

# 18 Alexander Street, Collaroy

## Proposed Residential Development

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### Traffic and Parking Impact Assessment

Ref: 21278

Date: September 2021

Issue: A

# Table of Contents

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<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>1.0 INTRODUCTION</b> .....	<b>2</b>
<b>2.0 PROPOSED DEVELOPMENT SCHEME</b> .....	<b>3</b>
2.1 Site, Context and Existing Circumstances.....	3
2.2 Proposed Development.....	3
<b>3.0 ROAD NETWORK AND TRAFFIC CONDITIONS</b> .....	<b>4</b>
3.1 Road Network.....	4
3.2 Traffic Controls .....	4
3.3 Traffic Conditions .....	5
3.4 Transport Services .....	5
<b>4.0 PARKING</b> .....	<b>6</b>
<b>5.0 TRAFFIC</b> .....	<b>7</b>
<b>6.0 ACCESS, INTERNAL CIRCULATION AND SERVICING</b> .....	<b>8</b>
6.1 Access.....	8
6.2 Internal Circulation .....	8
6.3 Servicing .....	8
<b>7.0 CONCLUSION</b> .....	<b>9</b>

## List of Figures

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

## List of Appendices

Appendix A	Public Transport Services
Appendix B	Turning Path Assessment

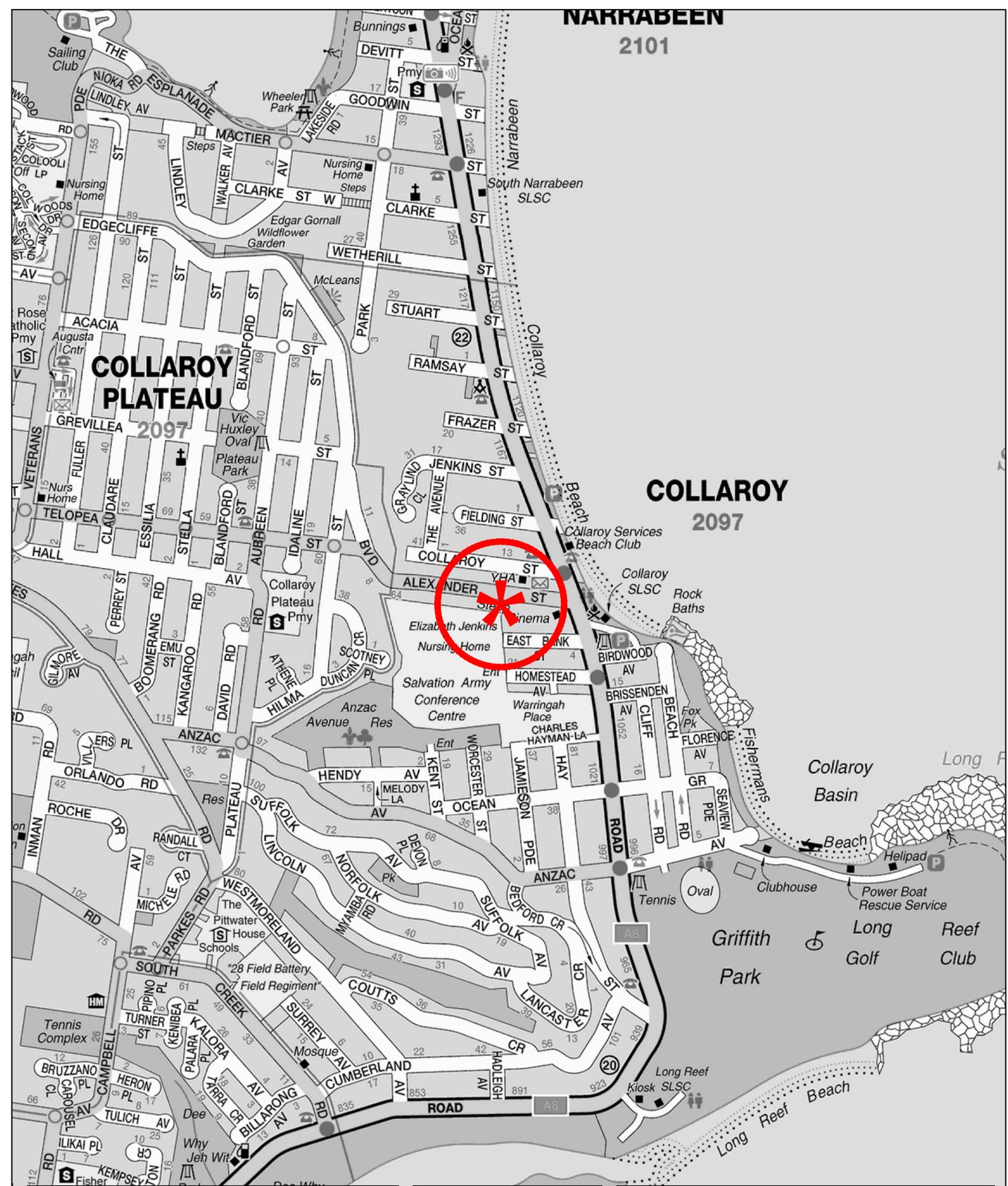
# 1.0 Introduction

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This report has been prepared to accompany a Development Application to the Northern Beaches Council for a proposed residential development on a site at 18 Alexander Street, Collaroy (Figure 1).

The proposed development scheme involves 5 Seniors Living residential apartments with associated basement car park, and the purpose of this report is to:

- ❖ describe the proposed development scheme
- ❖ describe the existing road network serving the site and the traffic conditions on that system
- ❖ assess the adequacy of the proposed parking provision for the development
- ❖ assess any potential traffic implications
- ❖ assess the suitability of the proposed access, internal circulation and servicing arrangements



**LEGEND**



**LOCATION**

**FIG 1**

## 2.0 Proposed Development Scheme

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### 2.1 Site, Context and Existing Circumstances

The development site (Figure 2) being a consolidation of Lots 8 and 9 in DP 6984 is located at 18 Alexander Street, Collaroy. It occupies a rectangular shaped area of some 1,156m<sup>2</sup> and has a some 24m wide frontage to the southern side of Alexander Street.

Existing on the site is an older residential dwelling with 2 access driveways at Alexander Street. Similar nature residential developments adjoin the site, while other nearby land uses include:

- the Collaroy Surf Life Saving Club to the east
- the Collaroy Centre to the south
- the Griffith Park to the southeast
- the industrial area to the southwest

### 2.2 Proposed Development

It is proposed to demolish the existing building on the site, undertake excavation to provide a basement car park and level building platform to accommodate a residential apartment complex of 5 three-bedroom Seniors Living apartments.

Vehicle access will be located at Alexander Street and the single level basement carpark will accommodate 15 cars.

Architectural details of the development proposal are provided on the plans prepared by Walsh Architects which accompany the Development Application.



**LEGEND**



**SITE**

**FIG 2**

## 3.0 Road Network and Traffic Conditions

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### 3.1 Road Network

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

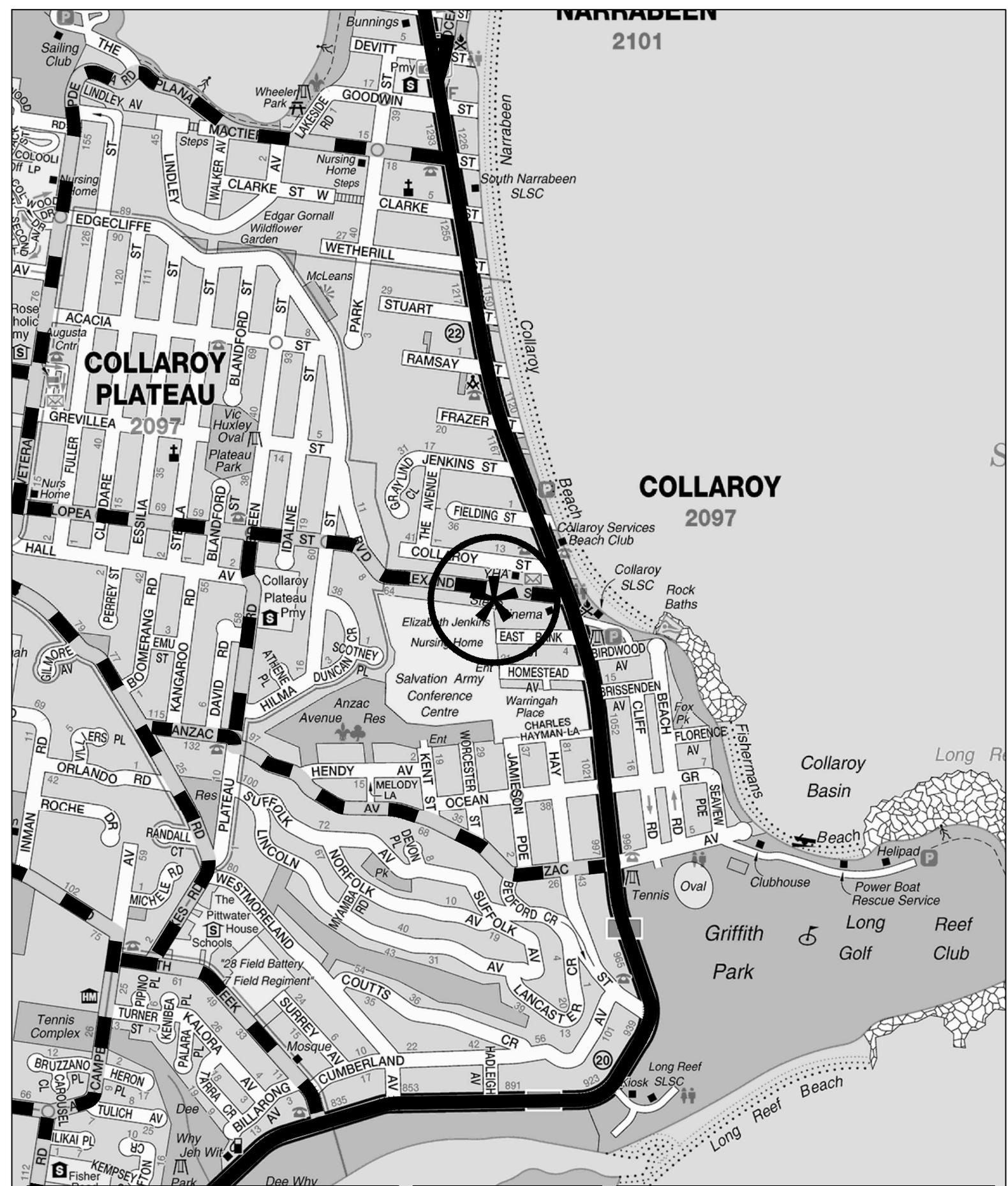
- ❖ *Pittwater Road* – a State Road and arterial route linking between Manly and the Northern Beaches
- ❖ *Veterans Parade / Mactier Street* – a collector road route which provides linkage between Narrabeen, Wheeler Heights and the Collaroy Plateau
- ❖ *Teloepa Street / Alexander Street* – a collector road route linking between Wheeler Heights and Collaroy
- ❖ *Anzac Avenue / Parkes Road / South Creek Road* – minor collector local access roads.

Alexander Street has a 7.5m wide carriageway and falls to the east.

### 3.2 Traffic Controls

Details of the existing traffic controls which exist in the vicinity of the site are shown on Figure 4 and summarised as follows:

- ❖ the roundabouts along Teloepa Street
- ❖ the traffic signals along Pittwater Road including the intersections with Collaroy Street, Homestead Avenue, Ocean Grove and Anzac Avenue
- ❖ the GIVEWAY priority control at the Alexander Street/ Pittwater road intersection
- ❖ the light vehicle traffic restriction on Alexander Street
- ❖ the KEEP CLEAR control at the intersection of Pittwater Road and Alexander Street
- ❖ the speed humps along Alexander Street



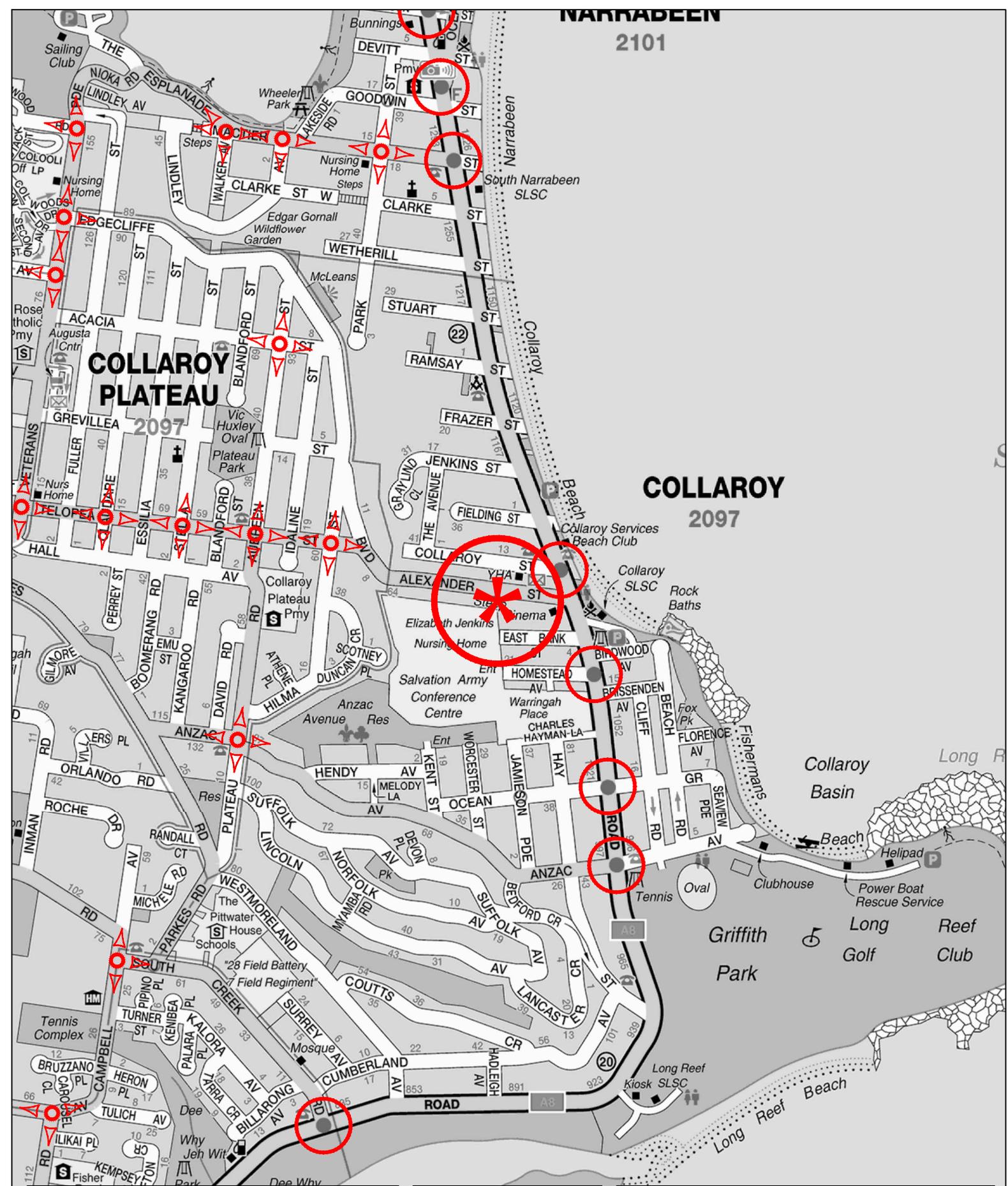
**LEGEND**

-  **ARTERIAL**
-  **SUB-ARTERIAL**
-  **COLLECTOR**



**ROAD NETWORK**

**FIG 3**



**LEGEND**

-  TRAFFIC SIGNAL CONTROL
-  ROUNDABOUT
-  RESTRICTED TURNING MOVEMENT



**TRAFFIC CONTROLS**

**FIG 4**

## Transport and Traffic Planning Associates

- ❖ the bus lane restriction on Pittwater Road between 6-10am on the southbound direction and 3-7pm on the northbound direction

### 3.3 Traffic Conditions

An indication of traffic conditions on the road system serving the site is provided by data published by the Roads and Maritime Services. The data<sup>1</sup> published by the RMS is expressed in terms of average annual daily traffic (AADT) and details relevant to the road system serving the site are provided in the following:

	<b>AADT</b>
Pittwater Road north of Jenkins Street	39,587

Observation of traffic operations in the vicinity of the site (in particular Alexander Street) indicates a satisfactory operating circumstance during the peak periods. Vehicles' access and turning movements on Alexander Road are not subject to extensive delays when accessing the higher order roads i.e. Pittwater Road.

### 3.4 Transport Services

There are frequent bus services operating along Pittwater Road some 250m from the site. These services are provided by Sydney Buses and connect the site with major centres i.e. Manly, Brookvale, North Sydney and the City.

Details of the available bus services are provided in in Appendix A.

<sup>1</sup> *Traffic Volume Data for Sydney Region*  
RMS

## 4.0 Parking

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The applicable car parking criteria are provided in the SEPP (Seniors Living) 2009 which indicates a rate of 0.5 spaces per bedroom for residents. No visitors' parking is required.

The proposal involves 5 x three-bedroom apartments (15 rooms), and application of the SEPP criteria would indicate a minimum requirement of 8 resident spaces.

The proposal will provide 15 spaces in the basement car park including 1 visitor's space. The proposal will satisfy the SEPP requirements entirely.

It is noted that the SEPP does not specify a requirement to provide onsite visitor's parking. Nevertheless, the proposal will incorporate 1 visitor's parking space in the car park to alleviate any occasional need to rely on existing on-street parking by visitors to the development. The proposed car parking arrangement meets the SEPP criteria entirely and will also result in a positive outcome to the surrounding on-street parking circumstance.

## 5.0 Traffic

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The RMS Development Guidelines<sup>2</sup> specify a peak hour traffic generation rate for larger medium-density apartment/townhouse dwellings of 0.6 vtpd per unit, while that of a single dwelling is 0.85 vtpd.

An application of the above to the existing dwellings and proposed development would indicate the following net traffic generation outcome:

	<b>Peak Traffic</b>
Existing (1 dwelling)	1 vtpd
Proposed (5 units)	3 vtpd
<b>Net Effect</b>	<b>+ 2 vtpd</b>

Traffic generation of this order of magnitude is minor in the context of the local road system, generally consistent with the existing land use traffic generation. It follows that there will be no undue traffic congestion or conflict at the vehicle access point or the adjacent intersections.

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<sup>2</sup> TDT 2013/ 04a - Guide to Traffic Generating Developments Updated traffic surveys, Roads and Maritime Services

## 6.0 Access, Internal Circulation and Servicing

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### 6.1 Access

The existing driveways will be demolished and kerb/gutter reinstated. A new 5.5m wide combined driveway will be provided centrally along the frontage. The proposed access accords with the AS2890.1:2004 design requirements.

### 6.2 Internal Circulation

The provisions made in the basement car park, including ramp, grades, transitions and associated headroom satisfy the AS2890.1 criteria. Details of a swept path assessment demonstrating a satisfactory arrangement are provided in Appendix B.

### 6.3 Servicing

Refuse collection occur via Alexander Street (i.e. bins wheeled out for collection on the designated day). All loading activities related to deliveries, courier activity, maintenance, etc., can rely on the ample on-street parking in the site's vicinity.

## 7.0 Conclusion

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The traffic, transport, and parking assessment provided in this report have established that:

- ❖ the traffic generation of the proposed development will not present any adverse traffic implications and traffic-related environmental impacts
- ❖ the proposed parking provision will be adequate and satisfies the SEPP criteria
- ❖ the proposed access and internal circulation will be consistent with the design principles set out in the AS2890.1
- ❖ the proposed servicing arrangement is appropriate and adequate

# Appendix A

## Transport Services

# Routes 151, E54, 188, E88, E89, L90, 199



## Route E54 to Milsons Point

Picks up and sets down as requested at Mona Vale, Pittwater Park, Narrabeen, Collaroy, Dee Why, Warringah Mall, Kenneth Rd Manly Vale, Spit Jn and Neutral Bay Jn, then all stops.

## Route E54 to Mona Vale

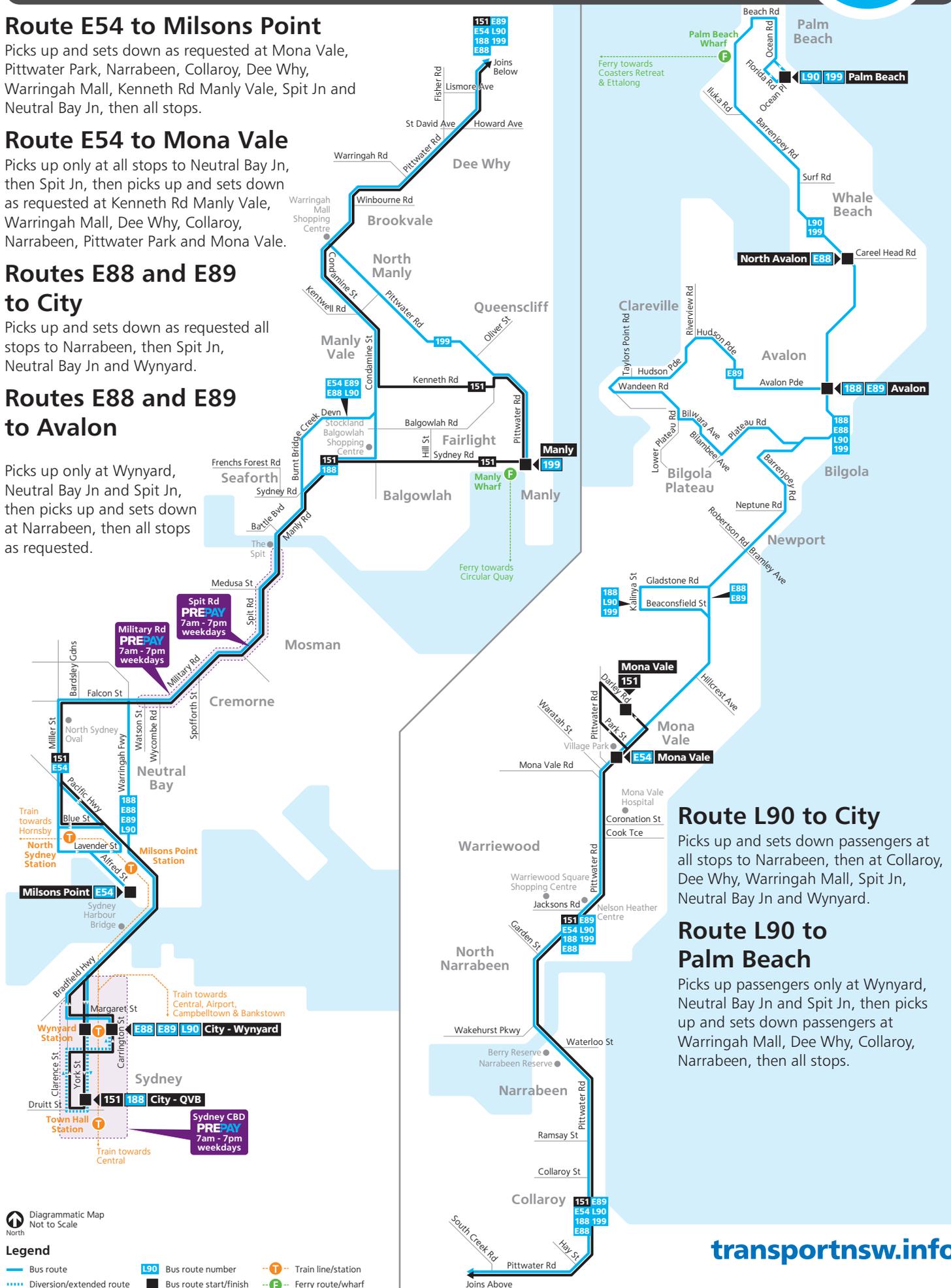
Picks up only at all stops to Neutral Bay Jn, then Spit Jn, then picks up and sets down as requested at Kenneth Rd Manly Vale, Warringah Mall, Dee Why, Collaroy, Narrabeen, Pittwater Park and Mona Vale.

## Routes E88 and E89 to City

Picks up and sets down as requested all stops to Narrabeen, then Spit Jn, Neutral Bay Jn and Wynyard.

## Routes E88 and E89 to Avalon

Picks up only at Wynyard, Neutral Bay Jn and Spit Jn, then picks up and sets down at Narrabeen, then all stops as requested.



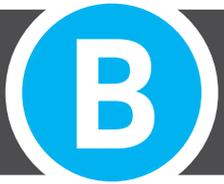
**Route L90 to City**  
Picks up and sets down passengers at all stops to Narrabeen, then at Collaroy, Dee Why, Warringah Mall, Spit Jn, Neutral Bay Jn and Wynyard.

**Route L90 to Palm Beach**  
Picks up passengers only at Wynyard, Neutral Bay Jn and Spit Jn, then picks up and sets down passengers at Warringah Mall, Dee Why, Collaroy, Narrabeen, then all stops.

Diagrammatic Map  
Not to Scale

- Legend**
- Bus route
  - L90 Bus route number
  - Train line/station
  - Diversion/extended route
  - Bus route start/finish
  - Ferry route/wharf

# Routes 182, E83, 185, E85



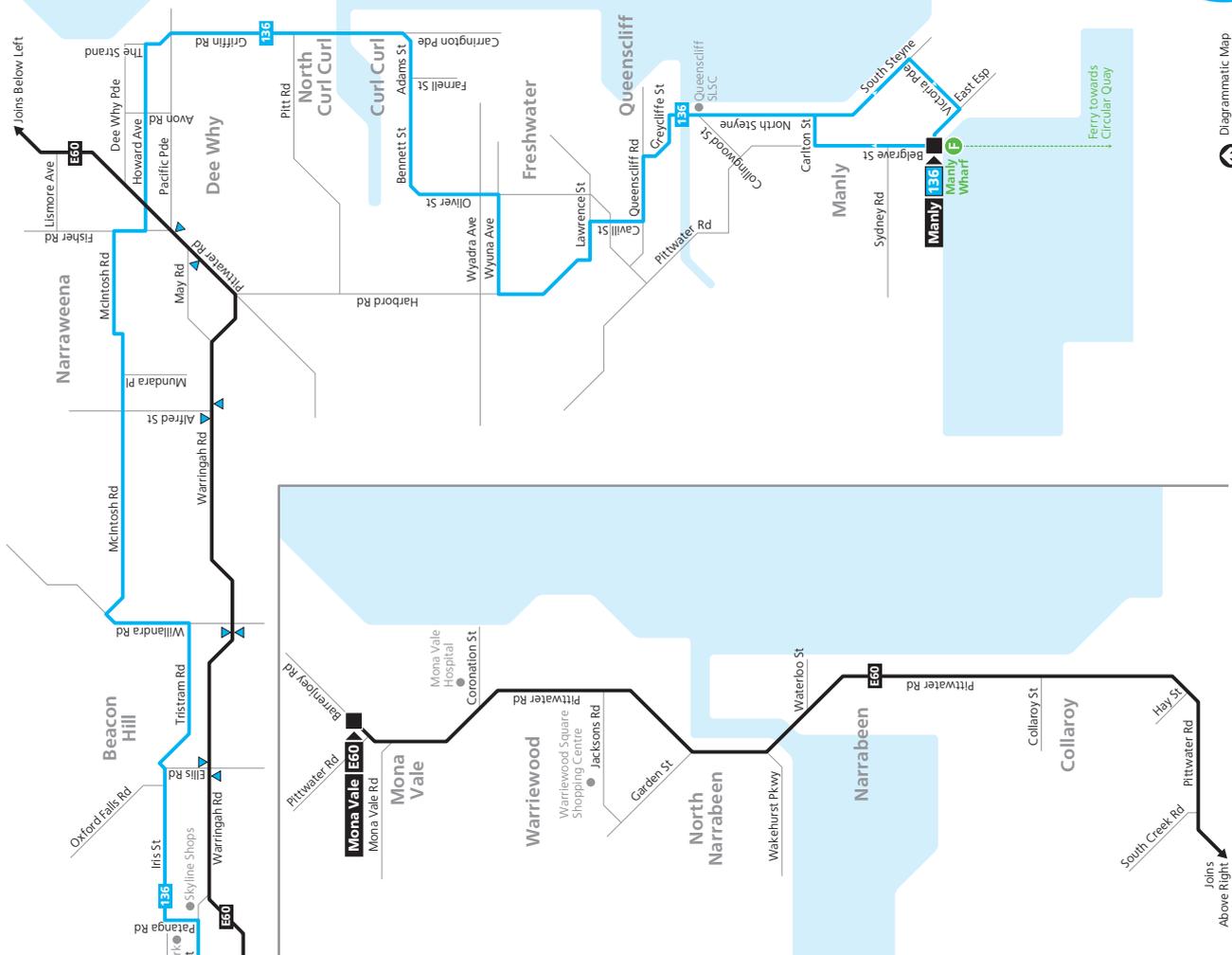
## Routes E83 and E85 to City

Picks up and sets down passengers at all stops to Dee Why, then Warringah Mall, Neutral Bay Junction and Wynyard.

## Routes E83 and E85 from City

Picks up passengers only at Wynyard, then Neutral Bay Junction, then picks up and sets down passengers at Warringah Mall, Dee Why and then all stops.

# Routes 136, 137, E60



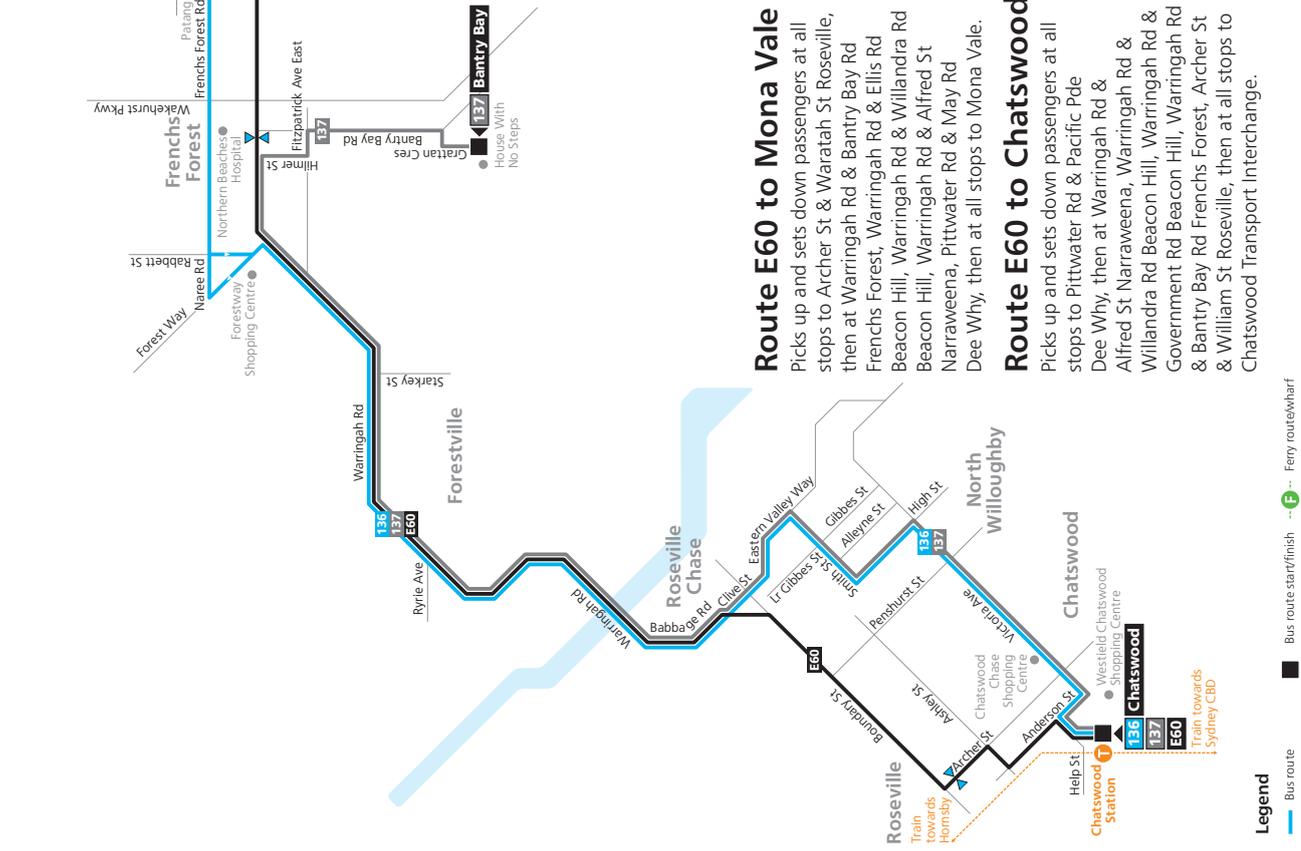
Diagrammatic Map  
North  
Not to Scale

## Route E60 to Mona Vale

Picks up and sets down passengers at all stops to Archer St & Waratah St Roseville, then at Warringah Rd & Bantry Bay Rd Frenchs Forest, Warringah Rd & Ellis Rd Beacon Hill, Warringah Rd & Willandra Rd Beacon Hill, Warringah Rd & Alfred St Narrabeena, Pittwater Rd & May Rd Dee Why, then at all stops to Mona Vale.

## Route E60 to Chatswood

Picks up and sets down passengers at all stops to Pittwater Rd & Pacific Pde Dee Why, then at Warringah Rd & Alfred St Narrabeena, Warringah Rd & Willandra Rd Beacon Hill, Warringah Rd & Government Rd Beacon Hill, Warringah Rd & Bantry Bay Rd Frenchs Forest, Archer St & William St Roseville, then at all stops to Chatswood Transport Interchange.



Legend  
 Bus route  
 Bus route number  
 Bus route start/finish  
 Ferry route/wharf  
 Train line/station  
 stops for limited stops services

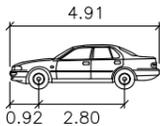
## Appendix B

# Turning Path Assessment

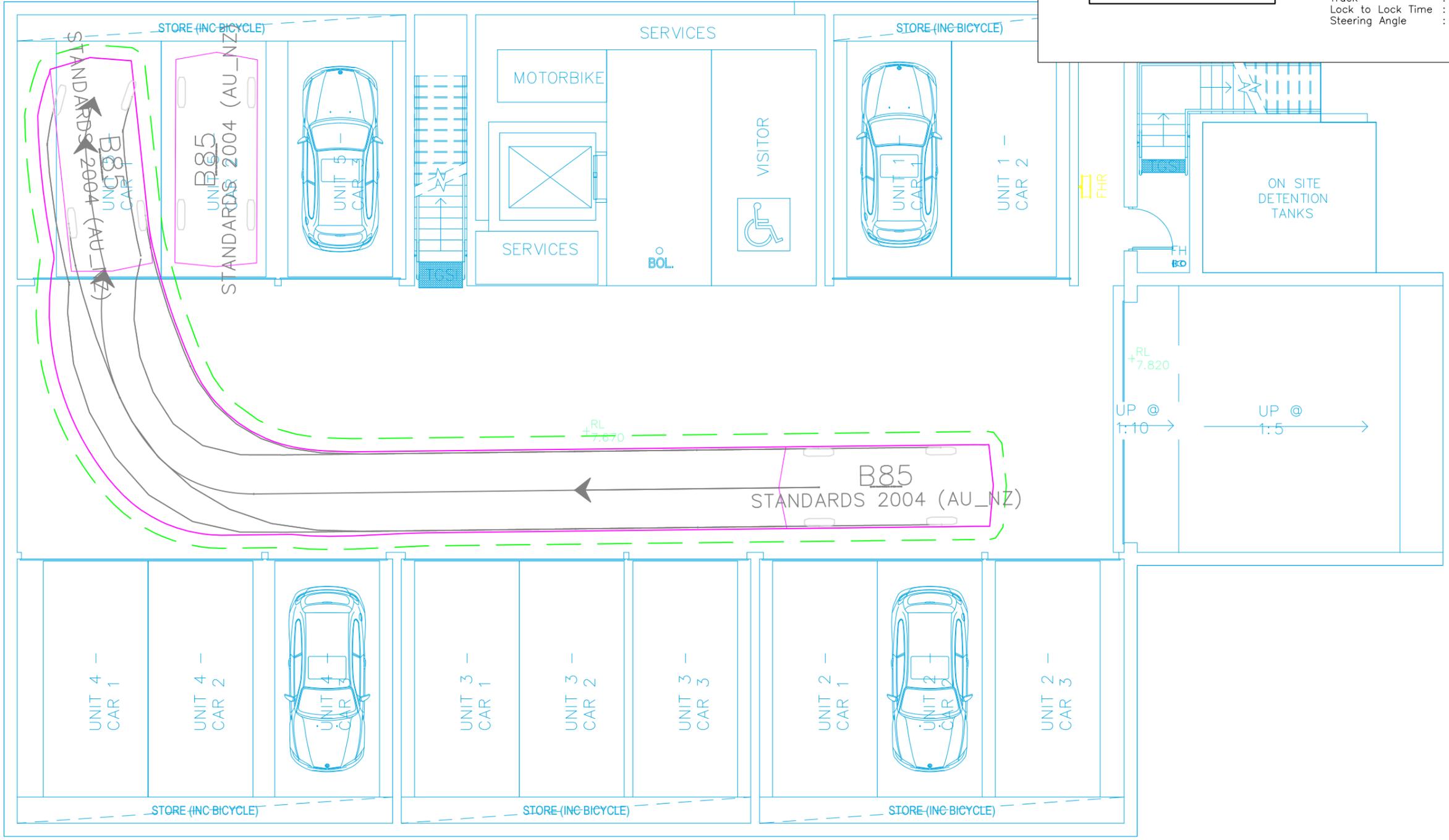
BOUNDARY -  
46.895m  
355'  
54'

**SWEPT PATH KEY:**

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



B85  
Width : 1.87 meters  
Track : 1.77  
Lock to Lock Time : 6.0  
Steering Angle : 34.1



BOUNDARY -  
47.955m  
175°

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Plotted by: Prasanth

**18 ALEXANDER STREET, COLLAROY  
PROPOSED RESIDENTIAL DEVELOPMENT  
SWEPT PATH OF A B85 VEHICLE ENTERING THE SITE**

DRAWING REF NO. 21278-CD-02-P1

SHEET NO. 01 OF 08

ISSUE DATE September 2021

DESIGNED BY P.Prathigadapa  
REVIEWED BY B.LO

SCALE A3 0 10 20 1:100



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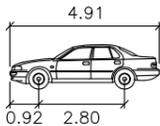
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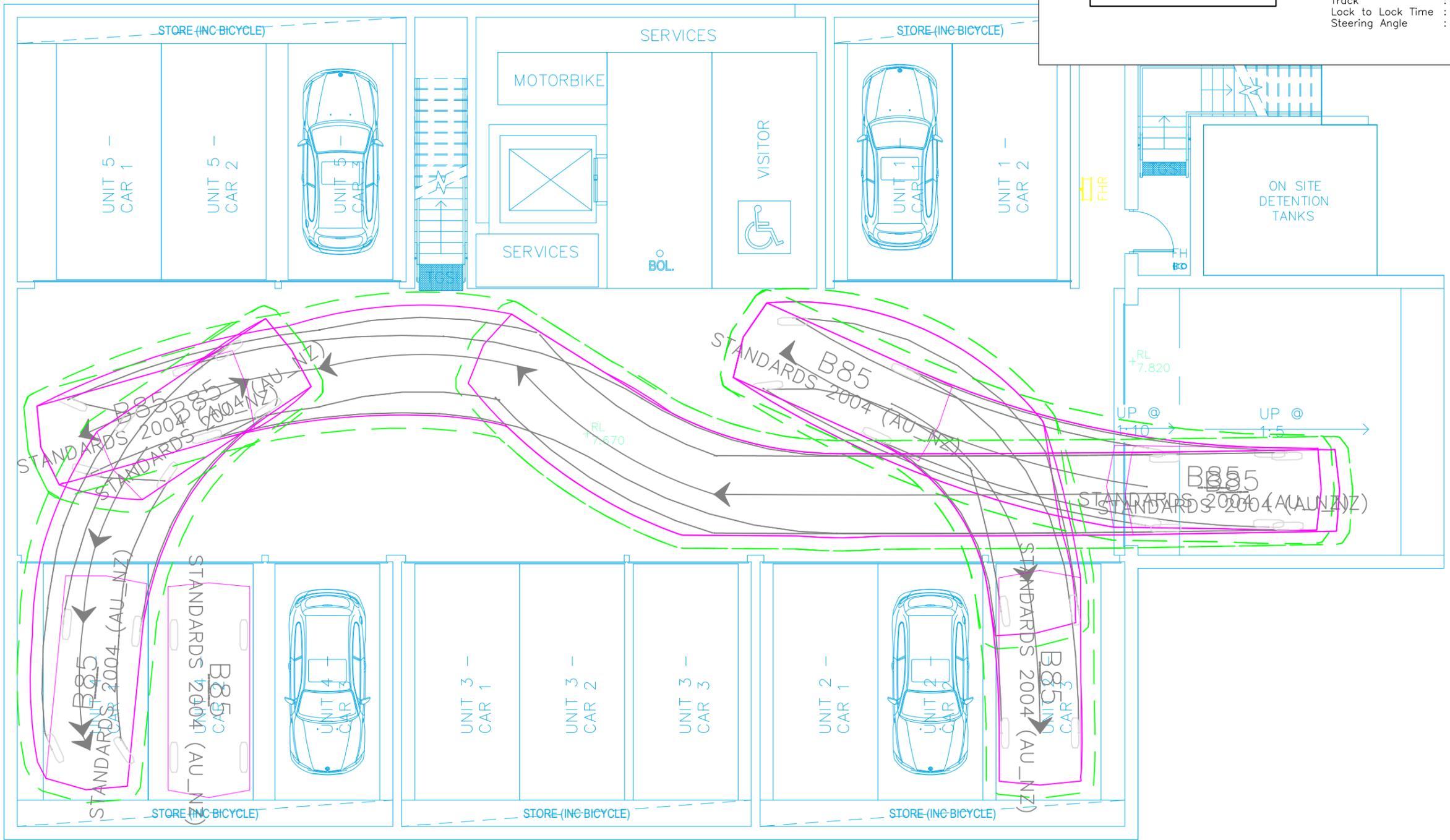
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175'

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Plotted by Prasanth

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SHEET NO. 02 OF 08

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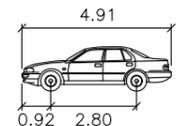
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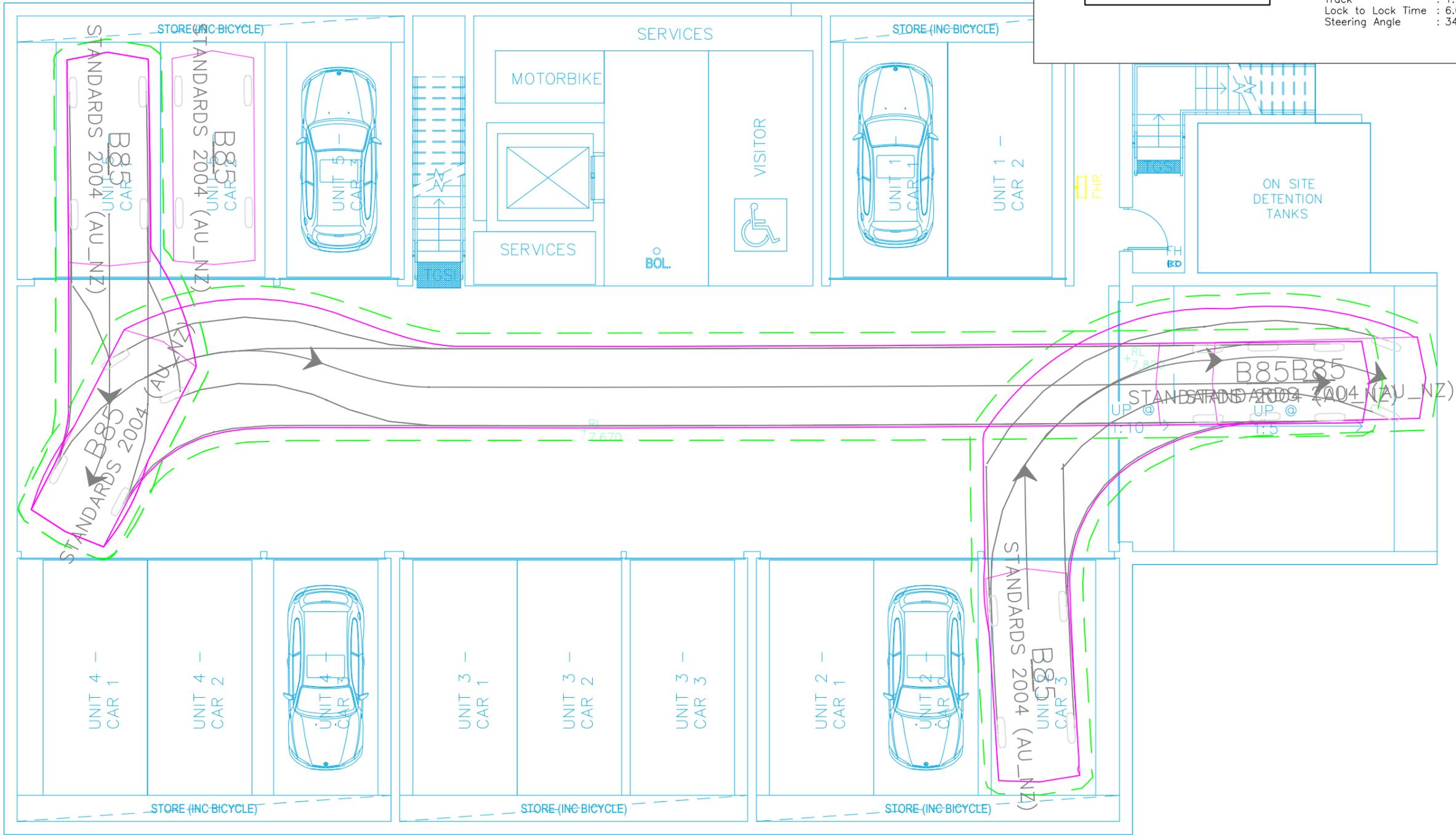
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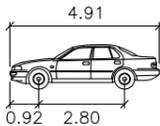
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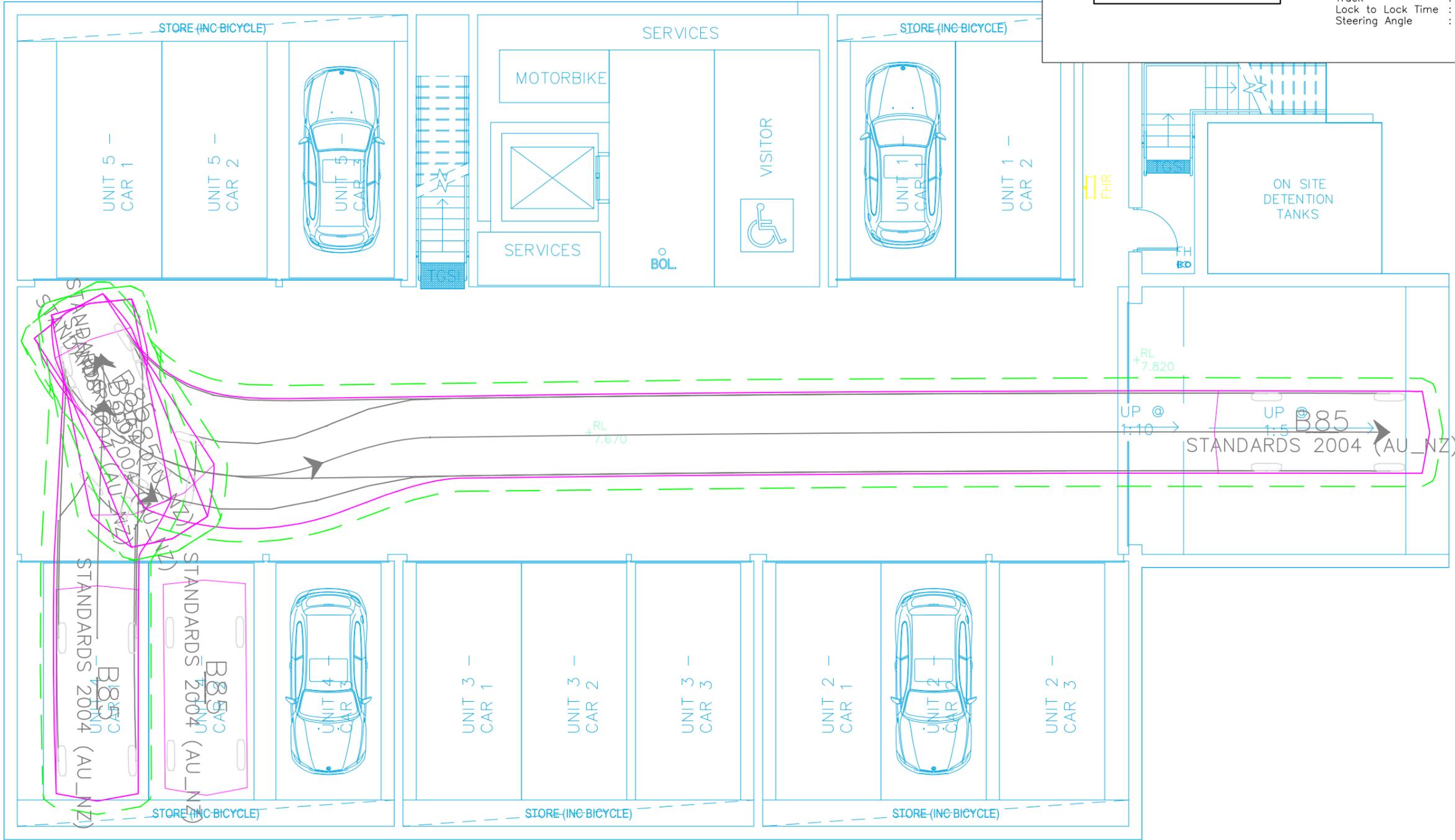
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DRAWING REF NO. 21278-CD-02-P1

SHEET NO. 04 OF 08

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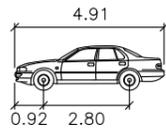
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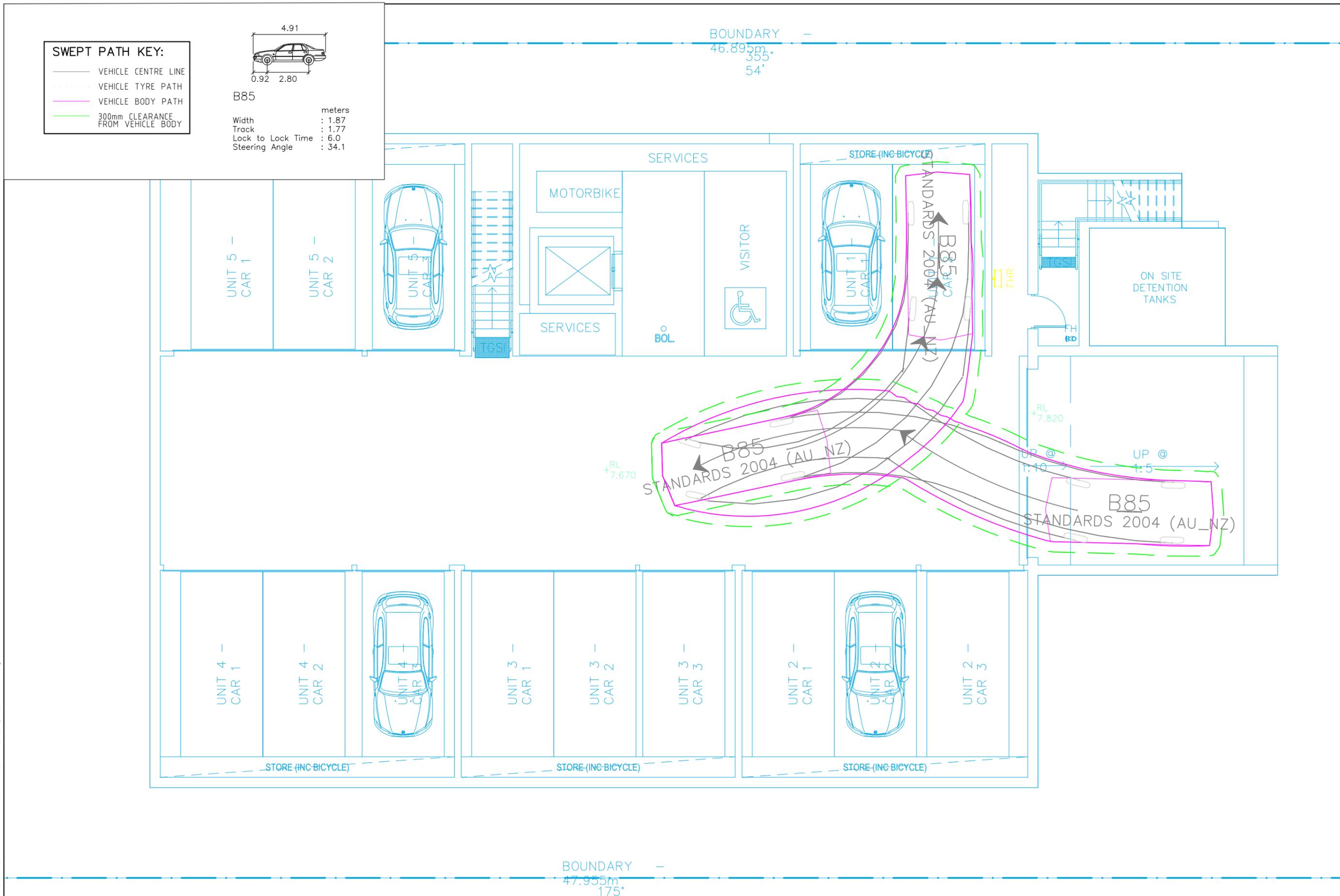
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 Track : 1.77  
 Lock to Lock Time : 6.0  
 Steering Angle : 34.1



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DRAWING REF NO. 21278-CD-02-P1

SHEET NO. 05 OF 08

ISSUE DATE September 2021

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18 ALEXANDER STREET, COLLAROY  
PROPOSED RESIDENTIAL DEVELOPMENT  
SWEEP PATH OF A B85 VEHICLE ENTERING THE SITE

DRAWING REF NO. 21278-CD-02-P1

SHEET NO. 06 OF 08

ISSUE DATE September 2021

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REVIEWED BY B.LO

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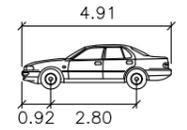
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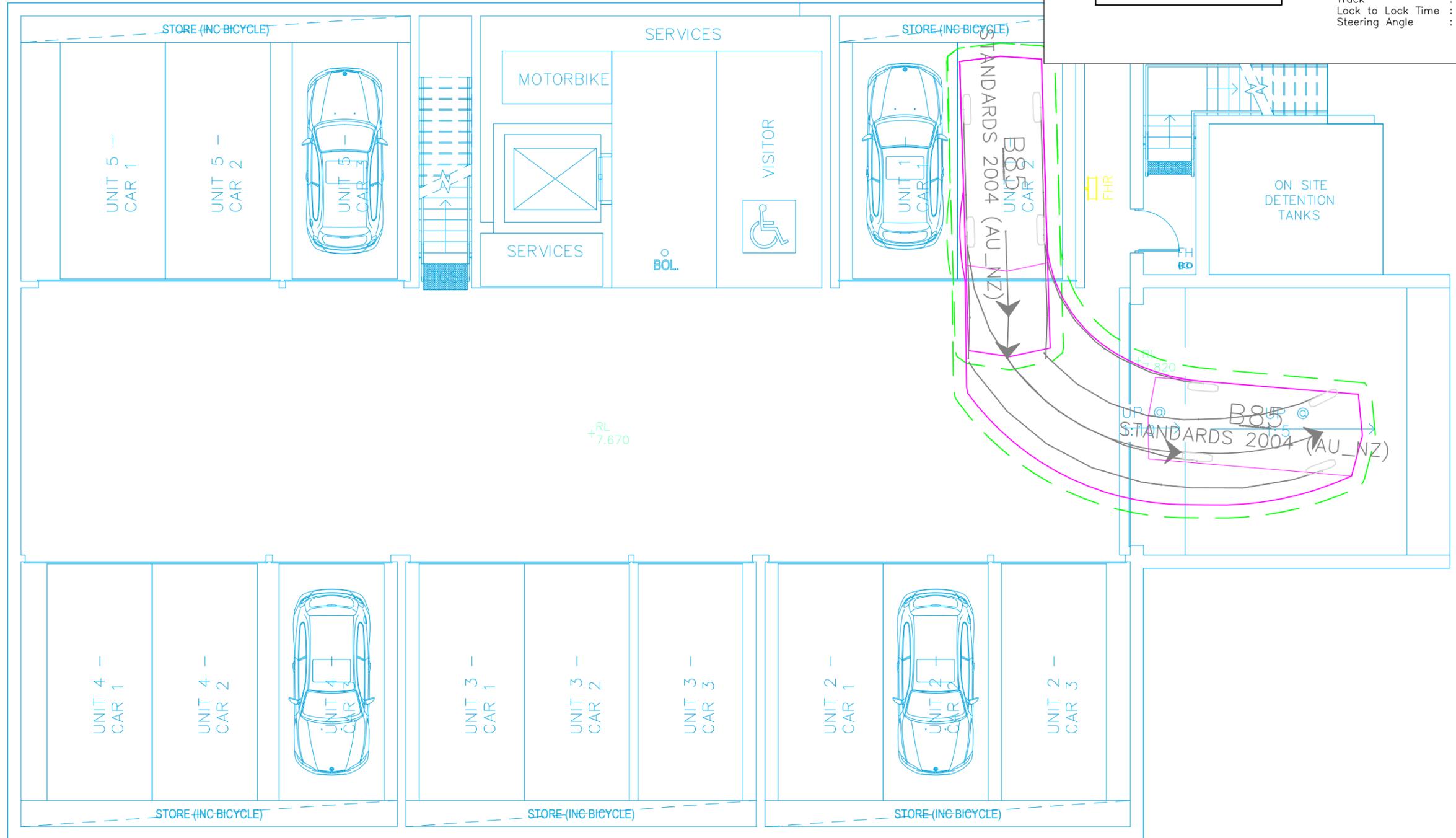
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46.895m  
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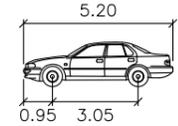
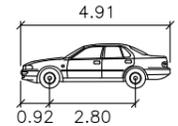
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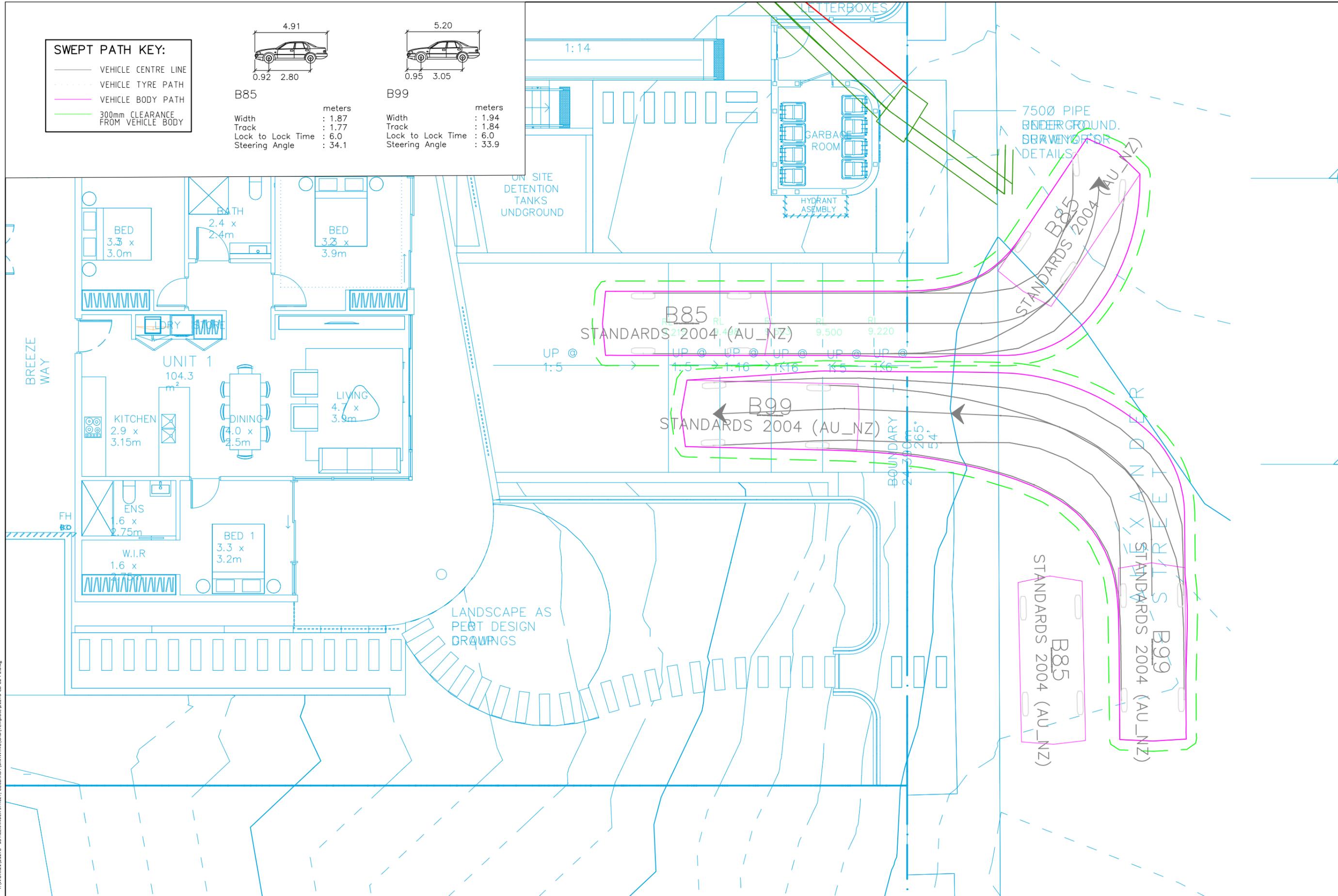
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- 300mm CLEARANCE FROM VEHICLE BODY



B85		B99	
meters		meters	
Width	: 1.87	Width	: 1.94
Track	: 1.77	Track	: 1.84
Lock to Lock Time	: 6.0	Lock to Lock Time	: 6.0
Steering Angle	: 34.1	Steering Angle	: 33.9



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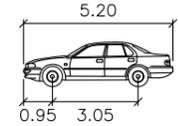
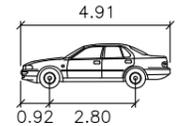


**PRELIMINARY PLAN**  
 FOR DISCUSSION PURPOSES  
 ONLY SUBJECT TO CHANGE  
 WITHOUT NOTIFICATION

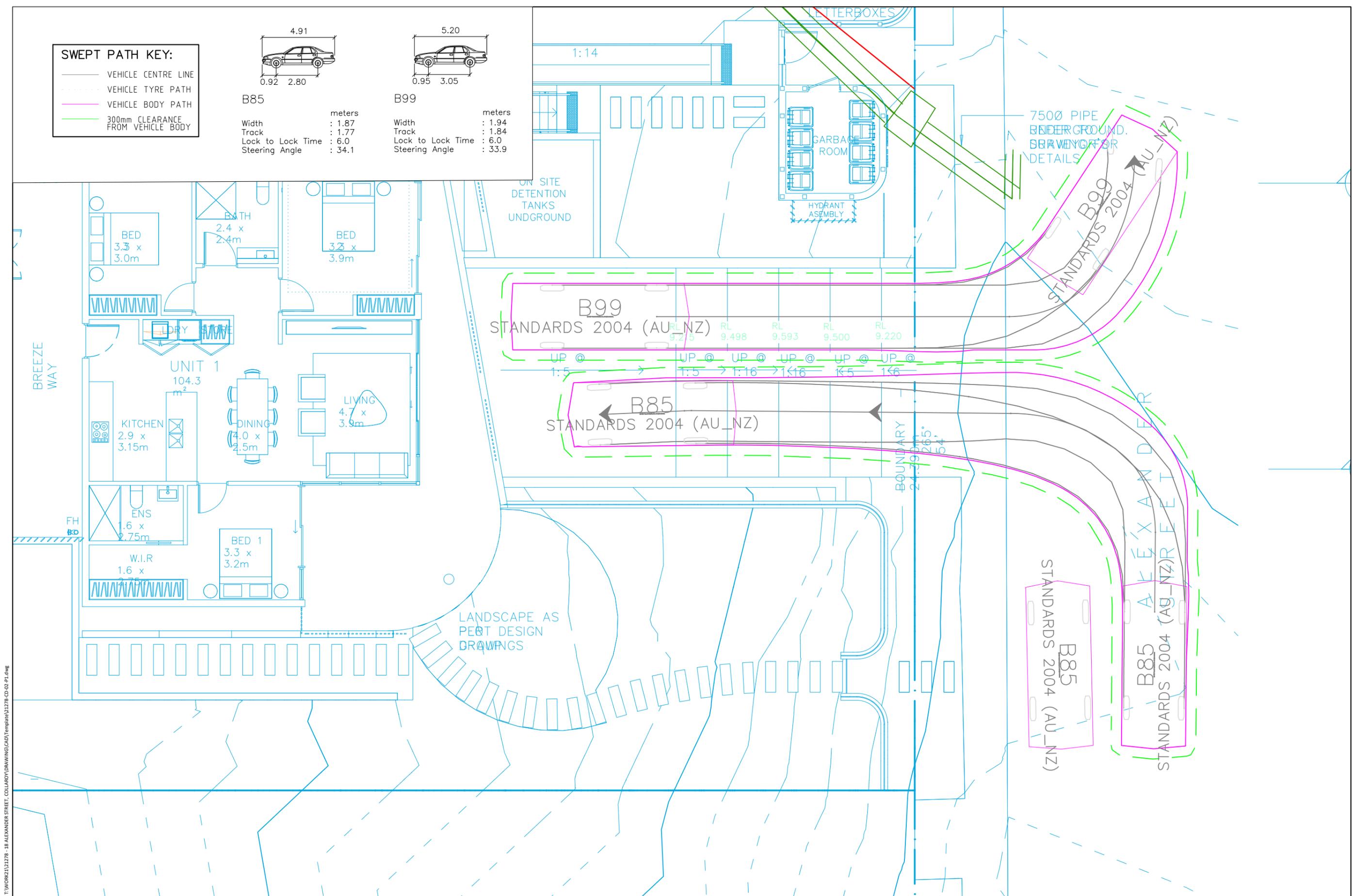
**WARNING**  
 THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY.  
 THE EXACT LOCATIONS SHALL BE PROVIDED ON SITE.  
 ALL EXISTING SERVICES SHOWN ARE NOT GUARANTEED.

**SWEPT PATH KEY:**

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



Parameter	B85 (meters)	B99 (meters)
Width	: 1.87	: 1.94
Track	: 1.77	: 1.84
Lock to Lock Time	: 6.0	: 6.0
Steering Angle	: 34.1	: 33.9



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**PRELIMINARY PLAN**  
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**WARNING**  
 THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY.  
 THE EXACT LOCATIONS SHALL BE PROVIDED ON SITE.  
 ALERTING SERVICES SHOULD NOT BE GUARANTEED.