Genesis Traffic

Traffic Impact Assessment

27 Brown Street, Forestville

Proposed Multi-Dwelling Housing Development

25270

Prepared for

Ben Nazeem

29 October 2025

Contact Information

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Document Information

Report	Traffic Impact Assessment
Client	Ben Nazeem
Proposal	Proposed Multi-Dwelling Housing Development
Architect	Walsh Architects
Project Location	27 Brown Street, Forestville
Council	Northern Beaches Council
Job Number	25270
Date	29/10/2025

Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
1	27/10/2025	Draft	LM, JP	BL
2	29/10/2025	For Issue	BB	BL

Contents

Attachments

Tables

Figures

1 Introduction

1.1 Background

This report has been prepared to accompany a Development Application to Northern Beaches Council for a Proposed Multi-Dwelling Housing Development at 27 Brown Street, Forestville (Figure 1-1).

Figure 1-1 Site

Source: Mecone (Modified by Genesis Traffic)

1.2 Scope of Works

The purpose of this report is to:

- describe the proposed development scheme
- describe the existing site, road network serving the site and the prevailing traffic conditions
- assess the adequacy of the proposed parking provision
- assess the potential traffic implications
- assess the suitability of the proposed vehicle access, internal circulation and servicing arrangements

1.3 Reference Documents

Reference has been made to the following documents when preparing this report:

- Australian Standard Part 1: Off-street Car Parking (AS2890.1:2004)
- Development Control Plan (Northern Beaches Council)
- Guide to Transport Impact Assessment, NSW Government, 2024
- State Environmental Planning Policy (Housing) 2021, NSW

2 Proposed Development

The proposal (Figure 2-1) seeks consent for a development outcome that involves:

- 4 x three-bedroom townhouse units
- At-grade garaged parking spaces – 4 car spaces

Vehicle access will be provided at the Brown Street frontage.

Figure 2-1 Development Plan

Source: Walsh Architects

Details of the proposal are indicated in the architectural plans prepared by Walsh Architects which accompany the submission and are reproduced in part in **Attachment 1**.

3 Existing Conditions

3.1 Site and Surrounding Context

The development site (Figure 3-1) is legally known as Lot 35 in DP 27447, located at 27 Brown Street, Forestville. The site occupies an area of 859m² and has frontage to Brown Street.

Figure 3-1 Site Context

Source: Metromap and Google Map (Modified by Genesis Traffic)

The site is occupied by a single residential dwelling at present (see inset above), with a vehicle access point located along the Brown Street frontage immediately opposite Bentley Avenue.

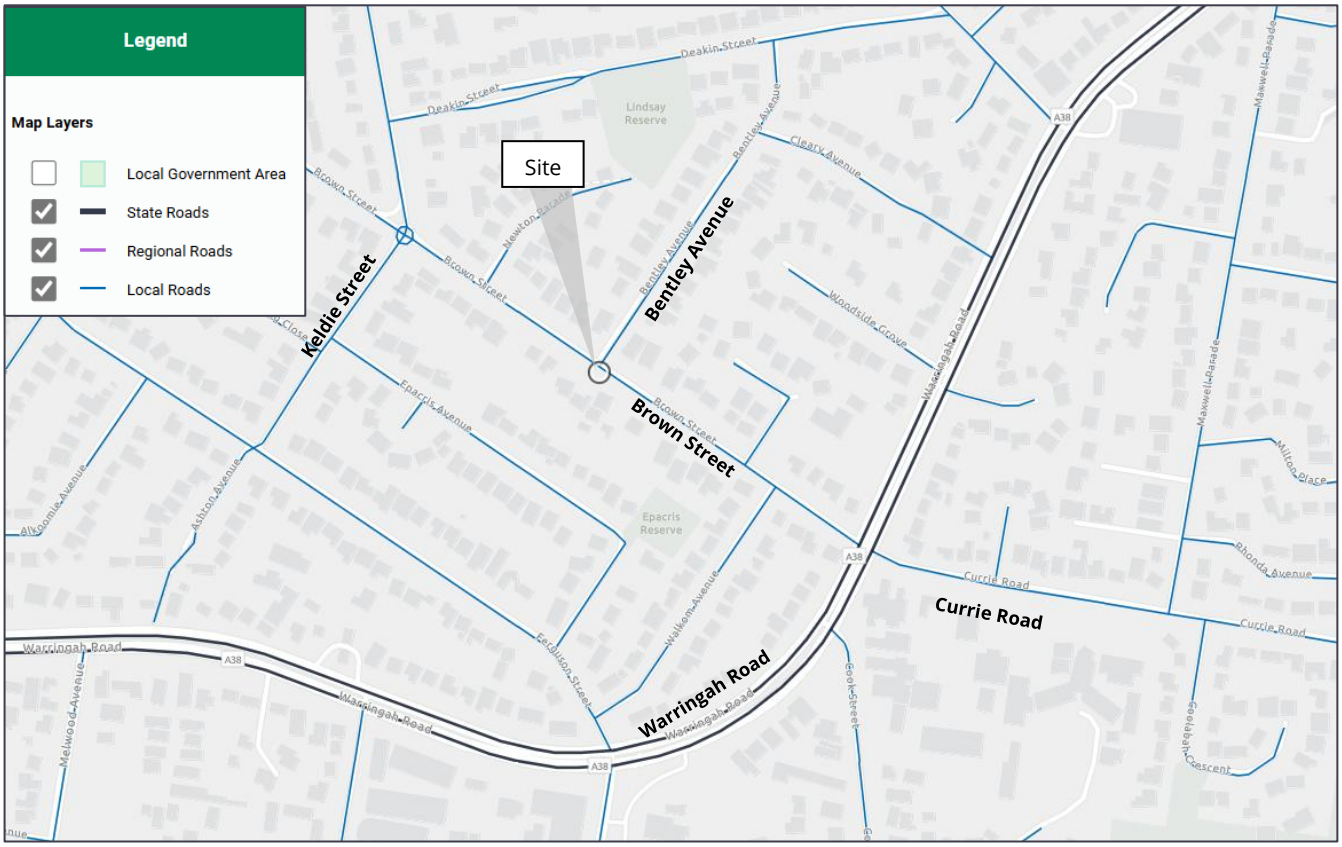
The adjoining and surrounding land uses include:

- Surrounding plots are largely comprised of single residential dwellings
- The Centre shopping mall to the south (~450m)
- Forestville Public School to the southwest (~400m)
- Northern Beaches hospital to the northeast (~1.5km)

3.2 Road Network

The existing road network serving the site area (Figure 3-2) are detailed in Table 3-1:

Figure 3-2 Road Network



Source: TfNSW (modified by Genesis Traffic)

Table 3-1 Surrounding Road Network

Road Name	Description
Warringah Road	· State Road · Speed limit 70 km/h · 3 lanes in each direction · Clearway restriction between 6am - 7pm Monday to Friday along both sides of the street
Brown Street	· Local Road · Speed limit 40 km/h · 1 lane in each direction · Unrestricted on-street parking along both sides of the street
Bentley Avenue	· Local Road

	· Speed limit 40 km/h · 1 lane in each direction · Unrestricted on-street parking along both sides of the street
Currie Road	· Local Road · Speed limit 50 km/h · 1 lane in each direction · Generally unrestricted on-street parking along the north side of the street · No Parking restrictions along the south side of the street during school pick-up and drop-off hours (8am – 9.30am, 2.30pm – 4pm), otherwise largely unrestricted on-street parking
Keldie Street	· Local Road · Speed limit 40 km/h · 1 lane in each direction · Unrestricted on-street parking along both sides of the street

3.3 Traffic Controls

The traffic controls on the road system in the vicinity of the site are detailed in Table 3-2:

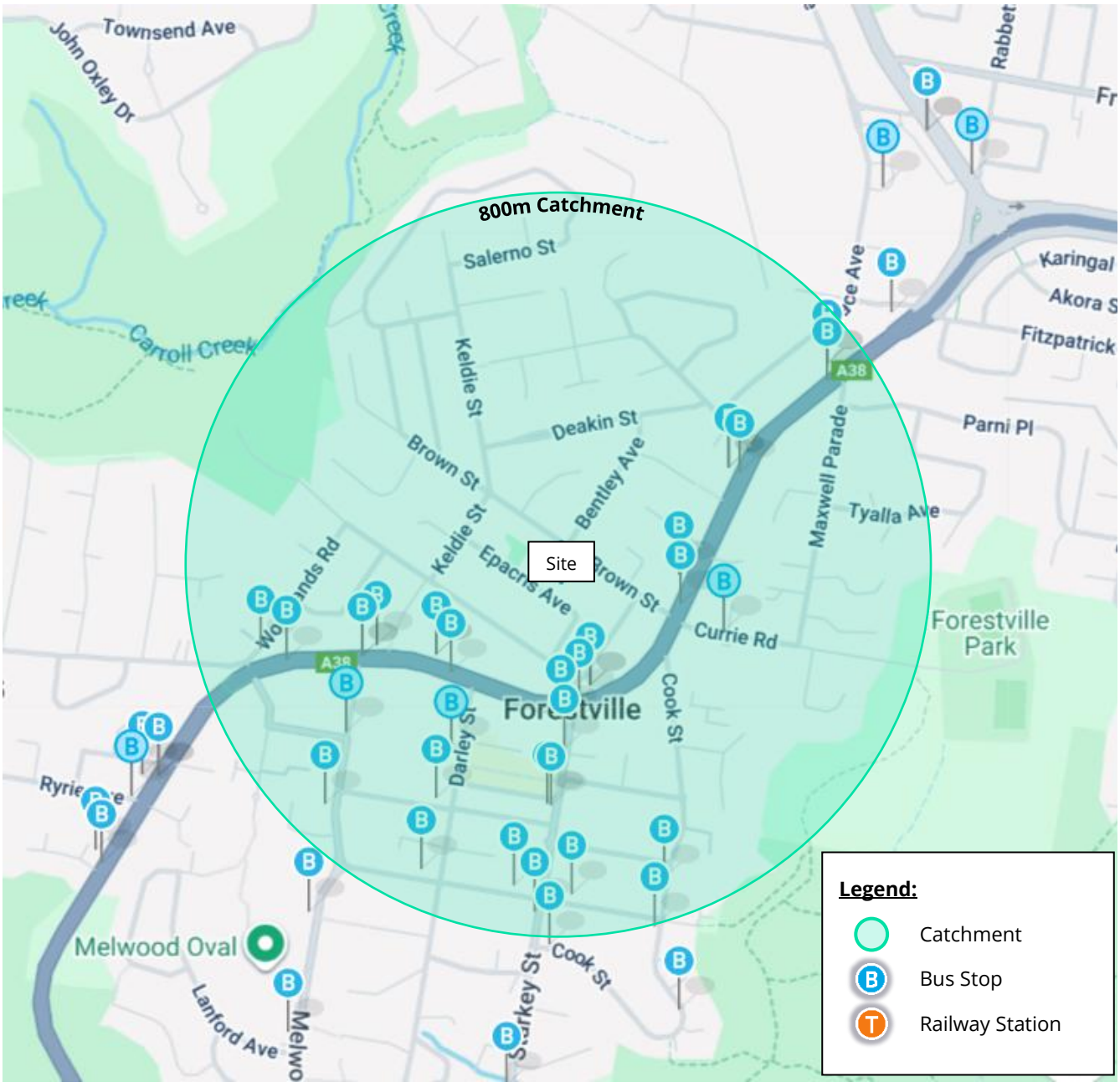
Table 3-2 Surrounding Traffic Controls

Traffic Control	Location
Traffic Signal	· Intersection of: o Warringah Road, Brown Street and Currie Road
Roundabout	· Intersection(s) of: o Brown Street and Keldie Street
Give-way / Stop Control	· Intersection of: o Brown Street and Bentley Avenue
No Right Turn	· From Warringah Road to Brown Street
School Zone	· Along parts of o Currie Road, Warringah Road and Brown Street
Pedestrian Crossing	· Along part of o Currie Road

3.4 Public Transport Services

The local public transport services are illustrated in Figure 3-3.

Figure 3-3 Local Public Transport Locations



Source: Google Map (Modified by Genesis Traffic)

Train/Metro

No train station is available within the vicinity of the site. Nevertheless, there are ample bus services that provide connections to the surrounding nearest train services such as Chatswood Train Station. This train

station provides T1 (North Shore & Western Line), T9 (Northern Line), CCN (Central Coast & Newcastle Line) and M1 (Metro North West & Bankstown Line) services.

Bus

Local bus services are within walking distance of the site. The nearest bus stop is located 150m from the site on Warringah Road. Table 3-3 outlines these bus services.

Table 3-3 Bus Services Provision

Bus Line	Bus Route	Peak Frequency
260	Terrey Hills to North Sydney	2 trips per hour
270	Terrey Hills to City QVB	4 trips per hour
271	Belrose to City QVB	2 trips per hour
274	City QVB to Davidson via Frenchs Forest	2 trips per hour
279	Chatswood to Frenchs Forest (Loop Service)	2-3 trips per hour
280	Warringah Mall to Chatswood	3 trips per hour
281	Chatswood to Davidson (Loop Service)	4 trips per hour
283	Chatswood to Belrose (Loop Service)	4 trips per hour
284	Duffys Forest to Terrey Hills & Chatswood	1 trip per hour

4 Parking Assessment

4.1 Car Parking Requirement

SEPP Housing 2021 provides the relevant car parking criteria for Low and Mid Rise Housing developments. Reference is made to the following non-discretionary development standards:

Chapter 6, Part 3, Section 172(2)

> *(2) The following non-discretionary development standards apply in relation to development for the purposes of multi dwelling housing—*
>
> *(a) a minimum lot size of 600m^2,*
>
> *(b) a minimum lot width at the front building line of 12m,*
>
> *(c) if no environmental planning instrument or development control plan that applies to the land specifies a maximum number of car parking spaces per dwelling—a minimum of 1 car parking space per dwelling,*
>
> *(d) a maximum floor space ratio of 0.7:1,*
>
> *(e) a maximum building height of 9.5m.*

The Warringah DCP does not specify a maximum parking rate, therefore, Part (c) applies in the context of this development. Having regard to the above, the proposal of 4 dwellings indicates a minimum requirement of 4 car spaces. The provision of 4 garaged car spaces complies with the above requirements.

4.2 Loading and Servicing Requirement & Arrangement

The development waste will be collected on-street along the Brown Street frontage by Council's waste team. Other infrequent loading and servicing needs will also be satisfied by the ample on-street parking, as is normal for developments of this nature and scale.

5 Access and Circulation Design

5.1 Access

The proposed access driveway will be located at Brown Street.

Details of the access design and geometry are discussed in Section 5.2.

5.2 Design Assessment and Internal Circulation

A detailed review of the car park has been undertaken to assess its conformance with the relevant AS2890 design criteria. The assessment outcome is tabulated below for ease of reference.

Table 5-1 Off-street Car Parking (AS2890.1:2004) Criteria

Features	Requirement	Provision	Compliance	Notes
Access Driveway				
Driveway Width	Min 5.5m	5.7m	Yes	
Sight Triangle (Pedestrian)	2.5m long x 2.0m wide	Provided	Yes	
Grade across Boundary Line	Max 5% (1:20)	<5%	Yes	
Ramp Grade	Max 25% (1:4)	<25%	Yes	
Headroom Clearance	Min 2.2m	>2.2m	Yes	Open
Single Garage				
Internal Dimension	5.4m long x 3.0m wide	5.4m long x 3.2m wide	Yes	
Aisle Width	Min 5.8m	5.8m	Yes	
Door Clearance	300mm	Provided	Yes	
Garage Opening	Min 2.4m	2.8m – 3.0m	Yes	
Height Clearance	Min 2.2m	>2.2m	Yes	
Gradient	Max 5% (1:20)	Level	Yes	

In summary, the assessment confirms that the design provisions in relation to the access, car parking circulation and arrangement in respect to the proposal generally comply with the AS2890 design criteria.

5.3 Swept Path Analysis

All critical vehicle movements in the proposed car parking facility have been assessed using Autoturn. Details of the assessment outcome, which demonstrate a satisfactory design provision, are provided in **Attachment 2**.

6 Traffic Assessment

6.1 Existing Traffic Condition

Observations in the site's locality reveal minor delays on Brown Street during peak periods due to its proximity to the Warringah Road traffic control signal. Notwithstanding, there is no apparent capacity constraint on Brown Street.

6.2 Existing Traffic Generation

The Guide to Transport Impact Assessment (2024) provides average weekday peak hour traffic generation rates for low-density residential dwellings in Sydney areas, as follows:

Sydney Area (Weekday)

- 0.68 vehicle trips per hour (vtph) per unit during the AM peak hour
- 0.77 vehicle trips per hour (vtph) per unit during the PM peak hour

Applying these rates to the existing single residential dwelling would result in a traffic generation outcome of 1 vtph.

6.3 Development Traffic Generation

The Guide to Transport Impact Assessment (2024) specifies average peak hour traffic generation rates for low-density residential development in Sydney areas, as follows:

Sydney Area

- 0.68 vehicle trips per hour (vtph) per unit during the AM peak hour
- 0.77 vehicle trips per hour (vtph) per unit during the PM peak hour

Based on the above, the proposed 4 residential units would generate 3 vtph during both the AM and PM peak periods.

6.4 Overall Traffic Generation and Distribution

Having regard to the above, the additional traffic generation outcome is calculated as follows:

Additional Traffic Generation = Development Traffic Generation – Existing Traffic Generation

= 3 vtph – 1 vtph

= 2 vtph

Based on the above, the proposal will likely result in the addition of 2 vehicle movements per hour during the peak periods. Traffic generation of this order of magnitude will not be perceptible in this context of the existing road network. It is concluded on this basis that the development traffic will not unduly impact the surrounding road network.

7 Conclusion

The traffic and parking assessment undertaken for the Proposed Multi-Dwelling Housing Development at 27 Brown Street, Forestville has concluded that:

- the traffic generation of the proposed development will not present any adverse traffic implications
- the proposed parking provision will comply with the Council's DCP criteria and will adequately serve the development
- the proposed access, internal circulation and parking arrangements will be consistent with the relevant AS design criteria

Attachment 1

Architectural Plans

WALSH ARCHITECTS

T4, 5 Geelong Street,
Fyshwick ACT 2609

E: scott@walsharchitects.com.au
P: 0466 049 880

Nominated Architect : Scott Walsh
ACT 2624

REV NO.	DESCRIPTION	REV DATE
3	FOR PRE DA	03.07.25
4	FOR INFORMATION	04.08.2025
5	FOR INFORMATION	12.08.2025
6	FOR DA	27.10.2025

GROUND FLOOR PLAN

SHEET NUMBER	DA101
REVISION	6
SCALE @ A1	1 : 100

Attachment 2

Turning Path Assessment

Genesis Traffic

PROJECT

27 BROWN STREET, FORESTVILLE

TITLE

COMPLIANCE CHECK

GROUND LEVEL

SCALE A3 1:200

0 2.0 4.0

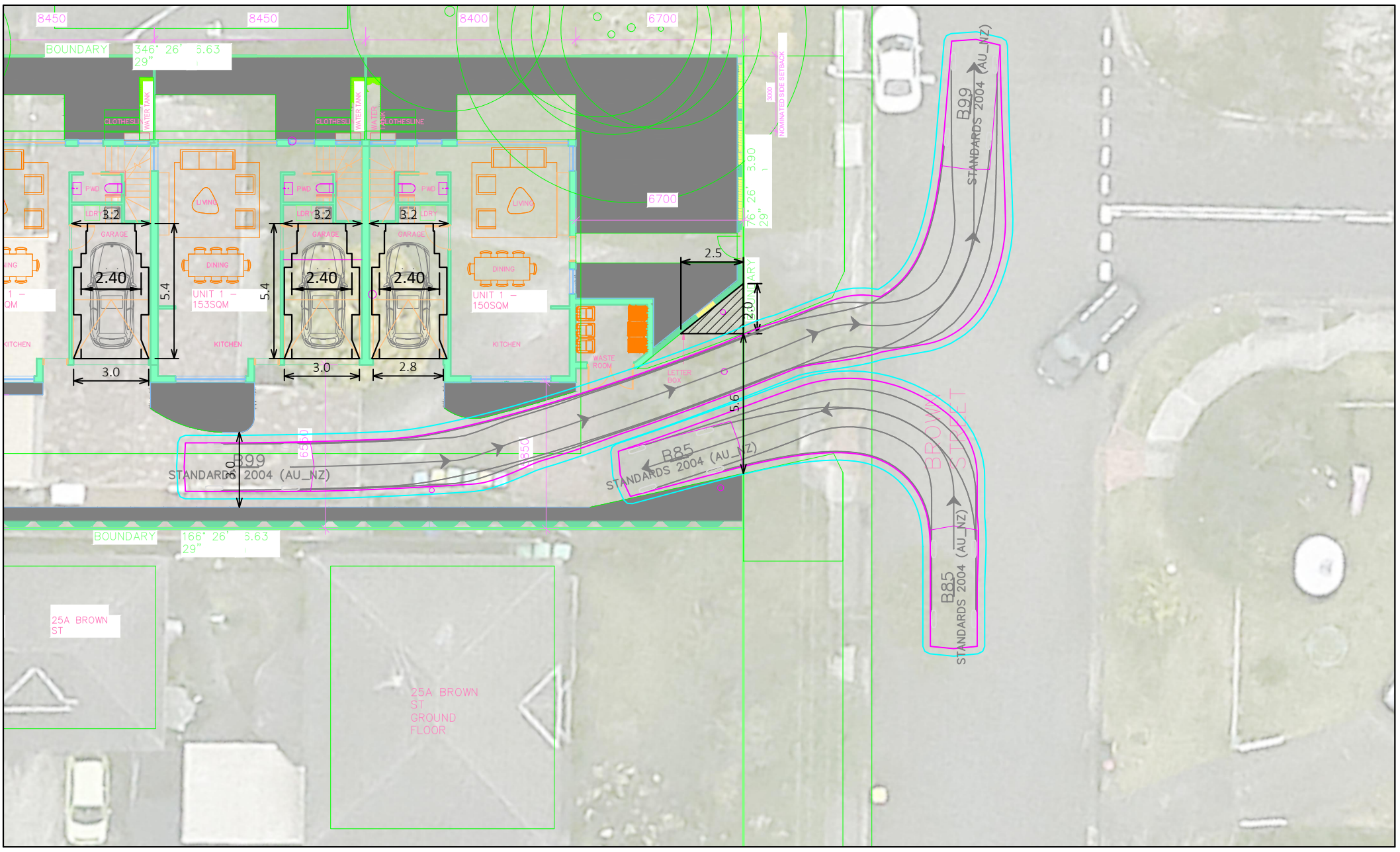
DESIGNED BY	REVIEWED BY
J.PHAM	B.BUI

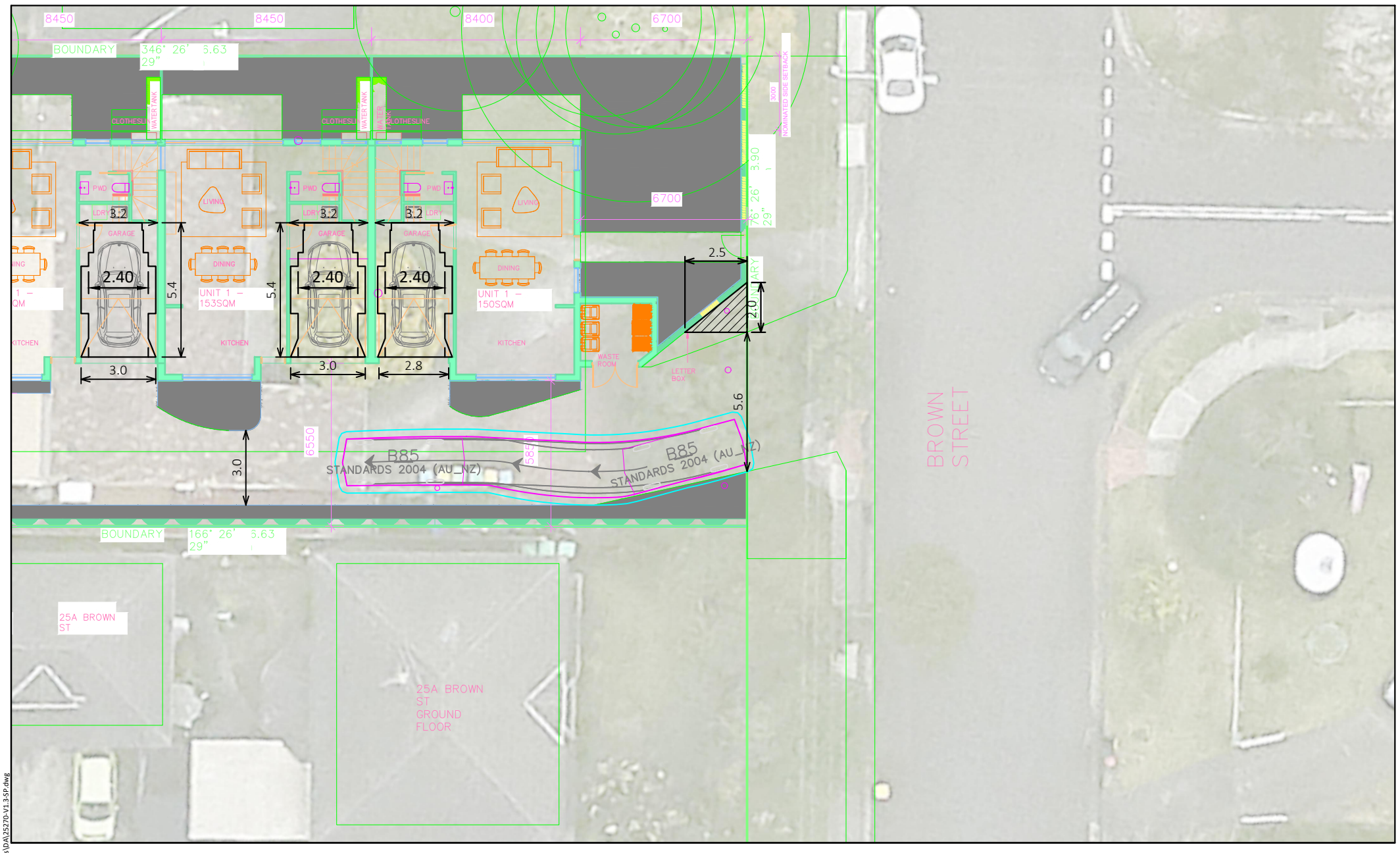
DRAWING REFERENCE (SOURCE):
G:\2025\25270 - 27 BROWN STREET, FORESTVILLE\DRAWINGS\DA\20251027

ISSUE DATE	27 October 2025
SHEET NO.	01 OF 04
DRAWING REF NO.	25270-V1.3-SP

LEGENDS/NOTES

- MAXIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m
- MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION AISLES AND PARKING SPACES
- MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE ACCESSIBLE PARKING SPACES
- MINIMUM HEIGHT CLEARANCE OF 4.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE SERVICE VEHICLE ACCESS ROADWAYS AND LOADING DOCKS
- HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 AS2890.1:2004
- ANY VERTICAL DROPS EXCEEDING 0.6m IN HEIGHT SHOULD BE PROTECTED BY STRUCTURAL WALL/BARRIER





SWEPT PATH ASSESSMENT

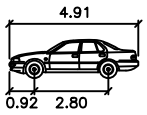
B85 & B99 PASSING PROVISION

GROUND LEVEL

SHEET NO. 02 OF 04 ISSUE DATE 27 October 2025

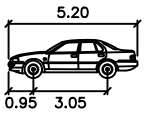
LEGENDS/NOTES

SWEPT PATH KEY:
- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B85

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



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

Genesis Traffic

PROJECT
27 BROWN STREET, FORESTVILLE

DRAWING REFERENCE (SOURCE):
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DRAWING REFENCE NO. 25270-V1.3-SP

SCALE A3 0 2.0 4.0 1:200

DESIGNED BY J.PHAM

REVIEWED BY B.BUI

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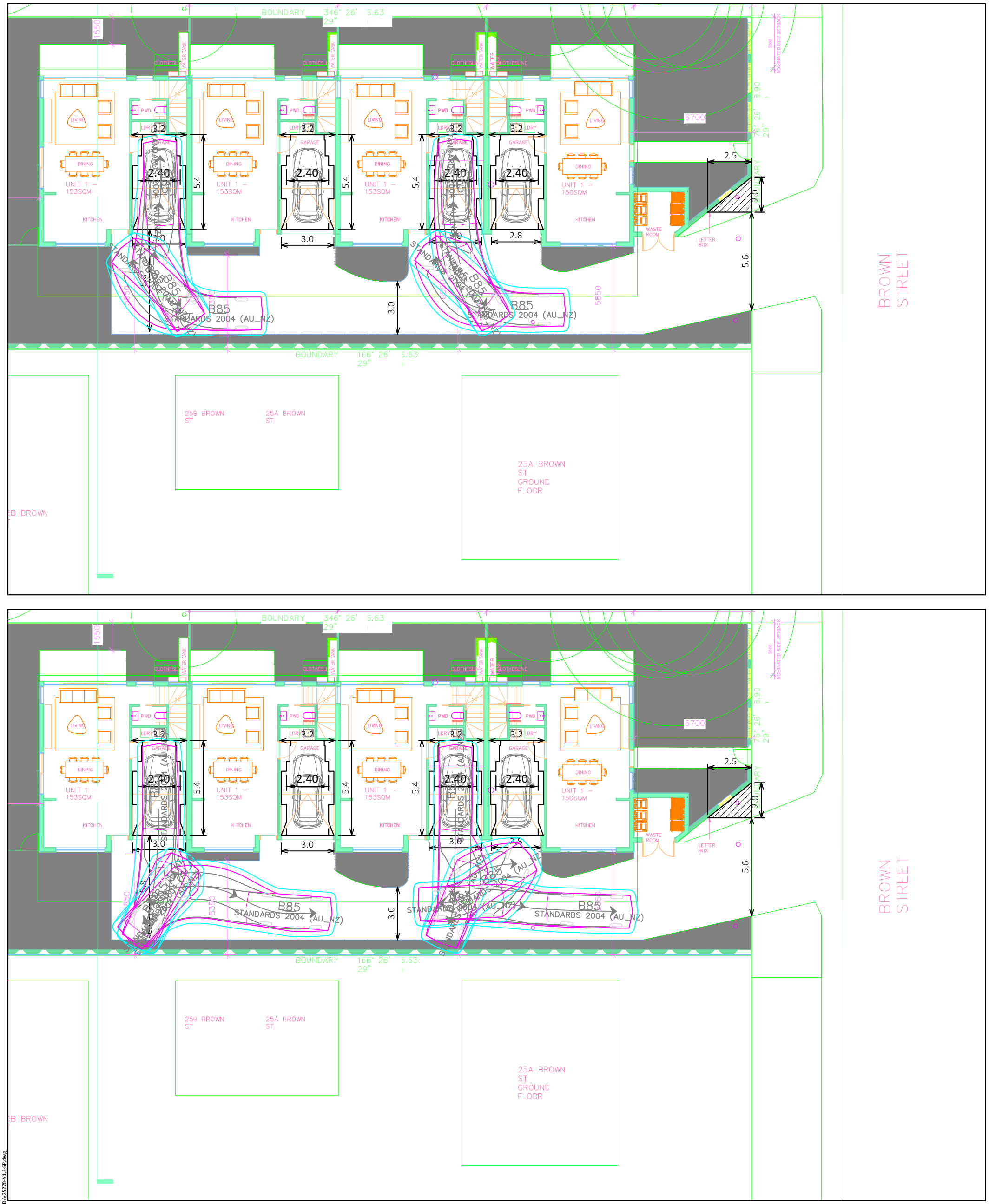
Plotted by Brian Bui



SWEPT PATH ASSESSMENT

B85 PARKING (FORWARD IN, REVERSE OUT)

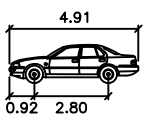
GROUND LEVEL

SHEET NO. 03 OF 04 ISSUE DATE 27 October 2025

LEGENDS/NOTES

SWEPT PATH KEY:

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



B85

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

Genesis Traffic

PROJECT

27 BROWN STREET, FORESTVILLE

DRAWING REFERENCE (SOURCE):
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DRAWING REFENCE NO. 25270-V1.3-SP

SCALE A3 1:200

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REVIEWED BY B.BUI

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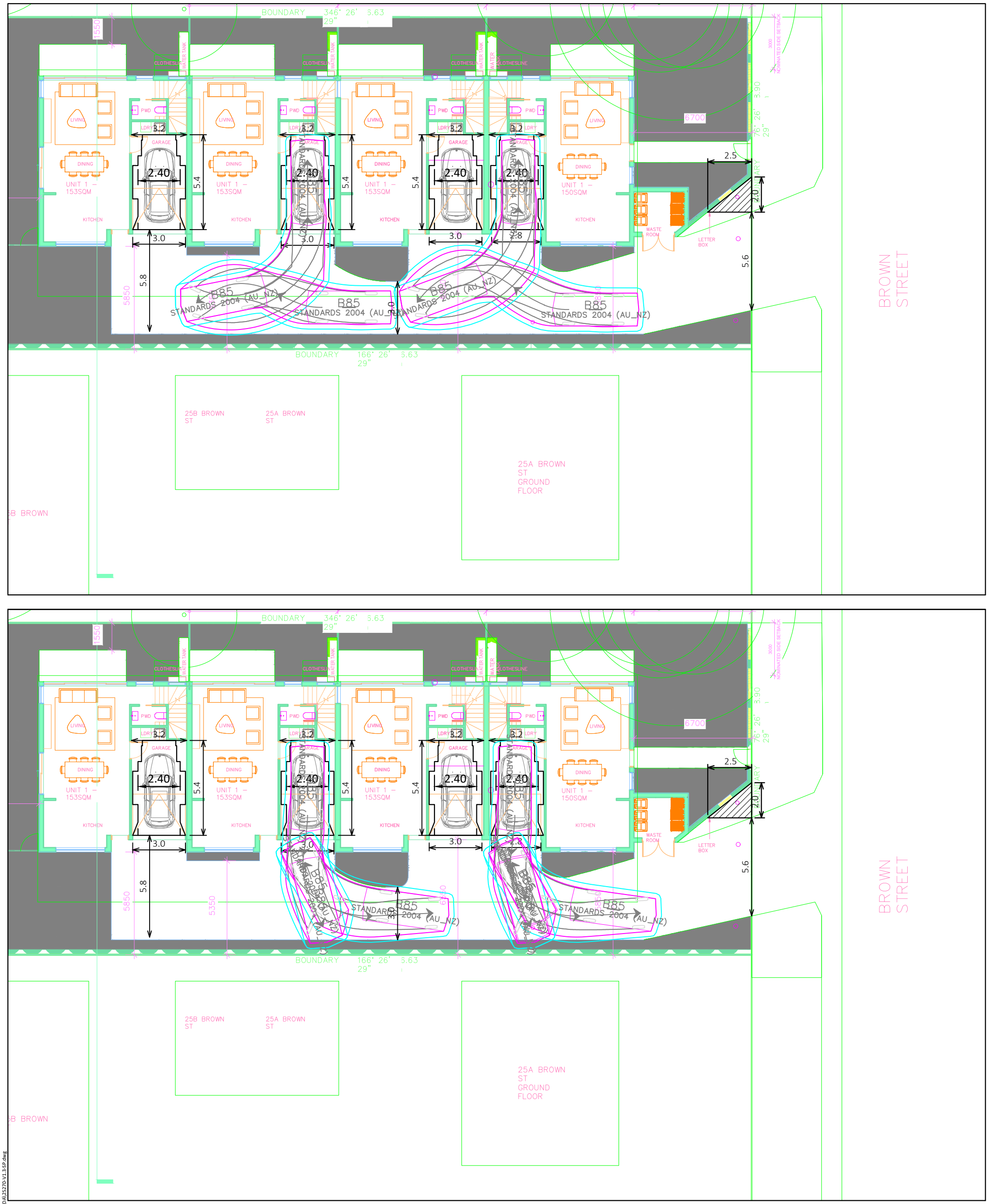
Plotted by Brian Bui



SWEPT PATH ASSESSMENT

B85 PARKING (FORWARD IN, REVERSE OUT)

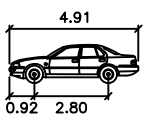
GROUND LEVEL

SHEET NO. 04 OF 04 ISSUE DATE 27 October 2025

LEGENDS/NOTES

SWEPT PATH KEY:

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



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Plotted by Brian Bui