Traffic & Parking Assessment Report

115-117 Dutton Street, Yagoona

Proposed Residential Apartment Development

Ref 24124

13th December 2024

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Document Control

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Project Address	115-117 Dutton Street, Yagoona			
Revision	**Date**	**Details**	**Author**	**Approved By**
Draft	31.08.24	First draft	D. Aloc	C. Palmer
Final	13.12.24	Final for submission	D. Aloc	C. Palmer

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1. Introduction

1.1 Project Summary

CJP has been engaged by Cedar Design & Construct to prepare a Traffic & Parking Assessment Report (TPAR) in support of a Development Application (DA) to Canterbury-Bankstown Council, involving a new residential development to be located at 115-117 Dutton Street, Yagoona.

In summary, this new DA involves the demolition of the two existing dwelling houses on the site and the construction of a new residential apartment building in its place. The proposed building will comprise 30 x built-to-sell units and 6 x affordable units.

Off-street parking is proposed for 55 cars (including 4 accessible spaces) within a new two-level basement parking area. Vehicular access to the site and basement parking area is proposed to be provided via a new entry/exit driveway located at the southern end of the Dutton Street site frontage.

Plans of the proposed development have been prepared by Cedar Design & Construct and are reproduced in Appendix A.

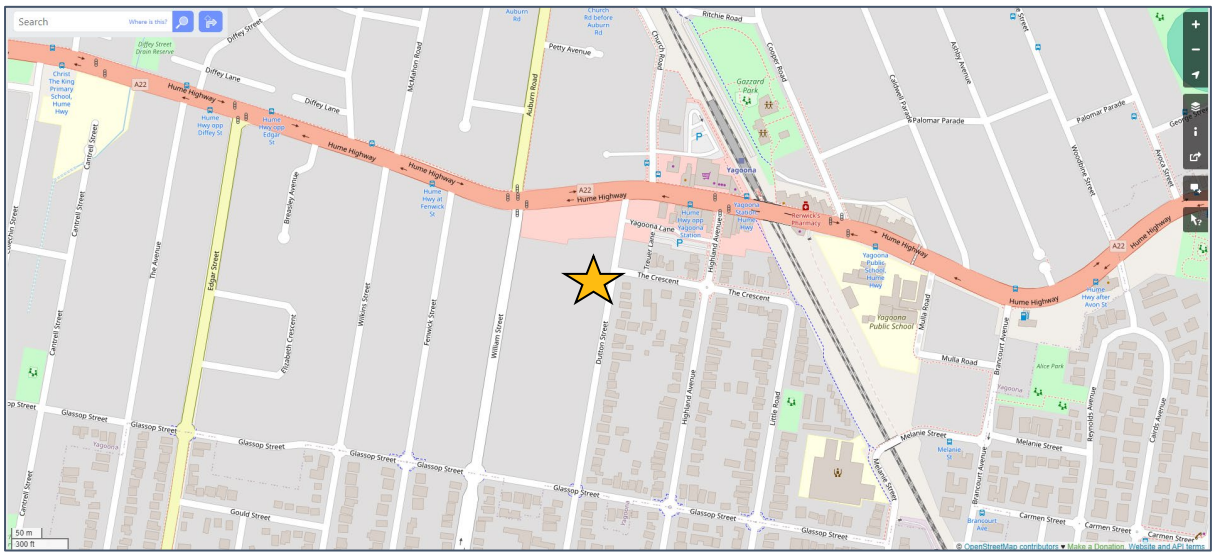


Figure 1.1 – Site Location (Source: OpenStreetMap)

Based on State Environmental Planning Policy (Transport & Infrastructure) 2021, Schedule 3 – Traffic Generating Development, referral to Transport for NSW is not required.

1.2 Assessment Tasks

The purpose of this TPAR is to assess the traffic, parking, access, transport, pedestrian and servicing characteristics of the DA application, and the associated impacts of the proposal on the surrounding road network, parking and transport environment. This can be briefly summarised below:

- Description of the existing site and its location
- Existing traffic and parking conditions
- Traffic generation potential of the proposal and its impacts on the surrounding road network
- Off-street parking, access and servicing requirements and provisions
- Design of parking and vehicular access driveway

1.3 Relevant Planning Controls & Strategies

The site lies within the Canterbury-Bankstown Council (Council) Local Government Area (LGA), such that the relevant Council planning controls and strategies referenced in this TPAR include:

- Canterbury-Bankstown Local Environmental Plan 2023
- Canterbury-Bankstown Development Control Plan 2023

1.4 Traffic, Transport & Parking Guidelines & Standards

In preparing this TPAR, references are also made to the following site access, traffic, parking & servicing guidelines:

- Roads & Maritime Service's Guide to Traffic Generating Developments 2002 (RMS Guide)
- Roads & Maritime Service's Technical Direction Updated Traffic Surveys 2013 (TDT)
- State Environmental Planning Policy (Transport & Infrastructure) 2021
- State Environmental Planning Policy (Housing) 2021
- Apartment Design Guide 2015 (ADG)
- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.3:2015 – Bicycle Parking (AS2890.3)
- Australian Standards 2890.6:2022 – Off-Street Parking for People with Disabilities (AS2890.6)
- NSW Government's Planning Guidelines for Walking & Cycling (December 2004)
- National Construction Code Series Building Code of Australia (BCA)

2. Existing Conditions

2.1 Site Location & Description

The development site is located on the western side of Dutton Street, just south of The Crescent intersection, and comprises the following properties:

- 115 Dutton Street, Yagoona
- 117 Dutton Street, Yagoona

The site has a street frontage of approximately 30m in length to Dutton Street and occupies a total area of 2,114m^2. A copy of the proposed demolition plan which shows the existing features of the site is reproduced below.

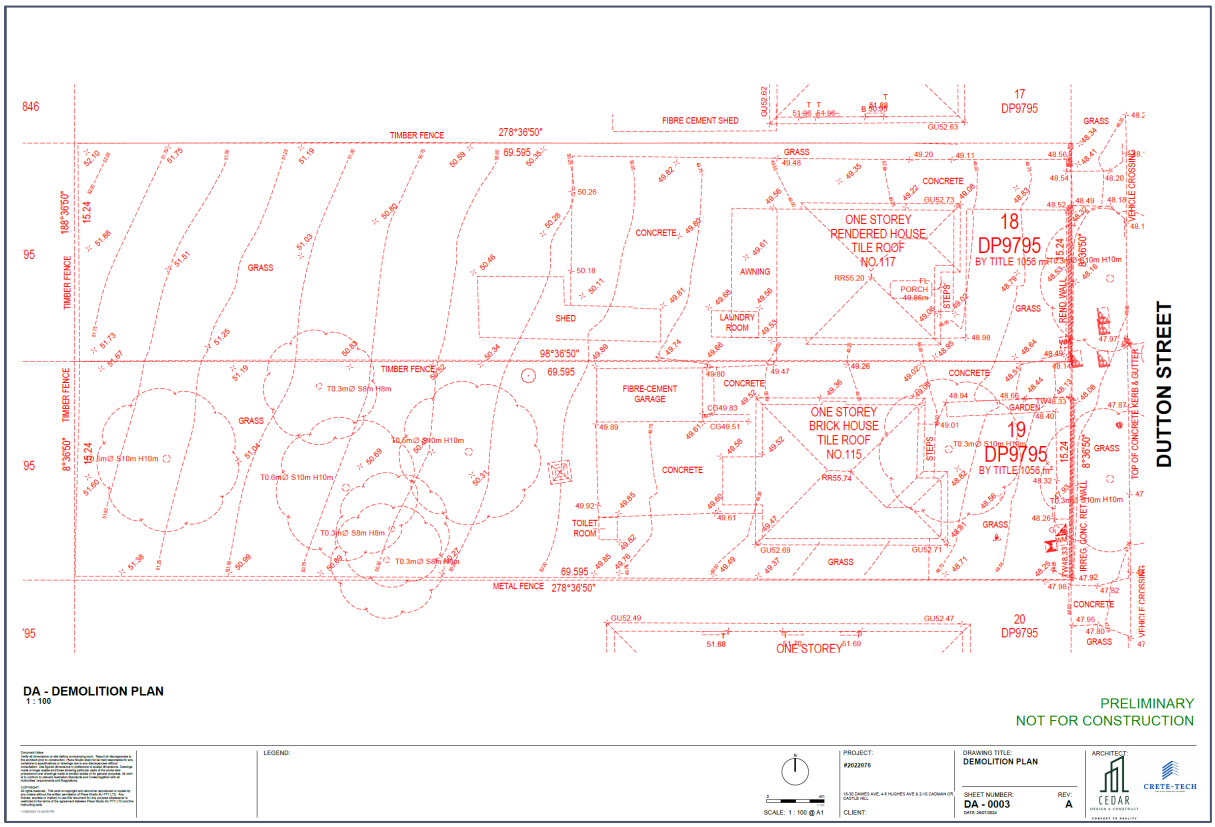


Figure 2.1 – Proposed demolition plan (Source: Cedar Design & Construct)

No.115 Dutton Street is currently occupied by a residential dwelling house with off-street parking. Vehicular access is provided via an existing driveway located at the northern end of its Dutton Street site frontage.

No.117 Dutton Street is also occupied by a residential dwelling house with off-street parking. Vehicular access is also provided via an existing driveway located at the northern end of its Dutton Street site frontage.

A recent aerial image of the site, along with a series of Streetview images, are reproduced on the following page.

Figure 2.2 – Aerial map (Source: Nearmap)

Figure 2.3 – Streetview image of the Dutton Street site frontage, looking north (Source: Google Maps)

Figure 2.4 – Streetview image of the Dutton Street site frontage, looking south (Source: Google Maps)

2.2 Planning Context

The site is zoned R4 High Density Residential under Canterbury-Bankstown LEP 2023, as indicated in the map below. The applicable building height limit is 13m and the floor space ratio is 1:1. The proposed development is permissible in the zone, subject to development consent.

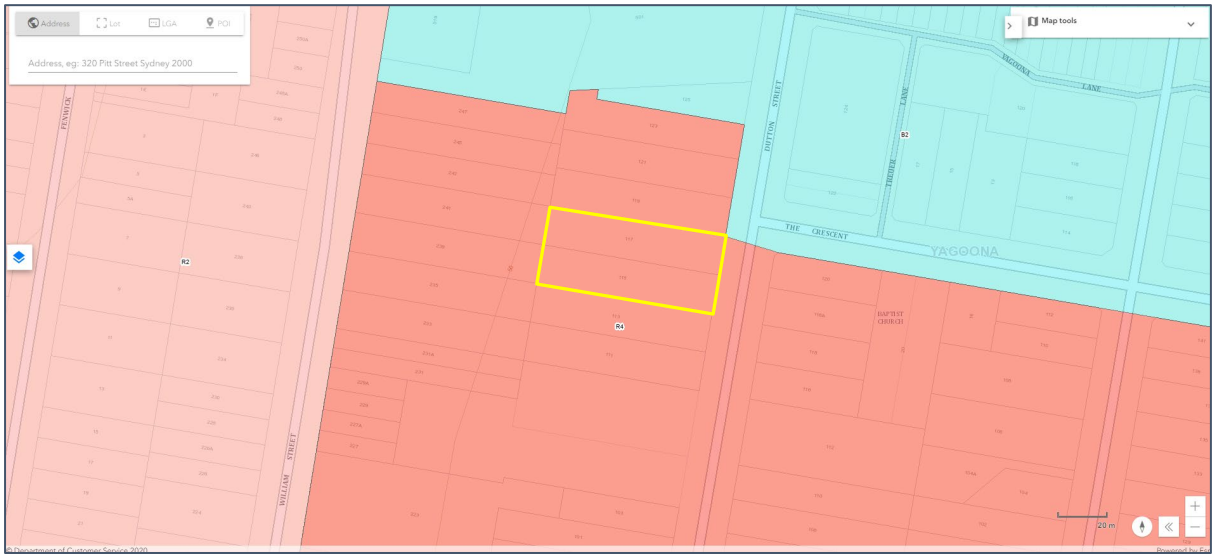


Figure 2.5 – Zoning map (Source: ePlanning Spatial Viewer)

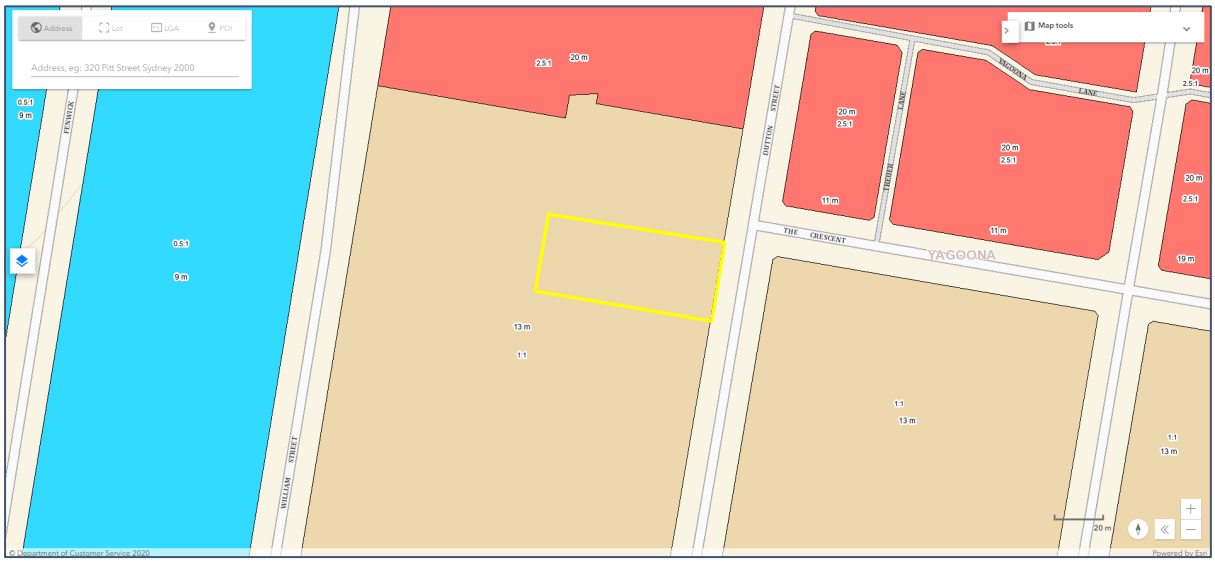


Figure 2.6 – Height of building limit and floor space ratio map (Source: ePlanning Spatial Viewer)

2.3 Road Network

The Transport for NSW (TfNSW) road hierarchy comprises the following road classifications:

- State Roads: Freeways, Motorways and Primary Arterial Roads (TfNSW managed)
- Regional Roads: Secondary or Sub-Arterial (Council managed, partly funded by the State)
- Local Roads: Collector and Local Access Roads (Council managed)

The road hierarchy in the vicinity of the site is shown in the figure on the following page, whilst the key roads are summarised as follows:

- Hume Highway/Remembrance Driveway is classified as a State Road and is a major east-west alignment, connecting several suburbs including Yagoona, Lansdowne, Lansvale and Warwick Farm. It typically carries three lanes of traffic in each direction, separated by a central median, with turning lanes provided at key intersections. The signposted speed limit is 70km/h.

- Dutton Street is classified as a Local Road which serves as the site frontage. It carries one lane of traffic per each direction, with kerbside parking generally permitted on both sides of the road. The signposted speed limit along Dutton Street is 50km/h.

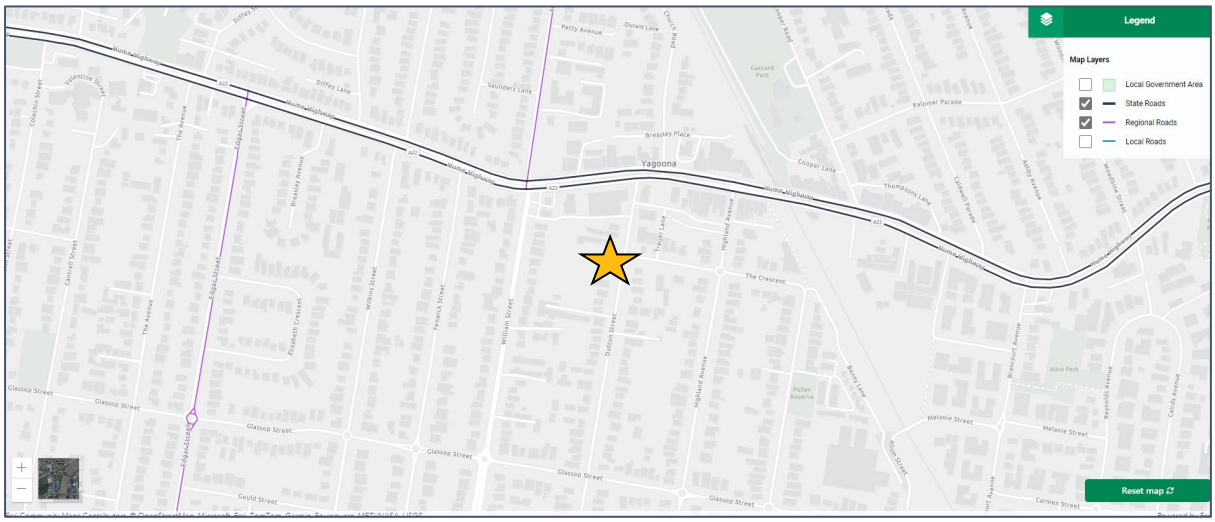


Figure 2.7 – Road Hierarchy (Source: Transport for NSW)

2.4 Public & Active Transport

The existing public transport services available in the vicinity of the site are illustrated in Figure 2.8. Conveniently, the nearest bi-directional bus stops are located on the Hume Highway, either side of the Highland Avenue intersection, approximately 350m (5-minute) walking distance north-east of the site. These bus stops are serviced by the 907 and the M91.

The 907 operates daily services between Parramatta and Bankstown via Bass Hill. Weekday peak services operate approximately every 15-20 minutes, weekday off-peak and Saturday services approximately 30 minutes, and Sunday & public holiday services every 60 minutes.

The M91 operates daily services between Parramatta and Hurstville via Granville, Yagoona and Padstow. Weekday peak services operate approximately every 10 minutes, weekday off-peak services every 15 minutes and Saturday, Sunday & public holiday services every 20 minutes.

The abovementioned bus services also provide connections to the suburban railway network at Parramatta, Granville, Yagoona, Bankstown, Padstow and Hurstville.

Research suggests that proximity to bus services influence the travel mode choice for areas within 400m walking distance (approximately 5 minutes) of a bus stop with regular services. As such, the proposed development also has potential for future residents to utilise buses for key journeys, including the work commute and recreational trips.

Furthermore, the nearest railway station is Yagoona Station, which is situated approximately 350m (5-minute walking distance) to/from the site. Yagoona Station lies on the T3 Bankstown Line, operating between Liverpool or Lidcombe and the City via Bankstown. Services run daily, with trains arriving every 15-20 minutes during peak periods and 30-60 minutes during off-peak periods.

Research also suggests that proximity to rail services influence the travel mode choice for areas within 800m distance (approximately 10 minutes) of a rail station. As such, the proposed development has excellent potential for future residents to also utilise the rail services for their travel to other key points of interest.

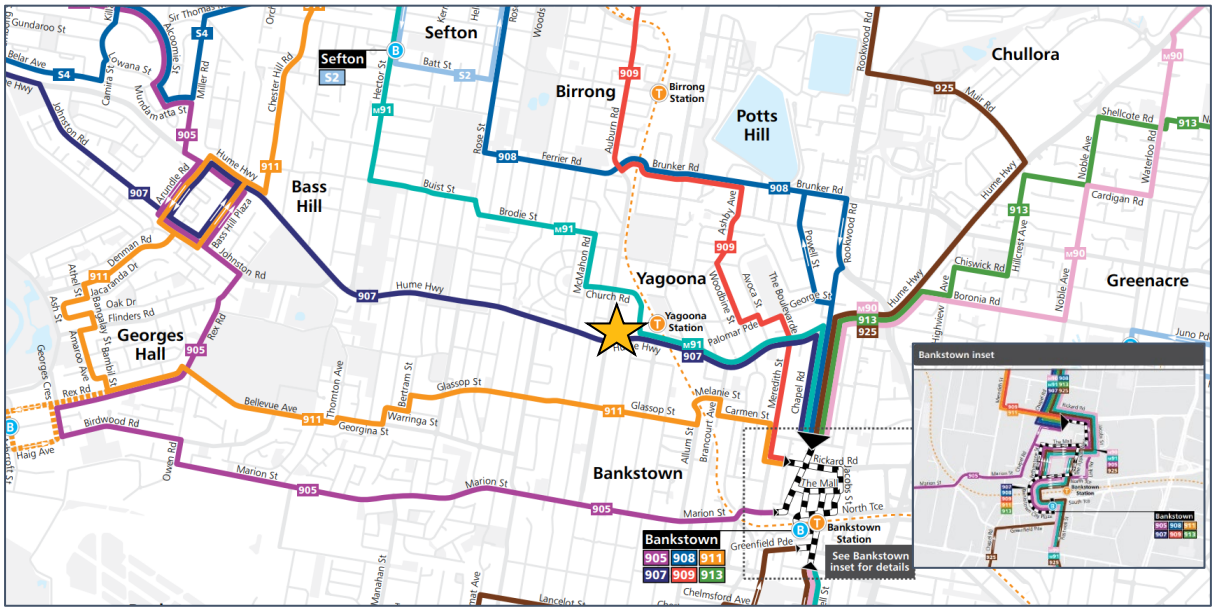


Figure 2.8 – Existing Public Transport Map (Source: Transport for NSW)

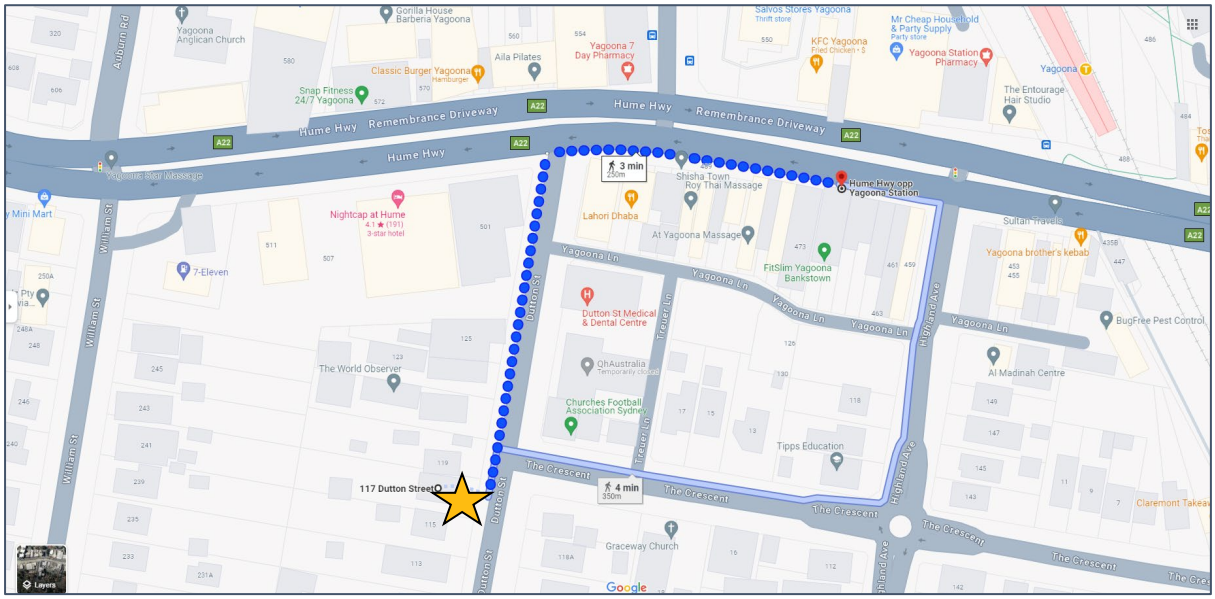


Figure 2.9 – Walking distance to the nearest westbound bus stop (Source: Google Maps)

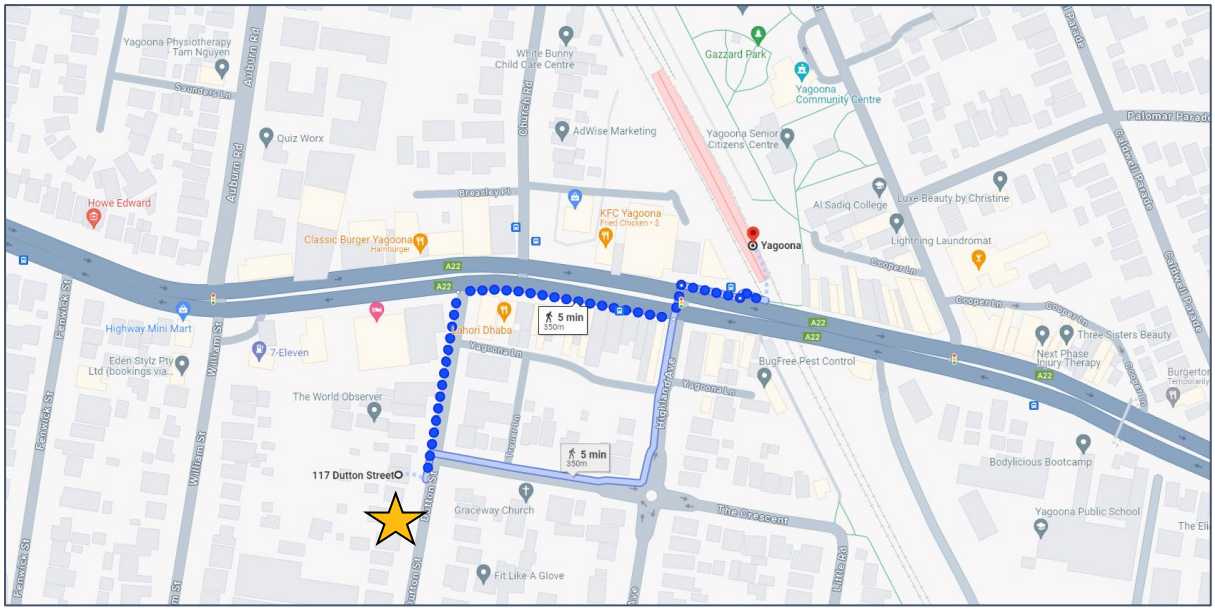


Figure 2.10 – Walking distance to the nearest eastbound bus stop and Yagoona railway station (Source: Google Maps)

In addition to the public transport services, there is also a good level of pedestrian connectivity available in the vicinity of the site, particularly on the eastern side of Dutton Street, which features a continuous footpath up to the Hume Highway. All existing footpaths in the surrounding area are of good quality, with appropriate widths and pram ramps provided at most intersections.

Figure 2.11 below shows the existing cycle routes near the site. The nearest bicycle routes are along Glassop Street and Highland Avenue, which are classified as *General Roads*, where bicycles may share space with motor vehicles, buses, or parked cars.

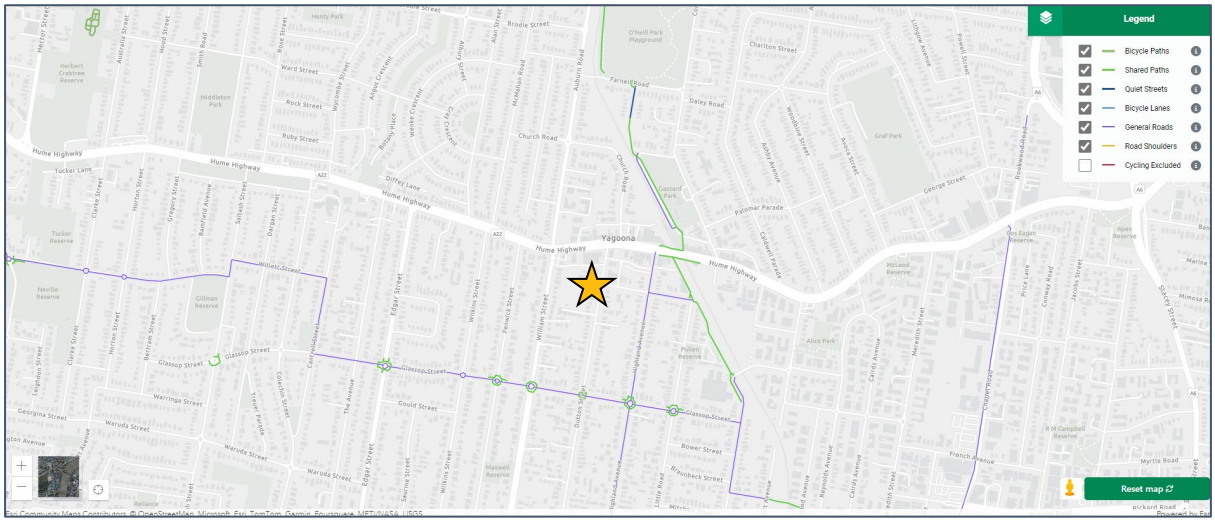


Figure 2.11 – Existing cycling network map (Source: Transport for NSW)

The *Planning Guidelines for Walking and Cycling* identifies a number of city-scale design principles that can assist the creation of walkable and cyclable cities and neighbourhoods. These principles emphasise urban renewal and the creation of compact, mixed use, accessible centres around public transport stops. At the neighbourhood scale, design principles can be reinforced through the creation of local and accessible centres and neighbourhoods with connected street patterns and road design which aim to reinforce local walking and cycling networks.

In particular, the *Guidelines* note that increased population density is an important element in creating a walkable and cyclable city. A compact development brings activities close together, making them more accessible by foot or by bicycle, without the need to use a car. Increased population density also enhances the viability of public transport services.

2.5 Existing Surrounding Traffic Controls

The existing traffic controls in the surrounding area comprise:

- A 70km/h speed limit which applies to Hume Highway/Remembrance Driveway
- Traffic signals along the Hume Highway where it intersects with William Street/Auburn Road, Highland Avenue and also Cooper Road
- A central median island in the Hume Highway which precludes right-turn movements into/out of Dutton Street
- Give-way restrictions in Dutton Street, where it intersects with Hume Highway
- A No Right Turn restriction for eastbound traffic on the Hume Highway, turning into William Street
- A right turn holding lane for eastbound traffic on the Hume Highway, turning into Highland Avenue
- A 50km/h speed limit which applies to Dutton Street and all other local roads in the surrounding area
- A roundabout at the Highland Avenue & The Crescent intersection

2.6 Existing Surrounding Parking Restrictions

The existing on-street parking restrictions in the surrounding area comprise:

- Clearway restrictions along both sides of the Hume Highway during peak periods
- 1P restrictions along the eastern side of Dutton Street, towards the far northern end, in the vicinity of the B2 Zone commercial area
- Bus Zones located at regular intervals along both sides of the Hume Highway
- Generally unrestricted kerbside parking along both sides of Dutton Street, including along the site frontage

3. Proposed Development

3.1 Development Description

The proposed development involves the demolition of the existing structures on the site and the construction of a new residential development, comprising 30 built-to-sell units and 6 affordable units. The breakdown of the units is shown in the table below.

Table 3.1 – Schedule of Affordable/Built-to-Sell Units		
Affordable/Built-to-Sell	**Bedroom Type**	**Number of Units**
Affordable	1 Bedroom 2 Bedroom	3 3
Built-to-Sell	1 Bedroom 2 Bedroom 3 Bedroom	3 15 4
Total		**28**

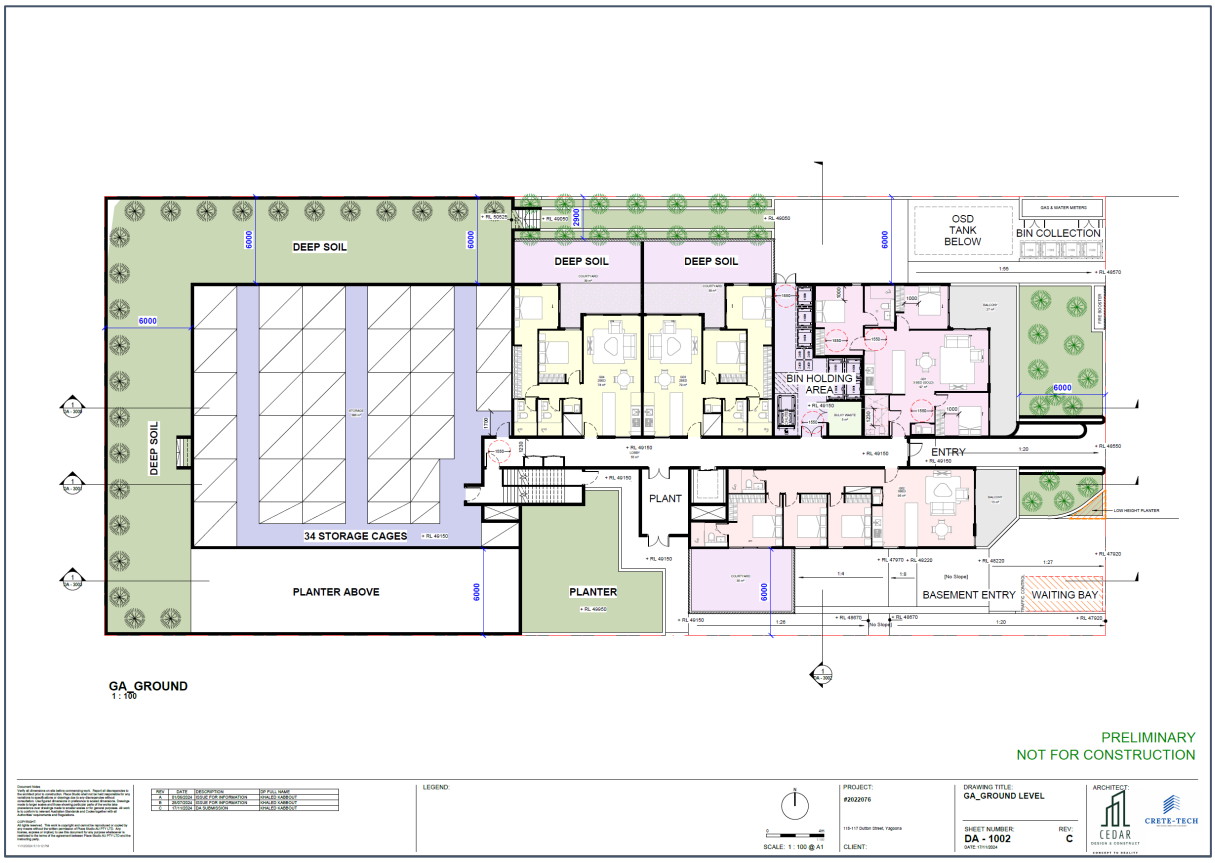


Figure 3.1 – Proposed ground floor plan (Source: Cedar Design & Construct)

3.2 Parking Arrangements

Off-street parking is proposed for 55 cars within a new two-level basement parking area in accordance with SEPP (Housing) 2021's applicable numerical requirements, comprising 49 residential spaces and 6 visitor spaces.

3.3 Waste Collection

Waste collection is to be undertaken by Council's contractor from the kerbside area outside the Dutton Street site frontage. In this regard, a temporary bin holding area is proposed to be provided in the north-eastern corner of the site, just inside the boundary, within 10m of the kerbside collection area and easily accessible to the contractor. Once emptied, bins will be moved back to the temporary bin holding area immediately. Importantly, bins will not be lined up along the kerbside for collection.

3.4 Vehicular Access

Vehicular access to the site and basement parking area is proposed to be provided via a 6.1m wide entry/exit driveway located at southern end of the Dutton Street site frontage. Beyond the initial 6.1m wide section of the driveway, it narrows into a 4.0m wide single-lane/two-way design that will be configured with a traffic signal, with the "passive" signal set to green at the street level, thereby giving priority to entering vehicles.

The internal ramp is also a single-lane design with traffic signals to control vehicle flow. Passing areas are provided on both basement levels as well as a holding bay on basement level 1.

The two existing driveway crossovers located off Dutton Street are to be permanently closed and restored to kerb & gutter.

4. Traffic Impact Assessment

4.1 Traffic Generation Guidelines

The traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing, approved or permissible uses, and its impact on the operational performance of the surrounding road network, particularly during the weekday morning and afternoon road network peak periods.

An indication of the traffic generation potential of most development types is provided by reference to the following documents:

- RMS Guide to Traffic Generating Developments 2002 (RMS Guide)
- RMS Technical Direction 2013/04a (TDT)

4.2 Existing Development Traffic Generation

The existing land uses on the site are defined by the RMS Guide as "dwelling houses". Based on the TDT trip generation rates, the existing development on the site has a traffic generation potential of 2 vehicle trips during the weekday morning and afternoon peak hour (vph), as set out in the table below.

Table 4.1 – Existing Peak Traffic Generation

Land Use	Period	Vehicle Trip Rate	Quantum	Existing Peak Trips*
Dwelling House	AM Peak Hour	0.99 trips/dwelling	2 dwellings	2 peak trips
	PM Peak Hour	0.95 trips/dwelling	2 dwellings	2 peak trips

* entry/exit combined

4.3 Proposed Development Traffic Generation

The proposal involves the construction of a new residential apartment development on the site, comprising a total of 28 units. Based on the TDT trip generation rates, the proposed development has a traffic generation potential of 6-7 vehicle trips during the weekday morning and afternoon peak hour, as set out in the table below.

Table 4.2 – Proposed Peak Traffic Generation

Land Use	Peak Period	Vehicle Trip Rate	Quantity	Proposed Peak Trips*
Apartment building	AM peak	0.19 trips/unit	28 units	7 peak trips
	PM peak	0.15 trips/unit	28 units	6 peak trips

* entry/exit combined

4.4 Traffic Impact

As noted above, the traffic implications of development proposals primarily concern the *nett change* in the traffic generation potential of a site compared to its existing and/or approved uses.

Based on the TDT trip generation rates and the above tables, the proposed development is expected to result in a *nett increase* of approximately 5 trips during the weekday AM peak period and 4 trips during the weekday PM peak period, as set out in the table on the following page.

Table 4.3 – Nett Peak Traffic Generation			
Period	**Proposed Peak Trips**	**Existing Peak Trips**	**Nett Peak Trips**
AM Peak Hour	7 vph	-2 vph	+5 vph
PM Peak Hour	6 vph	-2 vph	+4 vph

These nett increases in peak period traffic volumes are minimal and represent, on average, 1 additional vehicle trip approximately every 12-15 minutes during the weekday peak periods. These additional trips fall within typical daily fluctuations of the local road network and will have minimal impacts on the surrounding road network.

The microsimulation models that analyse intersections and road networks are unlikely to be impacted by 4-5 additional vehicle movements when split across the various intersections, such that the road network operation is expected to remain at the same Level of Service as it is currently.

Accordingly, the proposed development is supportable on traffic grounds.

5. Access, Parking & Servicing Assessment

5.1 Applicable Car Parking Rates

The minimum off-street car parking requirements applicable to the affordable and built-to-sell housing developments are specified in the State Environmental Planning Policy (Housing) 2021, Division 1 In-fill affordable housing, Clause 19 Non-discretionary development standards—the Act, s.4.15, as set out below.

19 Non-discretionary development standards—the Act, s 4.15

(2) The following are non-discretionary development standards in relation to the residential development to which this division applies—

(e) the following number of parking spaces for dwellings used for affordable housing—

(i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces,

(ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces,

(iii) for each dwelling containing at least 3 bedrooms— at least 1 parking space,

(f) the following number of parking spaces for dwellings not used for affordable housing—

(i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces,

(ii) for each dwelling containing 2 bedrooms—at least 1 parking space,

(iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces,

(Source: SEPP (Housing) 2021, Division 1, Clause 19)

5.2 Car Parking Requirements

Based on the proposal for a new residential building, comprising 30 affordable and 6 built-to-sell units, the proposed development requires the minimum provision of 37 car parking spaces, as set out in Table 5.1 below.

Table 5.1 – Minimum Off-Street Car Parking Requirements for Affordable and Built-to-Sell Housing

Use	Affordable/ Built-to-Sell	Minimum Rate	Quantity	Minimum Requirement
1 bedroom unit	Built-to-Sell	0.5 spaces / unit	3	1.5 spaces
2 bedroom unit	Built-to-Sell	1 space / unit	15	15.0 spaces
3 bedroom unit	Built-to-Sell	1.5 spaces / unit	4	6.0 spaces
1 bedroom unit	Affordable	0.4 spaces / unit	3	1.2 spaces
2 bedroom unit	Affordable	0.5 spaces / unit	3	1.5 spaces
Total				**25.9 spaces**

5.3 Accessible Parking

With respect to accessible parking, reference is made to the CBDCP 2023 extract below, and in turn, the Livable Housing Design Guidelines. Essentially, there is no requirement for adaptable apartments, only liveable apartments, therefore no residential accessible car spaces are required or proposed.

Development types	Development controls
Secondary dwellings and houses	New dwellings must achieve the Silver Standard.
Dual occupancies and semi-detached dwellings	At least one dwelling must achieve the Gold Standard; and the second dwelling must achieve the Silver Standard.
Multi dwelling housing and attached dwellings	A minimum 20% of new dwellings must achieve the Silver Standard; and a minimum 20% of new dwellings must achieve the Gold Standard.
Residential flat buildings and shop top housing	A minimum 20% of new dwellings must achieve the Silver Standard; and a minimum 20% of new dwellings must achieve the Gold Standard. However, it is noted that shop top housing will not deliver dwellings at the ground floor as this would be inconsistent with the LEP definition.

Notwithstanding, the proposed development includes the provision of 4 accessible car parking spaces within the basement parking area.

5.4 Proposed Car Parking Provisions

It is noteworthy that the SEPP (Housing) 2021 does not specify car parking rates for visitors, such that zero are technically required. Notwithstanding, the visitor parking rate for *Residential flat buildings/serviced apartments*, as stipulated in Council's DCP 2023, Chapter 3 – General Requirements, Section 2 – Off-street parking rates, is applied at a rate of *1 visitor space per 5 dwellings.*

Land use	Car spaces	Bicycle spaces
Residential flat buildings/serviced apartments	Zones R4, B1, B2 and B6 1 car space per 1 bedroom dwelling; 1.2 car spaces per 2 bedroom dwelling; 1.5 car spaces per 3 or more bedroom dwelling; 1 visitor car space per 5 dwellings. Zone B4 Minimum 1 car space and maximum 3 car spaces per dwelling; and 1 visitor car space per 5 dwellings. Note 1: Residential flat buildings on classified roads with over 10,000 vehicles per day should provide an additional space on the site for a furniture truck. Note 2: All car spaces must be located behind the front building line. Residential flat buildings are required to provide car spaces for people with disabilities depending on the size of the development. Note 3: Service and delivery vehicles can use visitor spaces.	1 visitor space per 10 dwellings

(Source: Canterbury-Bankstown DCP 2023, Chapter 3, Section 2)

The proposed development makes provision for a total of 55 off-street car parking spaces within the two-level basement parking, thereby satisfying the SEPP (Housing) 2021's minimum requirements, as well as Council's CBDCP 2023 requirements for visitors.

Table 5.2 – Off-Street Car Parking Proposed		
Land Use	**SEPP (Housing) 2021 Requirement**	**Proposed Provision**
Residential	25.9 spaces	49 spaces
Visitors	-	6 spaces
Total	**25.9 spaces**	**55 spaces**

5.5 Bicycle Parking

The SEPP (Housing) 2021 does not specify bicycle parking rates for in-fill housing developments. Notwithstanding, Council's CBDCP 2023 specifies a bicycle parking rate of *1 visitor space per 10 dwellings* for residential flat buildings. Application of this rate to the proposed provision of 28 units requires the provision of 4 bicycle spaces.

That requirement is satisfied by the proposed provision of 33 large storage cages located on the ground floor level within a secure room, all of which can accommodate several bicycles each, if required.

6. Design Assessment

6.1 Applicable Design Standards

The following design standards have been used as the basis for compliance with respect to the vehicular access, parking and loading requirements:

- Australian Standards 2890.1:2004 – Off-Street Car Parking (AS2890.1)
- Australian Standards 2890.3:2015 – Bicycle Parking (AS2890.3)
- Australian Standards 2890.6:2022 – Off-Street Parking for People with Disabilities (AS2890.6)

6.2 Vehicular Access & Circulation Design

The following key compliances are noted with respect to the vehicular access design and circulation system:

- 6.1m wide two-way driveway in accordance with "Category 1" requirements, before tapering into a 4.0m wide single-lane ramp with traffic signals at both ends to control flow
- driveway located outside of the 6m "prohibited" tangent points of an intersection
- first 6m of the driveway within the property boundary @ maximum 5% (1:20)
- maximum ramp gradient of 25% (1:4) on the entry ramp and internal ramp
- top and bottom 2m ramp transitions @ 12.5% (1:8)
- 2.5m x 2.0m pedestrian sight triangle on the exit side of the driveway at the top of the ramp
- minimum 6.1m wide aisles, in exceedance of User Class 1A requirements
- minimum 1m "aisle extension" at the end of the dead-end parking aisle on B2
- minimum 2.2m overhead clearance provided throughout the vehicular circulation system
- traffic signals at the top and bottom of the ramps, displaying the green lantern to entering traffic at all times, unless triggered by a vehicle existing the basement.

Further to the above, the vehicular access arrangements have been designed to accommodate the swept turning path requirements of the B99 design vehicle as specified in AS2890.1, allowing them to circulate the internal ramps without difficulty, and to enter and exit the site in a forward direction at all times. Swept turning path diagrams are reproduced in Appendix B.

6.3 Parking Design

The following key compliances are noted with respect to the parking and loading area design and the AS2890 series:

- 5.4m long x 2.4m wide car parking spaces in accordance with User Class 1A requirements
- 5.4m long x 2.4m wide accessible car parking spaces *plus* 5.4m long x 2.4m wide adjacent "shared area", in accordance with AS2890.6
- Minimum 300mm additional width for parking spaces located against walls
- minimum 2.5m overhead clearance provided above accessible parking spaces and adjacent shared area
- minimum 2.2m overhead clearance provided above all other parking spaces
- columns in parking areas generally located ~750mm back from the edge of the parking aisle
- no obstructions within the "design envelope" of any car parking spaces
- all vehicles are able to enter and exit the site in a forward direction at all times

7. Conclusion

In summary, the proposed development involves the demolition of the existing structures on the site and the construction of a new residential apartment building, comprising 30 built-to-sell units and 6 affordable housing units.

Off-street parking is proposed for 55 cars (including 4 accessible spaces) within a new two-level basement. Vehicular access to the site is to be provided via the new entry/exit driveway located off the southern end of the Dutton Street site frontage.

Based on the findings contained within this report, the following conclusions are made:

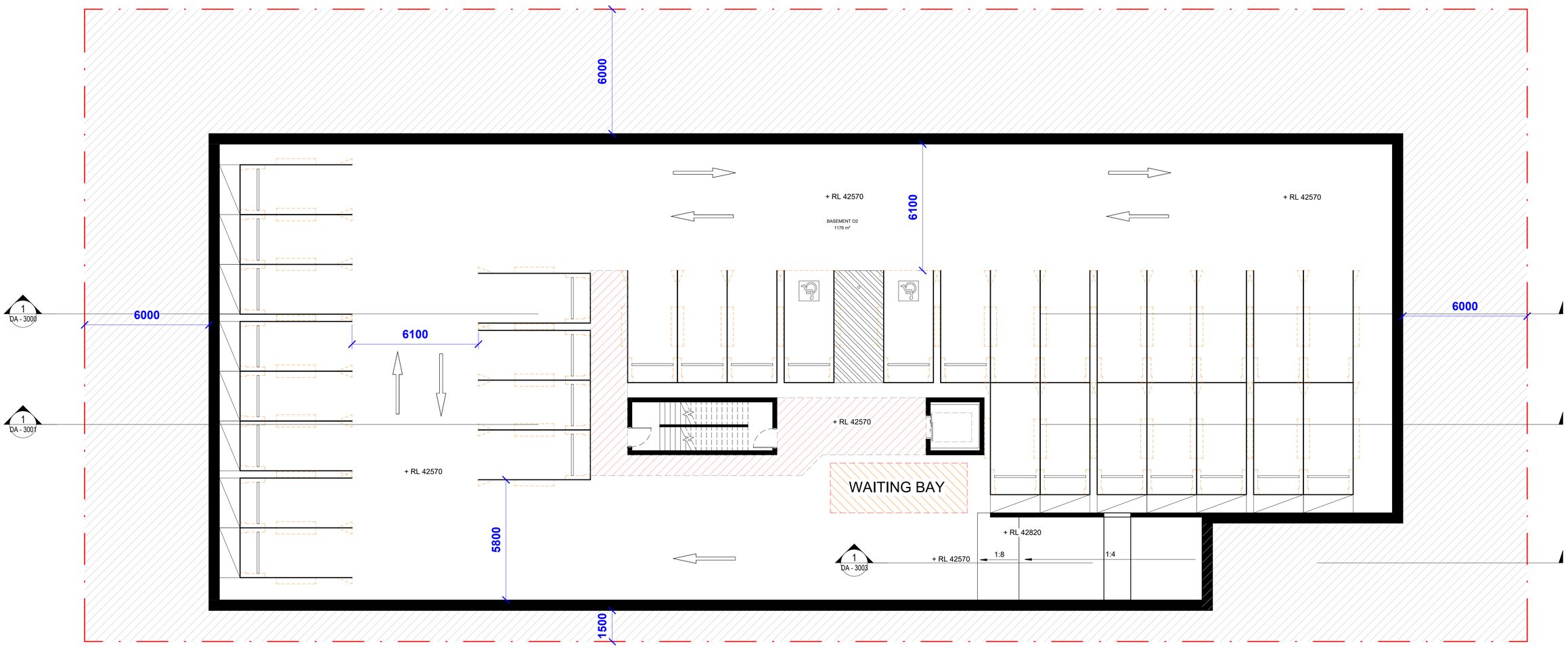
- the site is located within 400m radius of Yagoona railway station as well as high-frequency bus services along the Hume Highway
- the proposed development is expected to generate in the order of 6 vehicle trips during the weekday morning peak period and 7 vehicle trips during the weekday afternoon peak period
- when compared to the existing uses on the site, the proposed development is expected to result in a *nett increase* of 5 vehicle trips during the weekday morning peak period and 4 vehicle trips during the weekday afternoon peak period
- the proposed nett increase in traffic is minimal, consistent with the R4 zoning which applies to the site, and not expected to result in any unacceptable traffic implications to the surrounding road network
- the proposed development makes provision for 55 car parking spaces (including 4 accessible spaces), thereby satisfying the requirements set forth in SEPP (Housing) 2021 and Council's DCP 2023.
- the proposed vehicular access and parking design complies with the relevant requirements of the AS2890 series
- waste collection is to be undertaken from the kerbside area, directly outside the site

In light of the foregoing assessment, it is therefore concluded that the proposed development is supportable on vehicular access, traffic, parking and servicing grounds and will not result in any unacceptable implications.

CJP | CONSULTING ENGINEERS

Appendix A

Proposed Architectural Plans



GA_BASEMENT 02

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PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes

Verify all dimensions on site before commencing work. Report all discrepancies to the architect prior to construction. Place Studio shall not be held responsible for any variations to specifications or drawings due to any discrepancies without consultation. Use figured dimensions in preference to scaled dimensions. Drawings made to larger scales and those showing particular parts of the works take precedence over drawings made to smaller scales or for general purposes. All work is to conform to relevant Australian Standards and Codes together with all Authorities' requirements and Regulations.

11/12/2024 5:13:08 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	01/06/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
C	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
GA_BASEMENT 02

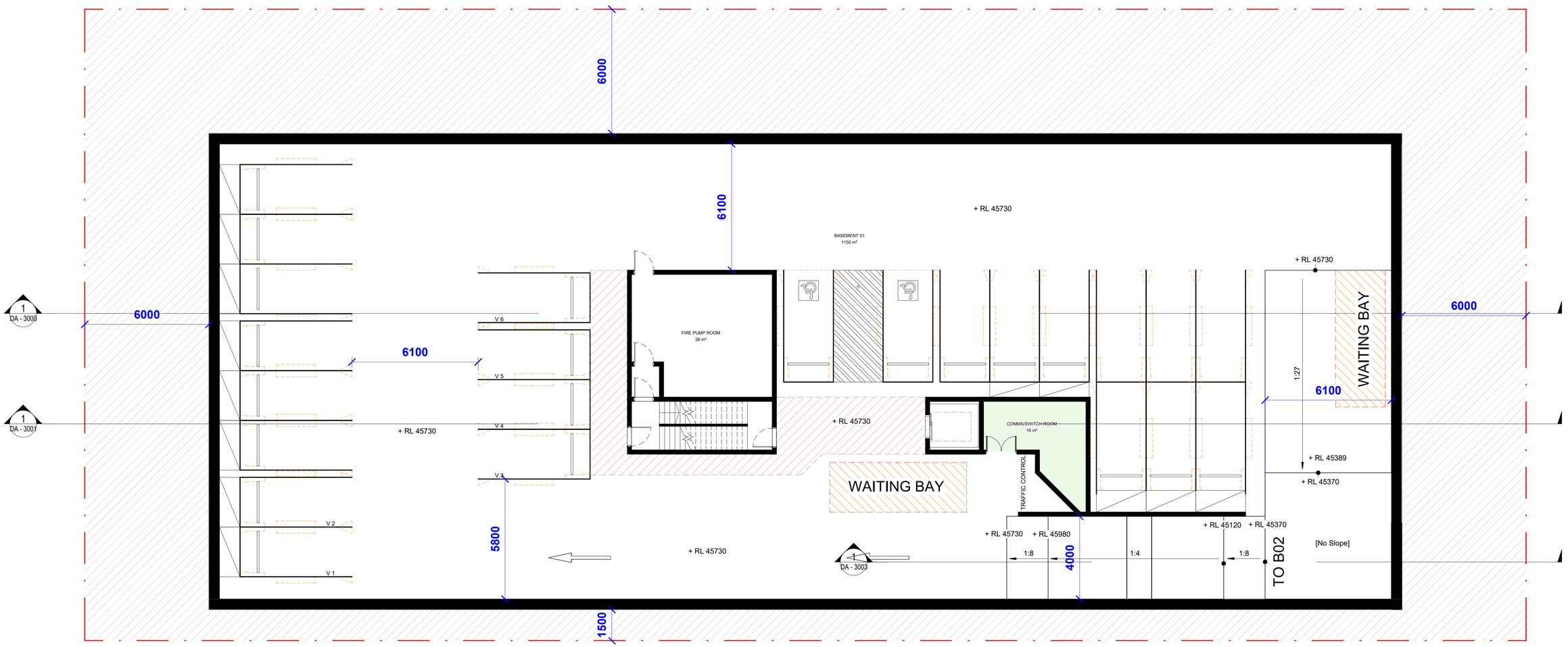
SHEET NUMBER:
DA - 1000

REV:
C

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH
WE BUILD, WHEN YOU CAN TRUST



GA_BASEMENT 01

1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes

Verify all dimensions on site before commencing work. Report all discrepancies to the architect prior to construction. Place Studio shall not be held responsible for any variations to specifications or drawings due to any discrepancies without consultation. Use figured dimensions in preference to scaled dimensions. Drawings made to larger scales and those showing particular parts of the works take precedence over drawings made to smaller scales or for general purposes. All work is to conform to relevant Australian Standards and Codes together with all Authorities' requirements and Regulations.

11/12/2024 5:13:09 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	01/06/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
C	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m

1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
GA_BASEMENT 01

SHEET NUMBER:
DA - 1001

DATE: 17/11/2024

REV:
C

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH
WE BUILD, WHEN YOU CAN TRUST

GA_GROUND
1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

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11/12/2024 5:13:12 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	01/06/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
C	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
GA_GROUND LEVEL

SHEET NUMBER:
DA - 1002

REV:
C

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH
WHY BUILD, WHEN YOU CAN PRINT

GA_LEVEL 01

1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes

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11/12/2024 5:13:17 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	01/06/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
C	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m

1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
GA_ LEVEL 01

SHEET NUMBER:
DA - 1003

REV:
C

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH

SECTION 1
1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes
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13/12/2024 9:38:05 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
SECTION 1

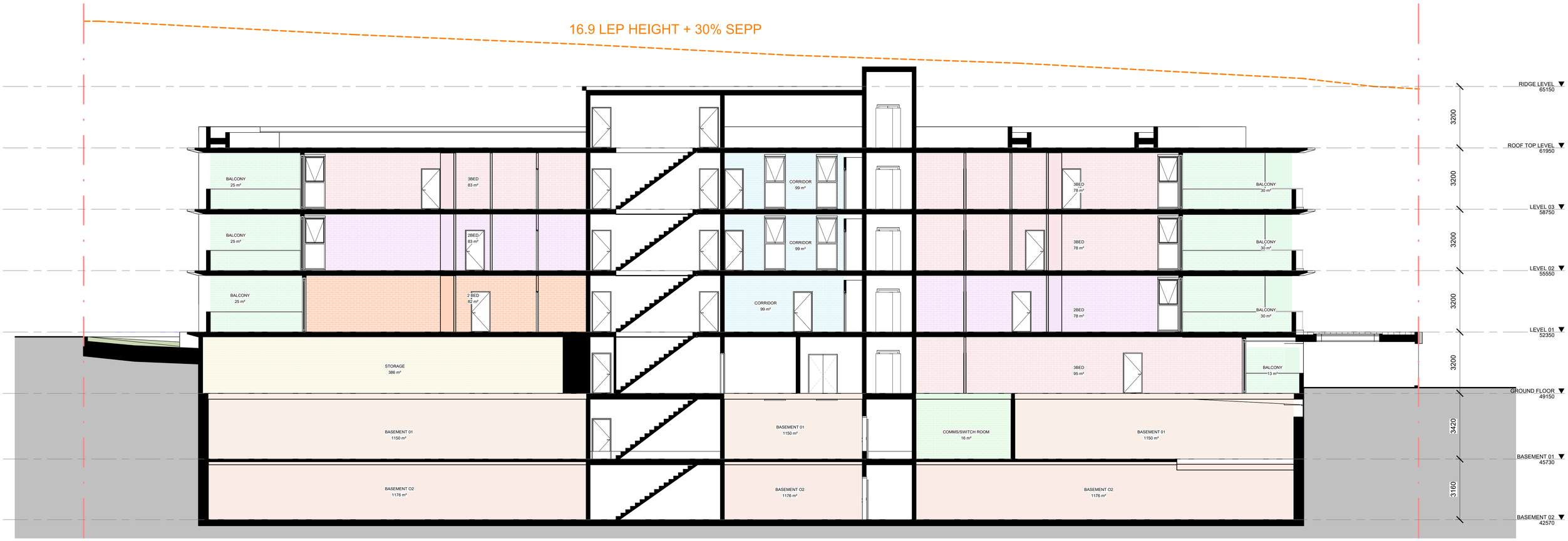
SHEET NUMBER:
DA - 3000

REV:
B

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH



SECTION 2
1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes
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13/12/2024 9:38:07 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
SECTION 2

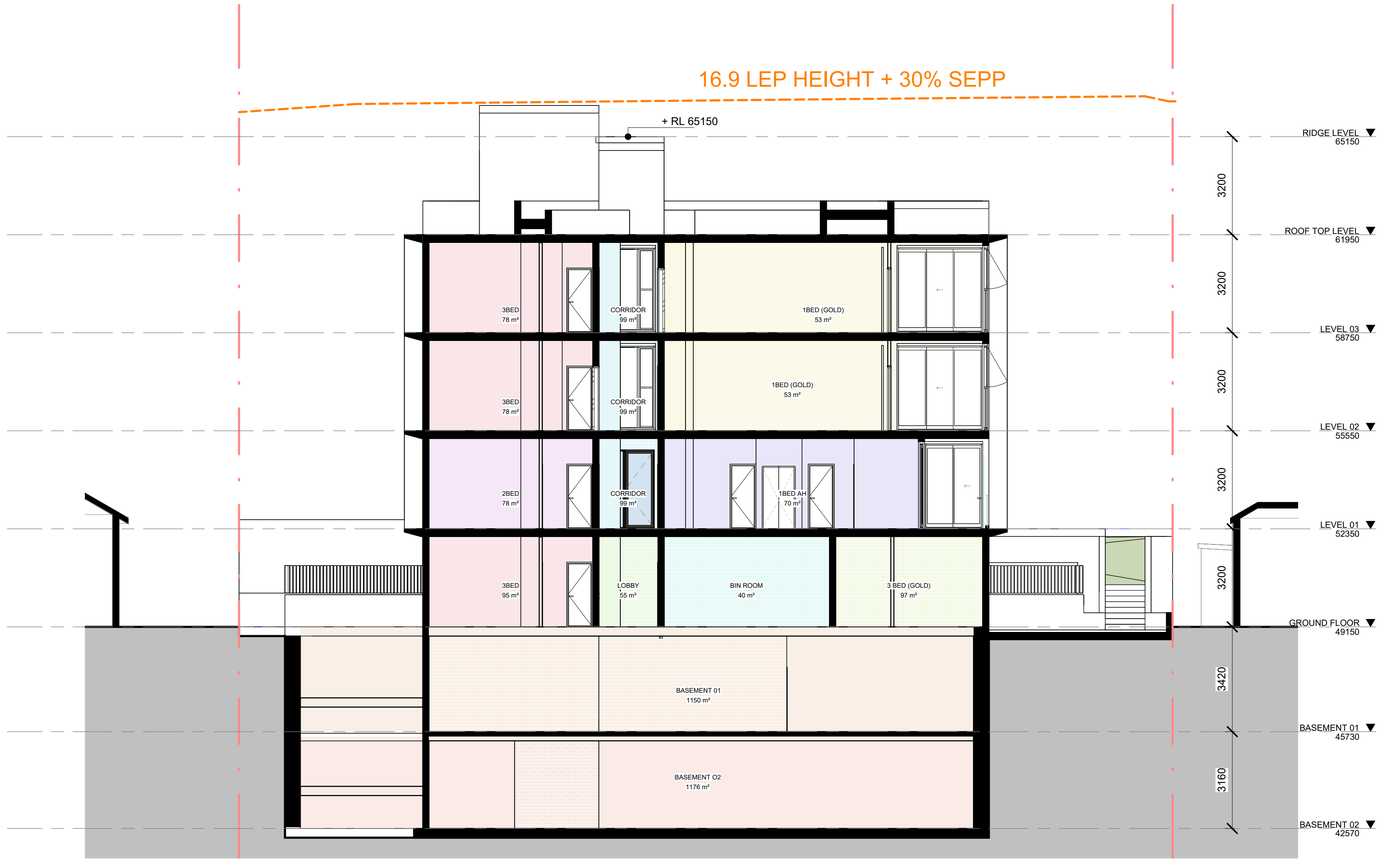
SHEET NUMBER:
DA - 3001

REV:
B

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH
WHY BUILD, WHEN YOU CAN PRINT



Section 3
1 : 100

PRELIMINARY
NOT FOR CONSTRUCTION

Document Notes
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13/12/2024 9:38:09 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	28/07/2024	ISSUE FOR INFORMATION	KHALED KABBOUT
B	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 100 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
SECTION 3

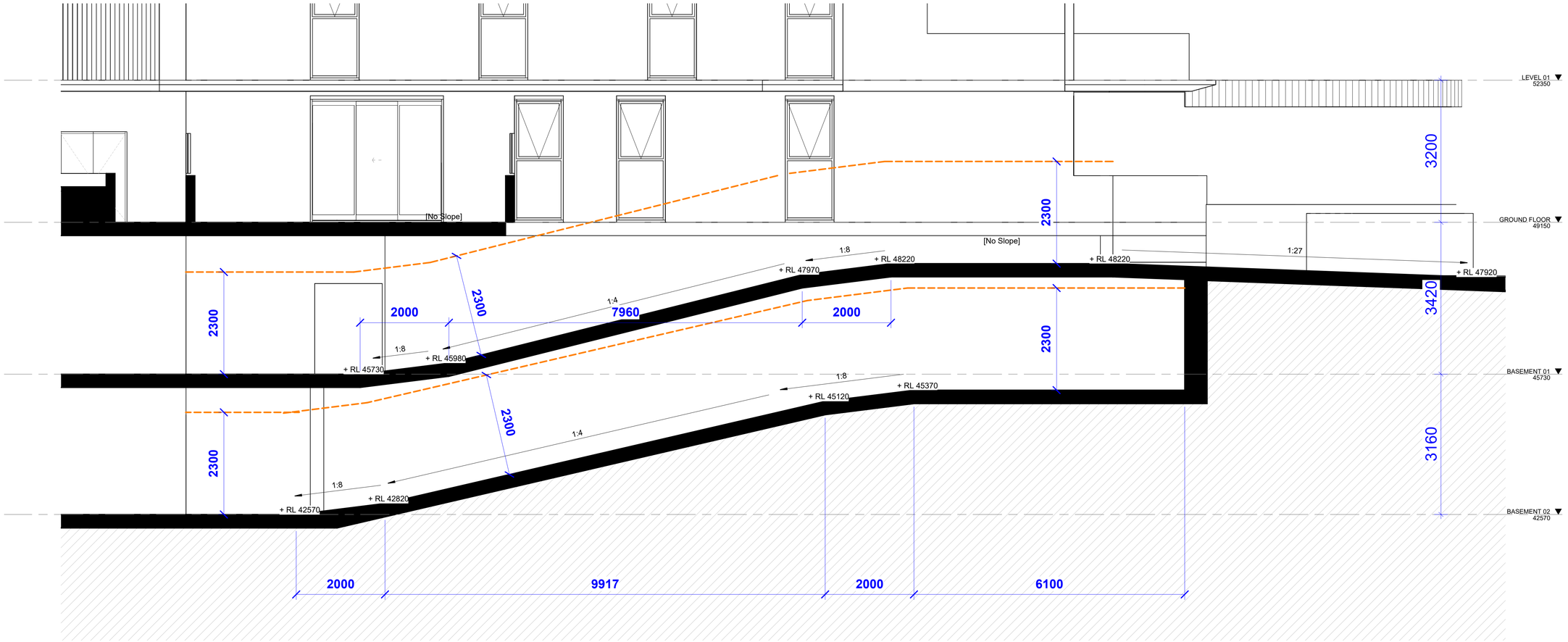
SHEET NUMBER:
DA - 3002

REV:
B

DATE: 17/11/2024

ARCHITECT:
CEDAR
DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH



RAMP SECTION
1 : 50

PRELIMINARY
NOT FOR CONSTRUCTION

13/12/2024 9:38:10 PM

REV	DATE	DESCRIPTION	DP FULL NAME
A	17/11/2024	DA SUBMISSION	KHALED KABBOUT

LEGEND:

N

0 4m
1:100

SCALE: 1 : 50 @ A1

PROJECT:
#2022076

115-117 Dutton Street, Yagoona

CLIENT:

DRAWING TITLE:
SECTION RAMP

SHEET NUMBER:
DA - 3003

REV:
A

DATE: 17/11/2024

ARCHITECT:
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DESIGN & CONSTRUCT
CONCEPT TO REALITY

CRETE-TECH

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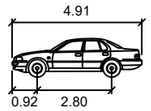
Appendix B

Swept Turn Paths

SWEPT PATH KEY:

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



B85

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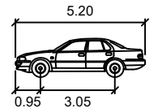
Width	: 1.87
Track	: 1.77
Lock to Lock Time	: 6.0
Steering Angle	: 34.1



B99

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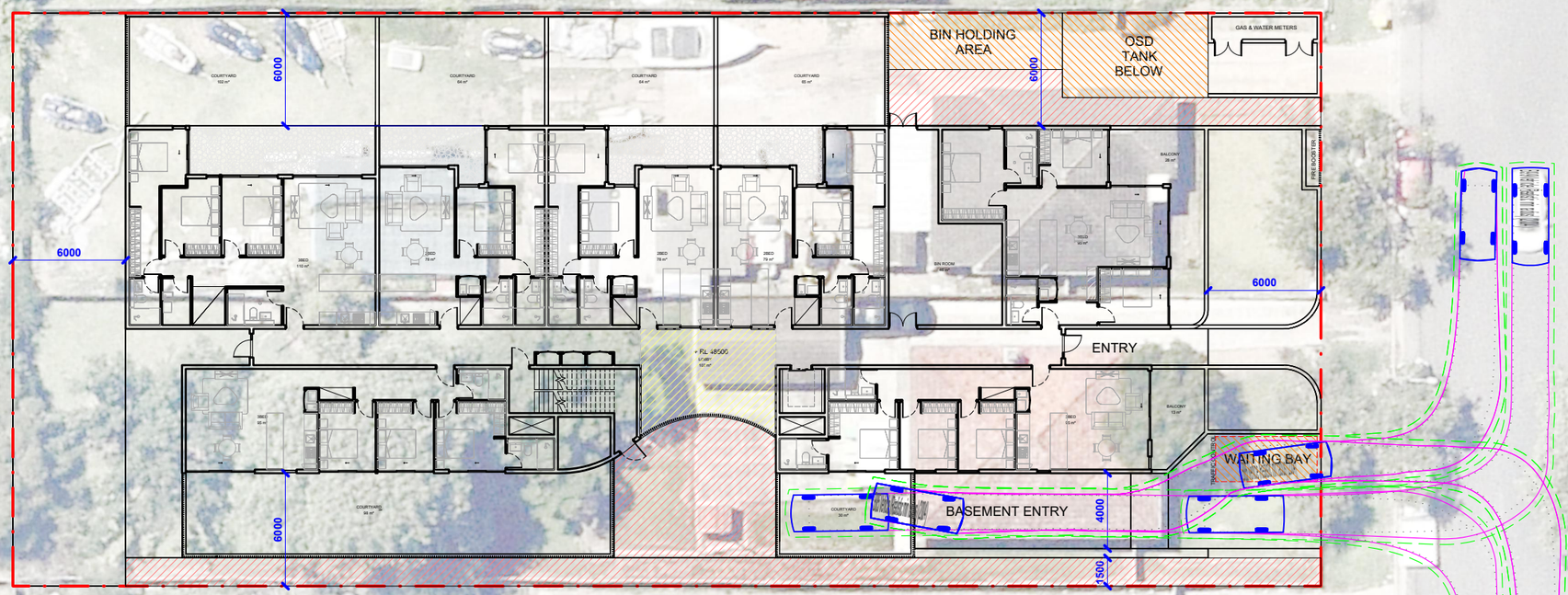
Steering Angle	: 33.9



Plotted by CJP CONSULTING ENGRS

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Hunters Hill NSW 2110
M: 0415 256 233
E: info@cjpconsultingengineers.com.au

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 PROVEN ON SITE.
ALL EXISTING SERVICES SHOWN ARE NOT GUARANTEED.

115-117 DUTTON STREET, YAGOONA
CAR PARK COMPLIANCE REVIEW - GROUND LEVEL
B99 ENTRY PATH AND B85 EXIT PATH

SCALE 0 3.0 6.0 1:300 @ A3

DRAWING NO. 24124-D01-V1

SHEET NO. 01 OF 05

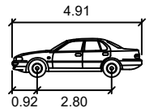
ISSUE DATE 26 July 2024

DRAWN BY D. ALOC

REVIEWED BY C. PALMER

SWEPT PATH KEY:

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



B85

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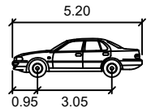

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Width	: 1.94
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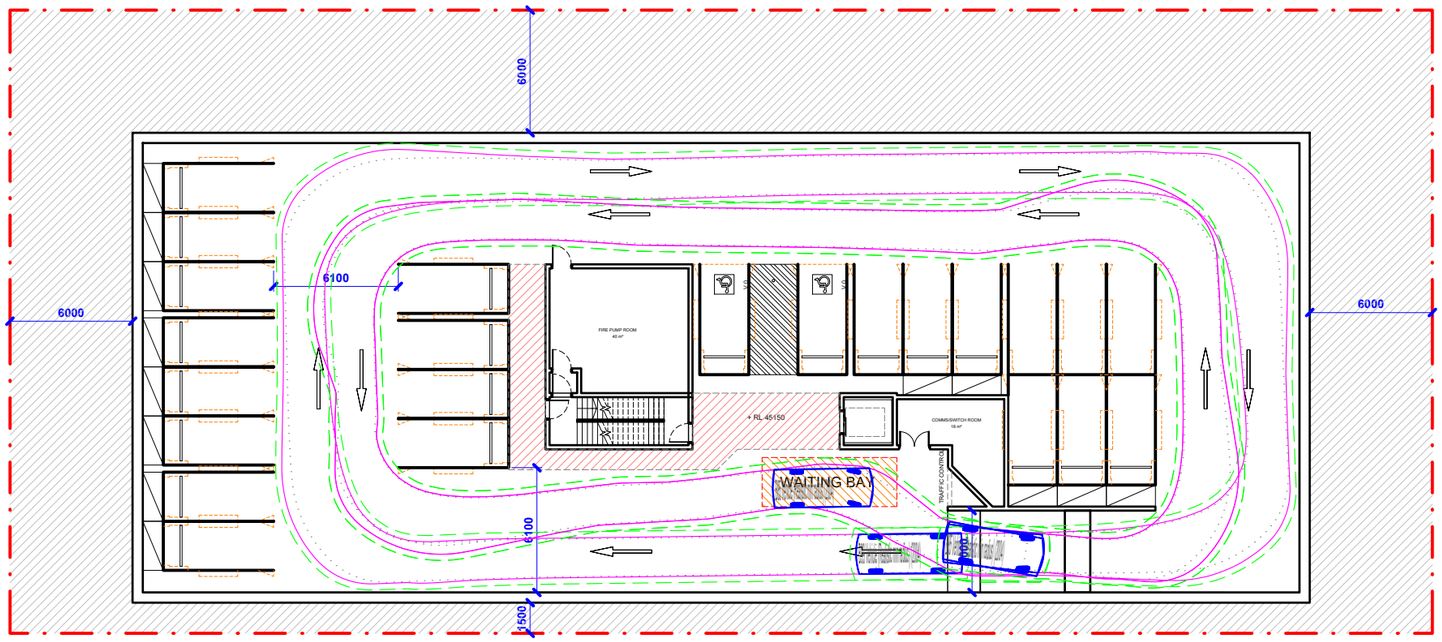
Steering Angle	: 33.9



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115-117 DUTTON STREET, YAGOONA
CAR PARK COMPLIANCE REVIEW - BASEMENT 1
B99 ENTRY PATH AND B85 EXIT PATH

N

SCALE 0 3.0 6.0 1:300 @ A3

DRAWING NO. 24124-D01-V1

SHEET NO. 02 OF 05

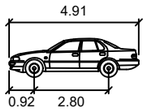
ISSUE DATE 26 July 2024

DRAWN BY D. ALOC

REVIEWED BY C. PALMER

SWEPT PATH KEY:

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



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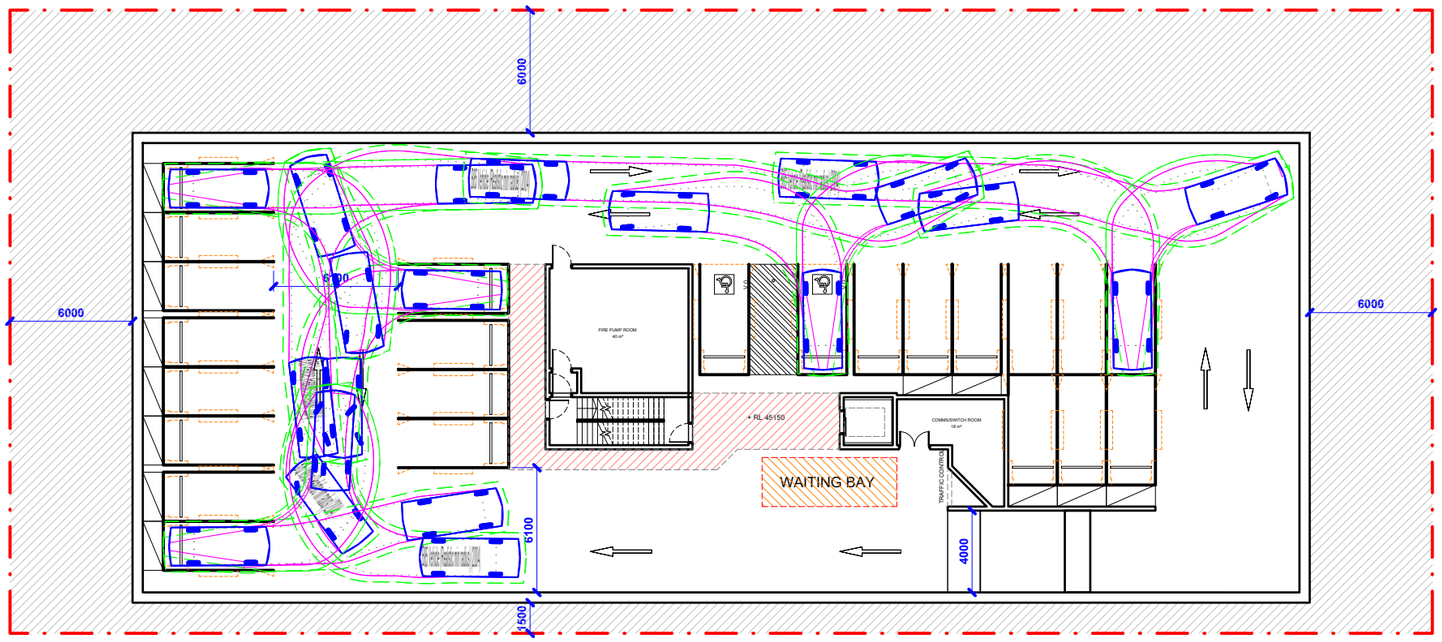

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115-117 DUTTON STREET, YAGOONA
CAR PARK COMPLIANCE REVIEW - BASEMENT 1
B85 ENTRY AND EXIT PATHS

SCALE 0 3.0 6.0 1:300 @ A3

DRAWING NO. 24124-D01-V1

SHEET NO. 03 OF 05

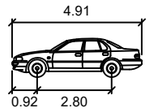
ISSUE DATE 26 July 2024

DRAWN BY D. ALOC

REVIEWED BY C. PALMER

SWEPT PATH KEY:

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



B85

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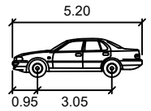
Lock to Lock Time	: 6.0
Steering Angle	: 34.1



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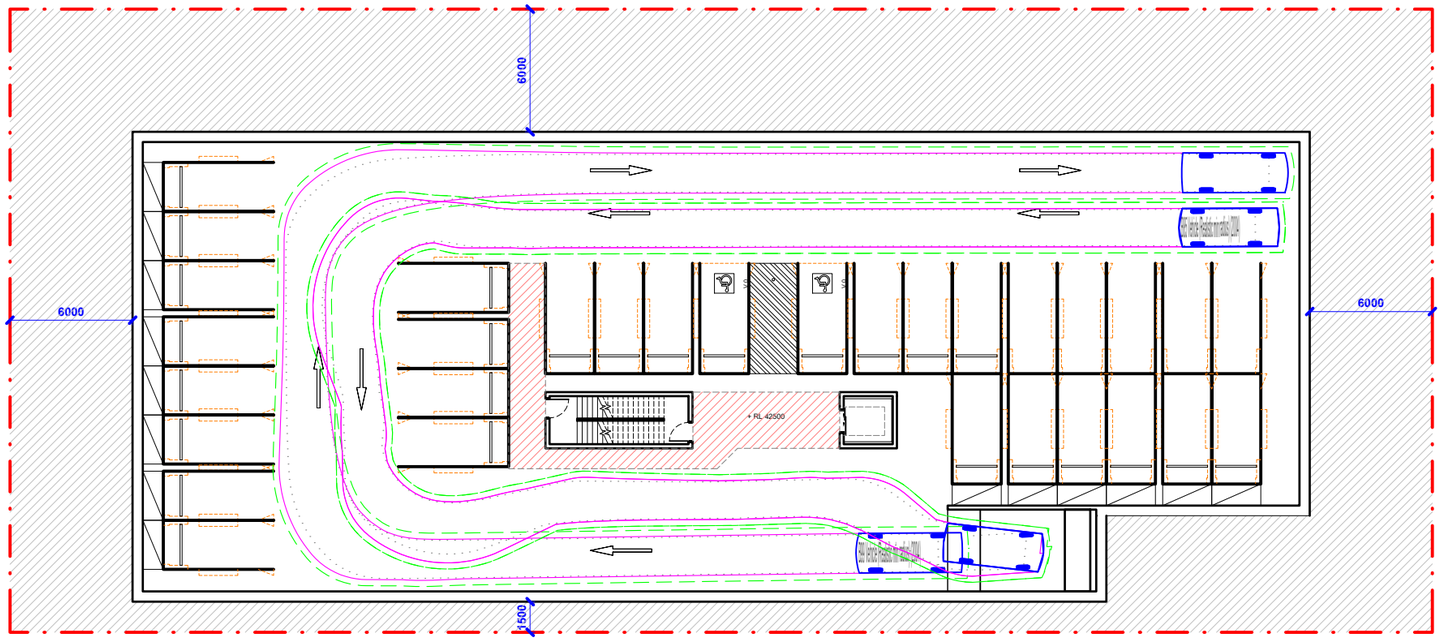

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115-117 DUTTON STREET, YAGOONA
CAR PARK COMPLIANCE REVIEW - BASEMENT 2
B99 ENTRY PATH AND B85 EXIT PATH

N

SCALE 0 3.0 6.0 1:300 @ A3

DRAWING NO. 24124-D01-V1

SHEET NO. 04 OF 05

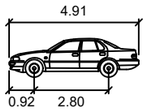
ISSUE DATE 26 July 2024

DRAWN BY D. ALOC

REVIEWED BY C. PALMER

SWEPT PATH KEY:

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



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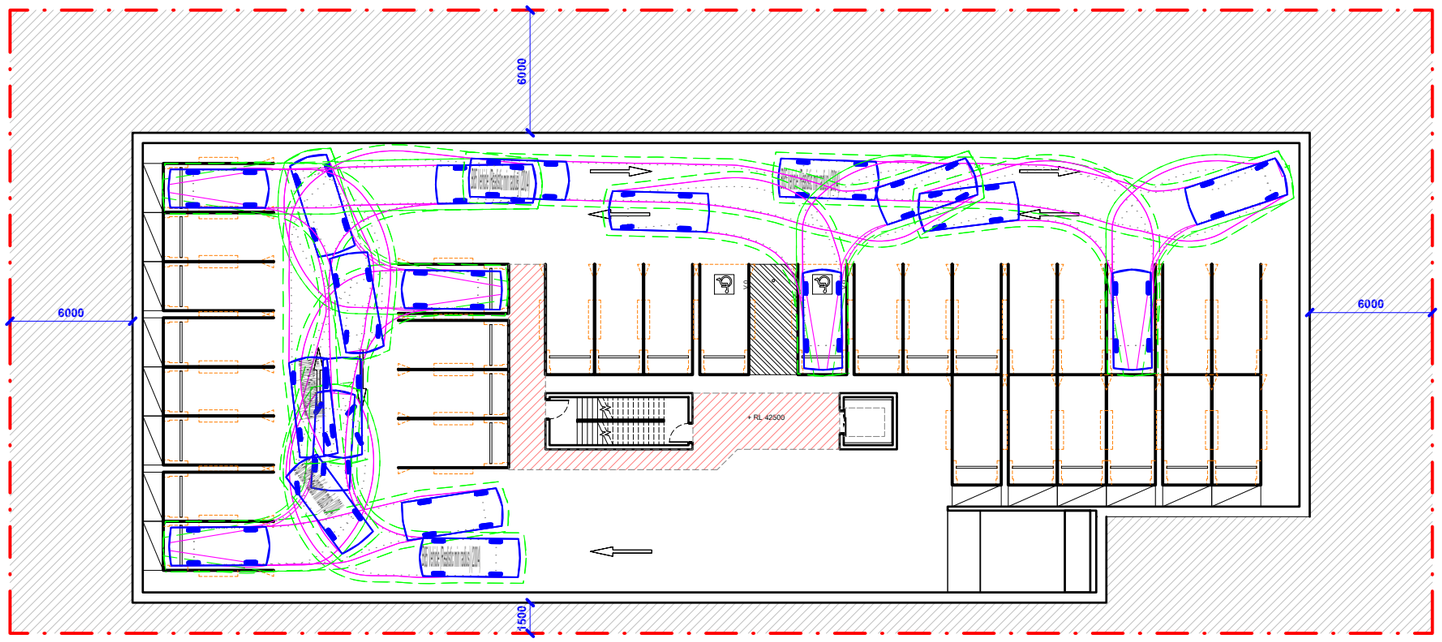

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115-117 DUTTON STREET, YAGOONA
CAR PARK COMPLIANCE REVIEW - BASEMENT 2
B85 ENTRY AND EXIT PATHS

N

SCALE 0 3.0 6.0 1:300 @ A3

DRAWING NO. 24124-D01-V1

SHEET NO. 05 OF 05

ISSUE DATE 26 July 2024

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