



Bush Fire Hazard Assessment Report

For Proposed Construction of Alterations and Additions

70 Attunga Rd, Newport. NSW 2106



24th February 2023

Prepared By:
The Fire Consultants
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Bushfire Risk Assessment Certificate

This certificate has been completed by a recognised consultant in Bushfire Risk Assessment in Accordance with Section 4.14 of the Environmental Planning and Assessment Act 1979.

<i>Property Address</i>	70 Attunga Rd, Newport. NSW 2106
<i>Description of Development</i>	Construction of alterations and additions to the existing dwelling
<i>References</i>	Plans as provided by applicant
<i>BAL Rating as per Table A1.12.5 of PBP 2019</i>	BAL-FZ
<i>Does Proposal rely on Alternate Solutions</i>	Yes
<i>Is Referral to NSW RFS Required</i>	Yes
<i>Date</i>	24/02/2023

I, Steve Brooks of The Fire Consultants have carried out a bushfire risk assessment on the above property and its proposal for development. A detailed report is attached.

I certify that I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk management and that subject to any conditions contained in the attached bushfire risk assessment report the development conforms to the relevant specifications and requirements of Planning for Bushfire Protection 2019 (NSWRFS) and any other document as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979.

The Bushfire Assessment Report prepared for the above property will be relied upon by Council and may be submitted in support of the proposed Development Application for the property in ensuring that the bush fire requirements have been met in accordance with Planning for Bushfire Protection 2019 (NSWRFS).

A handwritten signature in black ink that reads 'Steve Brooks'.

BPAD - Certification No. 40765
Graduate Diploma Bushfire Planning and Design (UWS)
Graduate Certificate in Fire Investigation (CSU)
Wattlegrove Services Pty Ltd T/as The Fire Consultants



Abbreviations Used

TFC – The Fire Consultants

PBP 2019 – Planning for Bushfire Protection (NSW Rural Fire Service)

RFS - Rural Fire Service

BCA - Building Code of Australia

EP&A Act- Environmental Planning and Assessment Act 1979

BAL - Bushfire Attack Level

APZ - Asset Protection Zone

FRNSW - Fire Rescue NSW

AS3959-2018 – Construction of buildings in bushfire prone areas

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Disclaimer

The assessment and recommendations contained in this Bush Fire Assessment are the views of TFC. The bushfire protection assessment, recommendations and strategies contained in this report are intended to address the submission requirements for developments on bush fire prone land as required by Section 100B of the RFS Act 1997 and or S 4.14 of the EP&A Act 1979

Whilst care is taken in the assessment and report, TFC Ltd does not warrant that the information contained in this report will be free from error or omission. Also, there is no implied assurance nor guarantee that compliance with the strategies and recommendations contained in this report will result in a development application consent being granted by the approving authority. TFC will not be liable for any financial losses incurred throughout the development planning and application process, should an application not be successful.

A bushfire may be unpredictable and, in many cases, perform differently to the measurements and assumptions of this report and AS3959. Therefore the information contained in this report cannot be used as a guarantee against any damages or losses resulting from any bushfire events.

Document Control

Document Name	Project Ref	Date	Author	Status
70 Attunga Rd	1	17/09/2021	S. Brooks	Complete
70 Attunga Rd	2	24/02/2023	S. Brooks	Complete

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Executive Summary

This report has been prepared as a Bushfire Hazard Assessment for the proposed construction of alterations and additions to the existing dwelling on the subject Lot located at 70 Attunga Rd, Newport. NSW 2106 in the Northern Beaches Council LGA. It is important to note that most of the proposed alterations and additions to the existing dwelling are internal with new balconies and approximately 1/5 of the windows being for the exterior alterations and additions.

The proposal is “Residential Infill Development” and has been identified as being bushfire prone and is subject to consideration under Section 4.14 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (NSW RFS 2019).

The subject Lot is identified as being partly within Category 1 Bushfire Hazard Vegetation Zone and Buffer Zone of Category 1 Bushfire Hazard Vegetations. as per the Northern Beaches Council LGA Bushfire Prone Land Map and therefore compliance with Bushfire Legislation is required.

The nearest Bushfire Hazard Vegetation – Tall Heath Classified Vegetation (Category 1 Bushfire Hazard Vegetation) is located 6m to the North and West of the existing dwelling. The degree of effective slope under the Tall Heath Classified Vegetation is 14° Downslope to the North and Upslope/Flat to the West.

Furthermore, there is Tall Heath Classified Vegetation located in the Northern, Southern and Eastern aspects. The effective slopes are Upslope/Flat to the South and 8° Downslope in the Eastern aspect.

The proposal is found to be in the BAL – FZ range as per Table A1.12.5 of PBP 2019 and will need referral to the NSW Rural Fire Service to meet the aims and objectives of the Building Code of Australia (ASCB 2019). It will also need to meet the requirements of Planning for Bushfire Protection 2019.

In NSW BAL-FZ is deemed to be outside the scope of AS3959-2018 as Section 9 BAL-FZ of AS3959-2018 has not been accepted or adopted by the NSW Rural Fire Service as a set of deem to satisfy provisions. Therefore, the proposed dwelling must be constructed to a varied BAL-FZ under AS3959-2018 with additional measures considered appropriate i.e., Alternate Solutions are required.

This report makes recommendations to assist the proposal being accepted by the NSW Rural Fire Service and Northern Beaches Council.

Building Elevation	Construction Standard (Bushfire)
North	BAL - FZ AS3959-2018
South	BAL - FZ
East	BAL - FZ
West	BAL - FZ

Table 1 – AS3959-2018 Construction Standards for the proposed alterations and additions to the existing dwelling.

1. Introduction

This report forms a Bushfire Assessment Report to Northern Beaches Council for the purposes of Section 4.14 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The report identifies that the proposal can meet the requirements of Planning for Bushfire Protection (2019). This report has been prepared in accordance with the submission requirements of Appendix 2 of Planning for Bushfire Protection (NSW RFS 2019).

The subject Lot is identified as being partly within Category 1 Bushfire Hazard Vegetation Zone and a Category 1 Bushfire Hazard Vegetation Buffer Zone as per the Northern Beaches Council LGA Bushfire Prone Land Map and therefore compliance with Bushfire Legislation is required.

The proposed development is to construct alterations and additions to the existing dwelling on the subject Lot.

2. Purpose of this Report

The purpose of a Bushfire Hazard Assessment report is to provide the consent authority, owners and RFS with a bushfire hazard determination consistent with the aim and objectives of *Planning for Bushfire Protection* 2019 (RFS) and Section 4.14 of the EP&A Act 1979. Such report provides the necessary recommendations for new building construction standards and any further bushfire mitigation measures appropriate having regard the hazard and particular circumstances of the development.

The recommendations provided in this report will assist Council and the Owner in proving a construction standard consummate with bushfire safety standards so that a safer level is provided should a bushfire occur on or near the property.

Property Details

Council:	Northern Beaches
Council Reference	N/A
Address:	70 Attunga Rd, Newport. NSW 2106 Lot 123 DP 752046
Site Area:	757 sqm approx.
Zoning	E4 – Environmental Living

3. **Proposal**

The proponent seeks to construct alterations and additions to the existing dwelling on the subject Lot located at 70 Attunga Rd, Newport. NSW 2106. It is important to note that most of the proposed alterations and additions to the existing dwelling are internal with new balconies and approximately 1/5 of the windows being for the exterior alterations and additions. The site is also known as Lot 123 DP 752046. It is bounded by residential development to the South and East with bushland in all aspects.

The Northern Beaches Council LGA Bushfire Prone Land Map indicates that the subject Lot is located partly within Category 1 Bushfire Hazard Vegetation Zone and Category 1 Bushfire Hazard Vegetation Buffer Zone.

The land is zoned E4 – Environmental Living for residential purposes and the proposal is understood to comply with the requirements of Northern Beaches Council LEP and DCP. This report only addresses the planning and construction issues relevant to the proposal. The proposal constitutes “Residential Infill Development” as defined and as such must meet the performance criteria and acceptable solutions outlined in Table 7.4a in of *Planning for Bush Fire Protection* 2019 (NSW RFS 2019).

Type of Proposal PBP 2019

☐	New Building	☒	Urban	☐	Dual Occupancy
☐	Rural Residential	☒	Alterations/Additions	☐	Isolated Rural

4. **Scope of Report and Referenced Documents**

The scope of this report is limited to the actual property concerned. A representative of TFC has visited the site and surrounding area but did not enter neighbouring private lands.

This report is based on requirements of the EP&A Act, *Planning for Bush Fire Protection* 2019, the Building Code of Australia (BCA) and AS3959 - 2018 *Construction of buildings in Bushfire Prone areas*. The methodology for this report is outlined in Appendix 1 of PBP 2019. Vegetation and site information was gathered from site inspection, Council Vegetation data and Aerial Photos. The report used base drawings as provided by the applicant to TFC.

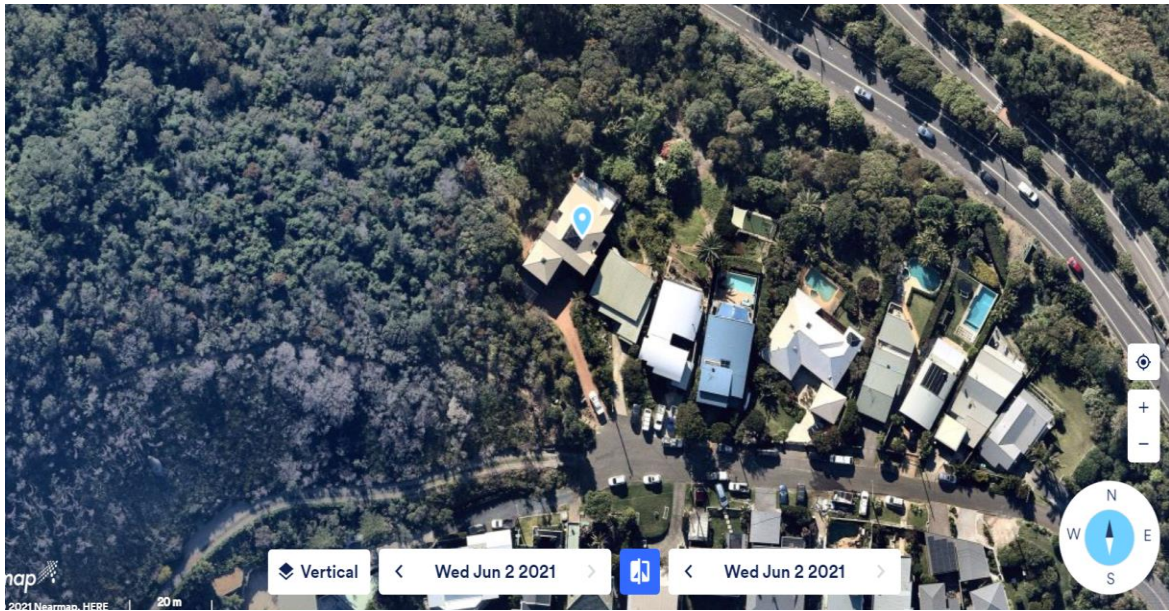


Image 1- Aerial View of the subject Lot (Nearmap 2021)

5. Statement that the site is Bushfire Prone Land

The land has been identified on the Northern Beaches Council LGA Bushfire Prone Land Map which covers the entire site.

A copy of the bushfire prone land status is shown below (Figure 1).

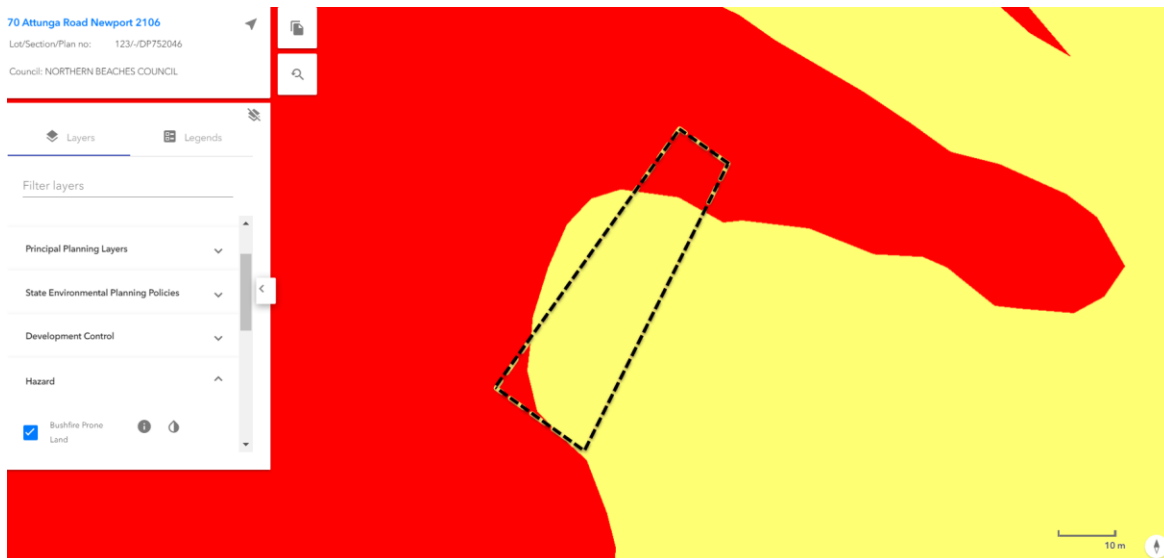


Figure 1 – 70 Attunga Rd, Newport. NSW 2106 Bushfire Prone Land Map (NSW Government 2021). It should be noted that the Bushfire Prone Land Map above indicates that the subject Lot is identified as being partly within a Category 1 Bushfire Hazard Vegetation Zone and a Category 1 Bushfire Hazard Vegetation Buffer Zone.

Hazard

Bushfire Prone Land (Non-EPI)

- Vegetation Category 1
- Vegetation Category 2
- Vegetation Category 3
- Vegetation Buffer

6. Bush Fire Hazard Assessment

6.1 Preface.

This bushfire hazard assessment has been done according to the guidelines of *Planning for Bushfire Protection* 2019 (NSWRFS). Properties that are located within a designated Bushfire Prone Area as identified by a Council LGA Bushfire Prone Map and Registered with the NSWRFS, must have either a Bushfire Hazard Assessment or a Bushfire Hazard Certificate (in certain Complying Development instances) completed and submitted prior to Council or a Private Certifier being able to approve the development.

The proposed development is to construct alterations and additions to the existing dwelling on the subject Lot, which is Residential Infill Development and as such, must comply with Section 4.14 of the EP&A Act 1979 and Section 7 of PBP 2019.

The property is known as 70 Attunga Rd, Newport. NSW 2106 (Lot 123 DP 752046) and is within a residential area in the Northern Beaches Council Local Government Area. The property has direct access to Attunga Rd which runs to the South of the subject Lot.

The vegetation that is a potential bushfire hazard to the proposal is Tall Heath Classified Vegetation and is located 6m to the North, 8m to the South, 29m to the East and 6m to the West of the existing dwelling.

6.2 Location

The subject Lot is known as 70 Attunga Rd, Newport. NSW 2106 (Lot 123 DP 752046) and is within a residential area in the Northern Beaches Council Local Government Area.

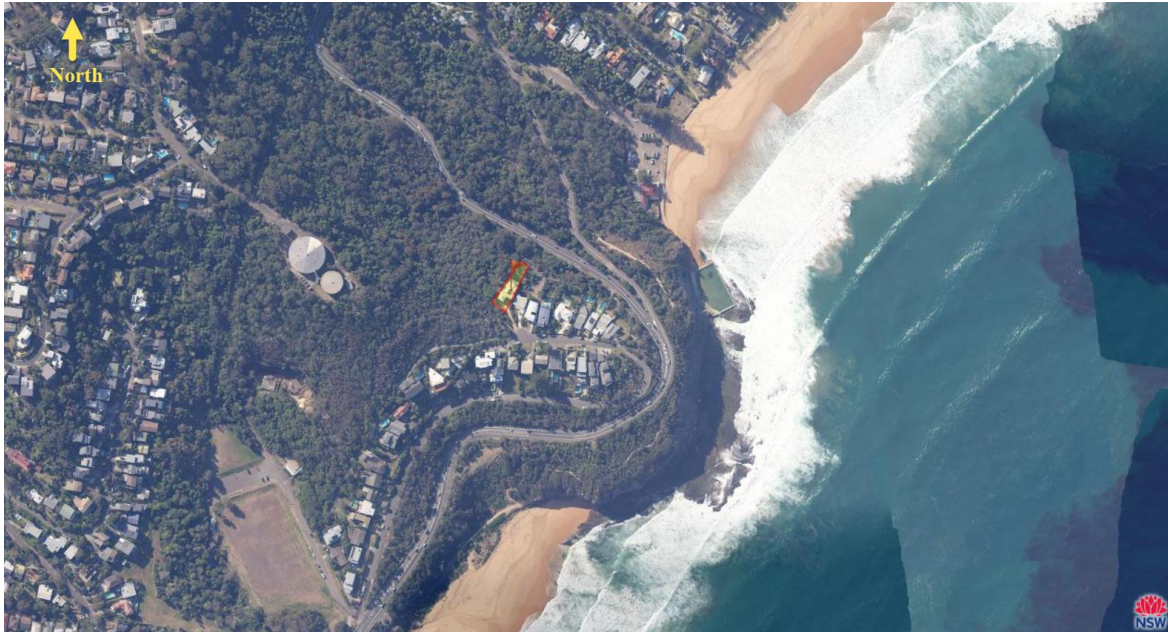


Image 2 - Site Aerial. (NSW Government 2021)



Figure 2 - Street Location of Property (NSW Government 2021)

6.3 Vegetation.

The vegetation that effects the development and is deemed the "Hazard" is mapped by Council on the applicable Bushfire Prone Land map as Category 1 Bushfire Hazard Vegetation. The Lot is partially cleared in areas and the boundaries in the Northern, Southern and Western aspects about hazardous bushfire vegetation.

The property is located within other residential properties to the South and East. To the North at 6m, South at 8m, East at 29m, and West at 6m of the existing dwelling is Category 1 Bushfire Hazard Vegetation – Tall Heath Classified Vegetation.

The separation distance to the hazard is assessed as follows.

Direction	Distance to Hazard
North	6m
South	8m
East	29m
West	6m

Table 2 – Distances to hazardous vegetation



Image 3 - Indicates that the separation distance to the Bushfire Hazard Vegetation (NSW Government 2021).



Photo 1 – Indicates Tall Heath to the South of the existing dwelling (Steve Brooks 2021)



Photo 2 – Indicates Tall Heath to the West of the existing dwelling (Steve Brooks 2021)



Photo 3 – Indicates Tall Heath to the North of the existing dwelling (Steve Brooks 2021)

6.4 Slope

The effective slope that would most significantly affect a bushfire is assessed for 100 metres from the building. The slope that is measured is under the hazard.

The effective slope under the Tall Heath Classified Vegetation is 14° Downslope to the North, Upslope/Flat to the South, 8° Downslope to the East and Upslope/Flat to the West of the existing dwelling.

Direction	Effective Slope
North	14° Downslope
South	Upslope/Flat
East	8° Downslope
West	Upslope/Flat

Table 3 – Indicates the effective slope under the hazardous vegetation.

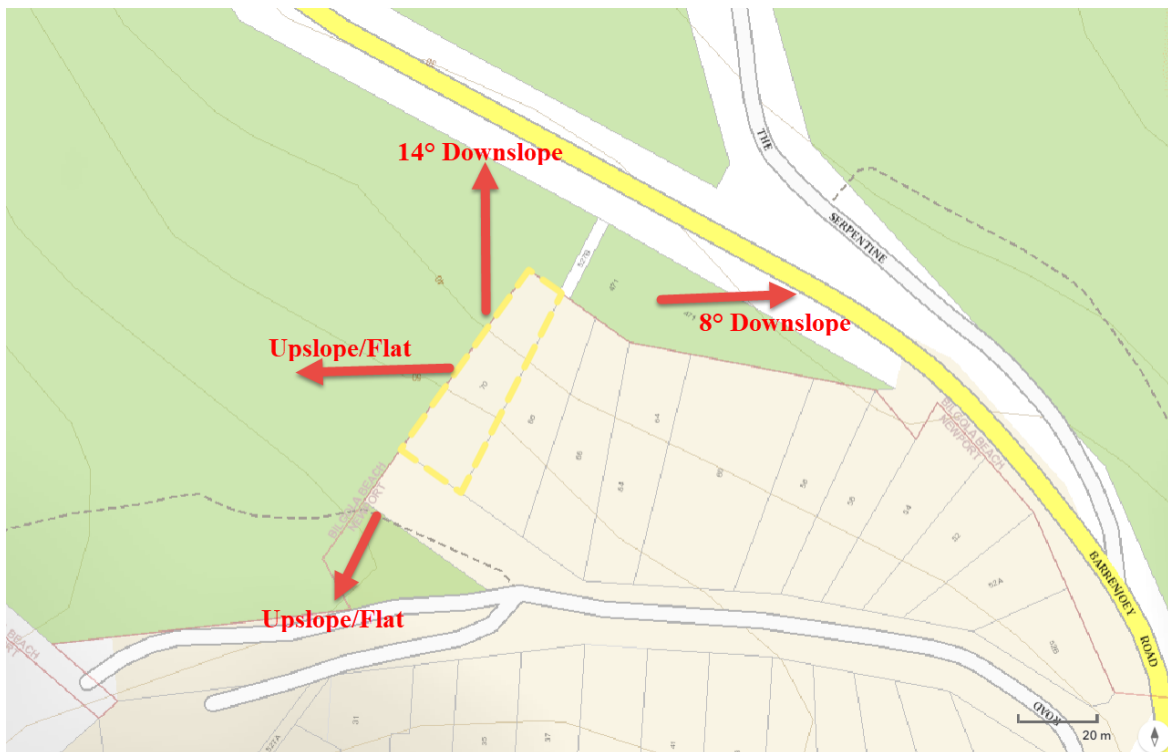


Figure 3 - Indicates the degree of slope under Bushfire Hazard Vegetation (NSW Government 2021)

6.5 Asset Protection Zones (APZ)

The APZ for the proposed construction of alterations and additions to the existing dwelling on the subject Lot is 6m to the North, 8m to the South, 29m to the East and 6m to the West comprising of minimal distance on actual property.

There is a maintained area between the hazardous vegetation in the Northern and Western aspects but is not located within the boundaries of the subject Lot and therefore the maintenance cannot be guaranteed in perpetuity. It is important to note that the APZs be located within the boundaries of the subject Lot as per the NSW RFS requirements.

Direction/Aspect	Effective Slope	Distance to Hazard	Required by Table A1.12.2 of PBP	Land-use	Vegetation type/Formation	Complies
North	14° Downslope	6m	22m	Bushland	Tall Heath	No
South	Upslope/Flat	8m	16m	Bushland	Tall Heath	No
East	8° Downslope	29m	20m	Residential/Bushland	Tall Heath	Yes
West	Upslope/Flat	6m	16m	Bushland	Tall Heath	No

Table 4 - APZ distances

The proposal cannot meet the requirements of Table 1.12.2 of PBP 2019 Minimal Specifications for APZ as the APZ's in the Northern, Southern and Western aspects do not meet the required distances. However, Section 7.5.3 of PBP 2019 - Construction in the flame zone states, *"All flame zone developments should be sited and designed to minimise the risk of bushfire attack. Buildings should be designed and sited in accordance with appropriate siting and design principles to ensure the safest protection from bushfire impacts"*. The proposed development meets the above statement via:

- In NSW BAL-FZ is deemed to be outside the scope of AS3959-2018 as Section 9 BAL-FZ of AS3959-2018 has not been accepted or adopted by the NSW Rural Fire Service as a set of deem to satisfy provisions. Therefore, the proposed alterations and additions must be constructed to a varied BAL-FZ under AS3959-2018 with additional measures considered appropriate i.e., Alternate Solutions are required.
- The proposal is Residential Infill Development and the site constraints do not allow APZ requirements to be met.
- The proposal allows for the minimum defensible space on all sides of the building envelope.
- The existing dwelling is designed to minimise the effects of bushfire behaviour.

- The proposed alterations and additions are predominantly internal with new glazing and decking being part of the external development which will increase bushfire protection to the existing dwelling and occupants than if the development did not take place.



Image 4 – Indicates the APZ distances to Bushfire Hazard Vegetation (NSW Government 2021).

6.6 Hazard Assessment Determination

PBP refers to the appropriate construction standard for a development as determined by Table A1.12.5 of PBP 2019. This provides a recommendation for the Bush Fire Attack (BAL) Level required for a development. The following Bushfire Attack Levels have been determined for the proposed alterations and additions to the existing dwelling on the subject Lot at 70 Attunga Rd, Newport. NSW 2106

FDI Appropriate to Development – Northern Beaches Council LGA 100

Direction/ Aspect	Distance to Vegetation	Vegetation Formation	Slope in degrees	Construction Requirements AS3959-2018
North	6m	Tall Heath	14° Downslope	BAL-FZ
South	8m	Tall Heath	Upslope/Flat	BAL-FZ
East	29m	Tall Heath	8° Downslope	BAL-19
West	6m	Tall Heath	Upslope/Flat	BAL-FZ

Table 5 - Summary of Building Compliance Requirements AS3959-2018.

The proposed dwelling has been found to be in the BAL-FZ range. In NSW BAL-FZ is deemed to be outside the scope of Section 9 BAL-FZ of AS3959-2018 has not been accepted or adopted by the NSW Rural Fire Service as a set of deem to satisfy provisions. Therefore, the proposed alterations and additions to the existing dwelling must be constructed to a varied BAL-FZ under AS3959-2018 with additional measures considered appropriate i.e., Alternate Solutions are required.

The final BAL Rating for the proposed alterations and additions is BAL-FZ for all facades. This is due to all facades being potentially exposed to radiant heat and/or direct flame contact particularly from vegetation in the Northern, Southern and Western aspects.

PBP allows where more than one facade is exposed to a hazard, then the facade with the highest requirement is used to determine the appropriate level of construction. Other facades may be reduced by one level of construction unless that facade is also subject to the same level of bush fire attack. Should the highest level be BAL-12.5 then the entire site shall be deemed as BAL - 12.5.

6.7 Compliance with PBP 2019

The proposed dwelling must also comply with the Performance Criteria and Acceptable Solutions of Table 7.4a of PBP 2019 for Infill Development. This assessment is provided below in detail.

Performance Criteria	Acceptable Solution	Compliance
Asset Protection Zones APZs are provided commensurate with the construction of the building; and A defensible space is provided.	An APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	No. See comments above (page 19 APZ) for comments regarding the exceptional circumstances for the APZs.
APZs are managed and maintained to prevent the spread of a fire to the building.	APZs are managed in accordance with the requirements of Appendix 4 of PBP.	Complies – The APZ will be managed in accordance with Appendix 4 of PBP 2019.
The APZ is provided in perpetuity.	APZs are wholly within the boundaries of the development site.	The APZ will be managed/maintained as an IPA within the subject Lot.
The APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised	APZs are located on lands with a slope less than 18 degrees.	Complies – the APZs are on Developed Maintained Lands. The APZ is on a slope <18 degrees Downslope and the APZ is made up of maintained within the subject Lot.
In relation to access/egress: Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	Property access roads are two-wheel drive, all-weather roads.	Complies - The subject Lot has direct access to Attunga Rd which allows occupants an egress route to safety. Attunga Rd is a surfaced all-weather road and is suitable for fire appliances.

The capacity of access roads is adequate for firefighting vehicles. Firefighting vehicles can access the dwelling and exit the property safely	The capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges and causeways are to clearly indicate load rating. There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distant external part of the proposed dwelling and the nearest part of the public access road (where the road speed limit is not greater than 70kph) that supports the operational use of emergency firefighting vehicles.	Complies - The capacity of Attunga Rd and surrounding roads is enough to carry fully loaded firefighting vehicles (up to 23 tonnes). Complies – There is an unobstructed path to the existing dwelling via an all-weather driveway which does not place fire appliances or firefighters at risk.
In relation to Water Supplies There is appropriate access to water supply.	Hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression; hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005 - Fire hydrant installations	Complies- There are reticulated mains pressure fire hydrants located along Attunga Rd and there is access to a reticulated mains pressure fire hydrant located at the access driveway to the subject Lot and it complies AS2419.1.2005.

	System design, installation, and commissioning; and there is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	
In relation to Electricity Supply: The Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings.	Where practicable, electrical transmission lines are underground; and where overhead, electrical transmission lines are proposed as follows: lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines	Complies – The existing dwelling is provided with electricity via above ground supply which is clear of trees and branches.
In relation to Gas Supply: The location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used; all fixed gas cylinders are kept clear of all flammable	Complies – The site is not connected to reticulated gas supply and any gas cylinders used shall comply with AS/NZS 1596:2014.

	materials to a distance of 10m and shielded on the hazard side; Connections to and from gas cylinders are metal. Polymer-sheathed flexible gas supply lines are not used; and above-ground gas service pipes are metal, including and up to any outlets	
In relation to Construction Standards: The proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.	BAL is determined in accordance with Tables A1.12.5 to A1.12.7; and construction provided in accordance with the NCC and as modified by section 7.5 (please see advice on construction in the flame zone).	Complies - The proposed construction of alterations and additions to the existing the dwelling has been found to be in the BAL-FZ as per Table A1.12.5 of PBP 2019. Therefore, the proposed alterations and additions to the existing dwelling must be constructed to a varied BAL-FZ under AS3959-2018 with additional measures considered appropriate i.e., Alternate Solutions are required.
Proposed fences and gates are designed to minimise the spread of bush fire.	Fences and gates are constructed in accordance with section 7.6.	N/A
Proposed Class 10a buildings are designed to minimise the spread of bush fire.	Class 10a buildings are constructed in accordance with section 8.3.2.	N/A

In relation to Landscaping: Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Compliance with the NSW RFS ‘Asset protection zone standards’ (see Appendix 4); a clear area of low-cut lawn or pavement is maintained adjacent to the house; fencing is constructed in accordance with section 7.6; and trees and shrubs are located so that: the branches will not overhang the roof; the tree canopy is not continuous; and any proposed windbreak is located on the elevation from which fires are likely to approach	Complies – The APZ will be managed as an Inner Protection Area within the subject Lot and will be maintained meet the standards outlined in Appendix 4 of PBP 2019 in relation to APZ Standards.
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Table 6 – Performance Criteria and Acceptable Solutions of PBP 2019

Furthermore, Section 7.5.4 - Flaming Materials of PBP 2019 states, “*materials that allow flaming can be problematic and are not supported by the NSW RFS for the following reasons: flaming materials increase the exposure of other elements of construction and the adjoining structure to flame contact after a bushfire front has passed; and flaming materials will potentially increase the exposure of occupants of the building to radiant heat, direct flame contact, smoke after a bushfire front has passed.*

This increase in exposure can contribute to the risk of loss of life and compromise the ability of residents to defend their property and egress from the building once the bush fire front has passed. In addition, it can reduce the ability of occupants to make safe and effective decisions about their safety.

Where there is potential for materials of construction to ignite as a result of bushfire attack, the proposed building solution generally fails the construction performance criteria for residential infill development.

For development which may be subject to flame contact (BAL-40 and BAL-FZ), systems tested in accordance with AS 1530.8.1 and AS 1530.8.2 respectively will be considered, except that there is to be no flaming of the specimen except for: window frames that have passed the criteria of AS 1530.8.1 and AS 1530.8.2, may be approved provided their flaming is not considered to compromise the safety of other elements of the building; and use of other minor elements which allow flaming may be considered provided they do not compromise the integrity of the fire safety of the building (examples include address numbers, house names, decorative artwork, etc).

Flaming of other more significant elements of the building (such as aesthetic wall cladding) is considered to pose an unacceptable risk and will not be supported”.

7 Recommendations

- The proposed construction of alterations and additions to the existing dwelling on the subject Lot has been assessed as BAL-FZ and must be constructed to a varied Section 9 BAL-FZ of AS 3959-2018.
- The existing APZ is deemed an Inner Protection Area on the subject Lot and as such any landscaping gardens and the like should comply with Appendix 4 PBP 2018.
- The occupants develop a Bushfire Emergency Plan to be able to be prepared for a bushfire event in the vicinity.

It is recommended Northern Beaches Council and the NSW Rural Fire Service approve the proposed construction of alterations and additions to the existing dwelling on the subject Lot located at 70 Attunga Rd, Newport. NSW 2106 in respect to Bushfire Requirements.

Measure	Environmental Impact	Comment
APZ	Minimal	APZ already in existence and no change planned
Construction	No Impact	Constructed on existing envelope
Water Supply	No Impact	Dedicated supply for firefighting
Utilities	No Impact	Existing supplies
Vehicle Access	No Impact	Direct access to road

Table 7 - Environmental Impact of any proposed bushfire measures

8. Conclusion

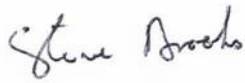
The proposed construction of alterations and additions to the existing dwelling on the subject Lot at 70 Attunga Rd, Newport. NSW 2106 can meet the planning requirements of *Planning for Bush Fire Protection* (NSW RFS 2019) and, are capable of meeting Australian Standard AS3959-2018 *Construction of buildings in bushfire prone areas* and the *Building Code of Australia* in relation to construction (ABCB 2019).

The Bushfire Attack Level for the proposed alterations and additions has been determined to be BAL FZ. In NSW, the NSW Rural Fire Service does not recognise Section 9 – Construction for BAL-FZ in AS3959-2019 as a deem to satisfy solution and therefore this proposal must satisfy the performance requirements of Section 9- BAL-FZ Construction. We have recommended that the proposed alterations and additions be constructed to meet the performance requirements of Section 9 - BAL FZ with varied conditions under AS3959 – 2018.

In accordance with the bushfire measures contained with this report and the site-specific assessment as per PBP and AS3959, it is our opinion that combined will provide a satisfactory level of bushfire safety to the property and satisfies the requirements of the RFS and Councils obligations for this area.

*The **Council** can determine the matter as complying with the specifications and requirements *Planning for Bush Fire Protection* (NSW RFS 2019) and *Section 4.14 of the EP&A Act 1979**

Prepared by Steve Brooks



BPAD - Certification No. 40765

Graduate Diploma Bushfire Planning and Design (UWS)

Graduate Certificate in Fire Investigation (CSU)



Reviewed by Jim Murphie



Grad Dip Bushfire Planning, FPAA BPAD Level 3 Construction in bushfire prone areas

Grad Cert Fire Engineering

Grad Int Fire Engineers Assoc



FPA Australia Corporate Member

References.

- Australian Building Codes Board (ABCB), 2019, *Building Code of Australia*, Volume 2, Canberra.
- Keith David, 2004, *Ocean Shores to Desert Dunes: the native vegetation of NSW and the ACT*, Dept of Environment and Conservation, NSW Government.
- NSW Rural Fire Service, 2019, *Planning for Bush Fire Protection*. Sydney
- NSW Rural Fire Service, 2020, website – www.rfs.nsw.gov.au :
- Standards Australia, AS 3959-2018 *Construction in Bushfire Prone Areas* (amended 2001) SAI Global, Melbourne.
- NSW Government *E-Planning Spatial Viewer* 2021
- NSW Government *Six Maps* 2021
- Nearmap 2021

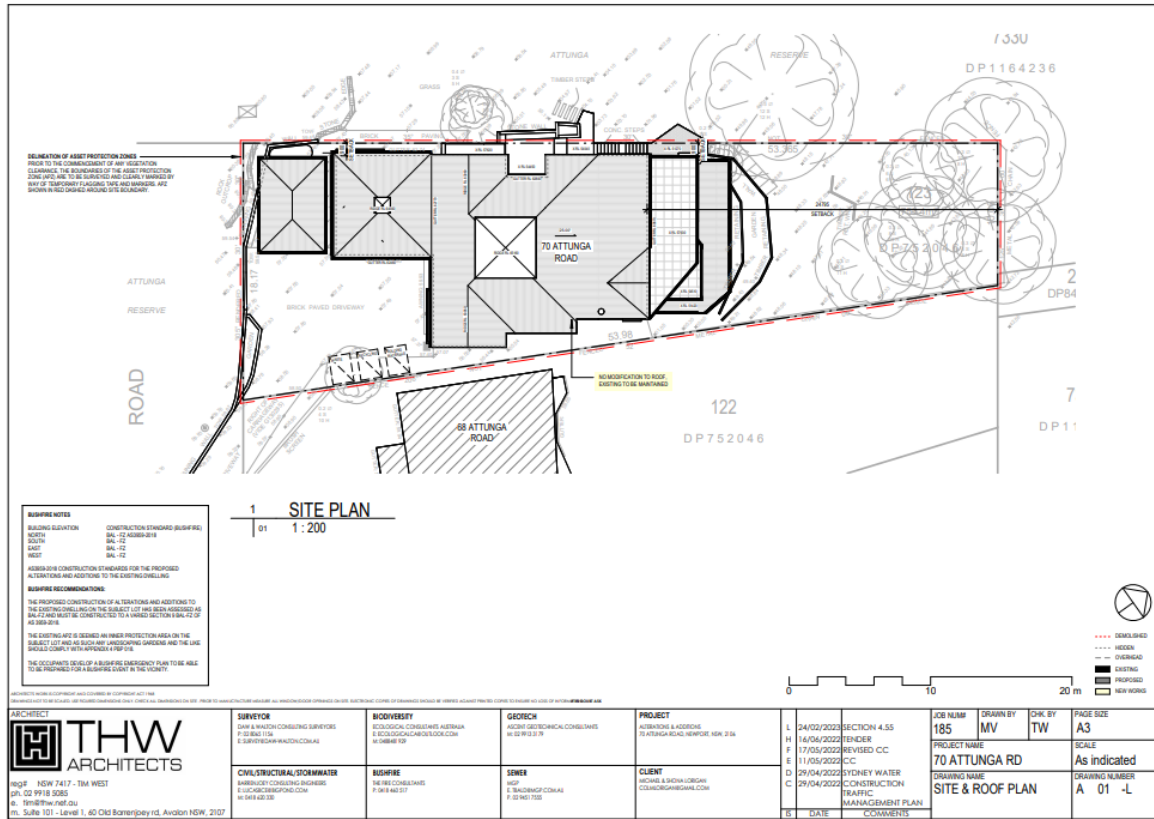
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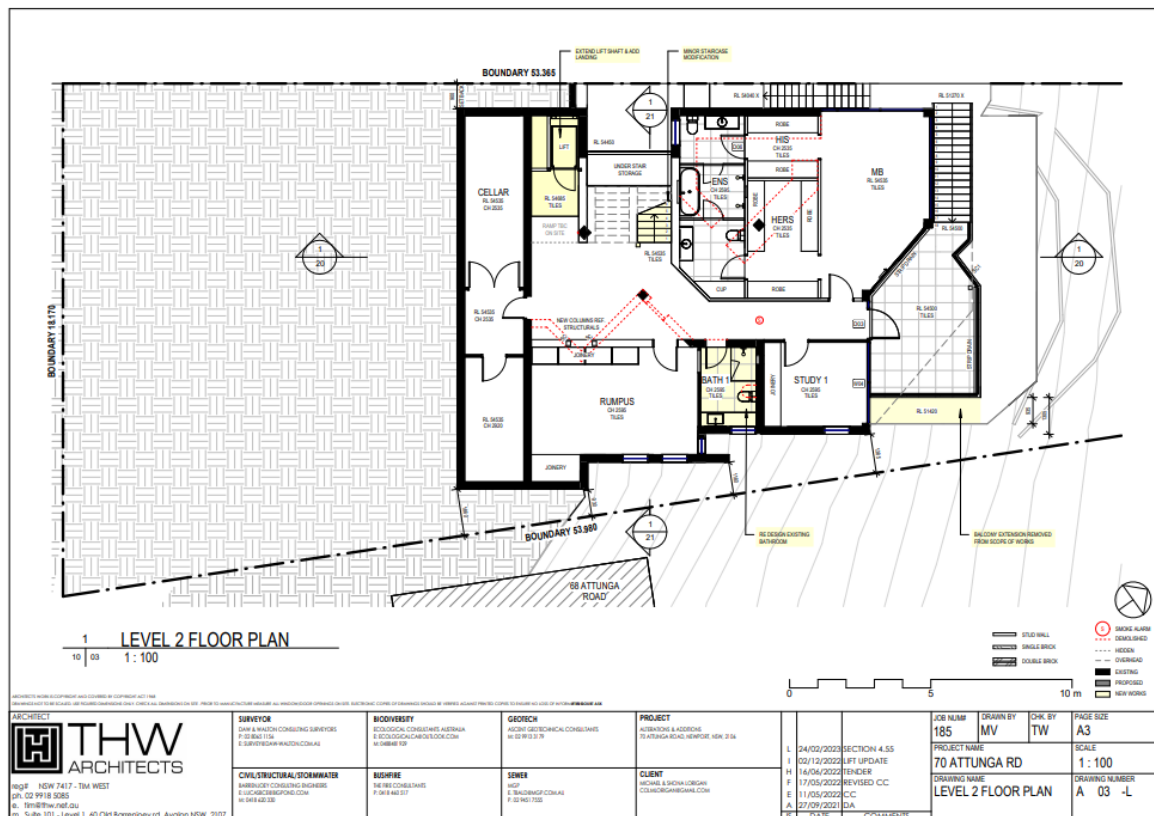
Disclaimer: Quote from Planning for Bushfire Protection, “notwithstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small always remains”. Although the standard is designed to improve the performance of the building, there can be no guarantee, because of the variable nature of bushfires that any one building will withstand bushfire attack on every occasion.

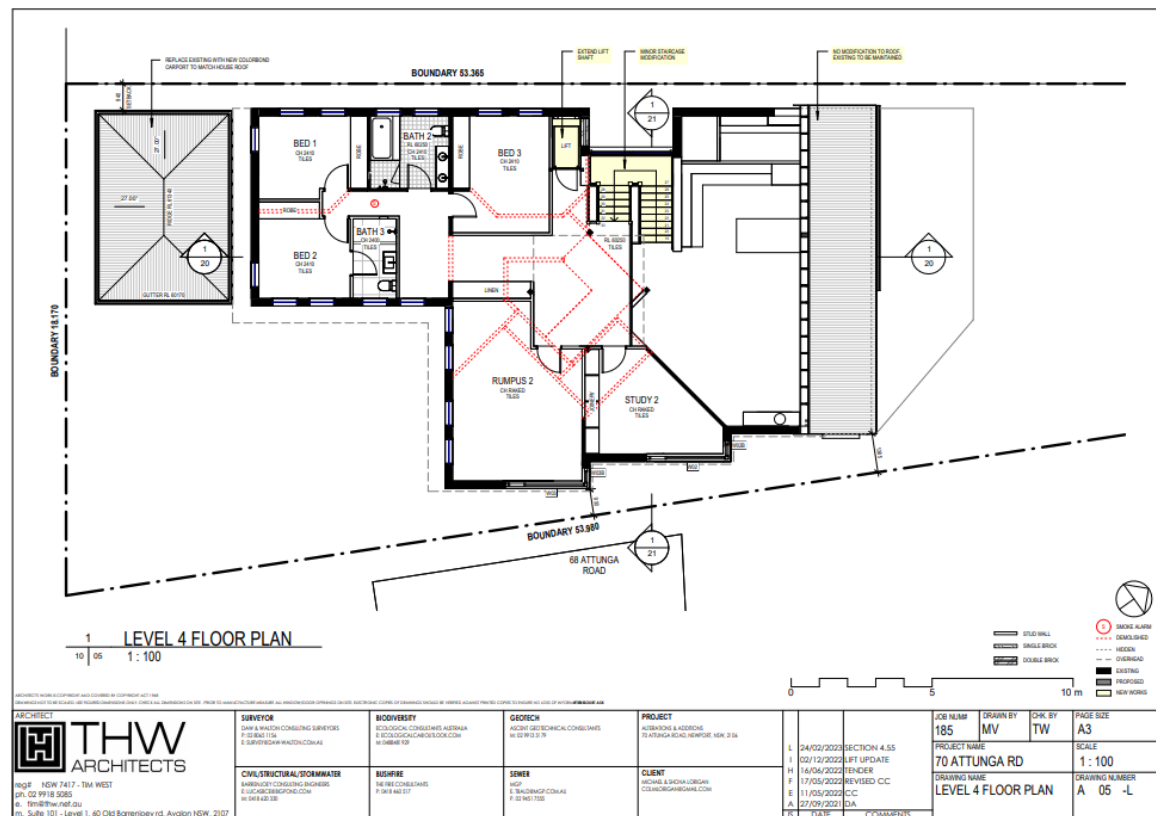
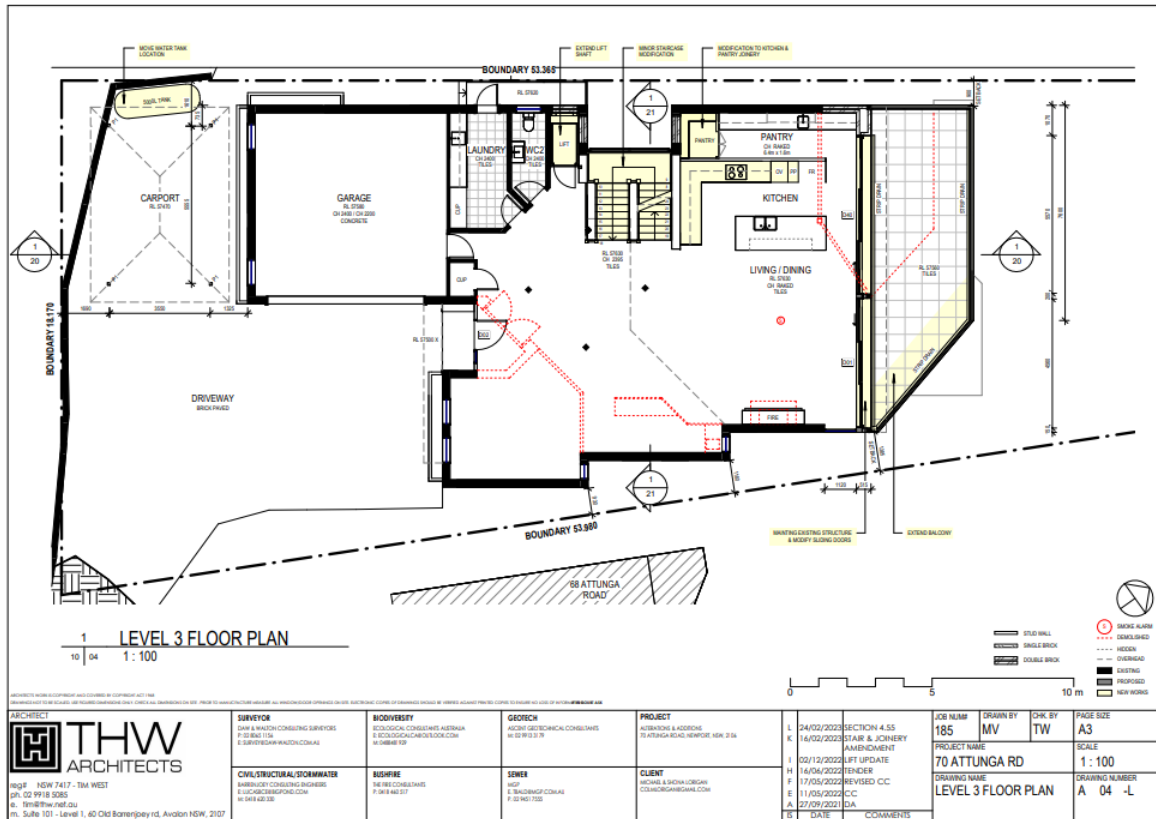
The opinions and assessment in regard to bushfire development in a Bushfire Prone Area given by TFC are therefore given in good faith.

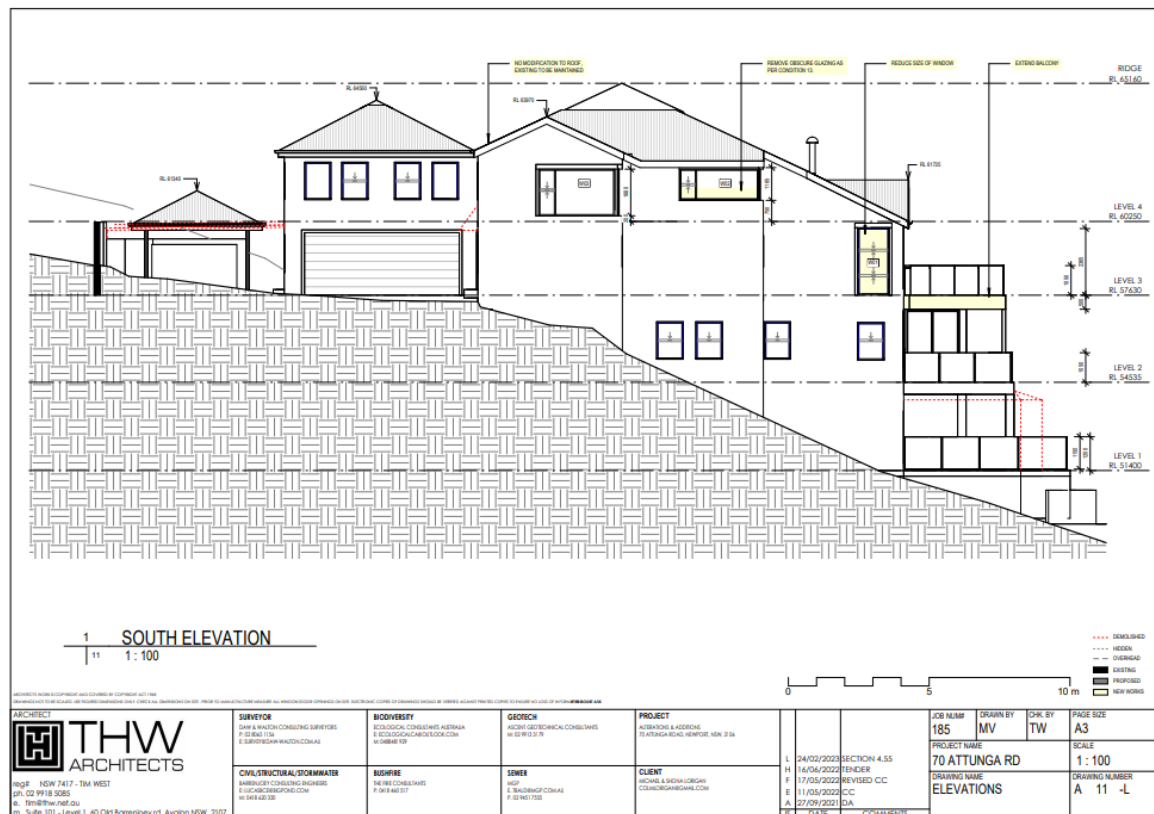
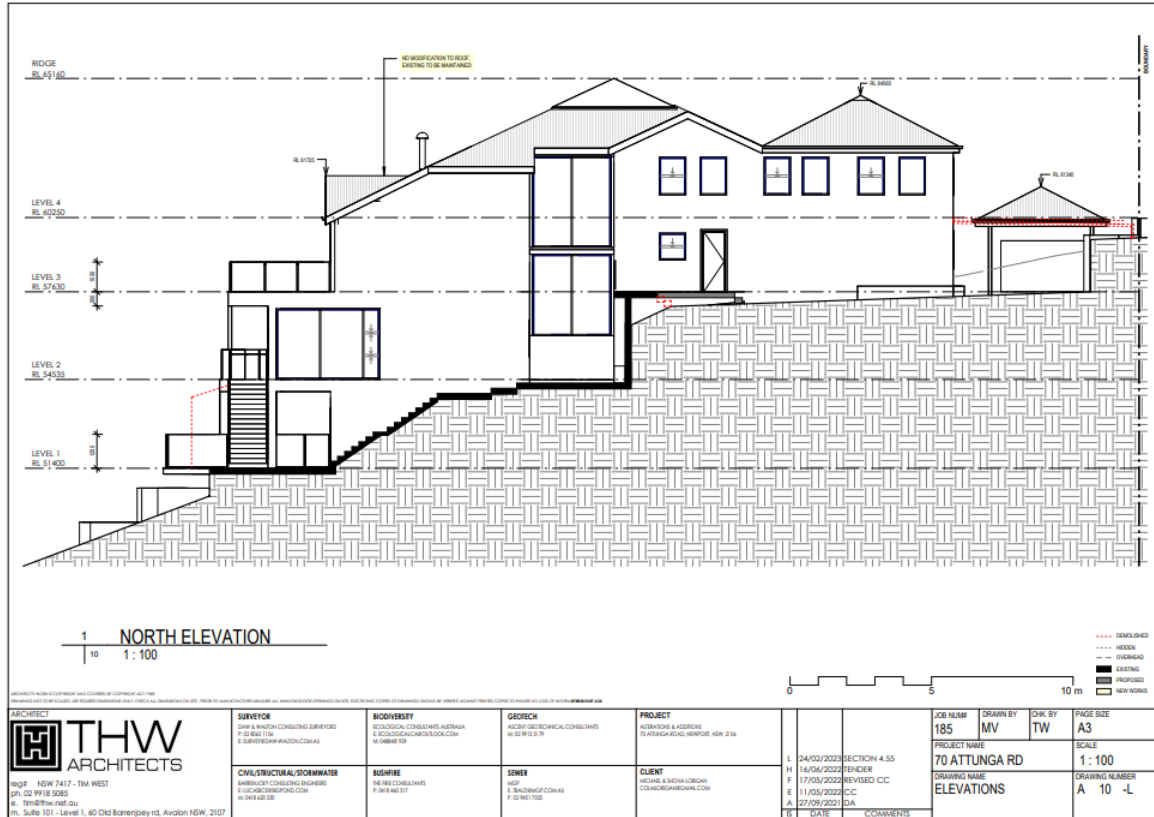
Appendix 1

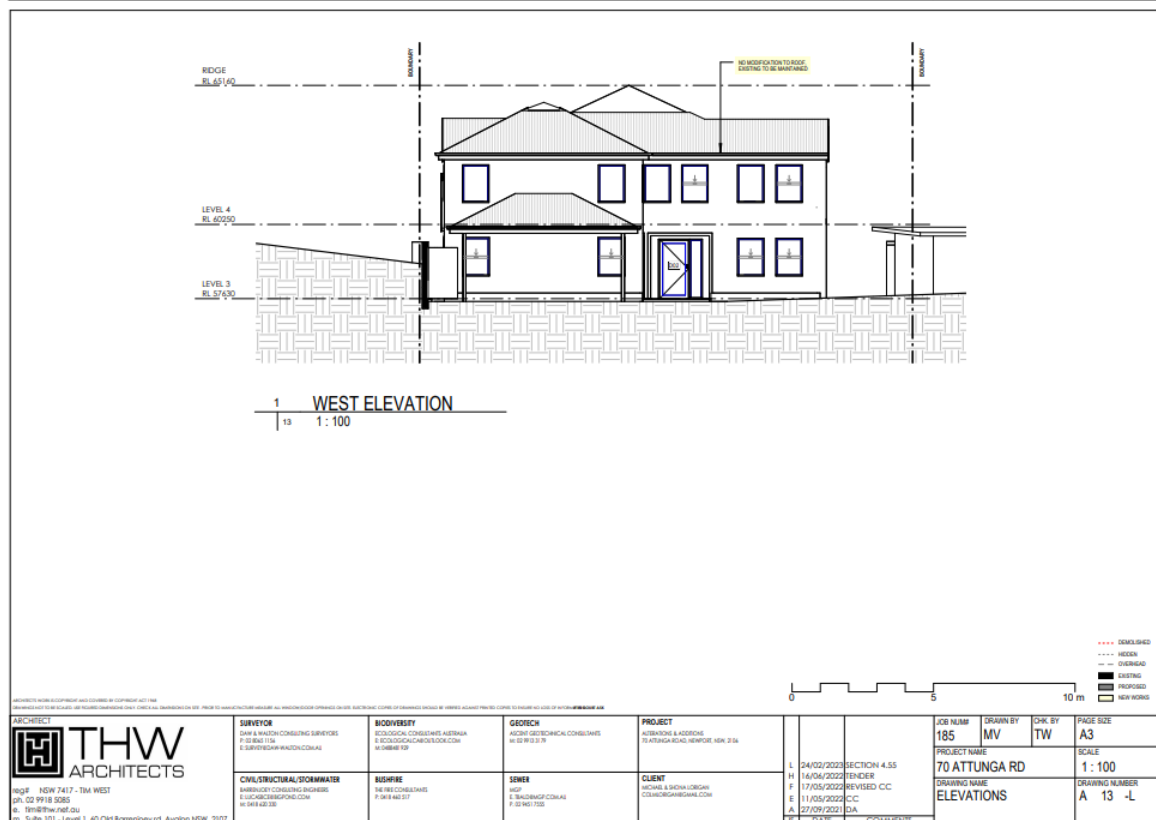
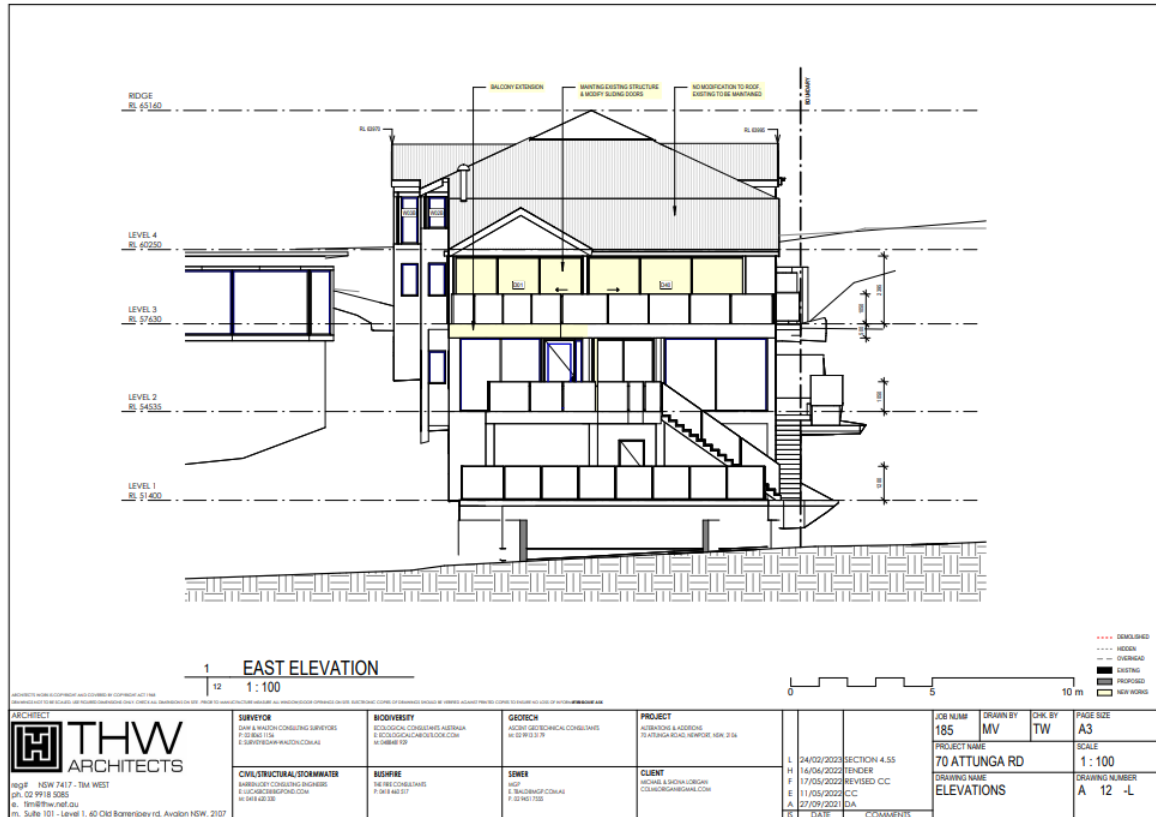
Plans provided by the applicant.

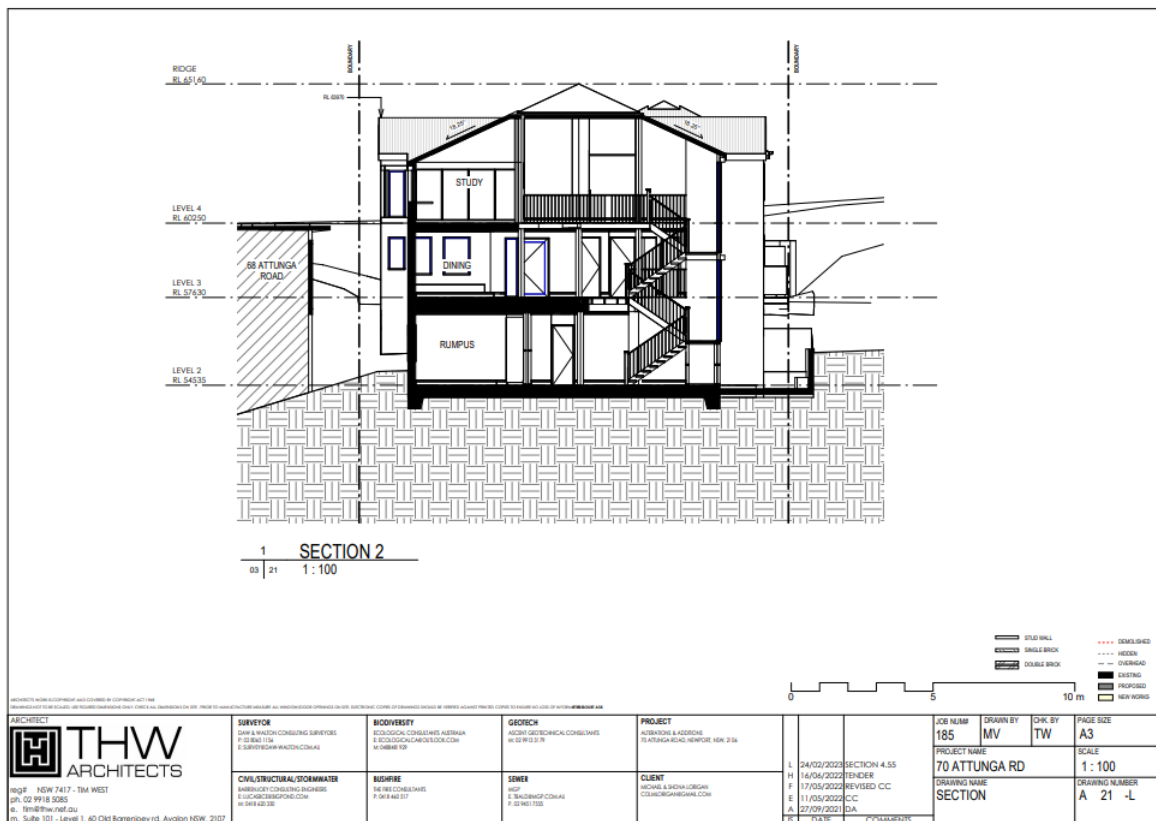
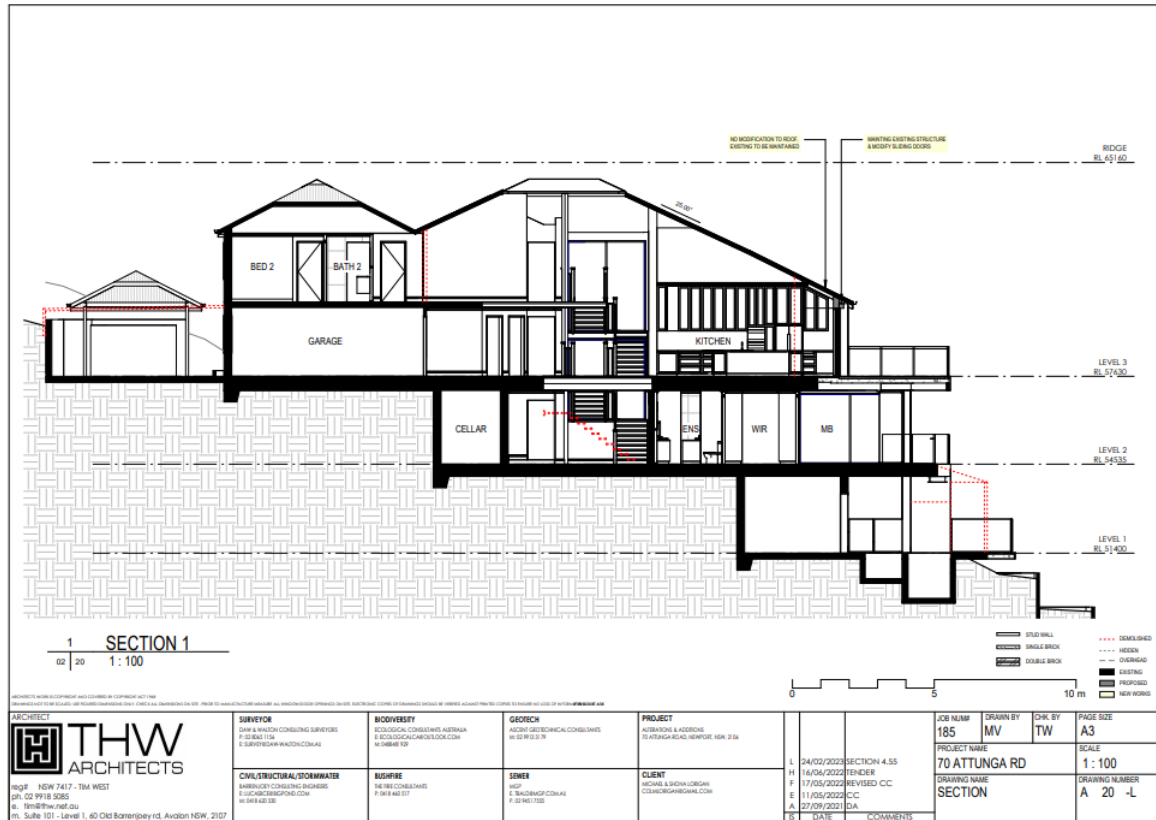


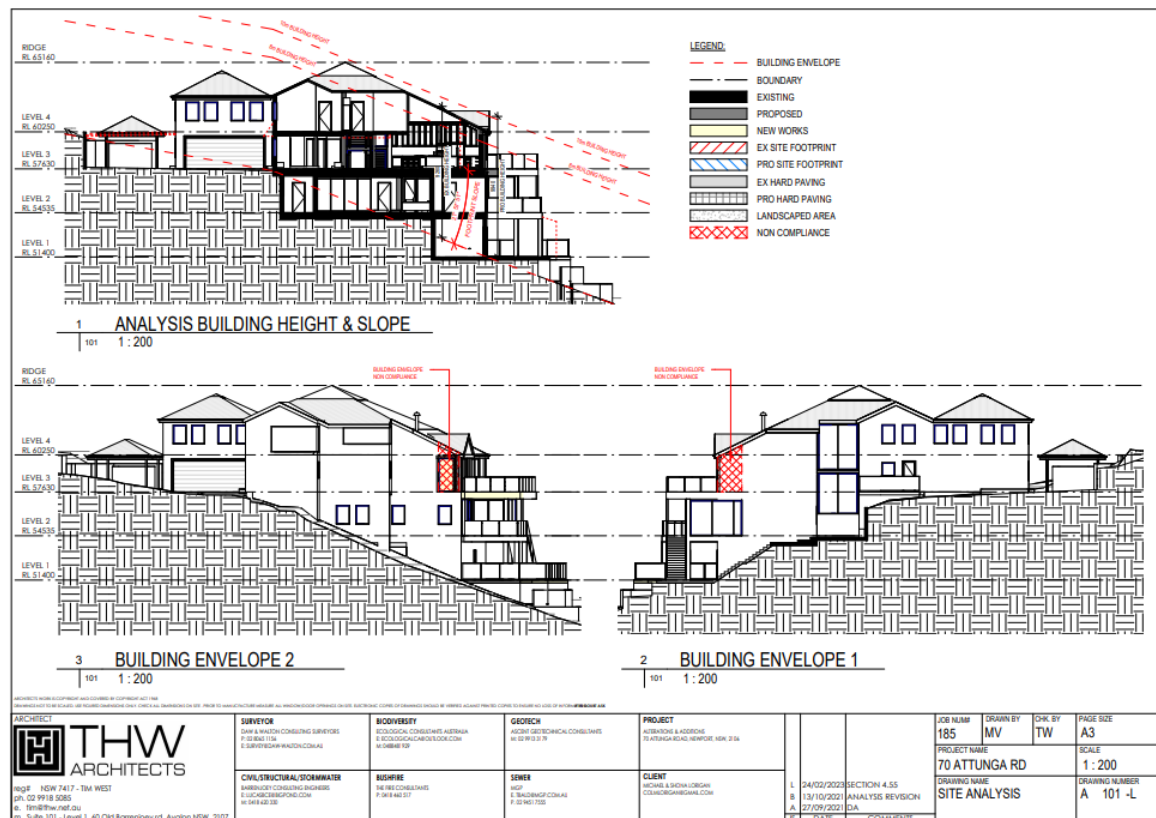
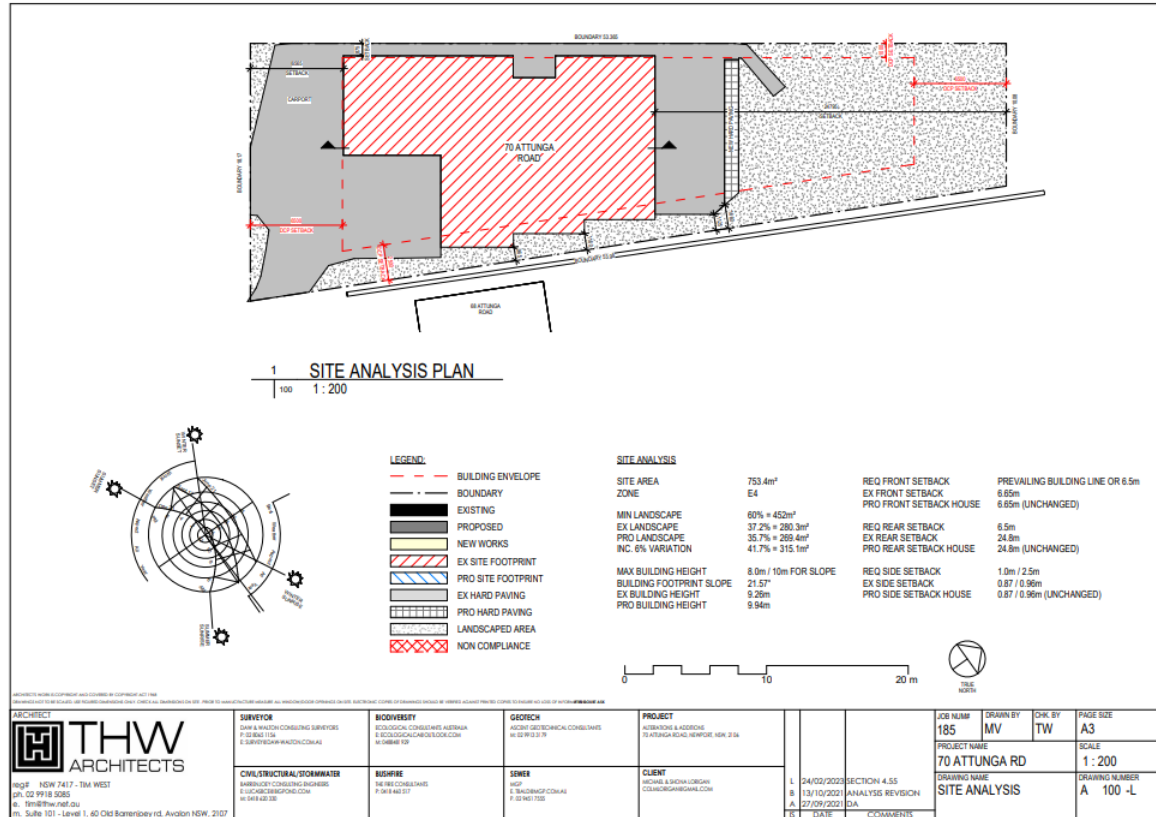












Appendix 2

Site Photos



Photo 4 – Indicates an APZ to the West of the existing but cannot be factored in as it is not within the boundaries of the subject Lot and cannot be guaranteed in perpetuity (Steve Brooks 2021)



Photo 5 – Indicates vegetation to the South (Steve Brooks 2021)