



TRAFFIC SOLUTIONS PTY LTD

Reference No : 24.25.012
26 November 2024

The General Manager
Canterbury Bankstown Council
P.O Box 77
Campsie NSW 2194

Dear Sir,

**Traffic and Parking Statement – Proposed Mixed use development,
153-159 Penshurst Road, Narwee**

Traffic Solutions Pty Ltd has been engaged by Lin's (Aust) Holding Pty Ltd to provide Council with an assessment of the traffic and parking implications of a development proposing an increase of 2 floors and an additional 10 dwellings to an existing approval in accordance with the Affordable Housing SEPP. The proposal will now include 219m² of ground floor retail and 43 residential Units over 9 levels above. (Comprising 8 x 1 bedroom, 31 x 2 bedroom and 4 x 3 bedroom dwellings).

Fifty One (51) car spaces plus a car wash bay including 7 accessible car spaces plus 10 bicycle spaces are proposed. Vehicle access to the site and basement car spaces is via a 7.2m wide double driveway to the rear Station Lane.

The proposed driveway location is satisfactory and will provide very good sight distance in both directions along Station Lane. The available sight distance easily exceeds the desirable 69m distance suggested by AS/NZS 2890.1:2004 for 50 km/h.

This assessment has been undertaken with reference to plans prepared by Ross Howieson Architects, project number 517, drawing numbers 001 – 002, 200 – 210, 301 - 304 and 401 – 402 revision P2 and dated 16 November 2024.

TRAFFIC

An estimation of the traffic generation of the proposed development can be calculated by reference to the Roads and Maritime Services Technical Direction '*Guide to Traffic Generating Developments, Updated surveys TDT 2013/14*' of May 2013. The guide undertook surveys of 234 High Density residential flat units in 2 – 8 Ashton Street, Rockdale (the closest to the subject site). The average weekday peak hour traffic flows per unit was recorded:

AM Peak Hour Vehicle Trips =	0.32
PM Peak Hour Vehicle Trips =	0.18

The Roads and Maritime Services defines a high density residential flat building as:

“... a building containing 20 or more dwellings. This does not include aged or disabled persons' housing. High density residential flat buildings are usually more than five levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.”

In the updated traffic surveys for the Guide to Traffic Generating Developments undertaken by the RMS (TDT 2013/04) survey data for the Ashton Street, Rockdale, site is approximately 700m walking distance from Rockdale Railway station. The subject proposal is located approximately 450m from Belmore Railway Station. Considering the location of the proposal to Belmore Railway station and shopping precinct the RMS high density residential flat building traffic generation rate is considered applicable at this location. Therefore, the estimated traffic generation of the residential part of the development calculates as:

AM Peak

43 Dwellings @ 0.32 trips per unit = 13.8 peak hour trips

PM Peak

43 Dwellings @ 0.18 trips per unit = 7.8 peak hour trips

An estimation of the traffic generation for the commercial part of the proposed development can be calculated by reference to the Roads and Maritime Services '*Guide to Traffic Generating Developments, Section 3 – Landuse Traffic Generation*' of October 2002. The guide specifies the following peak hour generation rates for office and commercial:

Retail Premises

Other locations in the former Bankstown LGA
1 car space per 40m² gross floor area.

Therefore, the estimated traffic generation of the commercial part of this development is:

Evening peak hour

219m² @ 2 trips per 100m² GFA = 4.4 evening peak hour trips

The estimated potential traffic generation of the subject is in the order of 18 and 12 trips in the morning and evening peak hours respectively. (Note: the retail evening peak hour calculation has been added to both morning and evening peak residential totals to ensure a robust assessment for both peaks.)

This increase in traffic will not have a noticeable or detrimental effect on the current operation of Station Lane or the surrounding road network.

PARKING

Geometric design requirements for car park layouts are specified in the '*Australian/New Zealand Standard, Parking Facilities Part 1; Off Street Car Parking (AS/NZS 2890.1)*' of 2004 and '*Australian/New Zealand Standard, Parking Facilities Part 6: Off street Parking for People with Disabilities*' of 2009. Part 1 of this standard classifies this development as a Class 1A off-street car parking facility requiring a category 1 driveway. The table on the following page provides a comparison on the requirements of AS/NZS 2890.1 and AS/NZS 2890.6 applicable to the car parking proposal.

FEATURE	AS/NZS 2890.1 & AS/NZS 2890.6 REQUIREMENT	PROPOSED	CONFORMS TO STANDARD
Parking Space	5.4m x 2.4m car space Additional 300mm when adjacent a wall	5.4m x 2.4m car space Additional 300mm when adjacent a wall	YES
	5.4m x 2.4m plus 5.4m x 2.4m shared zone for disabled spaces	5.4m x 2.4m plus 5.4m x 2.4m shared zone disabled spaces	YES
Aisle Width	5.8m min	5.8m min	YES
Blind Aisle	1.0m	1.0m	YES
Driveway Width	Category 1 d/w = 3m – 5.5m Note: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0m min.	7.2 combined driveway to Street	YES
			YES
Ramp Grades	<ul style="list-style-type: none"> 1 in 20 (5%) for 1st 6m > 20m 1 in 5 (20%) max < 20m 1 in 4 (25%) max. Transition required if grade change in excess of 1 in 8 (12.5%)	5% grade for 1 st 6m Ramps < 20m @ 1 in 4 (25%) with 1 in 8 (12.5%) grade transitions over 2m.	YES
			YES
Ramp Widths	For straight ramps <ul style="list-style-type: none"> One way ramps = 3.0m min Two way ramps = 5.5m min Additional 300mm when adjacent For curved ramps <ul style="list-style-type: none"> One way ramps = 3.6m min Two way ramps = 7.8m min Additional 300mm when adjacent	Straight two way ramps 5.5m plus 0.3m kerbs	YES
Headroom	2.3m desirable 2.2m minimum 2.5m above disabled space	2.4m min	YES
		2.7m	YES
Pedestrian Sight Line Splay	2m (along frontage) x 2.5m (into sight)	Not possible to achieve due to adjoining property wall on boundary. Wider driveway 7.2m set back 2m from southern boundary provided in lieu.	YES

Accordingly, this development proposal adheres to the above Australian Standard Requirements.

Council's Development Control Plan (*Canterbury Bankstown Development Control Plan 2023*) specifies the following car parking requirements for B1 Business Centres in accessible local centres:

Shop Top Housing in former Bankstown LGA

Zone B1 or B2 –

- car space per dwelling;
- Any use within the group term 'commercial premises' must comply with the off-street parking rate for that use; Any use within the group term 'health services facilities' must comply with the off-street rate for that use.

Retail

Other locations in the former Bankstown LGA
1 car space per 40m² gross floor area.

Accordingly, the car parking required for this development proposal calculates as:

33 dwellings @ 1 space/dwelling	=	33 spaces.
219m ² retail @ 1 space/40m ²	=	5.5 spaces.
Car wash bay	=	1 space
TOTAL	=	39.5 spaces.

However, State Environmental Planning Policy (Housing) 2021 and Part 3J-1 of the apartment Design Guide requires the residential component for parking to utilise the following design criteria for parking rates applicable to this proposal:

Car parking is provided based on proximity to public transport
in metropolitan Sydney and centres in regional areas

Design criteria

1. For development in the following locations:

- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or
- on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre

the minimum car parking requirement for residents and visitors is set out in the guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less

The car parking needs for a development must be provided off street

The Roads and Maritime Services *Guide to Traffic Generating Developments, Section 5 - Parking Requirements for Specific Landuses* of October 2002 provides the following parking rates applicable to this proposal:

Parking.

**The recommended minimum number of off-street resident parking spaces is as follows:
Metropolitan Regional (CBD) Centres:**

0.4 spaces per 1 bedroom unit.

0.7 spaces per 2 bedroom unit.

1.20 spaces per 3 bedroom unit.

1 space per 7 units (visitor parking).

Accordingly, the car parking required for the residential component of this development

proposal calculates as:

8 x 1 bedroom dwellings @ 0.4 spaces/dwelling	=	3.2 spaces.
31 x 2 bedroom dwellings @ 0.7 spaces/dwelling	=	21.7 spaces.
4 x 3 bedroom dwellings @ 1.2 spaces/dwellings	=	4.8 spaces.
33 dwellings @ 1 space/ 7 units for visitors	=	4.7 spaces.
219m ² retail @ 1 space/40m ²	=	5.5 spaces.
Car wash space	=	1 space
TOTAL	=	40.9 spaces.

Consequently, the proposed mixed use development satisfies Council's DCP and the SEPP 65 parking requirements with the provision of 51 off-street parking spaces.

The proposed development exceeds with the minimum requirements for car parking suggested by the RMS. The RMS rates are considered to be more appropriate as these rates are based upon surveys and research of residential buildings in Sydney.

Council's Development Control Plan also specifies the following bicycle parking requirements:

Shop Top Housing

1 space per 5 dwellings for residents
1 space per 10 dwellings for visitors

Retail

Minimum 1 space per 500m² over 1000m² GFA

Consequently, the proposed with 33 units 219m² of GFA exceeds Council's parking requirements with the provision of 10 bicycle spaces.

The Applicant has provided Security Level B bicycle parking facilities as per AS2890.3-2015. A review of the proposal indicates that the bicycle facilities comply with this standard.

In addition to the standards for off street car parking the Australian Standards, AS 2890.2:2015 provides the design requirements for varying size heavy vehicles. In this regard, the maximum vehicle proposed for garbage collection is a Small Rigid vehicle. The following table provides a comparison on the key requirements of AS 2890.2 applicable to the proposal.

FEATURE	AS 2890.2 REQUIREMENT	PROPOSED	CONFORMS TO AS 2890.2
Loading dock dimensions	SRV 6.4m x 3.5m MRV 8.8m x 3.5m HRV 12.5m x 3.5m	SRV 10.4m x 3.6m	YES
Driveway width	SRV 6m for minor road MRV 9m for minor road HRV 12.5m for minor road	SRV 6m.	YES
Headroom	SRV 3.5m MRV 4.5m HRV 4.5m	SRV 4.0m	YES

Accordingly, this development proposal adheres to the above Australian Standard requirements.

MANOEUVRING

AS/NZS 2890.1:2004 classifies this development as a Class 1A parking facility (Residential, domestic and employee parking) which permits a “Three-point turn entry and exit into 90° parking spaces only”. All of the car spaces in the Architectural plans can be entered and exited in a three point turn or less and the car park complies with AS 2890.1:2004.

To depict to Council how vehicles can manoeuvre within the development, turning paths have been generated using AUTOCAD Vehicle Tracking software. Attached for Council’s consideration is an AUTOCAD vehicle tracking drawing depicting the AS 2890.1:2004, B85 design car passing at the driveway.

Also attached for Council’s consideration is an AUTOCAD vehicle tracking drawing depicting the AS 2890.2:2015, Small Rigid Vehicle reversing into the loading dock, accessing the loading area and exiting the property in a forward direction. This attachments depicts that that the design vehicle can satisfactorily collect garbage without blocking Station Lane.

CONCLUSIONS

The preceding assessment has revealed the following:

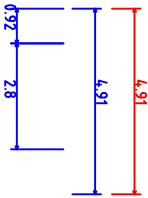
- The access driveway proposed to serve the development is suitably located and will provide good sight distance in both directions along Street.
- The proposed development satisfies the related geometric design specifications contained in the Australian Standards for off street parking and vehicular access.
- The off street parking provided in the proposed development satisfies the requirements specified Council’s DCP by the RMS.
- The bicycle parking provided in the proposed development satisfies the requirements specified by Council’s Development Control Plan and complies with AS 2890.3-2015.
- The proposal has a potential in estimated peak hour traffic flows in the order of 18 and 12 vehicle trips in the morning and evening peak hours, respectively which will not have any unacceptable traffic impacts upon Station or the surrounding road network.

Should you require any additional information or clarification of the contents of this letter please contact me on the numbers provided.

Yours sincerely



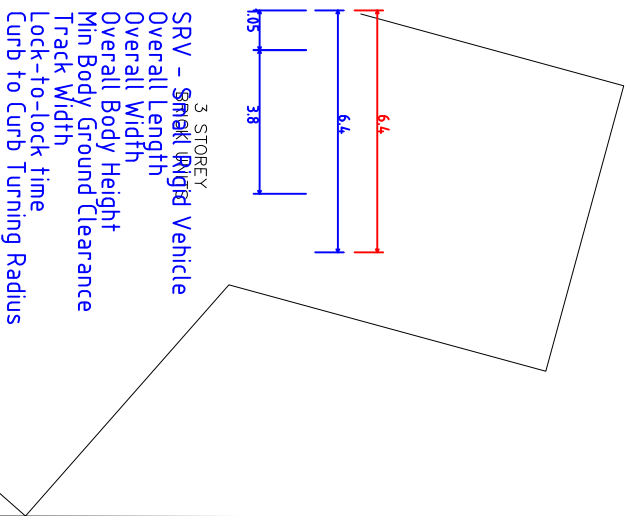
Craig Hazell
Director



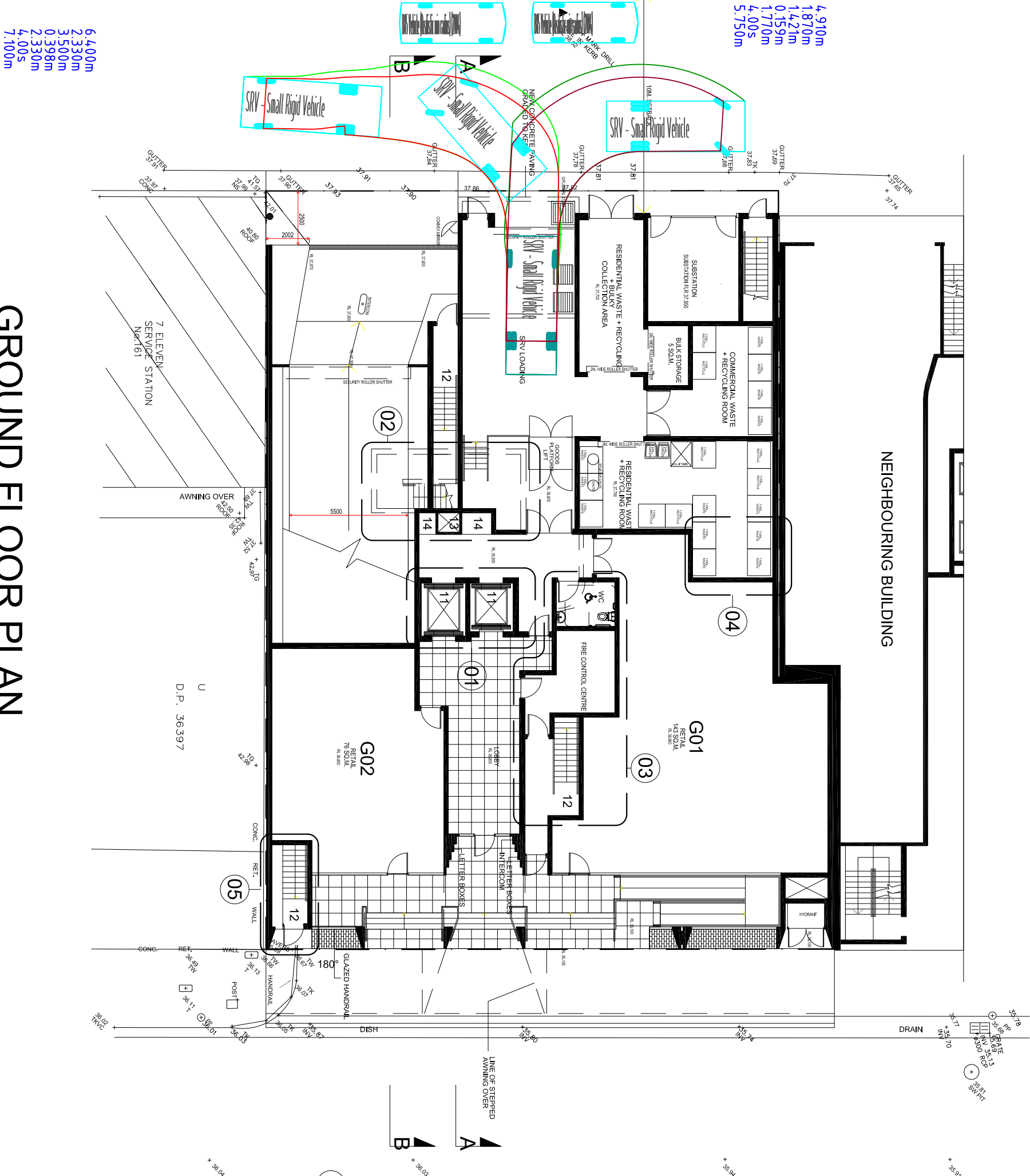
B85 Vehicle (Realistic min radius) (2004)
Overall Length 4.910m
Overall Width 1.870m
Overall Body Height 1.421m
Min Body Ground Clearance 0.159m
Track Width 1.770m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 5.750m

D . P . 3 5 9 9 1 2

No.140
HANNANS ROAD



3 STOREY
SRV - Small Rigid Vehicle
Overall Length 6.400m
Overall Width 2.330m
Overall Body Height 3.500m
Min Body Ground Clearance 0.398m
Track Width 2.330m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.100m



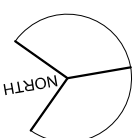
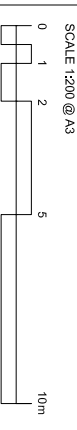
GROUND FLOOR PLAN

- 1 LIVING/DINING ROOM
- 2 KITCHEN
- 3 BED 1
- 4 BATH 1
- 5 BATH 2
- 6 LAUNDRY
- 7 BED 2
- 8 BED 3
- 9 STUDY
- 10 BALCONY
- 11 LIFT
- 12 FIRE STAIR/EGRESS
- 13 EXHAUST RISER
- 14 SERVICE CUPBOARD

01
AMENDMENTS TO APPROVED DA
REFER TO PROJECT SUMMARY PAGE
AND STATEMENT OF ENVIRONMENTAL
EFFECTS FOR DETAILS

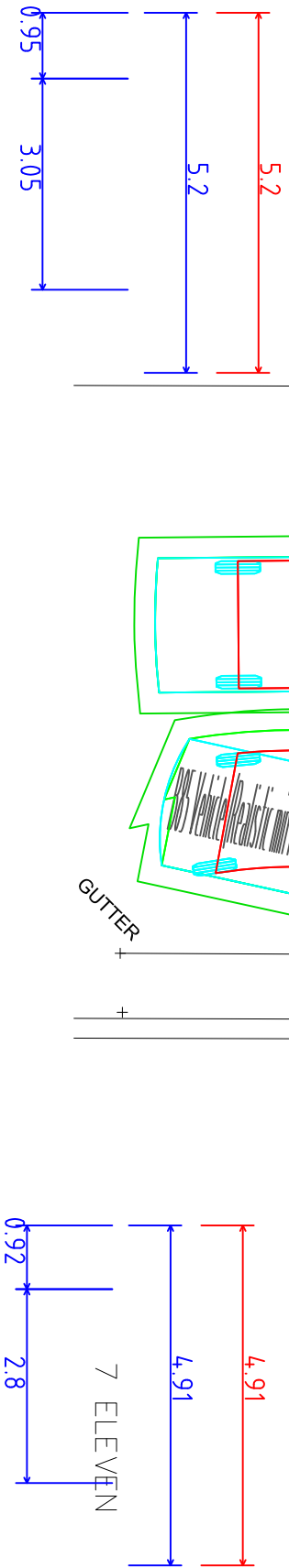
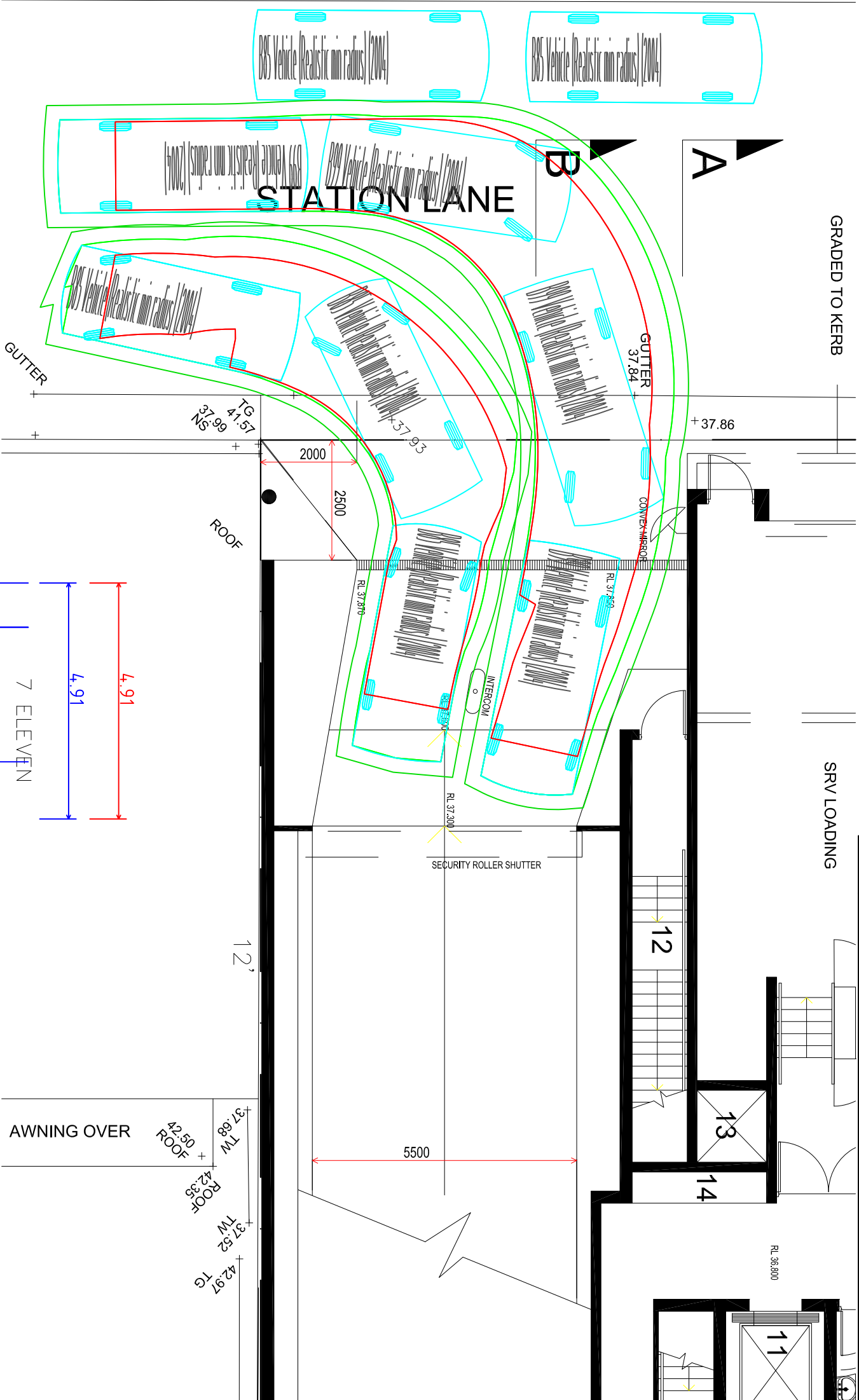


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NSW DESIGN PRACTITIONER REG NO. DEP0001060



153-159 PENSURST ROAD NARWEE
DRAWING TITLE
GROUND FLOOR PLAN
PROJECT 517
DRG NO. 204
REVISION P2
DATE 16.11.2024

RevNo	Revision note	Date	Signature



B99 Vehicle (Realistic min radius) (2004)

Overall Length 5.200m

Overall Width 1.940m

Overall Body Height 1.878m

Min Body Ground Clearance 0.272m

Track Width 1.840m

Lock-to-lock time 4.00s

Curb to Curb Turning Radius 6.250m

B85 Vehicle (Realistic min radius) (2004)

Overall Length 4.910m

Overall Width 1.870m

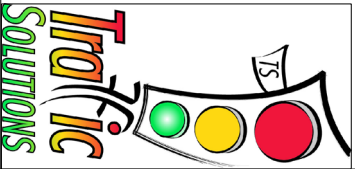
Overall Body Height 1.421m

Min Body Ground Clearance 0.159m

Track Width 1.770m

Lock-to-lock time 4.00s

Curb to Curb Turning Radius 5.750m



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Title
AS/NZS 2890.1:2004, B85
Car swept turning path

Date 21/11/24 Scale 1:100@A3

Client

File No. 24.25.012 Dwg No. 1