




Reference number 3578

Member of the Fire Protection Association of Australia

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## **Lot 17, DP 8595, 121 Pacific Road, Palm Beach, NSW 2108.**

Thursday, 7 October 2021

Prepared and certified by:	Matthew Willis <i>BPAD – Level 3 Certified Practitioner</i> Certification No: BPD-PA 09337		07/10/2021 19/04/2022
Can this proposal comply with AS3959-2018 (inc section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019)?	Yes		
What is the recommended AS 3959-2018 level of compliance?	BAL-19 and BAL-12.5		
Is referral to the RFS required?	No		
Can this development comply with the requirements of PBP?	Yes		
Plans by "Daniel Boddam" (Appendix 1) dated.	3/9/21		

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## **Bushfire Planning Services**

15 Parkcrest Place

Kenthurst NSW 2156

02 96543228

0428408577

[mattw@bushfireconsultants.com.au](mailto:mattw@bushfireconsultants.com.au)

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# **Bushfire Risk Assessment**

***Thursday, 7 October 2021***

## **Contact**

*Jane Cleary*

*Daniel Boddam Architecture and Interior Design*

*Po Box 1946*

*Potts Point NSW 2011*

*9660 1144*

## **Subject Property**

*Lot 17, DP 8595*

*121 Pacific Road*

*Palm Beach NSW 2108*

## BUSHFIRE RISK ASSESSMENT CERTIFICATE

**THIS FORM IS TO BE COMPLETED BY A RECOGNISED CONSULTANT IN BUSHFIRE RISK ASSESSMENT IN ACCORDANCE WITH SECTION 79BA 1(b) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 NO 203**

Property Address	Lot 17, DP 8595, number 121 Pacific Road Palm Beach
Description of the Proposal	Construction of a new dwelling
Plan Reference	3/9/21
BAL Rating	BAL-19 and BAL-12.5
Does the Proposal Rely on Alternate Solutions?	<b>No</b>

I, **Matthew Willis of Bushfire Planning Services Pty Ltd** have carried out a bushfire risk assessment on the above-mentioned proposal and property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in Planning for Bushfire Protection 2019 together with recommendations as to how the relevant Specifications and requirements are to be achieved.

I hereby advise, in accordance with Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203:

1. That I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment; and
2. That subject to the recommendations contained in the attached Bushfire Risk Assessment Report the proposed development conforms to the relevant specifications and requirements\*

\*The relevant specifications and requirements being specifications and requirements of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203.

I am aware that the Bushfire Assessment Report, prepared for the above-mentioned site is to be submitted in support of a development application for this site and will be relied upon by Northern Beaches Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with Planning for Bushfire Protection 2019.

<b>REPORT REFERENCE</b>	Thursday, 7 October 2021
<b>REPORT DATE</b>	Thursday, 7 October 2021
<b>CERTIFICATION NO/ACCREDITED SCHEME</b>	FPA A BPAD A BPD-PA 09337

### Attachments:

- Bushfire Risk Assessment Report
- Recommendations

**SIGNATURE:** ---  ----- **DATE:** -----Thursday, 7 October 2021

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# 1 Executive Summary.

Bushfire Planning Services has been requested by Jane Cleary from Daniel Boddam Architecture and Interior Design to supply a bushfire compliance report on lot 17, DP 8595, 121 Pacific Road, Palm Beach.

The works proposed for the subject lot are for the construction of a new dwelling, see attached plans for details.

The subject lot is on the eastern side of Pacific Road and at its closest point to the hazard the proposed new work has a separation distance to the west of approximately 96m.

The vegetation that is considered to be the hazard to this proposal is situated on land that slopes down slope away from the property at an angle of approximately 21.70°.

For the purposes of this assessment this vegetation is considered to be Forest.

The remaining vegetation within the study area is contained within the boundaries of established allotments and is managed land and of low threat to this proposal.

The calculations and assumptions outlined in this report show that the development will be required to comply with the construction requirements of AS 3959-2018 BAL-19 on its exposed western, northern and southern aspects, and BAL-12.5 on the eastern aspects and any additional construction requirements contained within section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.

The following table is a summary of the pertinent findings of this assessment.

Aspect	North	East	South	West
<b>Vegetation type</b>	Managed land	Managed land	Managed land	Managed land/forest
<b>Slope</b>	N/A	N/A	N/A	Greater than 20 degrees downslope
<b>Setback within lot 17</b>	N/A	N/A	N/A	24m
<b>Setback outside lot 17</b>	N/A	N/A	N/A	72m
<b>Total setback</b>	N/A	N/A	N/A	96m
<b>Bal level</b>	N/A	N/A	N/A	BAL-19

*Note: The above table is a summary of the significant variables used to determine the highest BAL for this proposal. THIS TABLE IS NOT INTENDED FOR CONSTRUCTION! Only the highest BAL level is shown, aspects marked as N/A will still have a BAL. Refer to section 11 for construction requirements for these other aspects.*

## 2 General.

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This proposal relates to the construction of a new dwelling on the subject lot and its ability to comply with the rules and regulations for building in a bushfire prone area.

The methodology used on this report is based on Planning for Bushfire Protection 2019 (PBP) as published by the New South Wales Rural Fire Service.

Any wording that appears in *blue italics* is quotes from Planning for Bushfire Protection 2019. Some of the measurements used in this report have been taken from aerial photographs and as such are approximate only.

## 3 Block Description.

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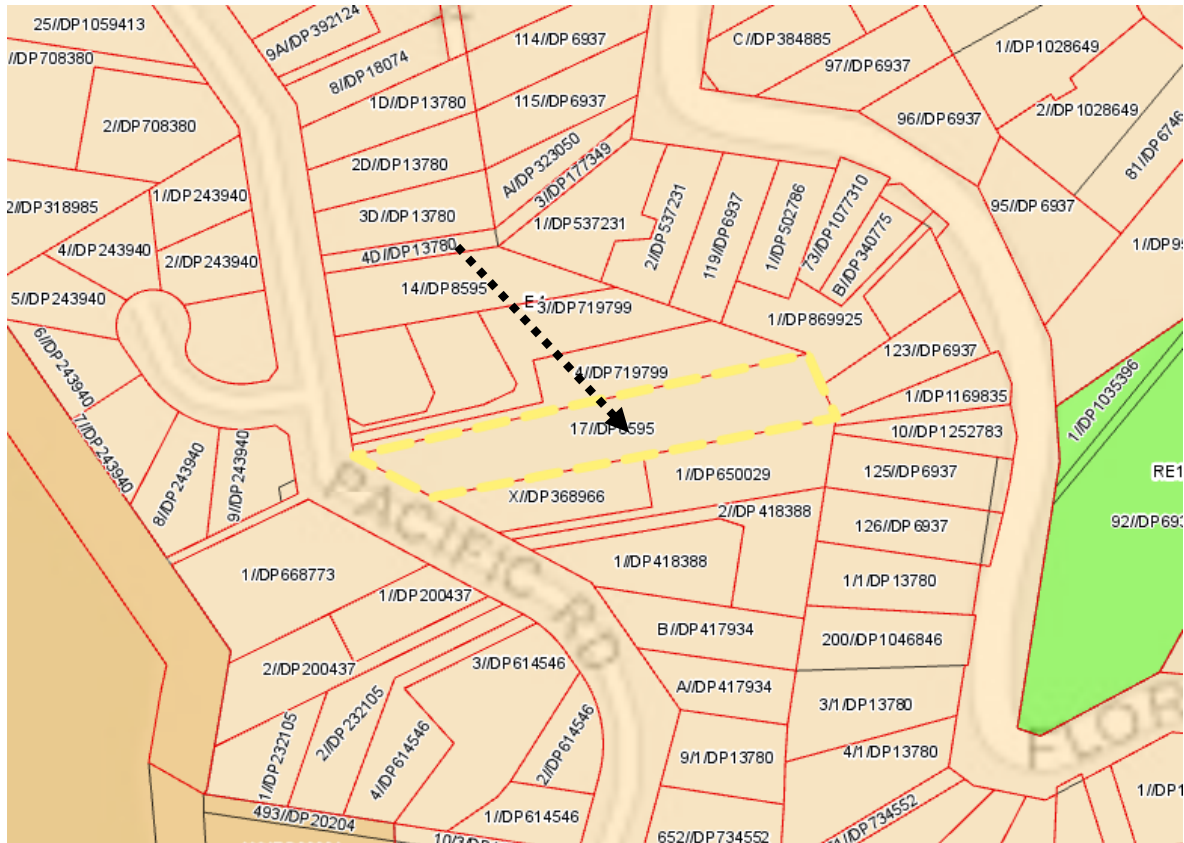
The subject block is situated on the eastern side of Pacific Road in an established area of Palm Beach.

The lot currently contains a single-level class 1 dwelling.

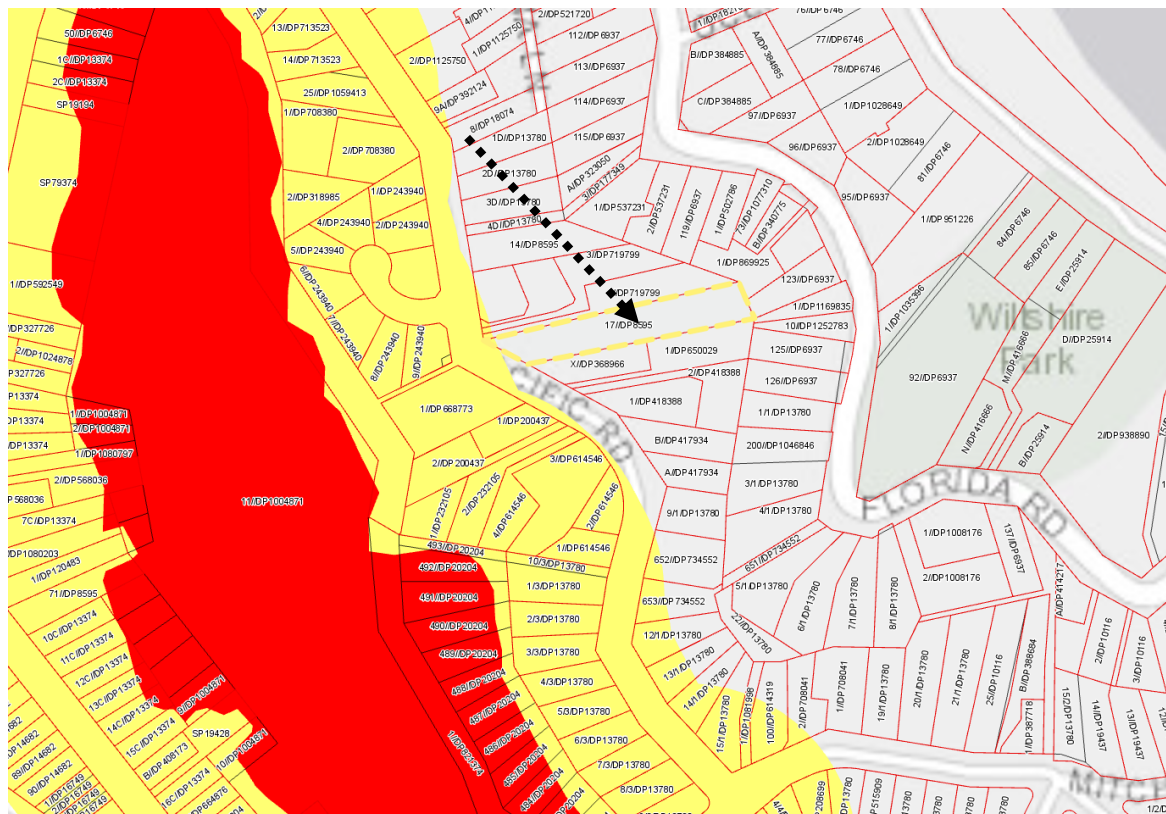
The lands surrounding the proposed site on the subject lot to a distance of at least 96m contain existing development or land that is otherwise not considered to be a significant bushfire hazard.

- Lot; 17
- DP; 8595.
- LGA; Northern Beaches.
- Area; 3065m<sup>2</sup>.
- Address; 121 Pacific Road, Palm Beach.

*This section has been left blank.*



Map 1 shows the cadastral layout around the subject lot.



Map 2 is an extract from the councils' bushfire prone land map. The map shows lot 17 to be within the buffer zone of category 1 bushfire vegetation.



## 4 Vegetation.

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The study area for the vegetation is 140m surrounding the subject block.

The vegetation within the study area for this development is considered to be largely managed land.

The major potential hazard to this development is the vegetation within an area of undeveloped land to the west.

For the purpose of this assessment and compliance with Planning for Bushfire Protection this area of undeveloped land is considered to be Forest and is the hazard to this proposal.



*Photo 1 - An overview of the vegetation within the general area.*

*This area has been left intentionally blank.*





*Photo 2 is a closer view of the vegetation in the area.*

Table 1 outlines the vegetation orientation and distance from the development area.

Aspect	North	East	South	West
<b>Vegetation type</b>	Managed land	Managed land	Managed land	Managed land/forest
<b>Setback within lot 17</b>	N/A	N/A	N/A	24m
<b>Off-site setback</b>	N/A	N/A	N/A	72m
<b>Total setback</b>	N/A	N/A	N/A	96m

*Table 1 - Any aspect marked with "N/A" in the table above indicates that it is considered there is none or only a secondary hazard in that direction.*

*This area has been left intentionally blank.*



## 5 Known constraints on subject block.

I have not been informed or know of any places of cultural or environmental significance within the boundaries of the subject block. Given the nature of the surrounding land it is considered highly unlikely that anything of significance will be affected by this development.

## 6 Slope.

The slope of the land beneath the hazard that is most likely to influence bushfire behaviour has been calculated by topographical map analysis to a distance of 100m from the subject lot. An extract of the topographical map for the area is shown below and the relevant slope analysis is shown in Table 2.

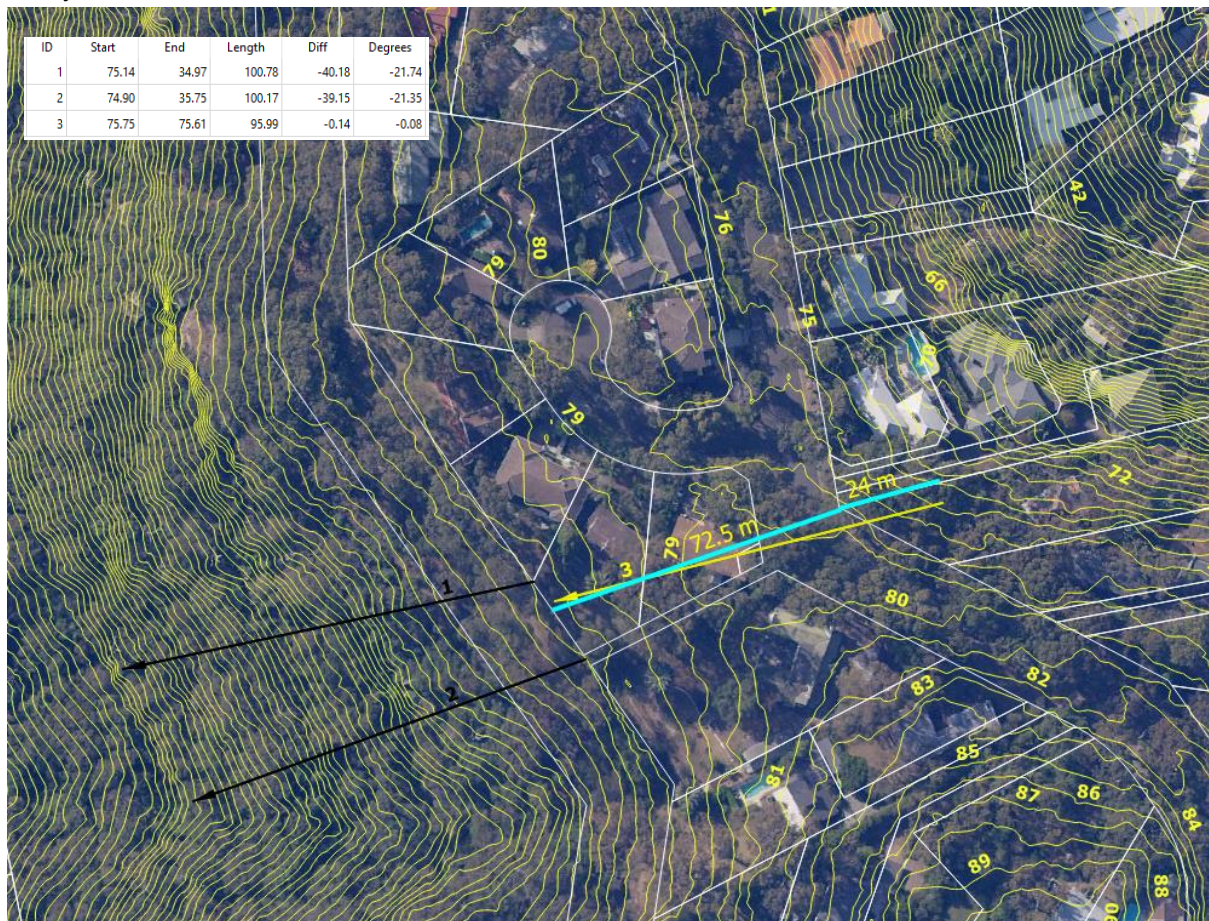


Table 2 shows the slope beneath the hazard.

Aspect	North	East	South	West
Slope	N/A	N/A	N/A	Greater than 20 degrees downslope

*Table 2 - Any aspect marked with "N/A" in the table above indicates that it is considered there is no hazard in that direction.*

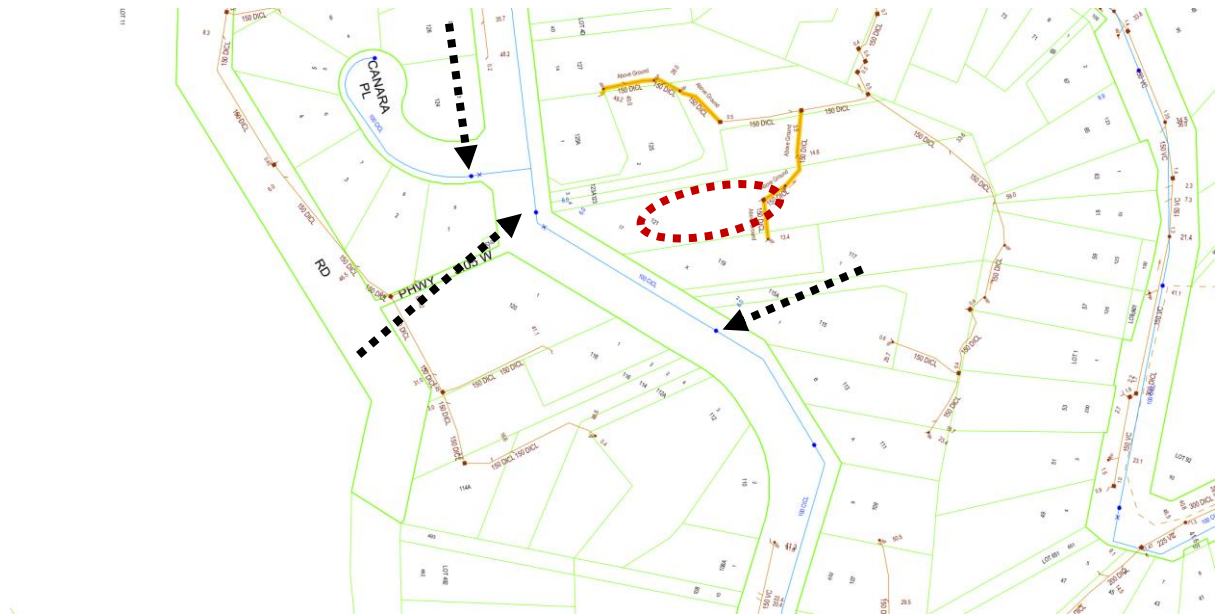
## 7 Utilities.

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### 7.1 Water.

The subject block will be serviced by a reticulated water supply.

The following map is an extract from Sydney waters hydrant map. Hydrants are indicated by a blue dot on a blue line. As can be seen there is at least one hydrant point indicated within close proximity of the property.



### 7.2 Electricity

Main's electricity is available to the block.

### 7.3 Gas

It is unknown if either bottled or mains gas is to be altered or installed in this proposal.

## 8 Access/Egress.

---

Access to the development site will be via a short private driveway from Pacific Road.

All roads in the vicinity are considered to be capable of carrying emergency services vehicles and pedestrian access onto the lot is also considered to be adequate.

## Analysis of development and recommendation.

### 9 Compliance with Planning for Bushfire Protection setbacks.

Planning for Bushfire Protection gives Deemed to Satisfy (DTS) tables to calculate Bushfire Attack Levels (BAL's) for slopes up to 20 degrees downslope.

As the slope beneath the hazard for this proposal exceeds 20 degrees a performance based calculation using method 2 of AS2959-2018 is required.

This calculation, as one of its outputs, gives a "flame length" for the design fire. The RFS considers that anything within the length of this flame is within the Flame Zone of the hazard.

In this instance the flame length is approximately 83m, the available separation distance is greater than the calculated flame length, flame contact will not occur.

Given there is no flame contact the determining factor for the BAL is the projected radiant heat. As can be seen in the following table the RHF has been calculated to be 16.14kwm2 making the appropriate BAL for the fire prone aspects BAL-19.

Assessment Details				+!
Run Description:	<input type="text" value="West"/>		<b>Run Calc</b>	
Filter Vegetation Class:	<input type="text" value="PBP 2019"/>	▼		
Vegetation Type:	<input type="text" value="Forest (including Coastal Swamp Forest)"/>	▼		
Separation Distance (m):	<input type="text" value="96"/>	Slope Unit:	<input type="text" value="Degrees"/>	▼
Vegetation Slope:	<input type="text" value="22"/>	Vegetation Slope Type:	<input type="text" value="Downslope"/>	▼
Site Slope:	<input type="text" value="0"/>	Site Slope Type:	<input type="text" value="Level"/>	▼
Flame Width (m):	<input type="text" value="100"/>	Flame Temp (K):	<input type="text" value="1090"/>	▼
Elevation of Receiver (m):	<input type="text" value="Default"/>	Note: Leave as Default to copy peak elevation.		
Heat Shield Height (m):	<input type="text" value="0"/>	Note: Measured directly against the vegetation.		
Heat Shield Width (m):	<input type="text" value="0"/>	Note: Measured in the centre of the vegetation.		
<b>Short Fire Run Inputs</b>				
Calculate Short Fire Run	<input type="checkbox"/>	Fire Run (m):	<input type="text" value="0"/>	
Forest Flame Model:	<input type="text" value="McArthur"/>	Vegetation Height (m):	<input type="text" value="2"/>	
<b>Results</b>				
Radiant Heat (kW/m2):	<input type="text" value="16.14"/>	Rate Of Spread (km/h):	<input type="text" value="12.05"/>	<input type="checkbox"/> Override ROS
Flame Length (m):	<input type="text" value="82.63"/>	Transmissivity:	<input type="text" value="0.745"/>	<input type="checkbox"/> Override Transmissivity
Construction Level:	<input type="text" value="BAL 19"/>	Peak Elevation of Receiver (m):	<input type="text" value="32.11"/>	<input type="checkbox"/> Override Flame Angle
Fire Intensity (kW/m):	<input type="text" value="224688"/>	Flame Angle (degrees):	<input type="text" value="51"/>	<input type="checkbox"/> Override View Factor
Inner Protection Area (m):	<input type="text" value="58"/>	Maximum View Factor:	<input type="text" value="0.285"/>	<input type="checkbox"/> Override View Factor
Outer Protection Area (m):	<input type="text" value="38"/>	Shielded View Factor:	<input type="text" value="0"/>	



## 10 Siting.

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The current site provides adequate separation between the proposed building and surrounding vegetation for a compliant structure to be built.

### Recommendation;

Nil.

## 11 Construction and design.

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All new work is to be undertaken in accordance with the relevant requirements of the NCC and AS3959 2018. The following recommendations are a minimum level of construction. Constructing the proposal to a higher level than that recommended is allowable under AS3959.

### Recommendation; all new work to the western, northern and southern aspects.

1. New construction on the western, northern and southern aspects shall comply with the requirements of section 3 of Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" and,
2. New construction on the western, northern and southern aspects shall also comply with the requirements of BAL-19 Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" or NASH Standard "National Standard Steel Framed Construction in Bushfire Areas" and any additional construction requirements contained within section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.

### Recommendation; all new work to the eastern aspect.

3. New construction on the eastern aspects shall comply with the requirements of section 3 of Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" and,
4. New construction on the eastern aspects shall also comply with the requirements of and BAL-12.5 Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" or NASH Standard "National Standard Steel Framed Construction in Bushfire Areas" and any additional construction requirements contained within section 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.
5. New roofing valleys and guttering should be fitted with a non-combustible leaf protection to stop the accumulation of debris.

*AS-3959 2018 is available as PDF from;*

[https://infostore.saiglobal.com/en-au/standards/as-3959-2018-122340\\_saig\\_as\\_as\\_2685241/](https://infostore.saiglobal.com/en-au/standards/as-3959-2018-122340_saig_as_as_2685241/)



## 12 Utilities.

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### 12.1 Water.

The proposed development will have access to a reticulated water supply. There is at least one hydrant indicated within the required distance from the dwelling.

#### Recommendation;

Nil.

### 12.2 Electricity and Gas.

#### Recommendation;

6. Any new electricity or gas connections are to comply with the requirements of table 7.4a of Planning for Bushfire Protection.

## 13 Asset Protection Zone (APZ).

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The Asset Protection Zone is *“An area surrounding a development managed to reduce the bushfire hazard to an acceptable level. The width of an APZ will vary with slope, vegetation and construction level”*.

#### Recommendation;

7. At the commencement of building works and in perpetuity the area to the west of the proposed dwelling up to the property boundary shall be managed as an Asset Protection Zone in accordance with the requirements of Planning for Bushfire Protection, the RFS document Standards for Asset Protection Zones and in a manner that does not create a bushfire hazard to the property.
8. In addition, the area to the north, south and east of the buildings shall be managed as an Asset Protection Area to a distance of at least 5m or to the property boundary.

## 14 Landscaping.

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#### Recommendation;

9. Any new fencing is to be constructed in accordance with section 7.6 of Planning for Bushfire Protection 2019.
10. Any new landscaping to the site is to comply with the principles of Appendix 4 and section 3.7 of Planning for Bush Fire Protection 2019. In this regard the following

landscaping principles are, where applicable, to be incorporated into the development<sup>1</sup>:

- Suitable impervious areas being provided immediately surrounding the building such as courtyards, paths and driveways;
- Grassed areas/mowed lawns/ or ground cover plantings being provided in close proximity to the building;
- Restrict planting in the immediate vicinity of the building which may over time and if not properly maintained come in contact with the building;
- Maximum tree cover should be less than 30%, and maximum shrub cover less than 20%;
- Planting should not provide a continuous canopy to the building (i.e. trees or shrubs should be isolated or located in small clusters);
- When considering landscape species consideration needs to be given to estimated size of the plant at maturity;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
- Avoid climbing species to walls and pergolas;
- Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such timber garden furniture way from the building; and
- Use of low flammability vegetation species.

## 15 Constraints on the subject block.

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None known.

Recommendation;

Nil

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<sup>1</sup>Refer to referenced documents for a complete description.

## 16 Access/Egress.

All roads in the area are considered to be capable of handling emergency service vehicles. Access from the roadway onto the property is also considered to be adequate for firefighting purposes.

### Recommendation

Nil

## 17 Compliance or non compliance with the specifications and requirements for bushfire protection measures.

<b>APZ</b> A defensible space is provided onsite. An APZ is provided and maintained for the life of the development.	Achievable with the implementation of the recommendations in section 13
<b>SITING AND DESIGN:</b> Buildings are sited and designed to minimise the risk of bush fire attack.	Achievable with the implementation of the recommendations in section 10
<b>CONSTRUCTION STANDARDS:</b> It is demonstrated that the proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact.	Achievable with the implementation of the recommendations in section 11
<b>ACCESS</b> Safe, operational access is provided (and maintained) for emergency services personnel in suppressing a bush fire while residents are seeking to relocate, in advance of a bush fire, (satisfying the intent and performance criteria for access roads in sections 4.1.3 and 4.2.7).	Achievable with the implementation of the recommendations in section 16
<b>WATER AND UTILITY SERVICES:</b> <ul style="list-style-type: none"> <li>adequate water and electricity services are provided for firefighting operations</li> <li>Gas and electricity services are located so as not to contribute to the risk of fire to a building.</li> </ul>	Achievable with the implementation of the recommendations in section 12
<b>LANDSCAPING:</b> <ul style="list-style-type: none"> <li>it is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause ignitions.</li> </ul>	Achievable with the implementation of the recommendations in section 14

## 18 Conclusions.

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Based on the above report and with the implementation of the recommendation contained within this report the consent authority should determine that this development can comply with the requirements of AS 3959-2018 and 'Planning for Bushfire Protection' guidelines.

The recommendations contained within this report are to be implemented in their entirety. Changing one aspect may have an adverse effect on the rest of the recommendations.

Bushfires are affected by many external influences such as climactic conditions, vegetation type, moisture content of the fuel, slope of the land and human intervention to name a few and are difficult to predict.

This report does not intend to provide a guarantee that the subject property will survive if a bushfire should impact the surrounding area. The purpose of this report is to show the developments level of compliance or in some cases non-compliance with the New South Wales legislation regarding building in bushfire prone areas.

Where non-compliance is found measures will be suggested that should make the building less susceptible to the various attack mechanisms of a bushfire and comply with the performance requirements of the Building Code of Australia.

The opinions expressed in this report are based on the writers' experience and interpretation of the relevant guidelines and standards. Notwithstanding the above, these guidelines and standards are open to interpretation. All care has been taken to ensure that the opinions expressed in this report are consistent with past successful outcomes.

Some of the information used in the compilation of this assessment has been provided by the proponent or the proponent's representatives. While we believe this information to be true and have accepted the information in good faith however this company or its representatives will not accept any responsibility if the provided information is determined to be incorrect.

This document is to assist the consenting authorities with their assessment of this proposal. The recommendations contained in this assessment reflect the normal conditions that are typically applied by the consent authority for a proposal such as this however the conditions of consent for the proposal will be supplied by the certifying authority on approval of the development and may not necessarily be the same as the recommendations of this assessment.

The recommendations in this assessment are for planning guidance only, construction details and compliance with all building requirements are the responsibility of the Architect/Designer, Builder and Certifier.

To avoid confusion, unless specifically referenced by the consenting authority, it is strongly recommended that once this proposal has been approved that this document is no longer referenced and that only the official conditions of consent as reflected in documentation by the certifying body are used for construction guidance.

If any further clarification is required for this report, please do not hesitate to contact me using the details above.

Yours Sincerely



**Matthew Willis**

*Grad Dip Planning for Bushfire Prone Areas*

*Bushfire Planning Services Pty Limited*

## **19 References.**

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- *Australian Building Codes Board (2019). National Construction Code Volume One - Building Code of Australia. ABCB*
- *Australian Building Codes Board (2019). National Construction Code Volume two - Building Code of Australia. ABCB.*
- *Keith, D.A. (2004). Ocean Shores to Desert Dunes: The Native Vegetation of New South Wales and the ACT. NSW Department of Environment and Conservation.*
- *National Association of Steel Framed Housing (2014). "Steel Framed Construction in Bush Fire Areas. NASH*
- *Ramsay, C and Rudolph, L (2003) "Landscape and Building Design for Bush fire Areas". CSIRO Publishing, Collingwood.*
- *Resources and Energy NSW (2016). ISSC 3 Guide for the Managing Vegetation in the Vicinity of Electrical Assets. NSW Government*
- *Rural Fire Service NSW (2005) "Standards for Asset Protection Zones"*
- *Standards Australia (2018). "AS 3959, Construction of buildings in bush fire prone areas".*
- *Standards Australia (2018). "AS/NZS 1530.8.1 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Radiant heat and small flaming sources".*
- *Standards Australia (2018). "AS/NZS 1530.8.2 Methods for fire tests on building materials, components and structures - Tests on elements of construction for buildings exposed to simulated bush fire attack - Large flaming sources".*
- *Standards Australia (2014). "AS/NZS 1596 The storage and handling of LP Gas".*



## 20 Appendix 1 - Plans .

### 121 PACIFIC RD PALM BEACH



DOOR SCHEDULE							
TYPE	NO.	WIDE	HEIGHT	DEPTH	FRAME MATERIAL	GLASS	NOTES
DOOR 1	DOOR 1	2000	2100				
DOOR 2	DOOR 2	2000	2100				
DOOR 3	DOOR 3	2000	2100				
DOOR 4	DOOR 4	2000	2100				
DOOR 5	DOOR 5	2000	2100				
DOOR 6	DOOR 6	2000	2100				
DOOR 7	DOOR 7	2000	2100				
DOOR 8	DOOR 8	2000	2100				
DOOR 9	DOOR 9	2000	2100				
DOOR 10	DOOR 10	2000	2100				
DOOR 11	DOOR 11	2000	2100				
DOOR 12	DOOR 12	2000	2100				
DOOR 13	DOOR 13	2000	2100				
DOOR 14	DOOR 14	2000	2100				
DOOR 15	DOOR 15	2000	2100				
DOOR 16	DOOR 16	2000	2100				
DOOR 17	DOOR 17	2000	2100				
DOOR 18	DOOR 18	2000	2100				
DOOR 19	DOOR 19	2000	2100				
DOOR 20	DOOR 20	2000	2100				

WINDOW SCHEDULE							
TYPE	NO.	WIDE	HEIGHT	DEPTH	FRAME MATERIAL	GLASS	NOTES
WIN 1	WIN 1	2000	1500				
WIN 2	WIN 2	2000	1500				
WIN 3	WIN 3	2000	1500				
WIN 4	WIN 4	2000	1500				
WIN 5	WIN 5	2000	1500				
WIN 6	WIN 6	2000	1500				
WIN 7	WIN 7	2000	1500				
WIN 8	WIN 8	2000	1500				
WIN 9	WIN 9	2000	1500				
WIN 10	WIN 10	2000	1500				
WIN 11	WIN 11	2000	1500				
WIN 12	WIN 12	2000	1500				
WIN 13	WIN 13	2000	1500				
WIN 14	WIN 14	2000	1500				
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WIN 27	WIN 27	2000	1500				
WIN 28	WIN 28	2000	1500				
WIN 29	WIN 29	2000	1500				
WIN 30	WIN 30	2000	1500				

DOOR MARK

WINDOW MARK

NOTES:  
DO NOT SCALE FROM DIMENSIONS.  
VERIFY THE DIMENSIONS ON SITE BEFORE COMMENCING  
WORK. THE DIMENSIONS ON THIS DRAWING ARE FOR INFORMATION ONLY.  
WITHOUT THE CONSENT OF DANIEL BODDAM ARCHITECTURE  
AND INTERIOR DESIGN, ANY REUSE OF THIS DRAWING IS PROHIBITED.

UNDERSTANDING: SET OUT FROM WALLS AND TACKS FROM THE  
FACE OF STRUCTURAL ELEMENTS. WALL LINES AND  
DIMENSIONS ARE INCLUDED IN THE DIMENSION VALUE.

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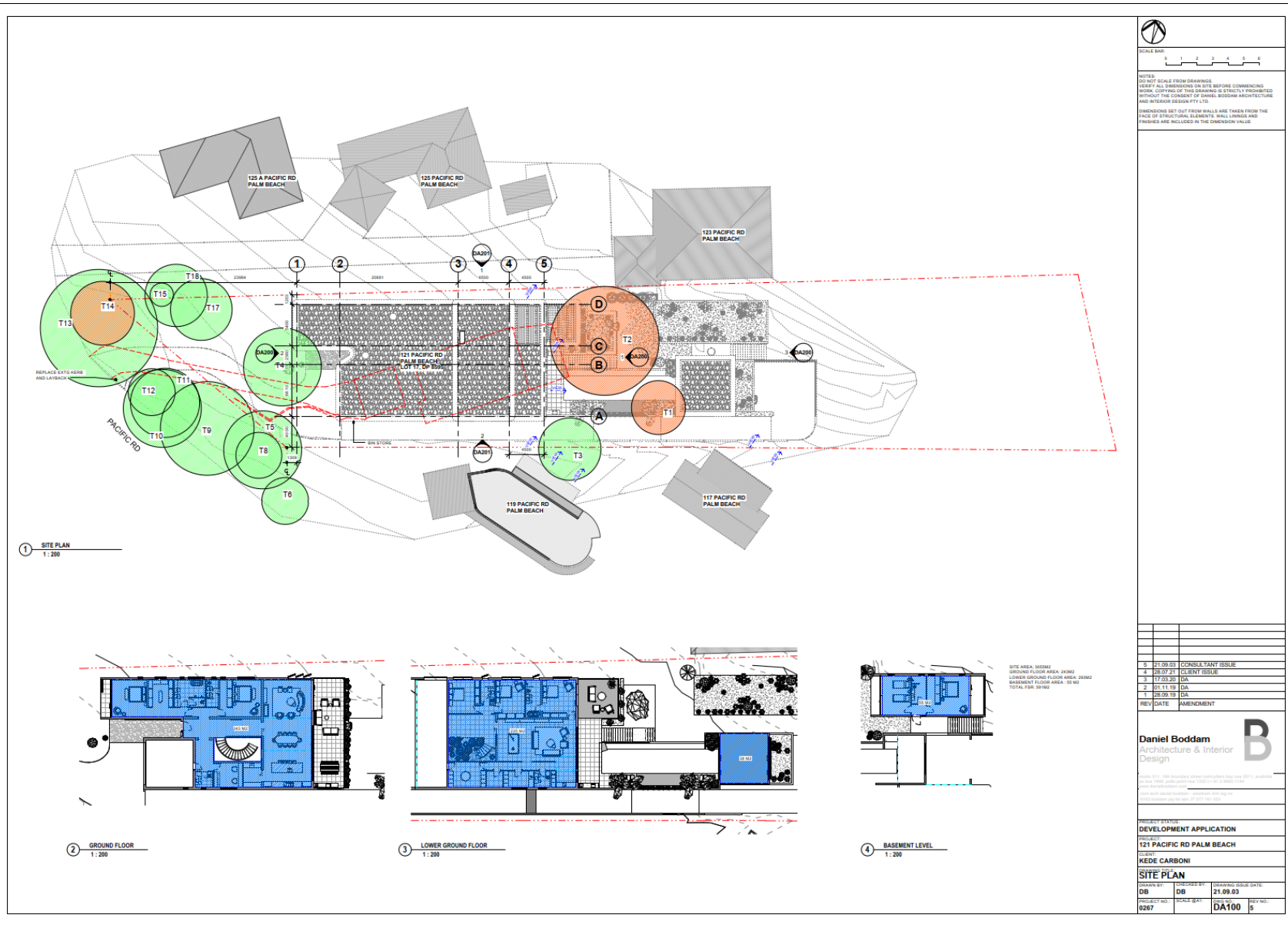
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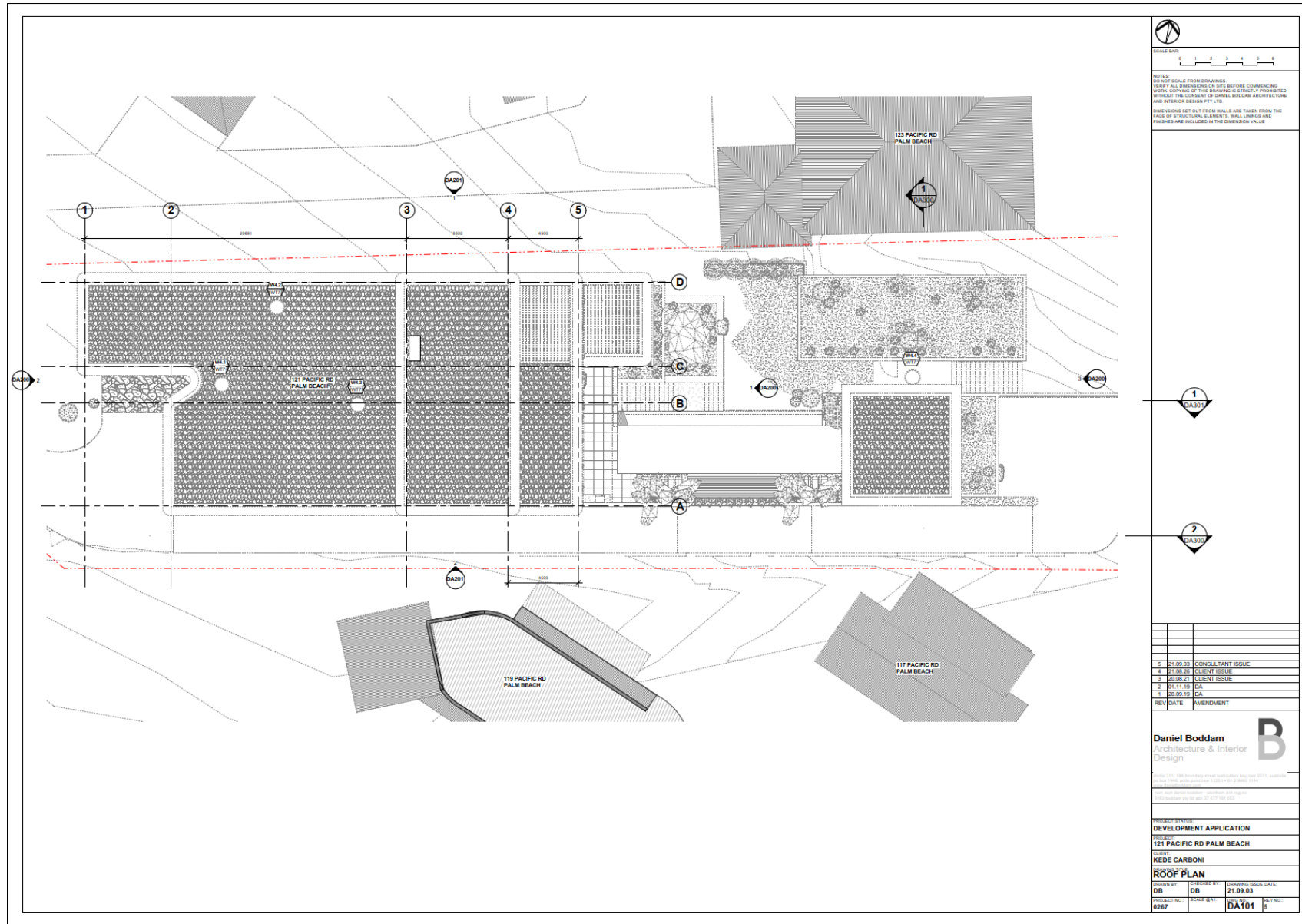
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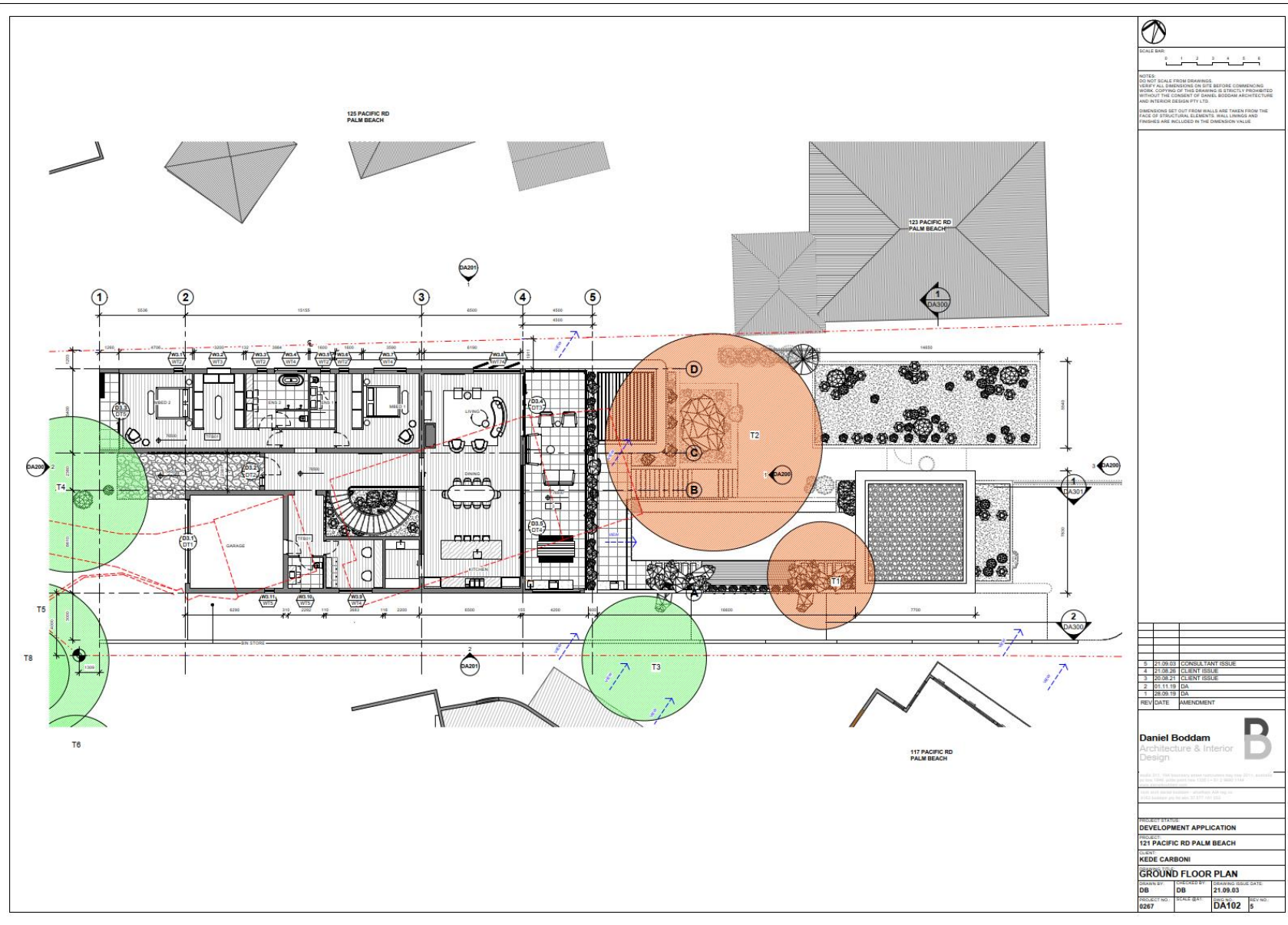
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NOTES:  
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AND INTERIOR DESIGN PTY LTD.

DIMENSIONS SET OUT FROM WALLS ARE TAKEN FROM THE  
FACE OF STRUCTURAL ELEMENTS. WALL LININGS AND  
FINISHES ARE INCLUDED IN THE DIMENSION VALUE.

3	21.09.03	CONSULTANT ISSUE
2	21.08.26	CLIENT ISSUE
1	20.08.21	CLIENT ISSUE
REV	DATE	AMENDMENT

**Daniel Boddam**  
Architecture & Interior  
Design

[illegible]

PROJECT STATUS:	DEVELOPMENT APPLICATION
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PROJECT:  
121 PACIFIC RD PALM BEACH

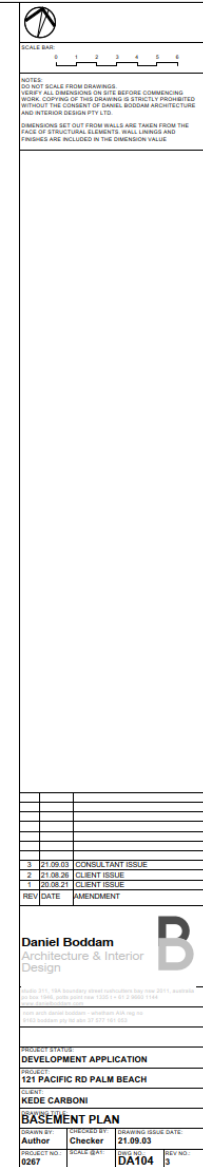
CLIENT:  
**KEDE CARBONI**

DRAWING TITLE:  
**LOWER GROUND**

DRAWN BY: <b>Author</b>	CHECKED BY: <b>Checker</b>	DRAWING DATE: <b>21.09.03</b>
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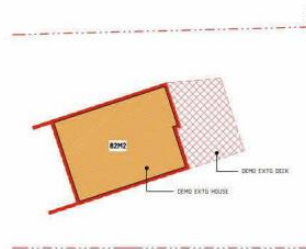
PROJECT NO.	SCALE 1:1	DWG NO.
0267		DA10



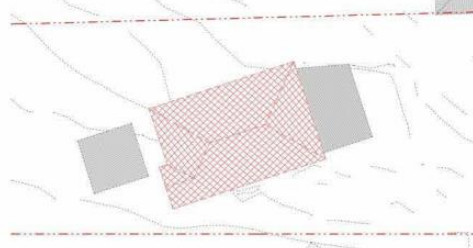




③ DEMO - GROUND FLOOR  
1:200



② DEMO - LOWER GROUND  
1:200



① DEMO - ROOF PLAN  
1:200



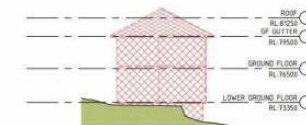
EXTS - FRONT OF HOUSE



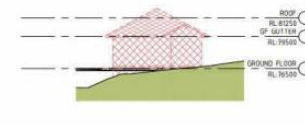
EXTS - REAR OF HOUSE



EXTS - SIDE OF HOUSE



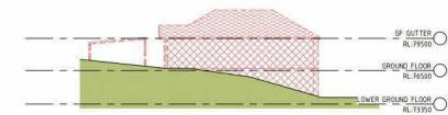
④ DEMO - EAST ELE  
1:200



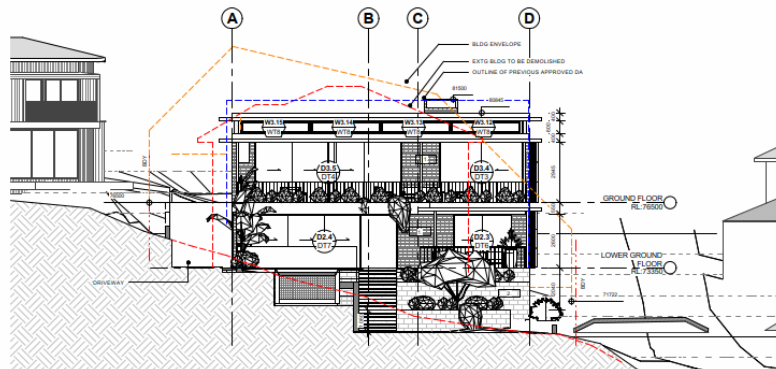
⑦ DEMO - WEST ELE  
1:200



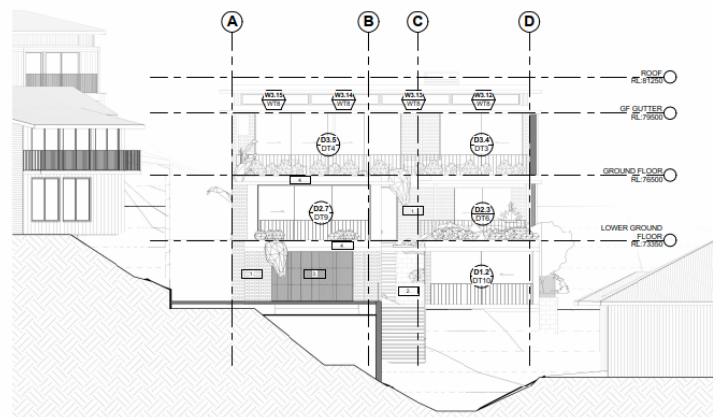
⑤ DEMO - NORTH ELE  
1:200



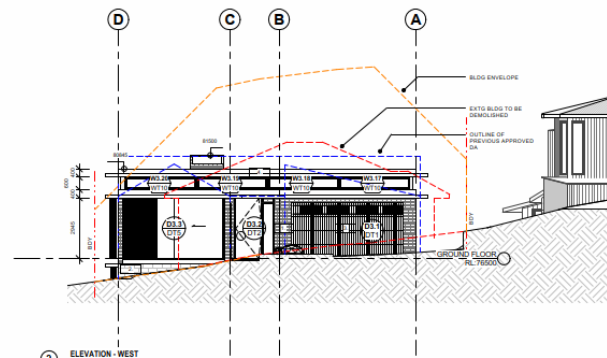
⑥ DEMO - SOUTH ELE  
1:200




1 ELEVATION - EAST - A  
1:100



3 ELEVATION - EAST - B  
1:100



2 ELEVATION - WEST  
1:100

SCALE BAR																			
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<b>Daniel Boddam</b> Architecture & Interior Design 																			
<b>DEVELOPMENT APPLICATION</b> <b>121 PACIFIC RD PALM BEACH</b> <b>KEDE CARBONI</b> <b>ELEVATIONS</b>																			
DRAWN BY: <b>DB</b> PROJECT NO: <b>0267</b>	CHECKED BY: <b>DB</b> SCALE BY: <b>DA200</b>																		
DRAWING ISSUE DATE: <b>21.08.20</b> REV NO: <b>5</b>																			





