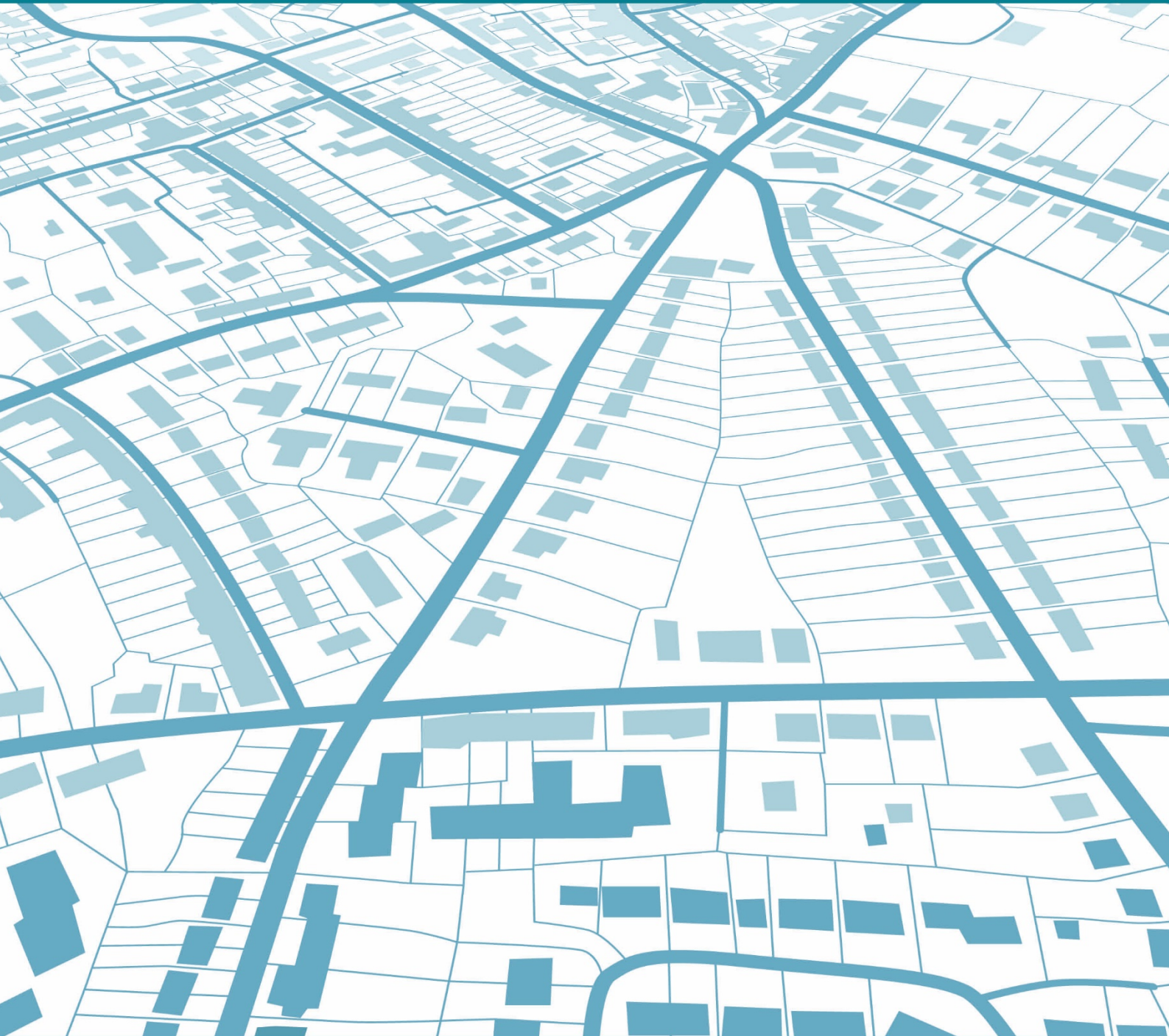




Proposed Residential Development

20-26 Avon Road, Dee Why

Traffic Impact Assessment

Ref: 21143
Date: February 2021
Issue: E

Table of Contents

1.0	INTRODUCTION	1
2.0	PROPOSED DEVELOPMENT SCHEME.....	2
2.1	Site, Context and Existing Circumstances.....	2
2.2	Proposed Development.....	2
3.0	EXISTING ROAD NETWORK AND TRAFFIC CONDITIONS	4
3.1	Road Network.....	4
3.2	Traffic Controls	4
3.3	Traffic Conditions	5
3.4	Transport Services	5
4.0	PARKING	6
5.0	TRAFFIC	8
6.0	ACCESS, INTERNAL CIRCULATION AND SERVICING	9
6.1	Access.....	9
6.2	Internal Circulation	9
6.3	Servicing	9
7.0	CONCLUSION	10

List of Figures

Figure 1	Location
Figure 2	Site
Figure 3	Road Network
Figure 4	Traffic Controls

List of Appendices

Appendix A	Previous Approved Plans
Appendix B	Transport Services
Appendix C	Turning Path Assessment

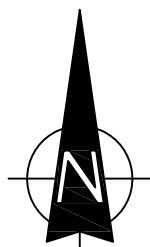
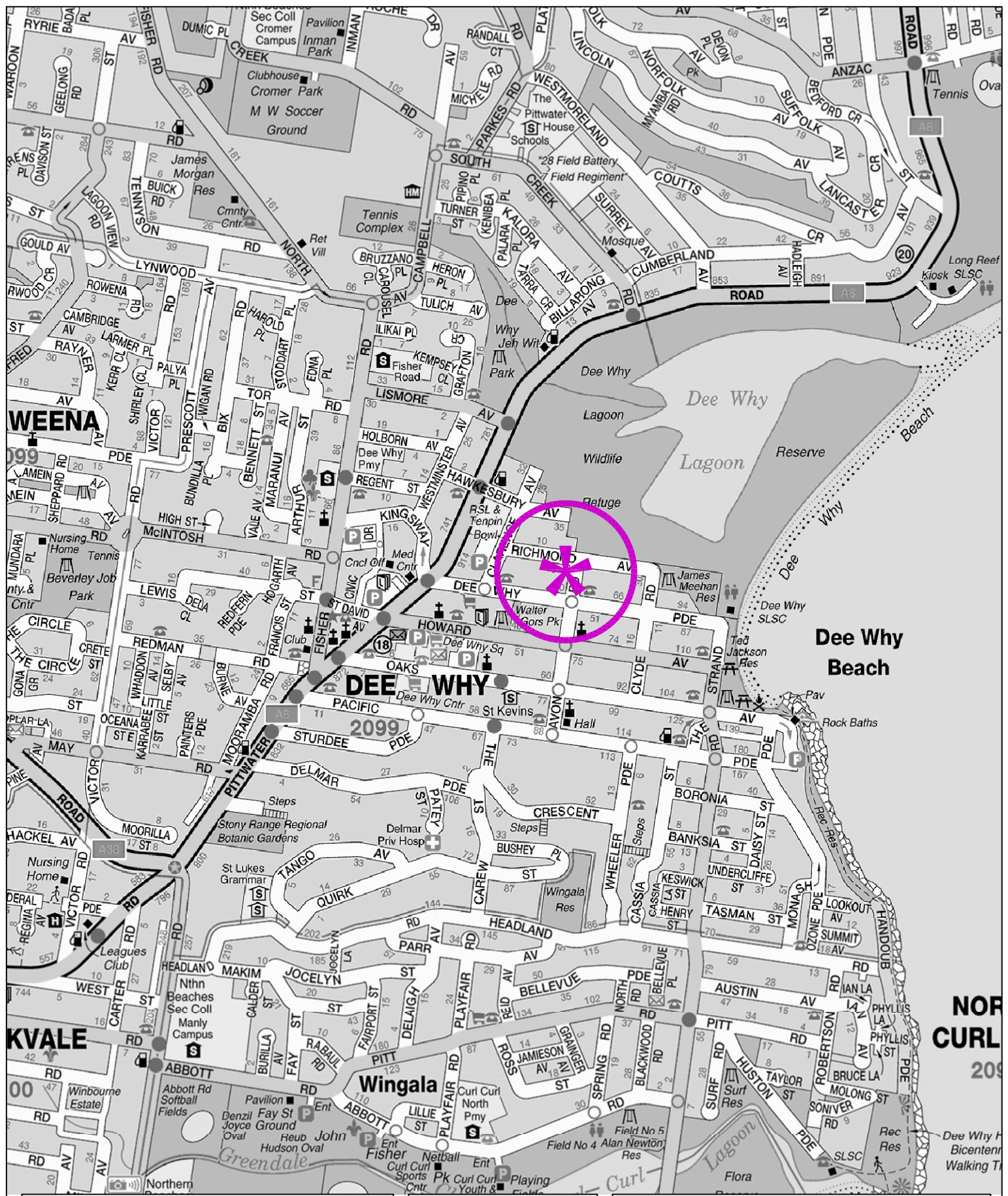
1.0 Introduction

This report has been prepared to accompany a Development Application to Northern Beaches Council for a proposed residential development at 20-26 Avon Road, Dee Why (Figure 1).

The proposed development scheme represents a continuation of the extensive transformation of underutilised sites in the northern beaches for residential apartment buildings. The site is conveniently located in relation to public transport services and within easy walking distance of the Dee Why Town Centre's retail entertainment and recreational facilities.

The proposed development comprises 23 residential apartments with basement car park and the purpose of the report is to:

- ❖ describe the site, its context, and the proposed development scheme
- ❖ describe the existing road network and traffic circumstances
- ❖ assess the potential traffic implications
- ❖ assess the adequacy of the proposed onsite parking provision
- ❖ assess the appropriateness of the proposed vehicle access, internal circulation, and servicing arrangements.



LOCATION

FIG 1

2.0 Proposed Development Scheme

2.1 Site, Context and Existing Circumstances

The site (Figure 2) is a consolidation of Lots 1 to 4 in DP 104820 located at 20-26 Avon Road, Dee Why. It occupies an area of some 1,532m², and has frontages to Avon Road and Richmond Avenue. Four existing single dwellings occupy the site at present and vehicle accesses are provided at Richmond Avenue (1) and Avon Road (4).

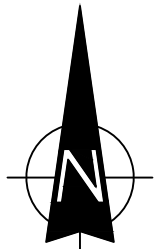
A mix of residential apartment complexes, old and new, surround the site. Further afield, Dee Why beach is located to the east while the Dee Why Town Centre, including its associated retail, commerce and public transport services, is some 400m to the west.

2.2 Proposed Development

It is proposed to demolish the existing building on the site, undertake excavation to provide for a single-level basement and a level building platform, on which a 3 storey residential complex comprising 23 apartments will be constructed. The proposed development mix is:

- 1 x studio apartments
- 3 x one-bed apartments
- 9 x two-bed apartments
- 10 x three-bed apartments

A total of 30 car parking spaces will be provided in a basement car park, and a new access driveway will be provided at the Richmond Avenue frontage near the western boundary. The existing access driveways on Avon Road will be demolished and all kerb/gutter reinstated as on-street parking.



SITE

FIG 2

Transport and Traffic Planning Associates

Details of this proposed development scheme are provided on the plans prepared by Walsh Architects which are reproduced in Appendix A.

3.0 Existing Road Network and Traffic Conditions

3.1 Road Network

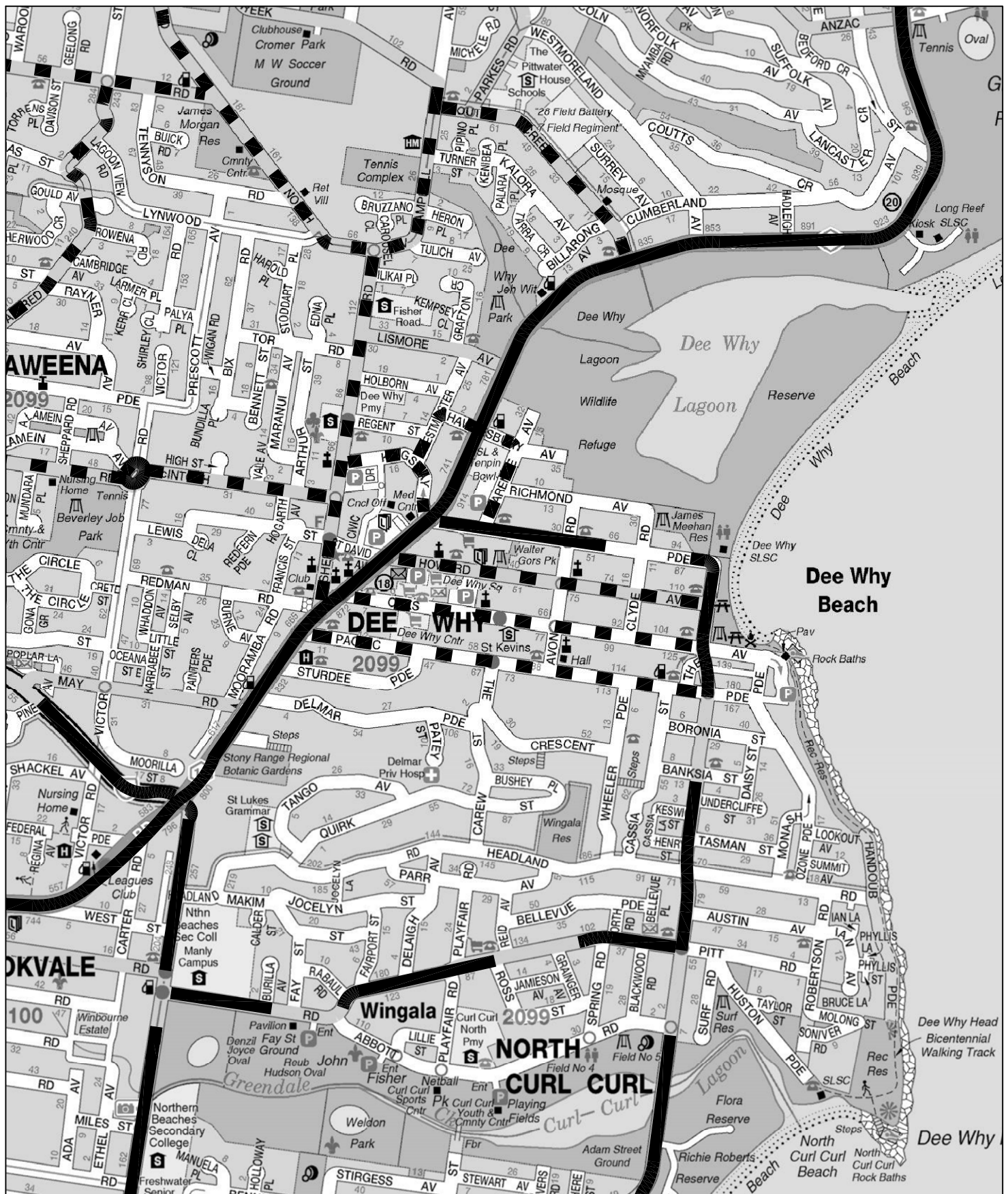
The existing road network serving the site (Figure 3) comprises:

- ❖ *Pittwater Road/Condamine Street* – a State Road and arterial route linking between the Northern Beaches Peninsula and the Spit Bridge crossing of Middle Harbour
- ❖ *Warringah Road* – a State Road and arterial route linking between Pittwater Road and the Roseville Bridge crossing of Middle Harbour
- ❖ *Harbord Road* – a Regional Road and sub-arterial route linking between Pittwater Road/Warringah Road and Queenscliff
- ❖ *Dee Why Parade/The Strand/Griffin Road* – a Regional Road and major collector route linking between Dee Why and Queenscliff
- ❖ *Howard Avenue, Oaks Avenue, Lismore Avenue and May Road* – minor collector routes
- ❖ *Richmond Avenue, Avon Road* – local access routes

3.2 Traffic Controls

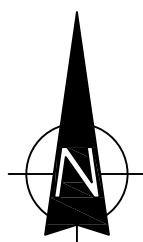
The limited existing traffic controls on the road network (Figure 4) comprise:

- ❖ the traffic signals intersections along Pittwater Road including Hawkesbury Avenue, Dee Why Parade/Kingsway, Howard Avenue/St David Avenue, Oaks Avenue, Fisher Road, Pacific Parade, Sturdee Parade
- ❖ the mid-block pedestrian signals on Oaks Avenue to the west of Avon Road
- ❖ the traffic signals controlling the Pacific Parade/The Crescent intersections



LEGEND

- ARTERIAL
- MAJOR COLLECTOR
- MINOR COLLECTOR



ROAD NETWORK

FIG 3

- ❖ the roundabouts at the intersections of The Strand/Oaks Avenue and Pacific Parade/Griffin Road
- ❖ the roundabouts controlling intersections along Avon Road including Oaks Avenue, Howard Avenue and Dee Why Parade
- ❖ the STOP signage at the Avon Road and Richmond Avenue intersection

3.3 Traffic Conditions

Traffic conditions in the area experience some fluctuation with peaking during the summer months. Traffic operation at Avon Road and Richmond Avenue are largely free-flowing during the peak periods and there is no apparent capacity constraint observed in the local road network within the site's vicinity.

3.4 Transport Services

The Dee Why area is well served by numerous bus routes including those which run along The Strand/Howard Avenue (ie 130, 136, 166, 176, E76) as well as the B Line services which run along Pittwater Road.

Details of the comprehensive bus network and services are provided on the network maps in Appendix B.

4.0 Parking

The Warringah DCP provides the following criteria in terms of car parking and bicycle requirements:

Car

One-bedroom (or less)	1.0 space per unit
Two-bedroom	1.2 spaces per unit
Three-bedroom	1.5 spaces per unit
Visitors	1 space per 5 apartments

Bicycle

1 space per apartment (residential); plus
1 space per 12 apartments (visitors)

The SEPP 65 also provides a car parking guide for sites that are:

- situated within 800m of a Sydney Metropolitan railway station; or
- situated within 400m of land zoned B4 Mixed Use or B3 Commercial Core in regional centres.

For sites that meet the above description, the following 'reduced' parking rates which account for a lower private vehicles dependency are:

One-bedroom (or less)	0.6 space per unit
Two-bedroom	0.9 spaces per unit
Three-bedroom	1.4 spaces per unit
Visitors	1 space per 5 apartments

Application of the DCP and SEPP 65 criteria reveals the following requirements:

	DCP	SEPP 65
<u>Car</u>		
1 x Studio	1.0 space	0.6 space
3 x One-bedroom	3.0 spaces	1.8 spaces
9 x Two-bedroom	10.8 spaces	8.1 spaces
10 x Three-bedroom	16.5 spaces	14.0 spaces
Visitor	4.8 spaces	4.8 spaces
Total	36.1 (36) spaces	29.3 (30) spaces

The site is located with proximity to high frequency B-Line trunk route bus services and is within convenient walking distances (~250m) of commercial and employment hubs in the Dee Why Town Centre. Therefore, it is quite appropriate to limit the provision of residential parking spaces in this development to discourage the ownership and reliance on private vehicles, consistent with SEPP's intent.

On this basis, the proposal will provide 30 car parking spaces (being 25 for residents and 5 for visitors) to comply with the SEPP criteria.

5.0 Traffic

The RMS Guide to Traffic Generating Development provides a traffic generation rate for high-density dwellings of 0.29 vehicle trips per hour (vtph) per unit.

The RMS rate would indicate a peak development traffic generation outcome of some 7 vtph. Traffic generation of this order of magnitude, being some 1 vehicle movement every 8 to 10 minutes during the peak hours, will be quite imperceptible in the context of the Dee Why Town Centre's traffic circumstance.

Based on the above, it is assessed that the proposal will have no adverse traffic and safety implications on the local road system.

6.0 Access, Internal Circulation and Servicing

6.1 Access

The four existing driveways on the Avon Road frontage will be demolished and the kerb/gutter reinstated, providing additional public onstreet parking spaces.

A new 5.5m wide combined access driveway for the basement car park will be provided on the Richmond Road frontage near the western site boundary. The access driveway will be generally consistent with the AS 2890.1 design requirements, particularly in relation to the provision of vehicle passage and sightlines for entering and exiting vehicles.

It is noted that the proposed access will not satisfy the AS grade requirement for the first 6m of the driveway. Where the AS requires the first 6m long driveway to be provided at a 5% grade, the proposal cannot achieve this due to the site's associated flood requirements. Instead, the proposed driveway will provide a relatively level vehicle standing area of some 3.3m behind the footpath.

6.2 Internal Circulation

The internal ramps, aisles and parking bays will accord with AS 2890.1 while suitable provision will be available for the infrequent opposing vehicle movements. The two-way circulation system will provide for flexible and efficient access appropriate for the development.

6.3 Servicing

The development will rely upon kerbside collection by Council's waste vehicles. Any infrequent requirement for large trucks (eg. furniture vans) will also be reliant on on-street parking as is normal for residential based developments of this nature.

7.0 Conclusion

The proposed residential apartment development at 20-26 Avon Road, Dee Why reflects the prestigious locale and is compatible with the adjacent uses.

This assessment for the proposed scheme has concluded that:

- ❖ the development will not present any adverse traffic implications
- ❖ the proposed parking provision will be consistent with the SEPP criteria and adequate for the site circumstances
- ❖ the reinstated kerb frontage on Avon Road will provide additional on-street public parking spaces
- ❖ the proposed access, internal circulation and servicing arrangements will be suitable and consistent with AS2890.1 design intent and principles.

Appendix A

Development Plans



SEPP65 PARKING RATES			
UNIT TYPE	NUMBER OF UNITS	GUIDE TO TRAFFIC GEN PARKING RATE	VISTOR PARKING RATE

1 BED	3	1.8	0.6
2 BED	9	8.1	1.8
3 BED	10	14	2
STUDIO	1	0.6	0.2
	23	24.5	4.6

TOTAL PROVIDED - 26 RESIDENTIAL & 5 VISITOR PARKING SPACES

Project: 20-26 AVON ROAD, DEE WHY
APARTMENT BUILDING - 23 APARTMENTS
Client: ACN 647 465 236 PTY LTD

Walsh
Architects
Registered Architect
ACT 2624 NSW 10366
scott@walsharchitects.com.au
0466 049 880

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1 : 200 @ A3

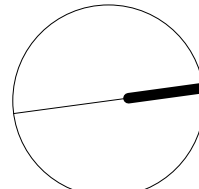
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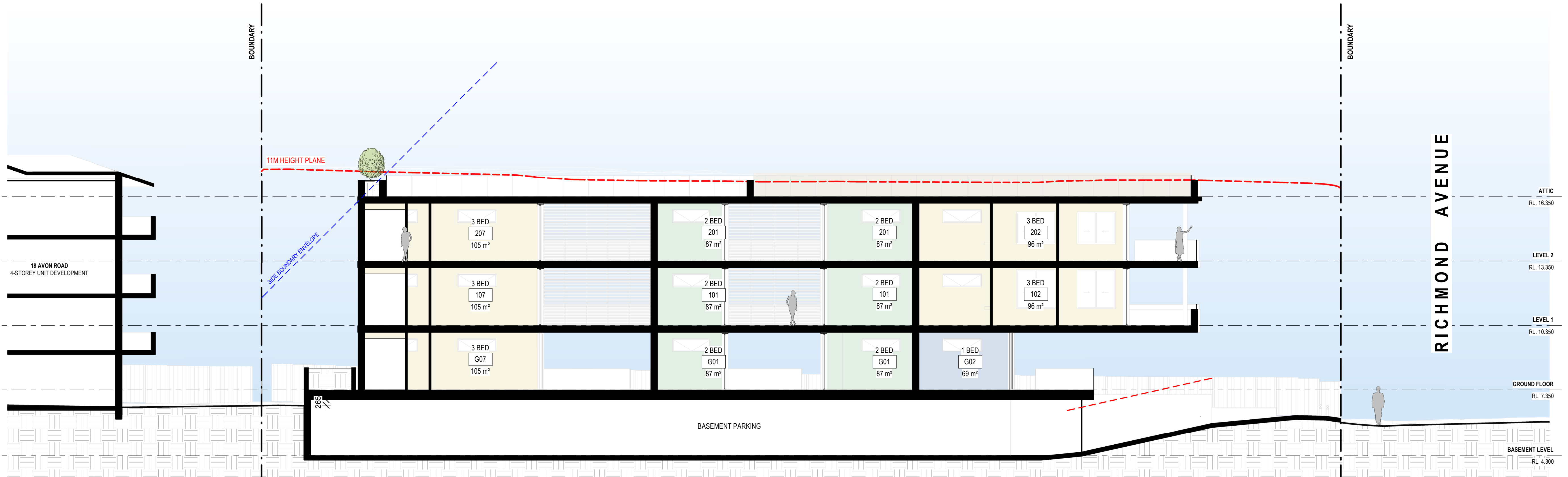
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DA100

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B	PLANS WITHOUT PREJUDICE	02.12.21
C	PLANS WITHOUT PREJUDICE	10.12.21
D	PLANS FOR LEC	27.01.22

Rev.
D







1 LONG SECTION 1
DA201/ 1:100 @ A1



2 LONG SECTION 2
DA201/ 1:100 @ A1

Project: 20-26 AVON ROAD, DEE WHY
APARTMENT BUILDING - 23 APARTMENTS
Client: ACN 647 465 236 PTY LTD

Walsh
Architects
Registered Architect
ACT 2624 NSW 10366
scott@walsharchitects.com.au
0466 049 880

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1 : 200 @ A3

Sheet Name
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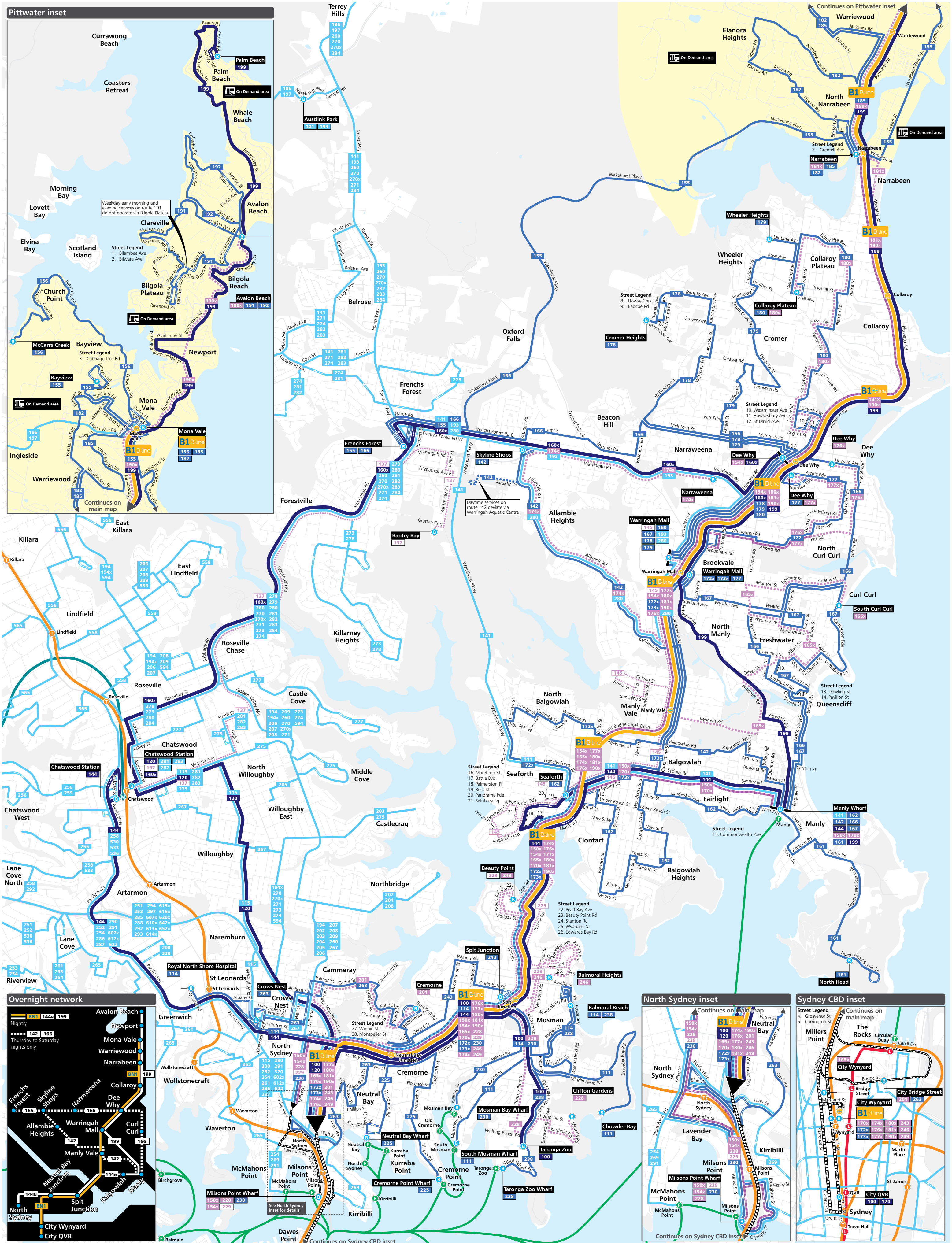
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C	PLANS WITHOUT PREJUDICE	02.12.21
D	PLANS WITHOUT PREJUDICE	10.12.21
E	PLANS FOR LEC	27.01.22

Rev.
E

Appendix B

Transport Services

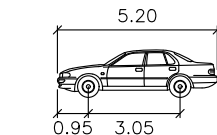


Appendix C

Turning Path Assessment

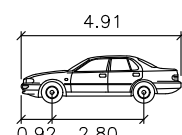
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- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



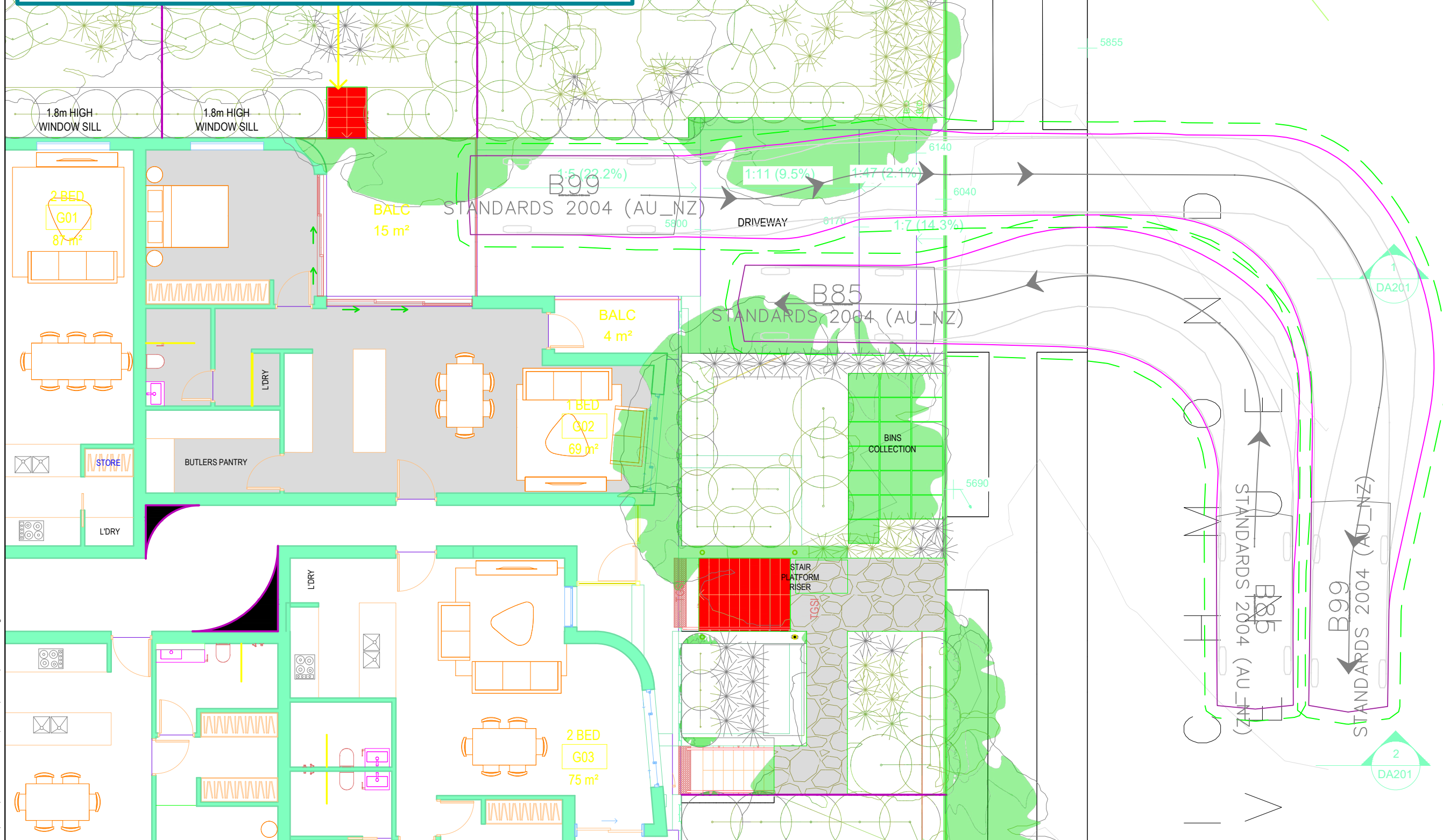
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Steering Angle : 33.9



B85

Width : 1.87 meters
Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 34.1



20-26 AVON ROAD, DEE WHY
PASSING MOVEMENTS
SWEPT PATH ASSESSMENT

DRAWING REF NO. 21143-V1.6-SP

SHEET NO. 01 OF 06

ISSUE DATE 31 January 2022

DESIGNED BY
L. ELLSON

REVIEWED BY
B. LO

SCALE
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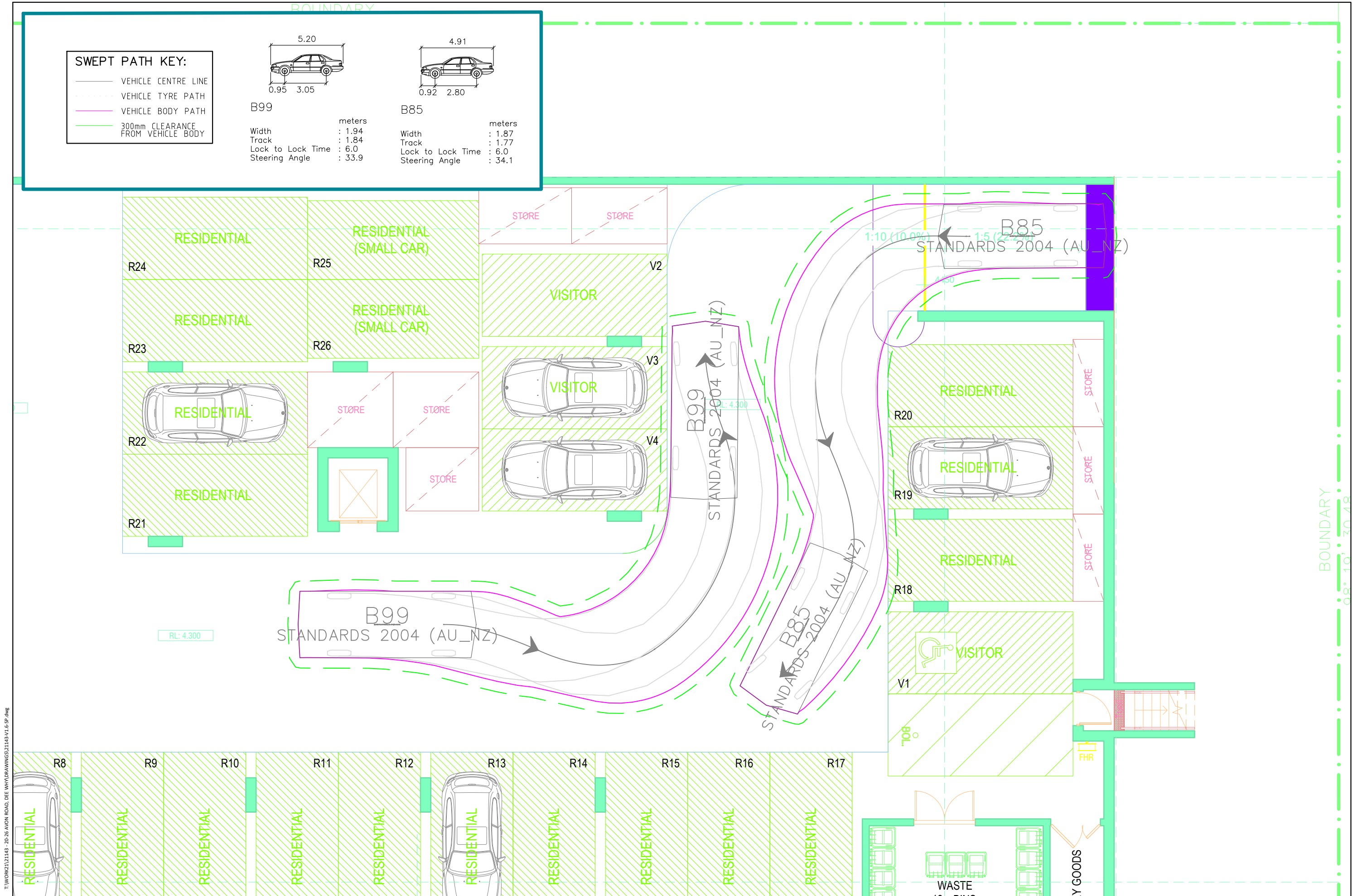


PRELIMINARY PLAN
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THE EXACT LOCATIONS SHALL BE PROVIDED ON SITE
ALL EXISTING SERVICES SHOWN ARE NOT GUARANTEED

ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994

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P: (02) 9411 5660 E: info@ttpa.com.au W: www.ttpa.com.au



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Plotted by Lachlan

20-26 AVON ROAD, DEE WHY
PASSING MOVEMENTS
SWEPT PATH ASSESSMENT

DRAWING REF NO. 21143-V1.6-SP

SHEET NO. 02 OF 06

ISSUE DATE 31 January 2022

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L. ELLSON

REVIEWED BY
B. LO

SCALE
A3



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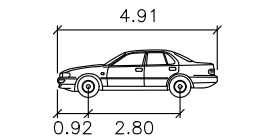
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- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

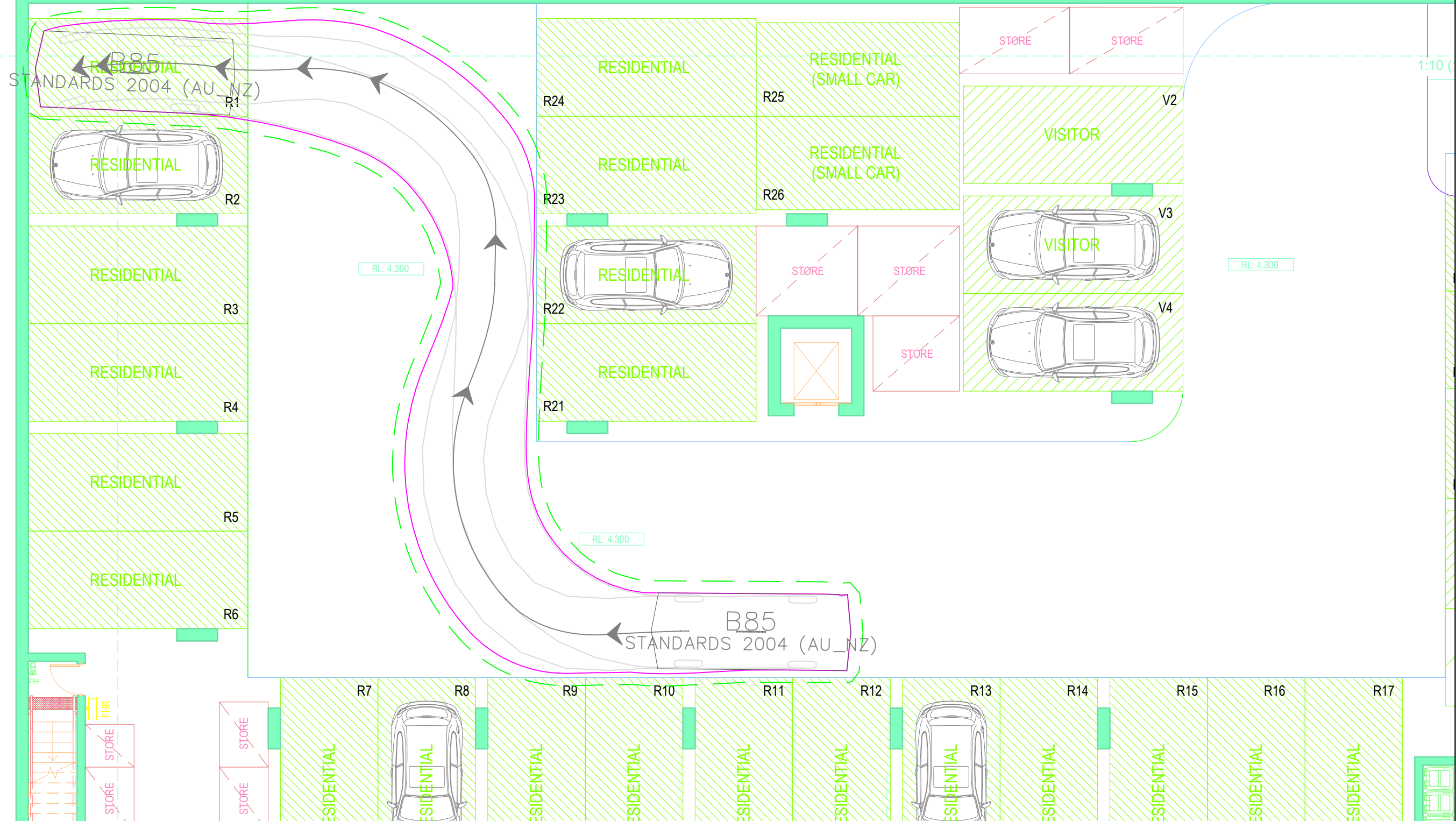


B85

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Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 34.1

BOUNDARY

8° 20' 05" 50.31 m



20-26 AVON ROAD, DEE WHY
ENTRY MOVEMENT
SWEPT PATH ASSESSMENT

DRAWING REF NO. 21143-V1.6-SP

SHEET NO. 03 OF 06

ISSUE DATE 31 January 2022

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L. ELLSON

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B. LO

SCALE
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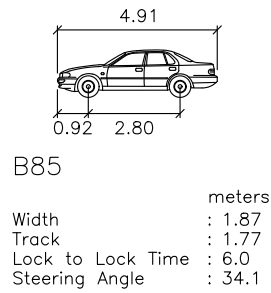
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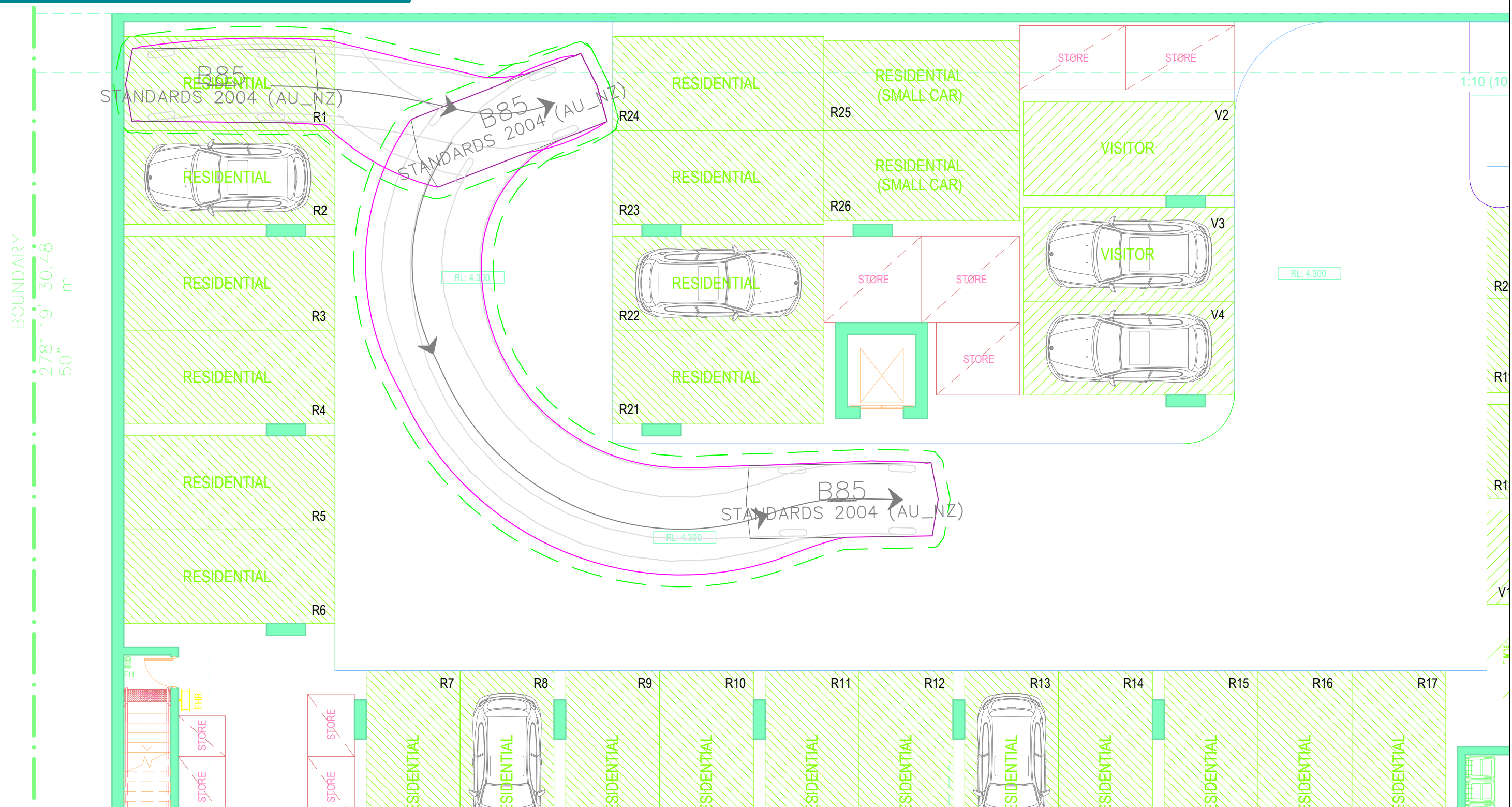
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- VEHICLE CENTRE LINE
- - - VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



BOUNDARY

8° 20' 05" 50.31 m



20-26 AVON ROAD, DEE WHY
EXIT MOVEMENT
SWEPT PATH ASSESSMENT

DRAWING REF NO. 21143-V1.6-SP

SHEET NO. 04 OF 06

ISSUE DATE 31 January 2022

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L. ELLSON

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B. LO

SCALE
A3

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1:100



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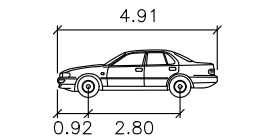
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SWEPT PATH KEY:

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- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



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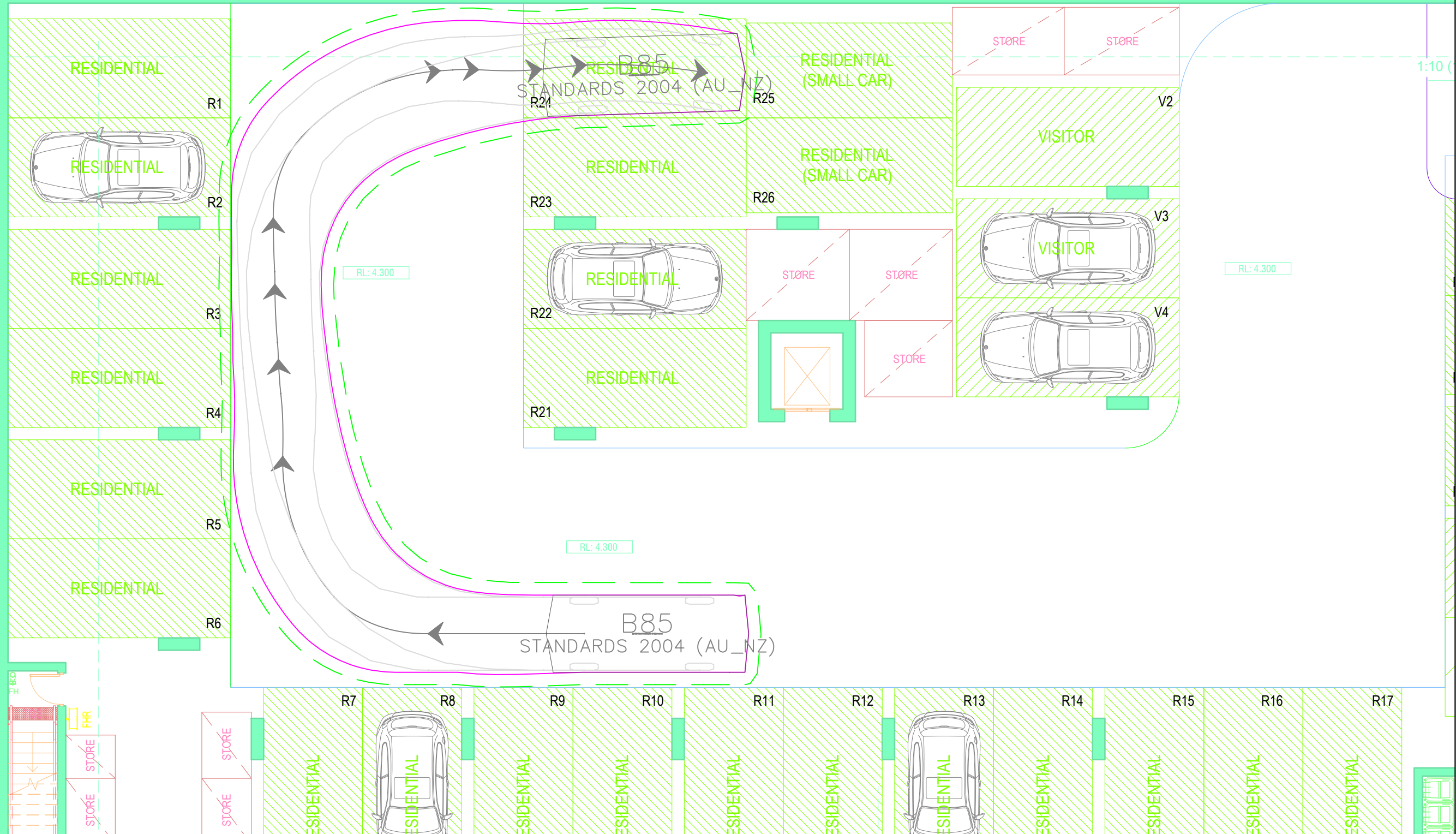
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Lock to Lock Time : 6.0
Steering Angle : 34.1

BOUNDARY

8° 20' 05" 50.31 m

BOUNDARY

278° 19' 30.48" 50" m



20-26 AVON ROAD, DEE WHY
ENTRY MOVEMENT
SWEPT PATH ASSESSMENT

DRAWING REF NO. 21143-V1.6-SP

SHEET NO. 05 OF 06

ISSUE DATE 31 January 2022

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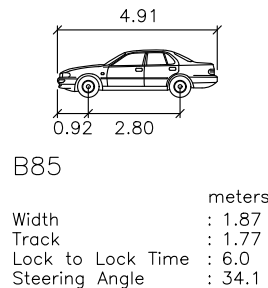
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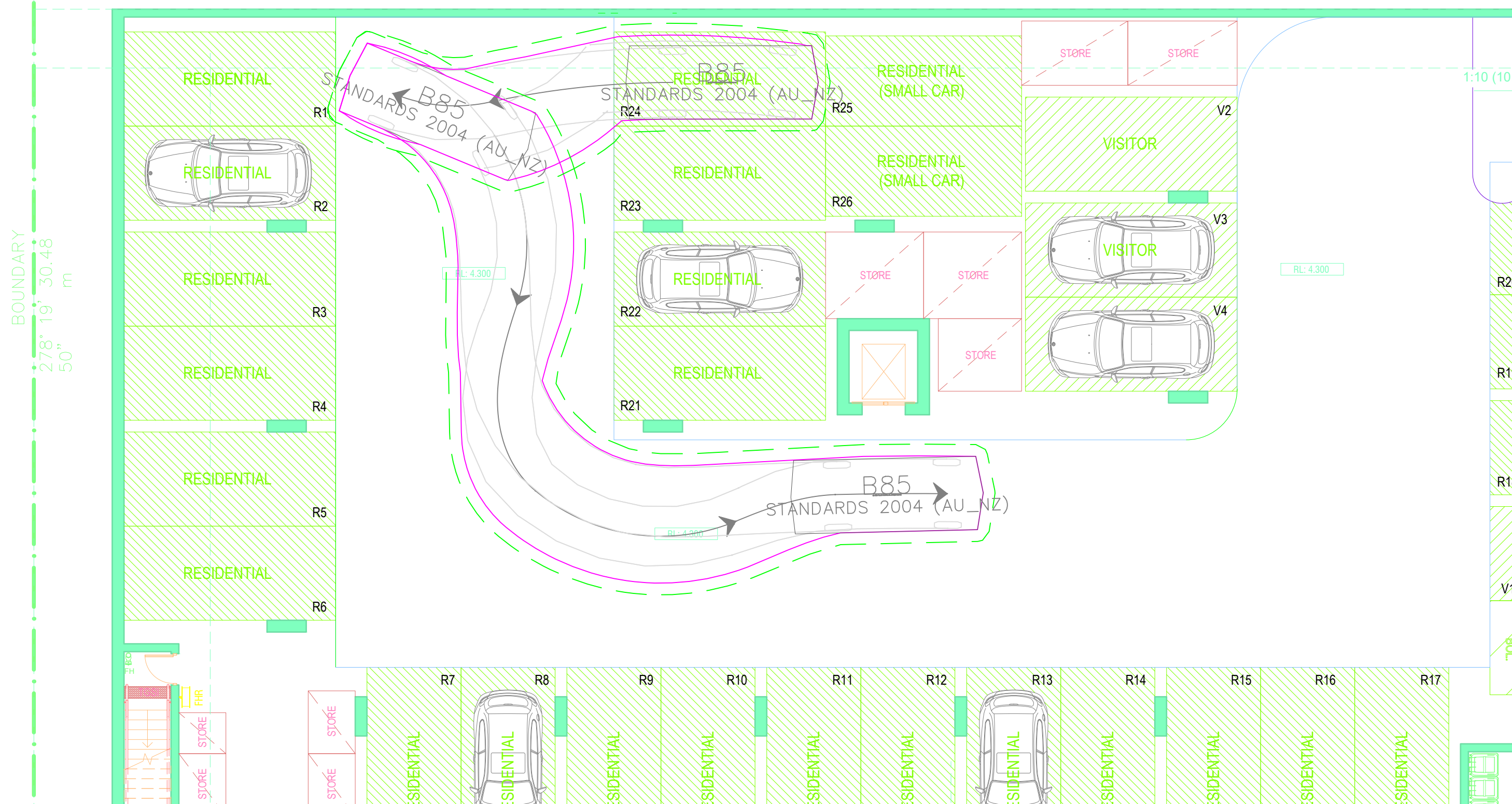
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- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



BOUNDARY

8° 20' 05" 50.31 m



20-26 AVON ROAD, DEE WHY
EXIT MOVEMENT
SWEPT PATH ASSESSMENT

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