



**BUSHFIRE MITIGATION REPORT
FM 5964
for
ELEVATE DEVELOPMENT SOLUTIONS
at
17 COURTNEY DRIVE
UPPER COOMERA**

**PREPARED BY
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6/10/2022**



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DISCLAIMER

Experienced fire fighters with extensive knowledge of building have prepared this Report. Their practical knowledge of fire fighting has been backed up by academic study.

However, fire is an element of nature. Small natural occurrences can disastrously affect the outcome of the best planning. Human actions similarly can have disastrous results.

Whilst every care has been taken in the formulation of this management report, there can be no guarantee that even the strictest adherence to its recommendations can guarantee safety of life and property.

The authors of this report accept no responsibility for any damage to life or property caused by fire or any other cause to persons using land or structures, which could in any way be construed to be the subject of this report.

The report has been commissioned as the land falls within an area deemed a fire risk by the local authority.

As such, it must be recognized that structures upon this land and those using the structures could be deemed at risk.

Logo by LogoInstant

Very Important Note:

This report is valid for the following periods;

- a) A maximum time of 5 years from date of preparation.
- b) The currency of the legislation referred to in Section 1 Report Brief
- c) Changes to any legislation generally that may impact on the report outcomes.
- d) Changes to vegetation, both on and off site, which may impact on the results of this report
- e) Any other changes that may impact on the report in any manner.

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ANY SUCH USE WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

THIS REPORT RELIES ON THE AS 3959 FOR THE CALCULATION OF CONSTRUCTION LEVELS.

ANY POSSIBLE ERRORS IN THE STANDARD ARE NOT THE RESPONSIBILITY OF THE AUTHOR.

THIS REPORT IS ONLY TO BE USED AND DISTRIBUTED AS A COMPLETE REPORT CONTAINING AS A MINIMUM SECTIONS 1,2,3,4 AND 5 (SECTIONS 5.1 & 5.2)

THIS REPORT IS NOT TO BE AMENDED IN ANY WAY BY ANY PERSONS OTHER THAN THE ORIGINAL AUTHOR.

THIS REPORT IS ONLY TO BE USED FOR PROJECTS IDENTIFIED IN THE REPORT AND REPRESENTED ON THE SITE PLAN ACCOMPANYING THE REPORT.

INTRODUCTION

This Fire Management Report has been written for the benefit of future occupants of this proposed site and developed in accordance with the requirements of;

- The Gold Coast City Council Town Plan,
- SPP 07/2017.
- Queensland Planning Act 2016
- “Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest” Natural Hazards , Risk and Resilience-Bushfire” published by QFES and Queensland Government.
- Natural hazards, risk and resilience-Bushfire State Planning Policy-state interest guidance material published by Queensland Government
- Bushfire Resilient Building Guidance for Queensland Homes published by CSIRO and Queensland Government
- The National Construction Code
- Queensland Bushfire Plan published by Queensland Government prepared by QFES.
- Australian Standard AS3959,
- International Fire Safety Engineering Guidelines

The report has been prepared as supporting documentation for a Material Change of Use (Building) /Reconfiguration of Lot Application.

- 1.1. Address:**
17 Courtney Drive
Upper Coomera
- 1.2. Local Authority**
Gold Coast City Council
- 1.3. R.P.D.**
Lot 182 on RP156422
- 1.4. Site area**
33410m²
- 1.5. Responsible Fire Authority**
Rural Fire Service Queensland via the rural fire brigade for rural fires and QFES for Structural fires.
- 1.6. Potential Bushfire Hazard Rating.**
The hazard rating maps prepared for the Council show the ratings on this property ranging from Low to Medium and being in a bushfire hazard buffer area
The draft risk rating maps prepared for the State Government show the ratings on this property ranging from Low to Medium and being in a bushfire hazard buffer area
- 1.7. Land tenure**
Freehold
- 1.8. Adjoining owners are:**
Freehold
- 1.9. Current Land Use:**
Rural Residential
- 1.10. Fire danger Index**
FDI 40 (nominated by AS 3959)
- 1.11. Topography**
Rolling Hills
- 1.12. Predominant Wind Direction**
The predominate wind direction is from the South East. In times of severe fire weather the wind direction will be from the North West. The Topography will create microclimates, which will cause swirling, which will modify the apparent wind direction according to primary direction and velocity
- 1.13. Slope**
upslope
- 1.14. Aspect**
South East

- 1.15. Fuel Type**
Grassy Eucalypt and Acacia Forest
Native Grasslands ungrazed
Slashed grass
- 1.16. Threat Vegetation Location**
Subject and adjoining sites
- 1.17. Fire History**
There is no evidence of a recent fire event
- 1.18. Location of Access Tracks**
The site is served by a sealed road system
- 1.19. Location of Fire Breaks**
There are no formal firebreaks
- 1.20. Location of existing firefighting Infrastructure**
There is no formal firefighting infrastructure
- 1.21. Historical and Cultural Sites**
There is no evidence of Historical and Cultural sites on the property.
- 1.22. Koala Habitat**
The site is in a Koala Habitat Area
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2. SITE AND HAZARD ASSESSMENT

2.1. Discussion with Responsible Fire Authority

The fire management report has not been discussed with the First Officer of the Rural Fire Brigade.

2.2. Vegetation Types

The vegetation type predominate to this site is as scheduled below. Note that under SPP 2017, differing vegetation types are used. This report does not refer to these but does take into account draft mapping prepared under different methodology and published by the State Government.

VEGETATION TYPE	AS 3959 CATEGORY	COMMENTS
Grassy Eucalypt and acacia forest	B	For the purposes of construction level assessment under AS 3959, woodland is the appropriate vegetation type to use due to fuel load.
Native Grasslands (ungrazed), open woodlands,	G	Note that where canopy cover is less than 30% AS 3959 uses the surface fuel load. State variation (Qld) to Section 3.10.5.0 of Volume 2 Building Code of Australia states that <i>"The requirements of (a) do not apply when the classified vegetation is Group F rainforest (excluding wet sclerophyll forest types), mangrove communities and grasslands under 300mm high."</i> This is interpreted as stating that where these communities exist within a Designated Bushfire Prone Area construction in accordance with AS 3959 is not required in relation to this vegetation.
Grazed grasslands, slashed grass	Low Threat Or G	Note that where grassland is maintained below 100mm it is regarded as Low Threat by AS 3959. State variation (Qld) to Section 3.7.4.0 of Volume 2 Building Code of Australia states that <i>"The requirements of (a) do not apply when the classified vegetation is Group F rainforest (excluding wet sclerophyll forest types), mangrove communities and grasslands under 300mm high."</i> This is interpreted as stating that where these communities exist within a Designated Bushfire Prone Area construction in accordance with AS 3959 is not required in relation to this vegetation.

2.3. Potential Bushfire Hazard Rating.

Desktop study, site inspection and assessment against the State Planning Policy Mapping Methodology generally confirms the intent of both Local Government and State Mapping in that the area is in a Potential Bushfire Hazard Area, and the relevant aspects required for Town Planning and Building are to be addressed.

2.4. Building Construction

All buildings situated within the site are in a Designated Risk Area. There is a requirement that certain Buildings within this area be constructed in accordance with the National Construction Code/Building Code of Australia, which refers to either the Australian Standard for Construction in Bushfire Prone Areas (AS 3959) or NASH Standard-Steel Framed Construction in Bushfire Areas as Deemed to Satisfy Solutions.

The levels determined effect the types and usage of materials in relation to the type of Bushfire Attack, which may occur as assessed under the Standard. The Level of Bushfire Attack is assessed taking the vegetation types, slope, and distance from vegetation into account. The most common elements affected are Windows and flyscreening, with some restrictions on cladding and timber types. A comprehensive breakdown is available in either the National Construction Code, the Australian Standard for Construction in Bushfire Prone Areas or NASH Standard-Steel Framed Construction in Bushfire Areas.

Extracts of these documents are not provided due to copyright reasons. Full details can be obtained from your building designer or certifier.

Note that the Building Code of Australia only requires Classes 1,2 and 3 buildings and Class 10a building associated with those buildings to comply with the bushfire provisions of the NCC /BCA.

Building Class requirements AS 3959

2.4.1.	FDI	40
2.4.2.	Vegetation Classification	B
2.4.3.	Land slope	Upslope

Distance of building from Predominate vegetation class (m) (Vegetation Management Zone)	Primary Bushfire Attack Level
100-	BAL-LOW

Note:

The levels shown above are based on Method 1 of the AS 3959.

The Vegetation management zone is described as all areas managed to a Low Threat condition encompassed by the distance between the building and threat vegetation from which construction levels are taken.

The distances shown above are horizontal distances, not measured along the slope.

2.5. Ecological Requirements.

The site is in a Koala Habitat Area and there is specific restriction in relation to vegetation management.

Note;

The Category of Bushfire Attack referred to in the Australian Standard is different to the Hazard/Risk area referred to above.

Extensive modification of the existing vegetation types including that on adjoining sites could result in a change of Category of Bushfire Attack and therefore variation in the Level of construction required.

It is the responsibility of the owner of each individual site to ensure that plantings subsequent to their occupation of the site do not reduce the safety of their buildings in a manner, which could require a higher level of Construction than that originally utilised

3. RISK MANAGEMENT PLAN

3.1. Agencies / Persons Responsible

The responsible Fire Authority is the Rural Fire Service Queensland through the Rural Fire Brigade being responsible for Bush Fires and the Queensland Fire and Emergency Service being responsible for Structural Fires

It is the responsibility of the Owners of the properties to ensure that the relevant measures required by this Management Report are in place prior to inspection by the Council and the Building Certifier and to ensure that those measures are in place prior to the occupation of any buildings, which are the subject of this report. It is the responsibility of Council and Building Certifiers to ensure that relevant measures within their responsibility are in place prior to the issuance of any certification.

3.2. Bushfire Safety Objective

The objective of this report is to minimise potential risk to life and property by protecting the buildings from the effects of bushfire.

3.3. Aims

The aims to achieve this objective are to mitigate the effect of the bushfire attack mechanisms of: -

- 3.3.1. Radiant Heat
- 3.3.2. Direct Flame Contact
- 3.3.3. Wind
- 3.3.4. Ember Attack
- 3.3.5. Smoke

3.4. Functional Requirements

The functional requirements to achieve this objective are: -

- 3.4.1. The provision of safe conditions for fire fighters
- 3.4.2. The provision of safe conditions for residents
- 3.4.3. Ensure adequate and safe access to and from the property
- 3.4.4. Ensure adequate and safe water supply to the property and the establishment of firefighting water reserves
- 3.4.5. Provide a system of fire breaks and trails to protect the building component
- 3.4.6. Remove vegetation that is considered dangerous and a hazard in Fire Conditions
- 3.4.7. To ascertain the required standard of construction of the buildings in accordance with the requirements of the National Construction Code and the Australian Standard for Construction in Bushfire Prone Areas or the provision of a satisfactory alternative solution
- 3.4.8. Facilitate the return to "normalcy "

3.5. Proposed Fire Fighting Infrastructure

- 3.5.1. The proposed building is to always have a minimum dedicated firefighting water reserve of 10,000l.
- 3.5.2. This reserve can be in the form of a Tank and must be in place at the time of completion of the new Building.
- 3.5.3. The tank must be located a minimum of 9m from the nearest building, have flat standing area immediately adjacent, and be no further than 20m from the building and be located between the building and the road.
- 3.5.4. The tank storage can comprise part of a larger tank providing the normal outlet is positioned to reserve 10,000l in the bottom for firefighting purposes only. Provide a 50mm male cam lock fitting outlet with isolating valve for fire brigade purposes only.
- 3.5.5. The tank is to be of non -combustible materials.

3.6. Construct a Fire Trail/Emergency Access track

- 3.6.1. A new vehicular fire trail is to be established to and around the building envelopes. This trail is to comply fully with the standards as set out in this Report
- 3.6.2. All Building Envelopes are to have a 6m wide defensible space, generally complying with the requirements (except for width) of the vehicular fire trail requirements to the whole perimeter. This space is not to be obstructed by structures or landscaping.
- 3.6.3. The road access and all boundary crossings through fences to these trails can be either a gate or a fence cutting point consisting of strainer posts 3.6m apart with fencing wire between
- 3.6.4. The location shown is indicative only and can be modified to suit terrain and vegetation.

3.7. Minimum Vehicular Fire Trail Standards

The Fire/Maintenance trail has: -

- 3.7.1. A minimum width of 6m cleared of midstorey vegetation.
- 3.7.2. A minimum trafficable width of 4m.
- 3.7.3. A minimum height of 4.8m
- 3.7.4. A maximum gradient of 16% or one that has been satisfactorily test driven with the type of Fire Service Appliance that would be utilised on the site during a fire event with adequate drainage to prevent soil erosion and minimise ongoing trail maintenance
- 3.7.5. Provided in accordance with "Fire Hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial Lots" published by QFES and Qld Government.

3.8. Vegetation management

- 3.8.1. All grass and existing mid storey vegetation within the proposed Lot 2 shall be always kept to a maximum of 100mm or be of less flammable or rain forest species.
- 3.8.2. Existing non rainforest trees within this area are to be reduced to give a noncontinuous canopy cover between trees with a total cover of less than 30% of the area.
- 3.8.3. No trees that are of protected size are required to be removed to comply with the above requirements
- 3.8.4. The above vegetation management scenario will produce a Low Threat scenario like “maintained public reserves and parklands” as cited in section 2.2.3.2(f) of AS 3959.
- 3.8.5. The width of the vegetation management zone noted above can be used to calculate the required BAL.
- 3.8.6. All other grass within a further 15 m or to the boundary, whichever is lesser shall be kept to a maximum of 200 mm at all times, with a reduction to 100mm during Fire Season.
- 3.8.7. All other grass in unforested areas to be kept to a maximum of 300 mm at all times by slashing and/or grazing to 100m from the building or the boundary, whichever is the minimum.
- 3.8.8. All dead and damaged timber to be removed from the building envelope and the surrounding areas indicated to be fuel reduced and removed from site.
- 3.8.9. Requirements noted above may be subject to State and Local Authority approval. Those approvals must be obtained prior to implementation of any of these measures.
- 3.8.10. Refer to Sections 14 and 19 of the Planning Act 2016 in relation to Local Authority Approval.
- 3.8.11. The management referred to above is regarded as “Essential Management “(necessary to remove or reduce the imminent risk that the vegetation poses of serious personal injury or damage to infrastructure” under the Sustainable Planning Regulation Schedule 24. It is recommended that the owner register any clearing work with www.dnrm.qld.gov.au, “Vegetation management notification form for self-assessable codes”.
- 3.8.12. This legislation is currently under review. It is the owner’s responsibility to make any necessary enquiries to ensure compliance with the current legislation with important amendments made in December 2019., as noted below:

Under changes to **Planning Regulation 2017 effective December 13, 2019**, permitted operational work includes the following:

Schedule 6, Part 3, Section 20A - Operational work for necessary firebreaks or fire management lines

Operational work that is clearing native vegetation if—

(a) the clearing is necessary for—

(i) establishing or maintaining a necessary firebreak to protect infrastructure, other than a fence, road or vehicular track, and the maximum width of the firebreak is equal to 1.5 times the height of the tallest vegetation next to the infrastructure, or 20m, whichever is the wider; or

(ii) establishing a necessary fire management line, and the maximum width of the clearing for the fire management line is 10m; and

(b) the clearing—

(i) is on freehold land; or

(ii) is on indigenous land; or

(iii) is on land leased under the Land Act 1994 for agriculture or grazing purposes; or

(iv) is on land leased under the Land Act 1994, other than for agriculture or grazing purposes, and is consistent with the purpose of the lease; or

(v) is on trust land under the Land Act 1994, other than indigenous land, is carried out, or allowed to be carried out, by the trustee and is consistent with achieving the purpose of the trust; or

(vi) is on unallocated State land and is carried out, or allowed to be carried out, by the chief executive of the department in which the Land Act 1994 is administered; or

(vii) is on land that is subject to a licence or permit under the Land Act 1994 and is carried out by the licensee or permittee.

As an example, with a height of the tallest vegetation being between 30 – 35m, the width of clearing would be calculated as between 45 – 52.5m.

Under Planning (Spit Master Plan and Other Matters) Amendment Regulation 2019 (Subordinate Legislation 2019 No.243) amends Schedule 6 Part 3 stating that “Development local categorising instrument is prohibited from stating if the above operational work is assessable development”.

Under Schedule 7 Part 3 this is placed in context, stating that *the above operational work is accepted development.*

Note. The major fire threat to this building is from ember attack from fire in vegetation outside the control of the owner located on surrounding land. As such, there is little that the owner can do to manage this.

The management is a component of the Construction Level. Therefore, the Building Certifier must ensure that the management has occurred in accordance with this report before issuing final certification

Recent research (Project Vesta) indicates that tree canopy without mid storey and surface fuels forms an important filter for control of ember attack, which is responsible for in excess of 90% all bushfire related house fires.

3.9. Fencing

Fencing between houses should be of materials matching the requirements for external walls for the relevant level of construction of the subject house where within 6m of the house.

3.10. Effluent Disposal Areas

Where possible, effluent disposal shall be located on the downhill side of the building envelope and be maintained in a band with a minimum 6m width. Grass in this area should be kept to a maximum of 50mm and any landscaping should be of Less Flammable Vegetation

3.11. Fire Trail and Fire Break Maintenance

- 3.11.1. Proposed driveways are to be always kept in a condition suitable for 2wd Heavy Vehicles.
- 3.11.2. The fire trails are to be kept mowed to a maximum of 50mm at all times and to be kept in a manner suitable for 4wd Fire Vehicles and to the satisfaction of the Fire Brigade.

3.12. Building Construction

All construction is to be in accordance with National Construction Code/Building Code of Australia, which refers to either the Australian Standard for Construction in Bushfire Prone Areas (AS 3959) or NASH Standard-Steel Framed Construction in Bushfire Areas as Deemed to Satisfy Solutions. and the Level of construction assessed under "Site and Hazard Assessment."

The plans lodged for Building Certification are to be assessed on this basis by the Building Certifier. A final stage completion certificate (Form 21) issued by the Building Certifier is to be received prior to occupation of the building.
Buildings are not to be occupied until certification is received

Buildings are to be maintained in a manner that protects the integrity of the construction and building elements as outlined in this report

3.13. Street Numbering

Numbering is to be installed in accordance with the current Street Numbering System at time of completion of building.

3.14. Less Flammable Landscaping

Any new landscaping within the sites is to be Less Flammable, in accordance with the list enclosed as an Appendix at the rear of this Report, rainforest species, or cultivated gardens, and comply with the requirements of "Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest" Natural Hazards, Risk and Resilience-Bushfire" published by QFES and Queensland Government, and "Natural hazards, risk and resilience-Bushfire-Assessment Benchmark 5" which cite a maximum Fuel Load of 8t/ha for revegetation or rehabilitation within bushfire prone areas. "Bushfire Resilient Building Guidance for Queensland Homes" published by Qld State Government provides a schedule of species in Appendix E.

<https://www.gra.qld.gov.au/bushfireguideline>

3.15. Insurance

Failure to comply with this management report may have a detrimental effect upon the Insurance of the subject Buildings.

3.16. Emergency Response Procedures

In the event of Fire Emergency, assistance is to be obtained by dialling 000

- 3.16.1. The owner should read thoroughly the brochures contained and those recommended at the rear of this report. They contain valuable information that could assist in the saving of lives and property in a fire event!

3.17. Community Awareness Strategies

- 3.17.1. Each subsequent owner is to be provided with a copy of this Fire Management report with an alert placed on either Title or Council Rate searches that the Report is in existence and is to be made available to ensuing owners.

3.18. Administering Staff

It is the responsibility of the developers and owners to ensure compliance with this Report and the Town Plan, and to ensure that each of the new owners is provided with a copy of this report.

It is the responsibility of the Council and the Building Certifier to ensure that the relevant measures required by this management report are in place prior to the final completion stage inspection of any buildings on any sites which are the subject of this report as noted in Clause 3.1 of this report.

It is the responsibility of the ensuing owners of the properties to maintain the properties in the conditions outlined in this report.

4. FIRE MANAGEMENT ACTION SUMMARY AND SCHEDULE

DEVELOPMENT REQUIREMENTS	BUILDING REQUIREMENTS	MAINTENANCE
Provision of fire access trails All dead and damaged timber to be removed from the areas indicated to be mowed and removed from site	Buildings to comply with the National Construction Code/Building Code of Australia. No occupation until compliance with Standard and Management Report Emergency Fire Fighting supplies Of 10,000 litres Vehicle access to and around Building Site	Regular mowing and maintenance of the vegetation management areas as set out in this report. Drive and fire trail access to be kept clear and accessible to satisfaction of the Fire Brigade. Building materials are to be maintained in "as new "condition to preserve the integrity of the relevant materials.

5. APPENDICES

- 5.1. Form 15
- 5.2. Site Plans
- 5.3. Supporting Information:

Note. These items below are referenced for information purposes only and are not to be construed as being part of the management report

This information is generic and not provided for approval purposes.

It is only provided for end user knowledge

- 5.3.1. Planning Regulation Fact Sheet December 2019
- 5.3.2. Prepare. Act. Survive
- 5.3.3. Rural property Fire Management Guide 2010
- 5.3.4. Notes for Landholders
- 5.3.5. Bushfire Action Guide
- 5.3.6. Bushfire Safety in Urban Fringe Areas
- 5.3.7. Water + Power -Vital for Fire fighting
- 5.3.8. Less Flammable Vegetation
- 5.3.9. Fire Retardant Native Plants
- 5.3.10. Tree selection for Fire-Prone Areas
- 5.3.11. Bushfire Resilient Building Guidance for Queensland Homes Appendix E
- 5.3.12. First Draft (specifying timber in bush fire zones)
- 5.3.13. External water spray system
- 5.3.14. Fire Retardant Coating Solutions
- 5.3.15. Archicentre Bushfire Design Guide
- 5.3.16. Section 3.8 Sign Types - Fire Trail Signage of the GCCC Natural Areas Management Unit (Page 16) Signage Guidelines
- 5.3.17. Trail Number and Key Point signage
- 5.3.18. Bushfire Hydrant detail
- 5.3.19. Tank detail
- 5.3.20. Recycled Water for Firefighting
- 5.3.21. Sample Easement Document
- 5.3.22. Bushfire Windows and Shutters
- 5.3.23. A guide to retrofit your home for better protection from a bushfire.
- 5.3.24. FireFly BAL-FZ System
- 5.3.25. Bushfire Planning and Design Certification Scheme Update
- 5.3.26. Eaves Water System
- 5.3.27. Aussi Ember Guard
- 5.3.28. The Australian "False Alarm: the great rainforest fire that wasn't"
- 5.3.29. Hijacking Australian 2019 Bushfire Tragedies to Fearmonger Climate Change
- 5.3.30. Bushfires have been in Australia for over 60 million years

We also recommend that the landholder obtains and reads the following;

- 5.3.31. Bushfire Hazard Planning in Queensland
- 5.3.32. Protecting your home against Bushfire
- Both available from the Dept. of Local Government and Planning, and
- 5.3.33. Fire in Bushland Conservation
- Available from Queensland Heritage Trust.

- 5.3.34. Bushfire Resilient Building Guidance for Queensland Homes
- <https://www.qra.qld.gov.au/bushfireguideline>

Signed

Eldon Bottcher
Grad. Dip. DBPA (UWS) Dip. Arch. (QIT), Cert. R.F.M. (USQ), F.R.A.I.A., M.A.I.E.S. AIFireE
Architect
BPAD-L3 Practitioner



APPENDIX 5.1
FORM 15

Form 15—Compliance certificate for building design or specification

This form is to be used by an appointed competent person for the purposes of section 10 of the *Building Act 1975* and sections 73 and 77 of the *Building Regulation 2012* (Design-specification certificate) stating that an aspect of building work or specification will, if installed or carried out as stated in this form, comply with the building assessment provisions.

Additional explanatory information is included in the Appendix at the end of this form.

1. Property description This section need only be completed if details of street address and property description are applicable. E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable. The description must identify all land the subject of the application. The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice. If the plan is not registered by title, provide previous lot and plan details.	Street address (include no., street, suburb/locality and postcode) 17 Courtney Drive Upper Coomera Postcode Lot and plan details (attach list if necessary) Lot 182 on RP156422 In which local government area is the land situated? Gold Coast City Council
2. Description of component/s certified Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.	Work as required for bushfire mitigation purposes as set out in the Bushfire Management Report prepared by Eldon Bottcher Architect Pty Ltd including assessment of Construction Levels assessed under AS 3959.
3. Basis of certification Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.	Compliance with the Bushfire Management Report prepared by Eldon Bottcher Architect Pty Ltd No certification of components covered by The Building Act 1975, The building Code of Australia or AS 3959. Gold Coast City Council Town Plan Bushfire Management Constraint code.
4. Reference documentation Clearly identify any relevant documentation, e.g. numbered structural engineering plans.	Bushfire Management Report FM 5964

5. Building certifier reference number and building development application number**Building certifier reference number****Building development application number (if available)**

Not Available

6. Appointed Competent person details

Under Part 6 of the Building Regulation a person must be assessed as competent for the type of work (design -specification) by the relevant building certifier.

Name (in full)

Eldon John Bottcher

Company name (if applicable)

Eldon Bottcher Architect Pty Ltd

Contact person

Eldon Bottcher

Phone no. (business hours)

07 55920082

Mobile no.

0412434134

Fax no.**Email address**

bushfires@eb-a.com.au

Postal address

P.O.Box 3606

Robina Town Centre

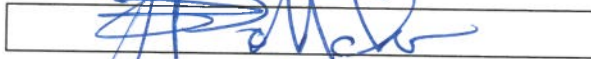
Postcode 4230**Licence Class or registration type (if applicable)****Licence or registration number (if applicable)**

Reg Architect Qld 1325

FPA Australia BPAD Level 3 practitioner 16935

7. Signature of appointed competent person

This certificate must be signed by the individual assessed by the building certifier as competent to give design-specification help.

Signature**Date**

6 October 22

LOCAL GOVERNMENT USE ONLY**Date received****Reference Number/s**

**APPENDIX 5.2
SITE PLANS**

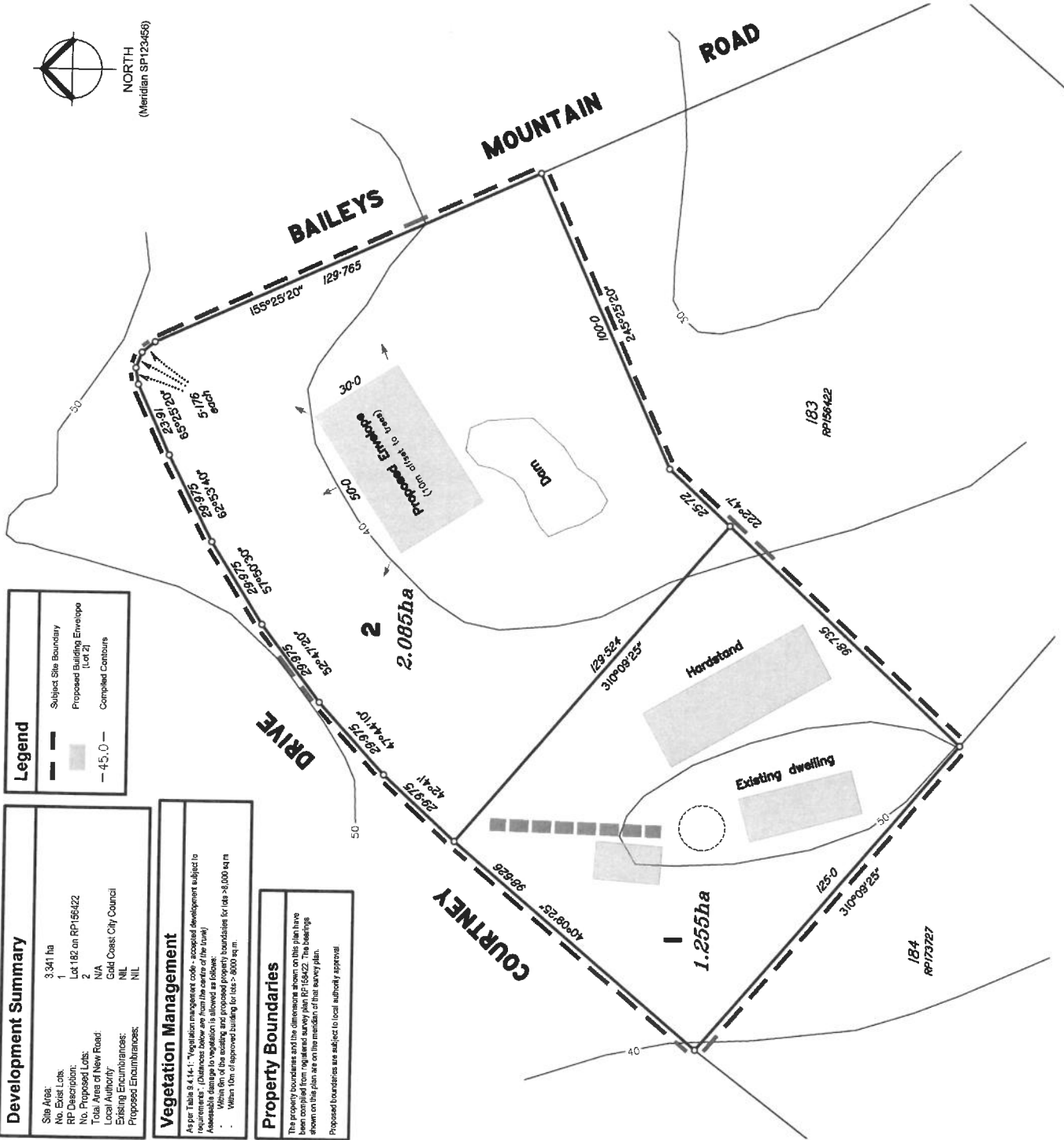
Revision:	Notes:
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1:1250 @ A3
0 12.5 25 37.5m
1:1250 @ A3
(Before Reduction)

Client: Elevate Development Solutions

Contours and improvements plotted from Queensland Globe

Contours shown are indicative only and have been compiled from Queensland Globe.



APPENDIX 5.3 SUPPORTING INFORMATION

(NOTE: SOME OF THIS INFORMATION IS GENERIC AND NOT PROVIDED FOR APPROVAL PURPOSES. IT IS ONLY PROVIDED FOR END USER KNOWLEDGE)

6. PROFILES

ELDON BOTTCHER

EDUCATION AND QUALIFICATIONS

Graduate Diploma in Design in Bushfire Prone Areas
University of Western Sydney
Diploma in Architecture
Queensland Institute of Technology
Certificate of Rural Fire Management
University of Southern Queensland
Registered Architect
Queensland
A+ Architect
Australian Institute of Architects
FPA Australia Certified Practitioner (BPAD-Level 3-16935)
Bushfire Planning and Design (BPAD-LEVEL 3),
Alternate Solutions & DTS

PROFESSIONAL MEMBERSHIPS

Fellow
Australian Institute of Architects
Member
Australian Institute of Emergency Services
Member
Australian Institute of Engineers Society of Fire Safety
Member
Queensland Environmental Law Association.
Member Board of Experts
Bushfire Building Council of Australia
Associate Member
Institution of Fire Engineers
Corporate Member
Fire Protection Association of Australia

PROFESSIONAL EXPERIENCE

Director
Eldon Bottcher Architect Pty Ltd since 1978
Bushfire Assessment and Planning Consultant since 1998
Group Officer
Albert Rural Fire Brigades Group
Queensland Fire and Rescue Service
Group Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service
Group Officer
South East Regional Support Group
Queensland Fire and Rescue Service
Planning Officer
Gold Coast Rural Fire Brigades Group
Queensland Fire and Rescue Service
Member Practice Committee AIA Qld Chapter
AIA delegate to Building Industry and Research Consultation Panel on Bushfire Hazard advising Queensland State Bushfire Committee
BBCA representation to Australian Standards Committee FP20 (AS 3959 & AS 5414)
Life Member
Guanaba Rural Fire Brigade
Member
Clagiraba Rural Fire Brigade

OTHER BUSHFIRE RELATED COURSES AND TRAINING

I.C.S./AIIIMS (40 hr. course) in Incident Command Systems
Certificate 4 (Workplace Training and Assessment)
RFSQ Level 1
RFSQ Level 2 (Officer)
RFSQ Fire Management 1
RFSQ Crew Leader
Certificate II in Public Safety (Firefighting Operations)
Fire Weather 1
QELA Expert Witness Workshop 2020

BUSHFIRE RELATED AWARDS

National Planning Award
State Planning Award
Planning Institute of Australia
Gold Coast Bushfire Management Strategy
(Co-Initiator and Member of Preparation Committee)

Australian Government
National Medal
Long and Distinguished Service to Fire fighting
Queensland Fire and Rescue Service
Diligent and Ethical Service Medal + Clasp
Service to Fire fighting

Queensland Government
Australia Day Medallion
Services to Rural Fire Fighting
Queensland Government
Year of the Volunteer Medallion
Services to Fire fighting
UDIA
Best Consultancy Team Award in 2007.

SERVICES OFFERED

Bushfire management Reports
Bushfire Safety Engineering
Bushfire Planning and Design
Bushfire Hazard Assessment
Alternative Solutions
Expert Witnessing
(See Planning and Environment Court of Queensland Determination
File No. BD 624 of 2005 sections 28 to 35)
Continuing Professional Development Lectures
Tertiary Education Lectures and Tutorials
Town Planning Bushfire Codes for Local Authorities
Bushfire Burn Planning
General consultancy relating to all aspects of Bushfire