Client	Date
Albert Street Developer Pty Ltd	16 September 2025

Transport Impact Assessment

Proposed Residential Development

53-57 Albert Street, Brunswick East

Planning
Transport
Urban Design
Waste Management
Landscape Architecture
Civil Engineering

ratio:

ratio.com.au

Project
55 Albert Street, Brunswick

Prepared for
Albert Street Developer Pty Ltd

Our reference
22850T

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Version	Date	Issue	Prepared by	Approved by
F01	16/09/2025	Final	R. Tan & J. Hamill-Beach	P. Malley

Acknowledgement of Country

We acknowledge the Traditional Owners of the land we work, live and travel on, and appreciate the rich cultures of the Aboriginal and Torres Strait Islander Peoples and their enduring connection to country.

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1. Introduction

1.1. Planning Background

Planning Permit MPS/2021/1029 was issued by Moreland City Council (now Merri-Bek City Council) for the land addressed as 53-57 Albert Street in Brunswick East.

The planning permit allows for:

"Construction of a five storey apartment building and a reduction in the car parking requirement, in accordance with the endorsed plans."

The approved development scheme proposed the construction of a five-storey residential building comprising 71 apartments.

50 car parking spaces were proposed within the basement level, with vehicle access to/from the site proposed via a 5.5-metre-wide crossover to/from Cross Street at the northeast corner of the site.

1.2. Introduction

Planning approval is now sought for an amended development scheme for the abovementioned land, via a Section 87A application.

Ratio Consultants has been engaged by the permit applicant to undertake a Transport Impact Assessment of the amended development proposal.

1.3. Purpose & Structure of this Report

This report sets out an assessment of the anticipated transport engineering implications of the amended development proposal, including consideration of:

- Existing traffic and car parking conditions in the vicinity of the site;
- Car parking demand likely to be generated by the development proposal;
- Suitability of the proposed car parking facilities, in terms of supply and layout;
- Suitability of the proposed bicycle parking facilities, in terms of supply and layout;
- Adequacy of the proposed site access arrangements;
- Adequacy of the proposed loading and waste collection arrangements; and
- Traffic generating characteristics of the development proposal and impact on the surrounding road network.

1.4. References

The following material has been referred to throughout the preparation of this report:

- Architectural plans prepared for the development proposal by Jackson Clements Burrows Architects, Rev A, dated 15 September 2025;

- Merri-bek Planning Scheme;
- Traffic Engineering Assessment prepared for the approved scheme by Traffix Group, Rev A, dated December 2021;
- Australian/ New Zealand Standard, Parking Facilities Part 1: Off-Street Car Parking (AS/NZS 2890.1:2004);
- Australian Standard, Parking Facilities Part 3: Bicycle Parking (AS2890.3:2015);
- Merri-bek Register of Public Roads;
- Various online mapping tools;
- A desktop inspection of the subject site and its surrounds; and
- Other documents referenced

2. Existing Conditions

2.1. Site Location

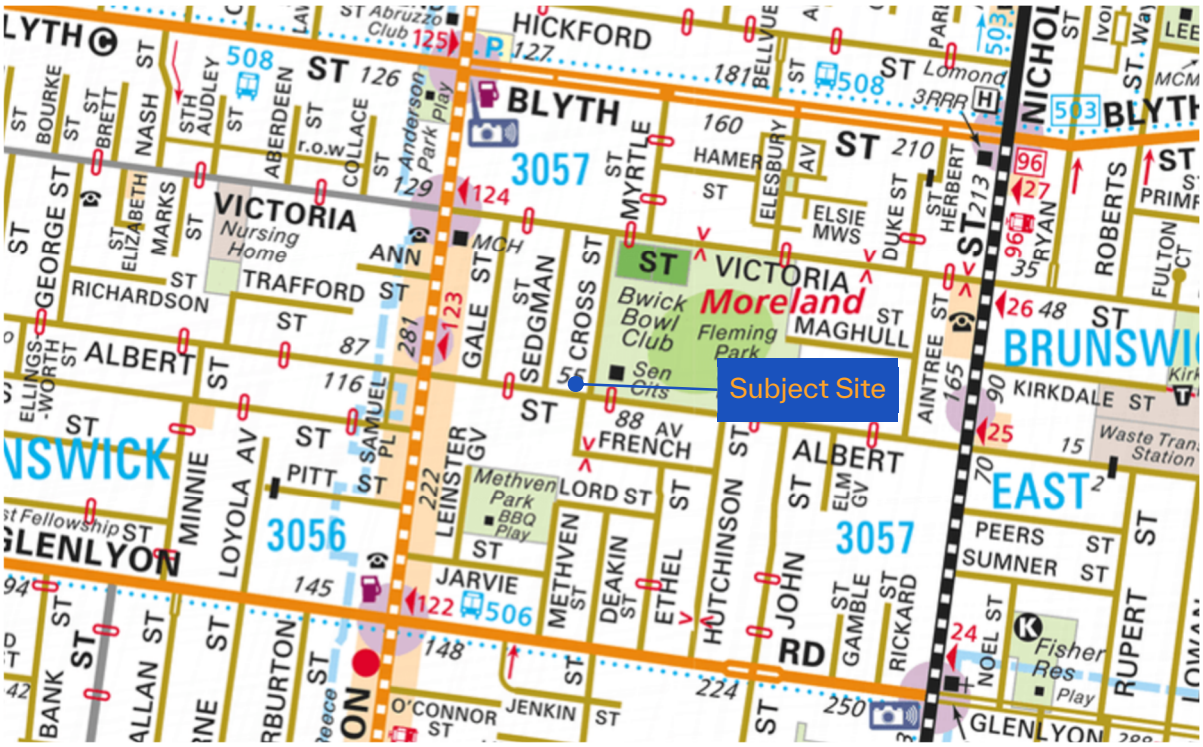
The subject site comprises the land parcel addressed as 53-57 Albert Street in Brunswick East.

The site is located on the northern side of Albert Street, between Sedgman Street and Cross Street and to the west of Fleming Park.

The site is occupied by a single storey industrial building, which will be demolished as part of the proposal.

The location of the subject site and its surrounding environs is shown in Figure 2.1, with an aerial view of the site also provided in Figure 2.2.

Figure 2.1: Site Location



Source: Melway

Figure 2.2: Aerial View of the Site and Surrounds

Source: Landchecker – image dated 10 May 2025

The subject site is located within the Mixed-Use Zone – Schedule 1 (MUZ1) and is subject to the following planning overlays:

— Parking Overlay – Precinct 1 (PO1);

— Design and Development Overlay – Schedule 19 (DDO19);

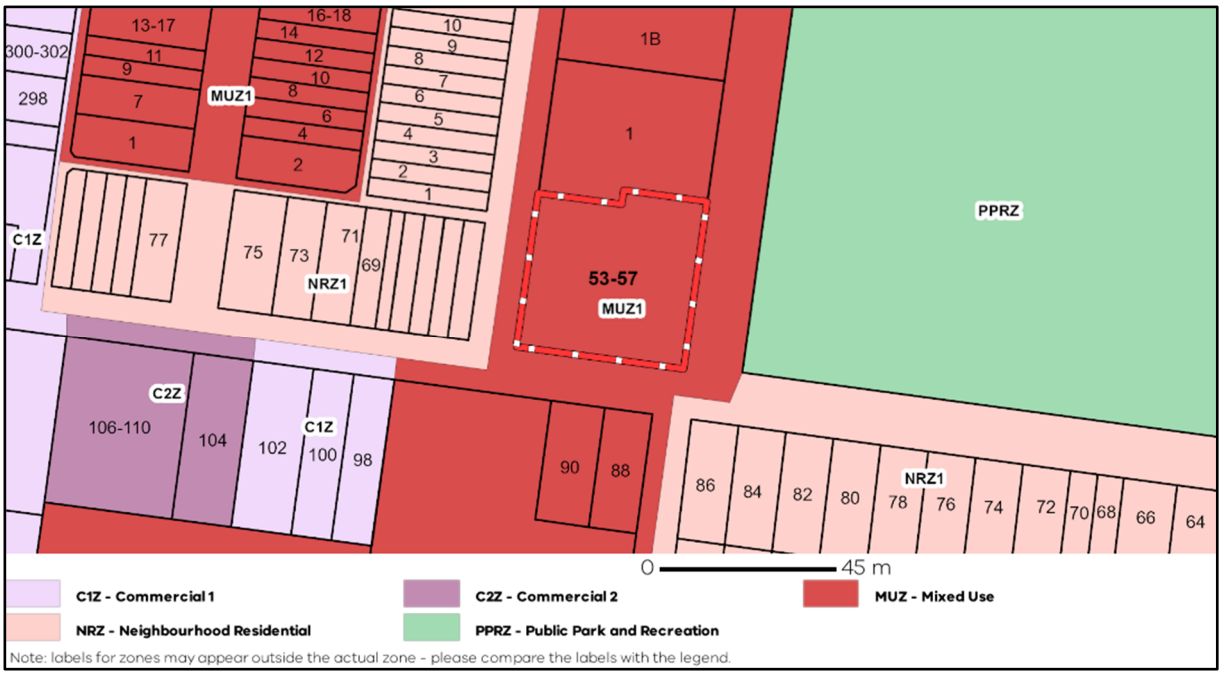
— Development Contributions Plans Overlay – Schedule 1 (DCPO1); and

— Environmental Audit Overlay (EAO).

Land in the nearby vicinity comprises a range of commercial, mixed-use, and residential zoning. The notable exception to this is Fleming Park, located immediately east of the subject site, which is zoned Public Park and Recreation Zone (PPRZ).

The land zoning in the nearby vicinity of the subject site location is shown in Figure 2.3.

Figure 2.3: Site Location & Land Zoning



Source: VicPlan

2.2. Road Network

Albert Street

The section of Albert Street fronting the subject site is classified as an 'Access Street' within the Merri-bek Register of Public Roads.

Albert Street is aligned in an east-west direction between its termination at Daly Street to the west and King Street to the east.

In the vicinity of the site, Albert Street is configured with a carriageway width of approximately 8.0 metres, which permits two-way traffic flow.

Time restricted parallel kerbside parking is permitted on both sides of the carriageway. In locations where a vehicle is parked on both sides of the carriageway there is sufficient width within the centre of the carriageway for a single lane of traffic with opposing vehicles required to move to the side and giving way.

A speed limit of 40 km/h applies to Albert Street, and constructed footpaths are provided on both sides of the road.

Views of Albert Street are shown in Figure 2.4 and Figure 2.5 below.

Figure 2.4: Albert Street, looking east

Source: Google Street View, image dated July 2024

Figure 2.5: Albert Street, looking west

Source: Google Street View, image dated July 2024

Sedgman Street

Sedgman Street is classified as an 'Access Street' within the Merri-bek Register of Public Roads.

Sedgman Street is aligned in a north-south direction, between Victoria Street to the north and Albert Street.

Sedgman Street is configured with a carriageway width of approximately 7.3 metres, which permits two-way traffic flow.

Time restricted parallel kerbside parking is permitted on both sides of the carriageway. In locations where a vehicle is parked on both sides of the carriageway there is sufficient width within the centre of the carriageway for a single lane of traffic with opposing vehicles required to move to the side and giving way.

Sedgman Street does not have a posted speed limit and therefore, a default speed limit of 40 km/h applies, as per the Merri-bek 'Safer Speed Rollout on Local Roads' project, which was implemented in 2023 & 2024.

Views of Sedgman Street are shown in Figure 2.6 and Figure 2.7 below.

Figure 2.6: Sedgman Street, looking north

Source: Google Street View, image dated July 2024

Figure 2.7: Sedgman Street, looking south

Source: Google Street View, image dated July 2024

Cross Street

Cross Street is classified as an 'Access Street' within the Merri-bek Register of Public Roads.

Cross Street is aligned in a north-south direction, between Victoria Street to the north and Albert Street.

Cross Street is configured with a carriageway width of approximately 8.0 metres, which permits two-way traffic flow.

Time restricted parallel kerbside parking is permitted on both sides of the carriageway. In locations where a vehicle is parked on both sides of the carriageway there is sufficient width within the centre of the carriageway for a single lane of traffic with opposing vehicles required to move to the side and giving way.

Cross Street does not have a posted speed limit and therefore, a default speed limit of 40 km/h applies, as per the Merri-bek 'Safer Speed Rollout on Local Roads' project, which was implemented in 2023 & 2024.

Views of Cross Street are shown in Figure 2.8 and Figure 2.9 below.

Figure 2.8: Cross Street, looking north

Source: Google Street View, image dated July 2024

Figure 2.9: Cross Street, looking south

Source: Google Street View, image dated July 2024

2.3. Sustainable Transport

Public Transport

The site has excellent access to public transport, with train, tram and bus services all operating within close proximity to the site, providing excellent connections in the north-south and east-west directions. Accordingly, the subject site is situated within the City of Merri-bek's Principal Public Transport Network (PPTN) area. A summary of the public transport services in the vicinity of the site is provided in Table 2.1 and is illustrated in Figure 2.10 .

Table 2.1: Public Transport Provision

Service	Route No's	Route	Nearest Stop	Approximate Walking Distance
Tram	1	East Coburg – South Melbourne Beach	Albert Street/ Lygon Street	210 metres ~3 minutes
	6	Moreland – Glen Iris		
Bus	506	Monee Ponds – Westgarth Station via Brunswick	Ethel Street/ Glenlyon Road	500 metres ~6 minutes

Figure 2.10: Merri-Bek Public Transport Network Map

Source: Transport Victoria

Bicycle Network

There are various bicycle facilities in the vicinity of the site, including off-road shared paths and on-street bicycle lanes.

Key bicycle routes nearby include the Glenlyon Road – Dawson Street Brunswick East-West route (Route 8), located south of the site, which provides a strong east-west connection between Nicholson Street and CityLink. This route (Route 8) also links to the East Brunswick shimmy (Route 3) to the east of the site, and West Brunswick Shimmy route (Route 4) to the west of the site, which runs north-south between Royal Park and O'Hea Street Shared Path (Route 7), and provides access to the Upfield Shared Path (Route 1).

Additional on-road bicycle lanes are available north of the site along Blyth Street, offering an east-west connection, as well as along Sydney Road to the west, supporting north-south cycling connectivity.

The above routes connect to bicycle infrastructure across the wider bicycle network, providing further connections across Melbourne in all directions.

The above-mentioned cycling routes are shown in Figure 2.11.

Figure 2.11: Excerpt of the Merri-Bek (formerly Moreland) Cycle Map

Source: Merri-Bek City Council

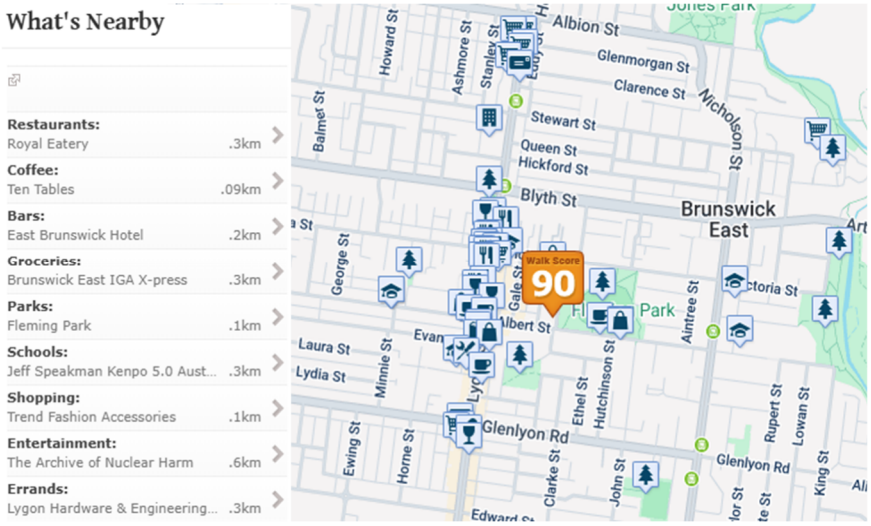
Pedestrian Network

Pedestrian movements are well facilitated in the area, with constructed footpaths provided along both sides of most surrounding streets. Raised pedestrian crossings are also provided on Sedgman Street and Cross Street, facilitating pedestrian safety and accessibility.

The site achieves a 'Walk Score' of 90 points (out of a possible 100) and is described as *'Walker's Paradise'* on walkscore.com, noting that '*daily errands do not require a car'.* A site's walk score is calculated based on the walking distance to local amenities, such as supermarkets, schools, parks, public transport, etc. WalkScore.com utilises data sources such as Google and road network data to calculate a 'Walk Score'.

The convenient everyday services are illustrated on a map in Figure 2.12

Figure 2.12: Walkable Services from the Subject Site



Source: Walk Score

2.4. Existing Traffic Conditions

To understand existing traffic conditions in the vicinity of the site location, Ratio Consultants commissioned turning movement count surveys at the Albert Street / Sedgman Street and Albert Street / Cross Street / French Avenue intersections.

The surveys were undertaken on Thursday 03 July 2025 over the following time periods:

— 6:30am – 9:30am; and

— 3:30pm – 6:30pm.

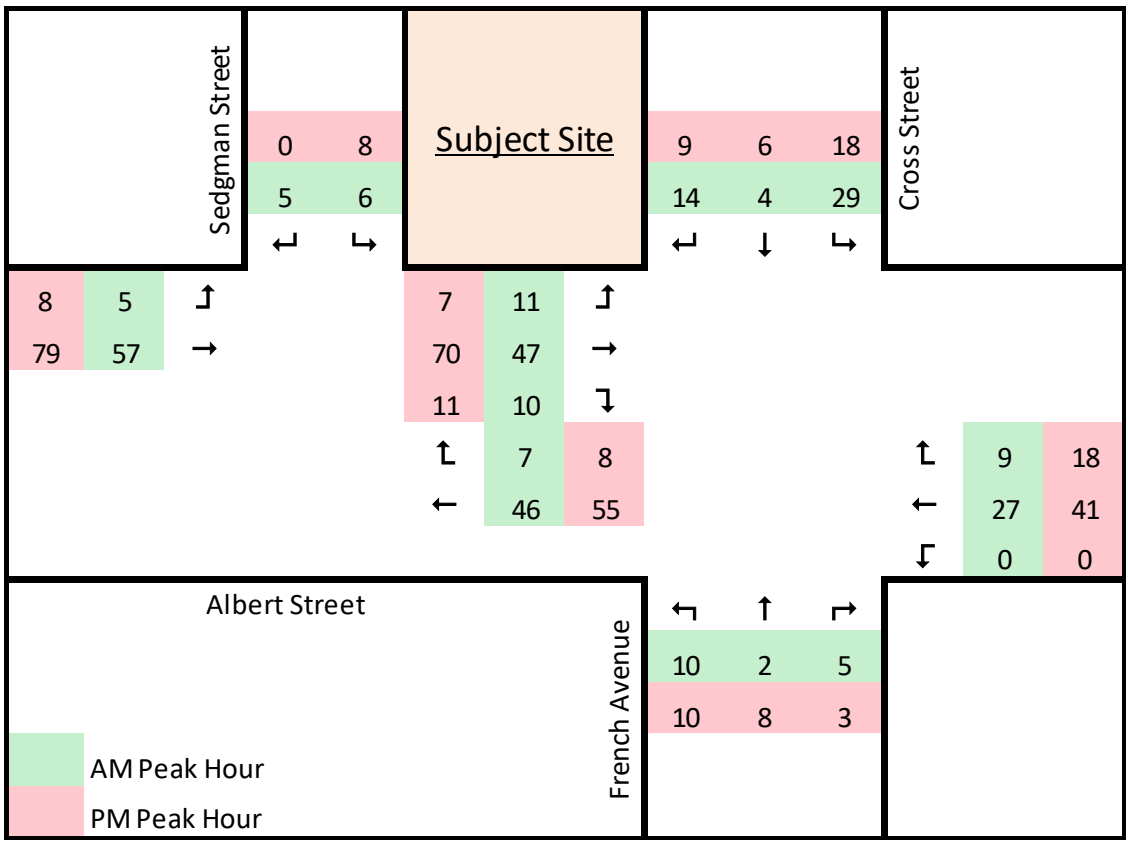
The surveys identified the following road network peak hours:

— AM Peak Hour – 8:15am – 9:15am; and

— PM Peak Hour – 4:45pm – 5:45pm.

The peak hour traffic volumes are presented in Figure 2.13, with a full set of results provided at Appendix A of this report.

Figure 2.13: Existing Peak Hour Traffic Volumes



3. Development Proposal

3.1. Development Overview

It is proposed to develop the land parcel addressed as 53-57 Albert Street in Brunswick East for the purpose of a residential development.

More specifically, it is proposed to construct a multi-storey residential building comprising 49 apartments under the following typologies:

— Four (4) x loft apartments;

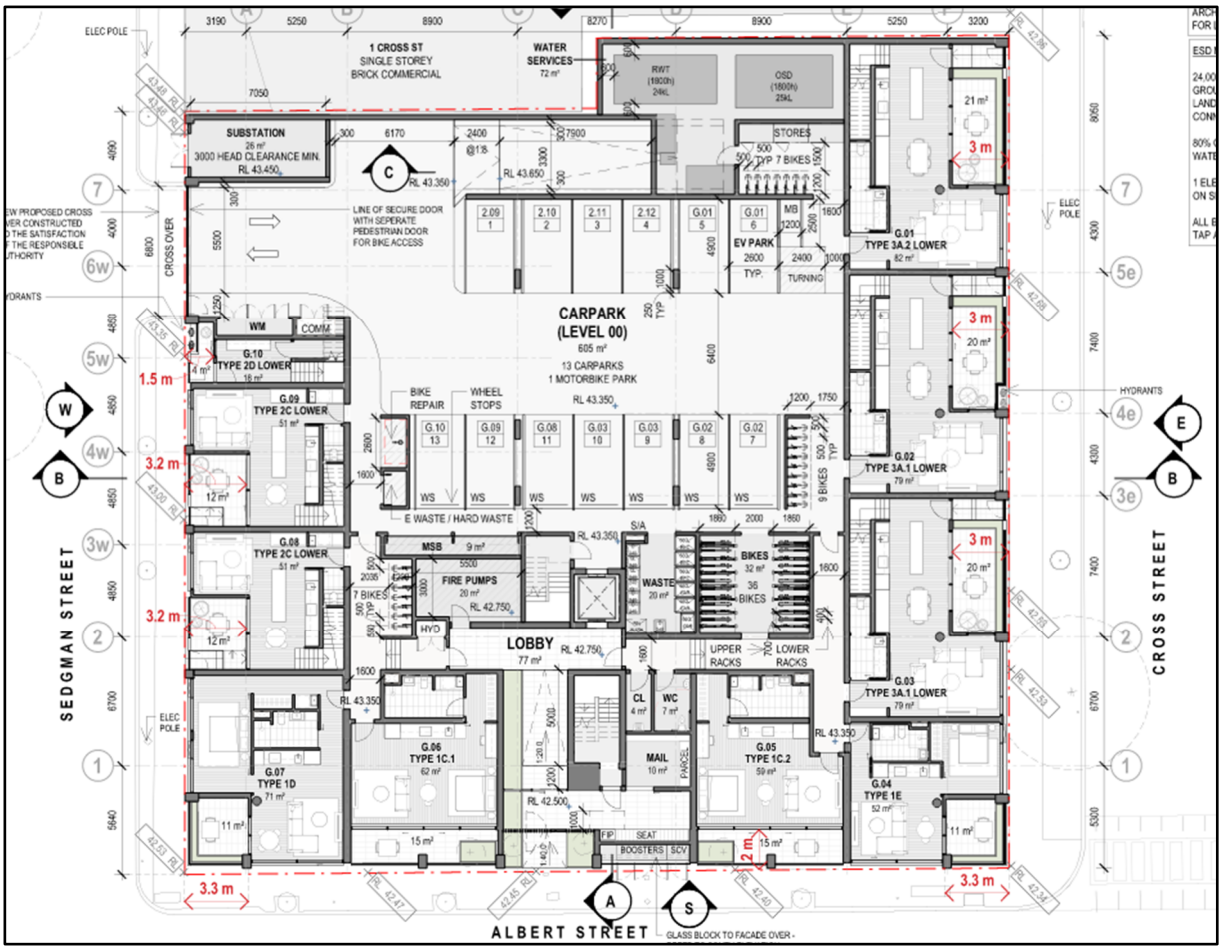
— 14 x one-bedroom apartments;

— 18 x two-bedroom apartments; and

— 13 x three-bedroom apartments.

The proposed site layout is shown in Figure 3.1, with the full architectural plans provided at Appendix B of this report.

Figure 3.1: Proposed Site Layout



Source: Jackson Clements Burrows Architects – Proposed Floor Plan – Level 00

3.2. Parking Provision

A total of 53 car parking spaces are proposed on-site, comprising:

— 13 spaces at ground level;

— 19 spaces at level 01; and

— 21 spaces within the carpark mezzanine level.

Included within the overall car parking provision are 12 tandem pairs, including six (6) tandem pairs within level 01 and six (6) tandem pairs within the carpark mezzanine level.

A total of 59 bicycle parking spaces and a bicycle repair station are proposed on-site, in various locations at ground level. 49 resident spaces and ten (10) visitor spaces are included within this provision.

Five (5) motorcycle parking spaces are proposed on-site, including:

— One (1) motorcycle space at ground level;

— Two (2) motorcycle spaces at level 01; and

— Two (2) motorcycle spaces within the carpark mezzanine level.

3.3. Site Access

Access to/from the car parking levels is proposed via a 6.8-metre-wide crossover along Sedgman Street, at the northwest corner of the site.

A secure door is proposed at the access point, which comprises a 5.5-metre-wide vehicle accessway and separate 1.25-metre-wide door for pedestrian and cyclist access.

Pedestrian access to/from the lobby is proposed midblock along Albert Street.

3.4. Loading & Waste Collection

No formal loading facilities are proposed on-site.

A waste storage room is proposed at ground level.

4. Car Parking Assessment

4.1. Clause 52.06.5 – Car Parking Requirement

Car parking requirements for new developments are set out within Clause 52.06 of the Merri-bek Planning Scheme. The purpose of the Clause 52.06 is defined in the scheme as follows:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

The number of car parking spaces required for a specified land use is listed in Table 1 within Clause 52.06. Table 1 sets out two parking rates, listed as Column A and Column B.

Column A rates are to apply unless the Column B rates are applicable.

Column B rates are applicable in the following circumstances:

- *Any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network (PPTN) Area Maps (State Government of Victoria, 2018); or*
- *A schedule to the Parking Overlay on another provision of the planning scheme specifies that Column B applies.*

The site is situated within the City of Merri-bek's PPTN area and accordingly, the Column B rates within Clause 52.06 of the Merri-bek Planning Scheme are applicable to the development proposal.

Accordingly, the statutory car parking requirements for the application are set out in Table 4.1.

Table 4.1: Statutory Car Parking Requirements

Description	Land Use	No.	Column B Parking Rate	Car Parking Requirement
Loft apartment	Dwelling	4 apartments	1 space to each one- or two-bedroom dwelling	4 spaces
One-bedroom apartment		14 apartments		14 spaces
Two-bedroom apartment		18 apartments		18 spaces
Three-bedroom apartment		13 apartments	2 spaces to each three or more bedroom dwelling (with studies or studios that are separate rooms counted as a bedroom)	26 spaces
Visitor		49 apartments	No requirement	0 spaces
		Total		**62 spaces**

Based on the assessment presented in Table 4.1, the application has a statutory requirement to provide 62 car parking spaces on-site.

4.2. Proposed Car Parking Provision

It is proposed to provide a total of 53 car parking spaces on-site.

The proposed allocation of parking spaces to each apartment is described within the architectural plans. A review of the proposed allocations indicates the following:

- Each three-bedroom apartment will be allocated two (2) parking spaces (each tandem pair will be allocated to a three-bedroom apartment);
- Each two-bedroom apartment will be allocated one (1) or two (2) parking spaces;
- Seven (7) of the one-bedroom and loft apartments will be allocated one (1) parking space; and
- 11 of the one-bedroom and loft apartments will not be allocated a parking space.

Based on the above allocations, the proposed supple of car parking for the two- and three-bedroom apartments satisfies the statutory requirement for these dwelling types.

However, the proposed car parking provision for the one-bedroom and loft apartments represents a shortfall of 11 spaces against the statutory requirement for these dwelling types.

Accordingly, the application is seeking a permit to reduce the car parking requirements set out within Clause 52.06 of the Merri-bek Planning Scheme.

For situations where the statutory car parking requirement is not met on-site, Clause 52.06-7 outlines that decision guidelines for an application to reduce the car parking requirement draw

a distinction between the likely demand for parking spaces and whether it is appropriate to allow the provision of fewer parking spaces.

These are two separate considerations, the former is technical, and the latter is strategic.

In this instance, the demand for parking spaces is considered to be the more critical factor.

Accordingly, an assessment of the anticipated car parking demand is provided in the following section.

4.3. Car Parking Demand Assessment

Clause 52.06-7 within the Merri-bek Planning Scheme specifies that an application to reduce (including to zero) the number of car parking spaces required by Clause 52.06-5, or in a schedule to the Parking Overlay, must be accompanied by a Car Parking Demand Assessment.

The assessment must consider various matters, including:

- *The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use;*
- *The variation of car parking demand likely to be generated by the proposed use;*
- *The short-stay and long-stay car parking demand likely to be generated by the proposed use over time;*
- *The availability of public transport in the locality of the land;*
- *The convenience of pedestrian and cyclist access to the land;*
- *The provision of bicycle parking and end of trip facilities in the locality of the land;*
- *The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land; and*
- *An empirical assessment or case study.*

The factors relevant to the sought parking dispensation are discussed below.

Public Transport

As discussed in Section 2.3 of this report, the site is situated within the City of Merri-bek's PPTN area and accordingly, has access to a range of public transport services operating seven (7) days per week, with stops located in close proximity to the subject site location.

Given the convenient access to a range of public transport services, future residents will be able to travel for various purposes without relying on the use of their private motor vehicle.

The Convenience of Pedestrian and Cyclist Access to the Site

Footpaths are provided on at least one side of all streets within proximity to the site and are generally in excellent condition.

The development proposal seeks to provide pedestrian access to/from the site directly via the existing footpath along Albert Street, providing a convenient link to the surrounding pedestrian network for future residents.

In addition, there are a number of bicycle routes in the vicinity of the site as discussed in Section 0, including the Glenroy Road – Dawson Street Brunswick East-West route and the East

Brunswick shimmy route in the vicinity of the site, with a mix of off-road shared paths and on-street cycle lanes provided along these routes.

These facilities provide a viable means for future residents to access nearby service and amenities without the use of their private motor vehicle.

Bicycle Parking Provision

The proposal includes a generous provision of 59 bicycle parking spaces and a bicycle repair station on-site, in various locations at ground level.

This provision comprises 49 resident spaces and ten (10) visitor spaces.

The proposed bicycle parking provision for residents is nearly five (5) times higher than the statutory requirement and also allows for one (1) bicycle parking space to be allocated to each apartment.

Moreover, the proposed visitor bike parking provision is double the statutory requirement.

The generous supply of bicycle parking will assist in promoting cycling as a method of travel to/from the site for both residents and visitors.

Car Ownership Rates

To inform the existing level of car ownership in the area, empirical data has been sourced from the 2021 Census undertaken by the Australian Bureau of Statistics (ABS).

Table 4.2 sets out a summary of the percentage of apartments that do not own a motor vehicle, within the Statistical Level 2 Area (SA2) - Brunswick East and the broader Merri-bek (formerly Moreland) municipality.

Table 4.2: Percentage of Dwellings with Zero Car Ownership

Dwelling Type	Brunswick East	Merri-bek
One-bedroom apartment	31% of dwellings	35% of dwellings
Two-bedroom apartment	19% of dwellings	19% of dwellings
Three-bedroom apartment	10% of dwellings	10% of dwellings

Of note, Table 4.2 suggests that there is an existing precedent for residents within one-bedroom dwellings to own zero motor vehicles. This is consistent across the Brunswick East SA2 area and across the broader Merri-bek municipality, with a total of 31% and 35% of one-bedroom apartments respectively recording that they do not own a motor vehicle.

4.4. Adequacy of Proposed Car Parking Provision

It is proposed to provide a total of 53 car parking spaces on-site.

Based on the proposed car parking allocations, the proposal is seeking to provide car parking in accordance with the statutory requirement for the two- and three-bedroom apartments.

Seven (7) of the loft and one-bedroom apartments will be allocated one (1) parking space, satisfying the statutory requirement for these dwellings.

The remaining 11 loft and one-bedroom apartments will not be allocated a parking space.

This is considered acceptable in this instance for the following reasons:

— There is an existing precedent within both the Brunswick East SA2 area and broader Merri-bek municipality for residents living in one-bedroom apartments to not own a motor vehicle;

— Indeed, the results of the 2021 Census indicated that 31% and 35% of residents living in one bedroom apartments within Brunswick East and Merri-bek respectively do not own a motor vehicle;

— Noting the ongoing trend away from private vehicle usage (particularly in inner urban areas), it is expected that the number of residents within these areas with zero motor vehicles will be higher now, when considering that the Census was undertaken four (4) years ago;

— The non provision of any on-site parking spaces for these apartments will force these residents to utilise sustainable transport modes for day-to-day trips, thereby assisting in reducing the number of vehicles on the road network. This is in line with the objectives of various local and state planning policies;

— The site has convenient access to various public transport services and is also highly accessible by cycling and walking; and

— The generous provision of bicycle parking for residents will allow one (1) bicycle parking space to be allocated to each apartment.

4.5. Motorcycle Parking

The Merri-bek Planning Scheme does not outline any requirements for the provision of motorcycle parking spaces for the subject site.

However, in order to cater for the demand of this transport mode and provide an additional travel option to traditional car based travel, a total of five (5) motorcycle spaces proposed on-site, including:

— One (1) space at ground level;

— Two (2) spaces at level 01; and

— Two (2) spaces within the carpark mezzanine level.

Motorcycle spaces have been designed to be 1.2 metres wide by 2.5 metres long, in accordance with the requirements set out within Figure 2.7 within AS/NZS 2890.1:2004.

On the basis of the above, the provision and design of the motorcycle parking spaces are considered acceptable.

5. Bicycle Parking Assessment

5.1. Clause 52.34 Requirements

Requirements for the provision of bicycle facilities are set out within Clause 52.34 of the Merri-bek Planning Scheme.

The purpose of Clause 52.34 is defined in the scheme as follows:

— *To encourage cycling as a mode of transport; and*

— *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

The statutory bicycle parking requirements for the development proposal are set out in Table 5.1.

Table 5.1: Statutory Bicycle Parking Requirements

Description	Land Use	No.	User	Parking Rate	Parking Requirement
Loft, one, two and three bedroom apartment	Dwelling	49 apartments	Resident	In developments of four or more storeys, 1 space to each 5 dwellings	10 spaces
			Visitor	In developments of four or more storeys, 1 space to each 10 dwellings	5 spaces

Based on the preceding assessment, the application has a statutory requirement to provide a total of 15 bicycle parking spaces on-site, including:

— Ten (10) spaces for residents; and

— Five (5) spaces for visitors.

5.2. Adequacy of Proposed Bicycle Parking Provision

A total of 59 bicycle parking spaces and a bicycle repair station are proposed on-site, in various locations at ground level.

This provision comprises 49 resident spaces and ten (10) visitor spaces.

The proposed provision of resident spaces is nearly five (5) times higher than the statutory requirement and also allows for one (1) bicycle parking space to be provided to each apartment.

The proposed provision of visitor spaces is two (2) times higher than the statutory requirement.

A bicycle repair station is also proposed on-site, which will afford residents and visitors with an on-site location to undertake maintenance tasks on their bike when required. Whilst the bicycle repair station is not formally required by Clause 52.34, it is considered that this provision will assist in making cycling appear a more attractive travel option for residents and visitors.

5.3. Bicycle Parking Layout

Bicycle parking spaces throughout the site are proposed as a mix of two-tier bike racks and wall mounted bike racks.

The proposed design of the bicycle parking spaces is described below:

— The Cora Single Height product is proposed for the two-tier bike racks. These bike racks are shown on plans with a 1.86-metre-long parking envelope, accessible via a 2.0-metre-wide aisle. Lower racks are proposed at 400mm spacings and upper racks are proposed at 700mm spacings;

— Wall mounted bike racks are proposed at 500mm spacings, within a 1.2-metre-long parking envelope and accessible via a 1.5-metre-wide access aisle.

The proposed design of the wall mounted bike racks is in accordance with the dimensional requirements set out within AS 2890.3:2015.

Whilst the proposed design of the two-tier bike racks differs slightly from the dimensional requirements outlined within AS 2890.3:2015; they have been designed in accordance with the product specification sheet provided by Cora for the single height two-tier bike rack, noting that the maximum density option has been adopted.

Furthermore, the proposed bicycle parking provision seeks to provide 24 of the total 59 bicycle parking spaces (41% of the total provision) within an at-grade horizontal arrangement[1], exceeding the requirement outlined within AS 2890.3:2015 that a minimum of 20% of bicycle parking spaces must be provided within an at-grade horizontal arrangement.

The Cora product specification sheet and an example of a representative wall mounted bike parking specification sheet are provided at Appendix C of this report.

[1] The bicycle parking spaces provided at the lower tier of the two-tier bike racks function as at-grade bicycle parking spaces.

6. Access Arrangements and Car Park Layout

6.1. Access Arrangements

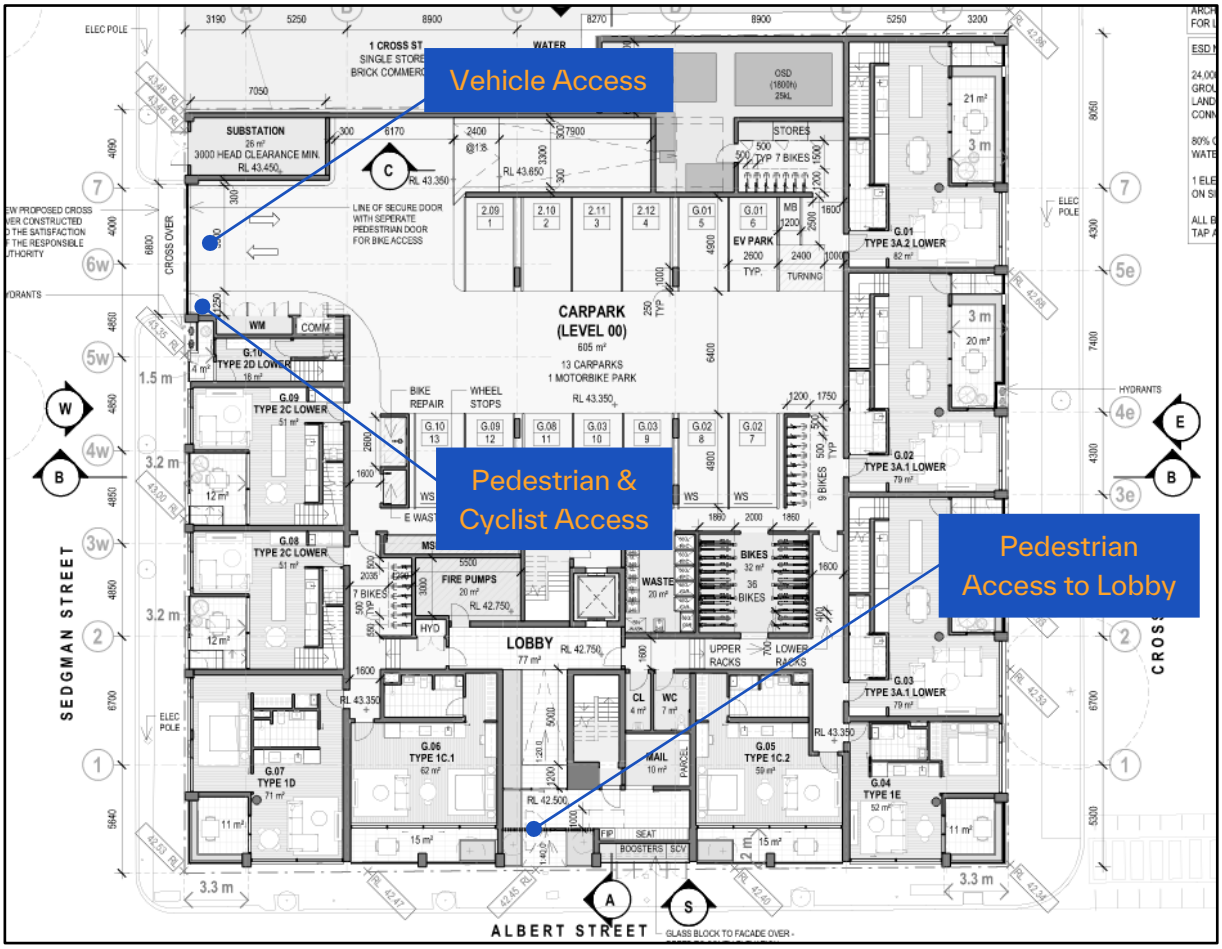
Access to/from the car parking levels is proposed via a 6.8-metre-wide crossover along Sedgman Street, at the northwest corner of the site.

A secure door is proposed at the access point, which comprises a 5.5-metre-wide vehicle accessway and separate 1.25-metre-wide door for pedestrian and cyclist access.

Pedestrian access to/from the lobby is proposed midblock along Albert Street.

The proposed access arrangements are demonstrated in Figure 6.1.

Figure 6.1: Proposed Access Arrangements



Source: Jackson Clements Burrows Architects – Proposed Floor Plan – Level 00

6.2. Car Park Layout

The design of the proposed car parking facilities is described below:

— Single width accessways have been designed with a minimum width of 3.3 metres, satisfying the requirements outlined in Design Standard 1 within Clause 52.06-9 of the Merri-bek Planning Scheme;

— Double width accessways have been designed with a minimum width of 5.5 metres, in accordance with the requirements outlined in Section 2.5.2 within AS/NZS 2890.1:2004;

— Car parking spaces have been designed with typical dimensions of 2.6 metres wide by 4.9 metres long and are accessible via a 6.4-metre-wide aisle, satisfying the requirements outlined in Design Standard 2 within Clause 52.06-9 of the Merri-bek Planning Scheme;

— 500m separation is proposed between parking spaces provided in tandem, satisfying the requirements outlined in Design Standard 2 within Clause 52.06-9 of the Merri-bek Planning Scheme;

— Car parking spaces adjacent to walls or other solid structures will be provided with a clearance of at last 300mm to provide an adequate door opening envelope, satisfying the requirements outlined in Design Standard 2 wtihin Clause 52.06-9 of the Merri-bek Planning Scheme;

— Columns adjacent to parking spaces are setback between 250mm – 1,250mm from the front of the parking space or within 1,750mm of the rear of the parking space, satisfying the requirements outlined in Design Standard 2 within Clause 52.06-9 of the Merri-bek Planning Scheme;

— A minimum height clearance of 2.2 metres will be provided along ramps and within the car parking areas;

— An extension of 800mm is proposed beyond the parking spaces at the end of the car park aisle within level 01 and the carpark mezzanine level. Whilst this extension is less than the 1.0 metre requirement that is outlined in Section 2.4.2 within AS/NZS 2890.1:2004, a swept path assessment has been completed which demonstrates that each of these spaces can be accessed in a suitable manner. This arrangement is therefore considered acceptable; and

— The proposed profile of each of the ramps within the site is as follows:

- 1:8 gradient along the 2.4-metre-long transition section at the bottom of the ramp;
- 1:4.5 gradient along the steepest section of the ramp; and
- 1:8 gradient along the 2.4-metre-long transitions section at the top of the ramp.

— All of the proposed gradients and transition lengths are in accordance with the requirements outlined in Design Standard 3 within Clause 52.06-9 of the Merri-bek Planning Scheme.

Whilst not formally required by any provision within Clause 52.06 of the Merri-bek Planning Scheme or AS/NZS 2890.1:2004, it is noted that convex mirrors and a traffic warning light system are proposed on-site within level 01 and the carpark mezzanine level to assist in improving visibility between vehicles on the ramp and within one of the car park levels and managing potential vehicle conflicts.

6.3. Swept Path Assessment

In addition to the above, an assessment of site access and circulation has been undertaken using the *'Autodesk Vehicle Tracking'* software program.

The results of the swept path assessment are summarised as follows:

- The vehicle access point has been designed suitably to allow for concurrent entry & exit movements between a B85 and B99 (85th and 99.8th percentile passenger vehicles respectively, as defined within AS/NZS 2890.1:2004);
- A B99 is able to turn to/from each of the single width ramps within the site;
- A B99 is able to circulate from the ramp between ground and level 01 and depart the site to Sedgman Street whilst another vehicle is propped to the south of the substation, waiting for the ramp to be clear;
- The nominated waste collection vehicle (6.4-metre-long mini-rear loader) is able to enter the site, utilise the area at the base of the ground – level 01 ramp to reverse into position within the ground level car park aisle in close proximity to the waste storage room. Once waste collection is complete, the truck is able to depart the site to Sedgman Street; and
- A B85 is able to suitable access the parking spaces at the end of the car park aisle within level 01 and the carpark mezzanine level.

Each of the abovementioned swept paths are provided at Appendix D of this report.

6.4. Adequacy of Access Arrangements & Car Park Layout

Based on the preceding assessment, the proposed access arrangement and car park layout area considered to have been designed appropriately and generally in accordance with the requirements outlined within Clause 52.06-9 of the Merri-bek Planning Scheme and/or relevant sections of the Australian Standards (AS 2890 series).

7. Loading and Waste Collection Arrangements

7.1. Statutory Requirement

Clause 65.01 'Decision Guidelines' within the Merri-bek Planning Scheme outlines the provision of loading requirements for new developments and states the following:

'Before deciding on an application or approval of a plan, the responsible authority must consider as appropriate:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.'*

7.2. Loading Arrangements

The primary loading and unloading activities generated by the site will be associated with day-to-day deliveries to residents. Deliveries are expected to be undertaken by vans or courier vehicles.

The site will also generate loading and unloading activities associated with moving furniture and goods into and out of the apartments. This will largely occur when the building is initially occupied and is expected to occur relatively infrequently thereafter. When having regard for the size of the apartments, it is expected that residents will be able to hire a typical moving van when they move in / move out of the site.

The B99 is considered an appropriate representation for both of the vehicle types described above.

No formal loading facilities are proposed on-site. As such, all loading activities will be undertaken via the use of a vacant on-street parking space in the nearby vicinity of the site.

This is a commonplace arrangement for residential developments of a similar scale, where the typical level of loading activities generated by the site mean that it is not necessary or feasible for a dedicated loading dock to be provided on-site.

Noting that on-street parking is permitted along each of the frontage roads and that a similar arrangement was proposed for the approved scheme, the proposed loading arrangements are considered to be acceptable.

7.3. Waste Collection Arrangements

A Waste Management Plan (WMP) has been prepared for the development by Ratio Consultants.

Based on details within the WMP, it is understood that waste bins will be collected on-site by a private contractor using a 6.4-metre-long mini-rear loader.

As described in Section 6.3 of this report, a swept path assessment has been undertaken which demonstrates that a 6.4-metre-long mini-rear loader is able to enter the site, utilise the area at the base of the ground – level 01 ramp to reverse into position within the ground level car park aisle in close proximity to the waste storage room. Once waste collection is complete, the truck is able to depart the site to Sedgman Street.

Refer to the WMP for further details.

7.4. Adequacy of Loading & Waste Collection Arrangements

Based on the preceding discussions, the proposed loading and waste collection arrangements are considered acceptable.

8. Traffic Assessment

8.1. Traffic Generation

Traffic generation rates for residential developments are impacted by a range of factors including housing density, number of car parking spaces provided, availability to proximate alternate transport modes (including public transport services, bicycle network and/or car share facilities) and proximity to nearby activity centres or other retail facilities and services.

Reference is made to Section 4.7.1 within the Traffic Engineering Assessment prepared for the approved scheme by Traffix Group; wherein, the following traffic generation rates were adopted:

— Two-bedroom dwellings with on-site car parking will generate an average of four (4) vehicle trips per day;

— Three-bedroom dwellings with on-site car parking will generate an average of five (5) vehicle trips per day; and

— 10% of the daily residential traffic generation occurs during the road network peak hours.

For the purpose of providing a comparable assessment to the approved scheme, the above traffic generation rates have been adopted for this assessment.

It is noted that the approved scheme did not propose to allocate any car parking spaces to the one-bedroom apartments and accordingly, it was assumed that these dwellings would not generate any vehicle trips.

The current scheme proposes to provide one (1) parking space to seven (7) of the loft and one-bedroom apartments. On this basis, the above traffic generation rate for the two-bedroom apartments will also be applied to the loft and one-bedroom apartments allocated a parking space.

Typical splits between inbound and outbound vehicle movements in the AM and PM peak hours for residential traffic have been assumed as follows:

— AM Peak Hour – 20% inbound / 80% outbound; and

— PM Peak Hour – 60% inbound / 40% outbound.

The above assumptions have been applied to the development proposal, with the estimated traffic generation presented in Table 8.1.

Table 8.1: Proposed Traffic Generation

Direction	AM Peak	PM Peak	Daily [1]
Inbound	3 vph	10 vph	83 vpd
Outbound	14 vph	7 vph	83 vpd
Total [1]	**17 vph**	**17 vph**	**166 vpd**

[1] Rounded to the nearest even number.

8.2. Traffic Distribution & Impact

All site generated traffic will access the site via Sedgman Street.

Sedgman Street runs in a north-south alignment between Victoria Street at the northern end and Albert Street at the southern end.

Both of these two roads run in an east-west alignment and provide connections to the broader arterial road network, with Lygon Street (to the west) and Nicholson Street (to the east) the most proximate north-south arterial roads.

In consideration of the fact that the site access point is located closer to Albert Street than Victoria Street, it is assumed that the majority of vehicle trips generated by the site will utilise Albert Street when travelling to/from the site. It is also noted that traffic signals are provided at the intersections of Albert Street with both Lygon Street and Nicholson Street.

From here, traffic will be able to disperse in all directions as required, dependent on the origin or destination of the trip

8.3. Traffic Impact

Reference is made to Section 4.7 within the Traffic Engineering Assessment prepared for the approved scheme by Traffix Group, which estimated that the approved scheme would generate up to 20 vehicle trips during each of the AM and PM peak hours and 196 vehicle movements per day.

Critically, this volume of traffic is higher than the level of traffic generation that is estimated for the current scheme.

It is acknowledged that the proposed vehicle access location has changed from Cross Street (for the approved scheme) and is now situated along the Sedgman Street frontage.

However, when having regard for the existing peak hour traffic volumes (presented in Figure 2.13), it is evident Sedgman Street carries a lower volume of traffic than Cross Street during the road network peak hours.

On this basis, it is concluded that the level of traffic generation associated with the current scheme can be comfortably accommodated by the surrounding road network in a safe and satisfactory manner.

9. Conclusion

It is proposed to develop the land parcel addressed as 53-57 Albert Street in Brunswick East for the purpose of a residential development.

More specifically, it is proposed to construct a multi-storey residential building comprising 49 apartments under the following typologies:

— Four (4) x loft apartments;

— 14 x one-bedroom apartments;

— 18 x two-bedroom apartments; and

— 13 x three-bedroom apartments.

The following parking facilities are proposed on-site:

— 53 car parking spaces;

— 59 bicycle parking spaces (comprising 49 resident spaces and ten (10) visitor spaces); and

— Five (5) motorcycle spaces.

Vehicle access to/from the site is proposed via Sedgman Street.

Based on the foregoing assessment, the following conclusions are drawn:

— The development proposal has a statutory requirement to provide 62 car parking spaces on-site;

— It is proposed to allocate the on-site car parking supply as follows:

- Each three-bedroom apartment will be allocated two (2) parking spaces (each tandem pair will be allocated to a three-bedroom apartment);
- Each two-bedroom apartment will be allocated one (1) or two (2) parking spaces;
- Seven (7) of the one-bedroom and loft apartments will be allocated one (1) parking space; and
- 11 of the one-bedroom and loft apartments will not be allocated a parking space.

— Based on the above allocations, the proposal is seeking a permit for a reduction of 11 spaces against the statutory requirements outlined within Clause 52.06 of the Merri-bek Planning Scheme;

— The non-provision of any car parking spaces for 11 of the one-bedroom and loft apartments is considered acceptable for the following reasons:

- Based on the results of the 2021 Census, there is an existing precedent within both the Brunswick East SA2 area and broader Merri-bek municipality for residents living in one-bedroom apartments to not own a motor vehicle;
- The non provision of any on-site parking spaces for these apartments will force these residents to utilise sustainable transport modes for day-to-day trips, thereby assisting

in reducing the number of vehicles on the road network. This is in line with the objectives of various local and state planning policies;

- The site has convenient access to various public transport services and is also highly accessible by cycling and walking; and
- The generous provision of bicycle parking for residents will allow one (1) bicycle parking space to be allocated to each apartment.

— The development proposal has a statutory requirement to provide a total of 15 bicycle parking spaces on-site, including ten (10) spaces for residents and five (5) spaces for visitors;

— It is proposed to provide 49 bicycle parking spaces for residents and ten (10) spaces for visitors. These provisions are nearly five (5) times and two (2) times higher than the respective statutory requirement for each user;

— The proposed bicycle parking spaces have been designed appropriate, either in accordance with the requirements set out within AS 2890.3:2015 or the manufacturer specifications for the proposed bicycle parking module;

— The proposed access arrangements and car park layout have been designed in accordance with the requirements set out within Clause 52.06 of the Merri-bek Planning Scheme and/or relevant sections of the Australian Standard (AS 2890 series);

— A swept path assessment has been completed which confirms that all key vehicle movements can be undertaken by the relevant design vehicle in a suitable manner;

— The proposed loading and waste collection arrangements are considered acceptable;

— The site is expected to generate up to 17 vehicle movements during the AM and PM peak hours and up to 166 vehicle movements per day; and

— This level of traffic is less than what was estimated for the approved scheme, noting also that vehicle access is now proposed via Sedgman Street, which carries a lower volume of traffic than Cross Street. Accordingly, it is concluded that the estimated traffic can be comfortably accommodated by the surrounding road network in a safe and satisfactory manner.

On the basis of the preceding assessment, the proposed development of the site is considered to be acceptable from a transport engineering perspective.

Appendix A Traffic Survey Results

TRANS TRAFFIC SURVEY

trafficsurvey.com.au

TURNING MOVEMENT SURVEY

Intersection of Albert St and Cross St, Brunswick

GPS -37.770181, 144.974390

Date:	Thu 03/07/25
Weather:	Overcast
Suburban:	Brunswick
Customer:	Ratio

North:	Cross St
East:	Albert St
South:	French Ave
West:	Albert St

Survey Period	AM:	6:30 AM-9:30 AM
	PM:	3:30 PM-6:30 PM
Traffic Peak	AM:	8:15 AM-9:15 AM
	PM:	4:45 PM-5:45 PM

All Vehicles

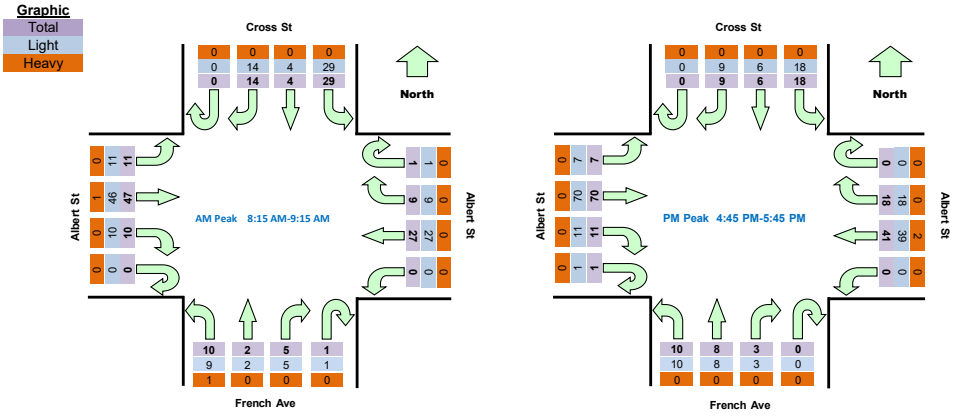
Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St				Hourly Total	
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	Hour	Peak
6:30	6:45	0	0	0	0	0	1	3	0	0	0	1	1	0	0	4	2	52	
6:45	7:00	0	1	0	1	0	1	3	0	0	0	0	3	0	1	3	0	69	
7:00	7:15	0	3	0	0	0	1	2	0	0	1	0	0	0	0	5	0	80	
7:15	7:30	0	1	0	1	0	1	1	2	0	1	0	1	0	1	5	1	95	
7:30	7:45	0	4	0	0	1	3	3	2	0	0	1	0	0	4	7	4	114	
7:45	8:00	0	3	0	5	0	1	4	0	0	0	1	2	0	0	6	2	130	
8:00	8:15	0	1	0	4	0	2	4	0	0	0	0	2	0	3	11	0	156	
8:15	8:30	0	6	0	9	0	0	3	0	0	1	1	0	0	1	9	4	170	Peak
8:30	8:45	0	4	1	9	1	0	6	0	1	0	0	2	0	3	15	3	160	
8:45	9:00	0	3	2	6	0	4	10	0	0	2	1	4	0	4	12	2		
9:00	9:15	0	1	1	5	0	5	8	0	0	2	0	4	0	2	11	2		
9:15	9:30	0	4	0	4	0	1	5	0	0	0	0	1	0	2	5	2		
15:30	15:45	0	1	1	2	0	1	8	0	0	1	3	1	0	1	8	1	148	
15:45	16:00	0	4	0	4	0	4	12	0	0	1	1	4	0	3	16	2	160	
16:00	16:15	0	1	3	7	0	5	10	0	0	1	1	0	0	2	10	3	162	
16:15	16:30	0	2	1	0	0	1	5	3	0	0	2	0	0	1	10	1	167	
16:30	16:45	0	1	1	5	0	2	9	3	0	0	0	1	1	1	12	4	198	
16:45	17:00	0	6	3	7	0	4	10	0	0	0	2	3	0	3	13	2	202	Peak
17:00	17:15	0	0	2	2	0	6	13	0	0	0	2	1	0	2	17	3	181	
17:15	17:30	0	3	1	6	0	2	9	0	0	2	3	4	1	3	21	2	174	
17:30	17:45	0	0	0	3	0	6	9	0	0	1	1	2	0	3	19	0	150	
17:45	18:00	0	1	1	2	0	5	9	2	0	0	1	1	0	1	7	2		
18:00	18:15	0	3	0	2	0	2	14	0	0	1	1	3	0	2	10	3		
18:15	18:30	0	1	0	5	0	1	7	0	0	1	0	2	0	2	13	1		

Peak Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St				Peak
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	total
8:15	9:15	0	14	4	29	1	9	27	0	1	5	2	10	0	10	47	11	170
16:45	17:45	0	9	6	18	0	18	41	0	0	3	8	10	1	11	70	7	202

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.

Graphic

Total
Light
Heavy



Light Vehicles

Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St			
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L
6:30	6:45	0	0	0	0	0	1	2	0	0	0	1	1	0	0	4	2
6:45	7:00	0	1	0	1	0	1	3	0	0	0	0	3	0	1	2	0
7:00	7:15	0	3	0	0	0	1	2	0	0	1	0	0	0	0	5	0
7:15	7:30	0	1	0	1	0	1	1	1	0	0	0	1	0	1	5	1
7:30	7:45	0	4	0	0	1	3	2	2	0	0	1	0	0	4	7	4
7:45	8:00	0	3	0	5	0	1	3	0	0	0	1	2	0	0	6	1
8:00	8:15	0	1	0	4	0	2	4	0	0	0	0	2	0	3	11	0
8:15	8:30	0	6	0	9	0	0	3	0	0	1	1	0	0	1	9	4
8:30	8:45	0	4	1	9	1	0	6	0	1	0	0	2	0	3	15	3
8:45	9:00	0	3	2	6	0	4	10	0	0	2	1	4	0	4	11	2
9:00	9:15	0	1	1	5	0	5	8	0	0	2	0	3	0	2	11	2
9:15	9:30	0	3	0	4	0	1	5	0	0	0	0	1	0	2	5	2

15:30	15:45	0	1	1	2	0	1	8	0	0	1	3	1	0	1	7	1
15:45	16:00	0	3	0	4	0	4	12	0	0	1	1	4	0	3	16	1
16:00	16:15	0	1	3	6	0	5	10	0	0	1	1	0	0	2	10	3
16:15	16:30	0	2	1	0	0	1	5	3	0	0	2	0	0	1	10	1
16:30	16:45	0	1	1	5	0	2	8	3	0	0	0	1	1	1	12	3
16:45	17:00	0	6	3	7	0	4	10	0	0	0	2	3	0	3	13	2
17:00	17:15	0	0	2	2	0	6	11	0	0	0	2	1	0	2	17	3
17:15	17:30	0	3	1	6	0	2	9	0	0	2	3	4	1	3	21	2
17:30	17:45	0	0	0	3	0	6	9	0	0	1	1	2	0	3	19	0
17:45	18:00	0	1	1	2	0	5	9	2	0	0	1	1	0	1	7	2
18:00	18:15	0	3	0	2	0	2	14	0	0	1	1	3	0	2	10	3
18:15	18:30	0	1	0	5	0	1	7	0	0	1	0	2	0	2	13	1

Peak Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St				Peak
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	total
8:15	9:15	0	14	4	29	1	9	27	0	1	5	2	9	0	10	46	11	168
16:45	17:45	0	9	6	18	0	18	39	0	0	3	8	10	1	11	70	7	200

Heavy Vehicles

Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St			
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L
6:30	6:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
6:45	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:00	8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
9:00	9:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
9:15	9:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
15:45	16:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00	16:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
16:15	16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:45	17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	17:15	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
17:15	17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Time		North Approach Cross St				East Approach Albert St				South Approach French Ave				West Approach Albert St				Peak
Period Start	Period End	U	R	SB	L	U	R	WB	L	U	R	NB	L	U	R	EB	L	total
8:15	9:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
16:45	17:45	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2

TRANS TRAFFIC SURVEY

trafficsurvey.com.au

TURNING MOVEMENT SURVEY

Intersection of Albert St and Sedgman St, Brunswick

GPS *-37.770115, 144.973775*

Date:	Thu 03/07/25
Weather:	Overcast
Suburban:	Brunswick
Customer:	Ratio

North:	Sedgman St
East:	Albert St
South:	N/A
West:	Albert St

Survey Period	AM:	6:30 AM-9:30 AM
	PM:	3:30 PM-6:30 PM
Traffic Peak	AM:	8:30 AM-9:30 AM
	PM:	4:45 PM-5:45 PM

All Vehicles

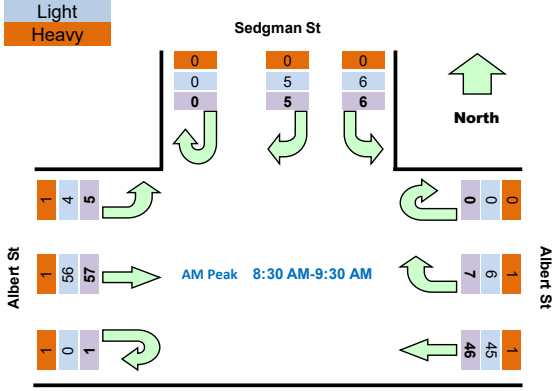
Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St			Hourly Total	
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	Hour	Peak
6:30	6:45	0	1	1	1	0	3	0	4	0	45	
6:45	7:00	0	0	0	0	1	6	0	4	2	61	
7:00	7:15	0	2	0	0	1	4	0	5	0	65	
7:15	7:30	0	0	1	0	0	3	0	6	0	78	
7:30	7:45	0	1	1	0	1	7	0	14	2	89	
7:45	8:00	0	0	0	0	1	8	0	8	0	98	
8:00	8:15	0	1	3	0	0	7	0	13	1	118	
8:15	8:30	0	0	1	0	0	8	0	11	1	123	
8:30	8:45	0	2	2	0	2	9	0	20	0	127	Peak
8:45	9:00	0	2	2	0	2	15	0	15	1		
9:00	9:15	0	0	2	0	3	11	0	13	1		
9:15	9:30	0	1	0	0	0	11	1	9	3		
15:30	15:45	0	0	1	0	0	11	1	8	1	112	
15:45	16:00	0	0	1	0	2	18	0	20	1	120	
16:00	16:15	0	0	1	0	1	10	0	14	0	115	
16:15	16:30	0	1	0	0	0	7	0	12	2	128	
16:30	16:45	0	0	1	0	0	11	0	17	1	152	
16:45	17:00	0	0	3	0	2	17	0	14	1	159	Peak
17:00	17:15	0	0	1	0	3	12	0	22	1	144	
17:15	17:30	0	0	4	0	1	16	0	22	3	142	
17:30	17:45	0	0	0	0	2	10	1	21	3	126	
17:45	18:00	0	0	0	0	0	11	0	10	1		
18:00	18:15	0	1	2	1	0	19	0	13	1		
18:15	18:30	0	0	0	0	1	10	0	17	2		

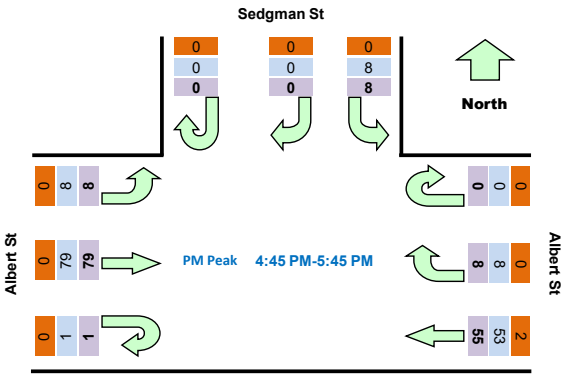
Peak Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St			Peak total
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	
8:30	9:30	0	5	6	0	7	46	1	57	5	127
16:45	17:45	0	0	8	0	8	55	1	79	8	159

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.

Graphic

Total
Light
Heavy





Light Vehicles

Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St		
Period Start	Period End	U	R	L	U	R	WB	U	EB	L
6:30	6:45	0	1	1	1	0	2	0	4	0
6:45	7:00	0	0	0	0	1	6	0	3	2
7:00	7:15	0	2	0	0	1	4	0	5	0
7:15	7:30	0	0	1	0	0	3	0	6	0
7:30	7:45	0	1	1	0	1	6	0	14	2
7:45	8:00	0	0	0	0	1	7	0	7	0
8:00	8:15	0	1	3	0	0	7	0	13	1
8:15	8:30	0	0	1	0	0	8	0	11	1
8:30	8:45	0	2	2	0	2	9	0	20	0
8:45	9:00	0	2	2	0	2	15	0	14	1
9:00	9:15	0	0	2	0	2	11	0	13	1
9:15	9:30	0	1	0	0	0	10	0	9	2
15:30	15:45	0	0	1	0	0	11	1	7	1
15:45	16:00	0	0	1	0	2	17	0	19	1
16:00	16:15	0	0	1	0	1	10	0	14	0
16:15	16:30	0	1	0	0	0	7	0	12	2
16:30	16:45	0	0	0	0	0	10	0	17	1
16:45	17:00	0	0	3	0	2	17	0	14	1
17:00	17:15	0	0	1	0	3	10	0	22	1
17:15	17:30	0	0	4	0	1	16	0	22	3
17:30	17:45	0	0	0	0	2	10	1	21	3
17:45	18:00	0	0	0	0	0	11	0	10	1
18:00	18:15	0	1	2	1	0	19	0	13	1
18:15	18:30	0	0	0	0	1	10	0	17	2

Peak Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St			Peak
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	total
8:30	9:30	0	5	6	0	6	45	0	56	4	122
16:45	17:45	0	0	8	0	8	53	1	79	8	157

Heavy Vehicles

Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St		
Period Start	Period End	U	R	L	U	R	WB	U	EB	L
6:30	6:45	0	0	0	0	0	1	0	0	0
6:45	7:00	0	0	0	0	0	0	0	1	0
7:00	7:15	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	1	0	0	0
7:45	8:00	0	0	0	0	0	1	0	1	0
8:00	8:15	0	0	0	0	0	0	0	0	0
8:15	8:30	0	0	0	0	0	0	0	0	0
8:30	8:45	0	0	0	0	0	0	0	0	0
8:45	9:00	0	0	0	0	0	0	0	1	0
9:00	9:15	0	0	0	0	1	0	0	0	0
9:15	9:30	0	0	0	0	0	1	1	0	1
15:30	15:45	0	0	0	0	0	0	0	1	0
15:45	16:00	0	0	0	0	0	1	0	1	0
16:00	16:15	0	0	0	0	0	0	0	0	0
16:15	16:30	0	0	0	0	0	0	0	0	0

16:30	16:45	0	0	1	0	0	1	0	0	0
16:45	17:00	0	0	0	0	0	0	0	0	0
17:00	17:15	0	0	0	0	0	2	0	0	0
17:15	17:30	0	0	0	0	0	0	0	0	0
17:30	17:45	0	0	0	0	0	0	0	0	0
17:45	18:00	0	0	0	0	0	0	0	0	0
18:00	18:15	0	0	0	0	0	0	0	0	0
18:15	18:30	0	0	0	0	0	0	0	0	0

Peak Time		North Approach Sedgman S			East Approach Albert St			West Approach Albert St			Peak
Period Start	Period End	U	R	L	U	R	WB	U	EB	L	total
8:30	9:30	0	0	0	0	1	1	1	1	1	5
16:45	17:45	0	0	0	0	0	2	0	0	0	2

Appendix B Proposed Architectural Plans

SITE AREA
1789.8m²

DEVELOPMENT SUMMARY

LEVEL	GFA (Excl. Terrace)	GFA PARKING	CIRCULATION /SERVICES	NSA RESIDENTIAL	LANDSCAPE	TERRACE POS / COMMUNAL TERRACE	LOFT	1 BED	2 BED	3 BED	TOTALS
LEVEL 00	1613 m²	605 m²	405 m²	603 m²	0 m²	141 m²	2	2	2	3	9
LEVEL 01	1571 m²	650 m²	174 m²	747 m²	0 m²	87 m²	2	0	3	0	5
CARPARK MEZZ 02	689 m²	566 m²	123 m²	0 m²	0 m²	0 m²	0	0	0	0	0
LEVEL 02	1407 m²	0 m²	175 m²	1110 m²	123 m²	463 m²	0	6	6	2	14
LEVEL 03	1283 m²	0 m²	174 m²	1110 m²	0 m²	340 m²	0	6	6	2	14
LEVEL 04	923 m²	0 m²	111 m²	813 m²	0 m²	359 m²	0	0	1	6	7
ROOF	44 m²	0 m²	44 m²	0 m²	0 m²	184 m²	0	0	0	0	0
	7532 m²	1822 m²	1206 m²	4382 m²	123 m²	1573 m²	4	14	18	13	49

APARTMENT MIX				
LOFT	1 Bed	2 Bed	3 Bed	Total
8%	28.6%	36.7%	26.5%	100%

CAR PARKING

Level	TOTAL SPACES Totals
LEVEL 00	13
CARPARK MEZZ 01	19
CARPARK MEZZ 02	21
TOTAL CAR SPACES	53

(12 TANDEM PARKS)

(1 X EV PARK TO LEVEL 00)

MOTORBIKE PARKING

Level	TOTAL SPACES Totals
LEVEL 00	1
CARPARK MEZZ 01	2
CARPARK MEZZ 02	2
TOTAL MB SPACES	5

BIKE PARKING

Level	Bicycles
LEVEL 00	59
	10 VISITOR PARKS 49 RESIDENT PARKS
	(22 GROUND MOUNT)

STORAGE CAGES

Level	Storage Cages
LEVEL 00	3
CARPARK MEZZ 01	25
CARPARK MEZZ 02	21
TOTAL	49

PARKING ASSIGNMENTS

UNIT	NUMBER	LEVEL
G.01	5	LEVEL 00
G.01	6	LEVEL 00
G.02	7	LEVEL 00
G.02	8	LEVEL 00
G.03	9	LEVEL 00
G.03	10	LEVEL 00
G.08	11	LEVEL 00
G.09	12	LEVEL 00
G.10	13	LEVEL 00

PARKING ASSIGNMENTS

UNIT	NUMBER	LEVEL
1.02	27	CARPARK MEZZ 01
1.02	28	CARPARK MEZZ 01
1.03	26	CARPARK MEZZ 01
2.01	29	CARPARK MEZZ 01
2.01	30	CARPARK MEZZ 01
2.02	14	CARPARK MEZZ 01
2.03	15	CARPARK MEZZ 01
2.04	16	CARPARK MEZZ 01
2.05	17	CARPARK MEZZ 01
2.06	18	CARPARK MEZZ 01
2.09	1	LEVEL 00
2.10	2	LEVEL 00
2.11	3	LEVEL 00
2.12	4	LEVEL 00
2.13	25	CARPARK MEZZ 01
2.14	31	CARPARK MEZZ 01
2.14	32	CARPARK MEZZ 01

PARKING ASSIGNMENTS

UNIT	NUMBER	LEVEL
3.01	21	CARPARK MEZZ 01
3.01	22	CARPARK MEZZ 01
3.02	33	CARPARK MEZZ 02
3.03	34	CARPARK MEZZ 02
3.04	35	CARPARK MEZZ 02
3.05	36	CARPARK MEZZ 02
3.06	37	CARPARK MEZZ 02
3.09	38	CARPARK MEZZ 02
3.10	39	CARPARK MEZZ 02
3.11	46	CARPARK MEZZ 02
3.12	47	CARPARK MEZZ 02
3.14	23	CARPARK MEZZ 01
3.14	24	CARPARK MEZZ 01

PARKING ASSIGNMENTS

UNIT	NUMBER	LEVEL
4.01	52	CARPARK MEZZ 02
4.01	53	CARPARK MEZZ 02
4.02	50	CARPARK MEZZ 02
4.02	51	CARPARK MEZZ 02
4.03	48	CARPARK MEZZ 02
4.03	49	CARPARK MEZZ 02
4.04	44	CARPARK MEZZ 02
4.04	45	CARPARK MEZZ 02
4.05	42	CARPARK MEZZ 02
4.05	43	CARPARK MEZZ 02
4.06	40	CARPARK MEZZ 02
4.06	41	CARPARK MEZZ 02
4.07	19	CARPARK MEZZ 01
4.07	20	CARPARK MEZZ 01

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REV	DATE	DESCRIPTION
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PROJECT # **24-064**

STATUS TOWN PLANNING

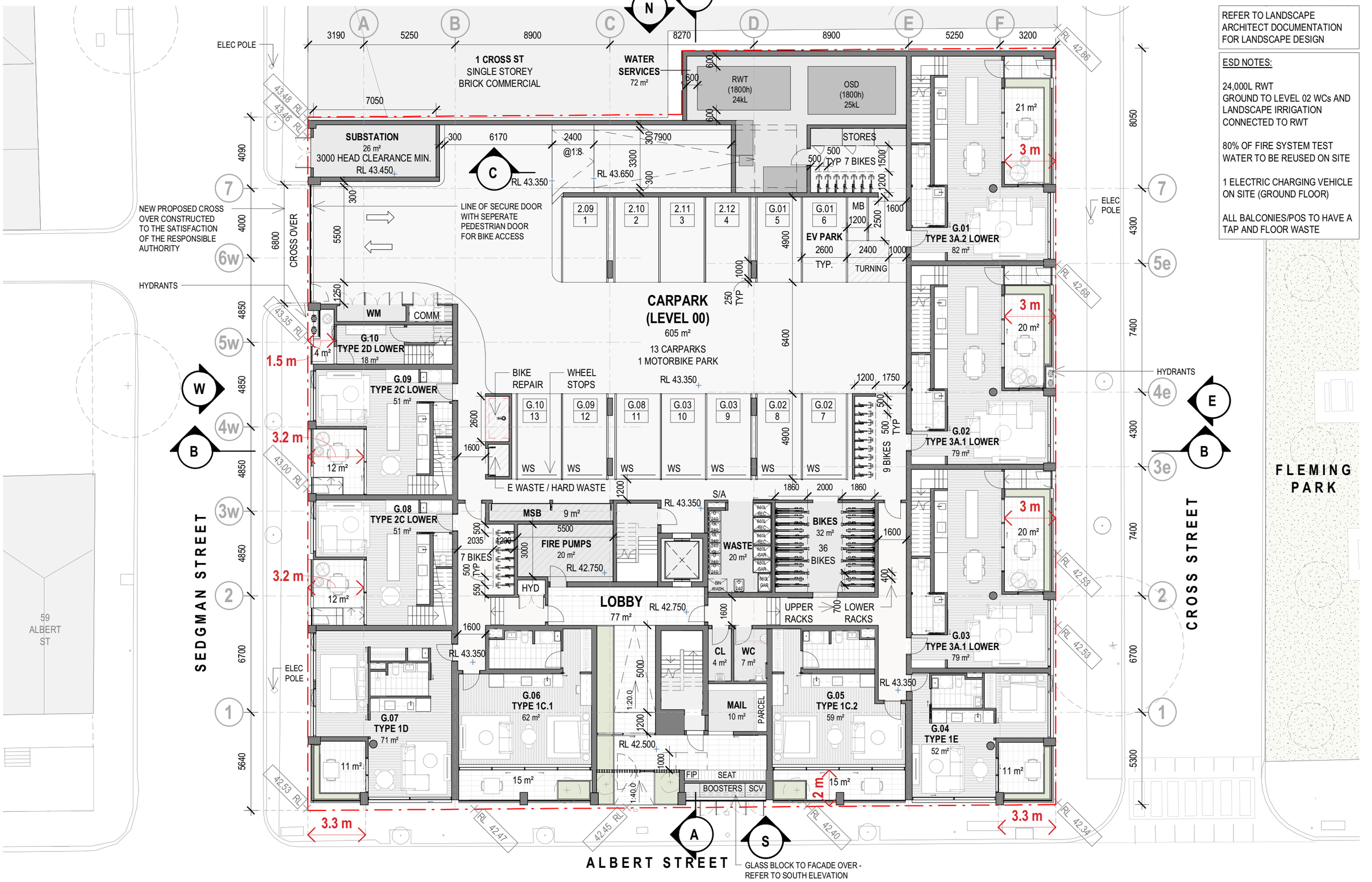
PROJECT
ALBERT STREET APARTMENTS
53-57 ALBERT ST BRUNSWICK EAST

DRAWING TITLE
DEVELOPMENT SUMMARY

DRAWING NUMBER **TP 0-001**

REVISION **A**

Jackson Clements Burrows



REFER TO LANDSCAPE ARCHITECT DOCUMENTATION FOR LANDSCAPE DESIGN

ESD NOTES:

24,000L RWT
GROUND TO LEVEL 02 WCs AND LANDSCAPE IRRIGATION CONNECTED TO RWT

80% OF FIRE SYSTEM TEST WATER TO BE REUSED ON SITE

1 ELECTRIC CHARGING VEHICLE ON SITE (GROUND FLOOR)

ALL BALCONIES/POS TO HAVE A TAP AND FLOOR WASTE

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PROJECT # 24-064

SCALE 1 : 200 @A3 (0 1 2 4 6 10m)

STATUS TOWN PLANNING

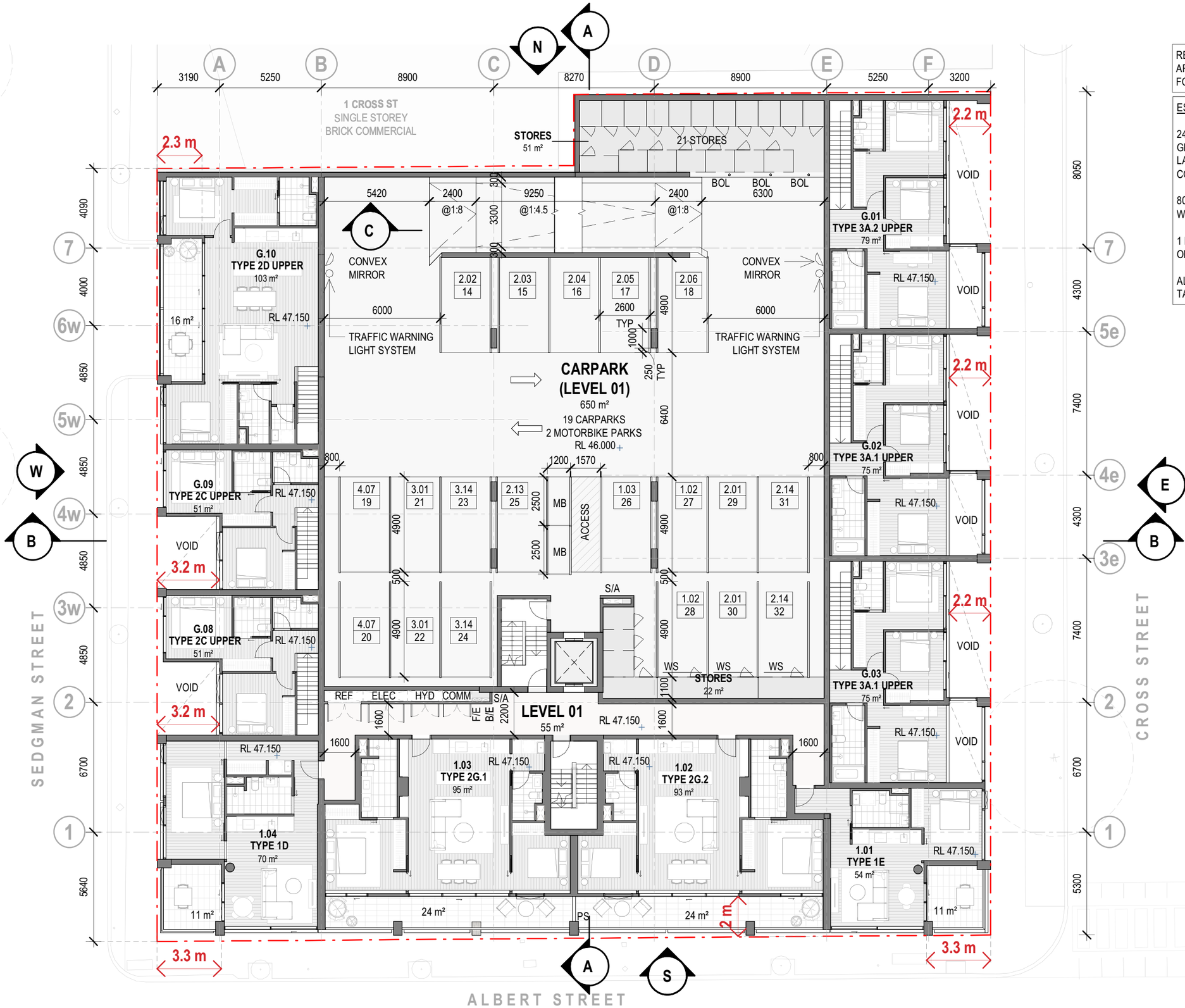
PROJECT
ALBERT STREET APARTMENTS
53-57 ALBERT ST BRUNSWICK EAST

DRAWING TITLE
PROPOSED FLOOR PLAN_LEVEL 00

DRAWING NUMBER TP 1-101

REVISION A

Jackson Clements Burrows



REFER TO LANDSCAPE ARCHITECT DOCUMENTATION FOR LANDSCAPE DESIGN

ESD NOTES:

24,000L RWT
GROUND TO LEVEL 02 WCs AND LANDSCAPE IRRIGATION CONNECTED TO RWT

80% OF FIRE SYSTEM TEST WATER TO BE REUSED ON SITE

1 ELECTRIC CHARGING VEHICLE ON SITE (GROUND FLOOR)

ALL BALCONIES/POS TO HAVE A TAP AND FLOOR WASTE

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PROJECT # 24-064

SCALE 1 : 200 @A3
0 1 2 4 6 10m

STATUS TOWN PLANNING

PROJECT
ALBERT STREET APARTMENTS
53-57 ALBERT ST BRUNSWICK EAST

DRAWING TITLE
PROPOSED FLOOR PLAN_LEVEL 01

DRAWING NUMBER TP 1-103

REVISION A

Jackson Clements Burrows

REFER TO LANDSCAPE ARCHITECT DOCUMENTATION FOR LANDSCAPE DESIGN

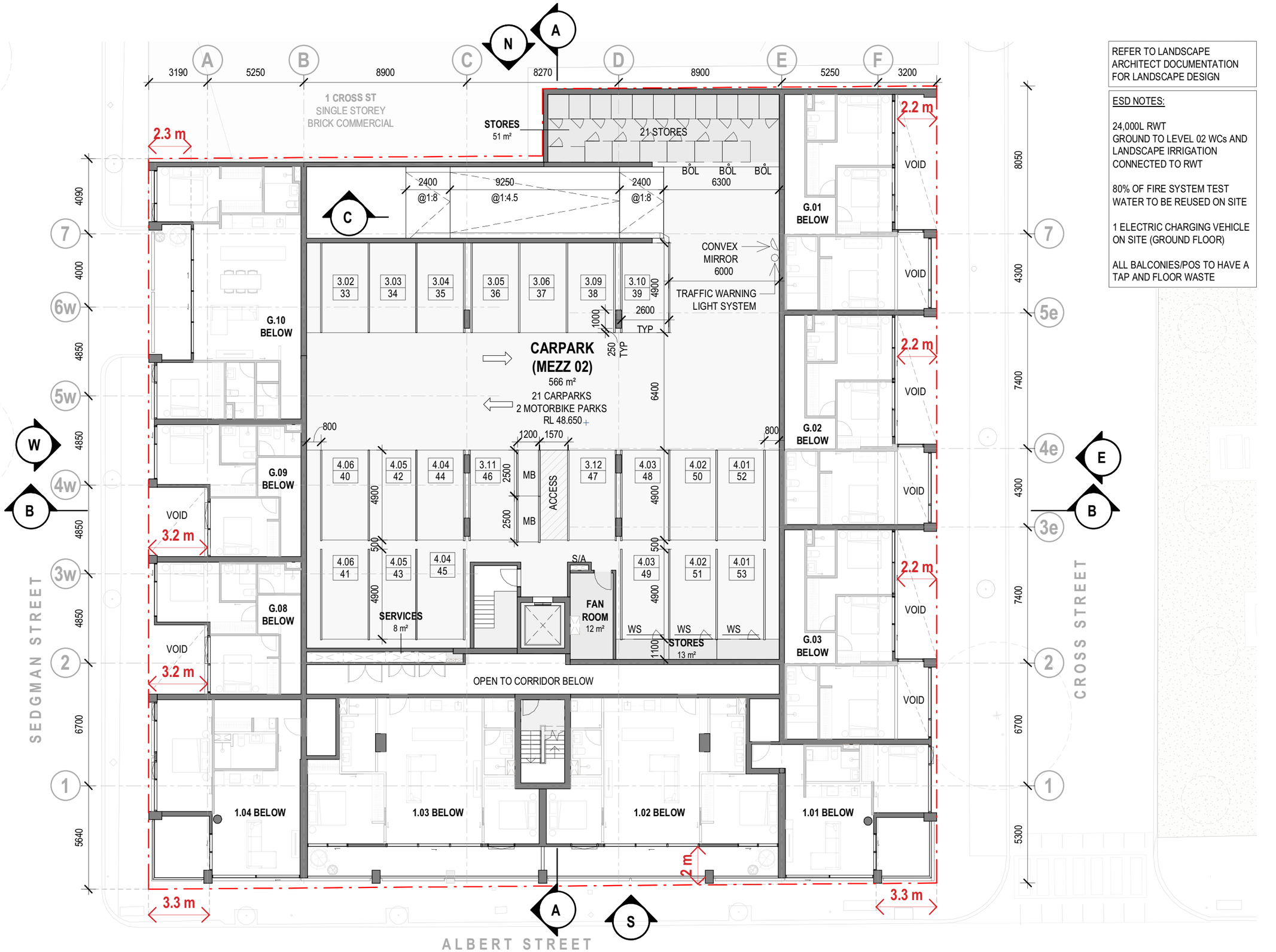
ESD NOTES:

24,000L RWT
GROUND TO LEVEL 02 WCs AND LANDSCAPE IRRIGATION CONNECTED TO RWT

80% OF FIRE SYSTEM TEST WATER TO BE REUSED ON SITE

1 ELECTRIC CHARGING VEHICLE ON SITE (GROUND FLOOR)

ALL BALCONIES/POS TO HAVE A TAP AND FLOOR WASTE



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PROJECT # 24-064

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STATUS TOWN PLANNING

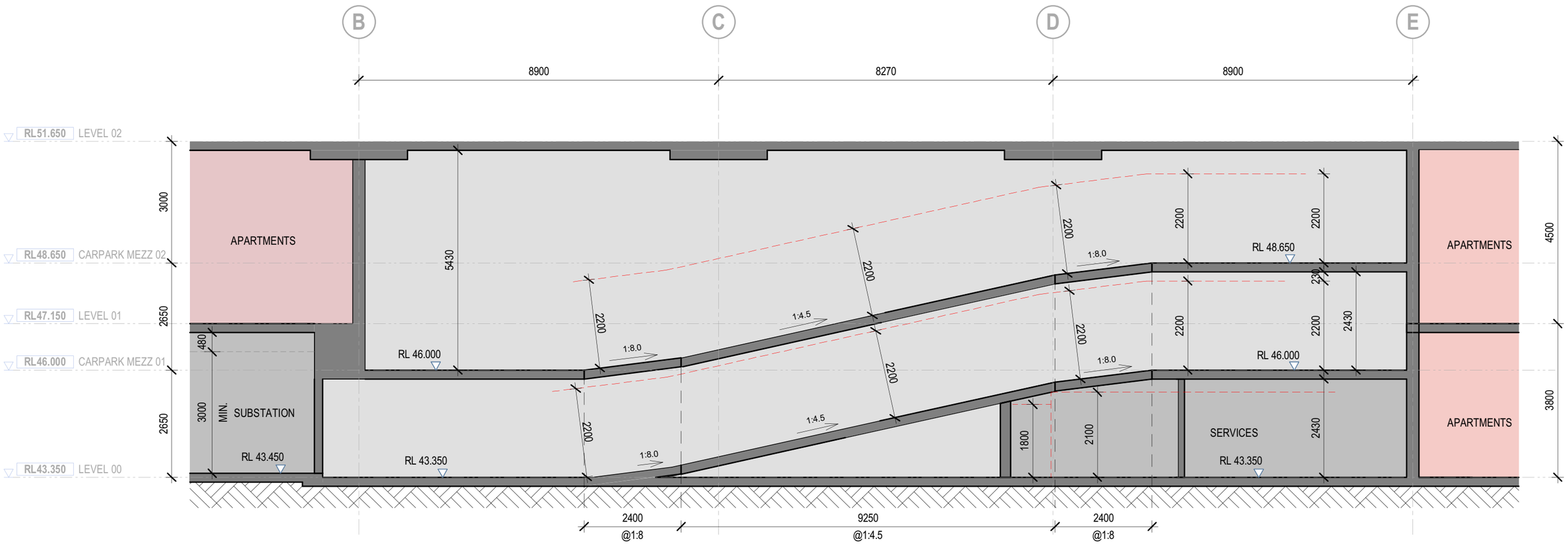
PROJECT
ALBERT STREET APARTMENTS
53-57 ALBERT ST BRUNSWICK EAST

DRAWING TITLE
PROPOSED FLOOR PLAN_CARPARK MEZZ 02

DRAWING NUMBER TP 1-104

REVISION A

Jackson Clements Burrows



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PROJECT #
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SCALE
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0 1 2 4 6 10m

STATUS
TOWN PLANNING

PROJECT
ALBERT STREET APARTMENTS
53-57 ALBERT ST BRUNSWICK EAST

DRAWING TITLE
SECTION - CARPARK RAMP

DRAWING NUMBER
TP 3-105

REVISION
A

Jackson Clements Burrows

Appendix C Representative Bicycle Parking Specifications

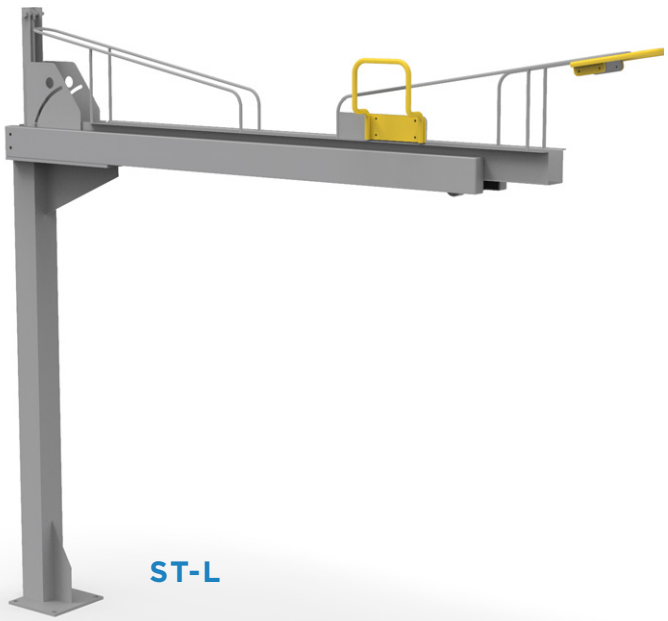
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

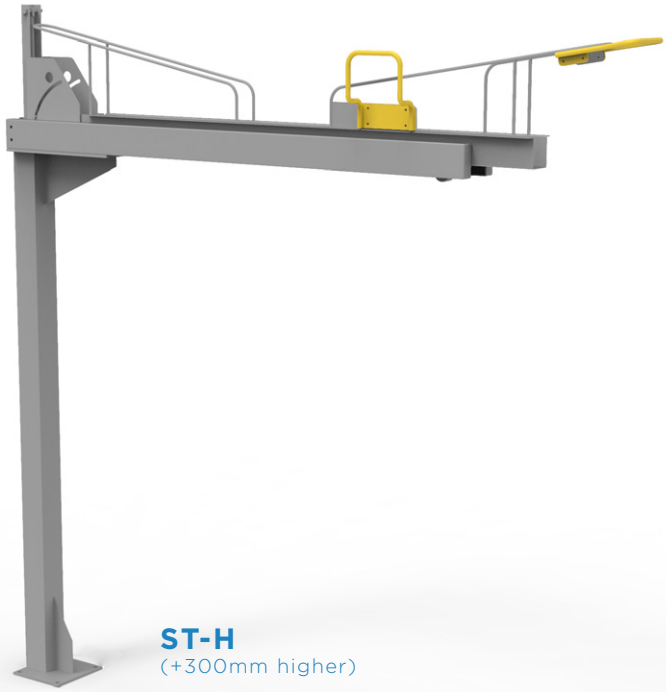
SKY TIER - DYNAMIC UPPER TIERS

- The **ST-L** (low) and **ST-H** (high) are dynamic upper tier bike racks
- Gas strut assist lift mechanism makes access a breeze
- Strategically positioned lock points
- Ideal for bike rooms and EOT areas where maximum capacity is critical
- Suitable for indoor installations with no weather exposure

AUSTRALIA'S MOST **VERSATILE** DOUBLE TIER SYSTEM



ST-L



ST-H
(+300mm higher)

DESIGNED FOR BIKES WITH

A WHEEL DIAMETER OF = 20-29"

A MAXIMUM TYRE WIDTH OF = 60mm / 2.35"

KG

A MAXIMUM WEIGHT OF = 25KG

FENDERS / MUDGUARDS = YES

SPECIFICATIONS

Capacity	Finish	Fixings	Assembly	Construction	Compliance
1 bike per rack	Main frame - Cora ceramic powder coat Handle and lock bar - Cora powder coat	Post: 4 x M12 x 80mm anchor bolts Rack: 4 x M10 bolts	Fix post to concrete surface Fix rack to top of post	Mild steel	AS2890.3 (2015) compliant

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

GROUND PIVOT - DYNAMIC LOWER TIERS

- The **GP-F** (front-in) and **GP-B** (back-in) are dynamic lower tier bike racks
- Dynamic pivot motion allows ease of use with reduced spacing requirements
- Strategically positioned lock points
- Ideal for bike rooms and EOT areas where maximum capacity is critical
- Suitable for indoor installations with no weather exposure

ALTERNATING HEAD TO TAIL MODELS FOR **MAXIMUM** CAPACITY

GP-F

GP-B

DESIGNED FOR BIKES WITH

A WHEEL DIAMETER OF = 20-29”

A MAXIMUM TYRE WIDTH OF = 60mm / 2.35”

KG

A MAXIMUM WEIGHT OF = 25KG

FENDERS / MUDGUARDS = YES

SPECIFICATIONS

Capacity	Finish	Fixings	Assembly	Construction	Compliance
1 bike per rack	Main frame – Cora ceramic powder coat Handle and lock bar – Cora powder coat	4 x M10 x 60mm anchor bolts	Fix rack to concrete surface	Mild steel	AS2890.3 (2015) compliant

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

STATIC LOWER TIER OPTIONS

- The **CBR1B** and **SG-E** are static bicycle parking rails
- Easy lean and lock system for 1 or 2 bicycles
- Great choice for bike rooms where high capacity and budget are important
- Suitable for indoor installations with no weather exposure

COST EFFECTIVE BIKE RAILS OR E-BIKE CHARGING RACKS

CBR1B

SG-E
(e-bike charging rack)

**see product specification sheet for additional product details*

DESIGNED FOR BIKES WITH

ANY WHEEL DIAMETER

ANY TYRE WIDTH

KG ANY WEIGHT

FENDERS / MUDGUARDS = YES

SPECIFICATIONS

Capacity	Finish	Fixings	Assembly	Construction	Compliance
2 bikes per rack	Cora ceramic or powder coat colours	4 x M12 x 80mm anchor bolts with tamper resistant fasteners	Fix rack to concrete surface	Mild steel	AS2890.3 (2015) compliant

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

STAGGERED HEIGHT
LAYOUT GUIDE

DYNAMIC UPPER TIERS / DYNAMIC LOWER TIERS

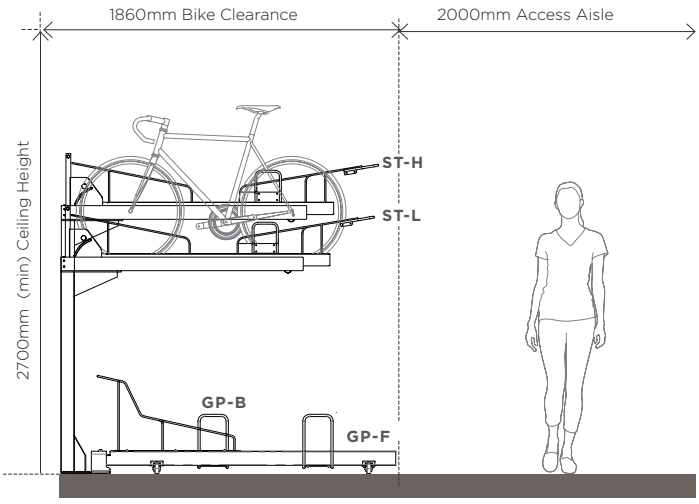
There are numerous configuration possibilities for double tier systems. **Options shown are compliant with AS2890.3 (2015)**

PERSPECTIVE VIEW WITH GP LOWER TIERS

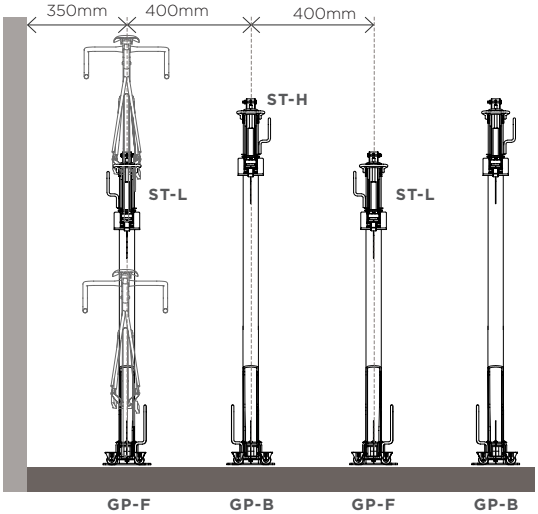
DYNAMIC UPPER/ DYNAMIC LOWER

To comply with AS2890.3 (2015), minimum spacing between rack centres is:

- ST Upper Tiers: 400mm if adjacent racks are offset in height by 300mm;
- GP Lower Tiers: 400mm if adjacent racks provide head to tail parking



SIDE VIEW WITH GP LOWER TIERS



FRONT VIEW WITH GP LOWER TIERS

Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

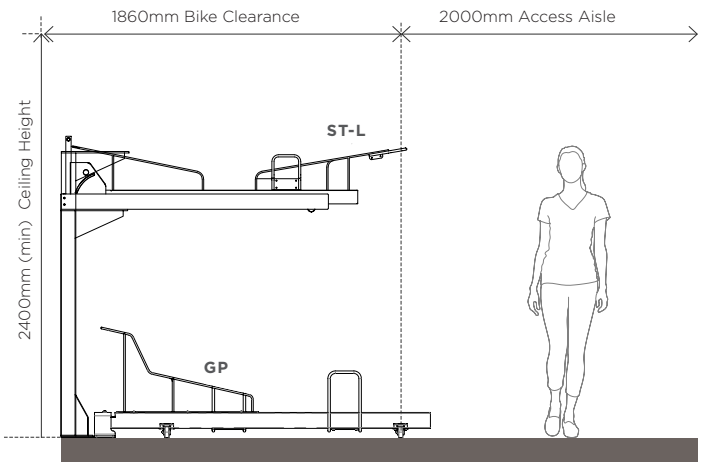
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

SINGLE HEIGHT
LAYOUT GUIDE
DYNAMIC UPPER TIERS / DYNAMIC LOWER TIERS

There are numerous configuration possibilities for double tier systems. **Options shown are compliant with AS2890.3 (2015)**

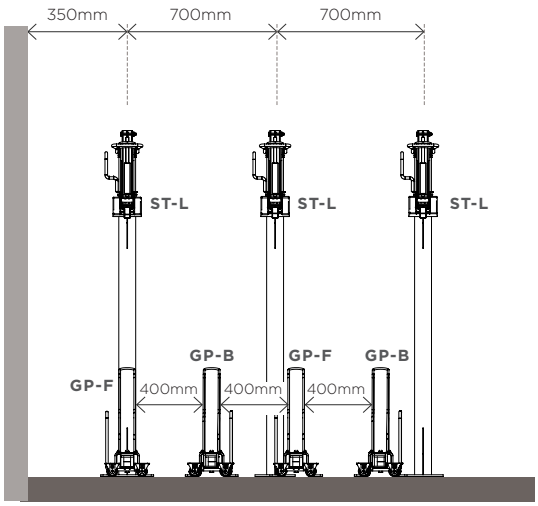
PERSPECTIVE VIEW WITH GP LOWER TIERS



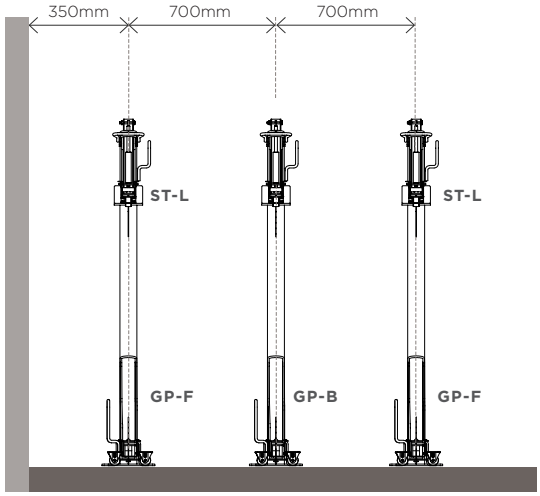
SIDE VIEW WITH GP LOWER TIERS

To comply with AS2890.3 (2015), minimum spacing between rack centres is:

- Where adjacent upper tier racks cannot be offset in height due to low ceiling clearance, single level racks can be used if spaced a minimum of 700mm apart
- GP Lower Tiers: - 400mm for maximum density; or 700mm for a symmetrical appearance



FRONT VIEW MAXIMUM DENSITY



FRONT VIEW SYMMETRICAL APPEARANCE

Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

CORA BIKE RACK

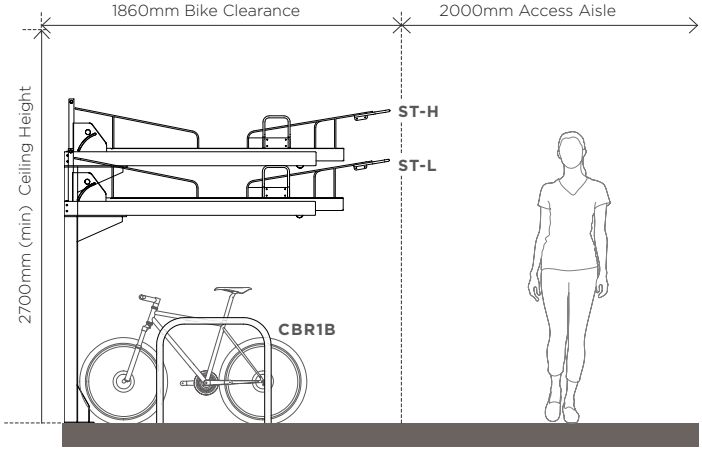
PRODUCT SPECIFICATION SHEET

STAGGERED HEIGHT
LAYOUT GUIDE

DYNAMIC UPPER TIERS / STATIC LOWER TIER

There are numerous configuration possibilities for double tier systems. **Options shown are compliant with AS2890.3 (2015)**

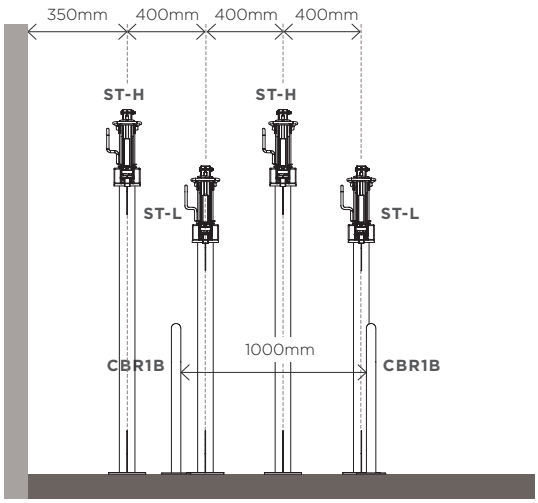
PERSPECTIVE VIEW WITH CBR1B LOWER TIERS



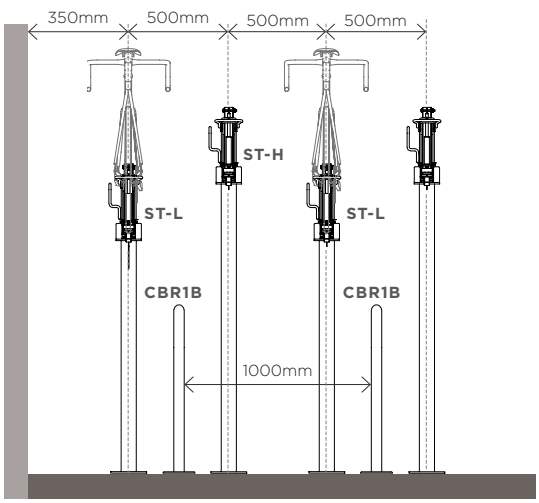
SIDE VIEW WITH CBR1B LOWER TIERS

To comply with AS2890.3 (2015), minimum spacing between rack centres is:

- ST Upper Tiers: 400mm for maximum density; or 500mm for a symmetrical appearance
- CBR1B or lower bike rails: 1000mm (500mm per bike space)



FRONT VIEW MAXIMUM DENSITY



FRONT VIEW SYMMETRICAL APPEARANCE

Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

SINGLE HEIGHT
LAYOUT GUIDE

DYNAMIC UPPER TIERS / STATIC LOWER TIER OPTIONS

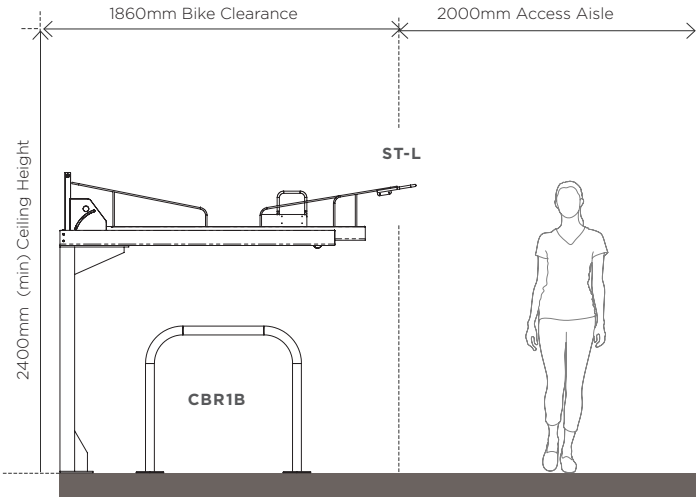
There are numerous configuration possibilities for double tier systems. **Options shown are compliant with AS2890.3 (2015)**

PERSPECTIVE VIEW WITH CBR1B LOWER TIERS

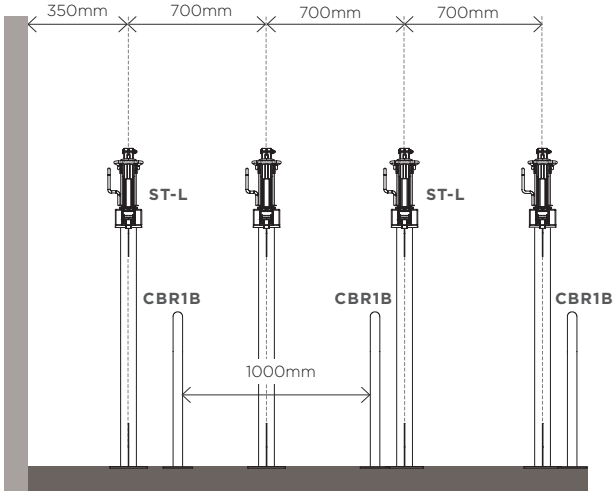
SINGLE HEIGHT DYNAMIC UPPER/ STATIC LOWER TIERS

To comply with AS2890.3 (2015), minimum spacing between rack centres is:

- Where adjacent upper tier racks cannot be offset in height due to low ceiling clearance, single level racks can be used if spaced a minimum of 700mm apart
- CBR1B or lower bike rails: 1000mm



SIDE VIEW WITH GP LOWER TIERS



FRONT VIEW WITH CBR1B LOWER TIERS

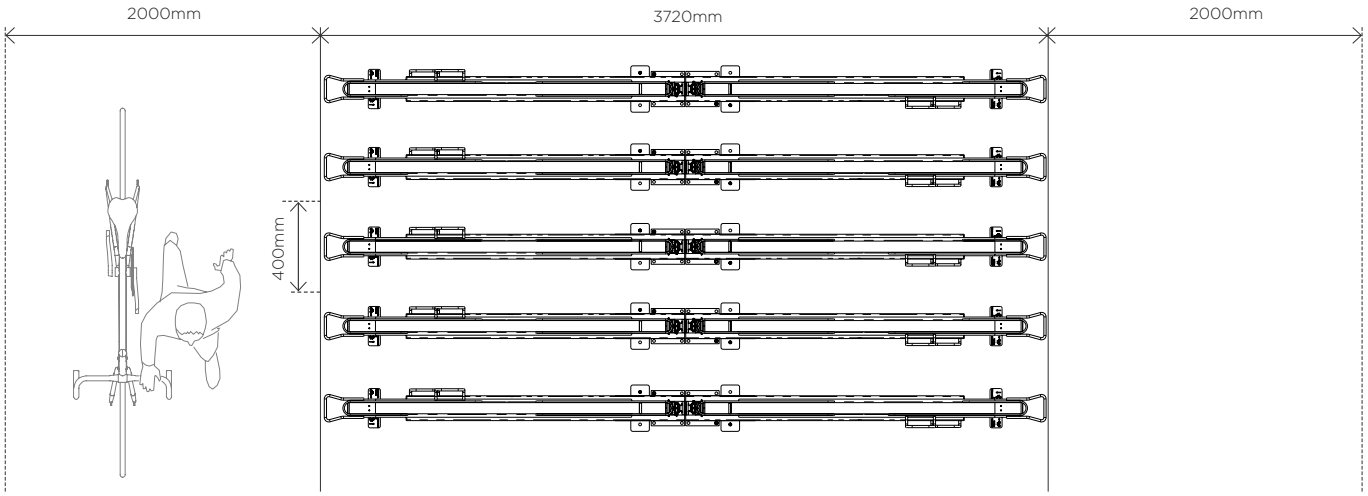
Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

CORA BIKE RACK

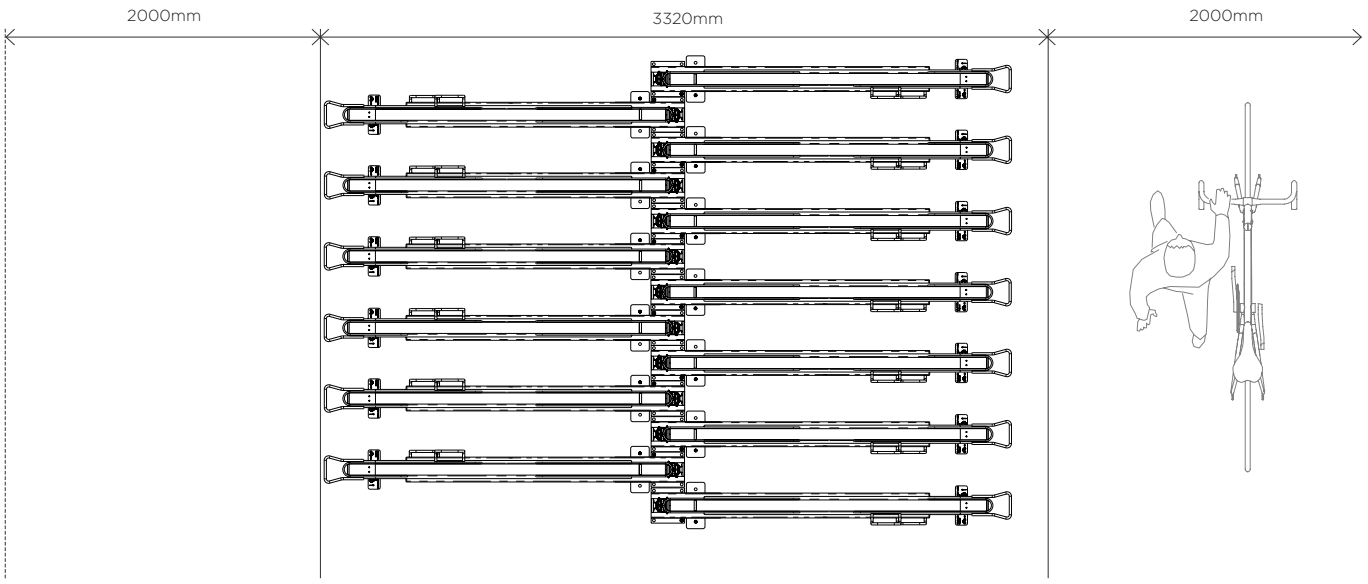
PRODUCT SPECIFICATION SHEET

BACK TO BACK & NESTED LAYOUTS

BACK TO BACK LAYOUT



NESTED LAYOUT



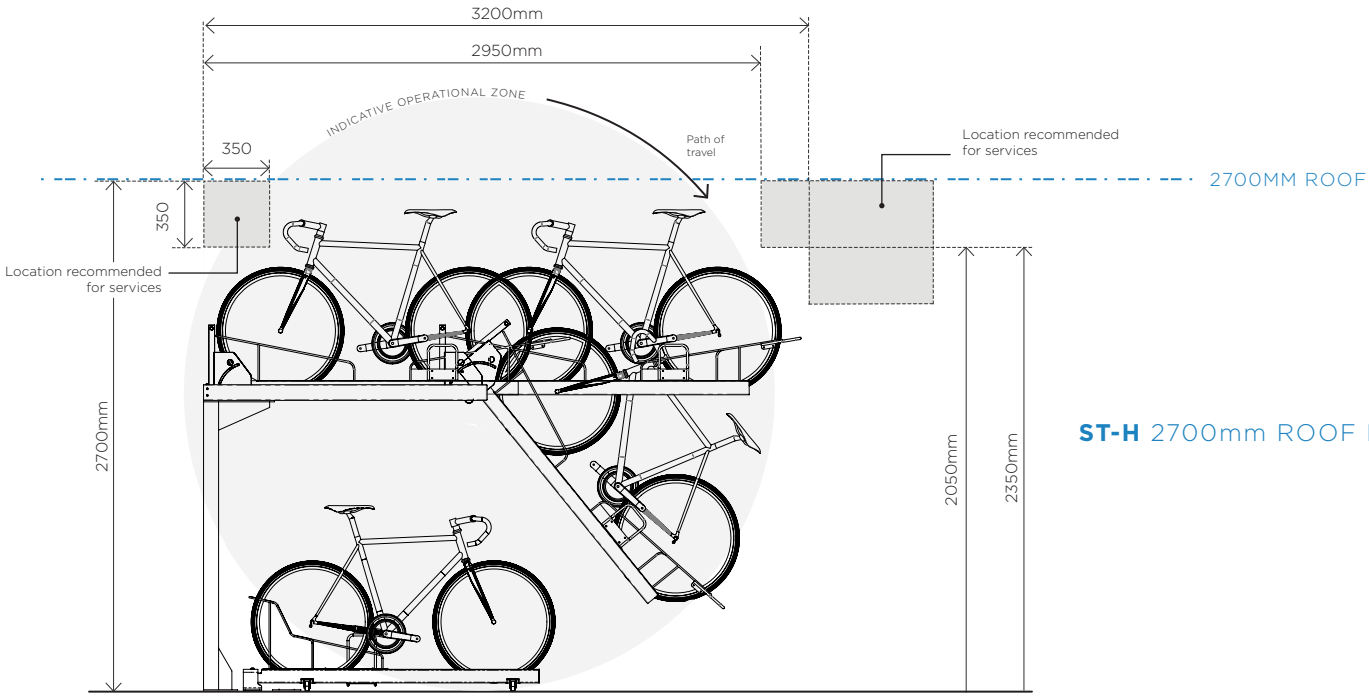
Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

CORA BIKE RACK

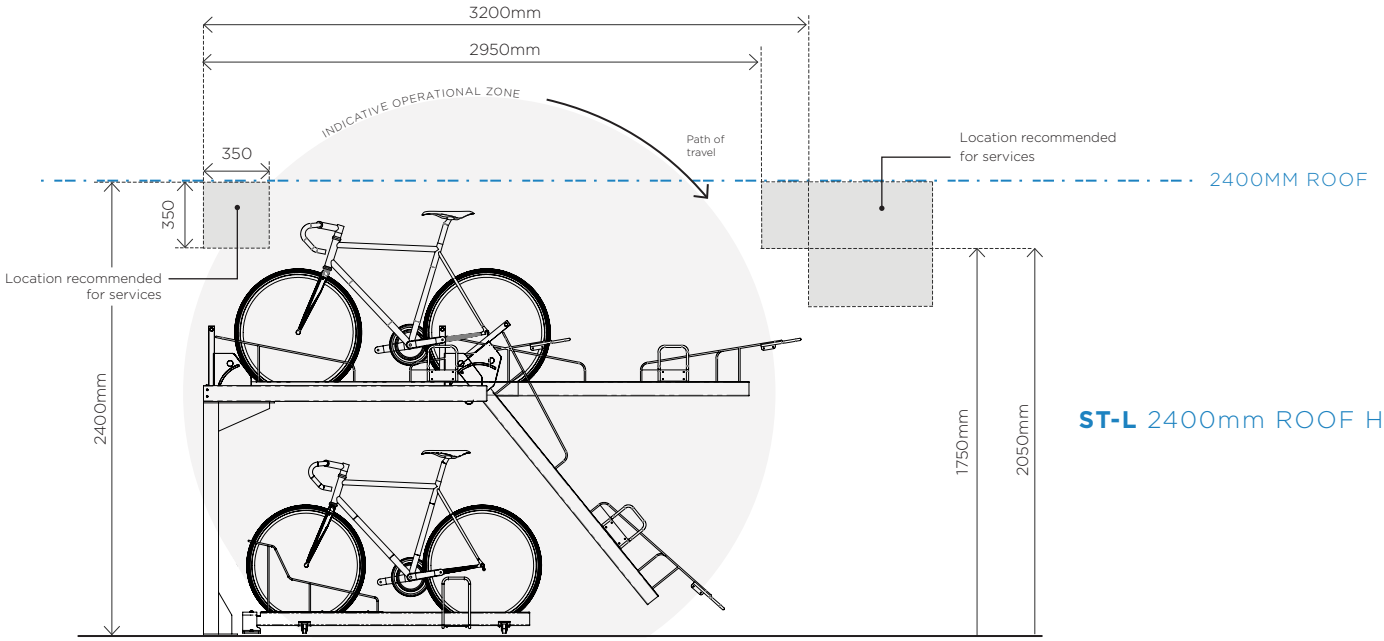
PRODUCT SPECIFICATION SHEET

ST-L & ST-H

ACCESS CLEARANCE



ST-H 2700mm ROOF HEIGHT



ST-L 2400mm ROOF HEIGHT

Refer to Installation Instructions sheet for specific installation and assembly guidelines. Racks should NOT be installed based on this sheet alone.

sales@cora.com.au
www.cora.com.au

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

E3VR SERIES

E3VR VERTICAL WALL OR POST MOUNTED BIKE RACK

Cora's latest vertical bike rack design, the E3VR, is available in several innovative models: wheel hold, wheel hook (for fenders), 45° angled, and dynamic moving racks. The E3VR gently cradles the front wheel for safety of the bike and easy access parking.

The E3VR can be mounted directly to existing walls or to the E3VR-P mounting post.

Capacity

- 1 bike per rack

Construction

- Heavy duty high quality steel
- 16mm CHS x 1.2mm

Fixings

- 3 x M8 x 40mm pin head torx security screws with tool, washers and nylon wall plugs included

Finishes

- In Stock - Yellow Powder Coat
- Option - Galvanised
- Option - 304 Stainless Steel
- Option - Colour Powder Coat (Cora standard colour range)

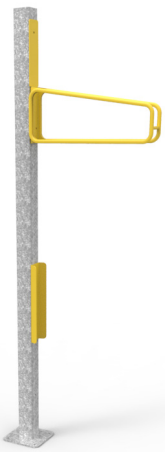
Assembly

- Supplied fully welded and assembled. For pole mounted option, assembly to pole E3VR-P required

Compliance

- Rack is AS2890.3 (2015) compliant

SINGLE RACK
WALL MOUNTED

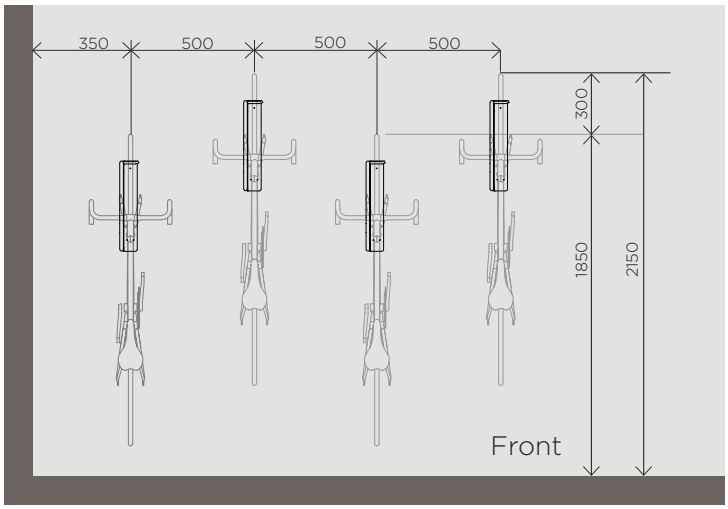


SINGLE RACK
POLE MOUNTED

DOUBLE RACK
POLE MOUNTED

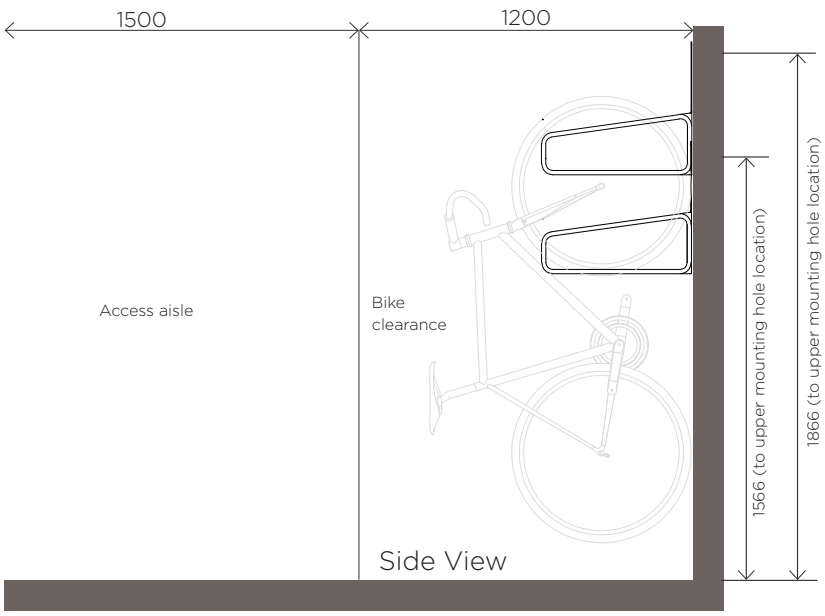
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET



NOTE: If all racks are to be mounted at the same height, racks must be spaced at 700mm centres.

* Minimum ceiling height: Staggered rack heights– 2200
Single lower level rack heights – 1900



E3VR WALL MOUNT LAYOUT GUIDE

To comply with AS2890.3 (2015), 500mm spacings are shown at alternating heights.
Spacings of 400-500mm are possible where compliance with AS2890.3 (2015) is not required.
700mm is required where racks do not alternate in height.

For specific assembly and installation instructions, please refer to individual instruction information sheets.
Racks should not be installed, based on the information on this sheet alone.

CORA BIKERACK

PH 1800 249 878

sales@cora.com.au

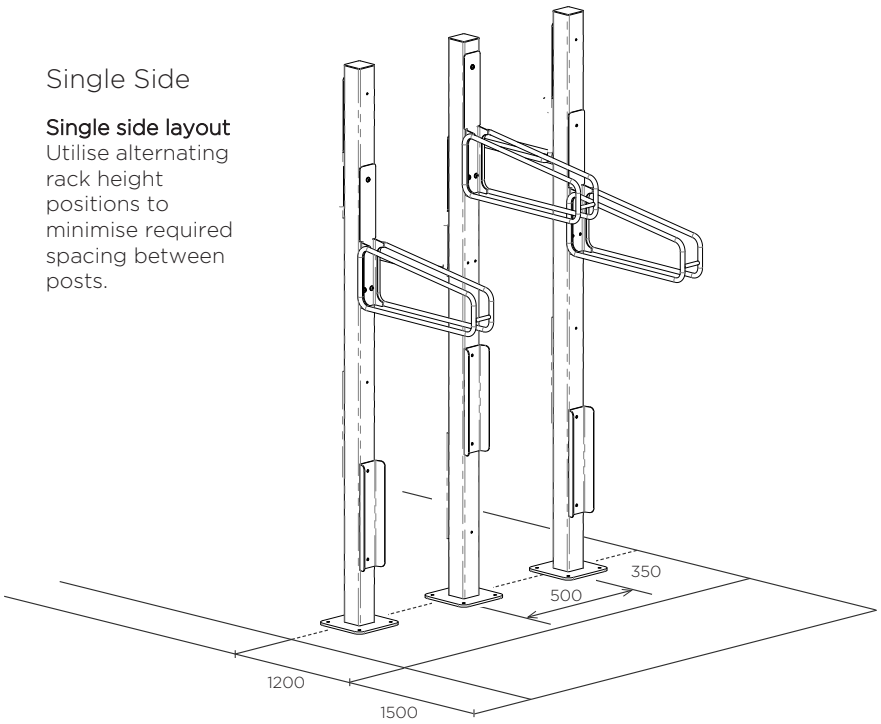
www.cora.com.au

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

Single Side

Single side layout
Utilise alternating rack height positions to minimise required spacing between posts.



E3VR POLE MOUNT LAYOUT GUIDE

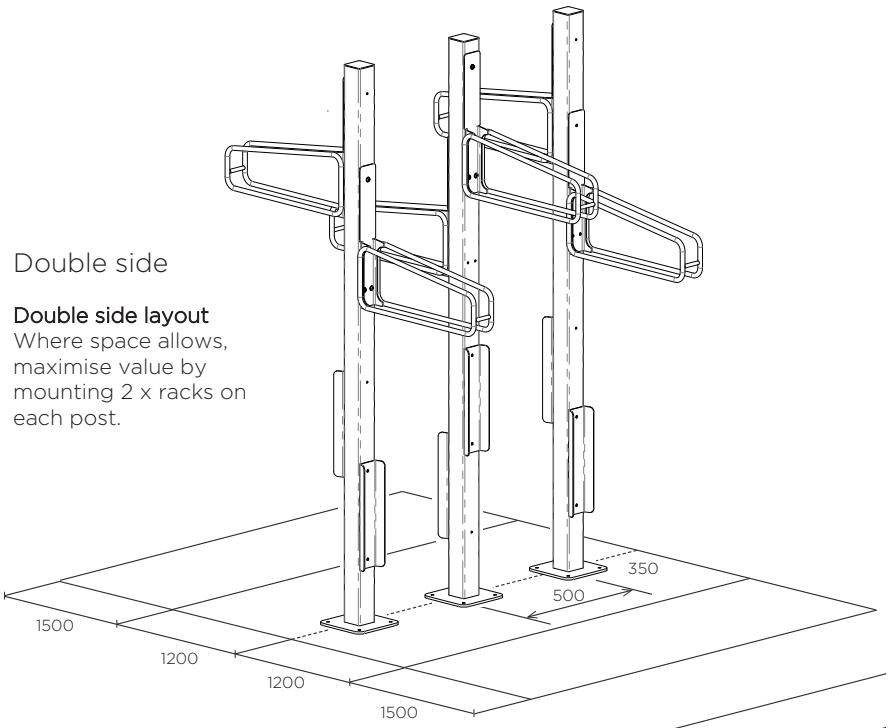
To comply with AS2890.3 (2015) minimum 500mm spacing between post centres and 350mm to walls or other obstructions is required. 400-500mm spacings are possible where compliance with AS2890.3 (2015) is not required.
700mm is required where racks do not alternate in height.

For specific assembly and installation instructions relating to E3VR Series racks, please refer to individual instruction information sheets.

Racks should not be installed, based on the information on this sheet alone.

Double side

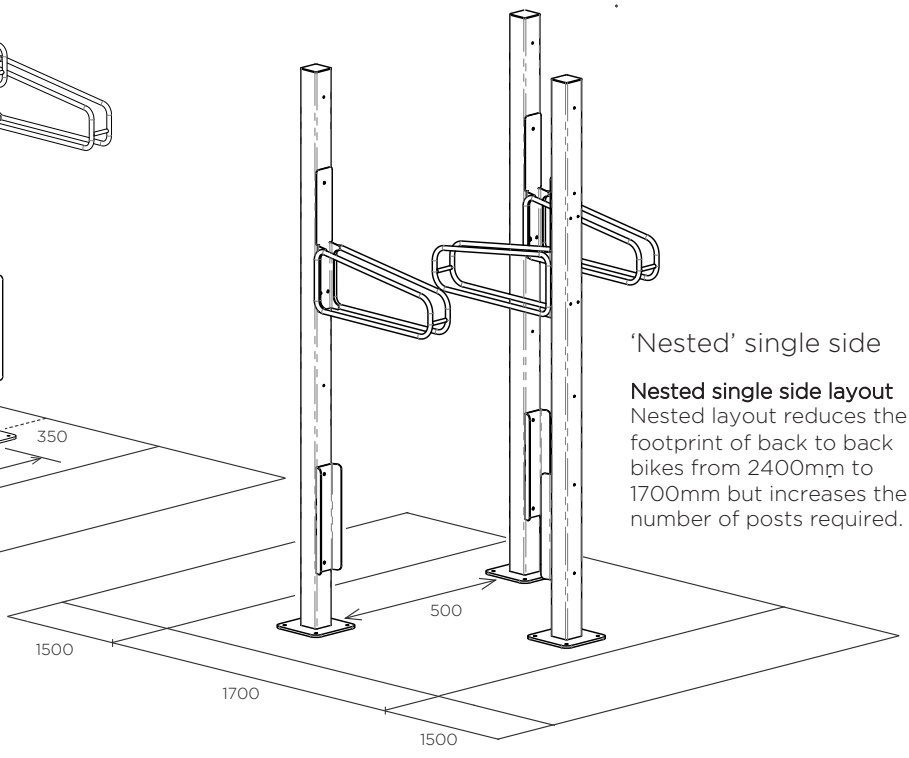
Double side layout
Where space allows, maximise value by mounting 2 x racks on each post.



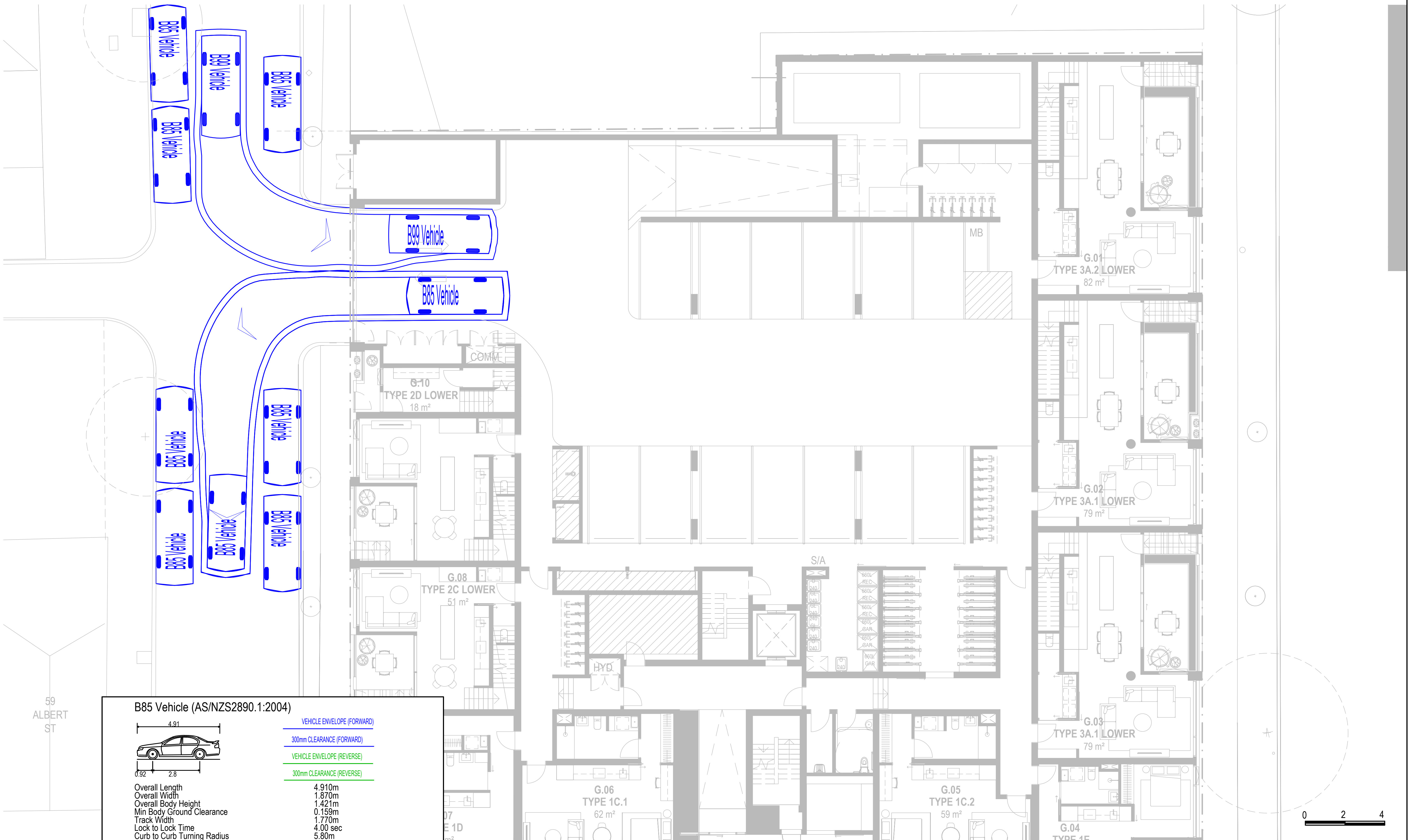
Access Aisle dimensions
Posts are to be mounted to allow for 1200mm bike footprints and 1500mm access aisles

'Nested' single side

Nested single side layout
Nested layout reduces the footprint of back to back bikes from 2400mm to 1700mm but increases the number of posts required.



Appendix D Swept Path Assessment



B85 Vehicle (AS/NZS2890.1:2004)

4.91 / 0.92 / 2.8

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

B99 Vehicle (AS/NZS2890.1:2004)

5.2 / 0.95 / 3.05

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

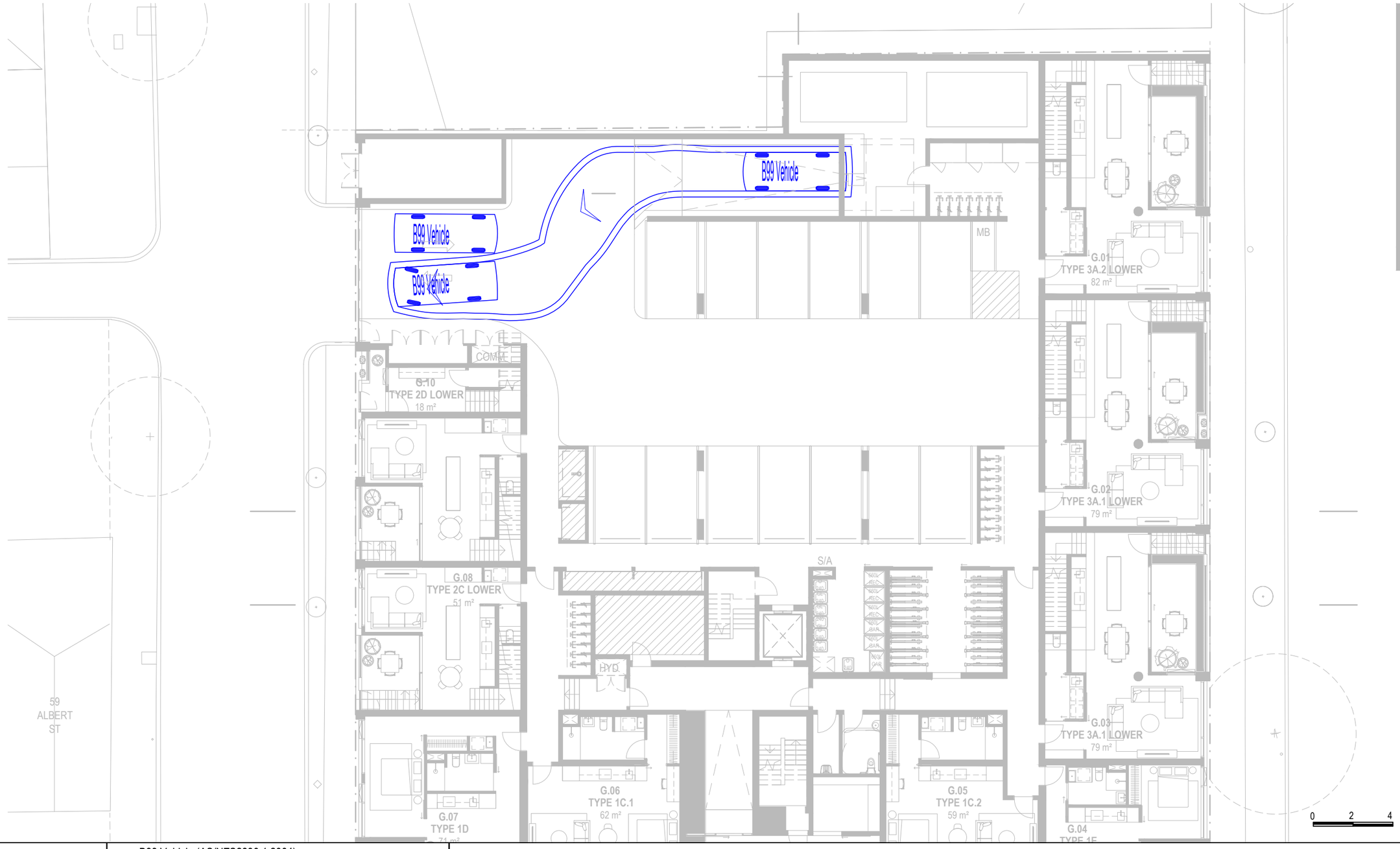
ratio:

RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Ground Level

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	1 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:

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ABN 005 422 104
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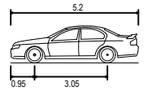
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



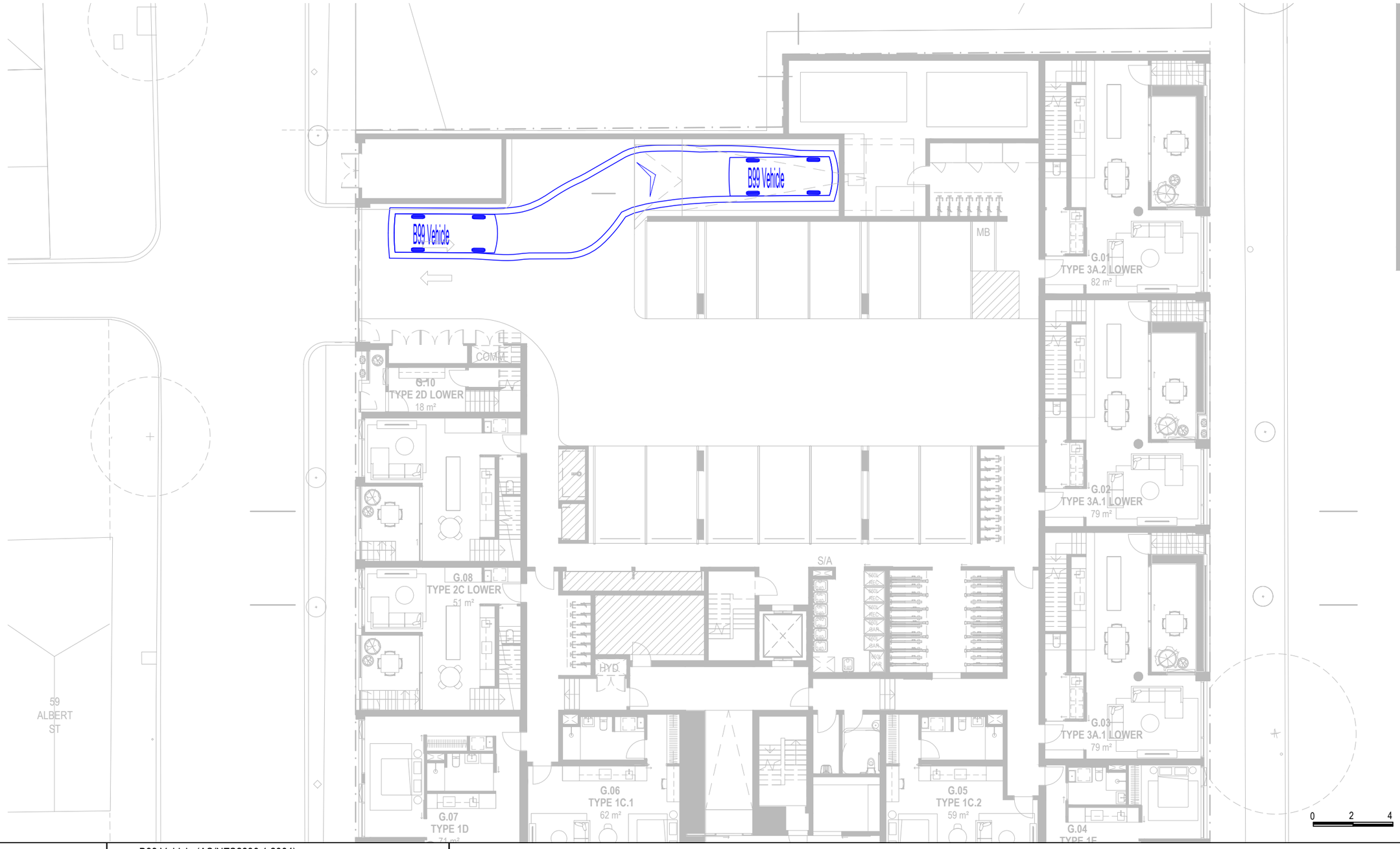
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Ground Level

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	2 of 10	J.H.B	1:200 @A3	16/09/2025



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ratio:

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CREMORNE, VICTORIA 3121
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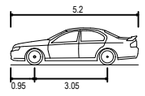
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



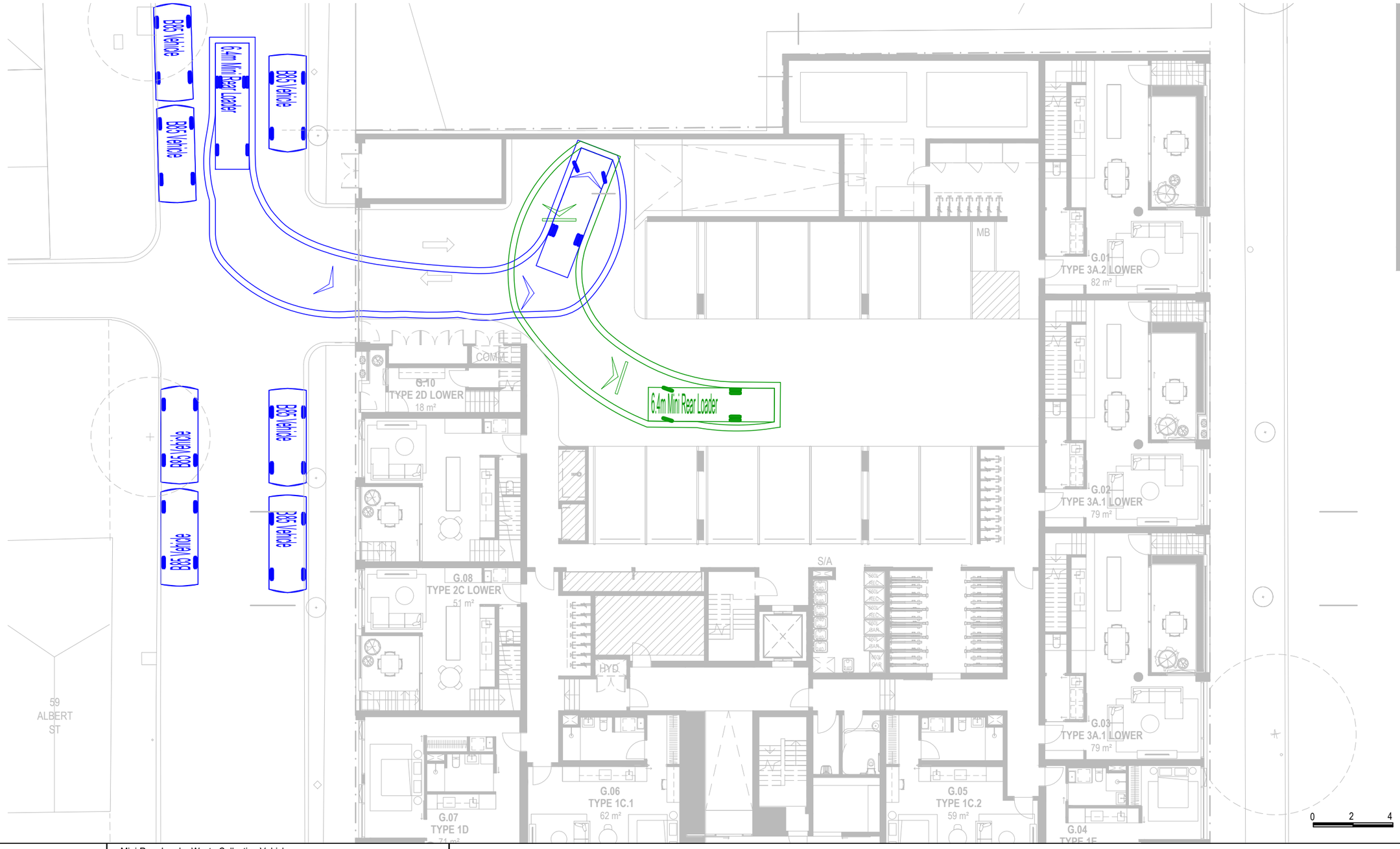
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Ground Level

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	3 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:
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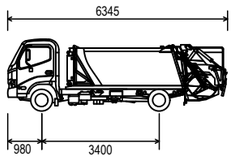
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Mini-Rear Loader Waste Collection Vehicle



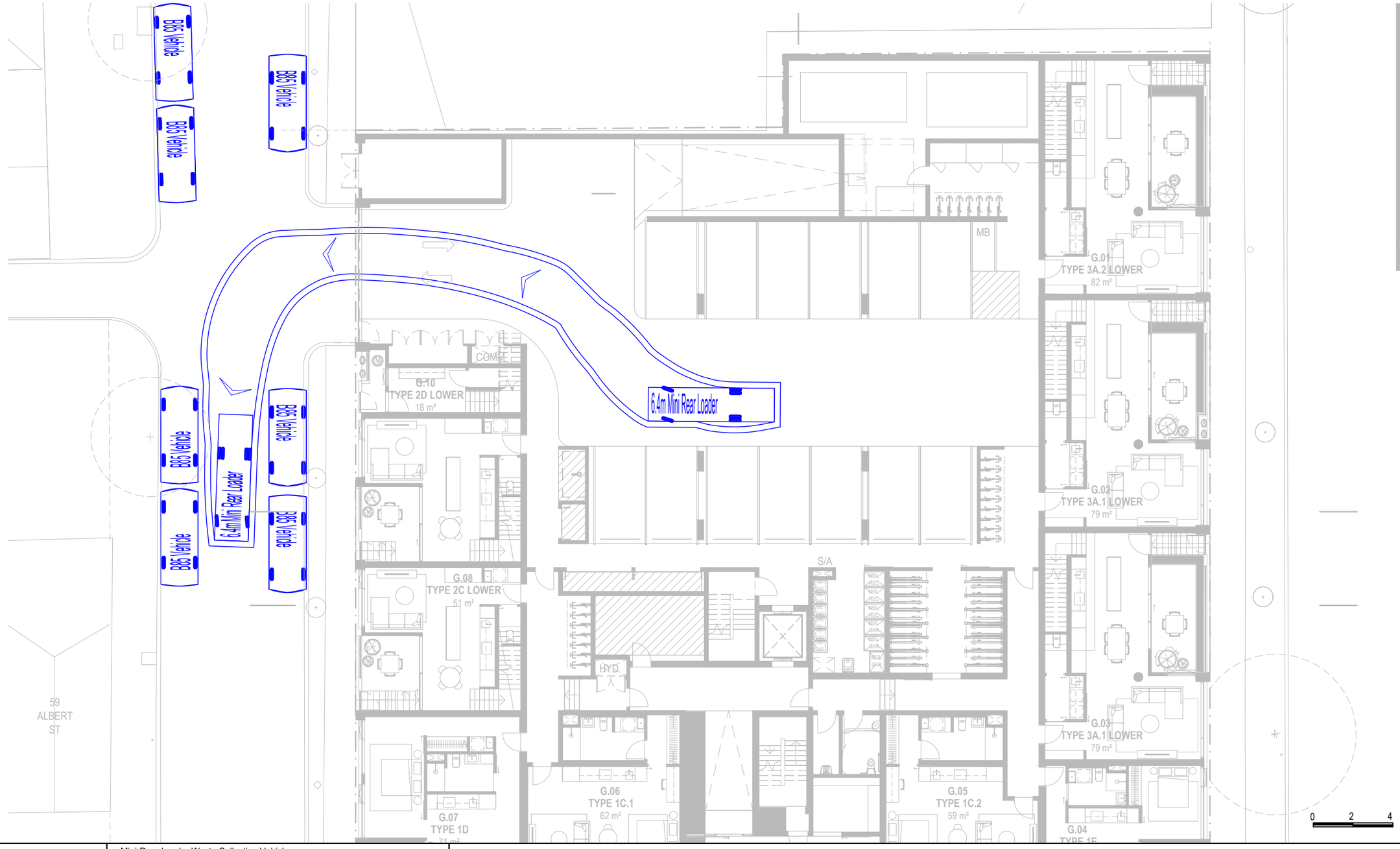
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	6.345m
Body Width	1.700m
Overall Body Height	2.080m
Min Body Ground Clearance	0.205m
Track Width	1.670m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.450m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Ground Level

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

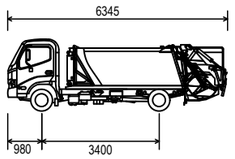
RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	4 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:

RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Mini-Rear Loader Waste Collection Vehicle



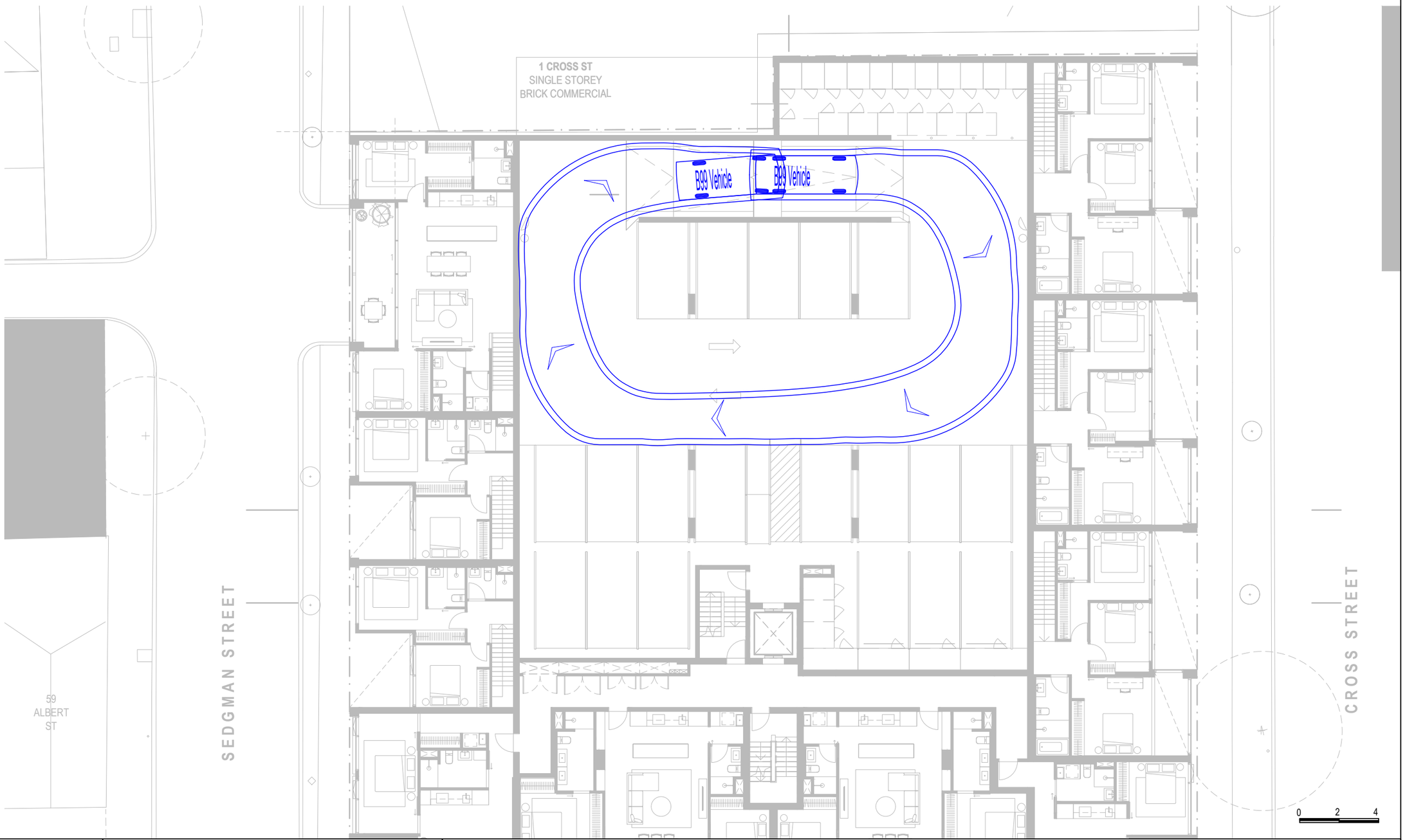
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	6.345m
Body Width	1.700m
Overall Body Height	2.080m
Min Body Ground Clearance	0.205m
Track Width	1.670m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.450m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Ground Level

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	5 of 10	J.H.B	1:200 @A3	16/09/2025



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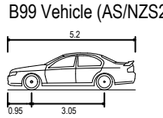
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



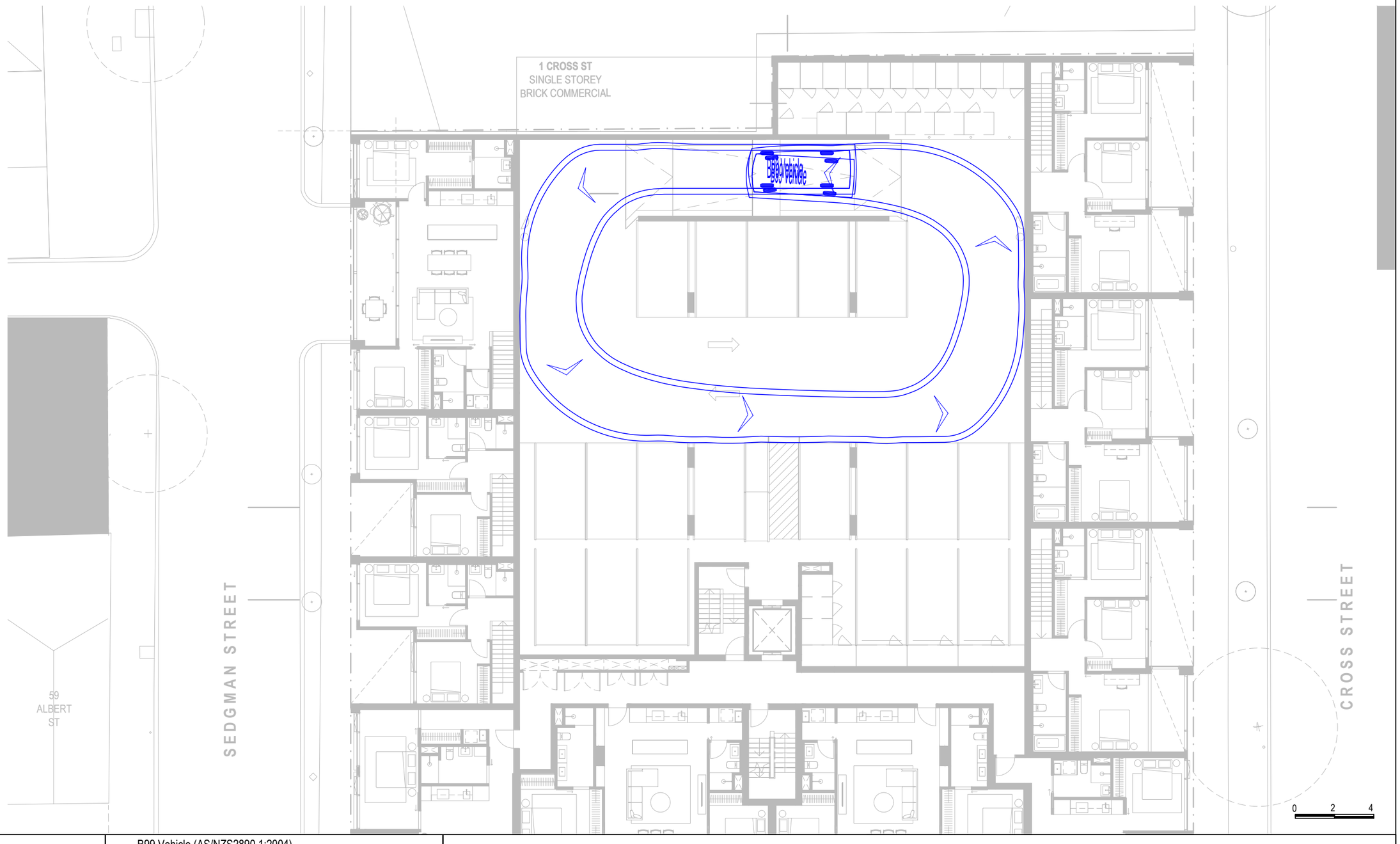
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Level 01

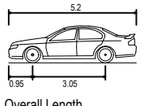
NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	6 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



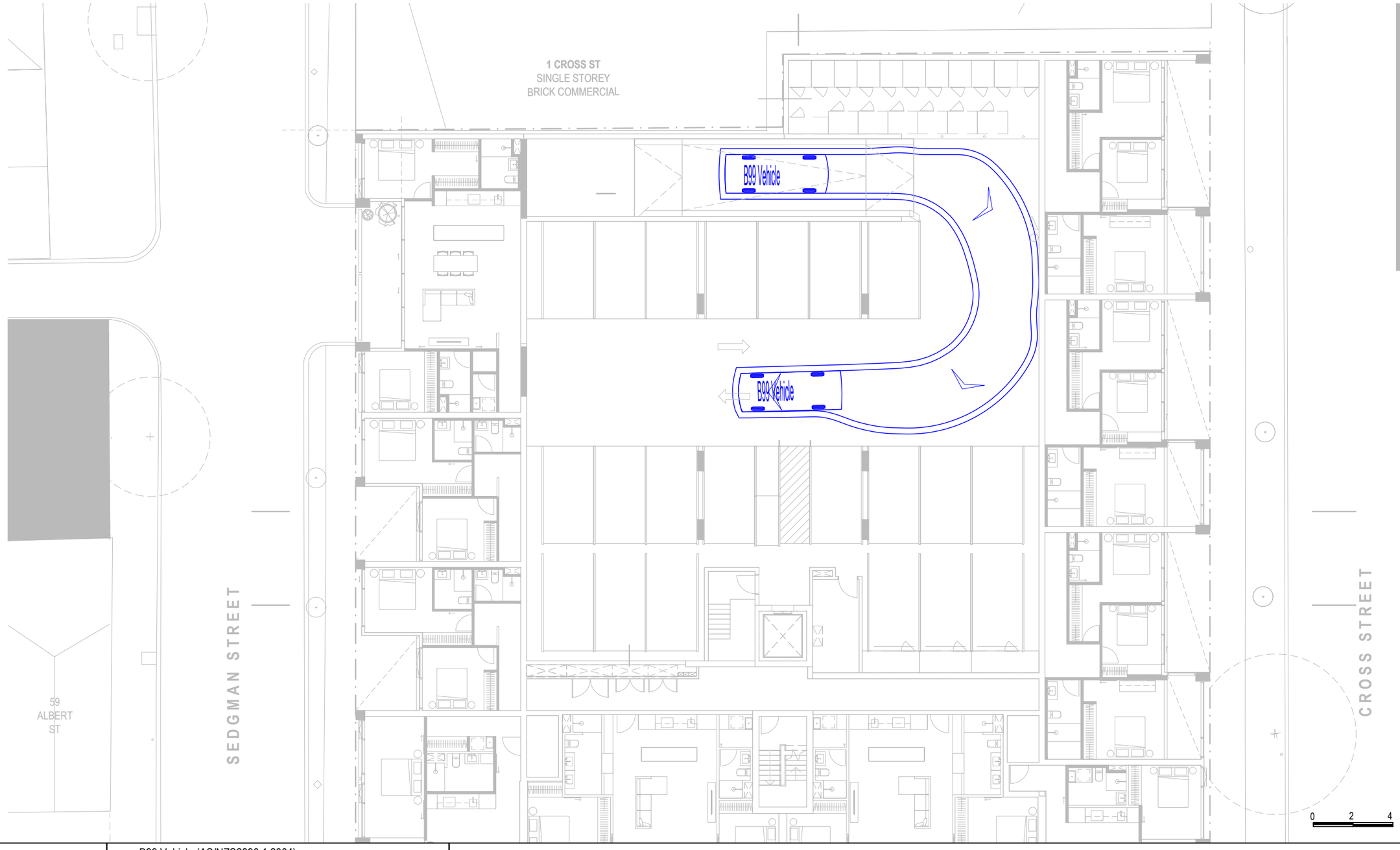
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Level 01

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	7 of 10	J.H.B	1:200 @A3	16/09/2025



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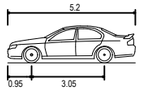
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



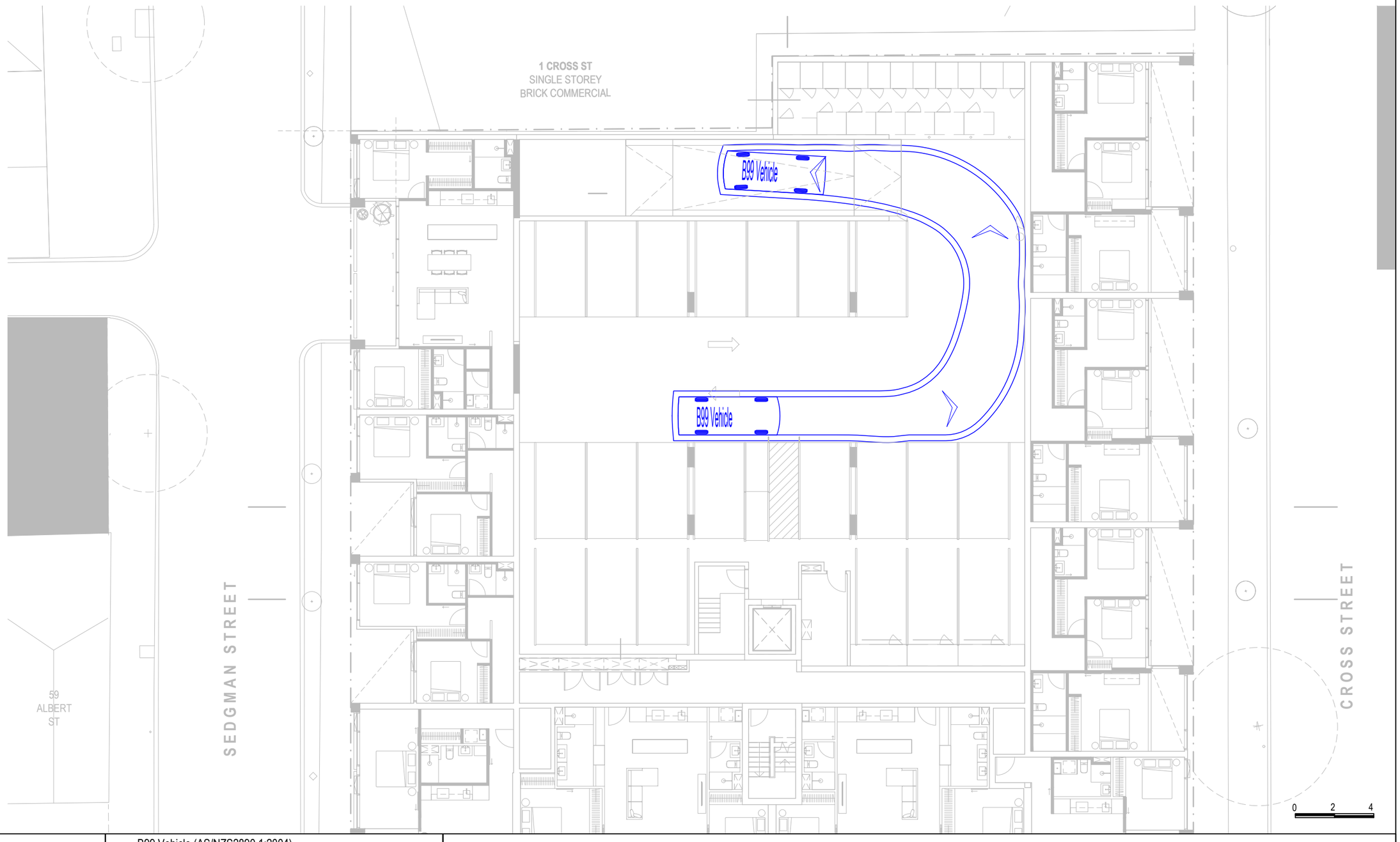
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Level 02

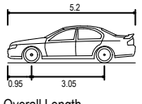
NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	8 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



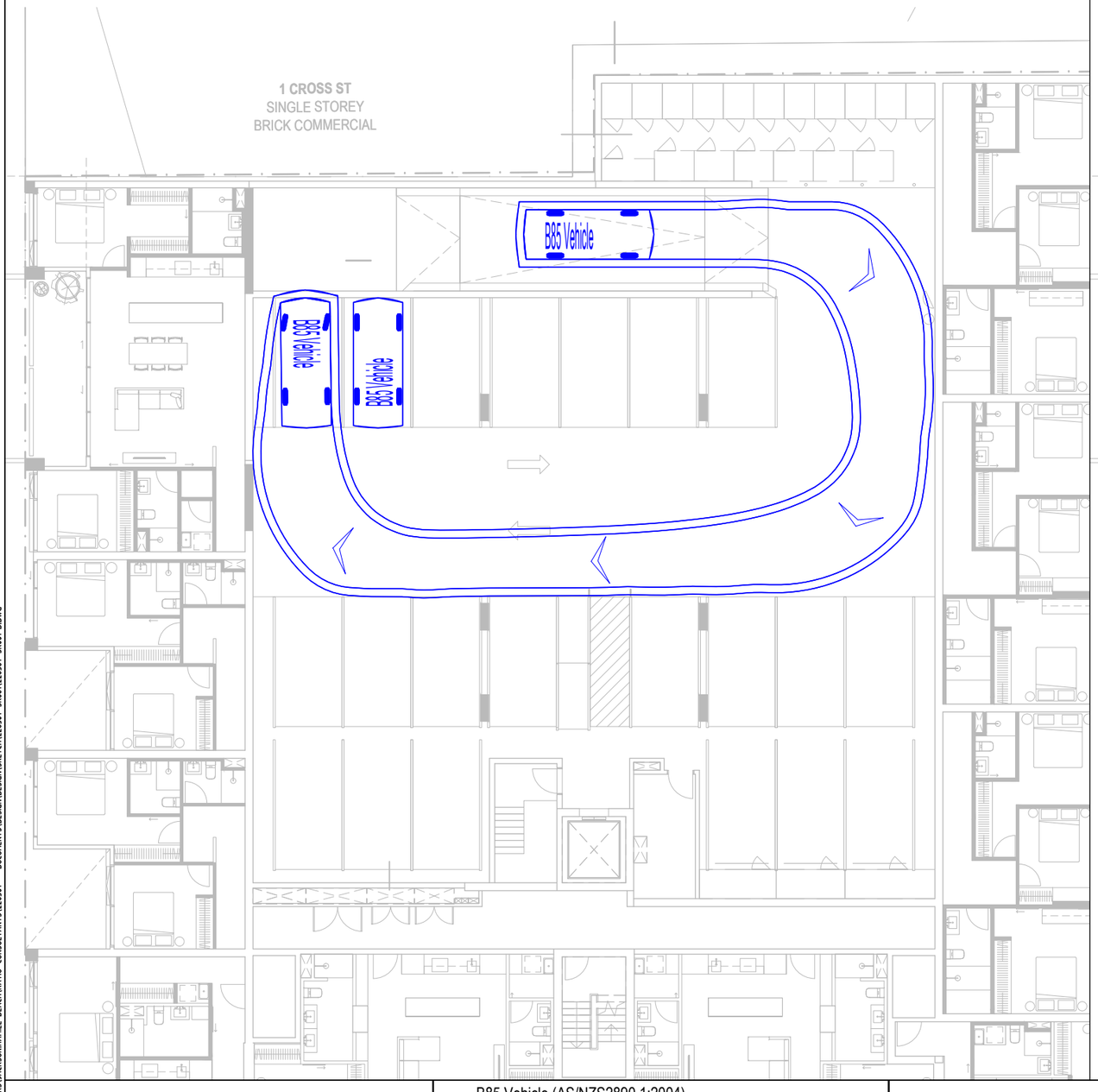
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Level 02

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

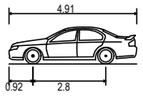
RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	9 of 10	J.H.B	1:200 @A3	16/09/2025



ratio:

RATIO CONSULTANTS PTY LTD
ABN 005 422 104
LEVEL 5, 65 DOVER STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

Proposed Residential Development
53-57 Albert Street, Brunswick
Swept Path Assessment - Level 02

NOTE:
1) Base plan supplied by Jackson Clement Burrows Architects, Rev A, dated 15 September 2025
2) Maximum design speed - 5 km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
22850T-SK001-D	10 of 10	J.H.B	1:200 @A3	16/09/2025