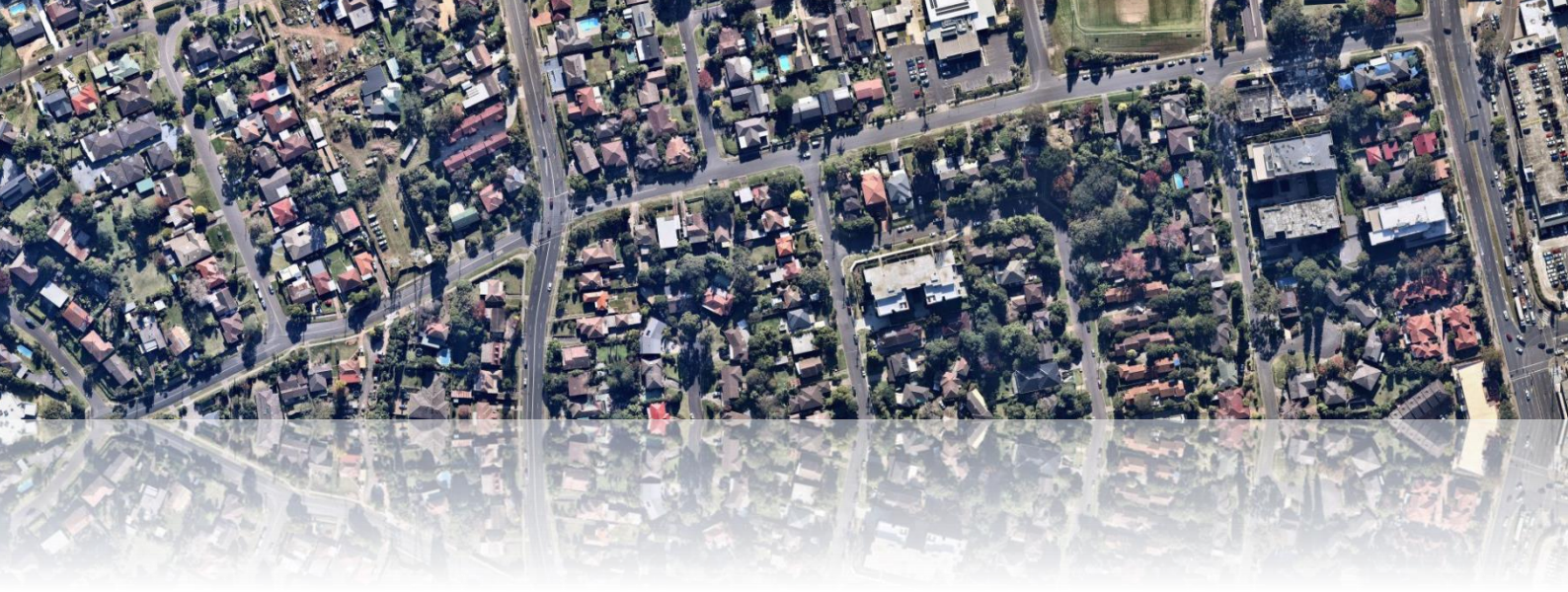

TRAFFIC AND PARKING IMPACT ASSESSMENT OF BOARDING HOUSE DEVELOPMENT AT 57 JENKINS ROAD, CARLINGFORD

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Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

210600.01FA - 15 September 2021

Development Type: **Boarding House Development**

Site Address: **57 Jenkins Road, Carlingford**

Prepared for: **ALW Design**

Document reference: **210600.01FA**

Status	Issue	Prepared By	Checked By	Date
Draft	A	ME	DF	14 September 2021
Final	A	ME	DF	15 September 2021

TABLE OF CONTENTS

1 INTRODUCTION

M^CLaren Traffic Engineering was commissioned by *ALW Design* to provide a Traffic and Parking Impact Assessment of the proposed Boarding House Development at 57 Jenkins Road, Carlingford as depicted in **Annexure A**.

1.1 Description and Scale of Development

The proposed development has the following characteristics relevant to traffic and parking:

- A three (3) storey boarding house development containing 19 individual rooms as per the following:
    - 16 single rooms;
    - Three (3) double rooms.
- A basement car parking area with vehicular access via a proposed two-way driveway from Moseley Street, accommodating the provision of:
    - 10 car parking spaces including one (1) disabled parking space;
    - Four (4) motorcycle parking spaces;
    - Four (4) bicycle parking spaces.

1.2 State Environmental Planning Policy (Infrastructure) 2007

The proposed development does not qualify as a traffic generating development with relevant size and/or capacity under *Clause 104* of the *SEPP (Infrastructure) 2007*. Accordingly, formal referral to Transport for New South Wales (TfNSW) is unnecessary, and the application can be assessed by The City of Parramatta Council officers accordingly.

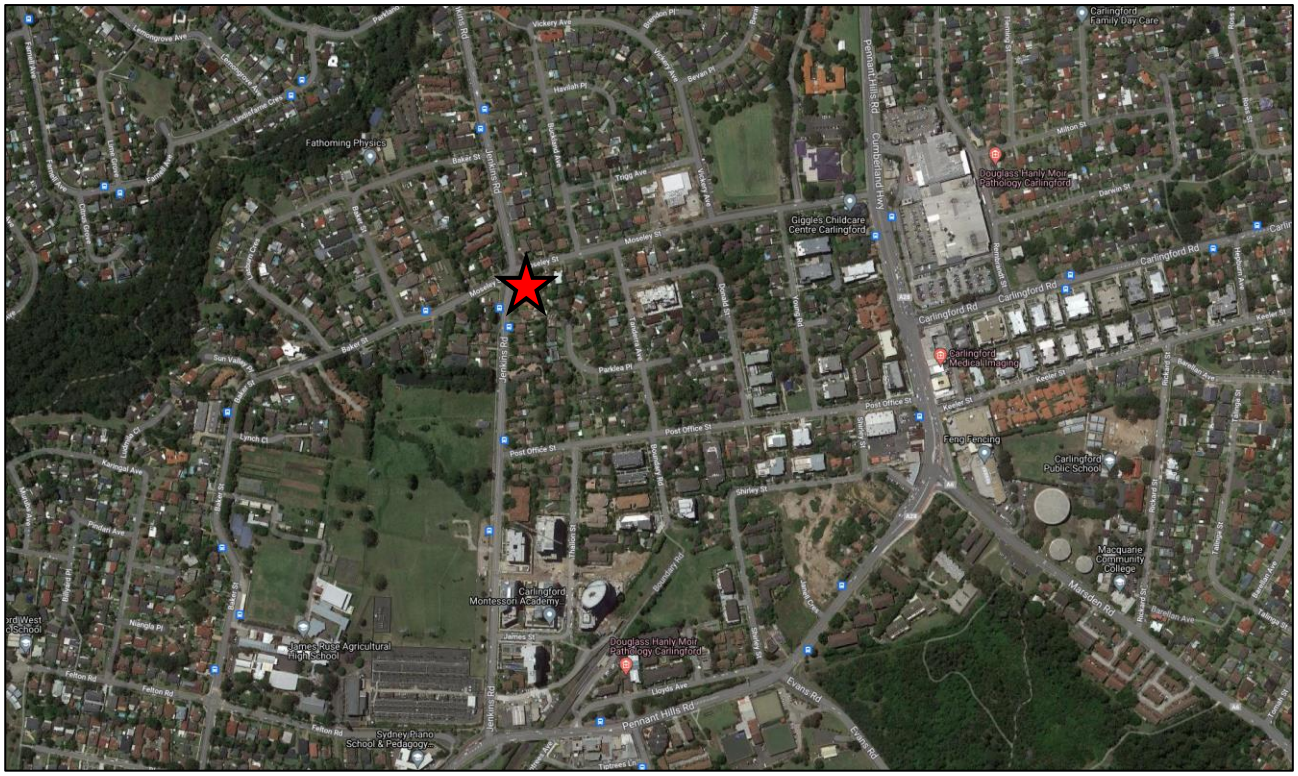
1.3 Site Description

The subject development involves the redevelopment of a single lot currently zoned *R4 – High Density Residential* under the Parramatta (former The Hills) Local Environmental Plan 2012 as adopted by The City of Parramatta Council, and is currently occupied by a single residential dwelling. The site is a corner block and has a frontage to Jenkins Road to the west and Moseley Street to the north.

The site is generally surrounded by low to medium density residential developments in all directions, with the Dundas Zone Substation and James Ruse Agricultural High School located approximately 600m to the south and the Carlingford local centre, containing Carlingford Court shopping centre located approximately 550m to the east.

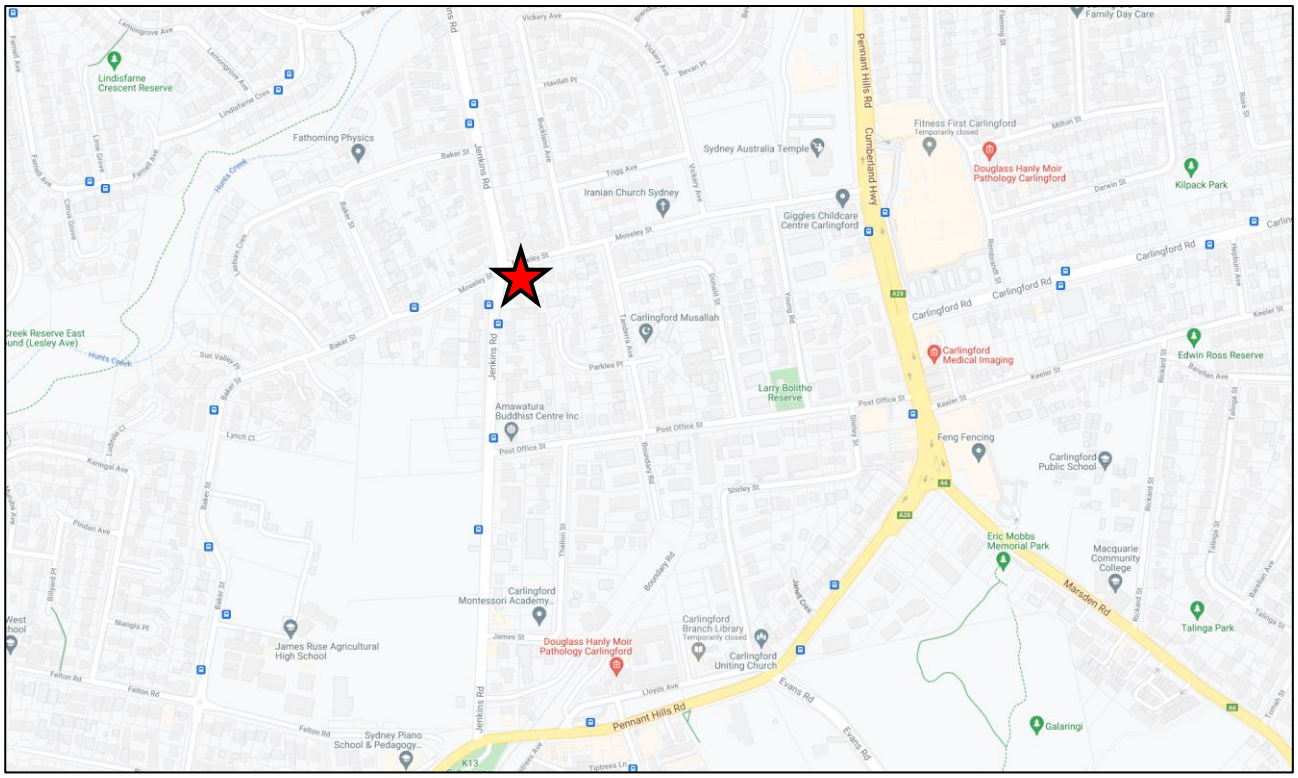
1.4 Site Context

The location of the site is shown on an aerial photo and a street map in **Figure 1** and **Figure 2** respectively.



Site Location

FIGURE 1: SITE CONTEXT – AERIAL PHOTO



Site Location

FIGURE 2: SITE CONTEXT – STREET MAP

2 EXISTING TRAFFIC AND PARKING CONDITIONS

2.1 Road Hierarchy

The road network servicing the site has characteristics as described in the following sub-sections.

2.1.1 Jenkins Road

- Unclassified Regional Road (No. 7145);
- Approximately 13m wide two-way carriageway (two lanes in each direction) with:
    - Two (2) lanes in each direction to the north of Moseley Street for 200m and for approximately 70m to the south of Moseley Street;
    - One (1) lane in each direction and one (1) line-marked kerbside parking lane on each side of the road from 200m to the north of Moseley Street;
    - Two (2) lanes southbound and one (1) lane northbound, with one (1) line-marked kerbside parking lane on the western side of the road from 70m south of Moseley Road.
- Signposted 50km/h speed limit;
- Kerbside parking is typically permitted on both sides of the road, with the following signposted restrictions:
    - "*No Parking*" signposted on the eastern side of the road to the north of Moseley Street for approximately 65m, with unrestricted kerbside parking permitted thereafter;
    - Unrestricted kerbside parking permitted on the western side of the road to the north of Moseley Street;
    - "*No Parking*" signposted on the western side of the road to the south of Moseley Street for approximately 45m, with unrestricted kerbside parking permitted thereafter;
    - *No Parking*" *and* "*Bus Zone*" signposted on the eastern side of the road to the south of Moseley Street for approximately 85m, with unrestricted kerbside parking permitted thereafter.

2.1.2 Moseley Street

- Unclassified Local Collector Road;
- Approximately 9m wide carriageway facilitating two-way traffic flow and kerbside parking on both sides of the road;
- Signposted 50km/h speed limit;
- Unrestricted kerbside parking permitted along both sides of the road.

2.2 Existing Traffic Management

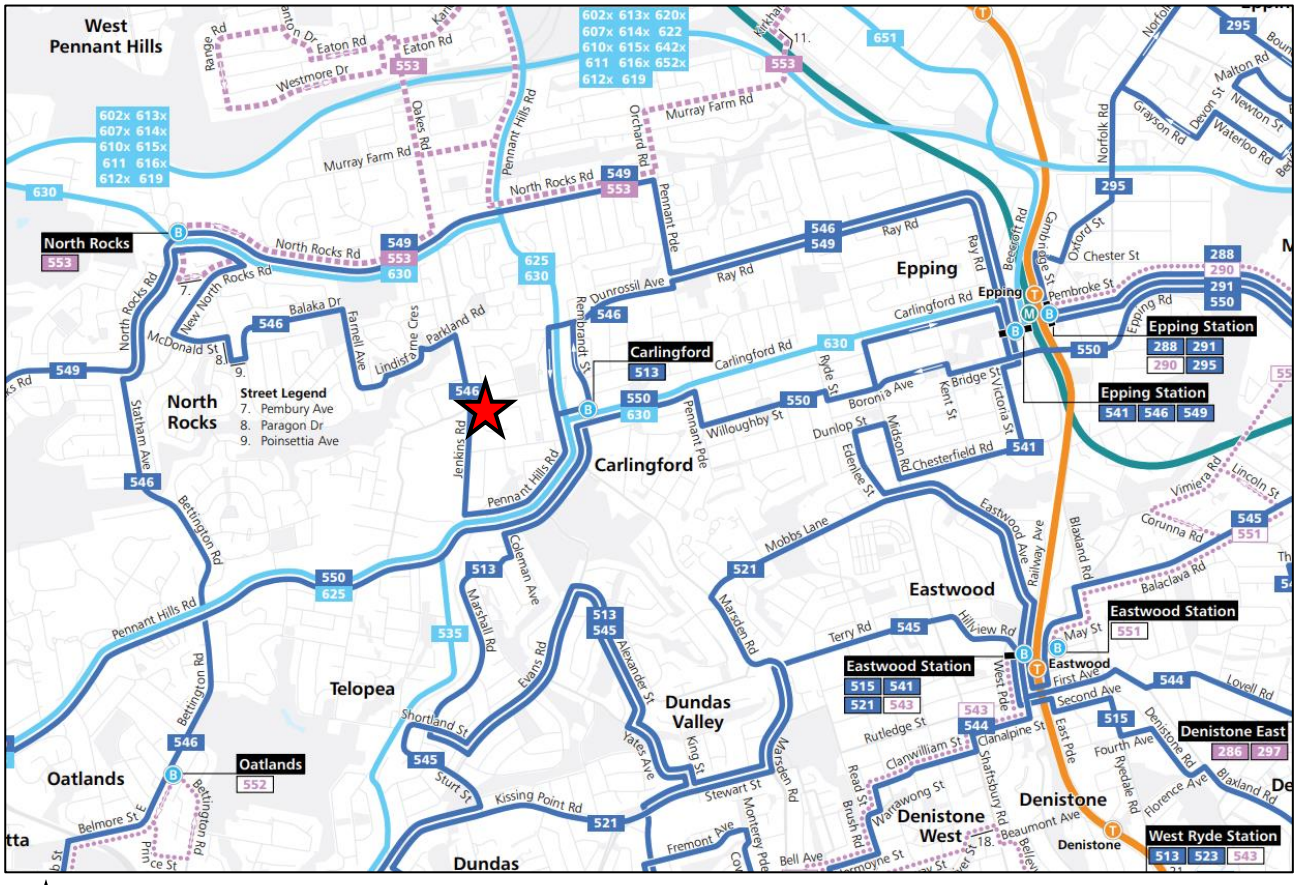
- Signal controlled intersection of Jenkins Road / Moseley Street;

- Priority controlled intersection of Moseley Road / Buckland Avenue;
- Priority controlled intersection of Moseley Road / Tanderra Avenue.

2.3 Public Transport

The subject site has access to existing bus stop (ID: 211875) located approximately 65m walking distance to the south of site on Jenkins Road. The bus stop services existing bus route 546 (Parramatta to Epping via Oatlands & North Rocks) and 550 (Parramatta to Macquarie Park via Epping) provided by State Transit.

There is no train station within an accessible distance from the subject site. The location of the site subject to the surrounding public transport network is shown in **Figure 3**.



Site Location

FIGURE 3: PUBLIC TRANSPORT NETWORK MAP

2.4 Future Road and Infrastructure Upgrades

From The City of Parramatta Council Development Application tracker and website, it appears that there are no future planned road or public transport changes that will affect traffic conditions within the immediate vicinity of the subject site.

3 PARKING ASSESSMENT

3.1 Council Parking Requirement

Reference is made to the *State Environmental Planning Policy (Affordable Rental Housing) 2009* (SEPP ARH) which designates the following parking rates applicable to the proposed development:

> ***29 Standards that cannot be used to refuse consent***
>
> *(e) parking*
>
> *if—*
>
> *(iia) in the case of development not carried out by or on behalf of a social housing provider—at least 0.5 parking spaces are provided for each boarding room, and*
>
> *(iii) in the case of any development—not more than 1 parking space is provided for each person employed in connection with the development and who is resident on site,*

Table 1 presents the parking requirements of the proposal according to the SEPP (ARH) car parking rates.

TABLE 1: SEPP(ARH) PARKING RATES

Land Use	Scale	Rate	Spaces Required	Spaces Provided
Boarding House	19 rooms	0.5 spaces per room	10 (9.5)	10

As shown, strict application of the SEPP(ARH) requires the provision of **10** car parking spaces. The proposed plans detail the provision of **10** car parking spaces, resulting in compliance with the SEPP(ARH) parking requirements.

3.2 Disabled Parking

The Hills Development Control Plan 2012 as adopted by The City of Parramatta Council does not outline disabled car parking rates for boarding house developments. As such, reference is made to *Table D3.5* of the *Building Code of Australia* (BCA) as part of the *National Construction Code 2019* (NCC) which categorises a boarding house development as a Class 3 building and therefore requires the provision of disabled parking at a rate of:

> *Class 3*
>
> *To be calculated by multiplying the total number of carparking spaces by the percentage of-*
>
> *(i) Accessible sole-occupancy units to the total number of sole-occupancy units; or*
>
> *(ii) Accessible bedrooms to the total number of bedrooms; and*
>
> *The calculated figure is to be taken to the next whole figure.*

The proposed development contains one (1) accessible boarding room of the 19 boarding rooms proposed. In accordance with the BCA requirements, one (**1**) disabled car parking space is to be provided. The proposed car parking layout details the provision of one (**1**) disabled car parking space as per with *AS2890.6:2009*, complying with BCA requirements.

3.3 Bicycle & Motorcycle Parking Requirements

Reference is made to the *State Environmental Planning Policy (Affordable Rental Housing) 2009* (SEPP ARH) which designates the following bicycle and motorcycle parking requirements:

> ***30 Standards for boarding houses***
>
> *(h) at least one parking space will be provided for a bicycle, and one will be provided for a motorcycle, for every 5 boarding rooms.*

The proposed development therefore requires the provision of four (**4**) bicycle parking spaces and four (**4**) motorcycle parking spaces. The proposed plans detail the provision of four (**4**) bicycle parking spaces and four (**4**) motorcycle parking spaces, resulting in compliance with the SEPP(ARH) parking requirements.

3.4 Servicing & Loading

The Hills Development Control Plan 2012 as adopted by The City of Parramatta Council does not outline servicing and loading requirements for boarding house developments. It is expected that site will be serviced by Council's waste collection services from the Jenkins Road or Moseley Street frontage, similar to existing operations.

3.5 Car Park Design & Compliance

The car parking layout as depicted in **Annexure A,** has been assessed to achieve the relevant clauses and objectives of *AS2890.1:2004*, *AS2890.3:2015* and *AS2890.6:2009*. Any variances from standards are addressed in the following subsections including required changes, if any. Swept path testing has been undertaken and are reproduced within **Annexure B** for reference.

The proposed car parking and vehicular access design achieves the following:

- 4.0m width single-lane driveway facilitating access to Moseley Street;
- Pedestrian sight triangle of 2m by 2.5m at the property boundary;
- Minimum 5.8m width parking aisles;
- Compliant ramp grades not exceeding 25% and no grade change greater than 12.5%;
- Minimum 5.4m length, 2.4m width spaces for residents;
- Minimum 5.4m length, 2.4m width disabled spaces with adjacent associated 5.4m length, 2.4m width shared space;
- Minimum 0.3m clearance to high objects from trafficable areas;
- Minimum headroom of 2.2m for general circulation and 2.5m headroom clearance provided over disabled and adaptable parking areas;

- Motorcycle spaces with minimum dimensions of 1.2m by 2.5m;

Whilst the plans have been assessed to comply with the relevant standards, it is usual and expected that a design certificate be required at the Construction Certificate stage to account for any changes following the development application.

4 TRAFFIC ASSESSMENT

The impact of the expected traffic generation levels associated with the subject proposal is discussed in the following sub-sections.

4.1 Traffic Generation

Traffic generation rates for the relevant land uses are provided in the *RTA Guide to Traffic Generating Developments (2002)* as adopted by Transport for New South Wales (TfNSW) and recent supplements and are as follows:

> ***3.3.2 Medium density residential flat building.***
>
> *Smaller units and flats (up to two bedrooms):*
>
> *Weekday peak hour vehicle trips = 0.4-0.5 per dwelling.*

The resulting traffic generation is summarised in **Table 2**.

TABLE 2: ESTIMATED TRAFFIC GENERATION

Use	Scale	Peak	Generation Rate	Trips (1)
Boarding House	19 rooms	AM	0.5 per dwelling	10 (2 in, 8 out)
		PM	0.5 per dwelling	10 (8 in, 2 out)

(1) Assumes 20% inbound, 80% outbound in the AM peak hour and 80% inbound, 20% outbound in the PM peak hour.

As shown, the expected traffic generation associated with the proposed development is in the order of **10** vehicle trips in the AM peak period (2 in, 8 out) and **10** vehicle trips in the PM peak period (8 in, 2 out). This traffic generation is expected to be of the upper range due to the general lower car-ownership levels of boarding house residents.

This level of traffic will have no adverse effect on any nearby intersections and can be readily accommodated within the existing road network with minimal impact in terms of traffic flow efficiency and road safety considerations.

Indeed, the computer models that are available to assess these impacts are not sensitive to such small changes and it may be concluded that the road network will operate with no change in the existing levels of service. In this regard, the proposed residential use of the site is a low-order traffic use and the proposed development is supportable in terms of its traffic impacts.

5 CONCLUSION

In view of the foregoing, the subject Boarding House Development proposal at 57 Jenkins Road, Carlingford (as depicted in **Annexure A**) is fully supportable in terms of its traffic and parking impacts. The following outcomes of this traffic impact assessment are relevant to note:

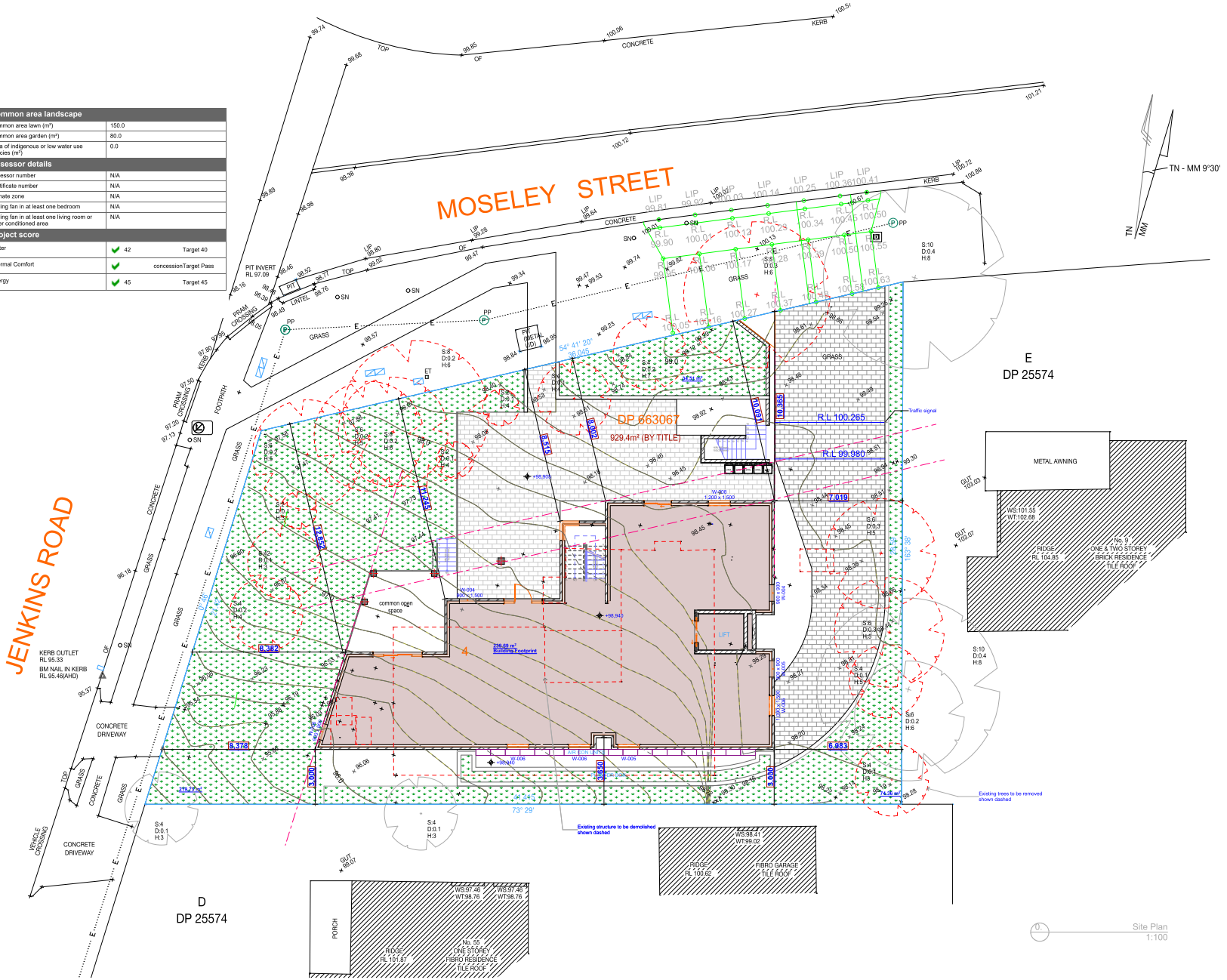
- The proposal includes the provision of **10** car parking spaces within a proposed carpark satisfying the relevant controls applicable to the development, including the SEPP(ARH) minimum requirements.
- The SEPP(ARH) requires the provision of four (**4**) bicycle parking spaces and four (**4**) motorcycle parking spaces which have been provided onsite resulting in compliance with the SEPP(ARH) requirements.
- The parking areas of the site have been assessed against the relevant sections of *AS2890.1:2004*, *AS2890.3:2015* and *AS2890.6:2009* and have been found to satisfy the objectives of each standard. Swept path testing has been undertaken and is reproduced within **Annexure B**.
- The traffic generated by the development is minimal when considering the existing traffic volumes in the local area and will not adversely affect the performance of nearby critical intersections or the existing road network, particularly in terms of Level of Service, traffic flow efficiency, residential amenity and road safety considerations.

ANNEXURE A: PROPOSED PLANS
(2 SHEETS)

Description of project

Project address	
Project name	Boarding house @ 57 Jenkins Road, Carlingford
Street address	57 Jenkins Road Carlingford 2118
Local Government Area	Parramatta City Council
Plan type and plan number	deposited 663067
Lot no.	4
Section no.	-
Project type	
No. of residential flat buildings	1
No. of units in residential flat buildings	19
No. of multi-dwelling houses	0
No. of single dwelling houses	0
Site details	
Site area (m²)	925
Roof area (m²)	251
Non-residential floor area (m²)	0.0
Residential car spaces	10
Non-residential car spaces	0

Common area landscape	
Common area lawn (m²)	150.0
Common area garden (m²)	80.0
Area of indigenous or low water use species (m²)	0.0
Assessor details	
Assessor number	N/A
Certificate number	N/A
Climate zone	N/A
Ceiling fan in at least one bedroom	N/A
Ceiling fan in at least one living room or other conditioned area	N/A
Project score	
Water	✔ 42 Target 40
Thermal Comfort	✔ concessionTarget Pass
Energy	✔ 45 Target 45



NOTE
The Builder shall check all dimensions and levels on site prior to construction. Notify any errors, discrepancies or omissions to the architect. Refer to written dimensions only. Do not scale from drawings. Drawings are not to be used for construction purposes until issued for construction. This drawing reflects a design by #Contact Company and is to be used only for work when authorised in writing by #Contact Company.

All boundaries and contours are subject to survey drawing. All levels to Australian Height Data unless noted otherwise. It is the contractors responsibility to confirm all measurements on site and locations of any services prior to work on site.

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a	Issued for da	12/07/21

Drawn N.L.
Project NO. 19-010
Project Status DA
Client Mr Andrew Wahba
Site 57 Jenkins Road Carlingford

DRAWING TITLE : Site Plan
PROJECT NAME : Proposed Boarding House

ISSUE: A
DRAWING NO. 3

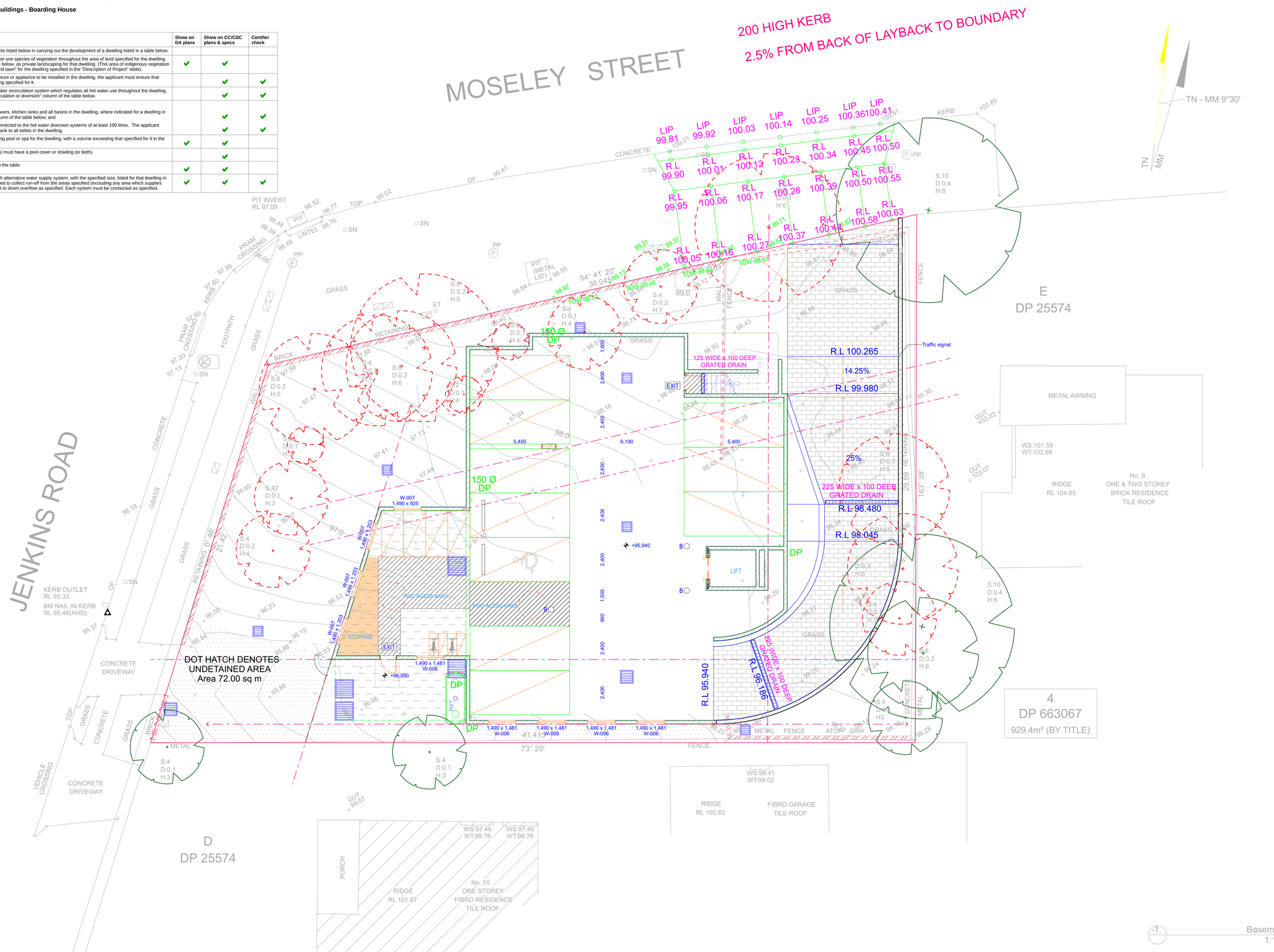
Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

1. Commitments for Residential flat buildings - Boarding House

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✔	✔	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✔	✔
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✔	✔
(e) The applicant must install: (aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and (bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✔ ✔	✔ ✔
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✔	✔	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✔	
(g) The pool or spa must be located as specified in the table.	✔	✔	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✔	✔	✔



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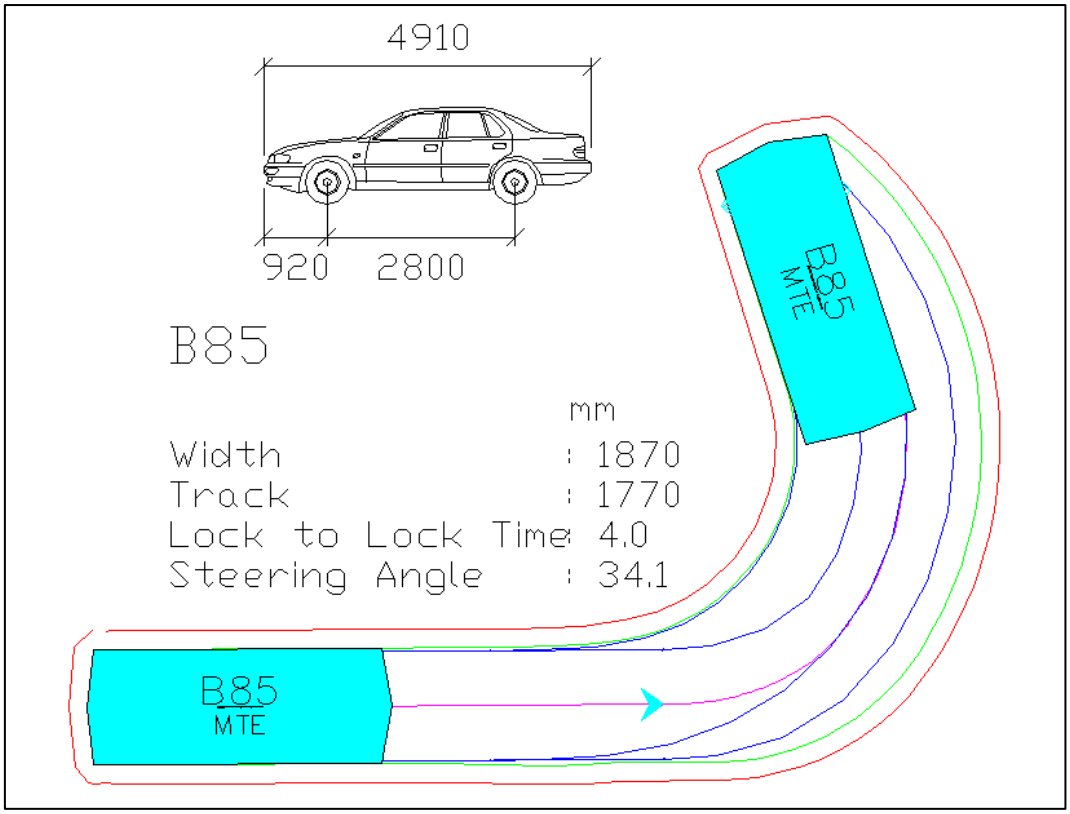
a	issued for da	12/07/21

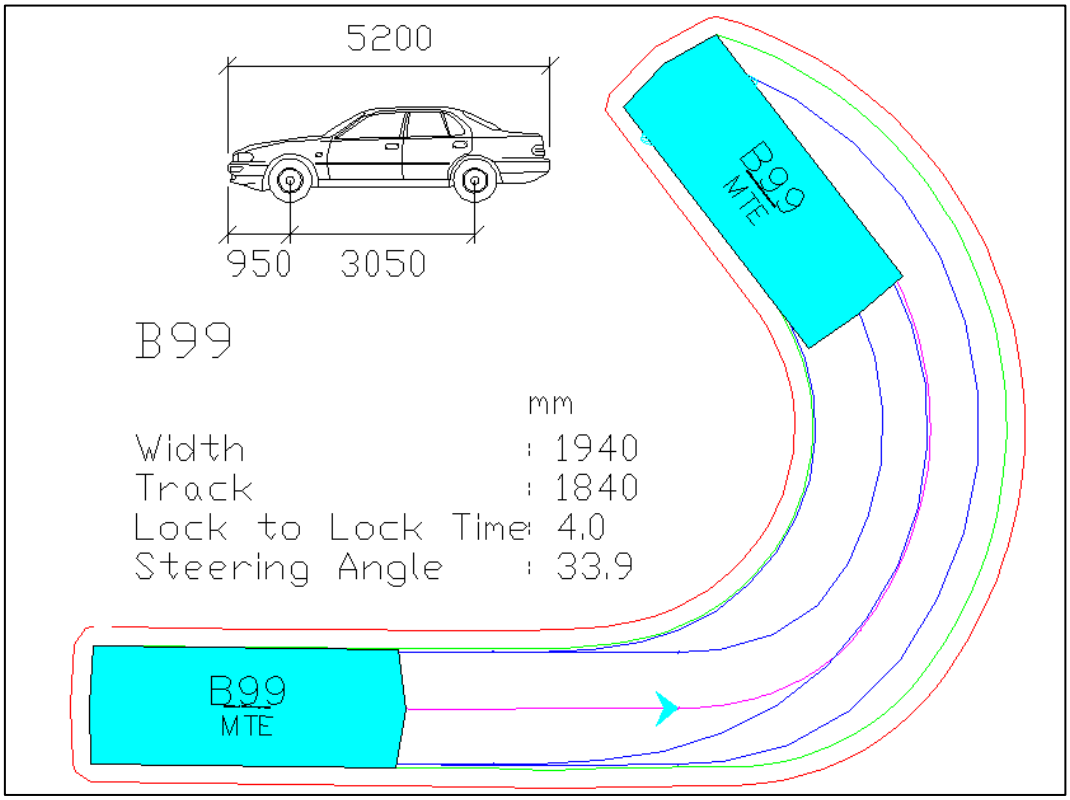
Drawn N.L.
Project NO. 19-010
Project Status DA
Client Mr Andrew Wahbe
Site: 57 Jenkins Road Carlingford

DRAWING TITLE : Basement
PROJECT NAME : Proposed Boarding House
ISSUE: A
DRAWING NO. 4

ANNEXURE B: SWEPT PATH TESTING
(2 SHEETS)



AUSTRALIAN STANDARD 85TH PERCENTILE SIZE VEHICLE (B85)

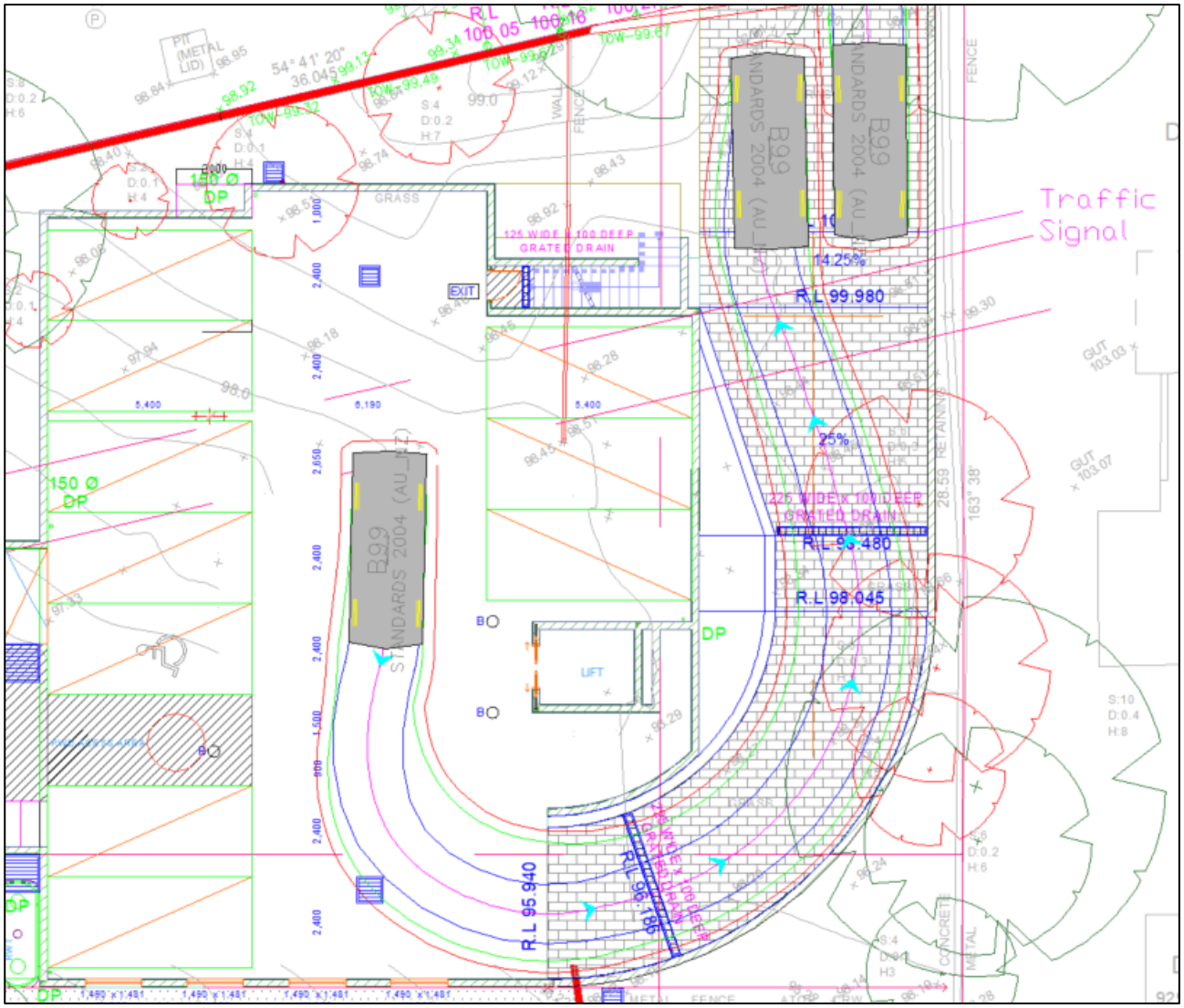


AUSTRALIAN STANDARD 99.8TH PERCENTILE SIZE VEHICLE (B99)

Blue – Tyre Path

Green – Vehicle Body

Red – 300mm Clearance



RAMP CIRCULATION