

# Bushfire Hazard Assessment Report

***Proposed:***  
**Residential  
Development**

***At:***  
**Lot 1 in DP 1097743 &  
Lot 6 in DP 252223 /  
Pacific Highway,  
Moonee Beach NSW**

*Reference Number:* 130075

*Prepared For:*  
Moonee Parklands Trust  
C/- J W Planning Pty Ltd

**15<sup>th</sup> March 2013**

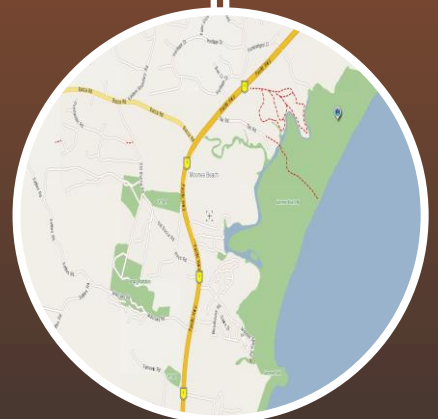
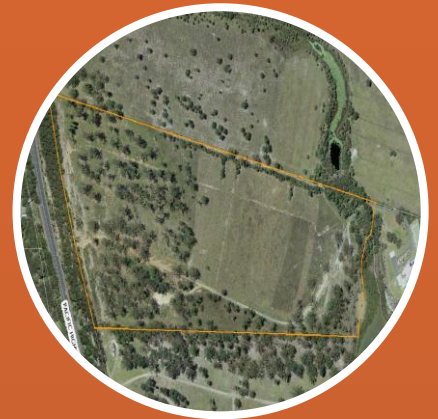


*Prepared By:*  
**Building Code & Bushfire  
Hazard Solutions Pty Limited**

Tel: (02) 9457 6530  
Fax: (02) 9457 6532

PO Box 124  
Berowra NSW 2081  
ABN 19 057 337 774

[www.bushfirehazardsolutions.com.au](http://www.bushfirehazardsolutions.com.au)



## Contents

---

	<u>Page No.</u>
List of Abbreviations	2
1.0 Introduction	3
2.0 Purpose of Report	4
3.0 Scope of Report	4
4.0 Referenced Documents and Persons	4
5.0 Compliance Table and Notes	5 - 6
6.0 Aerial view of the subject allotment	7
7.0 Bushfire Hazard Assessment	8 - 15
8.0 Site and Bushfire Hazard Determination	16 - 18
9.0 Recommendations	19
10.0 Conclusion	20 - 21
11.0 Annexure	21 - 22
- List of referenced documents and attachments	
- Attachments	

## List of Abbreviations:

---

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2009 as amended.
BAL	Bushfire Attack Level
BCA	Building Code of Australia
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Coffs Harbour Council
DA	Development Application
EP&A Act	<i>Environmental Planning and Assessment Act - 1979</i>
ESD	Ecologically Sustainable Development
FR NSW	Fire and Rescue NSW
IPA	Inner Protection Area
OPA	Outer Protection Area
PBP	<i>Planning for Bush Fire Protection – 2006</i>
ROW	Right of Way
RF Act	<i>Rural Fires Act - 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

## 1.0 Introduction

---

The overall concept planning proposal relates to the residential subdivision of Lot 1 in DP 1097743 and Lot 6 in DP 252223 / Pacific Highway, Moonee Beach. This assessment concentrates on the residential subdivision of Lot 1 in DP 1097743, being the northern allotment. Further investigation and assessment is required on the residential subdivision of Lot 6 in DP 252223.

The development proposal relates to the subdivision of one (1) existing allotment located at Lot 1 in DP 1097743 / Pacific Highway, Moonee Beach into one hundred and one (101) new residential allotments and one (1) public reserve. The proposed development will also include all associated infrastructure, including roadways, footpaths, and services.

This type of development is considered integrated under section 100B of the Rural Fires Act 1997. As the matter is a Part 3a application the NSW Department of Planning will refer the application to the NSW Rural Fire Service during their assessment process.

It is acknowledged that the proposed subdivision is within Moonee and subject to the 'Moonee' Development Control Plan 2004 and the Coffs Harbour City Local Environmental Plan 2000. In this regard the proposed development forms part of the North Moonee Precinct with an approved residential subdivision to the north and Cunninghams Creek to the south.

In consideration of this bushfire assessment it is further acknowledged that one of the Natural Environment Strategies of this DCP is that *'a minimum 40m-seperation area is to be provided between areas to be protected and future housing areas to ensure adequate bushfire protection is able to be provided without the need to remove protected vegetation'*.

The following assessment has considered the site specific circumstances in conjunction with the bushfire protection measures required under Planning for Bush Fire Protection 2006. It is therefore of our opinion that adequate bushfire protection will be provided without conforming to the minimum required 40 metre generic setback. Furthermore the bushfire protection measures described herein do not require the removal of any protected vegetation within the 50 metre creek buffer.

The subject site has frontage to the Pacific Highway to the west and abuts an approved (but yet to be constructed) residential development to the north, a tributary to Moonee Creek to the east and a large grazed allotment (part of the overall proposal) to the south.

The vegetation identified as being a potential bushfire hazard is located to the northeast within a yet to be rehabilitated wildlife corridor within the northern approved development, east within a retained public reserve and drainage reserve and south within the large neighbouring private allotment.

Coffs Harbour Council's Bushfire Prone Land Map identifies that the subject site contains designated Category 1 Vegetation and its associated 100 metre buffer zone. The application of *Planning for Bush Fire Protection 2006* (PBP) is therefore required.

## 2.0 Purpose of Report

---

The purpose of this Bushfire Assessment Report is to provide the owners, the Rural Fire Service and the NSW Department of Planning and Infrastructure with an independent bushfire hazard assessment together with appropriate recommendations for new building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that the NSW Department of Planning and Infrastructure and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject application.

## 3.0 Scope of this Report

---

The scope of this report is limited to providing a bushfire hazard assessment and recommendations for the subject site. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject site.

## 4.0 Referenced Documents and Persons

---

Comments provided are based on the requirements of the NSW *Environmental Planning and Assessment Act* 1979 (EP&A Act), the *Rural Fires Act* 1997, the Rural Fires Regulation 2008, the RFS document known as '*Planning for Bush Fire Protection* 2006' for the purposes of bushfire hazard determination and Australian Standard 3959 2009 titled 'Construction of buildings in bushfire-prone areas' as amended for building/structural provisions.

A company representative has made a site inspection of the subject site and the surrounding area. The 'Proposed Subdivision Lot Layout' prepared by CivilTech Consulting Engineers, dwg no 1277-DR1, sheet 1 of 8 has also been relied upon for this assessment.

The 'Moonee' Development Control Plan 2004 under Coffs Harbour City Local Environmental Plan 2000 and the Landscape Concept Plan & Open Space Management Plan prepared by The Rothwell Boys Pty Ltd, for The Glades at Moonee Beach – Volume 3, dated June 2007 have also been reviewed.

## 5.0 Compliance Tables & Notes

The following tables sets out the projects compliance with *Planning for Bush Fire Protection – 2006* for residential subdivision as dictated by **Appendix 2 Planning for Bush Fire Protection 2006**.

	Northeast	East	South	West
<b>Vegetation Structure</b>	Forest	Forested Wetlands	Remnant*	Maintained curtilages
<b>Slope</b>	0 – 5 degrees down	0 - 5 degrees down	0 – 5 degrees down	N/A
<b>Required Asset Protection Zone</b>	20 metres	20 metres	10 metres	N/A
<b>Proposed Asset Protection Zone</b>	≥20 metres	≥20 metres	≥10 metres	N/A
<b>Significant Environmental Features</b>	Approved residential development (yet to be constructed)	Tributary to Moonee Creek / Neighbouring dwelling	Large allotment predominately grazed	Pacific Highway
<b>Threatened Species</b>	Not Known By Others	Not Known By Others	Not Known By Others	Not Known By Others
<b>Aboriginal Relics</b>	Not Known By Others	Not Known By Others	Not Known By Others	Not Known By Others

\* The neighbouring property to the south was found to predominately comprise of grazed pastures. It is understood that this property owner has been progressively extending their management practices throughout the site (particularly adjacent the subject property).

Regardless of the potential future management practices and development within this property it currently contains small discontinued pockets of native vegetation along its northern boundary. This vegetation was found to provide clusters of vegetation less than a hectare in size which provide less than 50 metre fire runs toward the proposed residential allotments in the subject site. This vegetation has therefore been determined a Remnant hazard in accordance with A2.3 of Planning for Bush Fire Protection 2006.

The application of this area as a hazard has been considered a precautionary approach given the high likelihood of future development.

### Asset Protection Zones Compliance

The proposed new allotments can accommodate building footprints separation achieving (and in most instances exceeding) the minimum requirements under PBP 2006. The available APZs consist of land entirely within the subject property including land within the proposed residential allotments and the proposed perimeter road.

This assessment does not rely on any Asset Protection Zones within the public reserve or drainage reserve. While it is preferred that this area is managed in a fuel reduced state, should it be required to be rehabilitated for environmental reasons it will not altered the recommendations or conclusion of this assessment and subsequently would not compromise compliance with Planning for Bush Fire Protection 2006.

## Construction Level Compliance

No new dwellings are proposed as part of this application. The proposed new allotments can accommodate a building footprint meeting or exceeding the minimum required Asset Protection Zones as required under section 4.1.3 of PBP. An independent assessment will be required under s79BA of the *Environmental Planning and Assessment Act 1997* at the time of any future application for the construction of a new dwelling within the proposed new allotments.

## Access and Services

Guideline Ref.	Proposed Development Determinations
Property Access	The proposed development will involve the construction of an internal road network. This road network must comply with the requirements for Public Roads as detailed in section 4.1.3(1) of Planning for Bush Fire Protection 2006. The proposed subdivision lot layout has been reviewed and compliance can be achieved.
Water Supply	Hydrants will be extended along the proposed new internal road network as part of this development. Hydrant sizing, spacing and pressures must comply with AS2419.1 – 2005.
Evacuation	Evacuation will be possible by utilising proposed road infrastructure. I recommend that the occupants of the future dwellings complete a Bush Fire Safety Plan addressing “Prepare, Act, Survive” as advocated by the NSW RFS <a href="http://www.rfs.nsw.gov.au/">http://www.rfs.nsw.gov.au/</a> under <a href="#">publications / bushfire safety</a>



## 6.0 Aerial view of the subject allotment

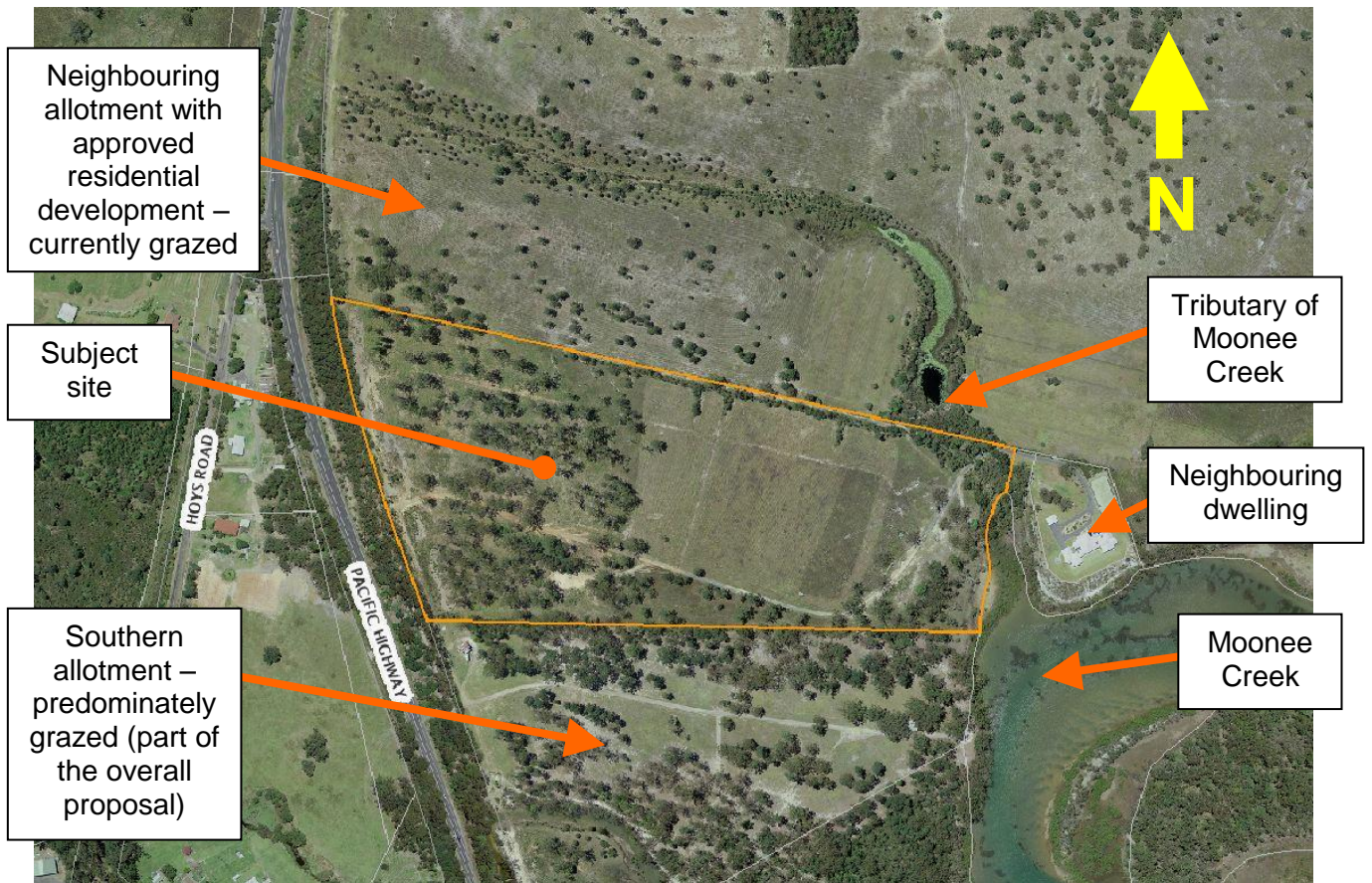


Image 01: Aerial view of the subject area.



## 7.0 Bushfire Hazard Assessment

### 7.01 Preface

Properties considered to be affected by possible bushfire impact are determined from the local Bushfire Prone Land Map as prepared by Council and or the Rural Fire Service. All property development within affected areas is subject to the conditions detailed in the document '*Planning for Bush Fire Protection 2006*' (PBP). Set back distances for the purpose of creating Asset Protection Zones (APZ's) must be applied and any buildings must then conform to corresponding regulations detailed in Australian Standard 3959 'Construction of buildings in bushfire prone areas' 2009.

*Planning for Bush Fire Protection 2006*, (PBP) formally adopted on the 1<sup>st</sup> March 2007 and amended May 2010 (Appendix 3) provides for the protection of property and life (including fire-fighters and emergency service personnel) from bushfire impact.

The thrust of the document is to ensure that developers of new properties or sub-divisions include the constraints associated with the construction of buildings in bushfire prone areas within their proposed development sites. PBP is applicable to proposed development inside determined Category 1 or 2 areas and also inside a buffer zone radius of 100m from a Category 1 bushfire area or 30m from a Category 2 bushfire area.

The document also acknowledges 'infill' developments associated with re-development of existing properties and allows some higher levels of building safety where the increased 'set backs' (APZ's) may not be achievable.

The subject development relates to the subdivision of one (1) existing allotment into one hundred and one (101) new residential allotments, one (1) public reserve and one (1) drainage reserve. To accord with PBP the subdivision is classified as integrated development and assessed under section 100B of the *Rural Fires Act 1997*.

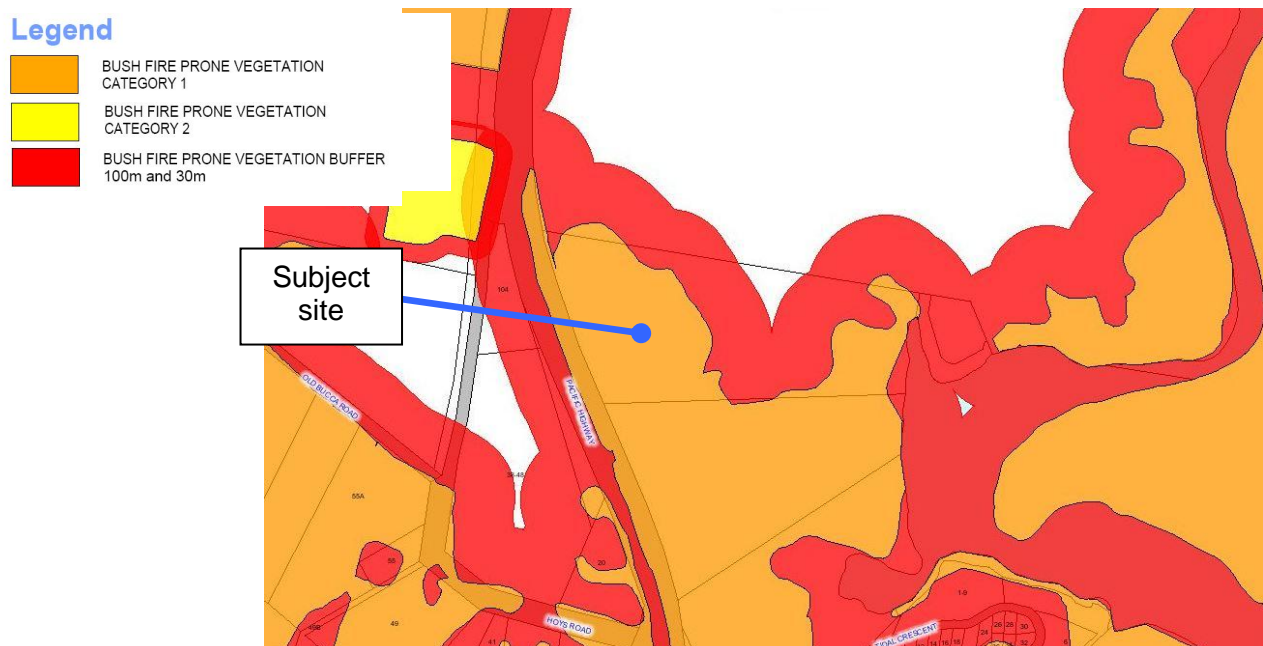


Image 02: Extract from Coffs Harbour Council's Bushfire Prone Land Map

## 7.02 Location

The subject site is an existing large allotment known as Lot 1 in DP 1097743 located along the Pacific Highway, Moonee Beach. The subject site is within Coffs Harbour Councils Local Government Area.

The subject site falls within the North Moonee Precinct of the 'Moonee' Development Control Plan 2004 under Coffs Harbour City Local Environmental Plan 2000.

The subject site has street frontage to the Pacific Highway to the west and abuts an approved (but yet to be constructed) residential development to the north, a tributary to Moonee Creek to the east and a large grazed allotment (also permitted for similar development under the DCP) to the south.

The vegetation identified as being a potential bushfire hazard is located to the northeast within a yet to be rehabilitated wildlife corridor within the northern approved development, east within a retained public reserve and drainage reserve and south within the large southern allotment.



Photograph 01: View south from within the subject property

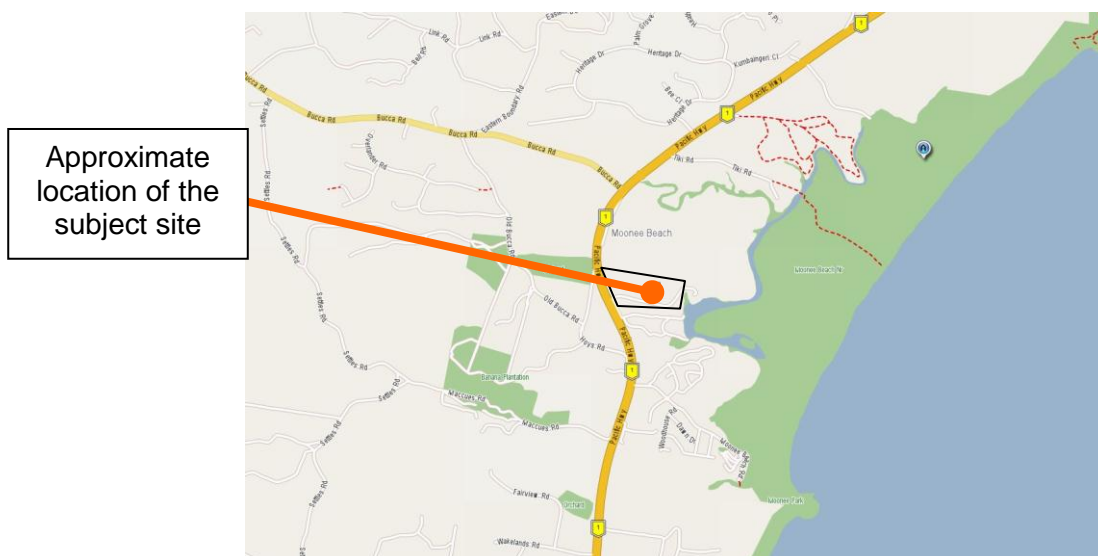


Image 03: Extract from street-directory.com.au

## 7.03 Vegetation

The subject property was found to predominately consist of slashed pastures with a scattered overstorey of mature trees 10-20 metres in height within the western portion. A tributary of Moonee Creek forms the eastern boundary of the site and was found to bisect the north-eastern corner of the site. It is understood that there is a 50 metre wide creek buffer which must be applied from this tributary.

The extent of vegetation management permissible within this area is currently unclear. For the purpose of this assessment it has been presumed that no vegetation management is permitted within the 50 metre buffer and that the area will be rehabilitated into the naturally occurring community.

This area was found to currently consist of scattered mature gum trees 10-30 metres in height, with a dense concentration of paperbark trees immediately adjacent the tributary in the north-eastern corner and an understorey of reeds and grasses. This area appears to be subject to periodic immersion from Moonee Creek. It is of our opinion that the vegetation community within this area would best be described as a Forested Wetlands.

The neighbouring property to the north has development consent for a residential subdivision, which has yet to be acted upon. In the preparation of this assessment the Landscape Concept Plan & Open Space Management Plan for the development was taken into consideration ensuring that no new hazard would be established to the north without suitable Bushfire Protection Measures incorporated in to the subject development.

The resultant findings were that a wildlife corridor is being established along the length of the tributary to Moonee Creek. The wildlife corridor is documented to comprise of existing forested wetlands, rehabilitated wetlands, sedgeland, swamp sclerophyll and heath communities along and immediately adjacent the tributary and rehabilitated indigenous forest communities on the higher gradients adjacent the perimeter road.

For the purpose of assessment against Planning for Bush Fire Protection we have used Forest, being the highest hazard to this aspect. While a Forest community has been used to this aspect this is considered to be an overestimate of the expected bushfire behaviour in this area.

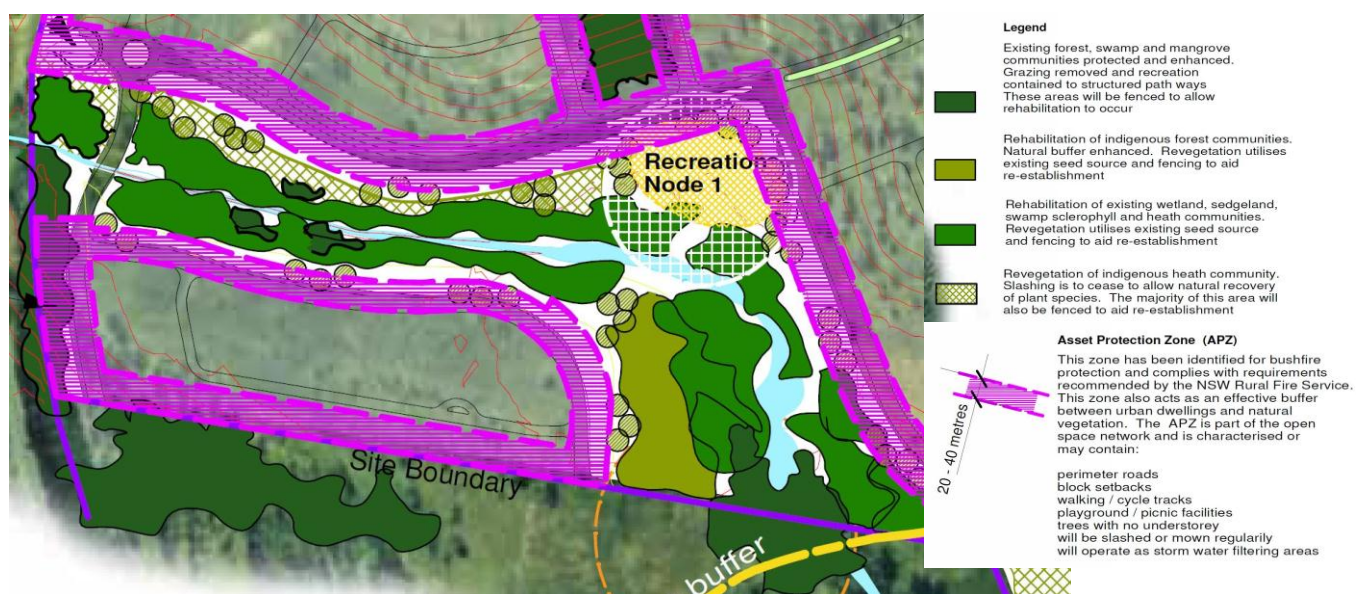


Image 04: Extract from the Landscape Concept Plan & Open Space Management Plan prepared by The Rothwell Boys Pty Ltd, for The Glades at Moonee Beach – Volume 3, dated June 2007



The southern allotment (Lot 6 in DP 252223) was found to predominately comprise of grazed pastures. It is understood that this property owner has been progressively extending their management practices throughout the site (particularly adjacent the subject property).

Regardless of the potential future management practices and development within this property it currently contains small discontinued pockets of native vegetation along its northern boundary. This vegetation was found to provide clusters of vegetation less than a hectare in size which provide less than 50 metre fire runs toward the proposed residential allotments. This vegetation has therefore been determined a Remnant hazard in accordance with A2.3 of Planning for Bush Fire Protection 2006.

The application of this area as a hazard has been considered a precautionary approach given the high likelihood of future development.



Photograph 02: View north from within the 50 metre creek buffer



Photograph 03: View northwest from the access drive to the neighbouring dwelling along the tributary of Moonee Creek





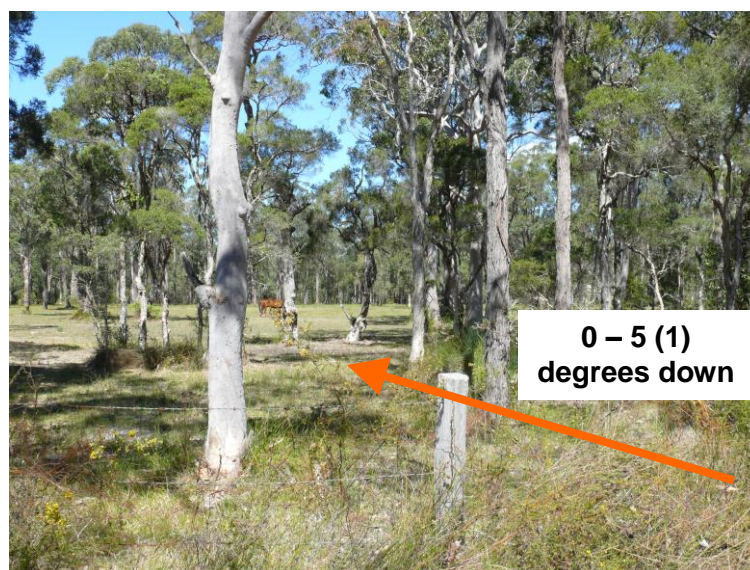
Photograph 04: View northeast from the northern boundary of the subject site

## 7.04 Slope and Topography

The slope that would most significantly affect bushfire behaviour within the hazard must be assessed for at least 100 metres from the closest available building footprint.

The most significant bushfire impact from the northeast and east is expected to be a bushfire burning along the existing watercourse flanking up toward the proposed residential allotments. The slope that would most significantly influence bushfire behaviour was determined onsite and verified from topographic mapping to be:

- 0 – 5 degrees down slope within the hazard to the northeast, east and south



Photograph 05: View south from the southern boundary of the subject property



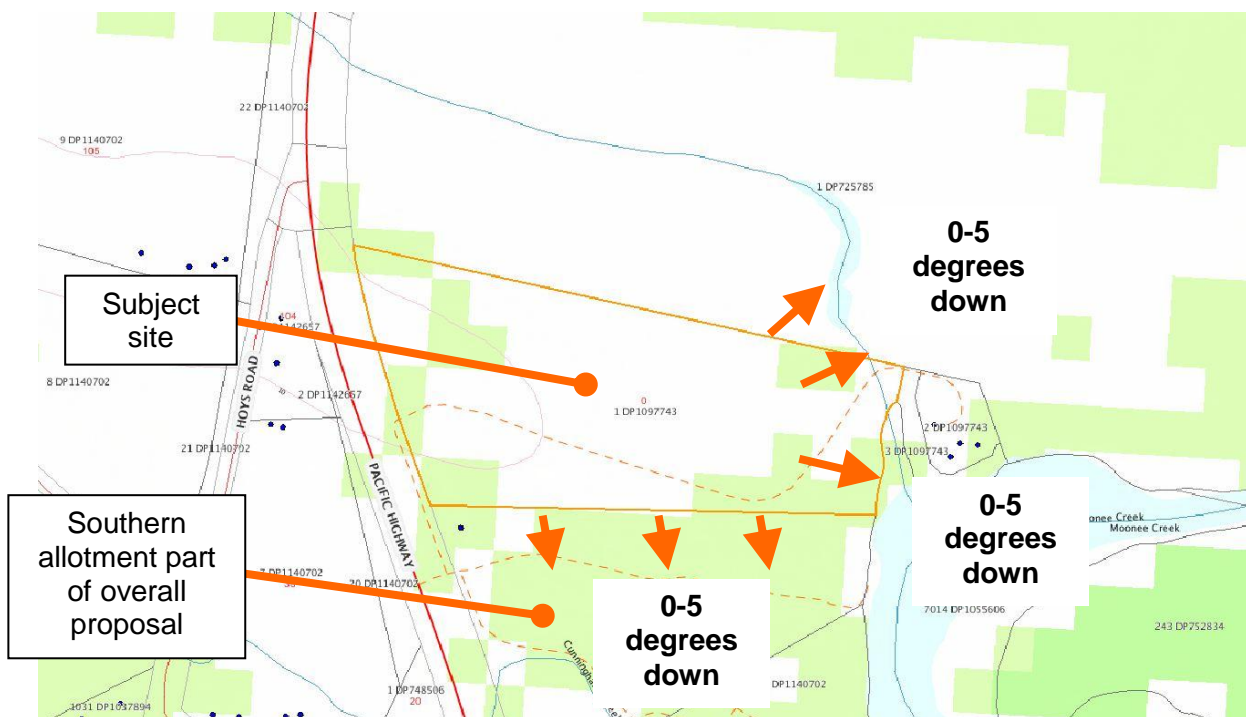


Image 05: Extract from the Land and Property Management Authority SixViewer database

## 7.05 Asset Protection Zones

The minimum required Asset Protection Zones (APZ) were determined from Table A2.5 of *Planning for Bush Fire Protection 2006* to be 20 metres to the northeast and east and 10 metres to the south.

All proposed residential allotments can accommodate a building footprint achieving (and in most instances exceeding) the minimum required Asset Protection Zones for Residential Subdivisions.

The proposed Asset Protection Zones will consist of the proposed perimeter road (Road 6) to the northeast (20 metres), the proposed perimeter road (Road 3) (16 metres) and the minimum Council street setback within the residential allotments themselves (5-7 metres) and maintained land within the rear yards of the residential allotments to the south (10 metres).

This assessment does not rely on any Asset Protection Zones within the public reserve or drainage reserve. While it is preferred that this area is managed in a fuel reduced state, should it be required to be rehabilitated for environmental reasons it will not alter the recommendations or conclusion of this assessment and subsequently would not compromise compliance with *Planning for Bush Fire Protection 2006*.

It should be noted that the provisions of the aforementioned Asset Protection Zones will not expose any future dwelling to a Bushfire Attack Level higher than BAL 40 (i.e. Flame Zone).



10m APZ

Photograph 06: View east along the southern boundary of the subject site



Existing  
access drive  
to  
neighbouring  
dwelling

50 metre  
creek  
buffer

Photograph 07: View north from within the subject site of the existing eastern APZ

## 7.06 Fire Fighting Water Supply

The proposed development will include the installation of the hydrant network along the proposed new internal road network. Hydrant sizing, spacing and pressures must comply with Australian Standard 2419.1 – 2005.

## 7.07 Property Access – Fire Services & Evacuation

It is understood that the primary access to the subject site will be to the north via the neighbouring approved residential development. Future development within the southern neighbouring allotment consistent with the 'Moonee' Development Control Plan 2004 would also provide access to the south.

The subject site has street frontage to the Pacific Highway to the west.

The proposed development includes the construction of an internal road network. This internal road network must satisfy the requirements for Public Roads under section 4.1.3(1) of *Planning for Bush Fire Protection* 2006.

A review of the Proposed Subdivision Lot Layout' prepared by CivilTech Consulting Engineers, dwg no 1277-DR1, sheet 1 of 8 has found that some road specifications do not achieve the minimum carriageway widths for Public Roads as detailed in section 4.1.3(1) of *Planning for Bush Fire Protection* 2006.

The proposed Road 4 & 5 must be widened from 6 metres to 6.5 metres. All other internal roads within the subject site were found to achieve the minimum required carriageway for Public Roads as detailed in section 4.1.3(1) of *Planning for Bush Fire Protection* 2006.

Attending fire crews can access the hazards directly via the proposed internal road network and perimeter roads for hazard reduction or fire suppression activities.

It should be noted that the proposed development will improve the current access provisions to the neighbouring dwelling to the east of the subject site.

The proposed subdivision lot layout has been reviewed and compliance can be achieved.

## 8.0 Site & Bushfire Hazard Assessment

### 8.01 Planning for Bush Fire Protection - 2006

'Planning for Bush Fire Protection – 2006' (PBP) is applicable to those lands determined as being within a 'bushfire prone area' in accordance with a local Bushfire Prone Land Map as provided by the Rural Fire Service and Council.

The most appropriate method of determining site bushfire hazard under the terms of PBP is to consider the site in a singular form.

*Bushfire prone areas are defined as those areas;*

- *within or within 100m of high or medium bushfire hazards; or*
- *within or within 30m of low bushfire hazards.*

In this instance the subject site has been identified as being bushfire prone land therefore it is appropriate to apply PBP as follows:

#### North Eastern Aspect:

- a) Vegetation Structure Forest
- b) Slope 0 - 5 degrees down slope
- c) Required APZ to comply with Appendix 2 PBP 2006 is 20 metres
- d) Available APZ is  $\geq 20$  metres achieving the minimum requirement

#### Eastern Aspect:

- a) Vegetation Structure Forested Wetlands
- b) Slope 0 - 5 degrees down slope
- c) Required APZ to comply with Appendix 2 PBP 2006 is 20 metres
- d) Available APZ is  $\geq 20$  metres achieving the minimum requirement

#### Southern Aspect:

- a) Vegetation Structure Remnant
- b) Slope 0 - 5 degrees down slope
- c) Required APZ to comply with Appendix 2 PBP 2006 is 10 metres
- d) Available APZ is  $\geq 10$  metres achieving the minimum requirement

### 8.02 Australian Standard AS 3959 – 2009 'Construction of buildings in bushfire –prone areas'

Australian Standard 3959 – 2009 'Construction of buildings in bushfire-prone areas' provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ. The Australian Standard 3959 specifies construction standards for buildings within various Bushfire Attack Levels as determined by the *Planning for Bush Fire Protection – 2006* document. The NSW Rural Fire Service will not accept deemed to satisfy provisions for BAL Flame Zone and therefore have a NSW variation to the listed standard provisions of BAL FZ under AS3959 - 2009.



### 8.03 Correlation between bushfire impact and AS3959

Bushfire Attack Level	Maximum radiant heat impact (kW/m <sup>2</sup> )	Level of construction under AS3959-2009
Low		No special construction requirements
12.5	≤12.5	BAL - 12.5
19	12.6 to 19.0	BAL - 19
29	19.1 to 29.0	BAL - 29
40	29.1 to 40.0	BAL - 40
Flame Zone	>40.0	BAL FZ No deemed to satisfy provisions

### 8.04 Site Specific Bushfire Hazard Determination

All property development must be assessed on an individual basis as broad-brush approaches of documents such as PBP may not be applicable in every instance. The proposed development located at Lot 1 DP 130075 / Pacific Highway, Moonee Creek was assessed against the requirements of *Planning for Bush Fire Protection* 2006 noting the following:

- The hydrant system will be installed along the proposed internal road network in accordance with AS2419.1 – 2005.
- The proposed internal road network will comply with the requirements for Public Roads under section 4.1.3(1) of *Planning for Bush Fire Protection* 2006.
- The available building footprints achieve (and in most instances exceed) the minimum required Asset Protection Zones.
- No future dwelling will be in a Bushfire Attack Level higher than BAL 40.

### 8.05 Viable Construction Method

The objectives of *Planning for Bush Fire Protection* – 2006 are for the protection of life including fire fighters. Provided these objectives can be met the construction of buildings is feasible and both the Rural Fire Service and Council should be in a position to consider such applications.

No new dwellings are proposed as part of this application.

An independent assessment will be required under s79BA of the *Environmental Planning and Assessment Act* 1997 at the time of any future application for the construction of a dwelling within the proposed allotments.

**It should be noted that the provisions of the Asset Protection Zones as described herein will not expose any future dwelling to a Bushfire Attack Level higher than BAL 40 (i.e. Flame Zone).**

### 8.06 Risk Rating

In assessing the bushfire threat to the site and its structures it is important to have a holistic approach and assess the risk of a bushfire occurring and impacting the subject site. It is also important to include the risk the site poses to neighbouring properties.



Image 06 is an overview of risk to any future dwellings. This model takes a holistic approach and assesses the risk of a bushfire occurring and impacting the site. This risk level can be reduced by either an increase in preparedness by the owners/occupants of the dwellings (e.g. good house keeping, maintained lawns & bushfire awareness) and/or hazard reduction activities by local fire agencies. Alternatively this risk level can increase if the preparedness level decreases and/or hazard reduction activities are neglected for the area.

The below matrix is for risk only, it does not reflect the Bushfire Attack Level determined within PBP 2006.

Consequence Likelihood	Minor	Moderate	Major	Catastrophic
Almost certain	Medium	High	Extreme	Extreme
Likely	Low	Medium	High	Extreme
Possible	Insignificant	Low	Medium	High
Unlikely	Insignificant	Insignificant	Low	Medium

Image 06: Risk Matrix

## 9.0 Recommendations

---

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bush Fire Protection* – 2006 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas' - 2009. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

### General

1. That the proposed development complies with the 'Proposed Subdivision Lot Layout' prepared by CivilTech Consulting Engineers, dwg no 1277-DR1, sheet 1 of 8.

### Asset Protection Zones

2. That any new landscaping within the residential allotments is to comply with Appendix 5 'Landscaping and Property Maintenance' under *Planning for Bushfire Protection* 2006.
3. That a minimum 10 metre Asset Protection Zone be provided from the southern boundary to any future dwelling.

### Construction

N/A

### Access

4. That the proposed Roads 4 & 5 be widened from 6 metres to 6.5 metres.
5. That all new internal roads comply with the requirements for Public Roads as detailed within section 4.1.3(1) of *Planning for Bush Fire Protection* 2006.

### Water Supply

6. That the new hydrant sizing, spacing and pressures must comply with AS2419.1 – 2005.

## 10.0 Conclusion

---

Given that the property is deemed bushfire prone under Coffs Harbour Council's Bushfire Prone Land Map any development would need to meet the requirements of *Planning for Bush Fire Protection* 2006 and of the construction requirements of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009 if any are applicable. The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject site.

The overall concept planning proposal relates to the residential subdivision of Lot 1 in DP 1097743 and Lot 6 in DP 252223 / Pacific Highway, Moonee Beach. This assessment concentrates on the residential subdivision of Lot 1 in DP 1097743, being the northern allotment. Further investigation and assessment is required on the residential subdivision of Lot 6 in DP 252223.

The development proposal relates to the subdivision of one (1) existing allotment located at Lot 1 in DP 1097743 / Pacific Highway, Moonee Beach into one hundred and one (101) new residential allotments, one (1) public reserve and one (1) drainage reserve. The proposed development will also include all associated infrastructure, including roadways, footpaths, and services.

This type of development is considered integrated under section 100B of the Rural Fires Act 1997. As the matter is a Part 3a application the NSW Department of Planning will refer the application to the NSW Rural Fire Service during their assessment process.

The vegetation identified as being a potential bushfire hazard is located to the northeast within a yet to be rehabilitated wildlife corridor within the northern approved development, east within a retained public reserve and drainage reserve and south within the southern allotment (Lot 6 in DP 252223).

The minimum required Asset Protection Zones (APZ) were determined from Table A2.5 of *Planning for Bush Fire Protection* 2006 to be 20 metres to the northeast and east and 10 metres to the south. All proposed residential allotments can accommodate a building footprint achieving (and in most instances exceeding) the minimum required Asset Protection Zones for Residential Subdivisions.

No new dwellings are proposed as part of this application. An independent assessment will be required under s79BA of the *Environmental Planning and Assessment Act* 1997 at the time of any future application for the construction of a dwelling within the proposed allotments. It should be noted that the provisions of the Asset Protection Zones as described herein will not expose any future dwelling to a Bushfire Attack Level higher than BAL 40 (i.e. Flame Zone).

The proposed access provisions and water supply must satisfy the requirements of section 4.1.3 under *Planning for Bush Fire Protection* 2006. The proposed subdivision lot layout has been reviewed and compliance can be achieved.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is my opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development and also satisfy both the Rural Fire Service's concerns and those of the NSW Department of Planning.

I am therefore in support of the application.

Should you have any enquiries regarding this project please contact me at our office.

Prepared by  
Building Code & Bushfire Hazard Solutions



**Stuart McMonnies**

G. D. Design in Bushfire Prone Areas.  
 Certificate IV Fire Technology  
 Fire Protection Association of Australia BPAD – A Certified Practitioner  
 Certification number – BPD – PA-09400

Reviewed by  
Building Code & Bushfire Hazard Solutions P/L



**Wayne Tucker**

G. D. Design in Bushfire Prone Areas.  
 Certificate IV Fire Technology  
 Ass Dip Applied Science  
 Manager - Bushfire Section  
 Fire Protection Association of Australia BPAD – A Certified Practitioner  
 Certification number – BPD – PA-09399

Disclaimer:

Quote from *Planning for Bush Fire Protection* 2006, 'Any representation, statement opinion, or advice expressed or implied in this publication is made in good faith on the basis that the State of New South Wales, the NSW Rural Fire Service, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice referred to above..'

Similarly the interpretations and opinions provided by Building Code and Bushfire Hazard Solutions in regard to bushfire protection are also given in the same good faith.

## 11.0 Annexure 01

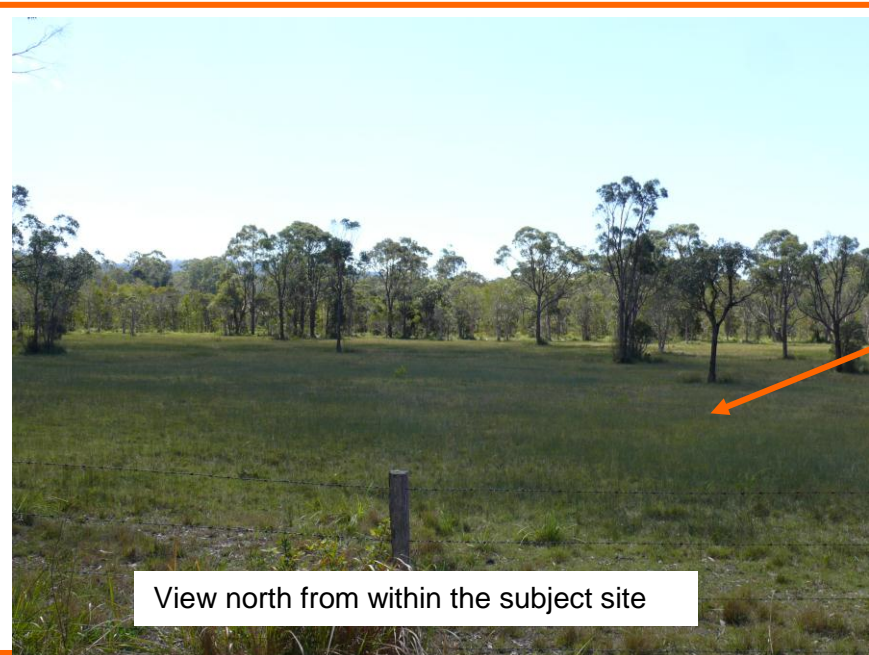
### List of Referenced Documents

- a) *Environmental Planning and Assessment Act* 1979
- b) *Rural Fires Act* 1997 as amended
- c) '*Planning for Bush Fire Protection*' 2006 - NSW Rural Fire Services & Planning NSW
- d) 'Construction of buildings in bushfire prone areas' - AS 3959 – 2009 (as - amended) – Standards Australia
- e) 'Coffs Harbour Council's Bushfire Prone Land Map'
- f) 'Moonee' Development Control Plan 2004
- g) Landscape Concept Plan & Open Space Management Plan prepared by The Rothwell Boys Pty Ltd, for The Glades at Moonee Beach – Volume 3, dated June 2007
- h) 'Proposed Subdivision Lot Layout' prepared by CivilTech Consulting Engineers, dwg no 1277-DR1, sheet 1 of 8
- i) Acknowledgements to:
  - UBD Directories
  - NSW Department of Lands – SixViewer
  - Street-directory.com.au

## Attachments

Attachment 01:                      Photographic Montage





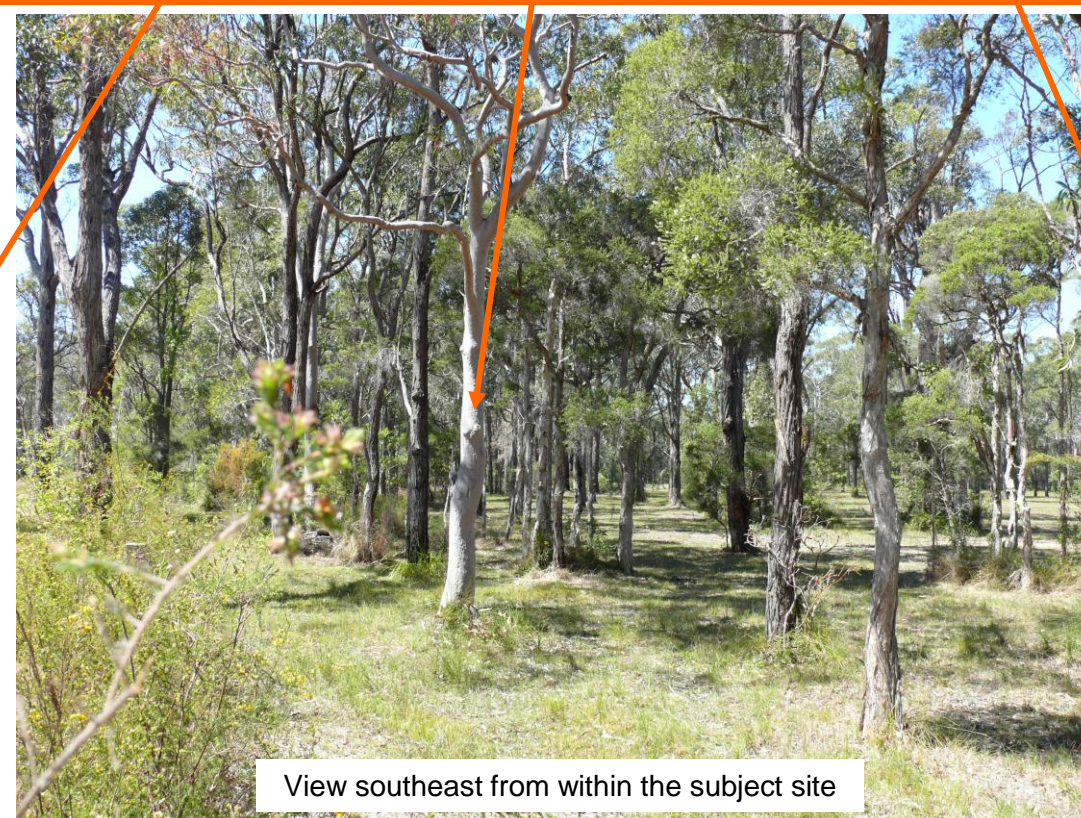
View north from within the subject site



View north from within the subject site



View west from within the subject site



View southeast from within the subject site



View south from within the neighbouring allotment



View south from within the subject site



View west from within the subject site



Aerial view and photographic montage of  
**Lot 1 Pacific Highway,**  
**Moonee Beach**  
 October 2012 / Our Ref: 130075