



Bushfire Hazard Solutions

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Memo

To: Superintendent Laurence McCoy, Acting Director – Built & Natural Environment –
NSW Rural Fire Service

From: Stuart McMonnies – Director / Manager Bushfire Section, Building Code &
Bushfire Hazard Solutions

Email: laurence.mccoy@rfs.nsw.gov.au

Date: 31 July 2025

Subject: NSW Rural Fire Service – Request for Information (3 July 2025)

Address: Pleasure Point Road, Pleasure Point

RFS Ref: DA20241028004481-S38-1

The NSW Rural Fire Service have issued a further Request for Information (**RFI**) in relation to the above matter (DA20241028004481-S38-1, dated 3 July 2025).

This request proceeds an earlier RFI (dated 5 December 2024) which Building Code and Bushfire Hazard Solutions Pty Ltd (**BCBHS**) issued a direct response (dated 10 April 2024) and, due to a proposal amendment, an updated Bushfire Assessment Report (dated 12 June 2025).

The latest RFI does not raise any technical or merit issues with the aim and objectives or Chapter 5 'Residential and Rural Residential Subdivisions' of Planning for Bush Fire Protection 2019 (**PBP**).

It is therefore reasonably assumed that the matters raised in RFI dated 5 December 2025 relating to the specific objectives of Section 5.2 of PBP and management of the foreshore park along Georges River have been adequately addressed with the additional material.

The remaining item relates to a 'recommendation' that a bush fire risk assessment addressing the landscape risk in accordance with the aim and objectives, and the strategic principles outlined in Chapter 4 'Strategic Planning' of PBP.

As described in PBP (p33) 'The strategic planning phase includes state-level planning, regional planning, LEPs, DCPs and Masterplans or Precinct Plans.'

Legislative Framework:

The development proposal relates to the subdivision of two existing allotments (zoned R2: Low Density Residential, C3: Environmental Management and RE1: Public Recreation) known as Pleasure Point Road, Pleasure Point (Lot 1 DP 875804 and Lot 2 DP 817692) for residential purposes.

The proposed development is a Concept Development Application, with Stage 1 comprising Substages 1 - 7 for which development consent is sought. Stage 2 comprising the remaining Substages 8 and 9 will be the subject of a future development application.

Liverpool City Council's Bushfire Prone Land Map identifies the property as containing Category 3 Vegetation and the Vegetation Buffer, therefore the subject site is considered 'bushfire prone'.

The development relates to the subdivision of bushfire prone land which can be lawfully used for residential purposes and is therefore classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act 1979*.

The development is captured under section 100B of the *Rural Fires Act 1997* and must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service.

Section 45 of the *Rural Fires Regulation 2022* sets out the relevant matters that must be considered when assessing a bushfire safety authority and a reproduced (with emphasis added) below:

- (1) *For the purposes of the Act, section 100B(4), an application for a bush fire safety authority must be made in writing.*
- (2) *An application for a bush fire safety authority must include the following—*
 - (a) *a description, including the address, of the property on which the development the subject of the application is proposed to be carried out,*
 - (b) *a classification of the vegetation on and surrounding the property, out to a distance of 140 metres from the boundaries of the property, in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection,*
 - (c) *an assessment of the slope of the land on and surrounding the property, out to a distance of 100 metres from the boundaries of the property,*
 - (d) *identification of significant environmental features on the property,*
 - (e) *the details of a threatened species or threatened ecological community under the [Biodiversity Conservation Act 2016](#) that the applicant knows to exist on the property,*
 - (f) *the details and location of an Aboriginal object or place, within the meaning of the [National Parks and Wildlife Act 1974](#), that the applicant knows to be situated on the property,*
 - (g) *a bush fire assessment for the proposed development, including the methodology used in the assessment, that addresses the following matters—*
 - (i) *the extent to which the development is to provide for setbacks, including asset protection zones,*
 - (ii) *the siting and adequacy of water supplies for fire fighting,*
 - (iii) *the capacity of nearby public roads to handle increased volumes of traffic when a bush fire emergency occurs,*
 - (iv) *whether or not nearby public roads that link with the fire trail network have two-way access,*
 - (v) *the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response,*
 - (vi) *the adequacy of bush fire maintenance plans and fire emergency procedures for the development site,*

- (vii) the construction standards to be used for building elements in the development,
- (viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development,
- (ix) registered fire trails on the property,

(h) an assessment of the extent to which the proposed development conforms with or deviates from Planning for Bush Fire Protection.

(3) An application for a bush fire safety authority must also be accompanied by the prescribed information if—

- (a) the proposed development is subdivision for the purposes of dwelling houses, dual occupancies or secondary dwellings on property in an urban release area, and
- (b) the application includes a request by the applicant that the Commissioner, when deciding the application, considers whether it would be appropriate for the erection of the dwelling houses, dual occupancies or secondary dwellings concerned to be excluded from the application of the [Environmental Planning and Assessment Act 1979](#), section 4.14.

(4) In this section—

prescribed information means the following—

(a) a plan of subdivision that shows—

- (i) the bush fire attack levels that will apply to the property on completion of clearing of vegetation proposed to be carried out as part of subdivision work, within the meaning of the [Environmental Planning and Assessment Act 1979](#), and
- (ii) proposed setbacks of buildings that may in future be erected on the property, including asset protection zones, and

(b) other information about the proposed development that the Commissioner may require.

Note—

More information about bush fire attack levels, including the flame zone, can be found in Planning for Bush Fire Protection, Table A1.7.

urban release area has the same meaning as in the [Environmental Planning and Assessment Regulation 2021](#), section 270.

dual occupancy, dwelling house and secondary dwelling have the same meanings as in the standard instrument prescribed by the [Standard Instrument \(Local Environmental Plans\) Order 2006](#).

Section 8.05 of the submitted Bushfire Assessment Report (dated 12 June 2025) addresses sections 2(a-h) inclusive.

In relation to the extent to which the proposed development conforms with or deviates from Planning for Bush Fire Protection the relevant requirements must first be established.

As outlined in section 1.4 'How to use the document' of PBP all development on Bush Fire Prone Land must satisfy the aim and objectives of PBP. The aim and objectives of PBP have been addressed in section 8.04 of the submitted Bushfire Assessment Report (dated 12 June 2025).

In addition to the aim and objectives the performance criteria and acceptable solutions are shown for each specified development type in Chapters 5-8.

Chapter 2 'Framework' of PBP is used to establish the type of application, which are listed in Figure 1.5 (Step 3) as:

- | | |
|---|------------------------------------|
| 1. Planning proposal. | 4. Complying Development. |
| 2. Development Control Plan amendment, state significant infrastructure (SSI) or state significant development (SSD). | 5. SFPP development. |
| 3. Residential or rural residential subdivision. | 6. Residential infill development. |
| | 7. Other development. |

In this instance the subject development application relates to a Residential Subdivision.

As the proposal relates to a residential subdivision in addition to the aim and objectives detailed in Chapter 1 'Introduction' the proposal must satisfy the specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

The specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP have been addressed in section 8.0 'Bushfire Protection Measures' of the submitted Bushfire Assessment Report (dated 12 June 2025).

As previously mentioned, the latest RFI does not raise any technical or merit issues with the aim and objectives or Chapter 5 of PBP.

It can therefore be reasonably assumed that the proposal adequately demonstrates compliance with the aim and objectives detailed in Chapter 1 'Introduction' and the specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

The application does not relate to state-level planning, regional planning, LEPs, DCPs, Masterplans or Precinct Plans and subsequently Chapter 4 'Strategic Planning' is not applicable.

NSW RFS RFI (3 July 2025):

The RFI dated 3 July 2025 includes the following statement:

A piecemeal approach of subdividing land for residential density is not considered suitable given the high bush fire risk and access constraints, posing significant evacuation challenges for residents and fire fighters.

Firstly, the staging of larger scale subdivisions is common practice and is acknowledged in section 3.2.1 of PBP. The submitted Bushfire Assessment Report (dated 12 June 2025) has acknowledged this feature and applied commensurate Bushfire Protection Measures.

In relation to the reference of 'the high bush fire risk and access constraints' this is an unsubstantiated comment and one which was not raised during the Pre-DA consultation with NSW RFS.

As described in A2.8 'Pre-DA advice' of PBP (with emphasis added):

*The NSW RFS provides a pre-DA advice service as a means for proponents of development to seek information and **obtain clarity about the NSW RFS position on a proposal before a formal DA is lodged with the consent authority.***

On 7 March 2024 BCBHS lodged a Pre-DA application with the NSW RFS which sort information on a proposed access solution relating to the proposal. Prior to NSW RFS issuing their advice a supplementary submission was made by BCBHS on 14 May 2025 which expanded the requested information to include advice on the vegetation assessment.

On 24 June 2024 the NSW RFS issued their Pre-DA Advice Summary which included information on the vegetation assessment and access for the subject development.

Included in this advice was a comment that 'the single access and egress point between the northwest and southeast areas of the subject site should be positioned not to expose accessing and egressing vehicles to the bush fire interface'.

The access design was subsequently adjusted to respond to this comment.

The NSW RFS Pre-DA Advice Summary included no commentary on the 'high bush fire risk and access constraints' or a need to prepare a bush fire risk assessment addressing the landscape risk in accordance with the aim and objectives, and the strategic principles outlined in Chapter 4 'Strategic Planning' of PBP.

The most concerning item in the NSW RFS RFI (3 July 2025) is that while the existing land zoning of the subject site is acknowledged, it is given no weight, unless a strategic study pursuant to Chapter 4 of PBP is undertaken.

The fact that NSW RFS did not provide comment on any strategic bush fire study to support the current zoning appears to be the justification for this request.

This is the reality for most land zoning across NSW.

In my professional opinion the request for a bush fire risk assessment addressing the landscape risk in accordance with the aim and objectives, and the strategic principles outlined in Chapter 4 'Strategic Planning' of PBP is not procedurally correct and is an overreach.

We therefore respectfully request that the NSW RFS issue General Terms of Approval, under Division 4.8 of the *Environmental Planning and Assessment Act 1979*, and a Bush Fire Safety Authority, under section 100B of the *Rural Fires Act 1997*.

Prepared by
Building Code & Bushfire Hazard Solutions P/L



Stuart McMonnies

Director / Manager Bushfire Section
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9400



- Attachment 01: Pre-DA Advice Package (07/03/2024)
- Attachment 02: Pre-DA Advice Package (14/05/2024)
- Attachment 03: NSW RFS Pre-DA Advice Summary (24/06/2024)
- Attachment 04: NSW RFS RFI (05/12/2024)
- Attachment 05: BCBHS Response to RFI (10/04/2025)
- Attachment 06: BCBHS Bushfire Assessment Report (05/09/2025)
- Attachment 07: NSW RFS RFI (03/07/2025)



PRE-DA APPLICATION FORM

Applicant Details

Name:	Andrew Muirhead	Company Name:	Bushfire Hazard Solutions
Postal Address:	PO Box 124, Berowra NSW 2081		
Phone:	9457 6530	Email:	andrew@bcbhs.com.au

Site Details

Street Address:	Lot 1 Heathcote Road, Pleasure Point
Lot & DP No.:	Lot 1 DP 875804 & Lot 2 DP 817692

Details of the Development Proposal

Development type:	☒ Subdivision / Dual Occupancy	☐ SFPP	☐ Residential Infill
Description of proposed development / use:	Residential Subdivision		
Information attached:	Post Development Bushfire Prone Overlay		

Issues for Discussion

Summary of particular issues to be discussed / areas of potential non-compliance:

One of the general principles underlying Planning for Bush Fire Protection is that protection measures are governed by the degree of threat posed to a development.

It is acknowledged that once the site is developed a number of proposed roads and residential allotments will be located >100 metres from any Category 1 hazard and 30 metres from any Category 2 or 3 hazard (see attached Post Development Bushfire Prone Overlay).

As the proposed road carriageways achieve or exceed the minimum carriageway requirements for Public Roads as detailed in section 5.3.2 of PBP it is requested that the roads which will not be located on bushfire prone land (see attached Post Development Bushfire Prone Overlay) be excluded from the parking restrictions described in section 5.3.2 of PBP.

This request, presents itself on large scale subdivisions and has been approved by the NSW Rural Fire Service in the past. The scale of the proposal and overall development in our opinion warrants this request.

Access for attending fire services to undertake early suppression is a key factor in whether a fire has the opportunity to develop into a quasi-steady state at which point the opportunity to control / extinguish the fire becomes far more challenging.

Where good access is available it provides opportunity to control / extinguish a fire in its growth phase before developing further and consequently becoming more difficult to conduct direct attacks.

In this particular instance the identified bushfire hazard has street frontage to Heathcote Road, Willowie Way, Lilli Pilli Drive, Pleasure Point Road and the proposed road networks. There is also an additional access track within the hazard to the north and existing public roads north of the Railway Line.

In consideration of the comprehensive access available to and through the hazard and its exposure to the public the identification and subsequent early extinguishment of a bushfire is considered probable and the proposed access arrangements are considered adequate.

Declarations

Are you or any party involved in this pre-DA application:

1. A member of or engaged by the NSW RFS?
2. An employee or engaged by the relevant consenting authority?

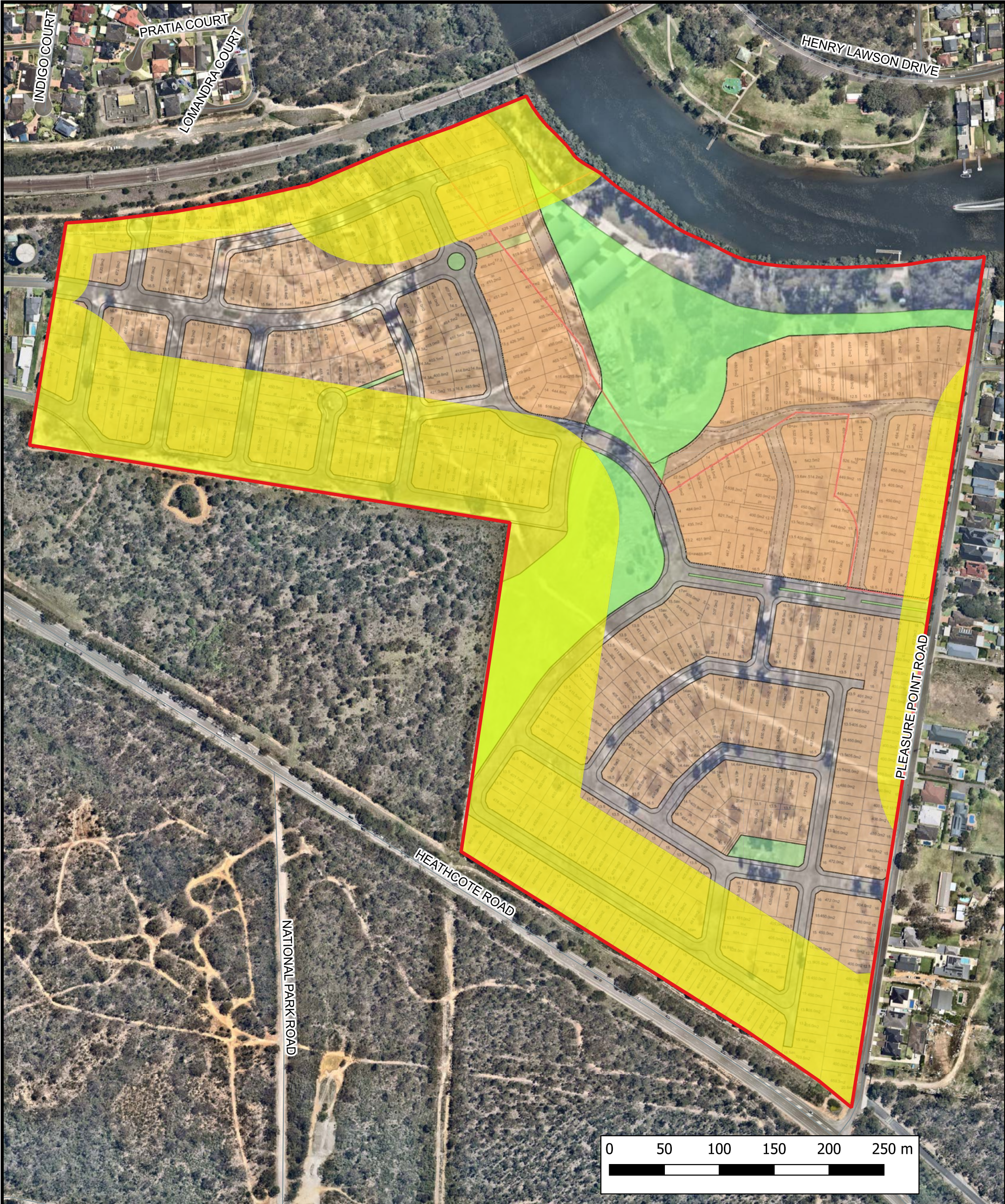
☒ Yes ☐ No

I understand that the advice given will be based on the information provided and will not prejudice the outcome of any subsequent determination.

Signature:



Date: 07/03/2024



Legend
[Red Outline] Subject site [Yellow Shading] Bushfire Prone Area Post Development

BCBHS Ref: 240556
Drawn by: AM
Dated: 07/03/2024
Issue: 1
Client: Sera Developments Pty Ltd
Address: Lot 1 Heathcote Road, Pleasure Point



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Post Development Bushfire Prone Land



PRE-DA APPLICATION FORM

Applicant Details

Name:	Andrew Muirhead	Company Name:	Bushfire Hazard Solutions
Postal Address:	PO Box 124, Berowra NSW 2081		
Phone:	9457 6530	Email:	andrew@bcbhs.com.au

Site Details

Street Address:	Lot 1 Heathcote Road, Pleasure Point
Lot & DP No.:	Lot 1 DP 875804 & Lot 2 DP 817692

Details of the Development Proposal

Development type:	☒ Subdivision / Dual Occupancy	☐ SFPP	☐ Residential Infill
Description of proposed development / use:	Residential Subdivision		
Information attached:	Minimum APZ Overlay		

Issues for Discussion

Summary of particular issues to be discussed / areas of potential non-compliance:	One of the general principles underlying Planning for Bush Fire Protection is that protection measures are governed by the degree of threat posed to a development. It is acknowledged that site has many unique characteristics. Along the northern boundary there is an access track which provides access to a water reservoir and train line. The vegetation is then also split with the proposed cycle way which will have a pedestrian link to Voyager Point. The vegetation along the track consists of isolated trees acting as a privacy screen and partly maintained grasses. The vegetation is broken from the vegetation which is periodically maintained under the rail bridge by the existing access trail which is used for maintenance and management. The vegetation around the reservoir is less than one hectare and >120 metres from any identified bushfire hazard and therefore in
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accordance with A1.10 of Planning for Bush Fire Protection the vegetation meets the Low Threat Vegetation – Exclusions.

It is acknowledged the vegetation to the north does not directly meet the requirements to be classified as Low Threat Vegetation – Exclusions. There are several breaks in vegetation and presence of existing track supports early suppression and ability to prevent the spread of fire.

There is also a proposed 3 metre high acoustic wall which will act as a Radiant Heat Barrier.

We therefore would like the support from the NSW Rural Fire Service to declassify the vegetation within this area and support of the attached Minimum APZ Overlay.

Declarations

Are you or any party involved in this pre-DA application:

1. A member of or engaged by the NSW RFS?
2. An employee or engaged by the relevant consenting authority?

☒ Yes ☐ No

I understand that the advice given will be based on the information provided and will not prejudice the outcome of any subsequent determination.

Signature:



Date:

14/05/2024



All areas within the subject site are to be managed as an Asset Protection Zone in accordance with Appendix 4 of Planning for Bush Fire Protection.

The proposed turning heads shall have a minimum radius of 12 metres or swept path modelling will need to be undertaken to show a fire truck can turn around in accordance with Appendix 3 of Planning for Bush Fire Protection.

Subject site

Minimum APZ

Legend

BCBHS Ref: 240556
Drawn by: AM
Dated: 14/05/2024
Issue: 4
Client: Sera Developments Pty Ltd
Address: Lot 1 Heathcote Road, Pleasure Point

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SILVER MEMBER
Fire Protection Association Australia

Minimum APZ Overlay



PRE-DA ADVICE SUMMARY

Applicant: Andrew Muirhead, Bushfire Hazard Solutions

Subject: Lot 1 Heathcote Road, Pleasure Point
RFS Ref. PRE-DA20240307000037

Details of the Proposal

- ☒ Residential subdivision

Bush Fire Protection Issues Discussed

- ☒ Application and/or Interpretation of sections of *Planning for Bush Fire Protection*

One of the general principles underlying Planning for Bush Fire Protection is that protection measures are governed by the degree of threat posed to a development. On this basis it is requested that:

The NSW Rural Fire Service to declassify the vegetation to the north as Low Threat Vegetation Exclusion despite not strictly complying with section A1.10.

And

The roads which will not be located on bushfire prone land be excluded from the parking restrictions described in section 5.3.2 of PBP.

- ☒ Performance Based Solutions

No APZs requirements for the areas identified as Low Threat Exclusions.

The roads which will not be located on future BFPLM be excluded from parking restrictions.

- ☒ Qualitative Analysis

Seeks to apply Low Threat Vegetation exclusions

- The vegetation to the north does not directly meet the requirements to be classified as Low Threat Vegetation – Exclusions. There are several breaks in vegetation and presence of existing track supports early suppression and ability to prevent the spread of fire.
- The vegetation around the reservoir is less than one hectare and >120 metres from any identified bushfire hazard.
- There is also a proposed 3 metre high acoustic wall which will act as a Radiant Heat Barrier

- ☒ Quantitative Analysis

- ☒ Qualitative Analysis

Seeks to remove parking restrictions

- ☒ Quantitative Analysis

- once the site is developed a number of proposed roads and residential allotments will located >100 metres from any Category 1 hazard and 30 metres from any Category 2 or 3 hazard.
- As the proposed road carriageways achieve or exceed the minimum carriageway requirements for Public Roads as detailed

in section 5.3.2 of PBP it is requested that the roads which will not be located on future bushfire prone land be excluded from the parking restrictions described in section 5.3.2 of PBP.

☒ Non compliances in relation to Bush Fire Protection Measures

- | | |
|--|---|
| ☒ Hazard Assessment | Apply Low Threat Exclusions to an area that does not comply. |
| ☒ Asset Protection Zones | No APZ requirements in land to be declassified. |
| ☒ Access | The roads which will not be located on bushfire prone land be excluded from the parking restrictions described in section 5.3.2 of PBP. |

Documentation

- | | |
|---|--|
| ☒ Preliminary Bush Fire Risk Assessment | Pre-DA application form - Lot 1 Heathcote Road, Pleasure Point |
| ☒ Concept/Detailed Drawings | Post Development Bushfire Prone Overlay
Minimum APZ Overlay |

Pre DA Advice

- Where areas of vegetation do not meet the criteria for Low Threat Vegetation as stated within Section A1.10 of *Planning for Bush Fire Protection 2019*, a performance-based assessment must then be applied to determine the bush fire behaviour for the subject area and subsequent bush fire protection measures applied. Potential performance-based assessment pathways for the subject application may include the following:
 - A 'Method 2' analysis as stated in the Australian Standard AS3959-2018 *Construction of buildings in bushfire prone areas*.
 - The application of radiant heat shields and subsequent supporting modelling to reduce the expected radiant heat exposure;
 - The application of deemed-to-satisfy setbacks in Table A1.12.2 of *Planning for Bush Fire Protection 2019*.
- Any proposed changes in road widths are required to be supported with an appropriate performance-based solution which demonstrates the performance criteria being satisfied, as given within Table 5.3b of *Planning for Bush Fire Protection 2019*.
- The single access and egress point between the northwest and southeast areas of the subject site should be positioned not to expose accessing and egressing vehicles to the bush fire interface.
- Please note that the pre-DA advice is not intended to provide pre approval of bush fire risk assessment to support a development application. The aim of the service is to identify any potential issues in relation to bush fire risk assessment before a formal development application is lodged. The advice issued is preliminary in nature and no detailed assessment of the site or development is undertaken at this stage. The service is not to be used for the purpose of submitting revised information/bush fire engineering brief for further review of the original advice.

Disclaimer

RFS advice is based on information provided and policy and legislative requirements applicable at the time. The advice should be copied into, or referenced in, any subsequent development application.

All efforts are made to identify issues of relevance and likely concern with the preliminary proposal. However, the comments and views in this document are based only on the plans and information submitted for preliminary assessment and discussion at the pre-DA meeting. You are advised that: -

- The views expressed may vary once detailed plans and information are submitted and formally assessed in the development application process, or as a result of issues contained in submissions by interested parties;
- Given the complexity of issues often involved and the limited time for full assessment, no guarantee is given that every issue of relevance will be identified;
- Amending any aspect of the proposal could result in changes which would create a different set of impacts from the original plans and therefore make this advice invalid; and,

- The Pre-DA advice given does not bind Council officers, the elected Council members, or other parties to the DA process.

Submitted by:

Approved by:

Josh Calandra
Development Assessment and Planning Coordinator
Planning and Environment Services (East)
Built and Natural Environment

Adam Small
Supervisor, Development Assessment and Planning
Planning and Environment Services (East)
Built and Natural Environment

Date: 24 June 2024



RFS



Liverpool City Council
Locked Bag 7064
LIVERPOOL BC NSW 1871

Your reference: CNR-75002 DA-441/2024
Our reference: DA20241028004481-Original-1

ATTENTION: Nabil Alaeddine

Date: Thursday 5 December 2024

Dear Sir/Madam,

Development Application
s100B – Subdivision – Torrens Title Subdivision
Pleasure Point Road Pleasure Point NSW 2172, 1//DP875804

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 07/11/2024.

The NSW RFS cannot support the development in its current form. The documentation submitted with the referral does not provide sufficient detail for a bush fire assessment.

The following information will need to be resubmitted through the Planning Portal under Section 38 of the *Environmental Planning & Assessment Regulation 2021*.

The bush fire assessment submitted with the development application has not undertaken a strategic bushfire risk assessment of the subject site and proposal which is necessary considering the following:

- The NSW RFS Wildfire History mapping shows that the subject site and surroundings have been affected by bush fires multiple times in the past, the most recent one in 2017-18 affected the land along Heathcote Road.
- The subject site is locked on the northwest by railway track; north by Georges River; east and south by bush fire prone vegetation which will be retained for its significance. As such, the connectivity of the future occupants of the subdivision will rely mainly upon Heathcote Road which is along the direct bush fire interface with forest vegetation within the National Park.
- The access/egress from Pleasure Point Road towards the existing residential development at Pleasure Point is also a dead end surrounded by bush fire prone land.

The bush fire report must address, as a minimum, the components in Table 4.2.1 of *Planning for Bush Fire Protection (PBP) 2019*.

The proposed subdivision must also address the specific objectives of Section 5.2 of *PBP 2019*, specifically to avoid creating bottlenecks within the subdivision.

- In this regard, the staging of the subdivision is such that Road no. 1 is designed to provide access/egress until Stage 5 of the subdivision, which does not satisfy the acceptable solution for access as per Table 5.3b of *PBP 2019- subdivisions of three or more allotments have more than one access in and out of the development*. The bush fire report states that a temporary 5.5 m wide road will be created to ensure that

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RFS



there are two access points at the completion of Stage 1, however, it is not clearly marked on the subdivision.

- RFS is requested to allow parking within the carriageway for roads which are located more than 100 metres from bush fire prone vegetation. Further justification needs to be provided in this regard considering that the proposed road layout will create bottlenecks and part of Road no. 01 traverses along the bush fire hazard.

It is understood that the foreshore park along Georges River will be dedicated to Council and it is assumed to be managed. A Plan of Management must be prepared for the entire area shown on the Landscape Masterplan (ref: H8-24016-2, revision G, dated 29 August 2024, prepared by HABIT8), except the area shown under Vegetation Management Zone.

Certain lots within the subdivision cannot comply with the asset protection zone (APZ) requirement and may not provide a reasonable dwelling envelope on them:

- In this regard, the effective slope within the forest vegetation to the west of proposed Lots 419-421 is identified as >0-5 DS which will require a 29m APZ.
- The vegetation along the northwestern site boundary and railway track poses a remnant hazard 23 metre wide which runs along the entire length of the subdivision Stages 5, 6 and 9. All the proposed lots along the northwestern site boundary will need to provide a minimum 14 metre APZ within the boundaries.

For any queries regarding this correspondence, please contact Rohini Belapurkar on 1300 NSW RFS.

Yours sincerely,

Bryce Pascoe
**Supervisor Development Assessment & Plan
Built & Natural Environment**



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Liverpool City Council
Locked Bag 7064,
Liverpool BC NSW 1871

10 April 2025
Our Ref. 240556B
Council ref: DA-441/2024

Attention: Nabil Alaeddine

**RE: PROPOSED SUBDIVISION
PLEASURE POINT ROAD, PLEASURE POINT NSW 2172, LOT 1 DP 875804
REQUEST FOR INFORMATION – BUSHFIRE DRAFT**

Dear Nabil,

We understand that Council has received a request to provide additional information from the NSW Rural Fire Service (DA2024102804481-Original-1 dated 5 December 2024) for the above-mentioned matter.

In accordance with due process, we submit this information to Council for consideration.

Items identified in the request relating to bushfire are listed below with along with our comments:

The bush fire assessment submitted with the development application has not undertaken a strategic bushfire risk assessment of the subject site and proposal which is necessary considering the following:

- *The NSW RFS Wildfire History mapping shows that the subject site and surroundings have been affected by bush fires multiple times in the past, the most recent one in 2017-18 affected the land along Heathcote Road.*
- *The subject site is locked on the northwest by railway track; north by Georges River; east and south by bush fire prone vegetation which will be retained for its significance. As such, the connectivity of the future occupants of the subdivision will rely mainly upon Heathcote Road which is along the direct bush fire interface with forest vegetation within the National Park.*
- *The access/egress from Pleasure Point Road towards the existing residential development at Pleasure Point is also a dead end surrounded by bush fire prone land.*

The bush fire report must address, as a minimum, the components in Table 4.2.1 of Planning for Bush Fire Protection (PBP) 2019.

Comment:

The assessment is not a Planning Proposal and therefore is not required to undertake a strategic bushfire risk assessment. The components set out in Table 4.2.1 of *Planning for Bush Fire Protection 2019* (PBP) are not relevant to this Development Application.

Bushfire Hazard Solutions prepared a Bushfire Assessment Report (240556 Date 5th September 2024) which accompanied the Development Application. The Bushfire History was identified within the report (s7.05, p16) and it was also identified that there has been significant development within the area practically to the

northwest, being the traditional fire path in NSW. Since these developments have occurred there has only been one wildfire which has impacted the site in 2002-03 (source NPWS Fire History dataset).

It is acknowledged that there has been a more recent fire to the southwest on the opposite side of Heathcote Road. The development has however provided adequate Bushfire Protection Measures (BPMs) in accordance with PBP from this vegetation.

Heathcote Road is the primary evacuation route for residents and will allow occupants to the northwest or southeast if they choose to. Heathcote Road does have a direct interface within the forest vegetation, however it also has a carriageway width of >15 metres and the trafficable lanes are >9 metres, which exceeds the perimeter road requirements within PBP.

The proposed subdivision must also address the specific objectives of Section 5.2 of PBP 2019, specifically to avoid creating bottlenecks within the subdivision.

- In this regard, the staging of the subdivision is such that Road no. 1 is designed to provide access/egress until Stage 5 of the subdivision, which does not satisfy the acceptable solution for access as per Table 5.3b of PBP 2019- subdivisions of three or more allotments have more than one access in and out of the development. The bush fire report states that a temporary 5.5 m wide road will be created to ensure that there are two access points at the completion of Stage 1, however, it is not clearly marked on the subdivision.*

Road No.01 will be constructed as part of stage 1 and will provide to access and egress points to the site being from Pleasure Point Road to the east and Willowie Way to the west. The attached plans show the proposed temporary road.

It is noted that at the completion of the entire development the majority of this temporary road will be upgraded to the perimeter road requirements.

- RFS is requested to allow parking within the carriageway for roads which are located more than 100 metres from bush fire prone vegetation. Further justification needs to be provided in this regard considering that the proposed road layout will create bottlenecks and part of Road no. 01 traverses along the bush fire hazard.*

The sections of Road No1 in which travel along the bushfire hazard are not being sought to have the allowance of parking within the carriageway.

The minimum road carriageway width of Road 01 is 9 metres in the areas which are located >100 metres from the identified hazards. This carriageway width will still allow for two-way traffic movement for the occupants.

The attending emergency services will have direct access to the bushfire hazards from the roads within bushfire prone areas within the site, Heathcote Road, Willowie Road and the existing tracks within the hazards.

In consideration of the existing road network the proposed road design will provide greater access and egress for the existing occupants within Pleasure Point.

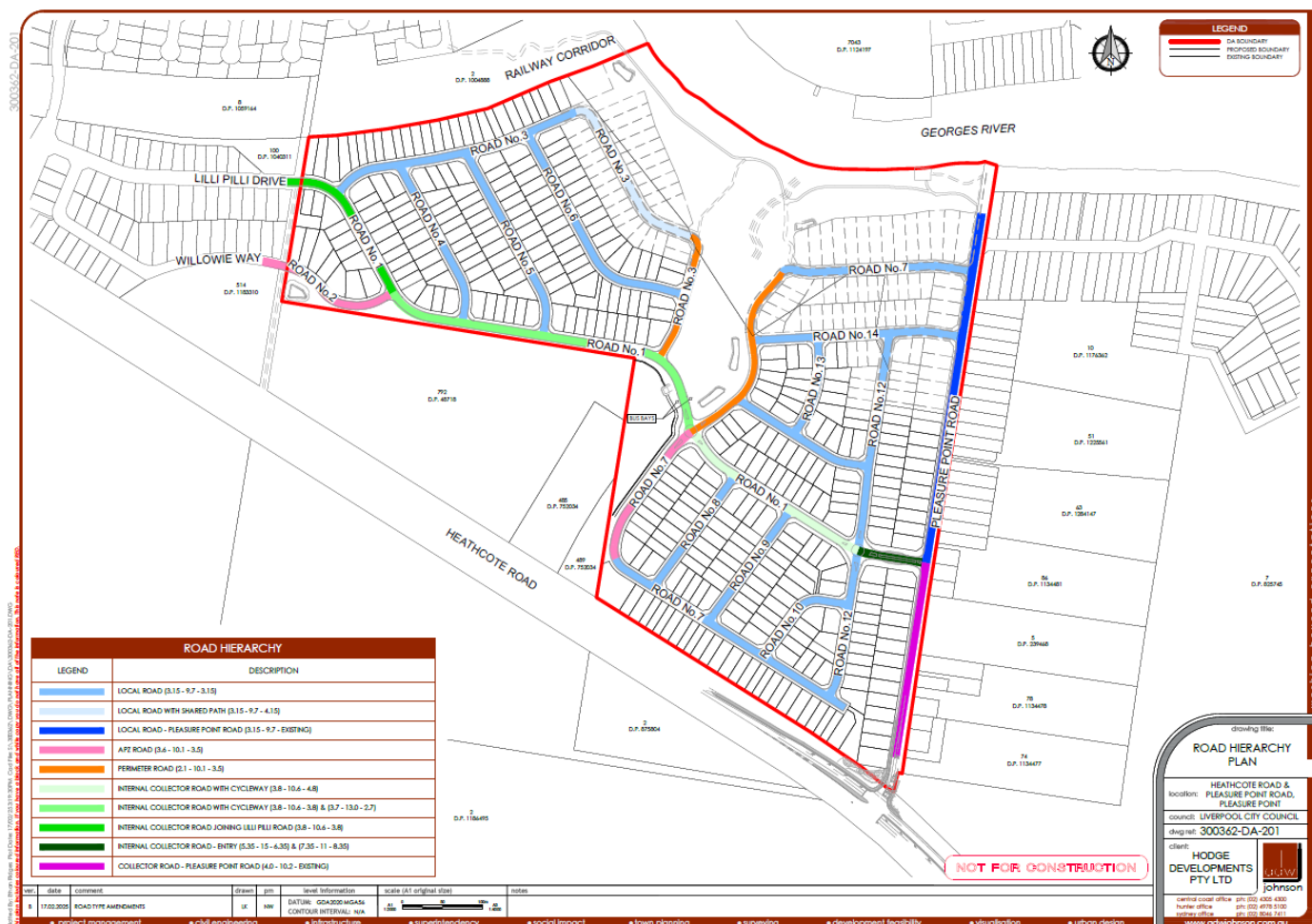


Figure 01: Proposed Road widths

It is understood that the foreshore park along Georges River will be dedicated to Council and it is assumed to be managed. A Plan of Management must be prepared for the entire area shown on the Landscape Masterplan (ref: H8-24016-2, revision G, dated 29 August 2024, prepared by HABIT8), except the area shown under Vegetation Management Zone.

The Vegetation Management Plan (VMP) prepared by Restore (Date 3 April 2025) has been developed for the overall development. As shown in the VMP and landscaping plans the foreshore will have planting however this meets the criteria to be considered managed land. The VMP does state:

The VMP and landscape plans are consistent with bushfire requirements to maintain tree canopy with mown grass and no shrub layer in specified areas.

VEGETATION MANAGEMENT ZONE

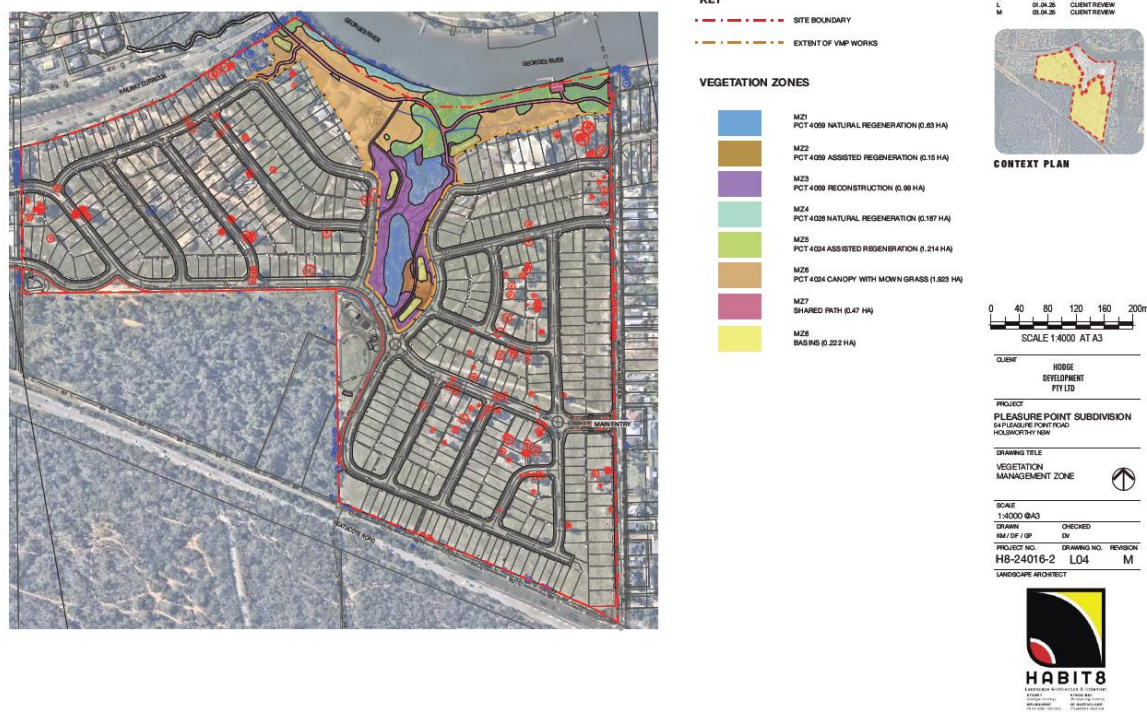


Figure 02: VMP Management Zones

LANDSCAPE CONCEPT PLAN 02 : FORESHORE

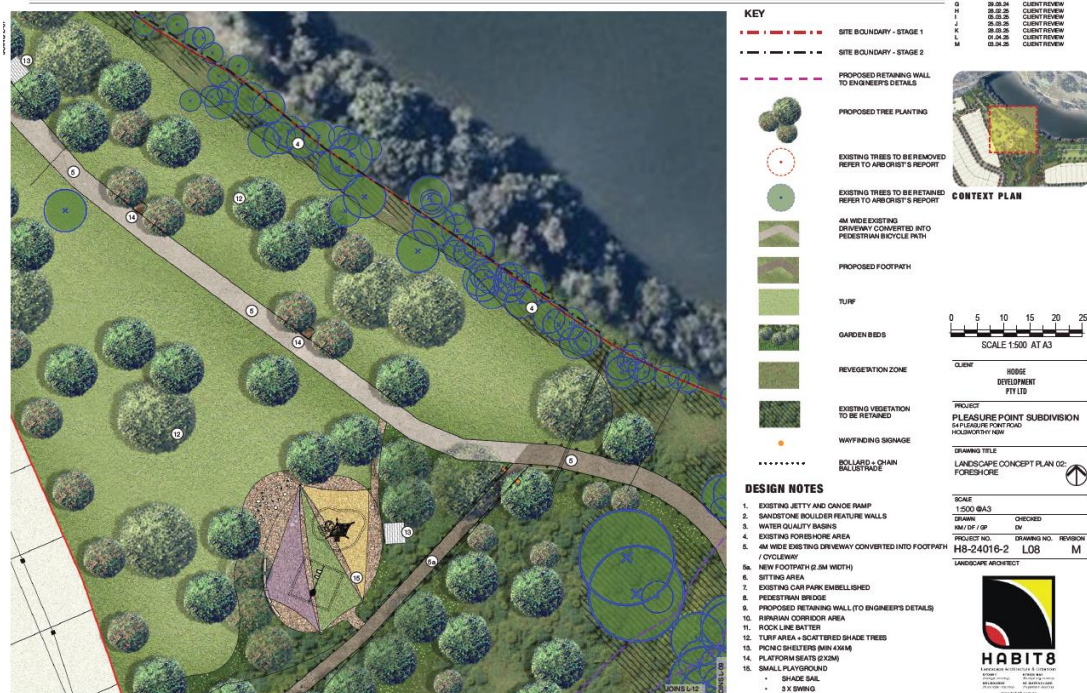


Figure 03: Landscape Plan showing the trees and grasses only

LANDSCAPE CONCEPT PLAN 04: FORESHORE

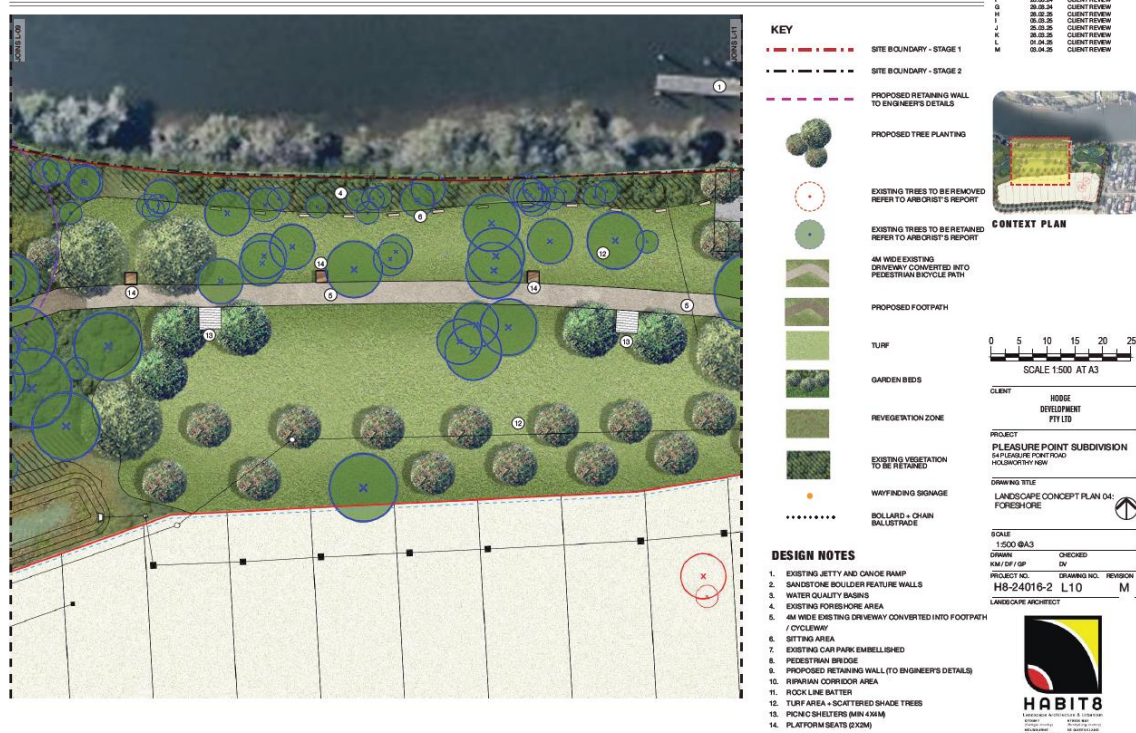


Figure 04: Landscape Plan showing the trees and grasses only

Certain lots within the subdivision cannot comply with the asset protection zone (APZ) requirement and may not provide a reasonable dwelling envelope on them:

- In this regard, the effective slope within the forest vegetation to the west of proposed Lots 419-421 is identified as >0-5 DS which will require a 29m APZ.*
- The vegetation along the northwestern site boundary and railway track poses a remnant hazard 23 metre wide which runs along the entire length of the subdivision Stages 5, 6 and 9. All the proposed lots along the northwestern site boundary will need to provide a minimum 14 metre APZ within the boundaries.*

The effective slope within the forest vegetation as recorded above directly towards Lots 420 and 421 is less than 30 metres. Pre-DA advice was sort from the NSW Rural Fire Service in regard to the minimum APZ Overlay in which did not raise any issues with the minimum APZs around these allotments. Regardless, the three allotments do have the ability to have larger APZs and will still have a viable footprint within their respective allotment.



Figure 05: Additional APZ setbacks if a downslope was taken as the effect slope towards the allotments.

The Pre-DA advice also sought advice in which to declassify the vegetation along the rail corridor which is mapped as Category 3 Vegetation. The vegetation is broken up by existing access tracks for the railway line and railway easement management. The area in which is being sought to be declassified are areas which act as privacy screen. Regardless, the allotments along this corridor have the ability to incorporate APZs from the remnant hazard and still maintain a viable footprint.



Figure 06: Additional APZ setbacks along the Railway Corridor setback showing allotments still have viable footprints

Therefore, we are in support of the proposed works and the recommendations within the Bushfire Assessment Report (ref 240556 Date 5th September 2024).

I am happy to meet with Council or the RFS if required.

Should you have any questions please do not hesitate in contacting me.

Prepared by
Building Code & Bushfire Hazard Solutions



Andrew Muirhead

Senior Bushfire Consultant
Graduate Certificate in Bushfire Protection WSU
Bachelor of Engineering Technology Mastering in Civil UniSQ
FPA Australia BPAD Level 2 Accredited Practitioner
BPAD Accreditation No. BPAD46966



Reviewed by
Building Code & Bushfire Hazard Solutions P/L



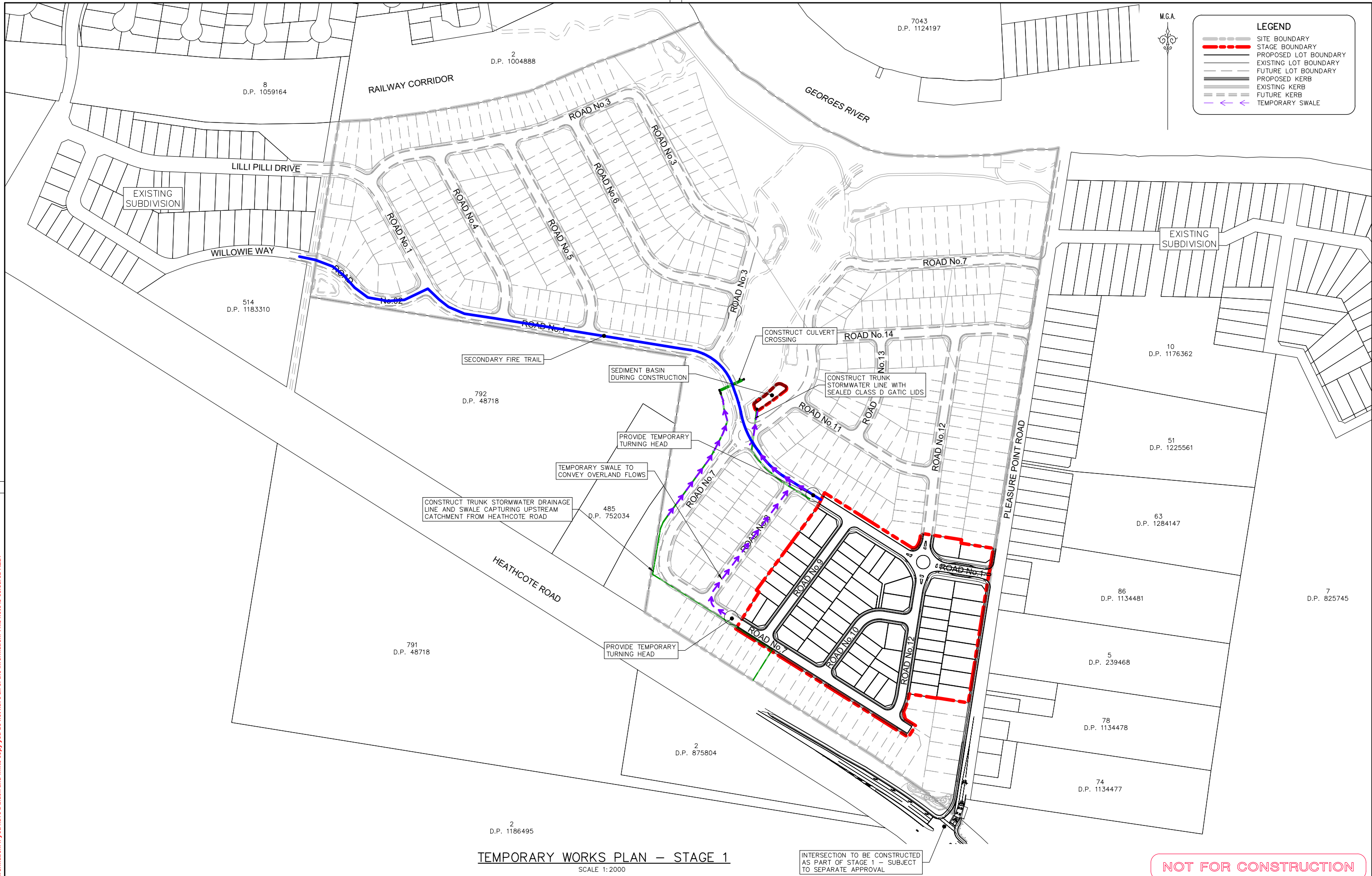
Stuart McMonnies

Director / Manager Bushfire Section
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9400



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TEMPORARY WORKS PLAN – STAGE 1
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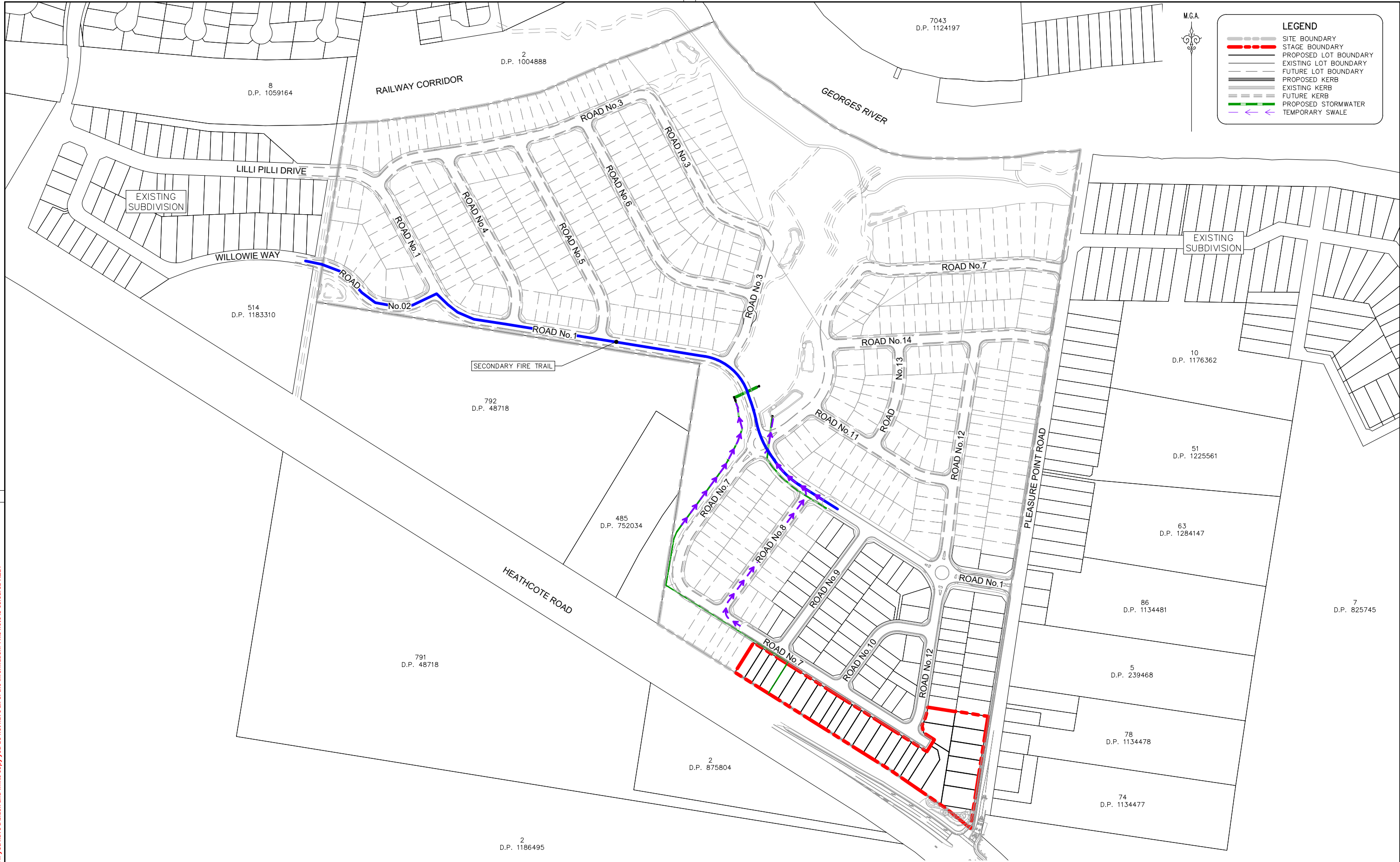
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AS PART OF STAGE 1 – SUBJECT
TO SEPARATE APPROVAL

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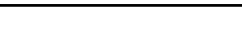
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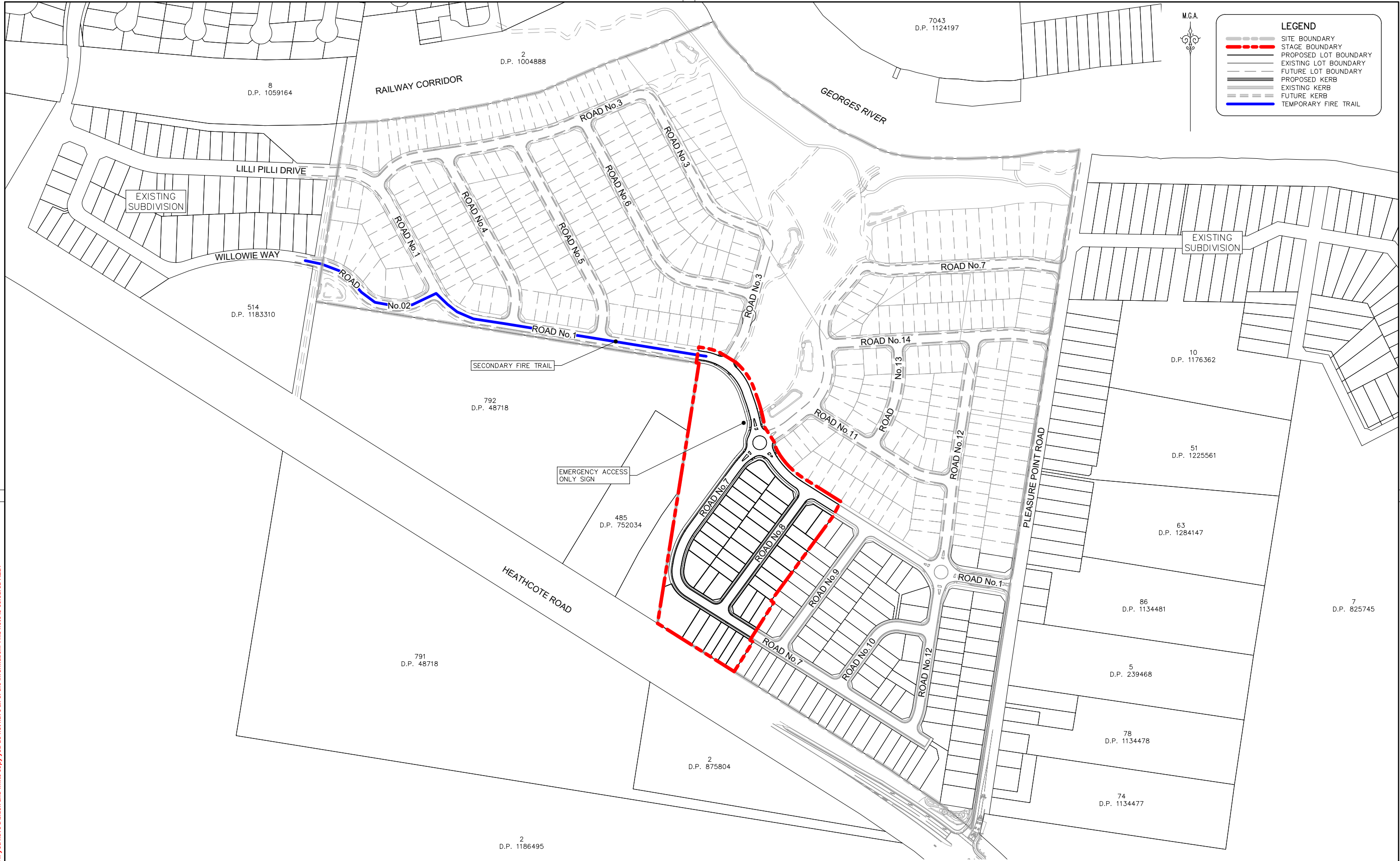
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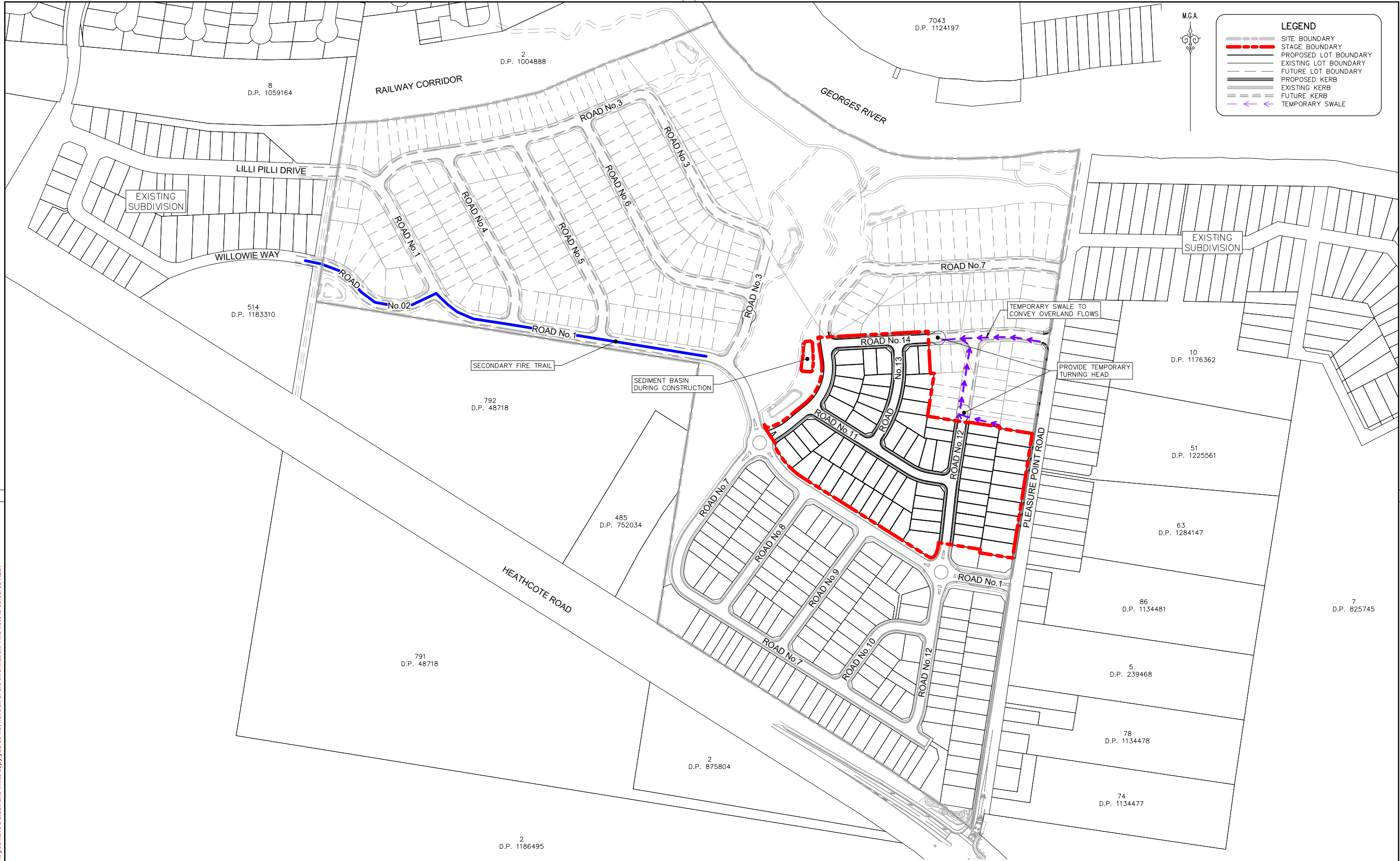
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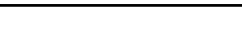
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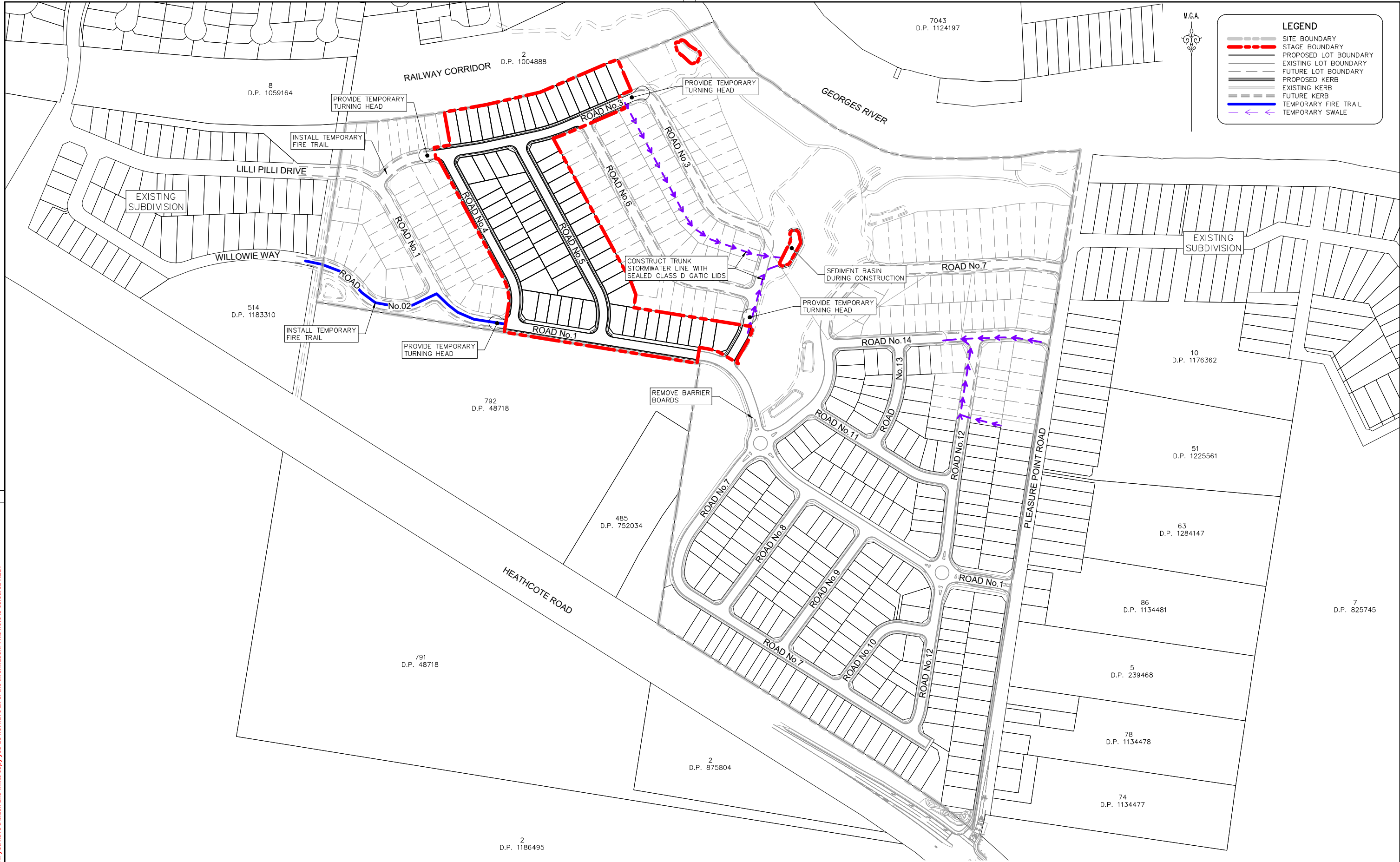
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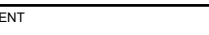
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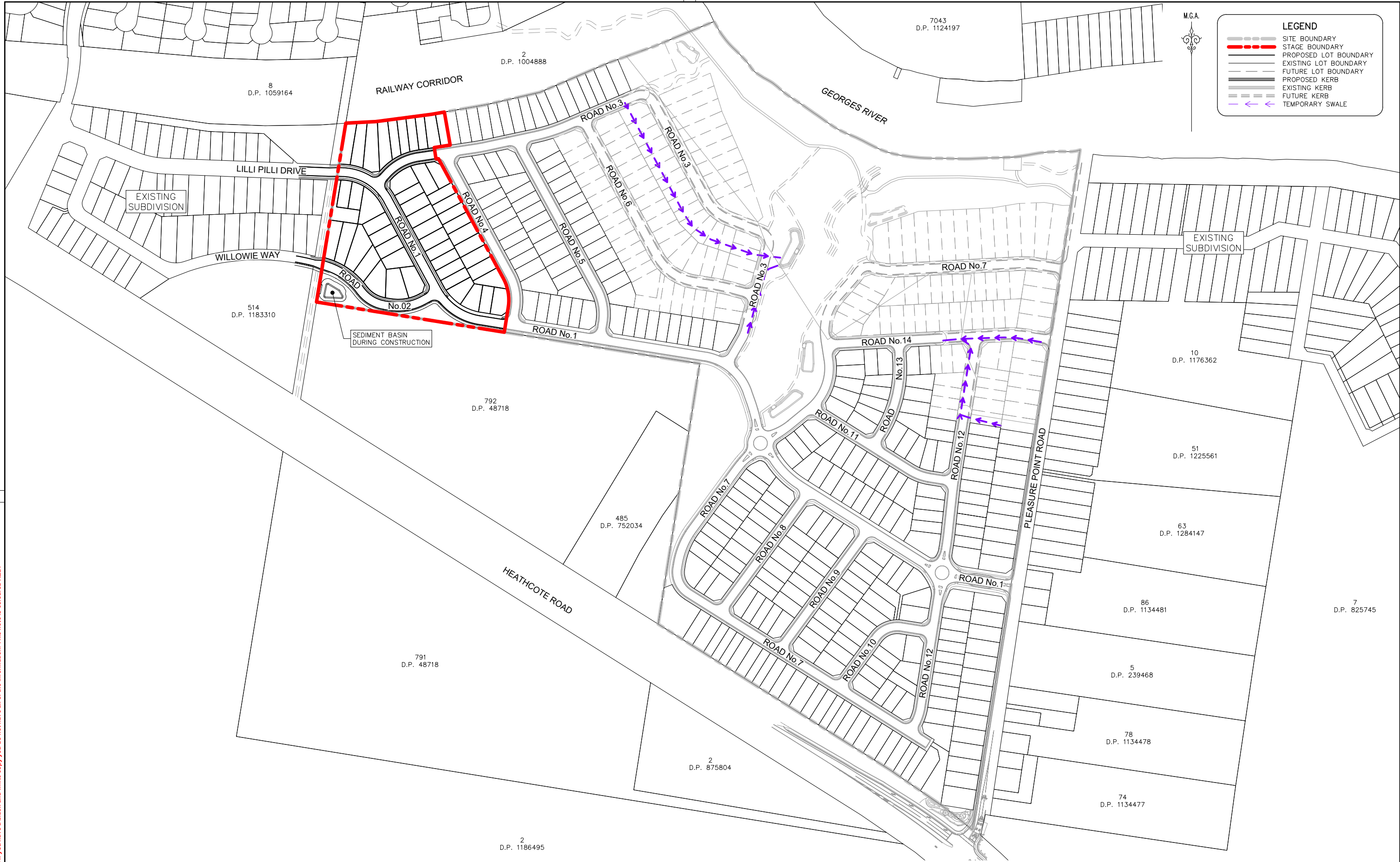


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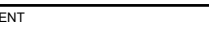
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LEGEND

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- STAGE BOUNDARY
- PROPOSED LOT BOUNDARY
- EXISTING LOT BOUNDARY
- FUTURE LOT BOUNDARY
- PROPOSED KERB
- EXISTING KERB
- FUTURE KERB
- TEMPORARY SWALE

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Bushfire Assessment Report

Proposed:
Subdivision

At:
**Pleasure Point Road,
Pleasure Point**

Reference Number: 240556

5th September 2024



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

Tel: (02) 9457 6530

PO Box 124
Berowra NSW 2081
ABN 19 057 337 774

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This report has been prepared as a submission document in support of a development application to Council and in instances may rely upon information provided by a number of external sources including Councils, State Government Agencies and it is assumed that the information provided was accurate at the time. This report cannot be relied upon for commencement of works or construction until such time as it has been endorsed or otherwise included within the consent conditions issued by Council as part of the DA determination.

s4.14 applications (under the Environmental Planning and Assessment Act 1979) and all infill development applications may be referred by Council to the NSW Rural Fire Service for review and concurrence during the DA process. S100B applications under the Rural Fires Act 1997 (subdivisions and Special Fire Protection Purpose Developments), Flame Zone determinations and Alternate Solutions must be referred by Council to the NSW Rural Fire Service for review and receipt of a Bushfire Safety Authority (BSA) or other such recommended conditions from the NSW Rural Fire Service before the consent can be granted.

The onus is on the applicant to cross reference this document with any conditions of consent issued by Council or any requirements supplied by the NSW Rural Fire Service following development approval. BCBHS can review and cross reference these documents however the onus is on the applicant to provide them to us and request this review – Building Code and Bushfire Hazard Solutions Pty. Ltd. is not in a position to track every DA through Council and we rely upon the applicant to undertake this role as project co-ordinator.

Where any discrepancy between this document and the development approval or the NSW Rural Fire Service requirements is found, the conditions of consent always take precedence until such time as an application to review, amend or vary these conditions is approved.

Disclaimer:

This report has been prepared with due care and diligence by Building Code and Bushfire Hazard Solutions Pty. Ltd and the statements and opinions contained in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in previous paragraphs.

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Version Control				
Version	Date	Author	Reviewed by	Details
1	05/08/2024	Andrew Muirhead	Stuart McMonnies	Draft Report
2	30/08/2024	Andrew Muirhead	Stuart McMonnies	Draft Report
3	05/09/2024	Andrew Muirhead	Stuart McMonnies	Final Report

List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2018 as amended
BAL	Bushfire Attack Level
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Liverpool City Council
DA	Development Application
EP&A Act	<i>Environmental Planning and Assessment Act - 1979</i>
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NCC	National Construction Code
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer Protection Area
PBP	<i>Planning for Bush Fire Protection – 2019</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 development proposal relates to the subdivision of two existing allotments (zoned R2: Low Density Residential, C3: Environmental Management and RE1: Public Recreation) known as Pleasure Point Road, Pleasure Point (Lot 1 DP 875804 and Lot 2 DP 817692) for residential purposes. The proposed subdivision will result in the creation of four hundred and sixty-two (462) residential allotments.

The subject site currently contains multiple dwellings and has street frontage to Pleasure Point Road to the east, Heathcote Road to the south and abuts private neighbouring allotments to the west. The subject site also has water frontage to Georges River to the northeast and abuts the East Hills Railway Line to the northwest.

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. Liverpool City Council's Bushfire Prone Land Map identifies the property as containing Category 3 Vegetation and the Vegetation Buffer, therefore the subject site is considered 'bushfire prone'.

The development relates to the subdivision of bushfire prone land which can be lawfully used for residential purposes and is therefore classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act 1979*. The development is captured under section 100B of the *Rural Fires Act 1997* and must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service.

All property development within bushfire affected areas is subject to the relevant specifications and requirements detailed in Planning for Bush Fire Protection - 2019 (PBP).

This report has assessed the subject site and proposal against the aim and objectives detailed in Chapter 1 'Introduction' and specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

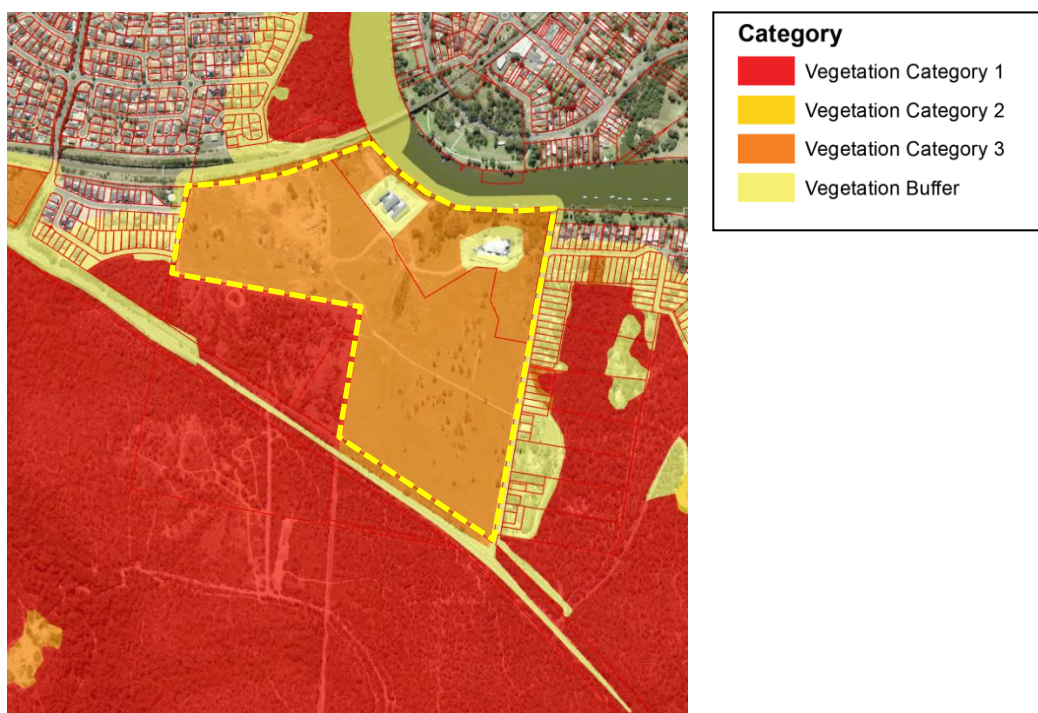


Figure 01: Extract from Liverpool City Council's Bushfire Prone Land Map

2.0 Legislative Requirements

The site is subject to the following legislative provisions as it relates to bushfire planning and protection:

- *Environmental Planning & Assessment Act 1979*
- *Rural Fires Act 1997*
- *Rural Fires Regulation 2022*
- *Planning for Bush Fire Protection*

2.1 Rural Fires Act 1997

The subdivision of bushfire prone land which can be lawfully used for residential purposes is captured by section 100b of the *Rural Fires Act 1997*.

The development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).

2.2 Environmental Planning & Assessment Act 1979

Section 10.3 requires councils, where a Bush Fire Risk Management Plan applies, to record a bush fire prone land map after consulting with the Commissioner of the NSW Rural Fire Service (NSW RFS). The Commissioner will designate lands to be bush fire prone within an area and, when satisfied that the lands have been recorded on a map, certify the map as the Bush Fire Prone Land map.

As the proposal is subject to s.100B of the *Rural Fires Act 1997*, it is integrated development in accordance with s.4.46. This means that the proposed development requires authorisation in respect of bush fire safety because of the subdivision of the land that is proposed to be lawfully used for residential purposes.

2.3 Rural Fires Regulation 2022

Section 45 sets out the relevant matters that must be considered when assessing a bushfire safety authority and includes an assessment of the proposal against Planning for Bush Fire Protection.

2.4 Planning for Bush Fire Protection

As the subject site is identified as being bushfire prone and the proposed development involves a residential subdivision the proposal is subject to the application of the relevant specifications and requirements of Planning for Bush Fire Protection.

The proposal is required to demonstrate that it achieves compliance with the following elements of PBP:

- Chapter 1 - Aim and Objectives
- Chapter 5 – Residential and Rural Residential Subdivisions

3.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the Rural Fire Service and Council with an independent bushfire assessment together with appropriate recommendations for both 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 Council and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject Development Application.

4.0 Scope of this Report

The scope of this report is limited to providing a bushfire assessment and recommendations for the subject property. 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 property.

5.0 Compliance Tables & Notes

The following table sets out the project's compliance with *Planning for Bush Fire Protection – 2019*

	Northwest	Southeast	South / West	Southwest	Central Riparian
Vegetation Structure	Forest	Forest	Forest	Forest	Forested Wetlands
Slope	0 – 5 degrees down	0 – 5 degrees down	0 degrees and up	0 – 5 degrees down	5 - 10 degrees down
Required Asset Protection Zone	29 metres	29 metres	24 metres	29 metres	16 metres
Proposed Asset Protection Zone	29 metres	29 metres	24 metres	29 metres	16 metres
Bushfire Attack Level	BAL 29	BAL 29	BAL 29	BAL 29	BAL 29

Compliance Summary of Bushfire Protection Measures			
Bushfire Protection Measure (s5 PBP)	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	☒	☐	8.03
Building Construction	☒	☐	8.03
Access	☒	☐	8.03
Services	☒	☐	8.03

Asset Protection Zones

APZs for new residential subdivisions are determined from Table A1.12.2 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 29kW/m² at the closest point of the indicative building envelope.

In this instance the minimum required APZs listed within the compliance table, have been determined in accordance with A1.12.2 of PBP.

The proposed APZs meet and in most cases exceed the minimum required APZs.

Construction Level

No new dwellings are proposed as part of this application.

An independent assessment will be required under s4.14 of the *Environmental Planning and Assessment Act 1979* at the time of any future application for the construction of a new dwelling within the proposed new allotments.

6.0 Aerial view of the subject site

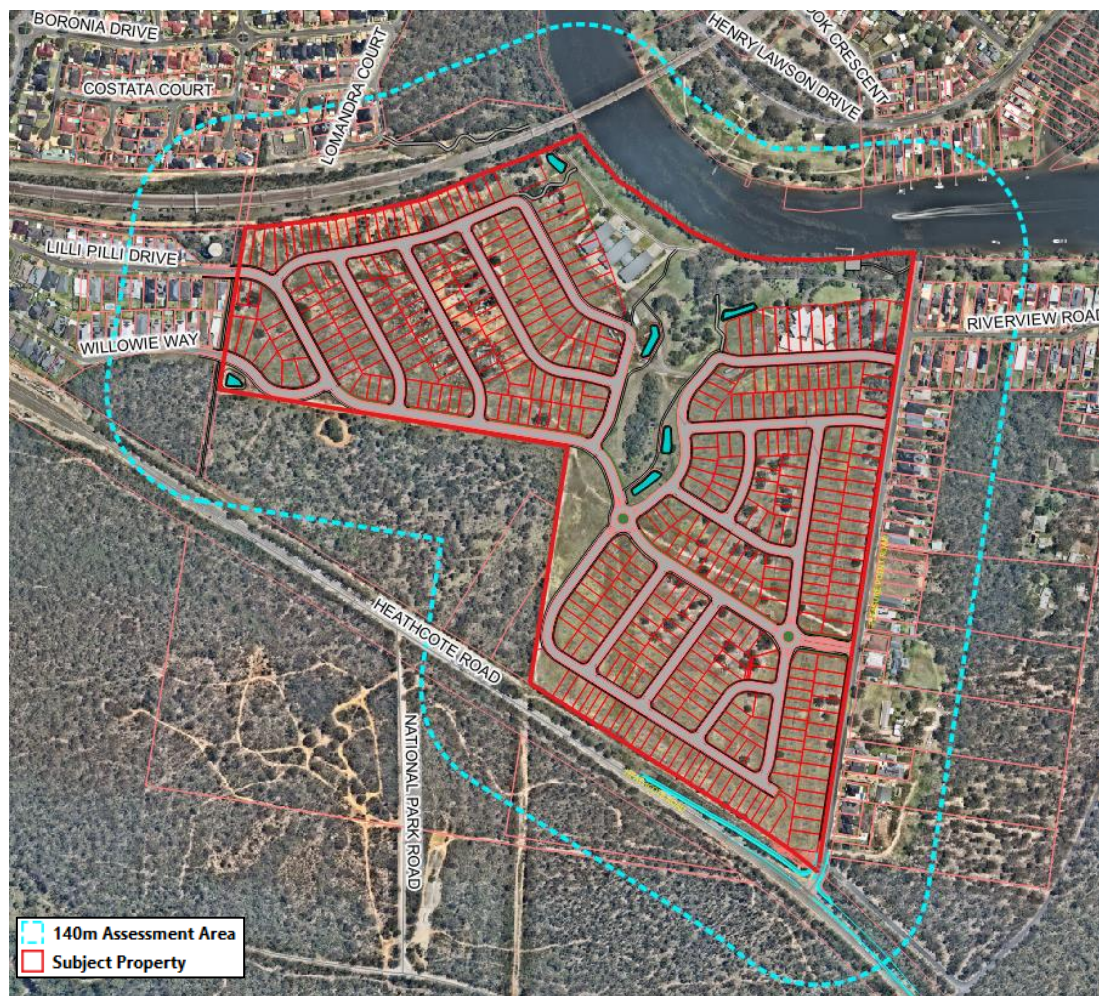


Figure 02: Aerial view of the subject area C/- Nearmap – January 2024



Figure 03: Proposed Subdivision Plan

7.0 Site Assessment

Site inspections have been undertaken by multiple representatives of Bushfire Hazard Solutions.

Additionally, the following external data sources have been relied upon for the site assessment:

- Aerial imagery of the subject area (NSW Spatial Services & Nearthmap);
- 1 metre contour mapping of the subject area (Elevation and Depth Foundation Spatial Data – Geoscience Australia)
- NSW Planning Portal Spatial Viewer
- Vegetation mapping (NSW Vegetation)
- NSW Bush Fire Prone Land (NSW Rural Fire Service)

7.01 Location

The subject site currently comprises of two (2) existing allotments that are legally identified as Lot 1 DP 875804 and Lot 2 DP 817692 and known as Pleasure Point Road, Pleasure Point.

The subject site currently contains multiple dwellings and has street frontage to Pleasure Point Road to the east, Heathcote Road to the south and abuts private neighbouring allotments to the west. The subject site also has water frontage to Georges River to the northeast and abuts the East Hills Railway Line to the northwest.

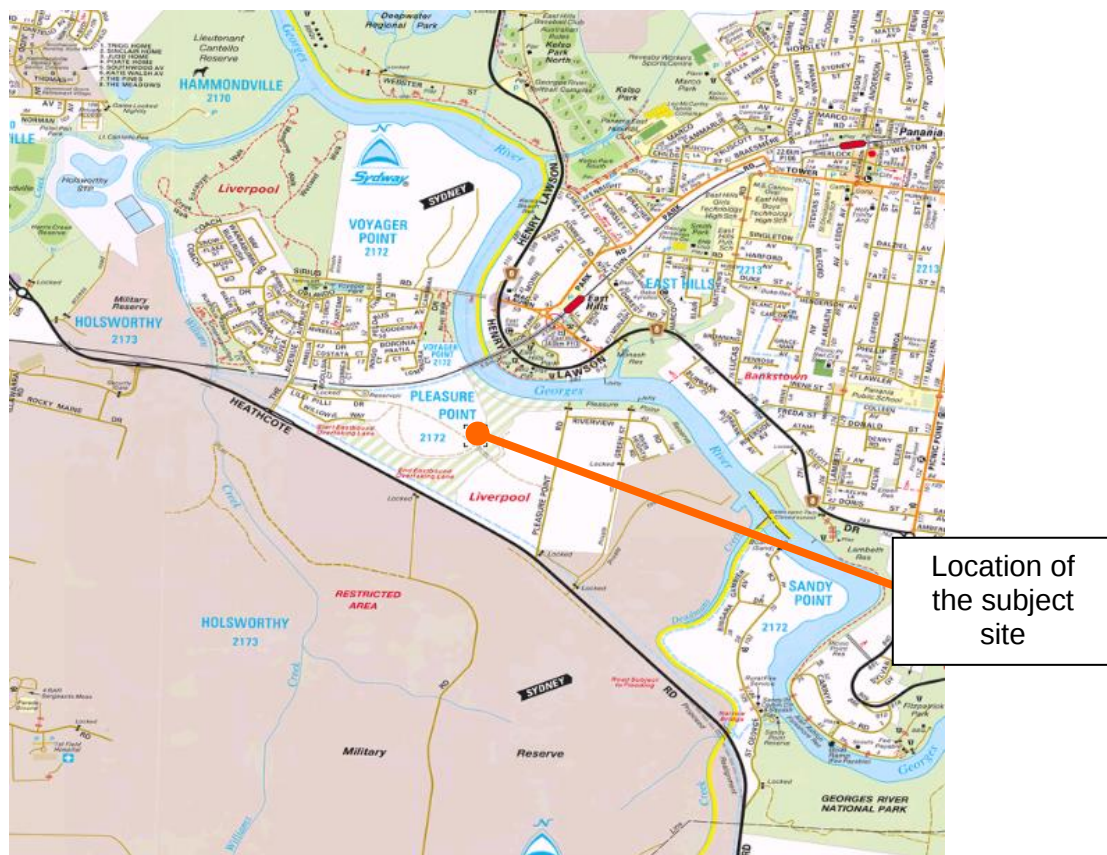


Figure 04: Extract from street-directory.com.au

7.02 Vegetation

In accordance with Appendix 1 'Site Assessment Methodology' of PBP we have undertaken an assessment of all vegetation formations within 140 metres of the development for each aspect as per Keith (2004).

As part of this bushfire assessment process consideration has been given to all existing vegetation within neighbouring allotments.

The vegetation posing a hazard was found to consist of trees 10 - 20 metres in height with 50 - 70% foliage cover, the understorey consisted of low trees, shrubs and ferns.

It is acknowledged that the site has many unique characteristics. Along the northern boundary there is an access track which provides access to a water reservoir and train line. The vegetation is then split by the proposed cycleway which will have a pedestrian link to Voyager Point.

The vegetation along the track consists of isolated trees acting as a privacy screen and partly maintained grasses. The vegetation is broken from the vegetation which is periodically maintained under the rail bridge by the existing access trail which is used for maintenance and management. It is also acknowledged that the proposal includes a cycle way and access path through this location, providing an additional vegetation break.

The vegetation around the reservoir is less than one hectare and >120 metres from any identified bushfire hazard and therefore in accordance with A1.10 of Planning for Bush Fire Protection the vegetation meets the Low Threat Vegetation – Exclusions.

It is acknowledged the vegetation to the north does not directly meet the requirements to be classified as Low Threat Vegetation – Exclusions. There are several breaks in the vegetation and the presence of an existing track supports early suppression and ability to prevent the spread of fire. This area of vegetation has therefore been determined to Low Threat Vegetation – Exclusions.

The vegetation to the south is being thinned and a privacy screen will be created. This will be maintained in perpetuity by the Heathcote Widening as part of the proposal (new traffic lanes and intersection) as well as the service access tracks to the southwest of the allotment, therefore the larger hazard posing a hazard to the south is the vegetation on the other side of Heathcote Road.

The NSW Vegetation mapping identifies the vegetation as Castlereagh Scribbly Gum Woodland (PCT: 3629), Sydney Hinterland Enriched Sandstone Bloodwood Forest (PCT: 3612), Cumberland Blue Box Riverflat Forest (PCT: 4024), Sydney Hinterland Dwarf Apple Low Woodland (PCT: 3813) and Castlereagh Ironbark Forest (PCT: 3448).

There are areas being revegetated within the C3 zoned land within the middle of the site. The project ecologist has advised that the area will be planted consistent with PCT 4059 'Sydney Hinterland Sandy Creekflat Shrub Forest' which under Keith has a 'Forested Wetland' formation.

As shown in the Landscape Package (prepared by Habit8, issue G, Date 29.08.2024) the foreshore will comprise of managed open space and parkland, which is to be utilised by the public. The Landscape Plan also identifies areas within the VMP as basins, playgrounds and rock lined batters. These areas are considered to achieve the criteria for Low Threat Vegetation Exclusions as set out in section A1.10 of PBP.

For the purpose of assessment under 'Planning for Bush Fire Protection' the vegetation posing a hazard to the development in all directions has been assessed as Forest and the revegetated area within the C3 land has been assessed as Forested Wetland.

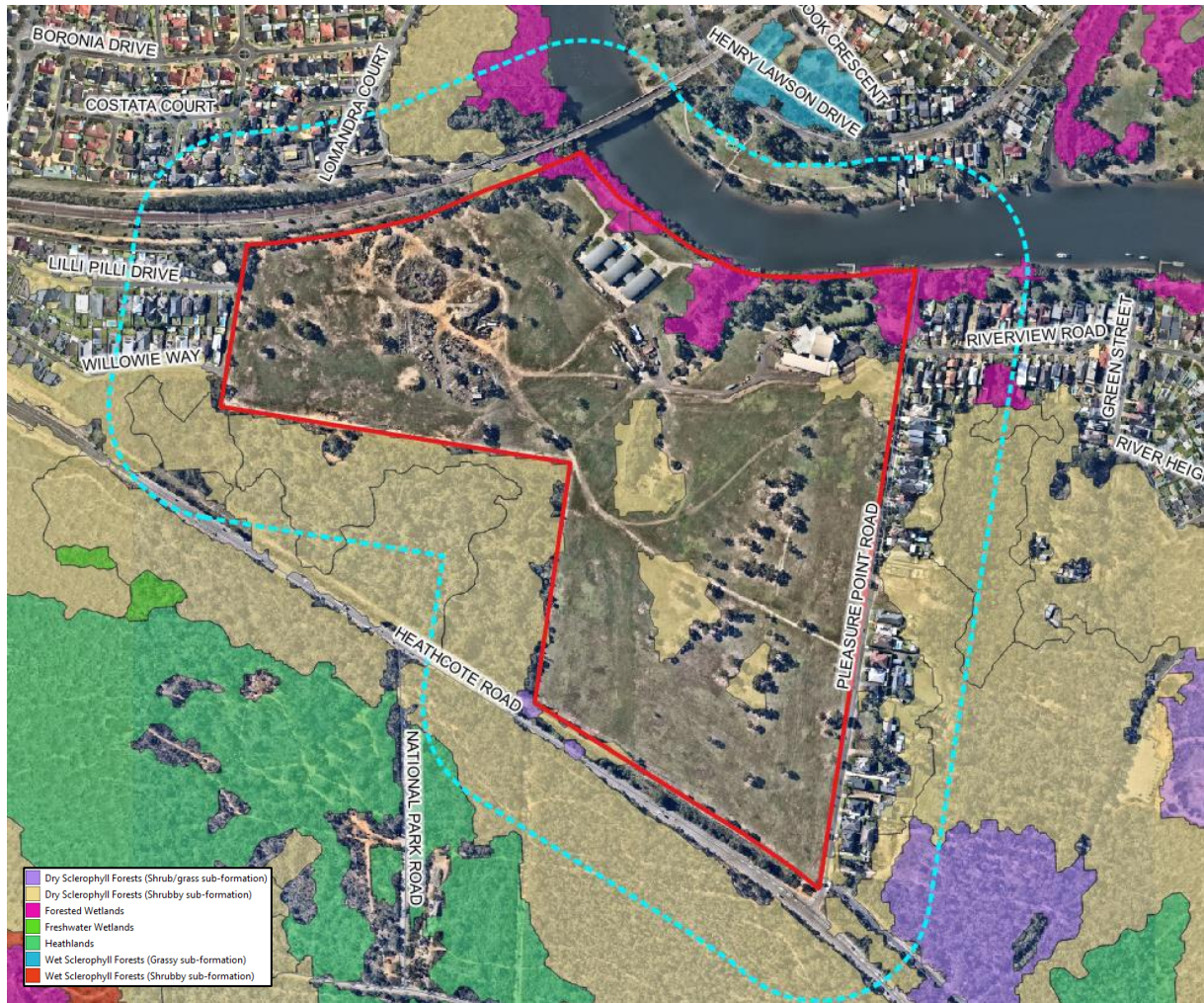


Figure 05: Extract from NSW Vegetation mapping.



Figure 4-1: VMP management zones (Habit8 2024)

Figure 06: VMP management zones from the VMP.

LANDSCAPE CONCEPT PLAN : SUBDIVISION



Figure 07: Landscape Plan showing the managed parkland along the foreshore.

7.03 Slope and Topography

The slope of the land under the classified vegetation has a direct influence on the forward rate of spread, fire intensity and radiant heat exposure. The effective slope is considered to be the slope under the classified vegetation which will most significantly influence bushfire behaviour toward the development site.

In accordance with A1.4 'Determine slope' of PBP the slope assessment is to be derived from the most detailed contour data available.

The slope that would **most significantly** influence bushfire impact was determined onsite using an inclinometer and verified from topographic imagery to be:

- 0 - 5 degrees down slope within the hazard to the north, southwest and southeast
- 0 degrees and up slope within the hazard south
- 5 - 10 degrees down slope within the hazard through the central riparian

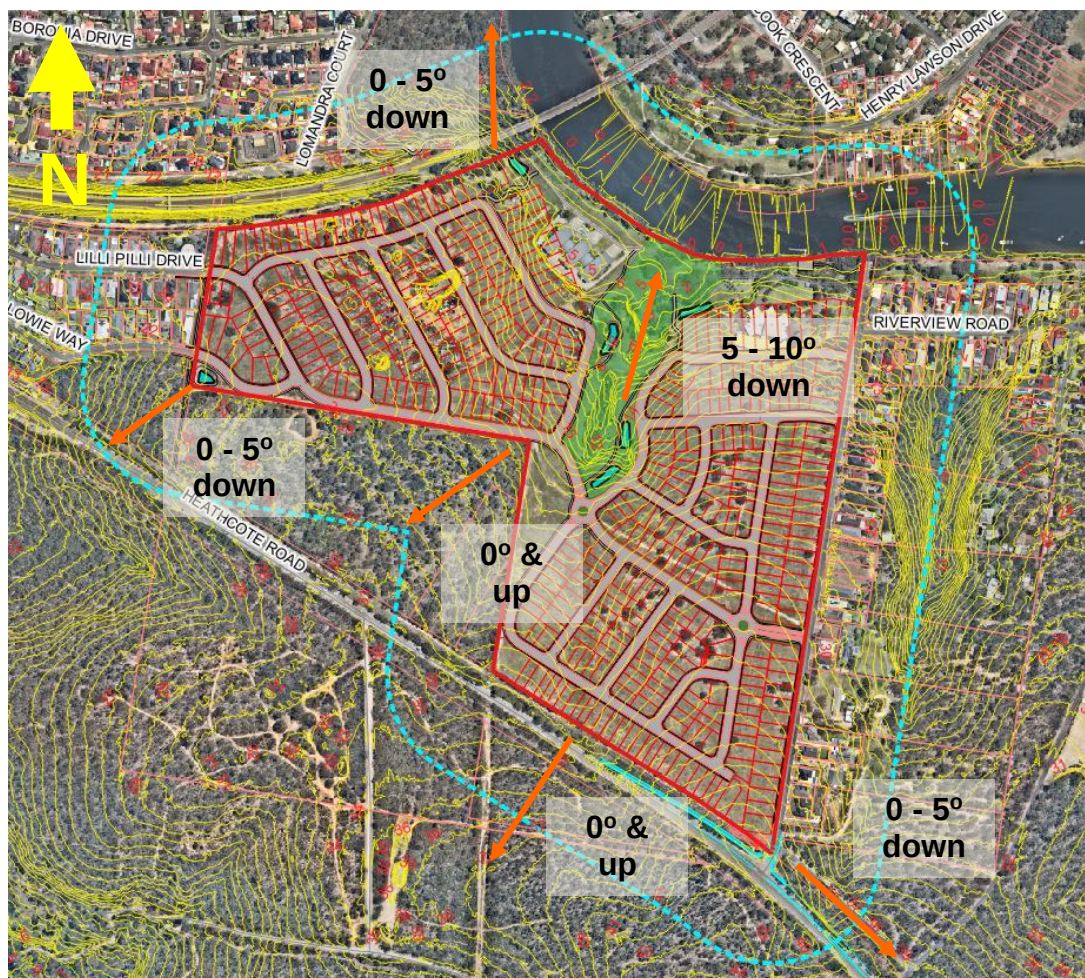


Figure 08: Extract from ELVIS – Geoscience Australia (1m contours)

7.04 Fire Weather

All development which attracts an Asset Protection Zone under PBP requires the identification of the relevant Fire Danger Index (FDI). The FDI required to be used for development assessment purposes is based on the local government boundaries, being Liverpool City Council in this instance.

In accordance with the NSW Rural Fire Service publication 'NSW Local Government Areas FDI' (2017) Liverpool City Council forms part of the Greater Sydney Region Fire Weather District and attracts an FFDI of 100.

7.05 Fire History

There are areas within NSW which have significant fire history and are recognised as known fire paths. While the fire history is more commonly considered as part of strategic planning (to ensure future development is not exposed to an unacceptable risk), it is useful to consider at a Development Application phase to ensure the land is suitable for development in the context of bushfire risk.

In this instance the site has been impacted by two wildfires (source NPWS Fire History dataset). These fires occurred in the 1997/98 and 2002/03 bushfire seasons. It is acknowledged that since these wildfire's have occurred there has been a significant development to the northwest of the site which has reduced the vegetation within this area.

The most recent wildfire to occur within the area was in 2017/18 bushfire season which occurred on the other side of Heathcote Road.

The subject site is therefore not considered to be within a known fire path.



Figure 09: Wildfire History courtesy of NPWS

8.0 Bushfire Protection Measures

8.01 Planning for Bush Fire Protection - 2019

Planning for Bush Fire Protection – 2019 (PBP) is applicable to development located on land determined as being 'bushfire prone' in accordance with the local Bushfire Prone Land Map.

Bushfire prone land are defined as those areas;

- containing or within 100m of Category 1 Vegetation; or
- containing or within 30m of Category 2 or 3 Vegetation.

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. Liverpool City Council's Bushfire Prone Land Map identifies the subject site as containing Category 3 Vegetation and the Vegetation Buffer, therefore is considered 'bushfire prone'.

The subject development relates to the subdivision of bushfire prone land which can be lawfully used for residential purposes and is therefore classified as integrated development under section 4.46 of the *Environmental Planning and Assessment Act 1979*. The development is captured under section 100B of the *Rural Fires Act 1997* and must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service.

In accordance with the submission requirements for a Bush Fire Safety Authority as detailed in clause 45 of the *Rural Fires Regulation 2022* an assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bush Fire Protection (PBP)* is required.

The application of PBP requires satisfactory demonstration of the aim and objectives and the specific objectives and bushfire protection measures relevant to the type of development.

In this instance the proposal relates to a residential subdivision and therefore in addition to the aim and objectives detailed in Chapter 1 'Introduction' the proposal must satisfy the specific objectives and bushfire protection measures detailed in Chapter 5 'Residential and Rural Residential Subdivisions' of PBP.

8.02 Specific Objectives

The following table lists the specific objectives for residential and rural residential subdivisions with a dwelling entitlement in accordance with section 5.2 of PBP and our comments of the proposal compliance or otherwise.

Specific Objective	Comment
<i>minimise perimeters of the subdivision exposed to the bush fire hazard (hourglass shapes, which maximise perimeters and create bottlenecks should be avoided);</i>	The subdivision design is within the existing residential pattern and the proposed building footprints will meet, and in most instances exceed, the minimum required APZs.

Specific Objective	Comment
<i>minimise vegetated corridors that permit the passage of bush fire towards buildings;</i>	There is a proposed vegetation corridor within the centre of the site within the C3 land. The proposed building envelopes meet, and in most instances exceed, the minimum required APZs.
<i>provide for the siting of future dwellings away from ridge-tops and steep slopes, within saddles and narrow ridge crests;</i>	The proposed building envelopes are not located on a ridge-top.
<i>ensure that APZs between a bush fire hazard and future dwellings are effectively designed to address the relevant bush fire attack mechanisms;</i>	The available APZs meet and in most instances exceed the minimum required APZs in accordance with A1.12.2 of PBP.
<i>ensure the ongoing maintenance of APZs;</i>	It is expected that the property management within the proposed residential allotments will be enforced by way of a condition of consent, similar to recommendation 1 of this report, as part of this development process. This will ensure ongoing management of the site.
<i>provide adequate access from all properties to the wider road network for residents and emergency services;</i>	The existing road network provides adequate access and evacuation for occupants and emergency services.
<i>provide access to hazard vegetation to facilitate bush fire mitigation works and fire suppression;</i>	The existing road network provides adequate access to the hazard to facilitate bushfire mitigation works and fire suppression.
<i>ensure the provision of an adequate supply of water and other services to facilitate effective firefighting.</i>	The most distant external point of the proposed building envelopes will be less than 70 metres from the proposed hydrants therefore a static water supply is not required, and the recommended water supply is sufficient for the replenishment of attending fire services.

8.03 Bushfire Protection Measures

Section 5.3 'Bush fire protection measures' of PBP outlines the specific Bushfire Protection Measures (BPMs) applicable to residential and rural residential subdivisions, including APZs, Access and Services.

The following section addresses each BPM and the proposals compliance or otherwise.

Asset Protection Zones & Landscaping

An Asset Protection Zone (APZ) is an area between the development (in this instance building envelopes) and the identified bushfire hazards. It is also an area where the fuels are maintained to a minimum to prevent the spread of fire between a hazard and an asset.

The width of the APZs is determined by the vegetation structure of the identified hazard, Fire Danger Index, effective slope and the type of development (residential development or Special Fire Protection Purpose).

APZs for new residential subdivisions are determined from Table A1.12.2 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 29kW/m^2 at the closest point of the indicative building envelope.

In this instance minimum required APZs are listed within the compliance table within section 5.0 of this report in accordance with A1.12.2 of PBP.



Figure 10: Proposed APZ within the subject site

Access

The development has street frontage to Pleasure Point Road to the east, Heathcote Road to the south and connects to Lilli Pilli Drive and Willowie Way to the west. The proposed allotments will be serviced by the proposed internal roads which will link to the existing road network to the east and west.

Attending fire services have comprehensive access to the identified hazards via the proposed and existing road network for hazard reduction and / or fire suppression activities.

The main road connecting from Pleasure Point Road, through to Lilli Pilli Drive and the Roads surrounding the vegetated allotment to the southwest and C3 land centrally within the site will be constructed to the requirements for Perimeter Roads as detailed in section 5.3.2 of PBP. All other roads will be constructed to the requirements for Non-Perimeter Roads as detailed in section 5.3.2 of PBP.

It is acknowledged that this is a staged development and therefore any dead-end roads between stages will have a temporary turning head in accordance with Appendix 3 of PBP and a temporary road will be created to ensure that there are two access points at the completion of stage 1. The temporary road will be a minimum 5.5 metres wide and an all-weather surface.

It is noted that several sections of the proposed roads are located >100 metres from any hazard (refer to Figure 09 overleaf) and therefore not on land considered 'bushfire prone'.

One of the general principles underlying Planning for Bush Fire Protection is that protection measures are governed by the degree of threat posed to a development.

As the proposed road carriageways achieve or exceed the minimum carriageway requirements for Public Roads as detailed in section 5.3.2 of PBP it is requested that the sections of road which are outside the 100 metre buffer as shown on Figure 09 overleaf be excluded from the parking restrictions described in section 5.3.2 of PBP.

This request while not being common does present itself on large scale subdivisions and has been approved by the NSW Rural Fire Service in the past. The scale of the proposal and overall development in our opinion warrants this request.

In consideration of the risk posed to the subject stage the proposed access arrangements in conjunction with that already approved are considered adequate.

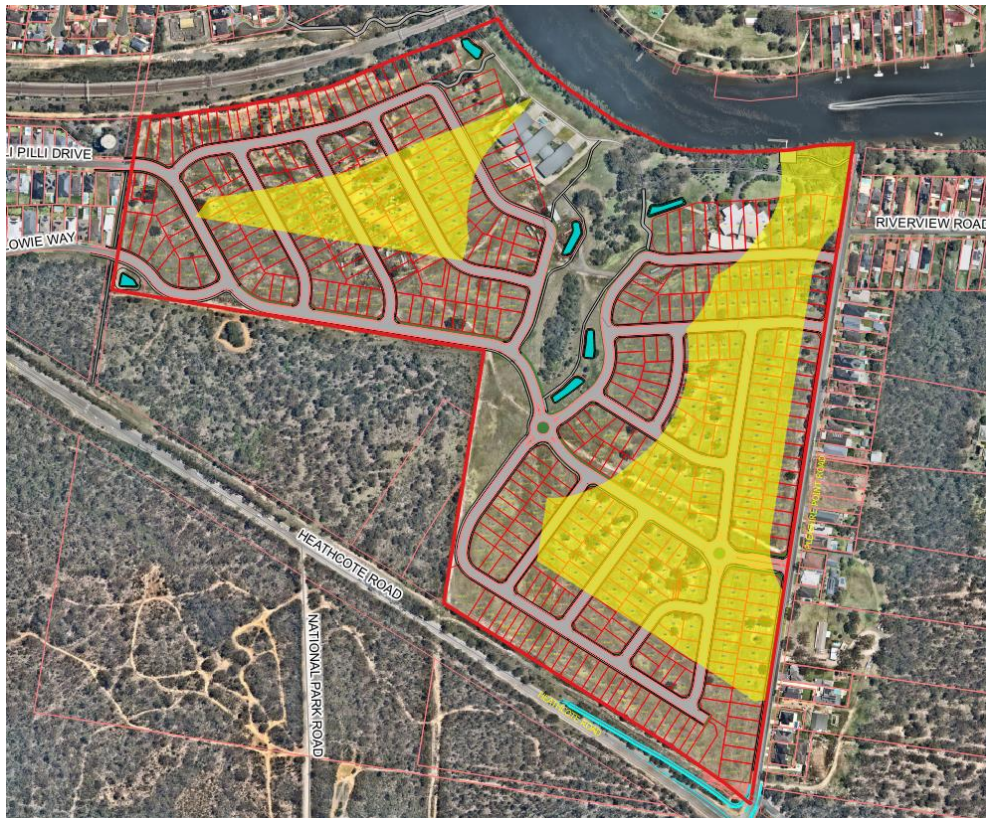


Figure 11: Plan of development overlaid with 100 metre buffer from hazards

Services – Water, electricity & gas

Existing in-ground hydrants are available along Pleasure Point Road and surrounding roads for the replenishment of attending fire services.

The hydrant system will be extended along the new internal roads to service the proposed residential allotments. The sizing, spacing and pressures of this system must comply with AS2419.1-2021.

The recommended water supply is considered adequate for the replenishment of attending fire services.

Recommendations will be included to ensure compliance with the electricity and gas services requirements.

Building Construction

No new dwellings are proposed as part of this application.

An independent assessment will be required under s4.14 of the *Environmental Planning and Assessment Act 1979* at the time of any future application for the construction of a new dwelling

8.04 Aim & Objectives of PBP

The following table details the aim and objectives of *Planning for Bush Fire Protection 2019* and the proposals ability to comply.

Aim / Objective	Comment
The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.	With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.
(i) afford buildings and their occupants protection from exposure to a bush fire;	The APZs meet and in most cases exceed the minimum required APZs and along with the future dwellings being built to the relevant BALs will afford occupants protection from the exposure to a bushfire.
(ii) provide for a defensible space to be located around buildings;	An ample defensible space around the building envelopes is provided.
(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;	The APZs meet and in most cases exceed the minimum required APZs. The separation will afford occupants protection from the exposure to a bushfire and will prevent the likely spread to buildings.
(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;	We are of the opinion that appropriate operational access and egress for emergency service personnel and occupants will be available.
(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and	It is expected that the property management within the proposed allotments will be enforced by way of a condition of consent, similar to recommendation 1 of this report, as part of this development process.
(vi) ensure that utility services are adequate to meet the needs of firefighters.	The recommended water supply is adequate for attending firefighters.

It is therefore of our opinion that the proposal can satisfactorily comply with the aim and objectives of *Planning for Bush Fire Protection 2019*.

8.05 Submission Detail

Section 45 of the *Rural Fires Regulation 2022* identifies various items which must be addressed and included within an application for a Bush Fire Safety Authority. The following table outlines these items and includes a corresponding response.

Submission Detail	Response
<i>(a) a description (including the address) of the property on which the development the subject of the application is proposed to be carried out,</i>	See section 7.01
<i>(b) a classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection,</i>	See section 7.02
<i>(c) an assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property),</i>	See section 7.03
<i>(d) identification of any significant environmental features on the property,</i>	Refer to Biodiversity Development Assessment Report
<i>(e) the details of any threatened species or threatened ecological community under the Biodiversity Conservation Act 2016 that is known to the applicant to exist on the property,</i>	The site is mapped as containing Biodiversity Values. Refer to Biodiversity Development Assessment Report
<i>(f) the details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property,</i>	Refer to Aboriginal Cultural Heritage Assessment Report
<i>(g) a bush fire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters—</i>	See section 8.0
<i>(i) the extent to which the development is to provide for setbacks, including asset protection zones,</i>	See section 8.03
<i>(ii) the siting and adequacy of water supplies for fire fighting,</i>	See section 8.03
<i>(iii) the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency,</i>	Pleasure Point Road was found to have a carriageway of >7 metres exceeding the non-perimeter road requirements detailed in PBP.
<i>(iv) whether or not public roads in the vicinity that link with the fire trail network have two-way access,</i>	No fire trail network within the area

Submission Detail	Response
<i>(v) the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response,</i>	See section 8.03
<i>(vi) the adequacy of bush fire maintenance plans and fire emergency procedures for the development site,</i>	There are currently no bush fire maintenance plans or emergency procedures for the development site.
<i>(vii) the construction standards to be used for building elements in the development,</i>	See section 8.03
<i>(viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development,</i>	There is no existing bushfire sprinkler system, nor is one proposed. See section 8.03 for all bushfire protection measures
<i>(ix) any registered fire trails on the property,</i>	There are no registered fire trails within the subject site.

9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bush Fire Protection – 2019*. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

Asset Protection Zones

1. At the issue of subdivision certificate and in perpetuity all grounds within the subject property shown to be an APZ in Figure 10 of this report shall be maintained in accordance with an Asset Protection Zone (Inner Protection Area) as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of *Planning for Bush Fire Protection 2019*.
2. At the issue of a subdivision certificate, suitable instruments shall be created pursuant to section 88B of the Conveyancing Act 1919 that all areas within the Minimum APZ as shown in Figure 10 of this report which prohibit the construction of buildings other than class 10 structures within the asset protection zone (APZ) as identified on the Subdivision Plan prepared by. The name of the authority empowered to release, vary or modify the instruments shall be Liverpool City Council.

Note: Minimum APZ Overlay is also attached to this Report showing the required minimum APZs.

Services (where applicable)

Water:

3. That the new hydrant system is to comply with the requirements detailed in Table 5.3c of *Planning for Bush Fire Protection 2019*, specifically:
 - fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2021;
 - hydrants are not located within any road carriageway;
 - fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2021.
 - all above-ground water service pipes external to the building are metal, including and up to any taps.
 - fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 Installation of fire hose reels.

Electricity:

4. Any new electrical services must comply with section 5.3.3 of *Planning for Bush Fire Protection 2019*, specifically:
 - where practicable, electrical transmission lines are underground.
 - where overhead electrical transmission lines are proposed:
 - lines are installed with short pole spacing (30 metres), unless crossing gullies, gorges or riparian areas; and
 - no part of a tree is closer to a power line than the distance set out in *ISSC3 Guideline for Management Vegetation Near Power Lines*.

Gas:

5. Any new gas services must comply with section 5.3.3 of Planning for Bush Fire Protection 2019, specifically:
 - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - *The storage and handling of LP Gas*, the requirements of relevant authorities, and metal piping is used;
 - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
 - connections to and from gas cylinders are metal;
 - polymer-sheathed flexible gas supply lines are not used; and
 - above-ground gas service pipes are metal, including and up to any outlets.

Access

6. That the new internal roads shall comply with the requirements for Non-Perimeter Roads as detailed in Table 5.3b of PBP, specifically:
 - property access roads are two-wheel drive, all-weather roads;
 - traffic management devices are constructed to not prohibit access by emergency services vehicles;
 - maximum grades for sealed roads do not exceed 15 degrees and an average grade of not more than 10 degrees or other gradient specified by road design standards, whichever is the lesser gradient;
 - the capacity of perimeter and non-perimeter road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges/ causeways are to clearly indicate load rating.
 - hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression;
 - hydrants are provided in accordance with the relevant clauses of AS 2419.1:2021 - Fire hydrant installations System design, installation and commissioning;
 - minimum 5.5m carriageway width kerb to kerb;
 - parking is provided outside of the carriageway width;
 - curves of roads have a minimum inner radius of 6m;
 - the road crossfall does not exceed 3 degrees; and
 - a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.

Note: The parking restrictions shall not apply to the sections of road that are not located on 'bushfire prone' land (i.e. within 100m of a bushfire hazard as per Figure 09 of this report).

7. That proposed main road connecting from Pleasure Point Road, through to Lilli Pilli Drive and the roads surrounding the vegetated allotment to the southwest and C3 land centrally within the site shall comply with the requirements for Perimeter Roads as detailed in Table 5.3b of PBP, specifically:
 - are two-way sealed roads;
 - minimum 8m carriageway width kerb to kerb;
 - parking is provided outside of the carriageway width; hydrants are located clear of parking areas;
 - are through roads, and these are linked to the internal road system at an interval of no greater than 500m;
 - curves of roads have a minimum inner radius of 6m;
 - the maximum grade road is 15 degrees and average grade of not more than 10 degrees;
 - the road crossfall does not exceed 3 degrees; and
 - a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.
8. Any temporary dead-end roads between stages will have a compliant turning head in accordance with Appendix 3 of *Planning for Bush Fire Protection 2019*.

10.0 Conclusion

The development proposal relates to the subdivision of an existing allotment (zoned R2: Low Density Residential, C3: Environmental Management and RE1: Public Recreation) known as Pleasure Point Road, Pleasure Point for residential purposes. The proposed subdivision will result in the creation of four hundred and sixty-three (463) residential allotments.

The proposal is captured under section 100B of the *Rural Fires Act 1997*.

In accordance with the submission requirements for a Bush Fire Safety Authority as detailed in section 45 of the *Rural Fires Regulation 2022* an assessment of the extent to which the proposed development conforms with or deviates from *Planning for Bush Fire Protection (PBP)* is required.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is our opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

We are 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



Andrew Muirhead

Bushfire Consultant
Graduate Certificate in Bushfire Protection WSU
Bachelor of Engineering Technology Mastering in Civil UniSQ
FPA Australia BPAD Level 2 Accredited Practitioner
BPAD Accreditation No. BPAD46966



Reviewed by
Building Code & Bushfire Hazard Solutions P/L



Stuart McMonnies

Director / Manager Bushfire Section
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9400



11.0 Annexure 01

List of Referenced Documents

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NSW Rural Fire Service (2019). *Planning for Bush Fire Protection. A Guide for Councils, Planners, Fire Authorities and Developers*.

Proposed plan of Subdivision prepared by ADW Johnson, dwg ref: 300362-PSK-015, Version E, Date 16.08.2024.

Rural Fires Act 1997

Rural Fires Regulations 2022

Rural Fire Service NSW (2005). *Standards for Asset Protection Zones*

Rural Fire Service NSW (2017). *NSW Local Government Areas FDI*

Standards Australia (2018). *AS3959 Construction of buildings in bushfire-prone areas*.

Standards Australia (2014). *AS/NZS 1596 The storage and handling of LP Gas*

Acknowledgements to:

Geoscience Australia
Nearmap
Street-directory.com.au

Attachments

Attachment 01: Minimum APZ Overlay



Legend

Subject site Minimum APZ Forested Wetlands

BCBHS Ref: 240556
Drawn by: AM
Dated: 04/09/2024
Issue: 5
Client: Sera Developments Pty Ltd
Address: Lot 1 Heathcote Road, Pleasure Point



Bushfire Hazard Solutions
(Pty. Limited) ABN 19 057 337 774
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Telephone: (02) 9457 6530
www.bushfirehazardsolutions.com.au



Minimum APZ Overlay



RFS



Liverpool City Council
Locked Bag 7064
LIVERPOOL BC NSW 1871

Your reference: (CNR-75002) DA-441/2024
Our reference: DA20241028004481-S38-1

ATTENTION: Nabil Alaeddine

Date: Thursday 3 July 2025

Dear Sir/Madam,

Development Application
s100B - Subdivision - Torrens Title Subdivision
Pleasure Point Road Pleasure Point NSW 2172, 154//DP15226, 1//DP875804

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 09/05/2025.

The NSW RFS has reviewed the amended subdivision proposal at the subject site which has reduced the scope of works to one stage and advise that the previously raised concerns in relation to bush fire emergency management and evacuation in our letter dated 5 December 2024 still remain applicable.

The RFS has assessed the concept proposal encompassing the residential subdivision of the entire site to yield 380 lots which is still the intended final outcome. A piecemeal approach in subdividing the land for increased residential density is not considered suitable given the high bush fire risk and access constraints, posing significant evacuation challenges for residents and fire fighters.

The Bushfire Assessment Reports prepared by Building Code & Bushfire Hazard Solutions (Reference Number: 240556, dated 5th September 2024, revised 10 April 2025, further revised 12th June 2025) have identified that a most recent wildfire in 2017-18 has affected the vegetation up to Heathcote Road. As per the RFS records, this wildfire burnt an extensive area of forest vegetation to the south of subject site, which lead to closure of Heathcote Road from Macarthur Drive to New Illawarra Road and alert was issued for residents in the areas of Voyager Point, Pleasure Point, Sandy Point which are in close vicinity of the subject site. In case of such bush fire emergency, evacuation of residents within the proposed subdivision on to Heathcote Road will be challenged, as either side of the public road will be closed due to its proximity to forest vegetation. In addition, the C2 Environmental Conservation and C3 Environmental Management lots to the south of subject site and the revegetation corridor within the proposed subdivision will provide continuity of bush fire hazard in the context of broader surrounding landscape.

The RFS acknowledges that the subject site is zoned for residential development, however, the Council is advised that increase in residential density on the subject lot, to the extent proposed, is not considered suitable as per the provisions of Table 4.2.1 of *Planning for Bush fire Protection 2019 (PBP)*, in the absence of broader landscape risk assessment and evacuation study. It must be noted that the RFS has not provided comments on any strategic bush fire study to support the current zoning provisions to facilitate increased residential density to gauge the

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RFS



suitability of the site, with regard to the bush fire hazard in the surrounding area; the past fire history of the place; and difficulty in accessing and suppressing a fire utilising Heathcote Road.

A bush fire risk assessment addressing the landscape risk in accordance with the aim and objectives, and the strategic principles outlined in chapter 4 of *PBP 2019* (relevant sections given below) is recommended to address the suitability of the existing access provisions for emergency management and evacuation and thereby inform the appropriate increase in density on site to ensure that additional residents are not exposed to unacceptable risk during bush fire events.

- *the development area is exposed to a high bush fire risk and should be avoided;*
- *the development is likely to be difficult to evacuate during a bush fire due to its siting in the landscape, access limitations, fire history and/or size and scale;*
- *the development will adversely effect other bush fire protection strategies or place existing development at increased risk;*
- *the development is within an area of high bush fire risk where density of existing development may cause evacuation issues for both existing and new occupants; and*
- *the development has environmental constraints to the area which cannot be overcome.*

The NSW RFS is not in a position to support the development in its current form. Further additional information will need to be resubmitted through the Planning Portal under Section 38 of the *Environmental Planning & Assessment Regulation 2021*.

For any queries regarding this correspondence, please contact Rohini Belapurkar on 1300 NSW RFS.

Yours sincerely,

Nika Fomin
Manager Planning & Environment Srv (Est)
Built & Natural Environment