TRAFFIX
TRAFFIC AND TRANSPORT PLANNERS

TRAFFIC IMPACT ASSESSMENT (TIA)

Proposed Seniors Housing Development
10-16 Birdwood Avenue, Cabramatta West

Reference: 23.458r01v03
Date: January 2025

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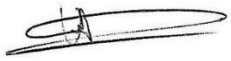
DOCUMENT VERIFICATION

Job Number	23.458			
Project	10-16 Birdwood Avenue, Cabramatta West			
Client	McGregor Westlake Architecture			
Revision	Date	Prepared By	Checked By	Signed
v03	13/01/2025	Tom Mojsiejuk	Vince Doan	

TRAFFIX

CONTENTS

1. INTRODUCTION

TRAFFIX has been commissioned by McGregor Westlake Architecture to undertake a Traffic Impact Assessment (TIA) in support of a development application (DA) relating to a seniors housing development at 10-16 Birdwood Avenue, Cabramatta West. The development is located within Fairfield Local Government Area (LGA) and has been assessed under that Council's controls as well as the requirements under *State Environmental Planning Policy (Housing) 2021*.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects prepared separately. The proposed development is considered minor and as such, will not require referral to Transport for NSW (TfNSW – formally RMS) under the provisions of State Environmental Planning Policy (Transport and Infrastructure) 2021.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Discusses access and internal design aspects
- Section 8: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site at 10-16 Birdwood Avenue is located approximately 28 kilometres southwest of Sydney central business district (CBD). More specifically, it is located on the southern side of Birdwood Avenue and adjacent to the intersection of Birdwood Avenue and Moonshine Avenue.

The site is quadrilateral in configuration and has a total site area of 2,320.7m^2. It has a northern frontage of 62.485 metres to Birdwood Avenue and a southern boundary of 61.95 metres to a residential property. The eastern boundary measures 33.53 metres and the western boundary of 41.685 metres are shared with neighbouring residential developments.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**.

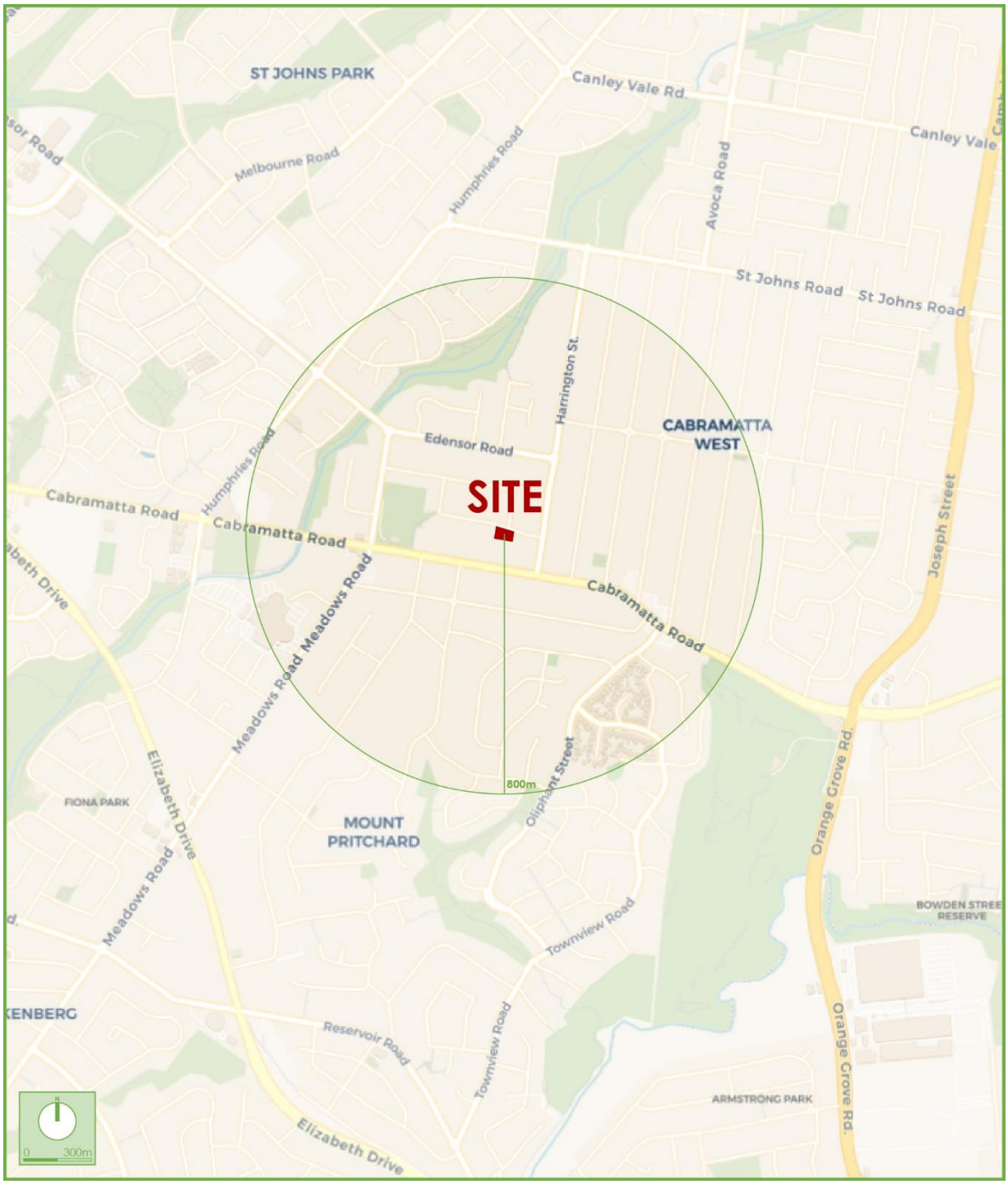


Figure 1: Location Plan

Figure 2: Site Plan

3. EXISTING TRAFFIC CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- Cabramatta Road West: a TfNSW Main Road (MR 534) that traverses in an east-west direction between Cabramatta Road E in the east and Elizabeth Drive in the west. Within the vicinity of the site, Cabramatta Road is subject to 60km/hr and accommodates two (2) lanes of traffic in each direction. Cabramatta Road does permit on-street parking with various restrictions, which can limit traffic to one (1) lane in each direction outside of clearway restrictions.
- Harrington Street: a local road that traverses in a north-south direction between St Johns Road in the north and Cabramatta Road W in the south. Within the vicinity of the site, it is subject to a 50 km/h speed zoning and generally accommodates a single lane of traffic in each direction. Harrington Street generally permits unrestricted on-street parking along both sides of the road.
- Birdwood Avenue: a local road that traverses between Moonshine Avenue in the north-west and Harrington Street in the east. Within the vicinity of the site, it is subject to a 50 km/h speed zoning and generally accommodates a single lane of traffic in each direction. Birdwood Avenue generally permits unrestricted on-street parking along both sides of the road.
- Moonshine Avenue: a local road that traverses in an east-west-south direction between Meadows Road in the west and Birdwood Avenue in the south. Within the vicinity of the site, it is subject to a 50 km/h speed zoning and generally accommodates a single lane of traffic in each direction. Moonshine Avenue generally permits unrestricted on-street parking along both sides of the road.

It can be seen from **Figure 3** that the site is conveniently located with respect to the arterial and local road systems serving the region. It is therefore able to effectively distribute traffic onto the wider road network.

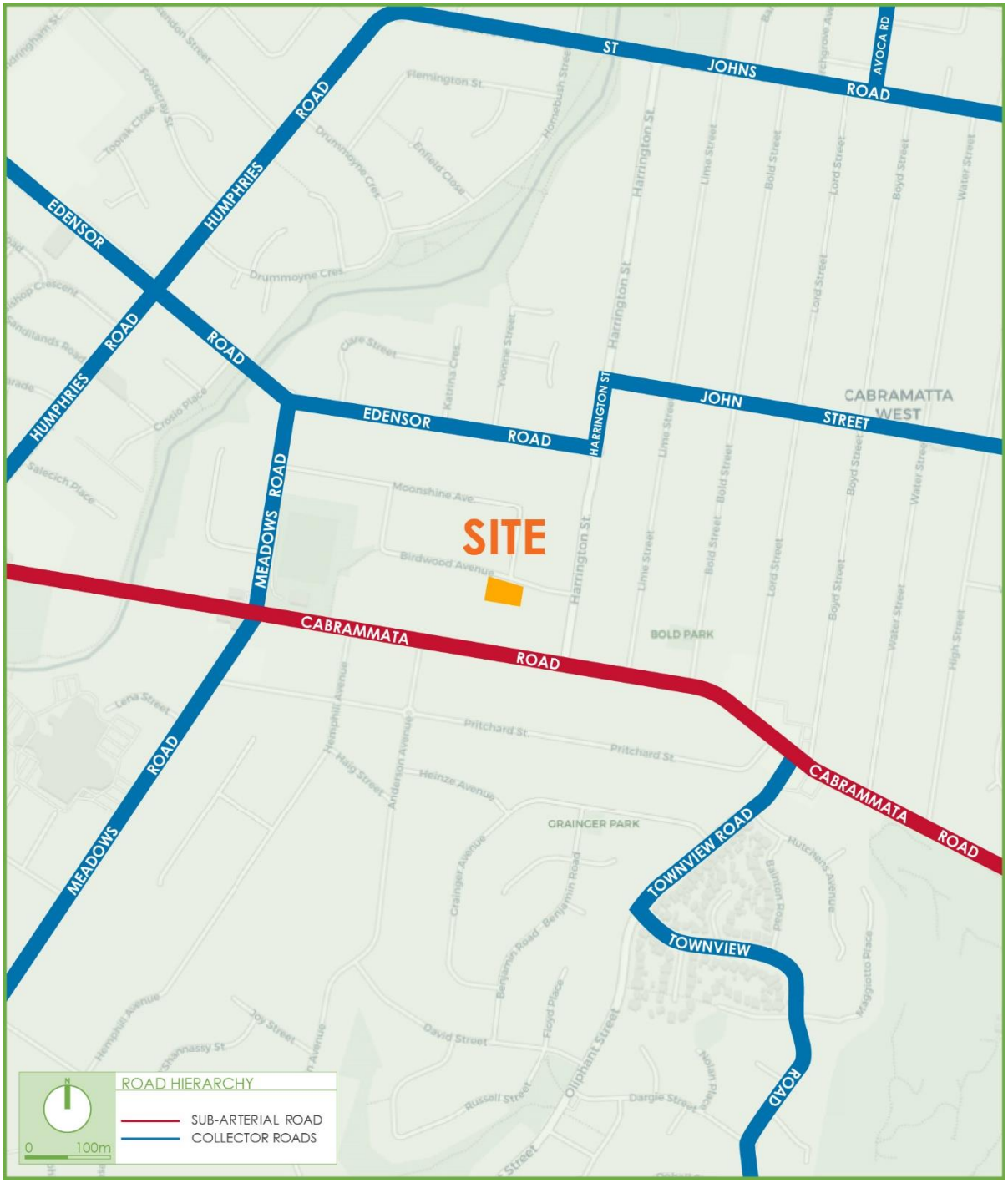


Figure 3: Road Hierarchy

3.2 Public Transport

The subject site is within optimal walking distance (400 metres) of several bus services operating in the locality. These bus services are presented in **Figure 4** and are summarised as follows:

- 801 – Badgerys Creek to Liverpool
- 807 – Cecil Hills to Cabramatta
- 808 – Liverpool to Fairfield
- 815 – Cabramatta to Mount Pritchard (Loop Service)
- 816 – Cabramatta to Greenfield Park (Loop Service)

Table 1: Bus Frequencies

Bus No.	Mondays to Fridays	Saturday	Sunday and Public Holidays
801	Limited to 3 services	Limited to 3 services	Limited to 3 services
807	Every 30 minutes	Every 30 minutes	Every 30 minutes
808	Every 30 minutes	Every 30 during peak and every 1 hour outside of peak	Every 1 hour
815	Every 30 during peak and every 1 hour outside of peak	Every 1 hour	Every 1 hour
816	Every 30 during peak and every 1 hour outside of peak	Every 1 hour	Every 1 hour

More information concerning all bus and train service information can be found on the Transport for NSW Info website: https://www.transportnsw.info.

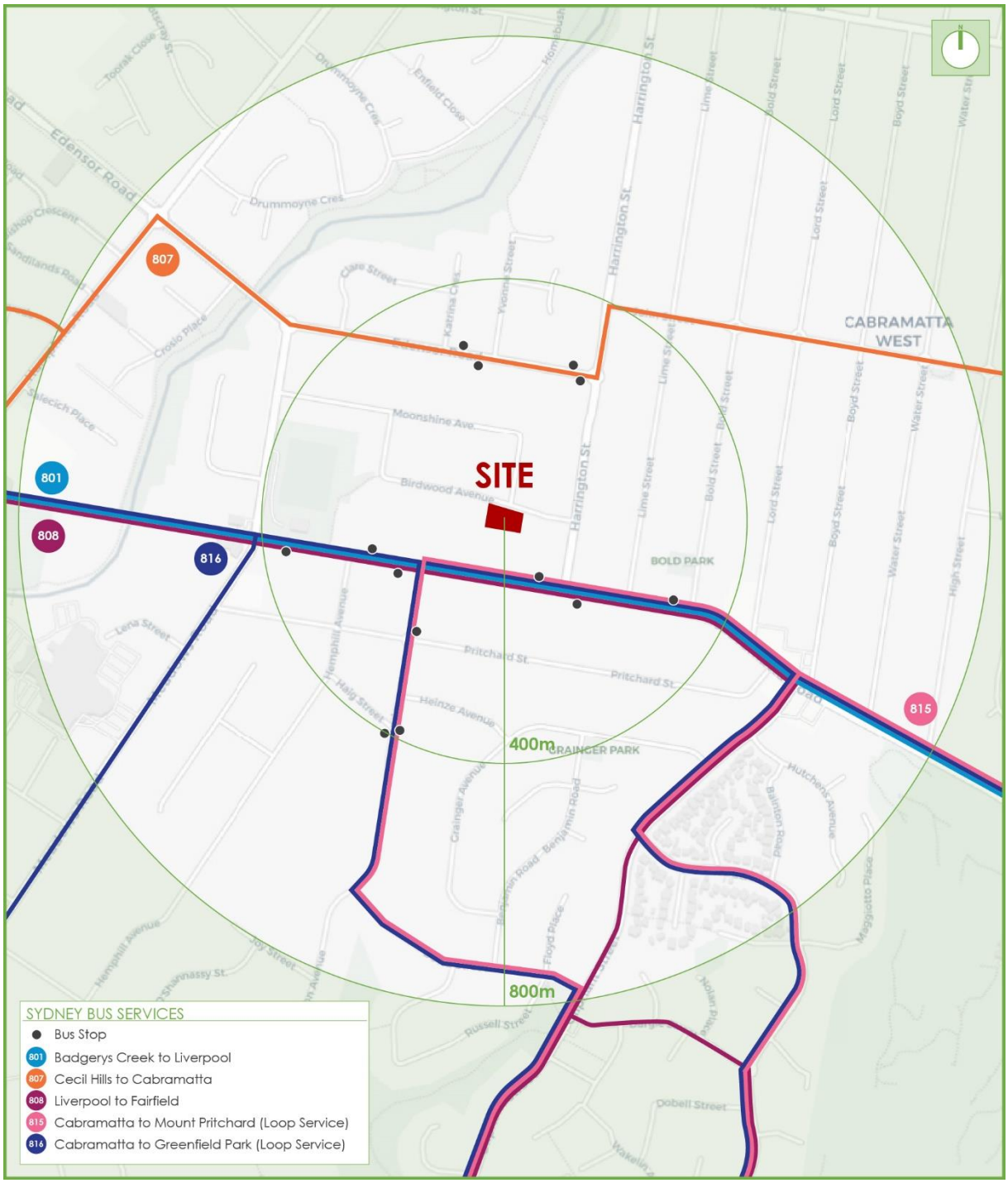


Figure 4: Public Transport

4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the Statement of Environmental Effects, prepared separately. In summary, a Development Application seeks the construction of seniors self-contained Independent Living Units (ILU's) in the following configuration:

- Demolition of existing residential dwellings.
- Construction of 18 x ILU's comprising:
  - 10 x one-bedroom units;
  - 8 x two-bedroom units.
- Provision for a total of eight (8) car parking spaces within the at-grade carpark, including:
  - 4 x accessible parking spaces; and
  - 4 x standard parking spaces for visitors.

The parking requirements and traffic impacts arising from the proposed development are discussed in **Section 5** and **Section 6**, respectively. Reference should be made to the architectural ground floor plan prepared by McGregor Westlake Architecture, which is presented at a reduced scale in **Appendix A**.

5. PARKING REQUIREMENTS

5.1 Car Parking

5.1.1 Overview

The subject development comprises Independent Living Units for Seniors. The *Fairfield Citywide Development Control Plan (DCP) 2013* requires parking for Seniors Housing Units to be provided in accordance with the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*. *As that SEPP superseded* the proposed development has been assessed in accordance with the *State Environmental Planning Policy (Housing) 2021*.

5.1.2 SEPP (Housing) 2021

The SEPP (Housing) 2021, Part 2, Division 6, Clause 42(1)(e) provides the minimum car parking rates for accessible areas, as outlined in **Table 2** below.

Table 1: SEPP Car Parking Rates and Provisions

Type	No. of Dwellings	SEPP Car Parking Rates	Parking Required [1]	Parking Provided
Independent Living Units				
One-bedroom	10	0.4 per dwelling	4	8
Two-bedroom	8	0.5 per dwelling	4	
TOTAL			**8**	**8**

[1] – Rounded to the nearest whole number.

It can be seen from **Table 2** that the proposed development is nominally required to provide eight (8) car parking spaces. In response, the development proposes eight (8) car parking spaces for residents. Therefore, the proposed development complies with the requirements of SEPP Housing 2021.

5.2 Accessible Parking

The SEPP (Housing) 2021, Clause 108(2)(j) at least 1 parking space for each 5 dwellings. These must be provided as accessible spaces to meeting the accessible requirements outlined in the SEPP. Therefore, the proposed development is required to provide a total of four (4) accessible

parking spaces. In response, the development proposes four (4) accessible parking spaces in accordance with the requirements outlined in the SEPP.

5.3 Refuse Collection

It is proposed that all garbage collection be undertaken kerbside on Birdwood Avenue by Council's waste collection vehicle. Garbage bins would be transferred from the waste storage area to Birdwood Avenue kerbside for collection.

6. TRAFFIC AND TRANSPORT IMPACTS

6.1 Existing Site Generation

The subject site is currently occupied by four (4) single dwelling houses. The TfNSW Technical Direction TDT 2013/04a for low density residential dwellings indicates that each dwelling would generate 0.95 and 0.99 peak hour vehicle trips in the morning and evening peak hours, respectively. When applying these rates to the existing developments, with an 80/20 split, the traffic generation is considered to be:

- 4 vehicle trips per hour in the morning peak period (1 in, 3 out); and
- 4 vehicle trips per hour in the evening peak period (3 in, 1 out).

6.2 Development Trip Generation

The TfNSW TDT 2013/04a recommends a senior's housing developments have a peak hour vehicle trip of 0.4 per dwelling during either peak period, noting that the morning peak does not coincide with the network peak hour and as a result accommodates approximately 30% of the evening peak period. Application of this rate to the proposed 18 dwellings, and adopting an 80/20 split resulting in the following;

- 3 vehicle trips per hour during the morning peak period (1 in, 2 out); and
- 8 vehicle trips per hour during the evening peak period (6 in, 2 out).

6.3 Net Traffic Generation

The above traffic generation is not however a net change over existing conditions. When taking into account the existing development, the proposed development is anticipated to result in the following net traffic generation:

- -1 vehicle trips per hour during the morning peak period (0 in, -1 out); and
- +4 vehicle trips per hour during the evening peak period (+3 in, +1 out).

This anticipated net traffic generation would equate to a single additional vehicle every 15 minutes during the evening peak period and a reduction in traffic during the morning peak

period. This net traffic generation is considered minor and would have negligible impacts onto the surrounding road network.

Accordingly, the traffic generation as a result of the development is considered supportable from a traffic planning perspective, with no external changes required to facilitate the development.

7. ACCESS AND INTERNAL DESIGN ASPECTS

7.1 Site Vehicular Access

The proposed development incorporates a total of eight (8) car parking spaces (User Class 1A) with access onto Birdwood Avenue, a local road. It will therefore require a Category 1 access under AS2890.1 (2004), being a 3.0-5.5 metre wide combined entry-egress access. In response, the development proposes a 5.5 metre wide combined entry-egress access, which is sufficient to comply with the requirements of AS2890.1 (2004), hence considered acceptable.

7.2 Internal Design

The at-grade carpark generally complies with the requirements of AS2890.1 (2004) and AS2890.6 (2022), with the following characteristics noteworthy:

- All standard parking spaces have been designed in accordance with AS2890.1 (2004) User Class 1A, being a minimum width of 2.4 metres and length of 5.4 metres.
- All accessible parking spaces have been designed in accordance with AS2890.6 (2009), being a minimum width of 2.4 metres, length of 5.4 metres and provide an adjacent shared zone with the same dimensions.
- All spaces adjacent to obstructions greater than 150mm in height are to be provided with an additional width of 300mm.
- The dead-end aisle is provided with the required 1.0 metre aisle extension in accordance with AS2890.1 (2004), Figure 2.3.
- A minimum head height clearance of 2.2 metres is to be provided for all trafficable areas.
- A minimum head height clearance of 2.5 metres is to be provided for all accessible parking spaces.
- A swept path analysis has been undertaken and provided in **Appendix B**, demonstrating satisfactory vehicle movements of B99 and B85 design vehicles at the vehicular access and a vehicle able to turn around in the aisle in the event that all spaces are occupied.

7.3 Summary

In summary, the internal configuration of the car park has been designed in accordance with AS 2890.1 and AS 2890.6. It is however envisaged that a condition of consent would be imposed requiring compliance with these standards and as such any minor amendments considered necessary (if any) can be dealt with prior to the release of a Construction Certificate.

8. CONCLUSIONS

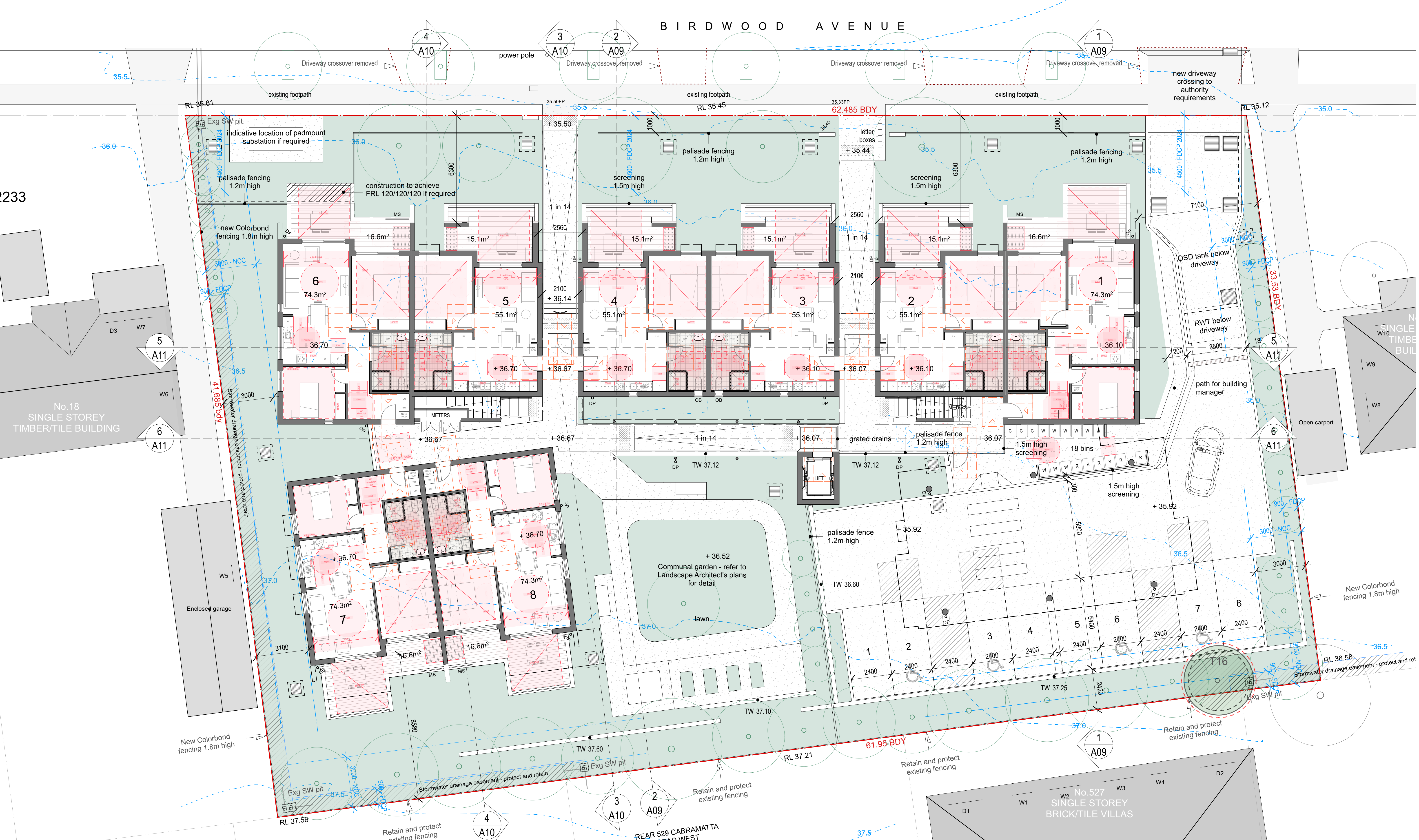
In summary:

- The proposal seeks approval to construct a seniors living development at 10-16 Birdwood Avenue, Cabramatta West, comprising 18 independent living units, and at-grade car parking accommodating eight (8) vehicles.
- The subject site is adequately connected to the public transport network with reliable access to regular bus and rail services. This provides a good opportunity to encourage residents to use sustainable transport modes.
- The proposed development is required to provide a minimum of eight (8) car parking spaces. In response, the development provides eight (8) car parking spaces, including four (4) accessible parking spaces . As such, the proposed development complies with the requirements of SEPP Housing 2021.
- The traffic generation arising from the development has been assessed as a net change over existing conditions and equates to a reduction of one (1) vehicle trips per hour during the morning peak and an increase of a four (3) vehicle trips per hour during the evening peak period. The net traffic impacts of the development are therefore considered non-material in terms of the impact to the surrounding road network.
- The carpark has been assessed to comply with the requirements of AS 2890.1 (2004) and AS2890.6 (2009), thereby ensuring safe and efficient operation.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds.

APPENDIX A

Reduced Plans


BIRDWOOD AVENUE
power pole
Driveway crossover removed
existing footpath
new driveway crossing to authority requirements
RL 35.81
RL 35.45
RL 35.12
62.485 BDY
33.53 BDY
41.685 bdy
61.95 BDY
Exg SW pit
indicative location of padmount substation if required
palisade fencing 1.2m high
construction to achieve FRL 120/120/120 if required
new Colorbond fencing 1.8m high
screening 1.5m high
letter boxes
1 in 14
OSD tank below driveway
RWT below driveway
path for building manager
Open carport
No.18 SINGLE STOREY TIMBER/TILE BUILDING
Enclosed garage
Stormwater drainage easement - protect and retain
METERS
grated drains
palisade fence 1.2m high
1.5m high screening
18 bins
1.5m high screening
LIFT
Communal garden - refer to Landscape Architect's plans for detail
lawn
TW 37.12
TW 36.60
TW 37.25
TW 37.10
TW 37.60
RL 37.21
RL 37.58
RL 36.58
T16
New Colorbond fencing 1.8m high
Retain and protect existing fencing
No.527 SINGLE STOREY BRICK/TILE VILLAS
REAR 529 CABRAMATTA ROAD WEST
REAR 535 CABRAMATTA ROAD WEST
6 74.3m²
5 55.1m²
4 55.1m²
3 55.1m²
2 55.1m²
1 74.3m²
7 74.3m²
8 74.3m²
16.6m²
15.1m²

1 Ground Floor Plan
scale 1:200 at A3

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ISSUE	DATE	REVISION

Comply with relevant Authorities requirements, the Building Code of Australia and all relevant Australian Standards when executing works described in this drawing

Dimensions in millimetres.
Confirm all dimensions on site prior to commencing work.
Use figured dimensions only.
Do not scale.
If discrepancy exists notify architect.
If in doubt ask.

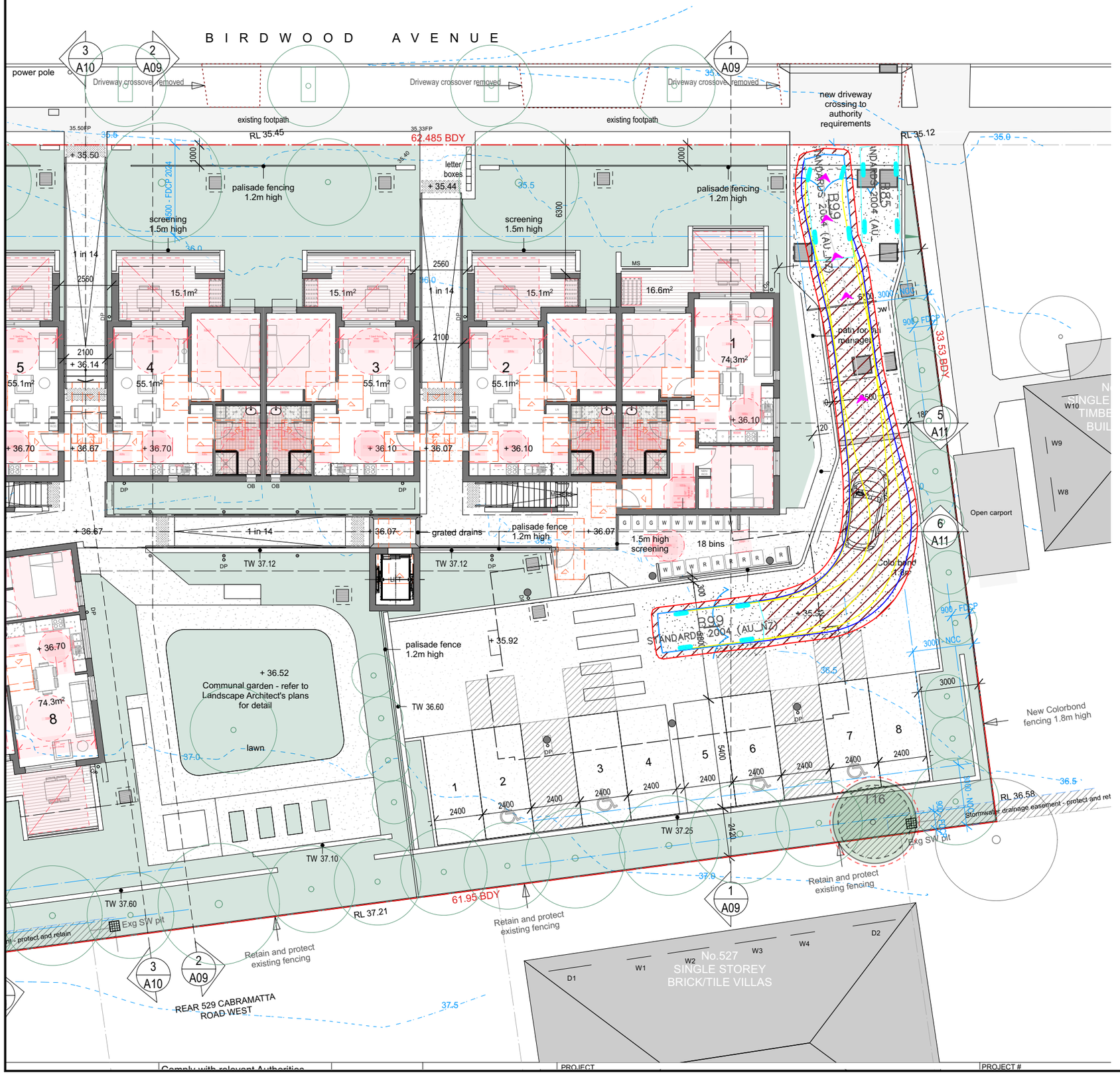
MGA

NSW GOVERNMENT

PROJECT	10-16 Birdwood Avenue, Cabramatta West
PROJECT #	BH2AQ
CLIENT	Homes NSW
LOT & DP	Lots 64, 65, 66 & 67 in DP 32233
DWG #	A04
DWG	Site & Ground floor plan
SCALE @ A3	1:200
DRAWN	DM
CHKD	PM
PLOT DATE	12-Mar-25
REVISION	

APPENDIX B

Swept Path Analysis



Notes:

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards *(AS/NZS 2890.1:2004 Parking facilities - Off-street car parking,* and/or *AS2890.2:2002 Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

Rev.	Revision Note	By.	Date
A	Swept Path Analysis	TM	10-01-25

Swept Path Legend

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

Architect
McGregor Westlake Architecture

Client
Homes NSW

Scale / Plan Orientation
0 2 4 6 8m
1:200 @ A3

Project Description
10-16 Birdwood Avenue, Cabramatta West - Traffic Engineering Services

Drawing Prepared By

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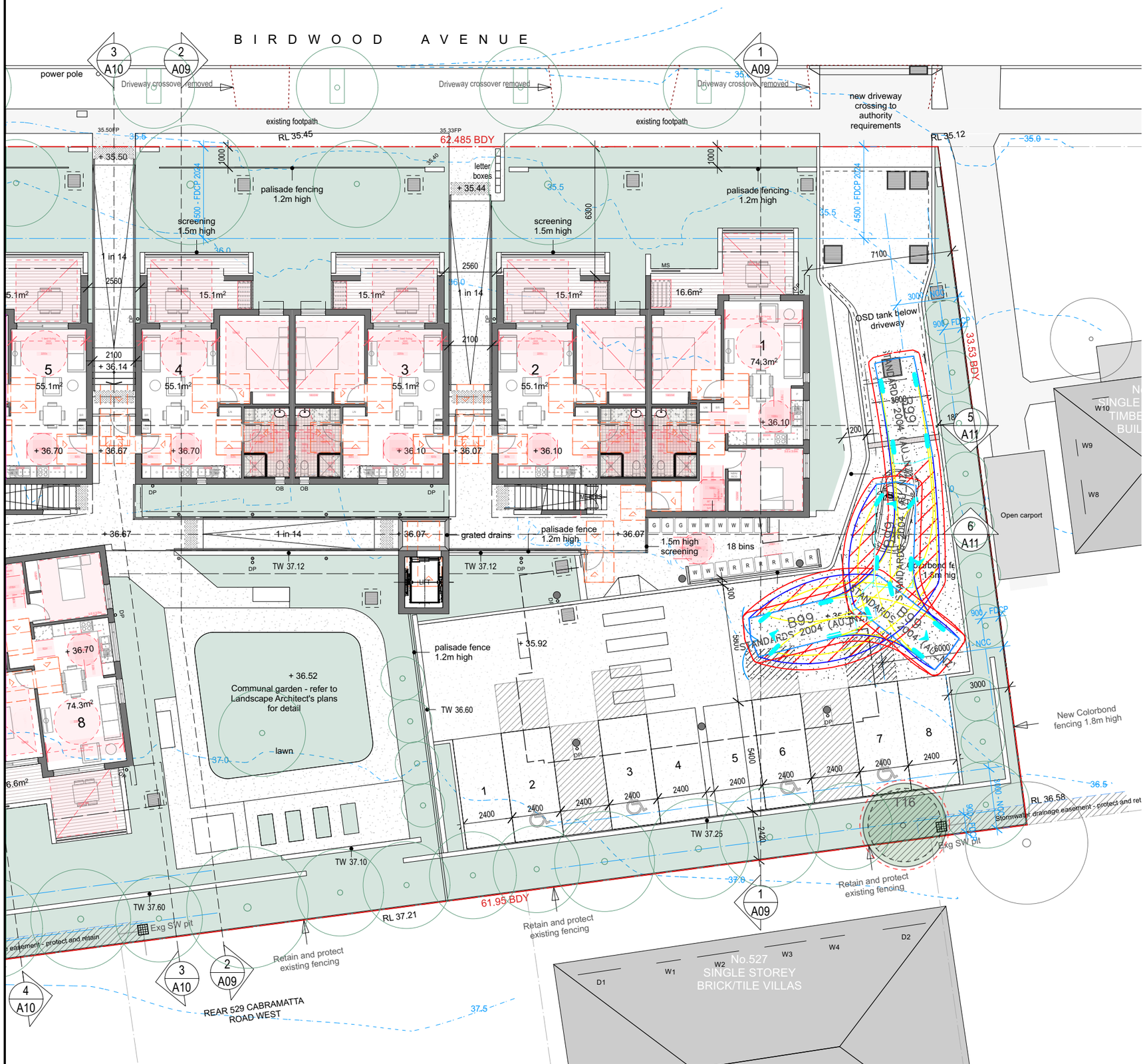
Drawing Title
Design Review
B99 & B85 Design Vehicles
B99 passing B85 manouevre.

Drawn:	Checked:	Date:
TM	VD	10-07-25

23.458d03v01 TRAFFIX [250108 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
23.458	DA	TX.01	A

Comply with relevant Authorities | PROJECT | PROJECT #



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Homes NSW

Scale / Plan Orientation
1:200 @ A3

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Drawing Title
Design Review
Swept Path Analysis
B99 Design Vehicle
Turnaround Manoeuvre

Drawn:	Checked:	Date:
TM	VD	10-07-25

23.458d03v01 TRAFFIX [250108 Plans] Design Review.dwg

Project No.	Drawing Phase	Drawing No.	Rev.
23.458	DA	TX.02	A