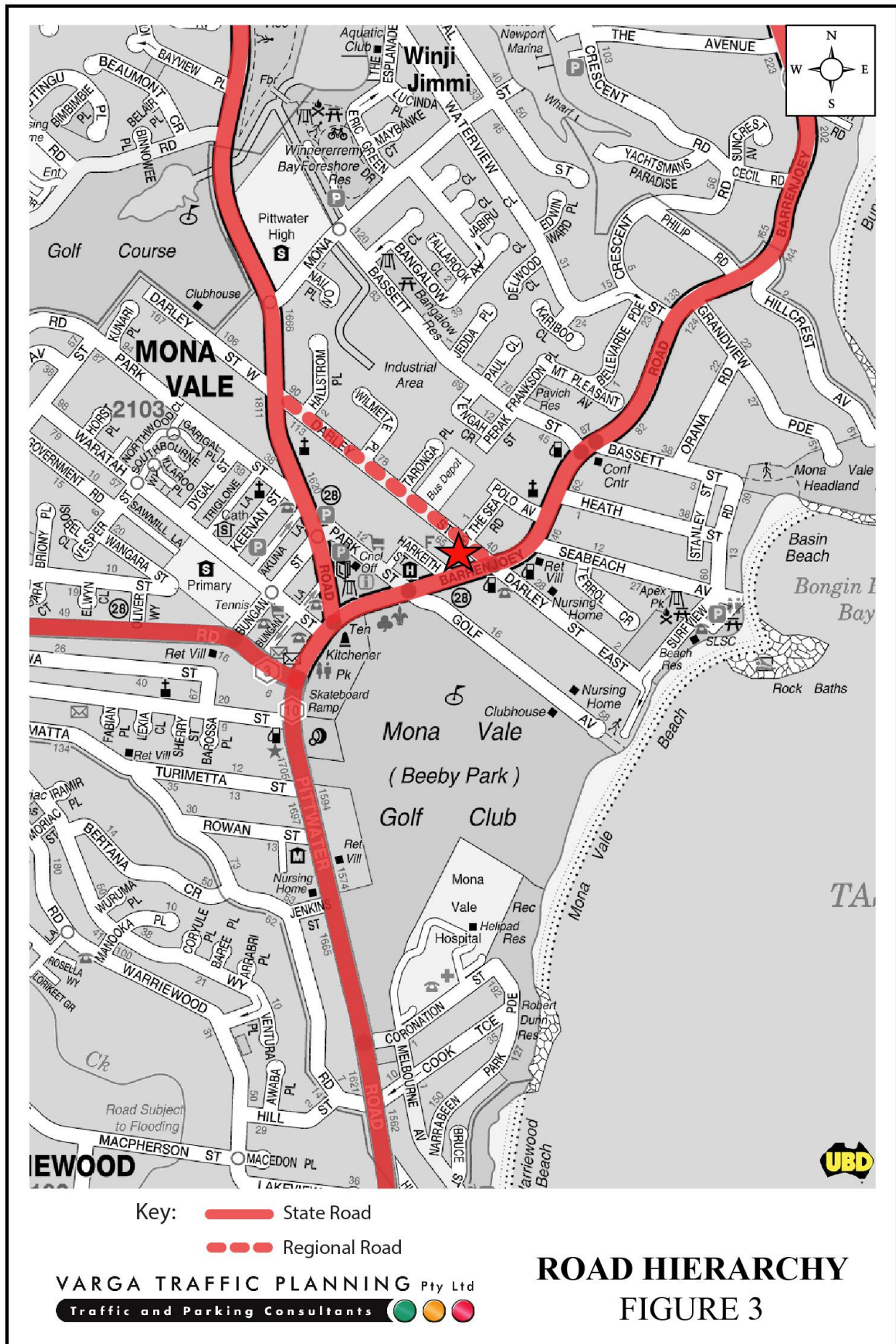
Darley Street is classified by TfNSW as a *Regional Road* and functions as a collector route in the local area connecting Barrenjoey Road and Pittwater Road. It typically carries one traffic lane in each direction in the vicinity of the site. Kerbside parking is generally permitted on both sides of the road subject to signposted restrictions.

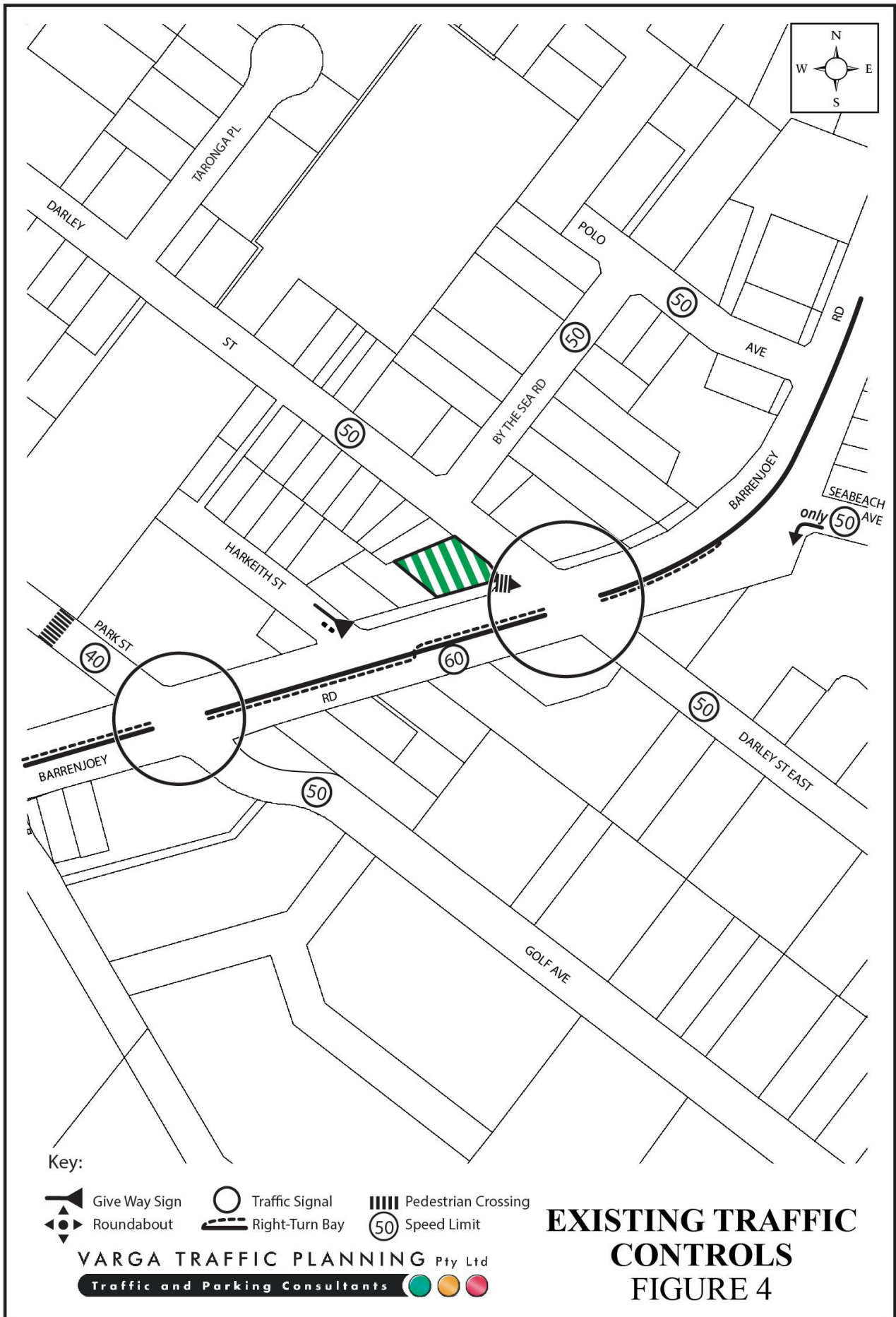
#### **Existing Traffic Controls**

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 Barrenjoey Road







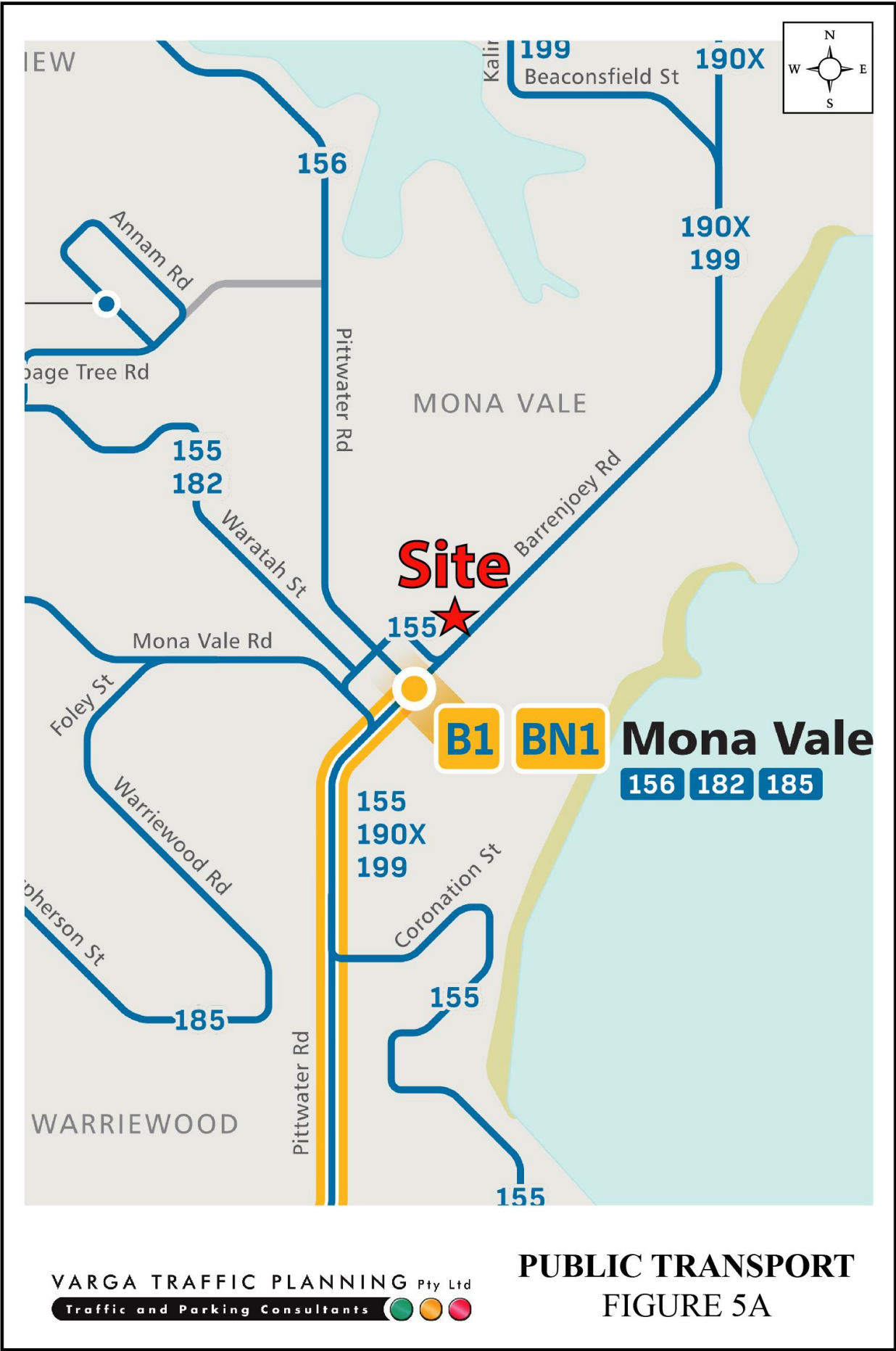
- a 50 km/h SPEED LIMIT which applies to Darley Street and all other local roads in the area
- a 40 km/h SPEED LIMIT which applies to Park Street in the vicinity of the Pittwater Place shopping centre
- TRAFFIC SIGNALS in Barrenjoey Road where it intersects with Darley Street/Darley Street East and Park Street/Golf Avenue
- a CENTRAL MEDIAN ISLAND along Barrenjoey Road
- RIGHT-TURN HOLDING BAYS on both the eastern and western approaches of the Barrenjoey Road/Darley Street/Darley Street east intersection
- RIGHT-TURN HOLDING BAYS on both the eastern and western approaches of the Barrenjoey Road/Park Street/Golf Avenue intersection.

### **Existing Public Transport**

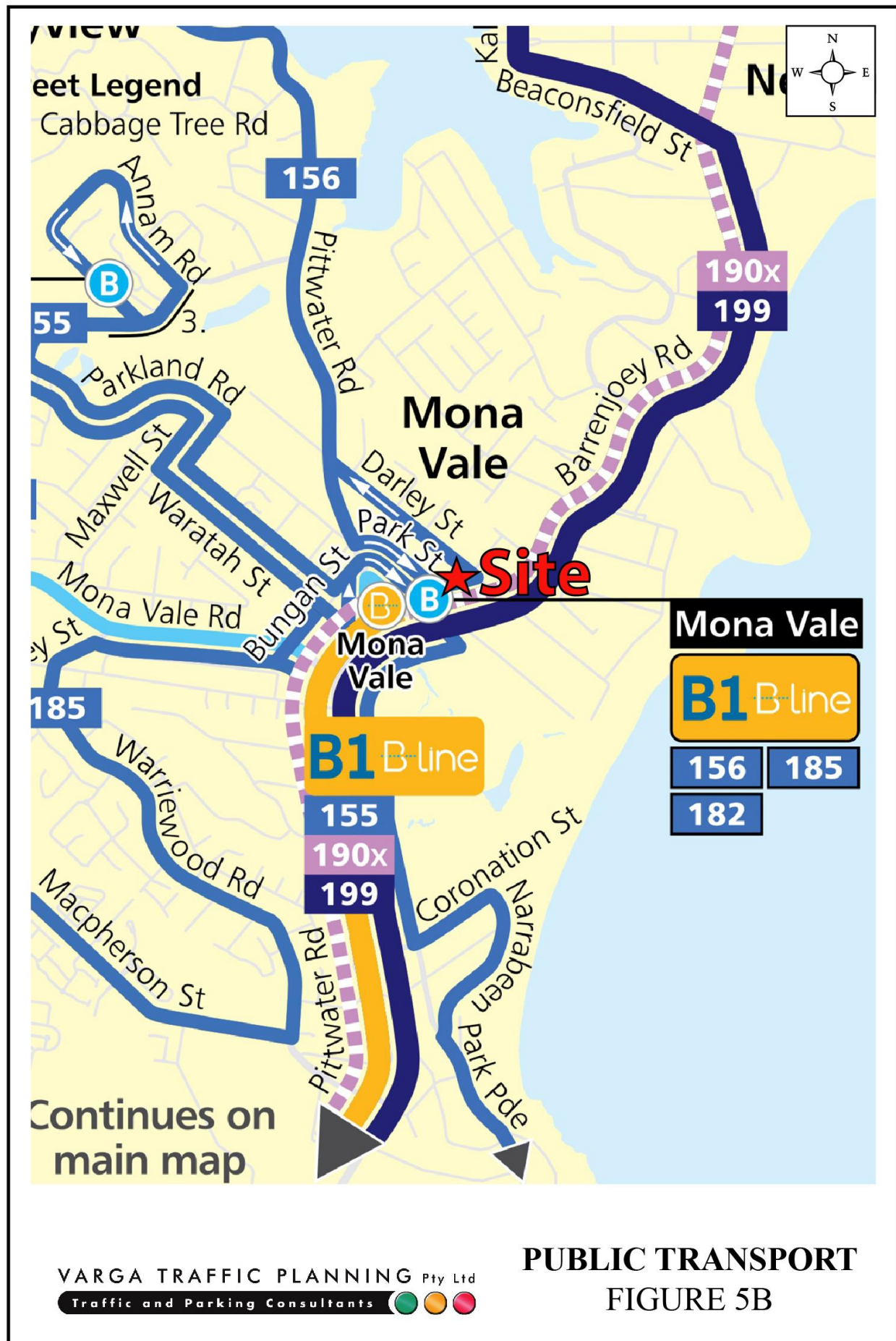
The existing public transport services available to the site are illustrated on Figures 5a and 5b. There are currently in the order of 8 bus services operating within approximately 550 metres walking distance of the site.

A summary of these bus services is provided in the table below, indicating that there are approximately 589 bus services per day are available in the vicinity of the site on weekdays, decreasing to approximately 466 bus services per day on Saturdays and approximately 453 bus services on Sundays and public holidays as set out below.









Bus Routes and Frequencies							
Route No.	Route	Weekdays		Saturday		Sunday	
		IN	OUT	IN	OUT	IN	OUT
155	Bayview Garden Village to Narrabeen and Frenchs Forest	29	32	20	20	20	20
156	McCarrs Creek to Mona Vale	47	39	37	37	36	36
182	Mona Vale to Narrabeen	18	17	14	14	13	13
185	Mona Vale to Narrabeen via Warriewood Valley	49	46	37	37	36	36
190x	Avalon Beach to City Wynyard (Express Service)	19	18	-	-	-	-
196	Mona Vale to Gordon	4	6	6	5	6	5
197	Mona Vale to Macquarie University via Gordon	18	23	11	12	11	12
199	Palm Beach to Manly via Mona Vale & Dee Why	111	113	108	108	105	104
<b>Total</b>		<b>295</b>	<b>294</b>	<b>233</b>	<b>233</b>	<b>227</b>	<b>226</b>

The subject site is also located within an approximate 500 metres walking distance from the B1 bus service, Mona Vale to City Wynyard. The B1 bus service is a fleet of modern double deck buses which provide frequent and reliable services between Mona Vale and Wynyard. B-Line bus services provide more seats and more services, typically operating at 6 to 10-minute intervals throughout the majority of the day.

### Projected Traffic Generation

The traffic implications of a proposed development 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 during the morning and afternoon commuter peak periods.

An indication of the traffic generation potential of the proposed development is provided by reference to the Roads and Maritime Services 'publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the recently published RMS *Technical Direction (TDT 2013/04a)* document.

The *TDT 2013/04a* document specifies that it replaces those sections of the *RMS Guidelines* indicated, and that it must be followed when RMS is undertaken trip generation and / or parking demand assessments.

The *RMS Guidelines* and the updated *TDT 2013/04a* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the proposed development:

**Motor Showrooms**

0.7 peak hour vehicle trips per 100m<sup>2</sup> of site area

The *RMS Guidelines* also make the following observation in respect of motor showrooms:

**Definition**

A *motor showroom* is a building or place used for the display and sale of motor vehicles, caravans or boats, and where accessories for these items are sold or displayed. Vehicle servicing facilities may be included as part of the development.

**Factors**

Traffic generation rates for motor showrooms vary widely. The above rate is based generally on showrooms with both new and used car sales as well as servicing facilities.

Application of the above traffic generation rate to the development's site area of 1032m<sup>2</sup> yields a traffic generation potential of approximately 7 vehicle trips per hour (vph) during the morning and afternoon commuter peak periods.

However as mentioned in the foregoing, the proposed development comprises two showroom areas, on the ground floor level and level 1 of the dealership, whereas the traffic generation rate nominated by the *RMS Guidelines* refers to single-level buildings or car yards rather than multi-level dealerships. Hence, by way of a more rigorous assessment, the abovementioned traffic generation rate will instead be applied to the total GFA of the showrooms for a more realistic representation of the traffic generation potential which could be expected from the proposed development. This yields a traffic generation potential of approximately 10 vph during the morning and afternoon commuter peak periods, as set out below:

**Projected Future Traffic Generation Potential**

Ground Level Showroom (655m <sup>2</sup> ):	4.6 vph
Level 1 Showroom Area (765m <sup>2</sup> ):	5.4 vph
<b>TOTAL TRAFFIC GENERATION POTENTIAL:</b>	<b>10.0 vph</b>

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the development proposal.

Application of the above traffic generation rates to the existing car yard dealership yields a traffic generation potential of approximately 7 vph during the morning and afternoon commuter peak periods.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential the site of approximately 3 vph, as set out below:

**Projected Nett Increase in Peak Hour Traffic Generation Potential  
of the Site as a Consequence of the Development Proposal**

Projected Future Traffic Generation Potential:	10.0 vph
Less Existing Traffic Generation Potential:	-7.2 vph
<b>NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:</b>	<b>2.8 vph</b>

That projected *nett increase* in the traffic generation potential of the site 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

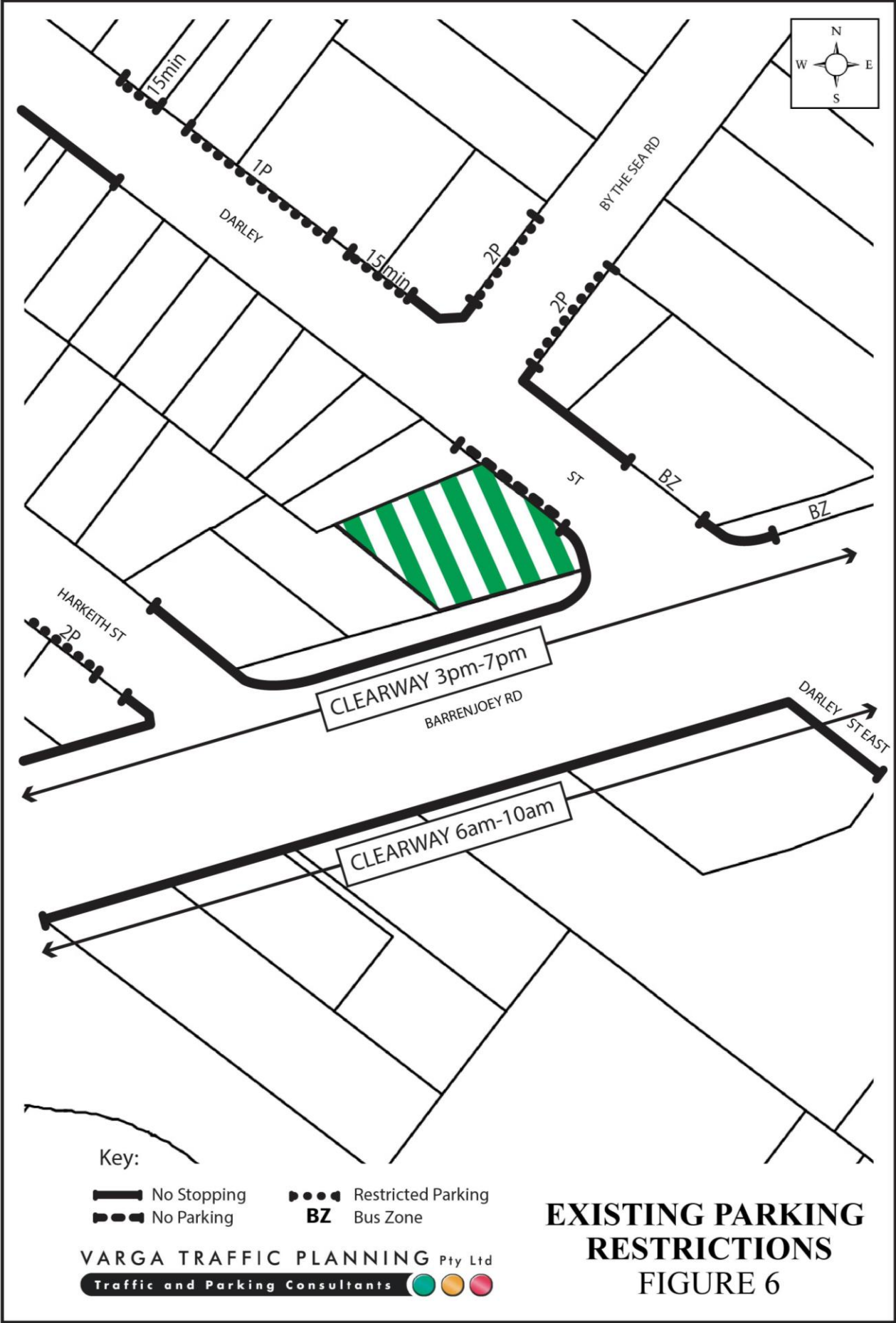
The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 6 and comprise:

- CLEARWAY restrictions along the southern side of Barrenjoey Road during the *morning* commuter peak period and along the northern side of Barrenjoey Road during the weekday *afternoon* commuter peak period, including along the site frontage
- NO PARKING restrictions along the western side of Darley Street, including along the site frontage
- NO STOPPING along both sides of Barrenjoey Road
- UNRESTRICTED kerbside parking along the western side of Darley Street, north of the site frontage
- BUS ZONES located near the Barrenjoey Road and Darley Street intersection.

### Off-Street Parking Provisions

The off-street parking rates application to the development proposal are typically specified in Council's *Pittwater Development Control Plan 2021, Section B: General Controls* document. The *DCP2021* does not nominate a parking rate for car dealerships, however it is noted that for developments not included in the *DCP2021*:

*The minimum number of vehicle parking requirements must be determined using the appropriate guidelines for parking generation and servicing facilities based on development type comparison based on the Roads and Maritime Services Guide to Traffic Generating Development or analysis drawn from surveyed data for similar development uses. Provision must be made within the development site for access and parking of all service vehicles servicing the site, visitor parking and parking for people with disabilities.*



Reference is therefore made to the *Roads and Maritime Services Guide to Traffic Generating Developments* document which nominates the following car parking rates:

**RMS Guidelines – Motor Showrooms**

0.75 spaces per 100m<sup>2</sup> of site area

However as mentioned in the foregoing, the proposed development comprises two showroom areas on the ground floor level and level 1 of the dealership. It is pertinent to note that the *RMS Guidelines* refers more to single level buildings or car yards rather than multi-level dealerships. Hence, the abovementioned car parking rate will instead be applied to the total GFA of the showrooms. This yields an off-street parking requirement of 11 parking spaces as set out below:

Ground Level Showroom (655m <sup>2</sup> ):	4.9 spaces
Level 1 Showroom (765m <sup>2</sup> ):	5.7 spaces
<b>TOTAL:</b>	<b>10.6 spaces</b>

The proposed development makes provision for a total of 18 off-street car parking spaces, thereby satisfying Council's *DCP2021* minimum parking requirements.

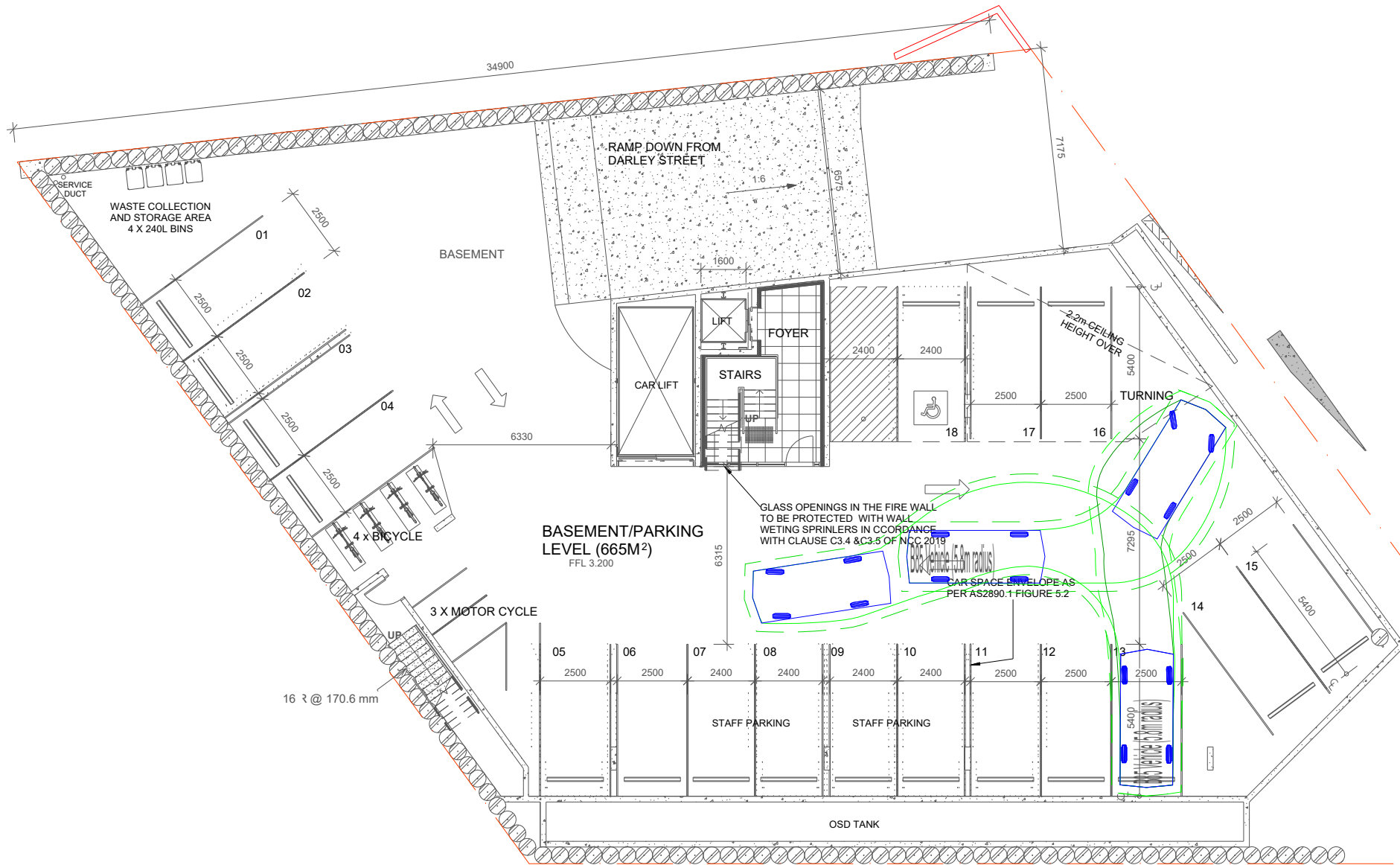
The geometric design layout of the proposed basement car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1*, *Parking Facilities Part 6 – Off-Street Parking for People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

A number of swept turning path diagrams have been prepared using the *Autodesk Vehicle Tracking 2022* program in accordance with the requirements of *AS2890.1 – 2004*, confirming that the parking spaces proposed in the basement car parking area can be accessed without difficulty, such that all vehicles will be able to enter and exit the site whilst travelling in a forward direction.

**Conclusion**

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in both Council's *DCP2021* as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable traffic or parking implications.





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PROJECT  
CAR SHOWROOM DEVELOPMENT



DRAWING TITLE  
B85 ENTRY-EXIT (1)

ADDRESS  
61 DARLEY ST, MONA VALE

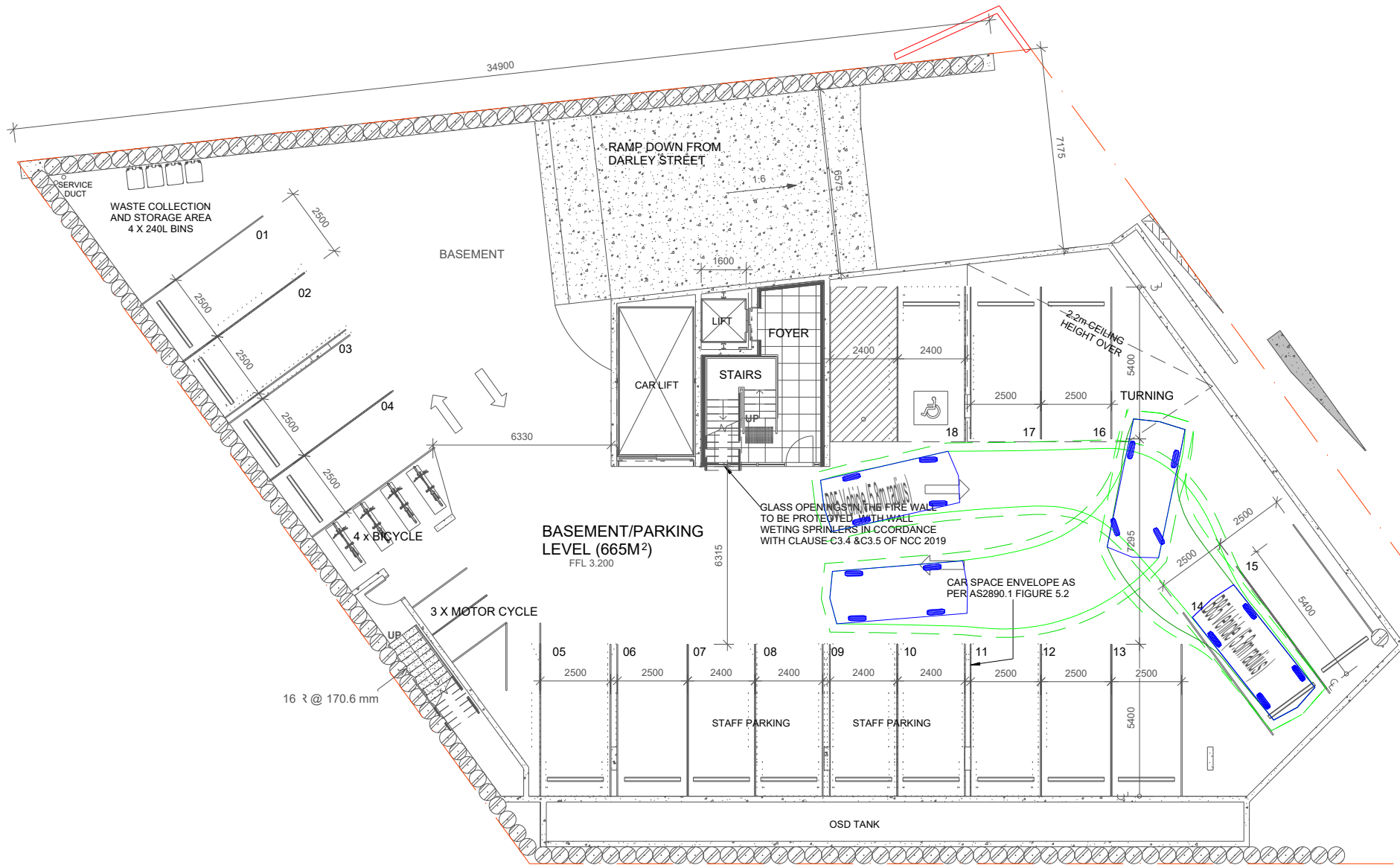
PROJECT NO.  
22644  
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ROBERT VARGA

1:200 @ A4

DATE DRAWN  
2023-2-15  
PREPARED  
JAYDEN LAM

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DRAWING TITLE  
**B85 ENTRY-EXIT (2)**

ADDRESS  
**61 DARLEY ST, MONA VALE**

PROJECT NO.  
**22644**  
REVIEWED  
**ROBERT VARGA**

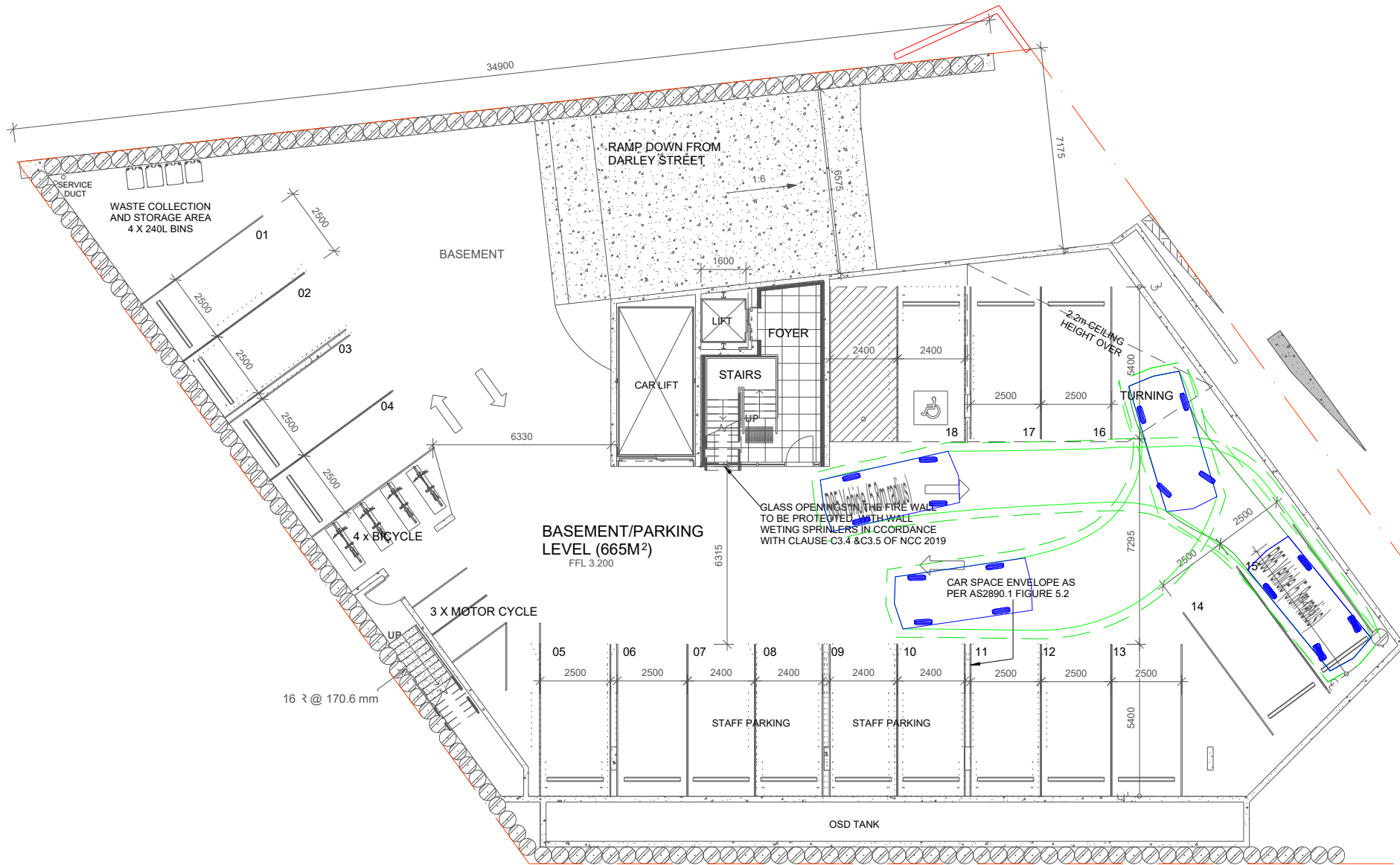
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DATE DRAWN  
**2023-2-15**  
PREPARED  
**JAYDEN LAM**

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PROJECT  
**CAR SHOWROOM DEVELOPMENT**



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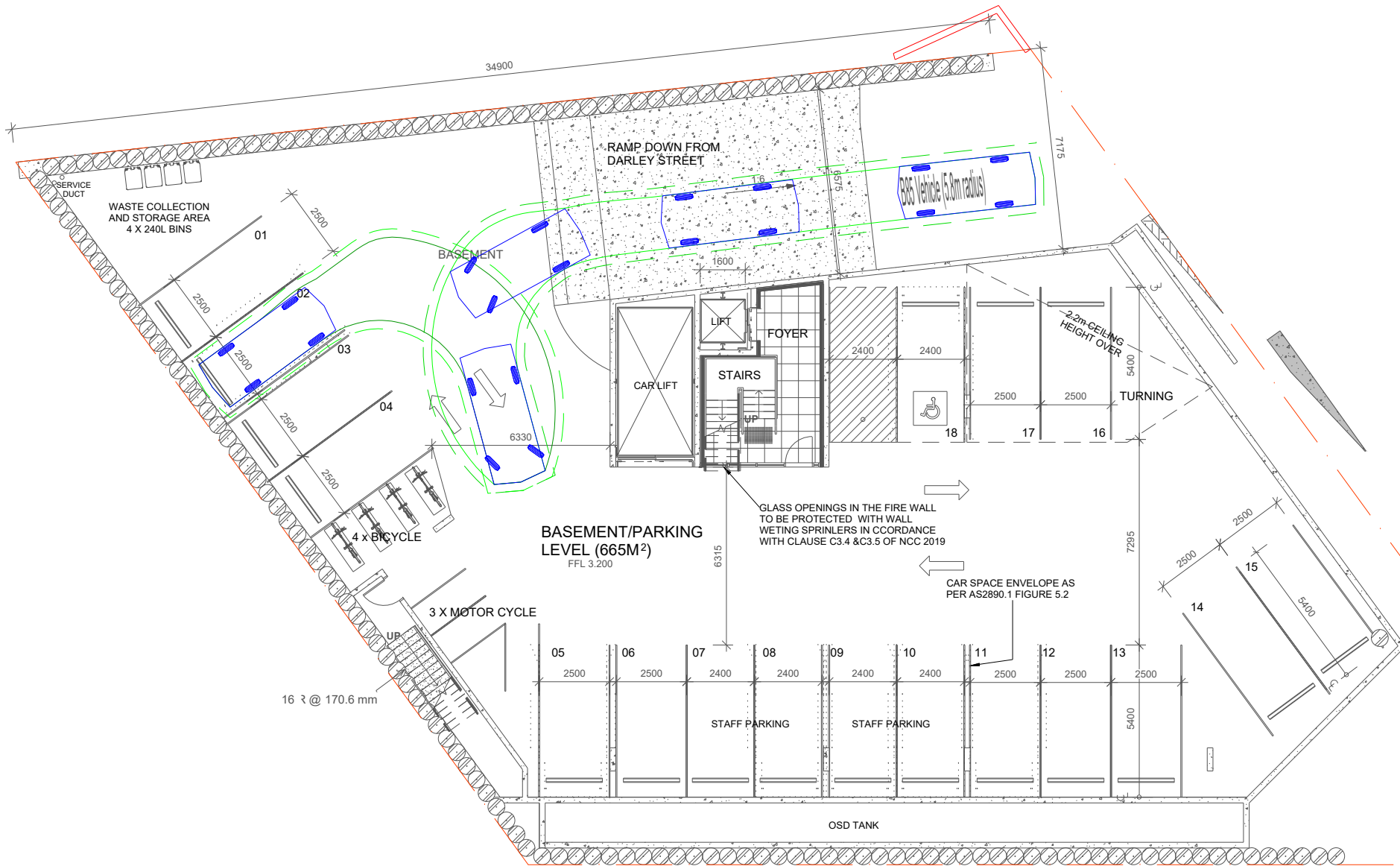
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PROJECT  
 CAR SHOWROOM DEVELOPMENT



DRAWING TITLE  
 B85 ENTRY-EXIT (5)

ADDRESS  
 61 DARLEY ST, MONA VALE

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1:200 @ A4

DATE DRAWN  
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