

5<sup>th</sup> August 2025

Mr & Mrs Wang 231-233 McCarrs Creek Road, Church Point NSW 2104

# RE: Sight Line Analysis at the Proposed Driveway Residential Dwelling House at 231-233 McCarrs Creek Road, Church Point

ParkTransit (PT) have been engaged by Mr & Mrs Wang to assess the sight line distance available at the driveway associated with the proposed residential dwelling house located at 231-233 McCarrs Creek Road, Church Point.

The proposal involves the construction of a three-storey residential building accommodating five bedrooms. As part of the proposal, an enclosed double garage will be provided on-site, accessible via a new driveway located along the sole frontage of McCarrs Creek Road.

#### **Reviewed Plans**

As part of the review process, PT have undertaken the sight line assessment of the proposed driveway with reference to the following drawings prepared by S&E Design Studio.

A copy of the following plans is presented in **Attachment A**:

- Site Pan Sheet Number 01, Revision Number E;
- Entry Floor Plan Sheet Number 02, Revision Number E;
- Middle Floor Plan Sheet Number 03, Revision Number E;
- First Floor Plan Sheet Number 04, Revision Number E;
- Elevations Sheet Number 10, Revision Number E; and
- Driveway Gradient Sheet Number 23, Revision Number E.

The sight line analysis was undertaken in accordance with AS2890.1-2004 (The Standard).

## **Sight Distance Assessment**

Section 3.2.4 of AS2890.1- 2004 (the Standard), specifies the recommended sight distance associated with the driveway. The sight distance requirement is prescribed in accordance with the posted speed limit along the frontage road.

The proposed site is accessible via a new driveway located along the sole frontage on McCarrs Creek Road. The following map shows the hierarchy of the surrounding road network as classified by Transport for New South Wales (formerly known as Road and Maritime Services (RMS).





Figure 1-Surrounding Road Network (Source TfNSW Website)

The section of McCarrs Creek Road located along the site frontage is classified as a Regional Road and the carriageway comprises one traffic lane in each direction. There is no provision of a footpath on either side of the carriageway, and unrestricted on-street parking is permitted within the informalised indented bays along the carriageway. In the immediate vicinity of the subject site, McCarrs Creek Road has a posted speed limit of 50 km/h and includes the provision of two flat-top speed humps. These speed humps are located at a distance of 120 metres apart. The location of the existing speed humps is shown in the figure below:



Figure 2-Speed Hump Location (Image Source Nearmap)

As stated earlier, the proposed development will be accessible via a new driveway located along McCarrs Road, which have a posted speed limit of 50kph. A site visit was undertaken during the daytime on 14<sup>th</sup> March 2022. The weather conditions were fine, and the visibility was clear.



It is expected that the operating speed of this stretch of road is likely to be less than 50kph as the speed humps themselves will require an approach speed of 25kph. Considering the distance between each speed hump is only 120 metres and both humps require an approach speed of 25 kph, we should expect the operating speed to be lower than the posted speed limit.

During our site visit, we observed that a majority of motorists travelling along the section of McCarrs Creek Road located outside the site frontage, were driving at less than 40kph – thus confirming the existing speed hump located along the site frontage was effective in slowing down the motorists.

Figure 3.2 of The Standard outlines the required sight distances for each tabulated speed. In accordance with Figure 3.2 of the Standard, the sight distance requirement should be established with the prevailing speed environment (i.e. 85<sup>th</sup> percentile speed) and not the posted speed limit. As motorists were travelling at a reduced speed of less than 40kph and thus, it would be appropriate to assess the sight distance requirement based on travel speed instead of the posted speed limit (i.e. 40kph instead of 50kph). For domestic driveways, Section 3.2.4 of the Standard specifies a minimum distance of 30 metres for streets having a posted speed limit of 40kph.

Additionally, a number of mature trees were located at the top of the bank adjacent to the edge of the bitumen (on McCarrs Creek Road). These trees have long trunks and are unlikely to block the visibility of the motorists exiting the subject site. Therefore, the presence of these trees is highly unlikely to have any detrimental impact on the visibility of the motorists exiting the subject site.

In accordance with the guidelines presented in AS2890.1-2004 Sight distance measurements were undertaken and are presented in the figure below:

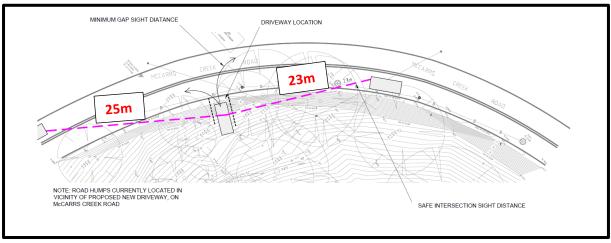


Figure 3- Sight Distance at the Proposed Driveway

It is evident that the sight distance for the motorists exiting the proposed residential dwelling is marginally less than the recommended by the Standard (i.e. 30m). Generally, to improve/enhance the overall visibility for the motorist accessing the development, one (or a combination) of the following measures are considered:



- Explore opportunities to introduce the proposed driveway at an alternate location. In this case, there is a sole frontage servicing the site (i.e. McCarrs Creek Road) and also, limited visibility is available on either side of the driveway therefore, relocating it to an alternate location will not result in any improvement and thus it is not considered appropriate;
- Introduce an engineered solution to improve the visibility of the residents exiting the residential development and approaching the motorists. Generally, a combination of advanced warning signage and a convex mirror are used to improve this visibility. Therefore, we recommended an advanced warning signage should be implemented on McCarrs Creek Road (in both the Northbound and Southbound directions) informing motorists of the presence of the hidden driveway servicing the site. Additionally, a convex mirror should be introduced (preferably) on the southern end of the driveway to improve the visibility of the motorists travelling in the southbound direction on McCarrs Creek Road. However, we recommend a detailed Road Safety Audit should be undertaken post-construction of the driveway to assess the proposed recommendation and identify any potentially hazardous situation.

Furthermore, as part of this analysis, a review of the crash data along the section of McCarrs Creek Road located along the site frontage was undertaken. The NSW Centre for Road Safety collects crash and casualty data periodically, which is publicly available. A review of the latest crash data from 2019-2023 indicates no crashes were recorded on McCarrs Creek Road, which indicates the local road is operating relatively safely. The Figure below provides the crash location and severity of these crashes recorded in the area.

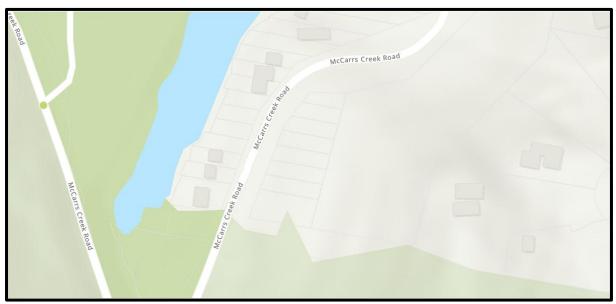


Figure 4 - Crash data (Source NSW Centre for Road Safety)



Lastly, the proposed driveway will be utilised by the residents who are highly likely to be familiar with the site constraints and its access arrangement and therefore, are anticipated to exercise due care while accessing the site.

The motorists travelling along the section of McCarrs Creek Road located outside the site frontage travel at a lower speed, and the local road network operates safely. We do note, that the sight distance for the motorists exiting the proposed residential dwelling is marginally less than the recommended by the Standard. However, the reduced sight distance can be compensated for by the introduction of an engineered solution involving advanced warning signs and the convex mirror.

In this regard, following the introduction of the proposed driveway, McCarrs Creek Road is likely to continue to operate similarly to the existing condition, and therefore, the proposed driveway is unlikely to have any detrimental impact on the operation of the local road. However, we recommend that a detailed Road Safety Audit be undertaken post-construction of the driveway to assess the proposed recommendation and identify any potentially hazardous situations.

### **Conclusion and Recommendation**

The recommended measure, including advanced warning signs and a convex mirror, is highly likely to improve the overall visibility of both the motorists travelling on McCarrs Creek Road and the residents accessing the site. Following the introduction of the proposed driveway, McCarrs Creek Road is likely to continue to operate similarly to the existing condition, and therefore, the proposed driveway is unlikely to have any detrimental impact on the operation of the local road.

Sincerely,

**Abdul Muneeb Khan Mohammad** 

Abdul Mohammal

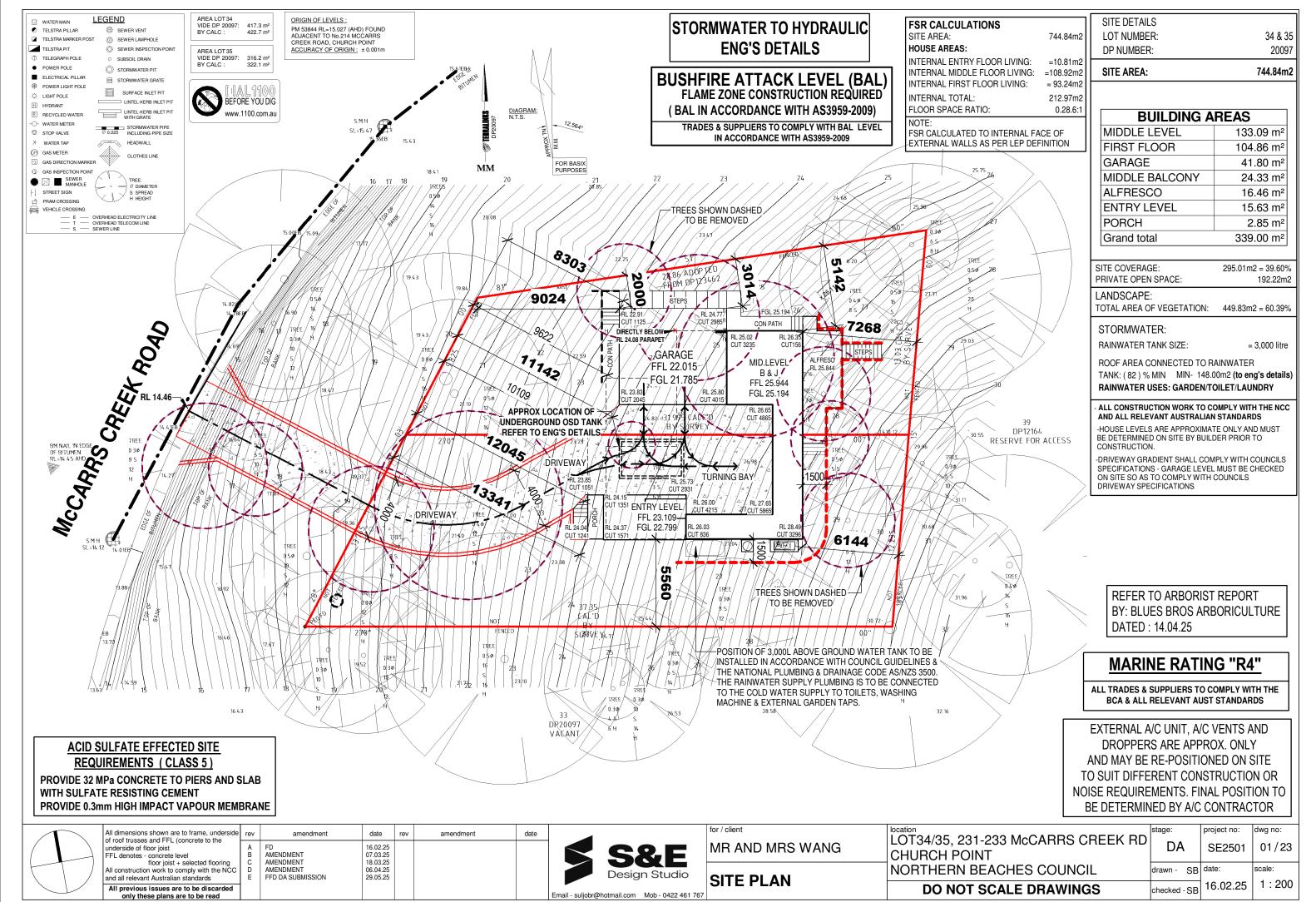
B.E. (Civil), Masters in Engineering (Transport System Engineering) Member, Australian Institute of Traffic Planning and Management

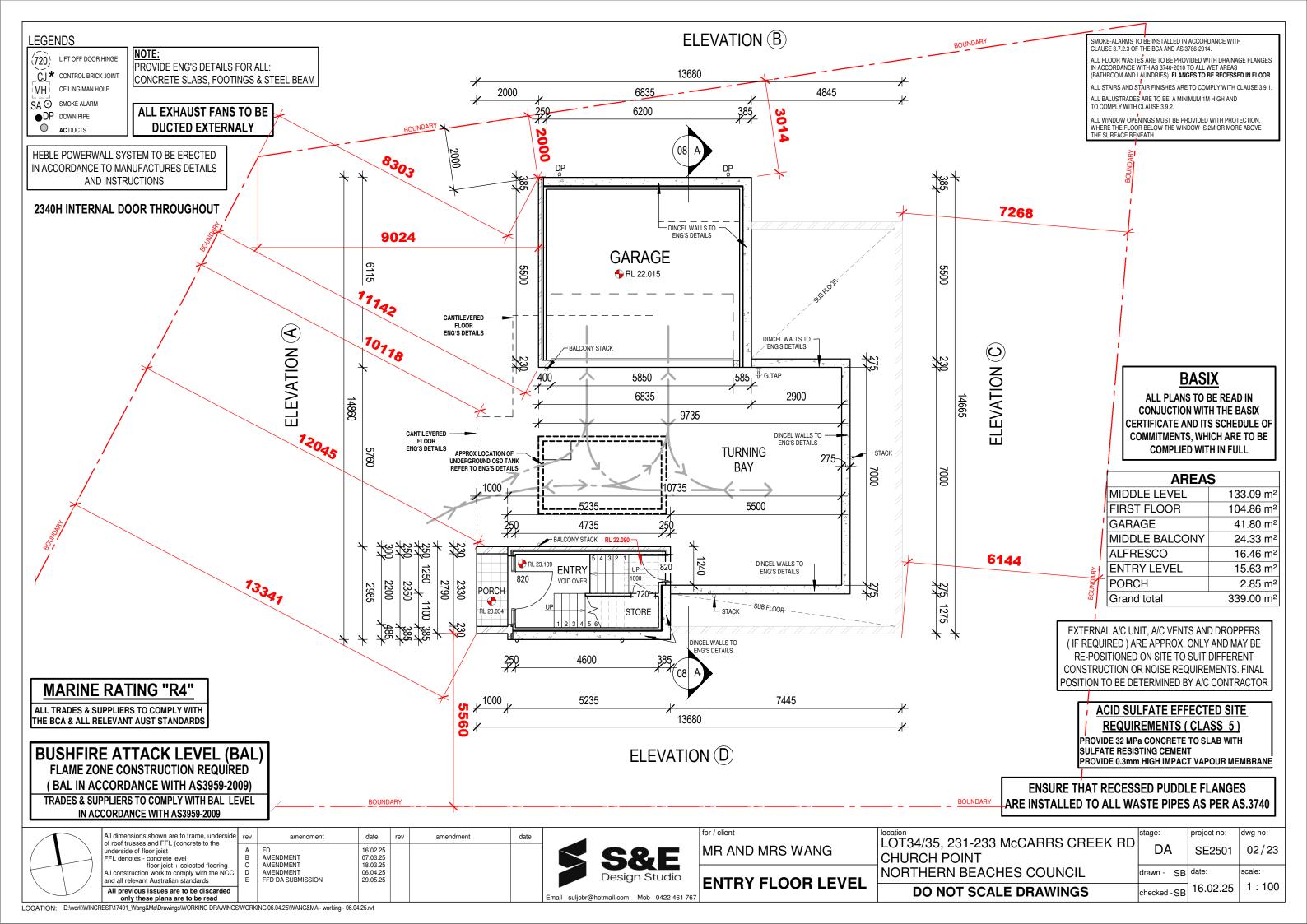
Senior Traffic Engineer ParkTransit Australia +61 (0) 431 084 571

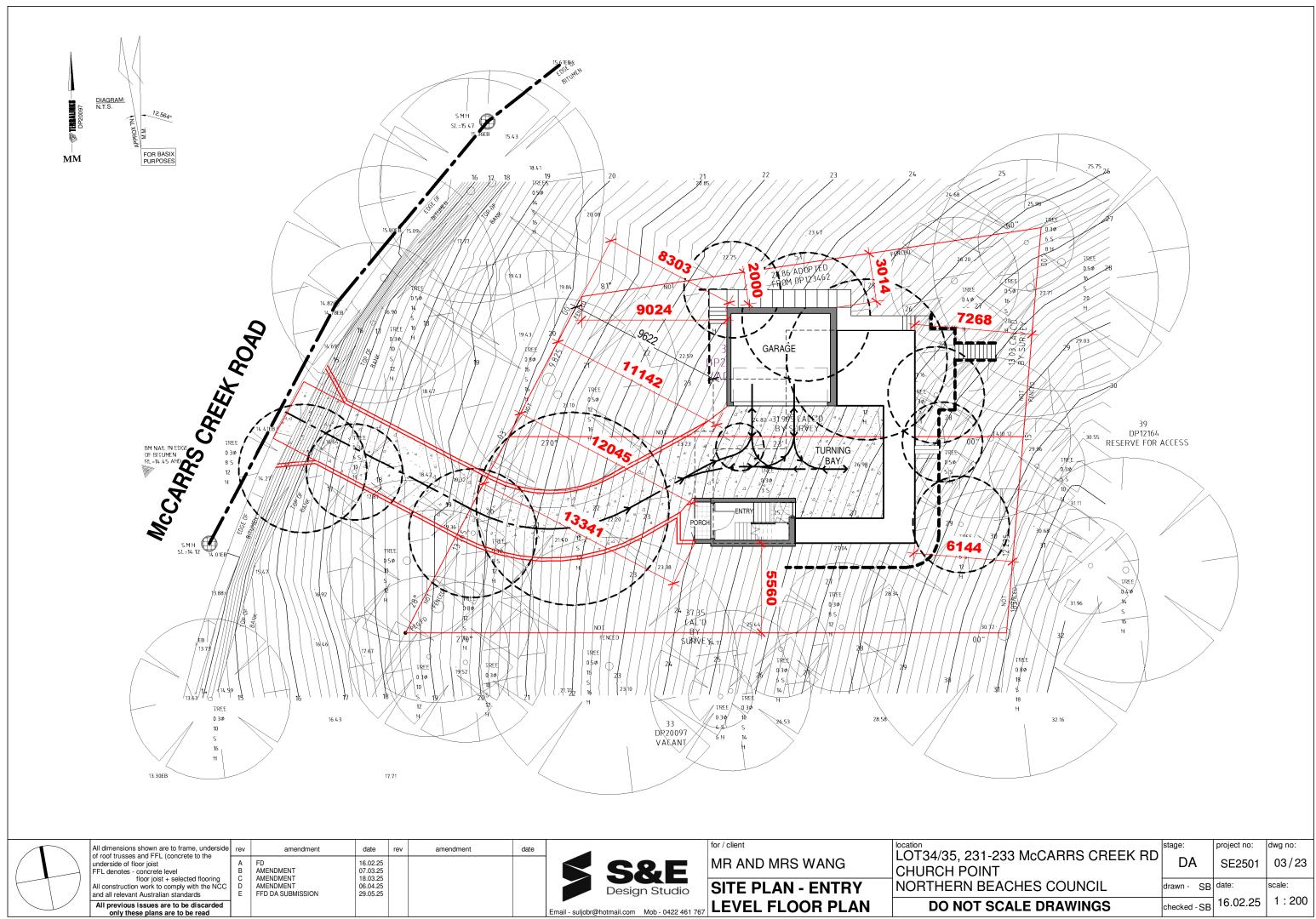


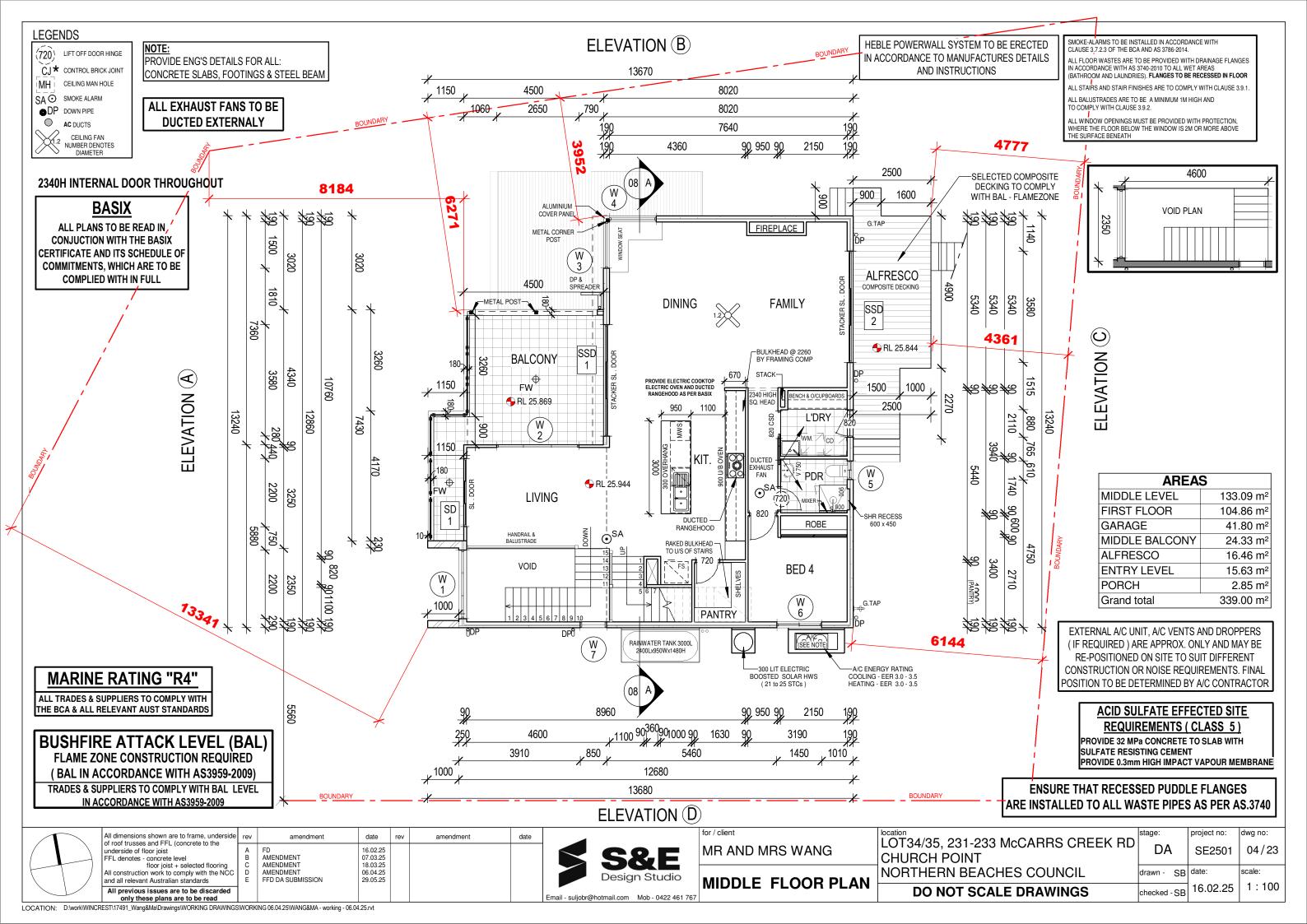


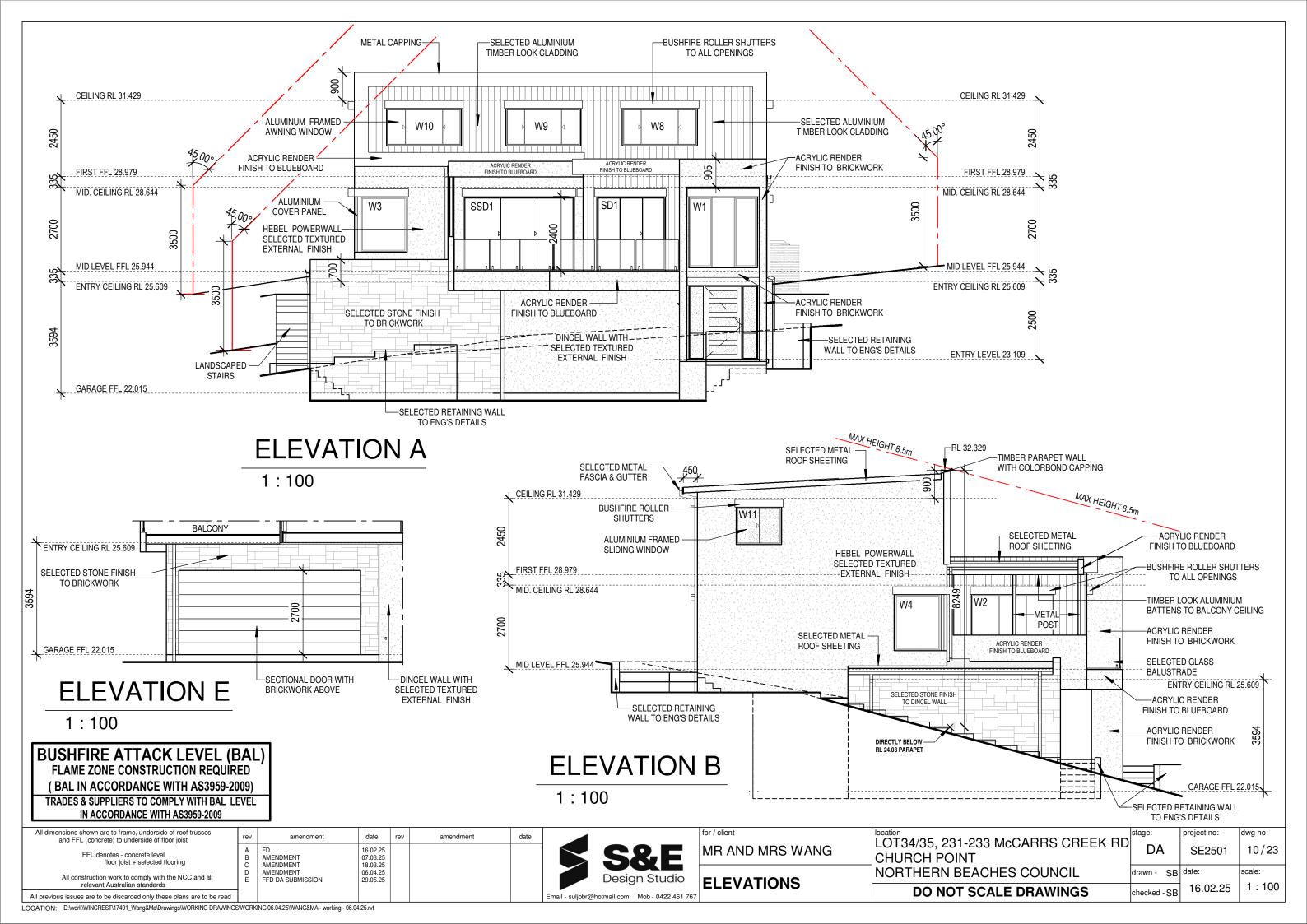
# **Attachment A – Architectural Plans**

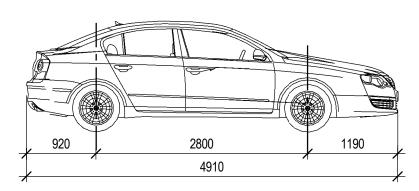




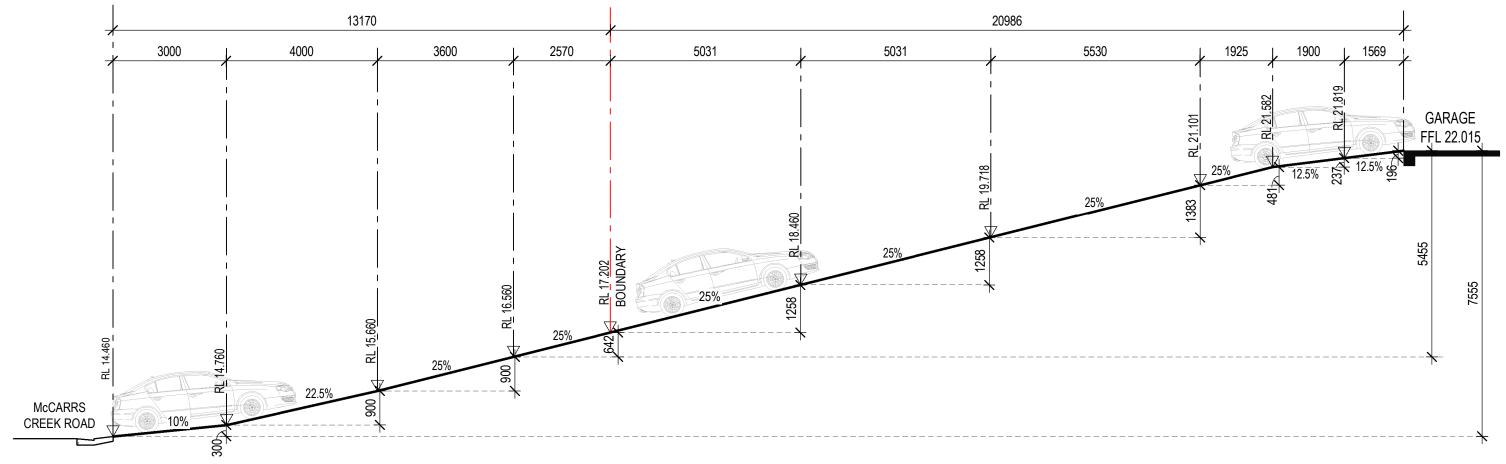








Australian B85 Type Vehicle – AS2890.1:2004



**SCALE 1:100** 

All dimensions shown are to frame, underside of roof trusses and FFL (concrete) to underside of floor joist	rev amendment	date rev	amendment	date			LOT34/35, 231-233 McCARRS CREEK RD	stage:	project no:	dwg no:
FFL denotes - concrete level floor joist + selected flooring	A FD B AMENDMENT	16.02.25 07.03.25			S S&F	MR AND MRS WANG	CHURCH POINT	DA	SE2501	23/23
All construction work to comply with the NCC and all	C AMENDMENT D AMENDMENT E FFD DA SUBMISSION	18.03.25 06.04.25 29.05.25			Design Studio	LONGITUDINAL	NORTHERN BEACHES COUNCIL	drawn - SB		scale:
relevant Australian standards  All previous issues are to be discarded only these plans are to be read					Email - suljobr@hotmail.com Mob - 0422 461 767	DRIVEWAY SECTION	DO NOT SCALE DRAWINGS	checked - SB	16.02.25	indicated