

AMENDED BUSHFIRE ASSESSMENT REPORT

Residential Subdivision: Concept Masterplan & Stage 1 559 Anambah Road, Gosforth

Prepared for Thirdi Anambah Pty Ltd



Bushfire Planning Australia

Stuart Greville Accredited Bushfire Practitioner BPAD-26202 © 0400 917 792

≥ stuart@bfpa.com.au Reference: 2425 Anambah V7 Prepared for Thirdi Anambah Pty Ltd c/- Vara Consulting
Attention: Jason McIntosh

① 0417 689 270

☑ jason@varaconsulting.com.au



Disclaimer and Limitation

This report is prepared solely for Thirdi Anambah Pty Ltd (the 'Client') for the specific purposes of only for which it is supplied (the 'Purpose'). This report is not for the benefit of any other person; either directly or indirectly and is strictly limited to the purpose and the facts and matters stated in it and will not be used for any other application.

This report is based on the site conditions surveyed at the time the document was prepared. The assessment of the bushfire threat made in this report is made in good faith based on the information available to Bushfire Planning Australia at the time.

The recommendations contained in this report are considered to be minimum standards and they do not guarantee that a building or assets will not be damaged in a bushfire. In the making of these comments and recommendations it should be understood that the focus of this document is to minimise the threat and impact of a bushfire.

Finally, the implementation of the adopted measures and recommendations within this report will contribute to the amelioration of the potential impact of any bushfire upon the development, but they do not and cannot guarantee that the area will not be affected by bushfire at some time.

Document Status: 2425 - Bushfire Assessment Report

| Version | Status | Purpose | Author | Review Date |
|---------|---------------|-----------------------------|------------------|----------------|
| 1 | Draft | Draft for Review | Katrina Greville | 1 July 2024 |
| 2 | Draft | Draft for Client Review | Stuart Greville | 22 August 2024 |
| 3 | Final | Final for Submission | Stuart Greville | 22 August 2024 |
| 4 | Final | Concept Plan & Stage 1 | Stuart Greville | 30 August 2024 |
| 5 | Amended Final | Response to RFS and MCC RFI | Stuart Greville | 24 June 2025 |
| 6 | Amended Final | Requested by Client | Stuart Greville | 27 June 2025 |
| 7 | Amended Final | Response to RFS | Stuart Greville | 18 July 2025 |

Certification

As the author of this Bushfire Threat Assessment (BAR), I certify this BAR provides the detailed information required by the NSW Rural Fire Service under Clause 45 of the Rural Fires Regulation 2022 and Appendix 2 of Planning for Bushfire Protection 2019 (PBP 2019) for the purposes of an application for a bush fire safety authority under section 100B(4) of the Rural Fires Act 1997.

Stuart Greville

Accredited Bushfire Practitioner

BPAD-26202

Date: 18 July 2025



In signing the above, I declare the report is true and accurate to the best of my knowledge at the time of issue.



Executive Summary

This Amended Bushfire Assessment Report has been prepared specifically in response to the Request for Further Information (RFI) issued by the NSW Rural Fire Service (RFS) on 12 November 2024 regarding DA/2024/763 and the subsequent letter of advice dated 11 July 2025. The report includes updated slope verification and provides a detailed justification for the proposed 8.0 metre wide non-perimeter roads, which comprise a 5.5 metre trafficable carriageway and a 2.5 metre verge or parking provision. This design achieves the Acceptable Solutions of Table 5.3b of PBP 2019 and is consistent with recent NSW RFS-approved subdivisions across the Hunter Region, where similar performance-based solutions have been formally supported through General Terms of Approval or General Notes.

In finalising the General Terms of Approval for this subdivision, it is requested that the RFS adopt a consistent approach to these approvals for developments exposed to a similar level of bushfire risk. The proposed design ensures safe operational access, effective evacuation capacity, and alignment with the overarching intent of Section 5.3.2 of PBP 2019. This Amended Report demonstrates that the development is now fully compliant with the applicable bushfire protection requirements.

A foundational principle for the assessment of this development is the explicit recognition that PBP 2019 is not a rigid, prescriptive code but a sophisticated, performance-based policy document. This framework is intentionally designed to provide flexibility, ensuring that bushfire protection measures (BPMs) can be tailored to the unique risks, constraints, and opportunities of each specific site, rather than imposing a one-size-fits-all solution that may be inappropriate or inefficient in certain contexts.

The structure of PBP 2019, which sets out performance criteria alongside acceptable solutions, confirms this intent. As such acceptable solutions are desirable but strict adherence is not necessary to achieve the intent and satisfy the performance criteria of PBP 2019. This approach is critical for complex projects like the Anambah subdivision, where a diverse landscape of risk exists across the site. A performance-based pathway allows for intelligent design that responds directly to the identified risk, ensuring that the highest levels of protection are applied where the risk is greatest while allowing for more pragmatic and efficient solutions in lower-risk internal areas.

Bushfire Planning Australia (BPA) has been engaged by Thirdi Anambah Pty Ltd c/- Vara Consulting Pty Ltd (the 'Client') to undertake a Bushfire Assessment Report (BAR) to support a concept development application for the proposed staged residential subdivision located at 559 Anambah Road, Gosforth (the 'Site'); legally known as Lot 55 DP874170 and Lot 177 DP874171.

The Project is for a Concept Development Application (CDA) seeking concept approval for the staged development of the concept masterplan, and for which detailed proposals for the Site or for separate parts of the site are to be subject of subsequent Development Applications (DAs), apart from Stage 1.

The masterplan creates a new urban subdivision within the Anambah Urban Release Area accommodating a mix of housing types with approximately 900 residential lots, and incorporates open space, roads, pedestrian networks, utilities and services, intersection and drainage infrastructure. The area of the Site subject to the concept masterplan is zoned R1 General Residential and is located within the Anambah Urban Release Area.

Stage 1 will create 220 residential lots and associated works including bulk earthworks, tree removal, landscaping, road construction, water basins, utilities and services. All subsequent stages will form the subject of separate development applications. Stage 1 includes a new intersection to provide access into the development via Anambah Road, together with a secondary emergency access to be constructed via the unformed River Road.



This assessment demonstrates Stage 1 of the Anambah concept proposal complies with the specifications and requirements of the NSW Rural Fire Service (RFS) document; Planning for Bushfire Protection 2019 (PBP 2019). This assessment will also demonstrate all future stages included in the concept masterplan are able to comply with the relevant requirements of PBP 2019.

Accordingly, the Client seeks a Bush Fire Safety Authority (BFSA) from the RFS for Stage 1 of the masterplan, in addition to endorsement of the concept masterplan.

This BAR found that the site is currently exposed to a medium bushfire hazard located within 140m east of the proposed development although separated by Anambah Road. The primary bushfire hazard is identified as a *forest*, specifically, *Hunter Macleay Dry Sclerophyll Forest*.

There is limited mature vegetation contained across the site, which has been highly modified for farming and grazing and is dominated by a mixture of exotic and native *grasslands* with some scattered trees are spread across the existing pastures. The proposed detention basins and existing watercourse will be revegetated as a *freshwater wetland*.

In summary, the following key recommendations have been designed to enable the proposed residential development to achieve the aims and objectives of PBP 2019:

Asset Protection Zones

- 1. All land within the site zoned R1 Residential; excluding the riparian corridors shall be managed as an Inner Protection Area (IPA) as outlined within Appendix 4 of PBP 2019 and the RFS document Standards for asset protection zones.
- 2. Asset Protection Zones (APZ) shall be provided as indicated on Figure 12.

Landscaping

- 3. Vegetation within road verges (including swales) to be consistent with a grassland vegetation classification with tree canopy less than 10% at maturity.
- **4.** Vegetation with the stormwater basins; including associated batters shall be planted consistent with a *freshwater wetland* vegetation classification with tree canopy less than 10% at maturity.
- **5.** Consideration should be given to landscaping and fuel loads on site to decrease potential fire hazards on site in accordance with Appendix 4 of PBP 2019.

Access

- **6.** Perimeter roads shall be constructed in accordance with the engineering design plans (**Appendix A**) and the following general requirements of Table 5.3b of PBP 2019:
 - a. Minimum 8.0m wide pavement width measured kerb to kerb
 - b. Hydrants are located clear of parking areas
 - c. Curves of roads have a minimum inner radius of 6m
 - d. The road crossfall does not exceed 3 degrees
 - e. A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches is provided
- 7. Non-perimeter roads shall be constructed in accordance with the engineering design plans (**Appendix A**) and the following general requirements of Table 5.3b of PBP 2019:
 - a. Minimum 5.5m wide pavement width measured kerb to kerb
 - b. Hydrants are located clear of parking areas
 - c. Curves of roads have a minimum inner radius of 6m



- d. The road crossfall does not exceed 3 degrees
- e. A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches is provided
- **8.** A temporary access road shall be provided during the staged construction of the development to provide an alternate secondary access to the New England Highway via River Road.
- **9.** Any temporary turning heads shall be constructed in accordance Appendix A3.3 of PBP 2019

Services

10. All new lots are to be connected to a reliable water supply network and that suitable fire hydrants are located throughout the development site that are clearly marked and provided for the purposes of bushfire protection. Fire hydrant spacing, sizing and pressure shall comply with AS2419.1 2021 and section 5.3.3 of PBP 2019.

Construction

11. All future dwellings to be constructed on the proposed lots shall have due regard to the specific considerations given in the National Construction Code: Building Code of Australia (BCA) which makes specific reference to Australian Standard AS3959-2018 Construction of buildings in bushfire prone areas (AS3959-2018) and the NASH Standard Steel Framed Construction in Bushfire Prone Areas.

This assessment has been made based on the bushfire hazards observed in and around the site at the time of inspection and production (August 2024 and May 2025) and demonstrates the development has satisfied the aims and objectives of Planning for Bushfire Protection 2019 (PBP 2019).

Finally, should the above recommendations be implemented, the existing bushfire risk should be suitably mitigated to offer an acceptable level of protection to life and property for those persons and assets occupying the site, but they do not and <u>cannot</u> guarantee that the area will <u>not</u> be affected by bushfire at some time and that property and life damage/loss will not occur.



Table of Contents

| Exec | utive | Summary | III |
|------|-------|---|-----|
| 1. | Intro | ductionduction | 1 |
| | 1.1. | Aims and Objectives | 1 |
| 2. | Site | Description | 2 |
| | 2.1. | Bushfire Prone Land | 6 |
| | 2.2. | Urban Release Area - Anambah | 8 |
| | 2.3. | Proposed Development - Concept Masterplan | 9 |
| | 2.4. | Proposed Development - Stage 1 | |
| 3. | Busl | nfire Hazard Assessment | 12 |
| | 3.1. | Vegetation Assessment | 12 |
| | 3.2. | Slope Assessment | |
| | 3.3. | Slope & Vegetation Assessment Results | 23 |
| | 3.4. | Significant Environmental Features | 27 |
| | 3.5. | Threatened Species, populations or ecological communities | 27 |
| | 3.6. | Aboriginal Objects | 27 |
| 4. | Busl | nfire Risk and Mitigation | 28 |
| | 4.1. | Asset Protection Zones | 28 |
| | | 4.1.1. Determining the Appropriate Setbacks | |
| | 4.2./ | Landscaping and Vegetation Management | |
| | | Access | |
| 1 | 4.4. | Services - water, electricity and gas | 40 |
| | | 4.4.1. Water | |
| | | 4.4.2. Electricity | 40 |
| | | 4.4.3. Gas | 40 |
| | 4.5. | Construction Standards: Bushfire Attack Level | 41 |
| | 4.6. | Emergency Services | |
| 5. | Con | clusion and Recommendations | 46 |
| 6. | Refe | rences | 48 |



| Figures |
|---|
| Figure 1: Land Use Zone Map (Maitland Local Environment Plan 2011) |
| Figure 2: Site Locality Plan4 |
| Figure 3: Site Context Plan5 |
| Figure 4: Bushfire Prone Land Map (RFS 2023)7 |
| Figure 5: Urban Release Area - Anambah (NSW ePlanning Spatial Viewer) |
| Figure 6: Proposed Concept Masterplan of Anambah Urban Release Area10 |
| Figure 7: Proposed Subdivision – Stage 111 |
| Figure 8: NSW State Vegetation Type Formation 202313 |
| Figure 9: Digital Elevation Model15 |
| Figure 10: Slope Analysis LiDAR with 5-degree gradients |
| Figure 11: Observed Slope and Vegetation Assessment - Concept Masterplan26 |
| Figure 12: Asset Protection Zones – Acceptable Solutions (Table 1.12.2)31 |
| Figure 13: Road Hierarchy Plan36 |
| Figure 14: Proposed Primary, Secondary and Emergency Access |
| Figure 15: River Road Emergency Access Plan38 |
| Figure 16: Post Development Bush Fire Prone Land Map39 |
| Figure 17: Bushfire Attack Level41 |
| Figure 18: Subdivision BAL Plan - Concept Masterplan44 |
| Figure 19: NSW Fire & Rescue - Rutherford45 |
| Tables |
| Table 1: Site Description2 |
| Table 2: Slope and Vegetation Assessment Results - Concept Masterplan24 |
| Table 3: Required and Recommended Asset Protection Zones - Concept Masterplan29 |
| Table 4: Required BALs - Concept Masterplan42 |
| Plates |
| Plate 1: Indicative development footprint looking south-east |
| Plate 2: Indicative development footprint looking west |
| Plate 3: Forest (grassy) vegetation north of the site and separated by Anambah Road (T1) 19 |
| Plate 4: Forest (grassy) vegetation identified as the primary bushfire hazard east of the site (T3) 19 |
| Plate 5: Grassland paddocks located south of the site (T5)20 |
| Plate 6: Grassland paddocks located south of the site (T5)20 |
| Plate 7: Grassland paddocks with scattered trees located to the south of the site (T7)21 |
| Plate 8: Actively grazed grassland paddocks with scattered trees located to the west of the site (T8)21 |
| Plate 9: Actively grazed grassland paddocks with scattered trees located to the west of the site (T9)22 |
| Plate 10: Isolated forest vegetation located north of the proposed development footprint (T11) 22 |



Appendices

Appendix A: Plan of Proposed Concept Masterplan

Appendix B: AHIMS Search Results
Appendix C: Landscape Masterplan

Terms and Abbreviations

| Abbreviation | Meaning |
|---------------------------|--|
| APZ | Asset Protection Zone |
| AS2419-2005 | Australian Standard – Fire Hydrant Installations |
| AS3959-2018 | Australian Standard – Construction of Buildings in Bush Fire Prone Areas |
| BAR | Bushfire Assessment Report |
| BCA | Building Code of Australia |
| BMP | Bush Fire Management Plan |
| BPA | Bush Fire Prone Area (Also Bushfire Prone Land) |
| BPL | Bush Fire Prone Land |
| BPLM | Bush Fire Prone Land Map |
| BPM | Bush Fire Protection Measures |
| Development Site | Stage 1 development (within the Anambah Concept Masterplan) |
| DoE | Commonwealth Department of the Environment |
| DPI Water | NSW Department of Primary Industries – Water |
| DSF | Dry Sclerophyll Forest |
| EPA Act | NSW Environmental Planning and Assessment Act 1979 |
| EPBC Act | Commonwealth Environment Protection and Biodiversity Conservation Act 1999 |
| FDI | Fire Danger Index |
| FMP | Fuel Management Plan |
| ha | hectare |
| IPA | Inner Protection Area |
| LGA | Local Government Area |
| MCC | Maitland City Council |
| OPA | Outer Protection Area |
| OEH | NSW Office of Environment and Heritage |
| PBP 2019 | Planning for Bushfire Protection 2019 |
| RF Act | Rural Fires Act 1997 |
| RF Regulation | Rural Fires Regulation |
| RFS | NSW Rural Fire Service |
| Subject Site / Study Area | Anambah Concept Masterplan |



1. Introduction

Bushfire Planning Australia (BPA) has been appointed by Vara Consulting on behalf of Thirdi Anambah Pty Ltd (the 'Client') to undertake a Bushfire Assessment Report (BAR) for the proposed staged residential subdivision located at 559 Anambah Road, Gosforth (the 'Site').

Whilst the BAR has assessed all stages within the concept masterplan, this assessment relates to the proposed Stage 1 development and will create 220 residential allotments and construction of associated ancillary services.

In addition to the assessment of Stage 1, in accordance with Section 4.22 in Division 4.4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act 1979), a concept development application is also being submitted seeking approval for a masterplan create a new urban subdivision within the Anambah Urban Release Area. The concept masterplan accommodates a mix of housing types within 900 residential lots, and incorporating open space, roads, pedestrian network, utilities and services, intersection and drainage infrastructure.

Overall, this assessment aims to provide a bushfire risk assessment which considers and assesses the bushfire hazard and associated potential bushfire threat relevant to the proposed development on a landscape scale, including Stage 1 within the Study Area. The assessment outlines the minimum mitigative measures which would be required in accordance with the BAR, provisions of the New South Wales Rural Fire Service (RFS) publication *Planning for Bushfire Protection 2019* (PBP 2019) and the *Rural Fires Regulation 2022*.

1.1. Aims and Objectives

This BAR aims to assess the bushfire threat and recommends a series of bushfire protection measures that aim to minimise the risk of adverse impact of bush fires on life, property and the environment.

This assessment has been undertaken in accordance with Appendix 2 of *Planning for Bushfire Protection 2019* and clause 45 of the *Rural Fires Regulation 2022*. This assessment also addresses the aim and objectives of PBP 2019, being:

| Afford buildings and their occupants protection from exposure to a bushfire. |
|---|
| Provide for a defendable space to be located around buildings. |
| Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings. |
| Ensure that appropriate operational access and egress for emergency service personnel and occupants is available. |
| Provide for ongoing management and maintenance of bushfire protection measures (BPMs). |
| Ensure that utility services are adequate to meet the needs of firefighters. |
| |



2. Site Description

The site is positioned within the characteristic semi-rural landscape of the Lower Hunter Valley, approximately 5 kilometres from the Maitland city centre, a key regional hub. The property at 559 Anambah Road currently presents as predominantly open grassland with sparse, scattered trees, a legacy of its historical use for agricultural purposes, including farming and grazing.

A critical feature of the site's location is its position at a distinct urban-bushland interface. The proposed development is bounded by Anambah Road to the east and is adjacent to contiguous tracts of native vegetation to its north-east and north-west. This interface is the primary source of the bushfire hazard analysed in this report. The site's strategic location near the New England Highway and the Anambah Business Park highlights its role in the planned growth of the Maitland region. **Figure 3** provides a contextual visual description of the subject site and its relationship to the established landscape; being primarily cleared agricultural land.

Table 1: Site Description

| Address | 559 Anambah Road, Gosforth |
|---------------------------|---|
| Title | Lot 177 DP874171 and Lot 55 DP874170 |
| LGA | Maitland City Council |
| Subject Site / Study Area | 124.08 ha |
| Development Site | Part of Lot 177 DP874171 and Lot 55 DP874170 (~ ha) |
| Land Use Zone | R1 General Residential and RU2 Rural Landscape (Figure 1) |
| Bushfire Prone Land | Vegetation Category 1, Vegetation Category 2, Vegetation Category 3 and Vegetation Buffer (Figure 4) |
| Context | The subject site forms part of the Anambah Urban Release Area. The site consists of two lots both located to the west of Anambah Road and separated by the unformed River Road. The site is vacant of any buildings and majority of the site has historically been used for grazing purposes. The south-western corner of the site is largely vegetated which scatters along the northern, eastern and western boundaries in isolated sections. Similarly, surrounding sites have historically been used for grazed, contain vegetation or rural residential properties. |
| Topography | The site compromises gently to moderately sloping undulating rolling hills. Slope range from 2-5 degrees over the eastern portion of the site and up to 7-8 degrees over much of the western portion of the site. |
| Fire Danger Index | 100 |



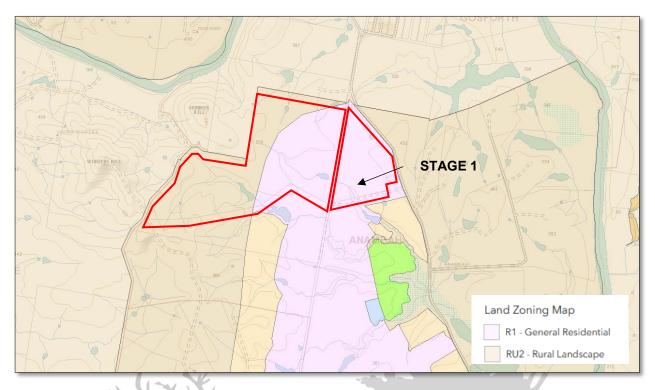
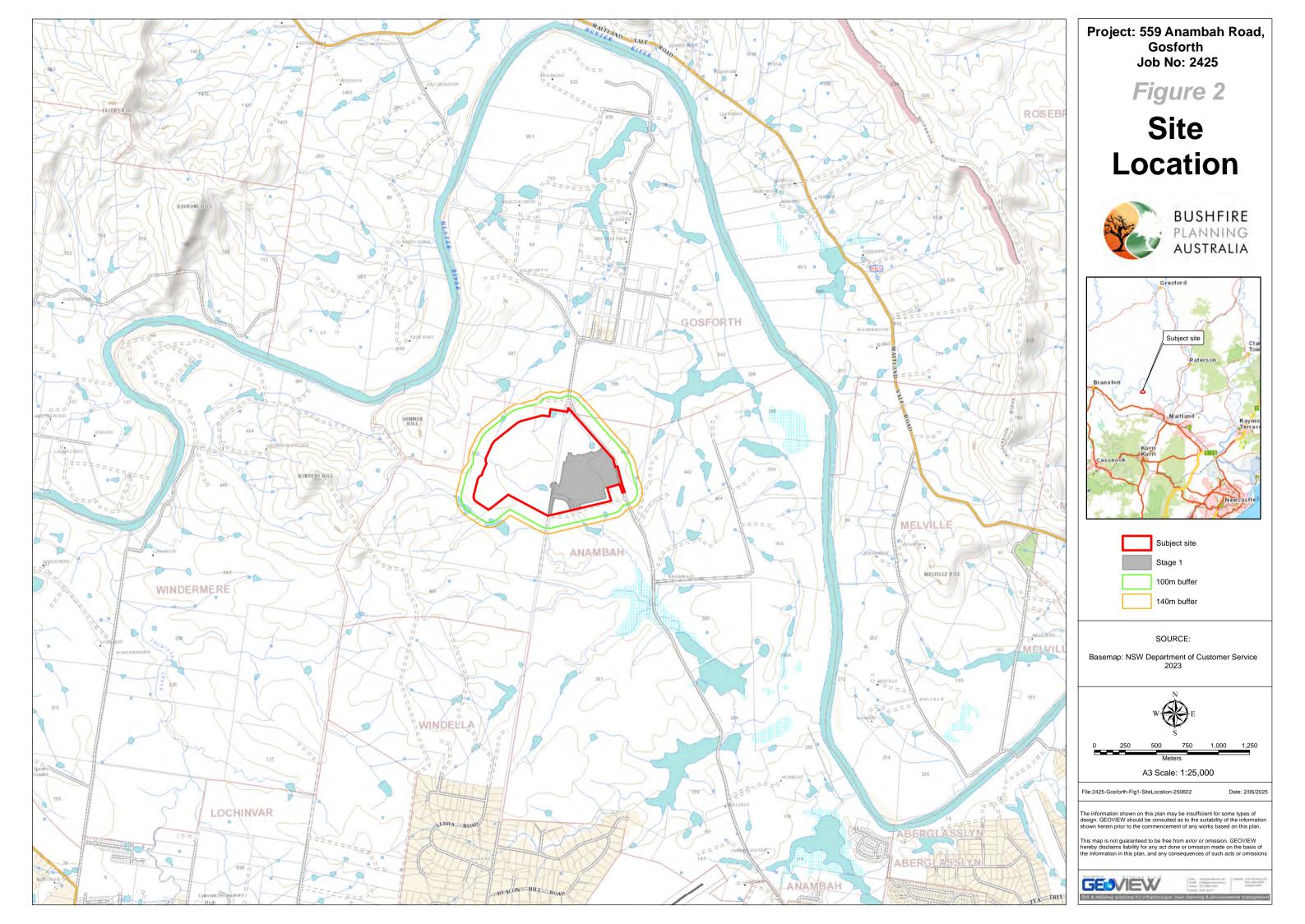
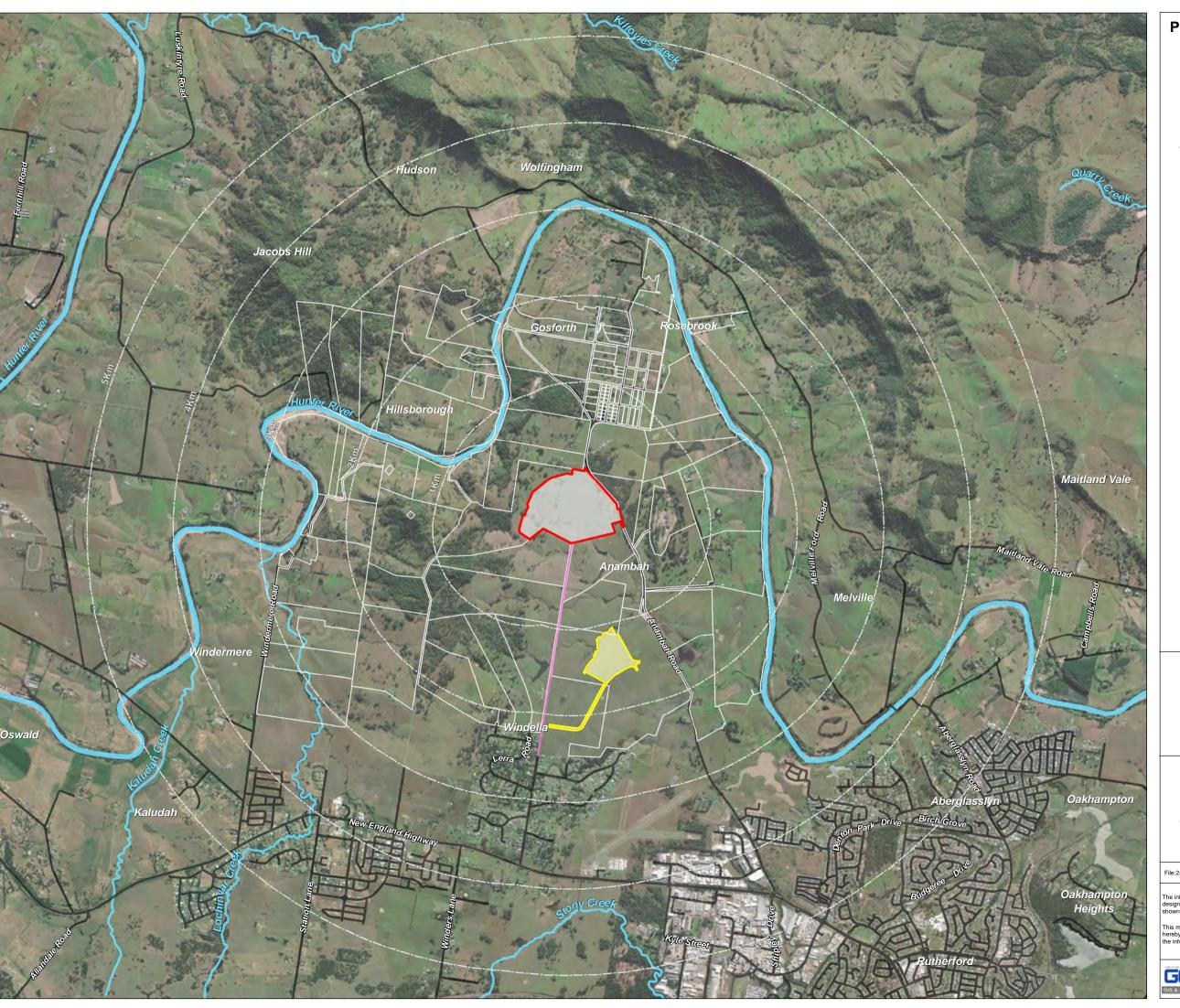


Figure 1: Land Use Zone Map (Maitland Local Environment Plan 2011)



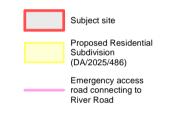


Project: 559 Anambah Road, Gosforth Job No: 2425

Figure 3

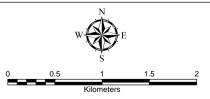
Site Context Plan





SOURCE:

Aerial Photo: Maxar 2023



A3 Scale: 1:40,000

File:2425-Gosforth-Fig11-Vegetation-Context-Plan-Clean-2500a7te818/07/2025

The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

This map is not guaranteed to be free from error or omission. GEOVIEW hereby disclaims liability for any act done or omission made on the basis of the information in this plan, and any consequences of such acts or omissions





2.1. Bushfire Prone Land

Bushfire activity is prevalent in landscapes that carry fuel and the two predominant bushfire types are grassland and forest fires. Factors such as topographic characteristics and quantity of fuel loads influence the intensity and spread of fire. The scale of a bushfire hazard is tailored to the characteristics of the hazard, the size and characteristics of the affected population, types of land use exposed to bushfire, predicted development growth pressures and other factors affecting bushfire risk.

Figure 4 demonstrates majority of the subject site is mapped as Category 3 Vegetation. The sites south-western corner largely consists of Category 1 vegetation which extends further north along the western and northern boundaries. There are also isolated sections of Category 1 Vegetation along the sites eastern boundary. There are also isolated sections of Category 2 Vegetation and Vegetation Buffer where dams exist, or small scattered vegetation exist within the site respectively.

Within and beyond 140m of the subject site, bushfire prone land including Vegetation Category 1, 2, 3 and Vegetation Buffer exists in all directions.

Bushfire prone land specific to the proposed Stage 1 development is identified as Vegetation Category 3 and minimal Vegetation Category 1 and Vegetation Buffer. Therefore, the primary bushfire hazard specific to the proposed Stage 1 development is located within and beyond 140m to the east of the site and separated by Anambah Road.



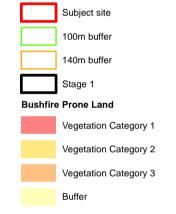


Project: 559 Anambah Road, Gosforth Job No: 2425

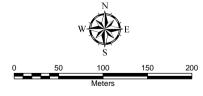
Figure 4

NSW Bush **Fire Prone** Land





SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2024
NSW Bush Fire Prone Land: NSW Rural Fire Service
2023
Aerial Photo: Nearmap 26/02/2024



A3 Scale: 1:4,250

The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

This map is not guaranteed to be free from error or omission, GEOVIEW nereby disclaims liability for any act done or omission made on the basis of the information in this plan, and any consequences of such acts or omission







2.2. Urban Release Area - Anambah

The site is located within the Anambah Urban Release Area (URA) as seen in **Figure 5**. It is strategically located in proximity to other areas earmarked for urban release including the Lochinvar URA, Anambah Road URA, Anambah Employment Area, Anambah Urban Extension Site (Windella) and Anambah Road Urban Extension Site.

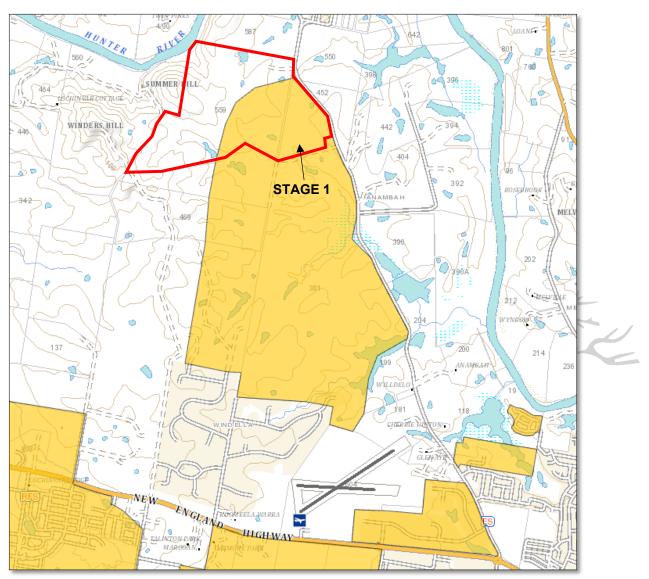


Figure 5: Urban Release Area - Anambah (NSW ePlanning Spatial Viewer)



2.3. Proposed Development - Concept Masterplan

In accordance with Section 4.22 in Division 4.4 of the EP&A Act 1979, a concept development application is being submitted seeking approval for a masterplan create a new urban subdivision within the Anambah URA (**Figure 5**). The concept masterplan accommodates a mix of housing types within 900 residential lots, and incorporating open space, roads, pedestrian network, utilities and services, intersection upgrades and drainage infrastructure as shown in **Figure 6**.

As shown in **Figure 1**, the concept masterplan is contained within the part of the site zoned R1 – General Residential. **Figure 5** demonstrates a portion of the site is within the Anambah URA under the Maitland Local Environmental Plan 2011 (MLEP). Accordingly, the area of the site the subject of the concept masterplan has previously been demonstrated to be suitable for residential development. It is also noted the concept masterplan has been designed to integrate into the similarly residential zoned land immediately south of the development site; known as 381 Anambah Road.

Accordingly, a bushfire hazard assessment (and not a Strategic Bushfire Study) has been completed for the area affected by the concept development application and this BAR will demonstrate the concept masterplan and all future stages are able to comply with the relevant specifications and requirements of PBP 2019.

In principle support for the broader concept masterplan is requested from the RFS.





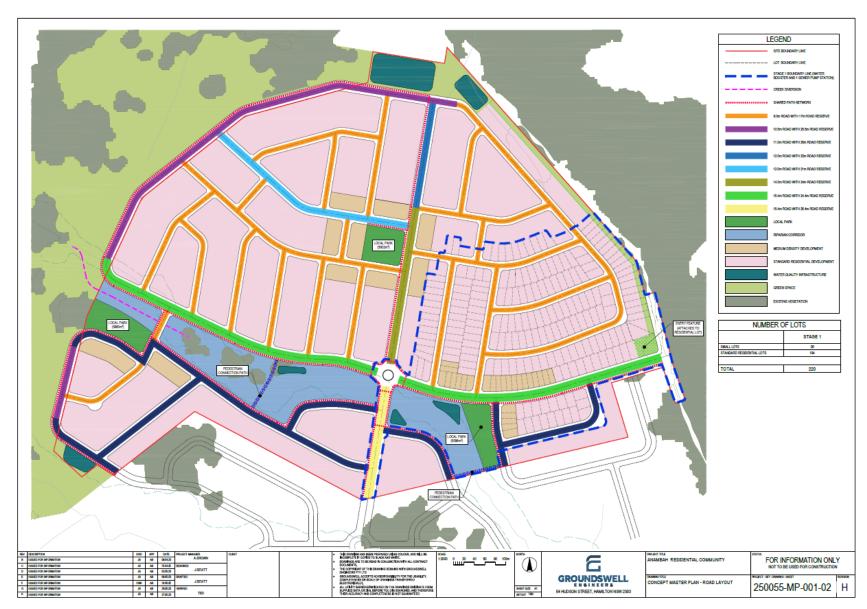


Figure 6: Proposed Concept Masterplan of Anambah Urban Release Area



2.4. Proposed Development - Stage 1

The concept masterplan is proposed to be delivered in several stages. Stage 1 forms the subject of the current concept development application. All stages subsequent to Stage 1 will form the subject of separate development applications.

This BAR has been prepared for the purposes of an application for a bush fire safety authority (BFSA) under section 100B(4) of the Rural Fires Act 1997 for Stage 1.

The proposed development of Stage 1 will create 220 residential lots and associated works including bulk earthworks, tree removal, landscaping, water basins, utilities and services as shown in **Figure 7**. The development of Stage 1 will also include the construction of both public through (collector) roads, perimeter roads and non-perimeter roads to provide access to each lot.

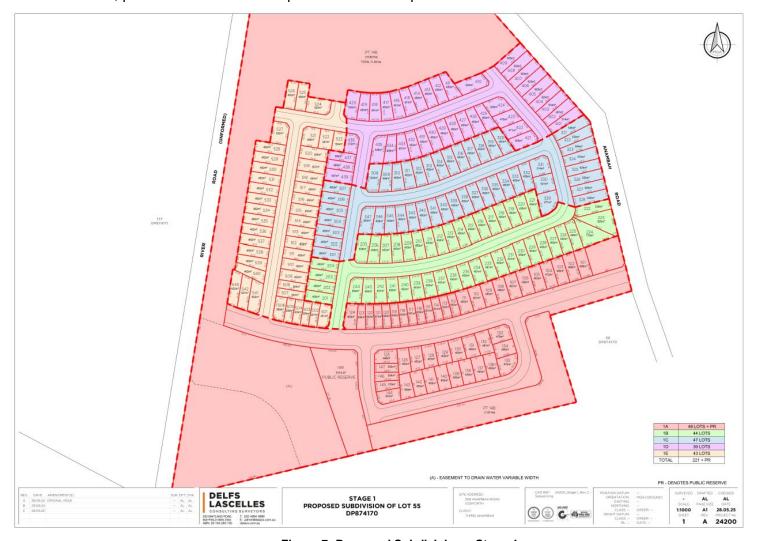


Figure 7: Proposed Subdivision – Stage 1



3. Bushfire Hazard Assessment

The bushfire hazard assessment will involve quantitative and qualitative assessments of the site. The quantitative assessment includes a detailed site inspection to record and review vegetation communities, slope and aspect both within and surrounding the site. The qualitative assessment will be based on the known bushfire behaviour of the subject land.

3.1. Vegetation Assessment

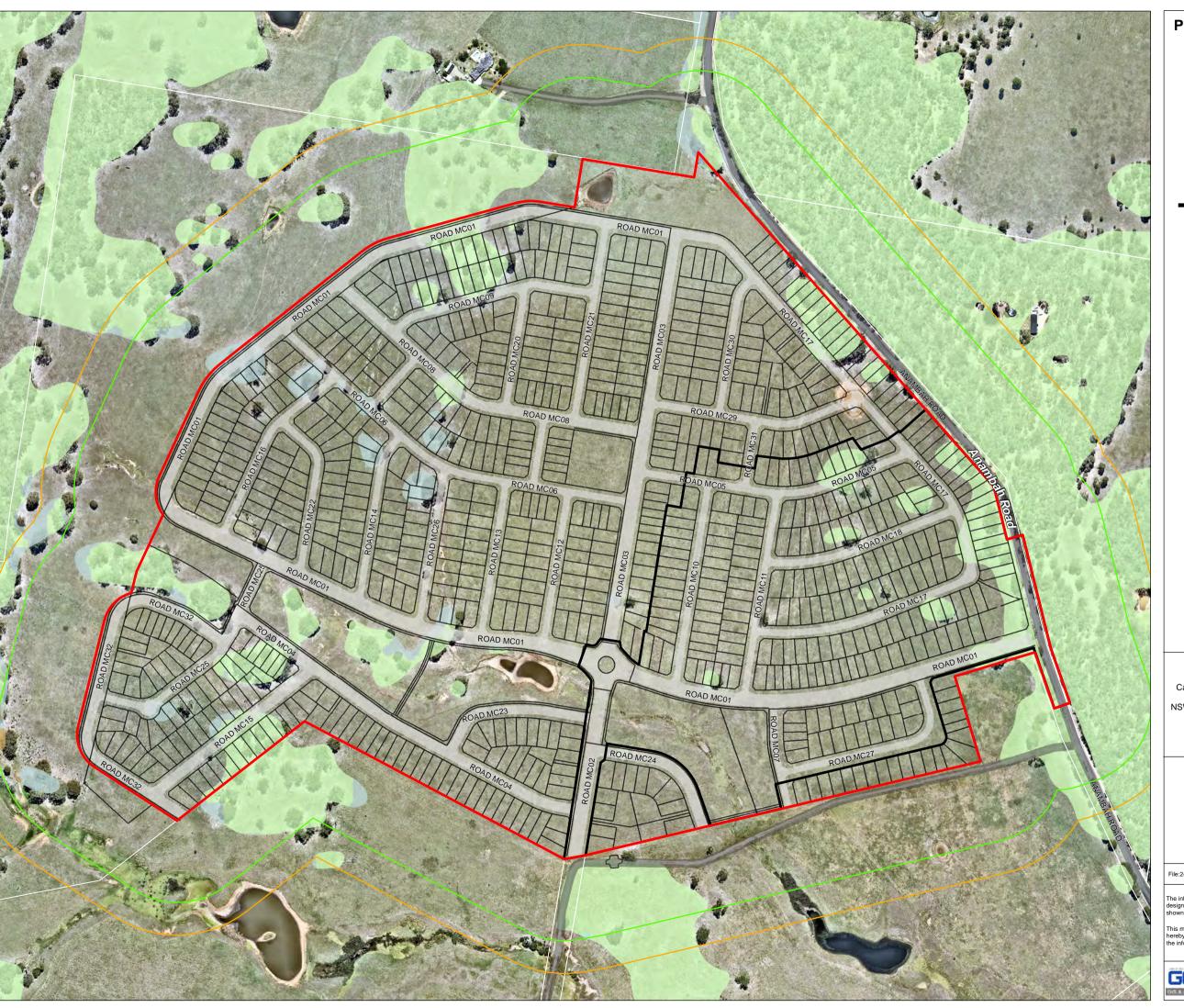
Vegetation classification over the entire Study Area (concept masterplan) and surrounding area has been carried out as follows:

| Aerial Photograph Interpretation to map the vegetation classification and extent (NearMap historical series). |
|--|
| Reference to NSW State Vegetation Type (SVT) Formation Department of Planning, Industry and Environment 2023 (Figure 8) |
| Landscape Masterplan completed by Taylor Brammer dated 30 May 2025 (Appendix C) |
| Site Inspection completed on 17 April 2024 by Stuart Greville (BPA) |
| |

In accordance with PBP 2019, an assessment of the vegetation over a distance of 100m in all directions from the site was undertaken for Stage 1 and the Study Area.

Vegetation that may be considered a bushfire hazard was identified in all directions from the development footprint. The vegetation classification is based on Appendix 1 of PBP 2019 as per Keith (2004). The unmanaged fuel loads detailed in the *Comprehensive Vegetation Fuel Loads* published by the RFS in March 2019 have been adopted for the purpose of assessing the bushfire hazard. The findings of the site inspection were compared to the Keith Vegetation Formations mapping provided by the NSW RFS and NSW SVT. The inconsistencies between the mapping sources were quantified during the site inspection.

The proposed concept masterplan will revegetate the riparian corridor located within the site. The proposed revegetation treatment as outlined in the Landscape Masterplan has been considered and the vegetation formations identified adopted for the purpose of this hazard assessment for both the concept masterplan and Stage 1.



Project: 559 Anambah Road, Gosforth Job No: 2425

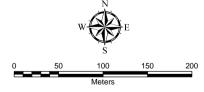
Figure 8

NSW State Vegetation Type (Class)





SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2024
NSW Vegetation Type: NSW Department of Planning,
Industry and Environment 2023
Aerial Photo: Nearmap 26/02/2024



A3 Scale: 1:4,250

File:2425-Gosforth-Fig3-Vegetation-NSW-SVT-250602

2 Date: 2/06/202

he information shown on this plan may be insufficient for some types of esign. GEOVIEW should be consulted as to the suitability of the information hown herein prior to the commencement of any works based on this plan.

This map is not guaranteed to be free from error or omission. GEOVIEW hereby disclaims liability for any act done or omission made on the basis of the information in this plan, and any consequences of such acts or omissions







3.2. Slope Assessment

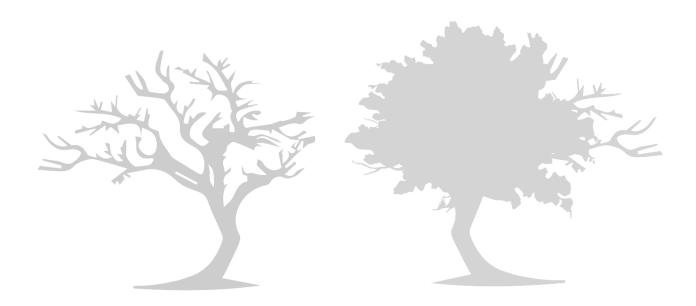
The slope assessment was undertaken as follows:

- ☐ Review of LiDAR point cloud data including DEM (NSW LPI)
- Detail survey of existing contours

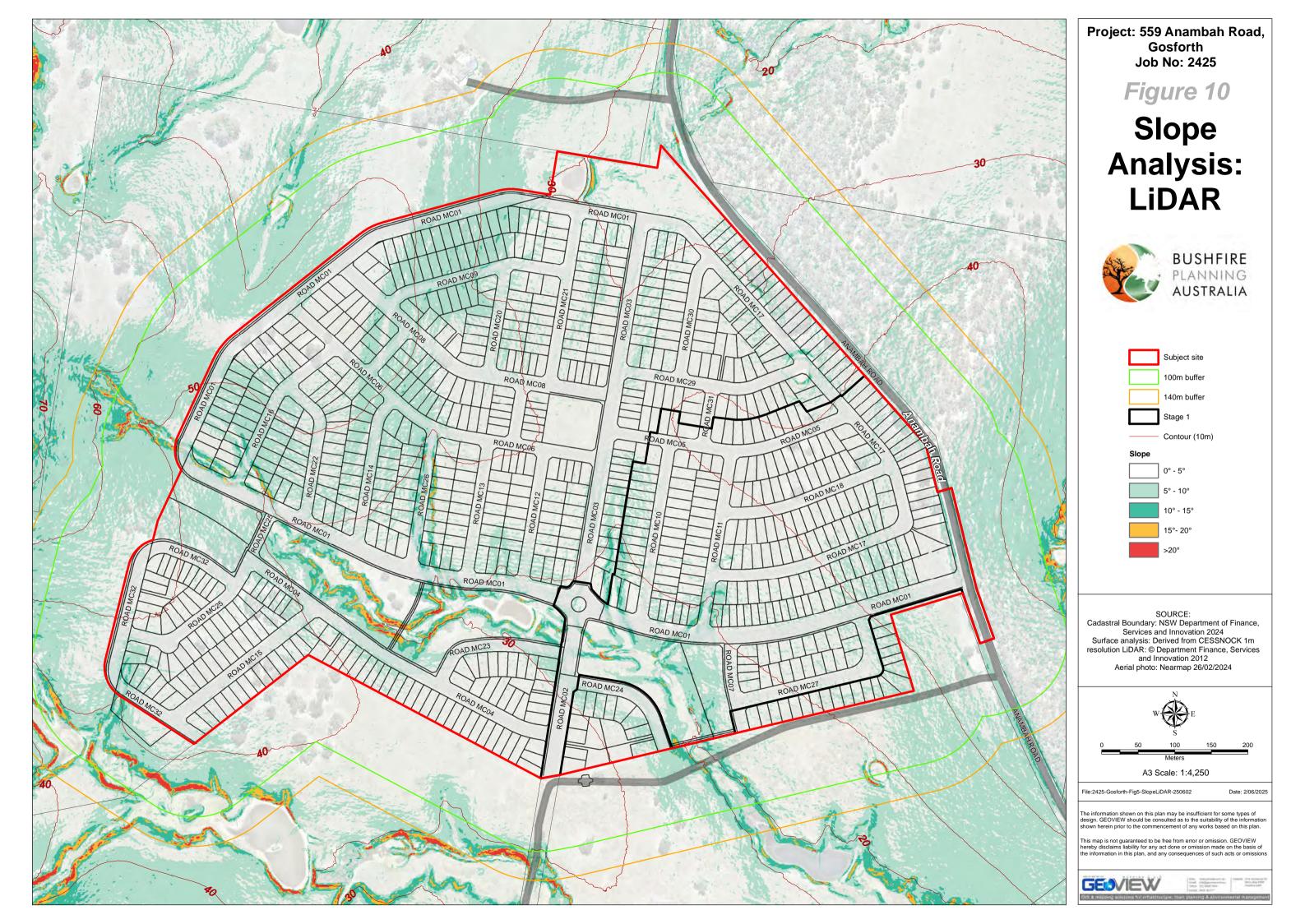
An assessment of the slope over a distance of 140m in the hazard direction from the site boundary was undertaken. The effective slope was then calculated under the classified vegetation where there was a fire run greater than 50m. The topography of the site has been evaluated to identify both the average slope and by identifying the maximum slope present. These values help determine the level of gradient which will most significantly influence the fire behaviour of the site.

A series of figures were produced that demonstrate the slope within 140m from the subject site in multiple formats, including:

- ☐ Digital Elevation Model (**Figure 9**)
- □ Slope analysis in gradients of 5 degrees (**Figure 10**)









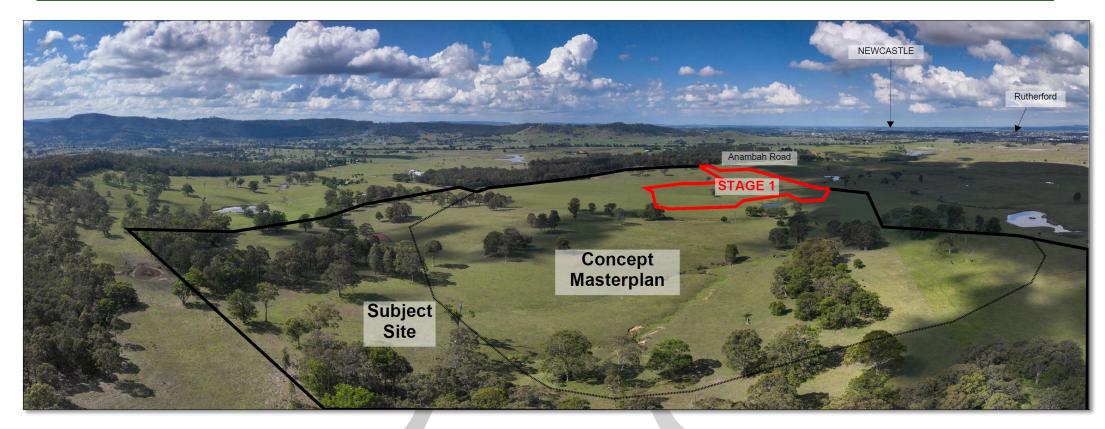


Plate 1: Indicative development footprint looking south-east



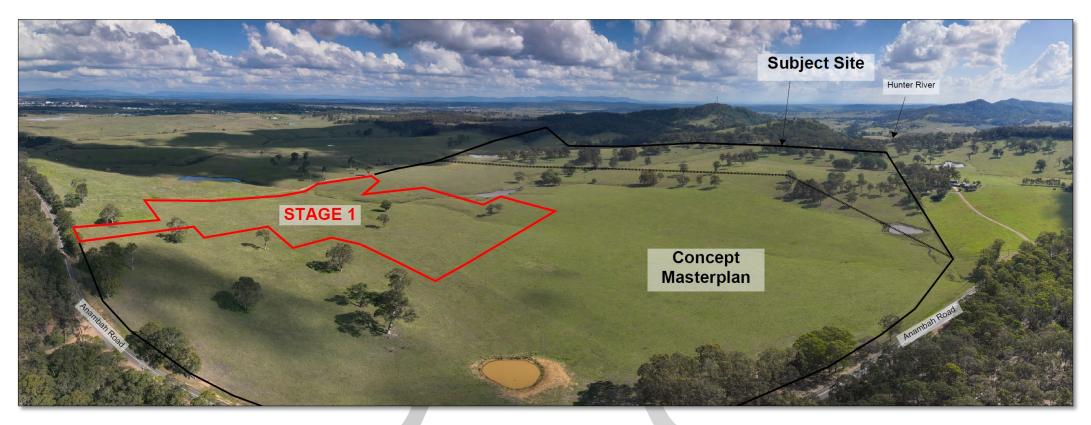


Plate 2: Indicative development footprint looking west





Plate 3: Forest (grassy) vegetation north of the site and separated by Anambah Road (T1)



Plate 4: Forest (grassy) vegetation identified as the primary bushfire hazard east of the site (T3)





Plate 5: Grassland paddocks located south of the site (T5)

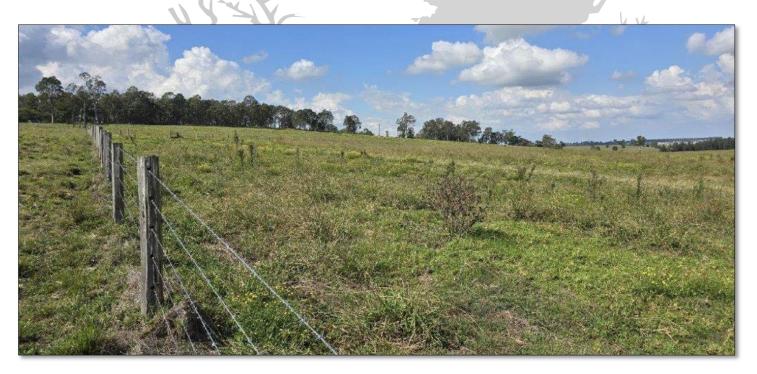


Plate 6: Grassland paddocks located south of the site (T5)





Plate 7: Grassland paddocks with scattered trees located to the south of the site (T7)



Plate 8: Actively grazed grassland paddocks with scattered trees located to the west of the site (T8)





Plate 9: Actively grazed grassland paddocks with scattered trees located to the west of the site (T9)



Plate 10: Isolated forest vegetation located north of the proposed development footprint (T11)



3.3. Slope & Vegetation Assessment Results

All vegetation identified within the current Bush Fire Prone Land map was confirmed during the site inspection.

The majority of the Site (concept masterplan) and its surrounds has been highly modified for farming and grazing and is dominated by a mixture of exotic and native *grasslands* with some scattered trees or isolated forest vegetation spread across the existing pastures. Vegetation located within and beyond 100m east of the Site (concept masterplan) is identified as *forest* vegetation, namely *Hunter Macleay Dry Sclerophyll Forest*; being a grassy forest with a reduced surface fuel load as compared to a shrubby forest. This vegetation is identified as the primary bushfire hazard for both the concept masterplan and Stage 1 development. It is noted, the proposed Stage 1 residential lots are greater than 100m from this hazard and is further separated by Anambah Road.

There is an existing riparian corridor located within the southern portion of the site that will be revegetated and assessed as a *freshwater wetland* hazard within both the concept masterplan and the Stage 1 development.

In a broader landscape scale context, the potential bushfire hazards up to 5km from the site are found in isolated and fragmented clusters. Within 5km of the site, the land is a mix of rural grazing land, cleared agricultural land, riparian corridors along the Hunter River and some rural residential estates. The dominant vegetation is highly fragmented pasture with clusters of grassy forests, which in themselves are isolated and discontinuous. The overall area is gently undulating, with slopes generally 0–5 degrees. The Hunter River floodplain to the east is flat and low-lying.

The closest potential fire run is from the east from the grassy forest and is less than 400m.

The results of hazard assessment for the concept masterplan and Stage 1 are detailed in **Table 2** and shown in **Figure 11** respectively.

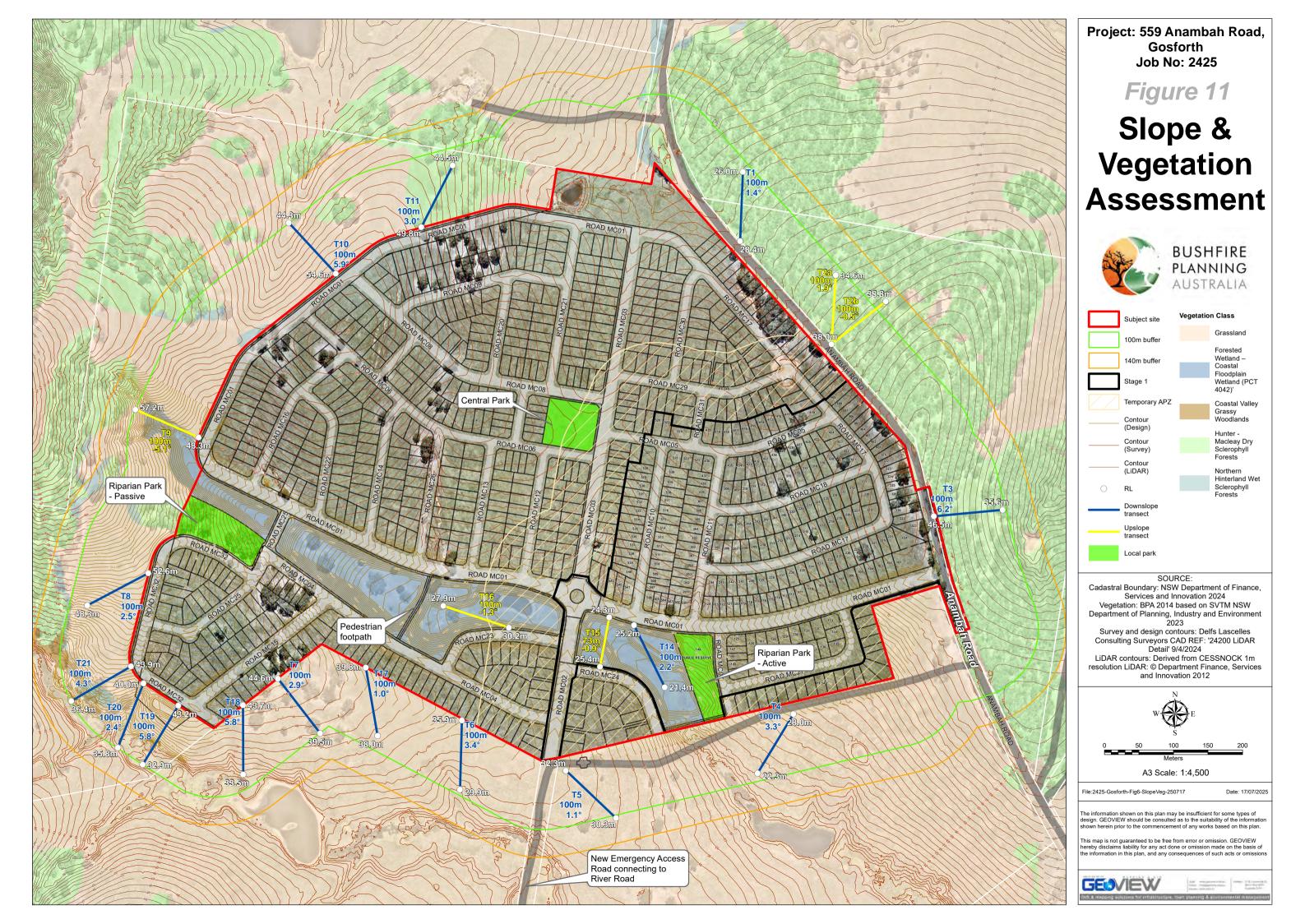


Table 2: Slope and Vegetation Assessment Results - Concept Masterplan

| Transect | Vegetation Description | Vegetation Classification (PBP 2019) | Slope |
|----------|---|--|-------------------|
| T1 | Grassy forest vegetation identified as the primary bushfire hazard, north east of the site and separated by Anambah Road. Maximum fire run of 300m before opening to extensive grazing lands and continuing to the Hunter River. | Forest (Hunter Macleay Dry Sclerophyll Forest) | 1.4° Downslope |
| T2a | Grassy forest vegetation, identified as the primary bushfire hazard, north-east of the site and separated by Anambah Road. Maximum fire run of 400m before opening to extensive grazing lands and continuing to the Hunter River. | Forest (Hunter Macleay Dry Sclerophyll Forest) | -0.5° Upslope |
| T2b | Grassy forest vegetation, identified as the primary bushfire hazard, north-east of the site and separated by Anambah Road. Maximum fire run of 300m before opening to extensive grazing lands and continuing to the Hunter River. | Forest (Hunter Macleay Dry Sclerophyll Forest) | 1.9° Downslope |
| Т3 | Forest vegetation, identified as the primary bushfire hazard, east of the site and separated by Anambah Road. Maximum fire run of 200m before opening to quarry and continuing to the Hunter River. | Forest (Hunter Macleay Dry Sclerophyll Forest) | 6.2° Downslope |
| T4 | Grassland vegetation from the edge of the proposed road south of the site | Grassland | 3.3° Downslope |
| T5 | Grassland vegetation from the edge of the proposed road south of the site | Grassland | 1.1° Downslope |
| Т6 | Grassland vegetation from the southern site boundary | Grassland | 3.4° Downslope |
| Т7 | Isolated forest vegetation from the southern site boundary | Grassland | 2.9° Downslope |
| Т8 | Grassland vegetation from the western development site boundary | Grassland | 2.5° Downslope |
| Т9 | Grassland vegetation from the Stage 1 western development site boundary | Grassland | -5.1° Upslope |
| T10 | Grassland vegetation from the Stage 1 north- western development site boundary | Grassland | 6.3° Downslope |
| T11 | Isolated forest vegetation from the Stage 1 northern development site boundary | Forest (Hunter Macleay Dry Sclerophyll Forest) | 3.0° Downslope |



| Transect | Vegetation Description | Vegetation Classification (PBP 2019) | Slope |
|----------|---|---|-------------------|
| T14 | Revegetated riparian corridor separated from the residential allotments by proposed roads | Freshwater Wetlands | 2.2° Downslope |
| T15 | Revegetated riparian corridor separated from the residential allotments by proposed roads | Freshwater Wetlands | -0.9° Upslope |
| T16 | Revegetated riparian corridor west of the site | Freshwater Wetlands | 1.3° Downslope |
| T17 | Grassland from the southern development boundary that forms part of future subdivision stages | Grassland | 2.9° Downslope |
| T18 | Grassland from the southern development boundary that forms part of future subdivision stages | Grassland | 5.8° Downslope |
| T19 | Grassland from the southern development boundary that forms part of future subdivision stages | Grassland | 5.8° Downslope |
| T20 | Grassland from the southern development boundary that forms part of future subdivision stages | Grassland | 2.4° Downslope |
| T21 | Grassland from the southern development boundary that forms part of future subdivision stages | Grassland | 4.3° Downslope |





3.4. Significant Environmental Features

The recommended bushfire protection measures have been designed to minimise any unacceptable impacts on any significant environmental features for both the Study Area (concept masterplan) and Stage 1.

3.5. Threatened Species, populations or ecological communities

The area of the site to be affected by the proposed development has been identified to minimise impact on any threatened species, population or EEC. An independent Biodiversity Development Assessment has been completed by MJD Environmental (June 2024) to demonstrate the site meets the requirements of the Biodiversity Assessment Method 2017 (BAM) established under Section 6.7 of the NSW Biodiversity Conservation Act 2016.

All bushfire mitigation measures, including APZs has considered the existing and potential biodiversity values to avoid impact where possible.

3.6. Aboriginal Objects

A search of the AHIMS database (results contained in **Appendix B**) revealed there are potentially three (3) Aboriginal sites or places recorded near the subject site of which one (1) is located near the proposed Stage 1 development site. Whilst all bushfire mitigation measures, such as APZs have considered this and been designed to minimise disturbing any artefacts (if identified), it is recommended an Aboriginal Cultural Heritage Assessment Report be completed.





4. Bushfire Risk and Mitigation

This Bushfire Assessment Report (BAR) has adopted the methodology to determine the appropriate Bushfire Protection Measures (BPMs) detailed in PBP 2019. As part of the BAR, the recommended BPMs demonstrate the aims and objectives of PBP 2019 have been satisified; including the matters considered by the RFS necessary to protect persons, property and the environment from the danger that may arise from a bushfire.

The following BPMs have been designed specific to Stage 1. However, the methodology and approach to designing the BPMs adopted for Stage 1 also apply to the entire concept masterplan and will be incorportated into any future development applications for subsequent stages.

4.1. Asset Protection Zones

An AP7 can include the following:

An APZ is an area surrounding a development that is managed to reduce the bushfire hazard to an acceptable level to mitigate the risk to life and property. The required width of the APZ varies with slope and the type of hazard. An APZ can consist of both an inner protection area (IPA) and an outer protection area (OPA).

| , ,,,, | 7 ti 2 dan molado trio following. |
|--------|---|
| | Lawns; |
| | Discontinuous gardens; |
| | Swimming pools; |
| | Roads, driveways and managed verges; |
| | Unattached non-combustible garages with suitable separation from the dwelling; |
| | Open space / parkland; and |
| | Car parking. |
| Th | e presence of a few shrubs or trees in the APZ is acceptable provided that they: |
| | Do not touch or overhang any buildings; |
| | Are well spread out and do not form a continuous canopy; |
| | Are not species that retain dead material or deposit excessive quantities of ground fuel in a short period or in a danger period; and |
| | Are located far enough away from any dwelling so that they will not ignite the dwelling by direct flame contact or radiant heat emission. |

Woodpiles, wooden sheds, combustible material storage areas, large areas / quantities of garden mulch, stacked flammable building materials etc. are not recommended in the APZ.

4.1.1. Determining the Appropriate Setbacks

To achieve compliance with the performance criteria for APZs (Table 5.3a), the Acceptable Solutions outlined in Table A1.12.2 of PBP 2019 has been adopted as a deemed-to-satisify solution.

As the development site lies within the Maitland City Council LGA, it is assessed under a FDI rating of 100. To ensure the APZs achieve the intent of Section 5.3 of PBP 2019, the APZs have been determined to ensure all lots within Stage 1 are able to accommondate a dwelling that will not be exposed to radiant heat levels exceeding 29kW/m².

In accordance with s4.22 of the EP&A Act, the likely APZs required for the broader concept masterplan have been determined and shown in **Figure 12**. These APZs demonstrate all lots within concept masterplan can be designed and sited to accomomodate a dwelling that will not be exposed to radiant heat levels exceeding 29kW/m².

Refer to **Table 3** and **Figure 12** for the recommended APZs for the complete concept masterplan.

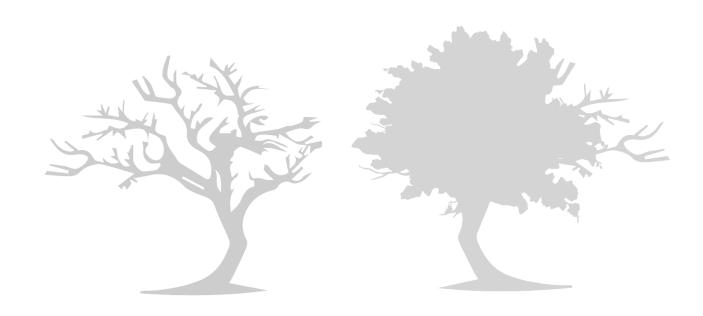


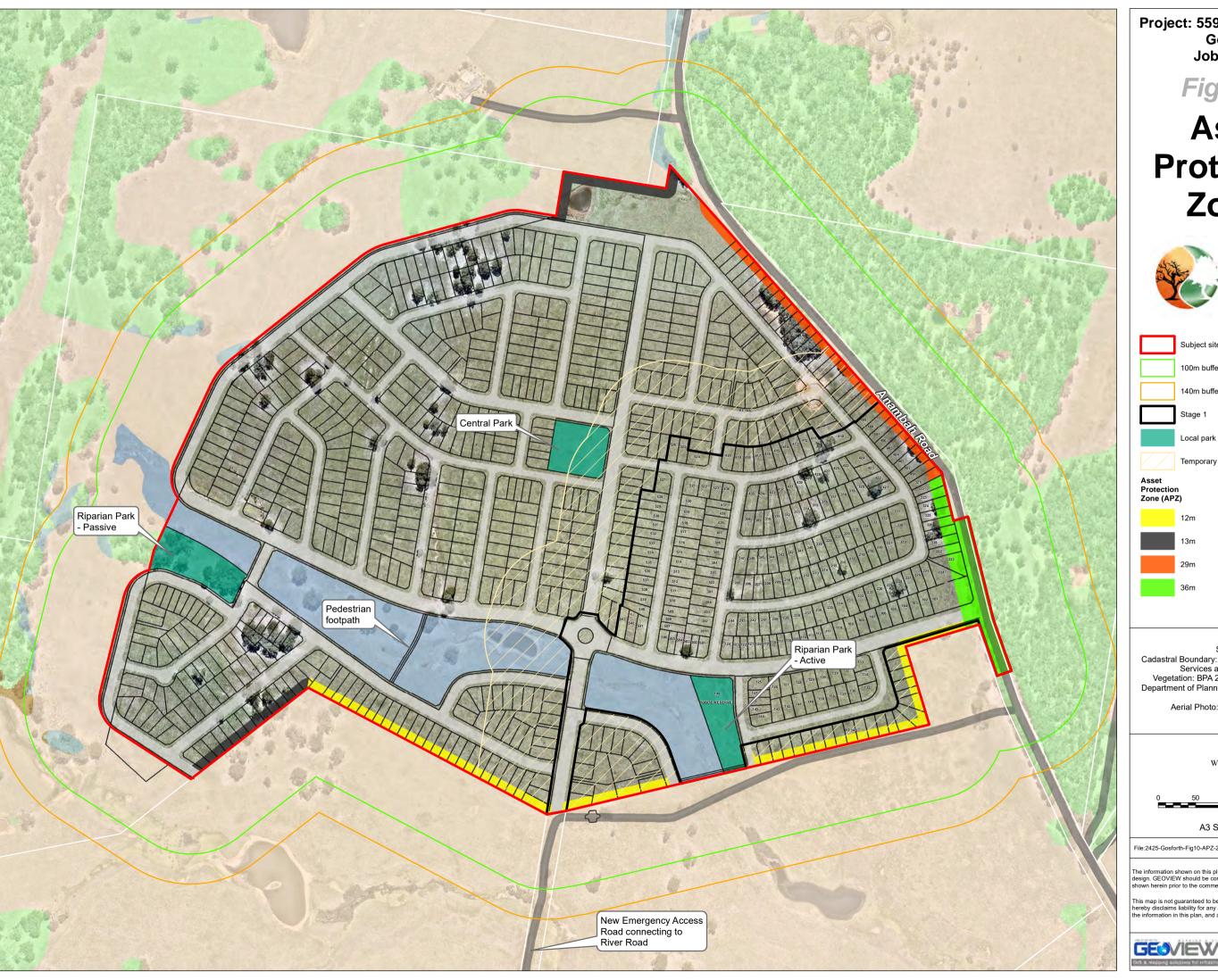
Table 3: Required and Recommended Asset Protection Zones - Concept Masterplan

| Transect | Vegetation Classification (PBP 2019) | Slope Class | PBP 2019 FDI 100 Table A1.12.2 | AS3959-2018 (Method 2 – 29kW/m²) |
|----------|---|-------------------|--------------------------------------|--|
| T1 | <i>Forest</i> (Hunter Macleay Dry Sclerophyll Forest) | 1.4° Downslope | 29m | 17m |
| T2a | Forest (Hunter Macleay Dry Sclerophyll Forest) | -0.5° Upslope | 24m | 15m |
| T2b | Forest (Hunter Macleay Dry Sclerophyll Forest) | 1.9° Downslope | 29m | 17m |
| Т3 | <i>Forest</i> (Hunter Macleay Dry Sclerophyll Forest) | 6.2° Downslope | 36m | 21m |
| T4 | Grassland | 3.3° Downslope | 12m | 12m |
| T5 | Grassland | 1.1° Downslope | 12m | 12m |
| Т6 | Grassland | 3.4° Downslope | 12m | 12m |
| T7 | Forest (Hunter Macleay Dry Sclerophyll Forest) | 2.9° Downslope | 29m | 18m |
| Т8 | Grassland | 1.6° Downslope | 12m | 12m |
| Т9 | Grassland | -5.0° Upslope | 10m | 10m |
| T10 | Grassland | 6.3° Downslope | 13m | 13m |
| T11 | <i>Forest</i> (Hunter Macleay Dry Sclerophyll Forest) | 3.2° Downslope | 29m | 18m |
| T14 | Freshwater Wetlands | 2.2° Downslope | 6m | 6m |
| T15 | Freshwater Wetlands | -0.9° Upslope | 5m | 5m |
| T16 | Freshwater Wetlands | 1.3° Downslope | 5m | 5m |
| T17 | Grassland | 1.0° Downslope | 12m | 12m |
| T18 | Grassland | 5.8° Downslope | 13m | 13m |



| Transect | Vegetation Classification (PBP 2019) | Slope Class | PBP 2019 FDI 100 Table A1.12.2 | AS3959-2018 (Method 2 – 29kW/m²) |
|----------|--------------------------------------|-------------------|--------------------------------------|--|
| T19 | Grassland | 5.8° Downslope | 13m | 13m |
| T20 | Grassland | 2.4° Downslope | 12m | 12m |
| T21 | Grassland | 4.3° Downslope | 12m | 12m |

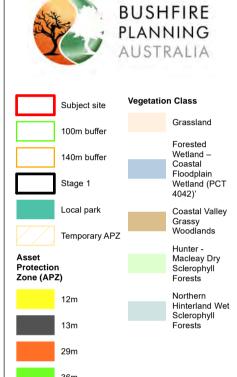




Project: 559 Anambah Road, Gosforth Job No: 2425

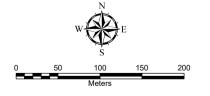
Figure 12

Asset Protection Zones



SOURCE: Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024 Vegetation: BPA 2014 based on SVTM NSW Department of Planning, Industry and Environment 2023

Aerial Photo: Nearmap 26/02/2024



A3 Scale: 1:4,500

The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

nis map is not guaranteed to be free from error or omission. GEOVIEW breby disclaims liability for any act done or omission made on the basis or e information in this plan, and any consequences of such acts or omission









4.2. Landscaping and Vegetation Management

In APZs and IPAs, the design and management of the landscaped areas in the vicinity of buildings have the potential to improve the chances of survival of people and buildings. Reduction of fuel does not require the removal of all vegetation. Trees and plants can provide some bushfire protection from strong winds, intense heat and flying embers (by filtering embers) and changing wind patterns.

| Ger | nerally landscaping in and around a bushfire hazard should consider the following: |
|--------------------|--|
| | Priority given to retaining species that have a low flammability |
| | Priority given to retaining species which do not drop much litter in the bushfire season and which do not drop litter that persists as ground fuel in the bush fire season |
| | Priority given to retaining smooth barked species over stringy bark |
| | Create discontinuous or gaps in the vegetation to slow down or break the progress of fire towards the dwellings |
| | dscaping within APZs and IPAs should give due regard to fire retardant plants and ensure that loads do not accumulate as a result of the selected plant varieties. |
| The | e principles of landscaping for bushfire protection aim to: |
| | Prevent flame impingement on dwellings |
| | Provide a defendable space for property protection |
| | Reduce fire spread |
| | Deflect and filter embers |
| | Provide shelter from radiant heat |
| | Reduce wind speed |
| fire spe avo | piding understorey planting and regular trimming of the lower limbs of trees also assists in reducing penetration into the canopy. Rainforests species such as Syzygium and figs are preferred to cies with high fine fuel and/or oil content. Trees with loose, fibrous or stringy bark should be ided. These trees can easily ignite and encourage ground fire to spread up to, and then through crown of trees. |
| APZ land | nsideration should be given to vegetation fuel loads present on site with particular attention to Zs. Careful thought must be given to the type and physical location of any proposed site dscaping. Inappropriately selected and positioned vegetation has the potential to 'replace' any viously removed fuel load. |
| prin | aring in mind the desired aesthetic and environment sought by site landscaping, some basic sciples have been recommended to help minimise the chance of such works contributing to the ential hazard on site. |
| | ecific requirements for the management of vegetation and landscaping around vulnerable relopments and within the APZ the following conditions apply: |
| | Within 10m of a building, flammable objects such as plants, mulches and fences must not be located close to vulnerable parts of the building such as windows, decks and eaves. |
| | Trees must not overhang the roofline of the building, touch walls or any other elements of a building. |
| | Grass should be no more than 100mm in height. All leaves and vegetation debris are to be removed at regular intervals (rake leaves and twigs from grass every week during the fire season). |
| | Establish lawn substitutes including non-flammable ground covers such as decorative stone or gravel. |



| Plants greater than 100m in height at maturity must not be placed directly in front of a window or other glass features. |
|--|
| Tree canopy separation of 2 metres and overall canopy cover no more than 15% at maturity. |
| Preference should be given to smooth barked and evergreen trees. |
| Shrubs should not be located under trees. |
| Shrubs should not form more than 10% ground cover. |
| Provide a reliable and sufficient water supply and installation of sprinkler systems to create a well-watered landscape. |

Whilst it is recognised that fire-retardant plant species are not always the most aesthetically pleasing choice for site landscaping, the need for adequate protection of life and property requires that a suitable balance between visual and safety concerns be considered.

It is reiterated again that it is <u>essential</u> that any landscaped areas and surrounds are subject to ongoing fuel management and reduction to ensure that fine fuels do not build up.

A Landscape Masterplan has been prepared for the concept masterplan by Taylor Brammer (dated 30 May 2025) and is contained in **Appendix C**.

4.3. Access

In the unlikely event of a serious bushfire, it will be essential to ensure that adequate ingress/egress and the provision of defendable space are afforded in the subdivision layout. All dwellings must have direct access to a public road. Section 5.3.2 of PBP 2019 requires a development to provide safe operational access to structures and water supply for emergency services while residents are seeking to evacuate. Refer to Appendix A for the development plans for Stage 1 indicating the proposed access arrangements.

Access Roads

1. Main Collector Road (MC01):

A 15.4m wide public road connecting to Anambah Road, functioning as the principal all-hours ingress and egress route for residents and services. This road is a key perimeter road and has been designed for tactical firefighting access.

2. Second Access to Anambah Road:

A second access to Anambah Road is provided to the north of Stage 1 to provide more than access in and out of the development.

3. Emergency Access (MC02):

A 6.0m wide sealed and flood-resilient emergency-only road connecting to River Road via the southern end of the development as indicated in **Figures 13** and **14**. The access requirements for this emergency route, including the gate, will be provided (as a minimum standard) in accordance with the *NSW Fire Trail Standards 2023*, specifically the section on "Trail Access and Access/Egress Points". Under Ch 3.4.4 of PBP 2019, where a fire trail is incorporated into a development, the fire trail must be designed, constructed and maintained in accordance with the NSW RFS Fire Trail Standard. This standard provides detailed criteria for access control mechanisms, including that any gate must be operable by a single person in a practical timeframe and have sufficient setbacks and clearance for the safe parking of an appliance. The design will adhere to these state-wide standards, which represent the appropriate benchmark for this type of access.

All new perimeter roads and non-perimeter roads are designed in accordance with Maitland City Council development control plan and engineering specifications, and either are in accordance with or exceed the minimum required for an Acceptable Solution under PBP 2019. A Road Hierarchy Plan



has been prepared (**Figure 10**) to indicate the location of each road, the road pavement width, and also the designation as a perimeter or non-perimeter road.

Perimeter Road Design (Western Boundary)

The revised concept masterplan incorporates a continuous perimeter road along the entire western boundary of the development site. All perimeter roads adjoining the bushfire hazard interface have a minimum kerb-to-kerb width of 10.5m and are fully compliant with the Acceptable Solutions of Table 5.3b of PBP 2019. These perimeter roads provide direct access to the western bushland interface and riparian corridor and have been purposefully designed to facilitate safe two-way access for firefighting vehicles and residents evacuating the site.

Non-Perimeter Roads – Carriageway Widths and Justification

The local non perimeter roads are proposed with an 8.0m wide carriageway. These internal roads are not located on the bushfire interface. While initially assessed as a performance-based solution under PBP 2019, it is important to clarify that these non-perimeter roads do in fact comply with the Acceptable Solutions under Table 5.3b of PBP 2019, which requires a minimum 5.5m wide trafficable carriageway and parking provided outside that width. The proposed local roads provide exactly this configuration—a 5.5m clear carriageway with an additional 2.5m sealed verge or pavement suitable for on-street parking, positioned outside the main traffic lane. This design maintains full compliance with PBP 2019's Acceptable Solutions for non-perimeter roads, while also enabling safe on-street parking without impeding emergency vehicle access.

The suitability of the 8.0m road layout in achieving PBP 2019's intent for safe access and egress is further supported by the following factors:

- 1. On Street Parking Demand is Low: All dwellings will provide a minimum of two off-street parking spaces, with additional capacity for two vehicles on driveways, accommodating up to four vehicles per lot. The average vehicle ownership in Maitland LGA is 1.9 per dwelling, indicating that on-site parking is sufficient to meet normal residential needs without reliance on kerbside parking. During bushfire emergencies, visitor vehicles are unlikely to be present as official advice directs people to avoid such areas, and most vehicles would be removed during evacuation, reducing kerbside congestion.
- 2. Functional Width Maintained During Emergencies: If vehicles were parked on both sides of the street, a clear width of 4.0 metres remains. This width is consistent with conservative performance-based assessments previously accepted by the RFS in similar contexts and is navigable by firefighting vehicles under emergency conditions. It benefits from regular driveway gaps (typically every 10m), creating passing bays, and is supported by good sight distances allowing early detection and yielding to oncoming emergency vehicles.
- 3. Limited Evacuation Traffic: Even under conservative modelling, an 8.0m wide local street servicing approximately 22 lots are expected to generate only 23 vehicle trips during evacuation. These trips are dispersed across time, and the internal road network is highly interconnected, ensuring multiple evacuation paths and low conflict potential with emergency vehicles.
- 4. Non-Perimeter Roads Are Not Firefighting Access Routes: The 8.0m wide roads are not situated adjacent to the bushfire hazard interface and do not serve as primary firefighting access routes. All tactical access to the hazard areas is provided via compliant 10.5m or greater perimeter roads, designed specifically for this purpose. Therefore, the local roads serve only to convey evacuating residents to safer parts of the subdivision and do not require the same design standard as interface roads.

The proposed local road design for the residential subdivision satisfies the Performance Criteria and Acceptable Solutions of Table 5.3b of PBP 2019 for non-perimeter roads and demonstrates strong performance against the overarching intent of the policy. The layout ensures: compliance with minimum carriageway widths and parking configurations; effective evacuation and emergency access; limited and low-conflict traffic volumes; and separation from bushfire-prone vegetation.



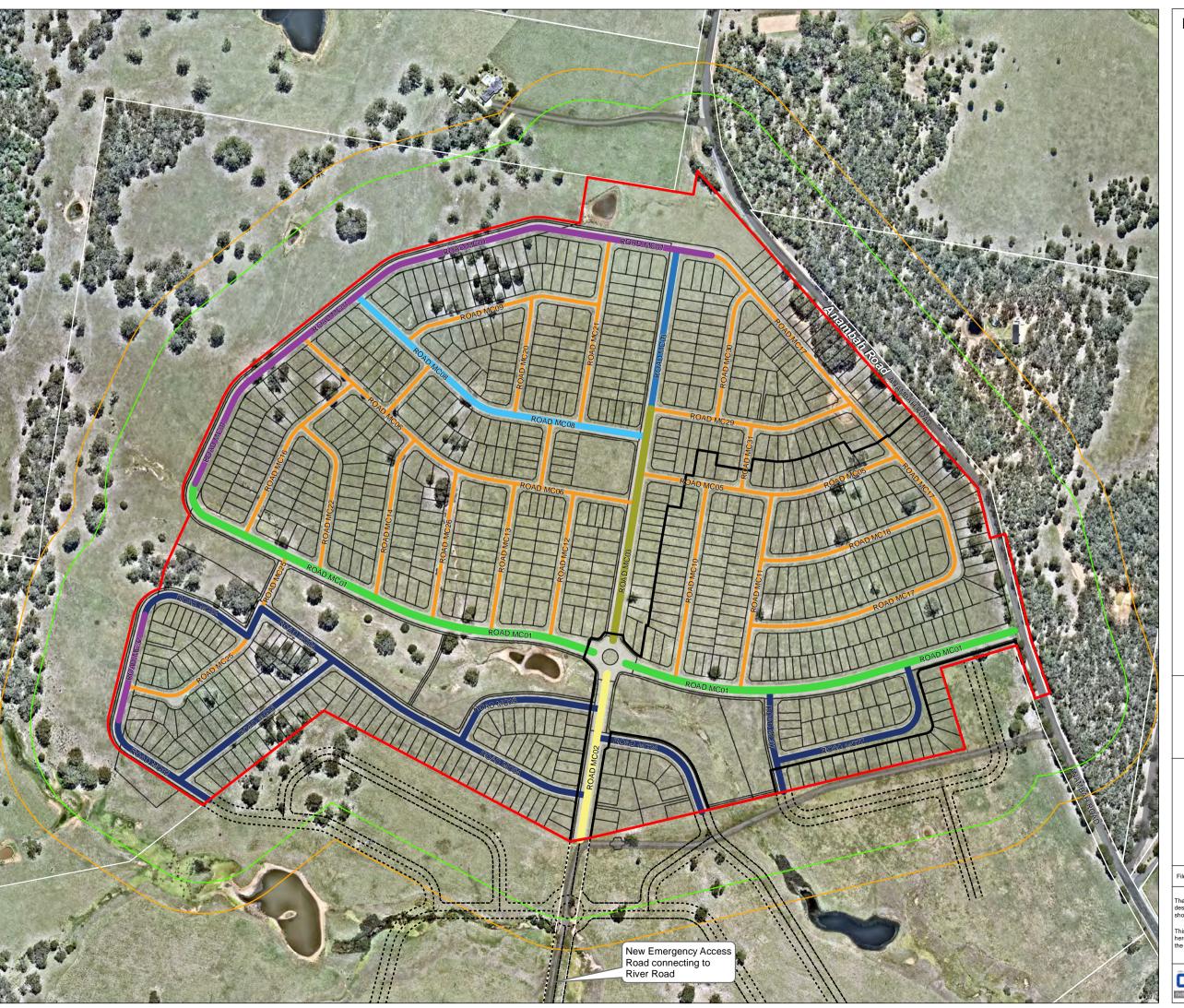
Consistency with Recent RFS Approvals

The access provisions are consistent with the RFS's expectations for similar residential subdivision approvals across the Hunter and Central Coast Regions. Specifically, the RFS has recently supported 8.0m wide non-perimeter roads in a number of comparable subdivisions, where the design provides a minimum 5.5m trafficable carriageway and parking located outside of the 5.5m width or managed to ensure emergency vehicle access.

The RFS has employed various mechanisms to support performance-based solutions for road access, including issuing General Notes within Bush Fire Safety Authorities such as where an 8m carriageway with parking was allowed due to low bushfire risk. Furthermore, the RFS has directly approved performance-based solutions for access, explicitly stating their support or acceptance of such solutions based on specific circumstances and justification. The proposed 8.0m wide non perimeter roads for this subdivision adopt the same design approach, a compliant 5.5m carriageway plus an additional 2.5m verge or parking provision, consistent with these recent RFS supported examples.

In summary, it is considered the proposed road network provides safe, all weather two way through roads and safe operational access for emergency service personnel and evacuation purposes, complying with the relevant provisions contained in Section 5.3.2 of PBP 2019. Moreover, the broader road network throughout the concept masterplan has adopted a similar road design and hierarchy. The aforementioned evidence applies to all roads within the Study Area and therefore are also consistent with the provisions contained in Section 5.3.2 of PBP 2019.





Project: 559 Anambah Road, Gosforth Job No: 2425

Figure 13

Road Hierarchy Plan



Subject site

100m buffer

140m buffer

Stage 1

8.0m road with 17m road reserve

10.5m road with 20.5m road reserve

11.0m road with 20m road reserve

12.0m road with 22m road reserve

12.0m road with 21m road

reserve

14.0m road with 24m road

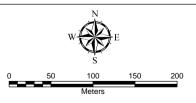
15.4m road with 24.4m road

15.4m road with 25.4m road

----- Future road

SOURCE:

Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024



A3 Scale: 1:4,500

File:2425-Gosforth-Fig9-Road-Hierarchy-2506

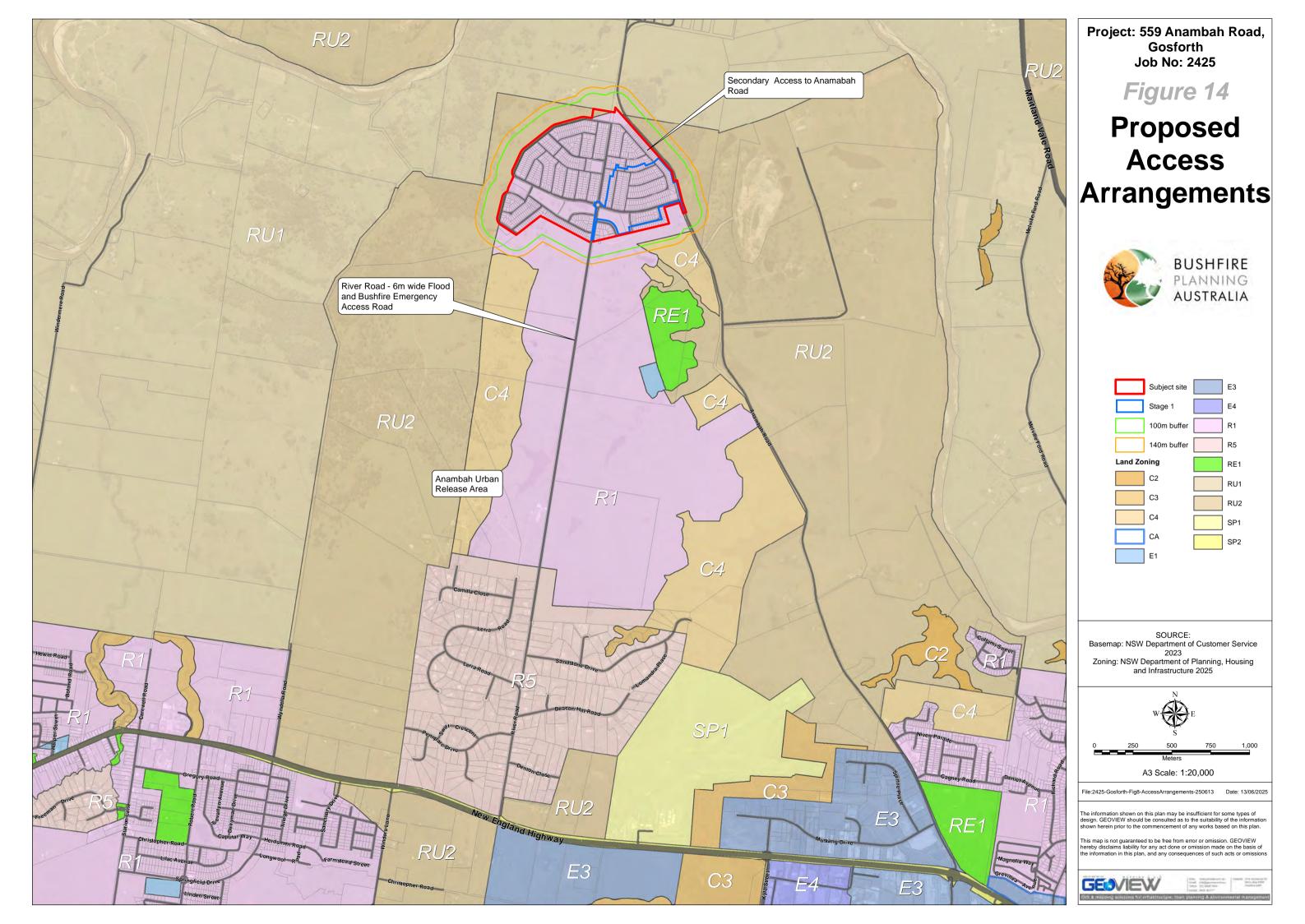
525 Date: 25/00/202

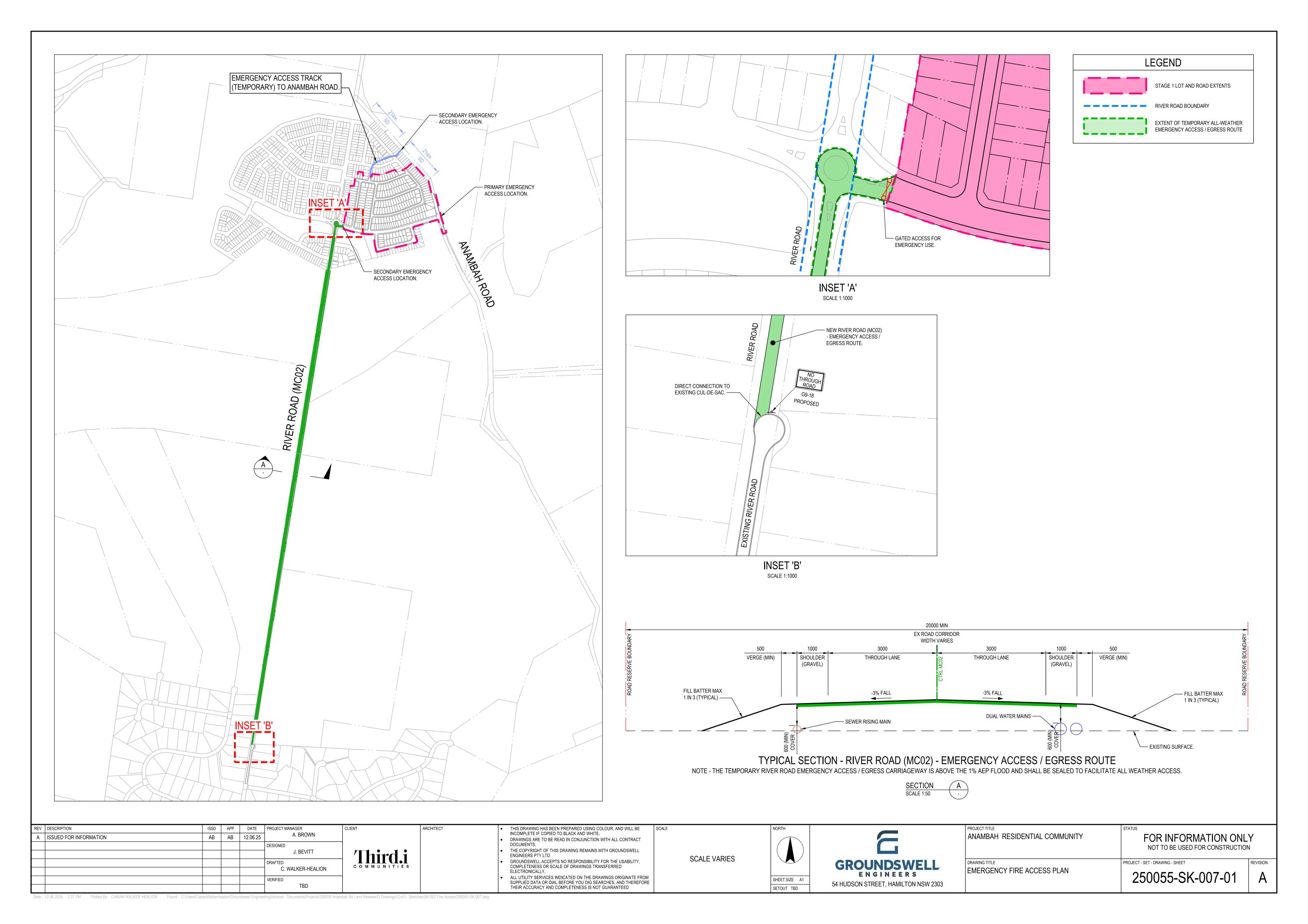
The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

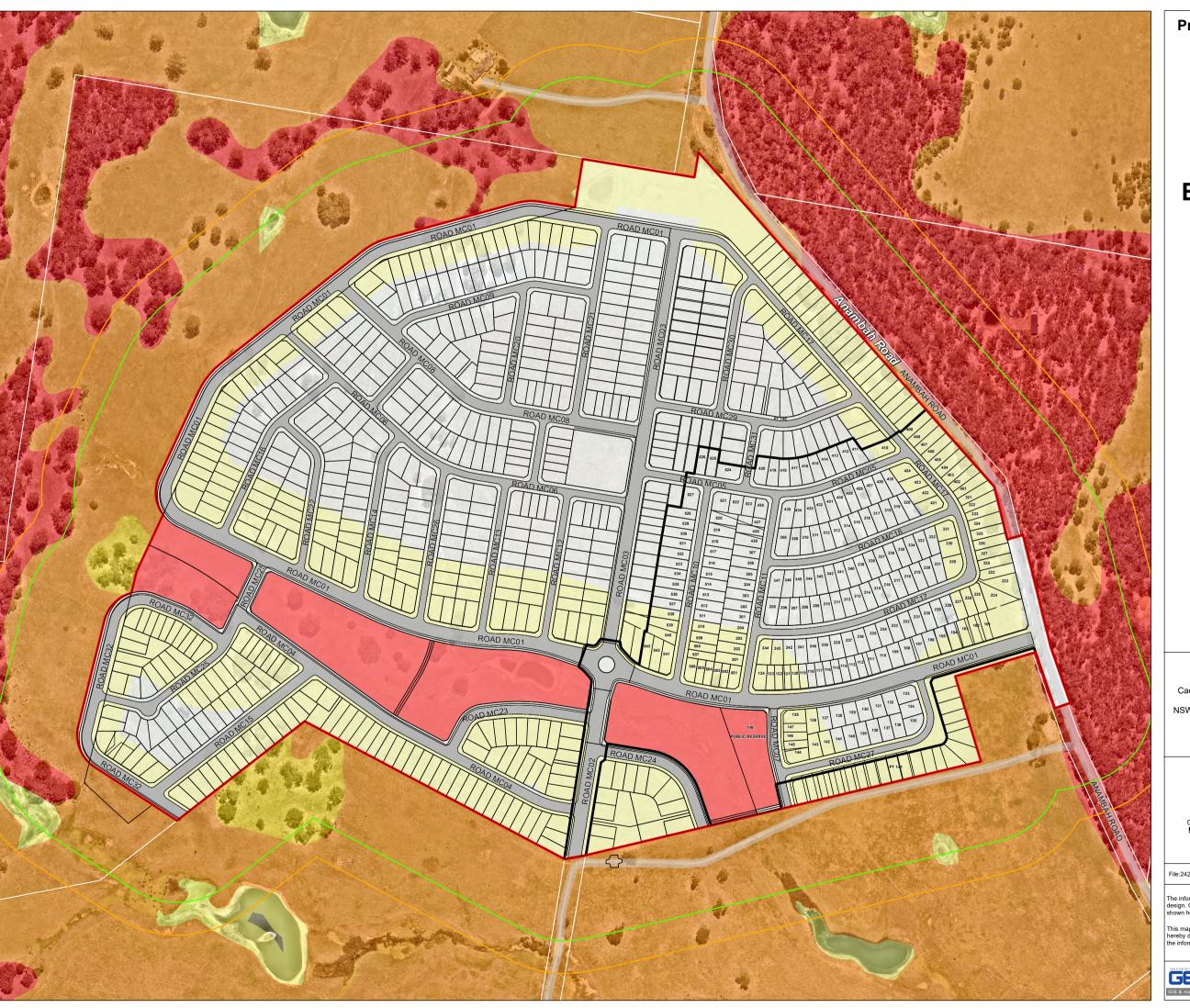
This map is not guaranteed to be free from error or omission. GEOVIEW hereby disclaims liability for any act done or omission made on the basis of the information in this plan, and any consequences of such acts or omissions









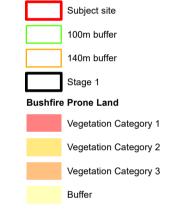


Project: 559 Anambah Road, Gosforth Job No: 2425

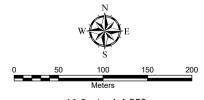
Figure 16

Post Development Bush Fire Prone Land





SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2024
NSW Bush Fire Prone Land: NSW Rural Fire Service
2023
Aerial Photo: Nearmap 26/02/2024



A3 Scale: 1:4,250

The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

his map is not guaranteed to be free from error or omission. GEOVIEW ereby disclaims liability for any act done or omission made on the basis of ne information in this plan, and any consequences of such acts or omission







4.4. Services - water, electricity and gas

4.4.1. Water

All sites within Stage 1 (and each subsequent stage) of the proposed development will be connected to the internal reticulated water supply.

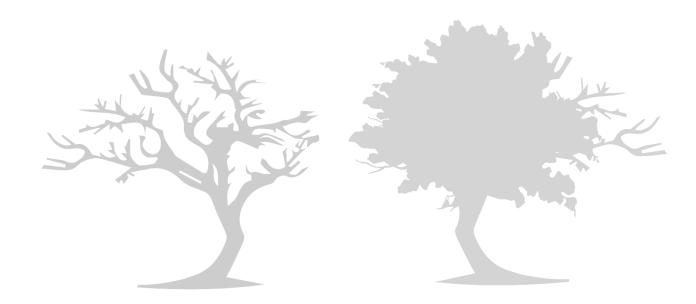
Fire hydrant spacing, sizing and pressure should comply with AS 2419.1-2021. Hydrants are not to be located within any road carriageway.

4.4.2. Electricity

All new electricity services will be located underground across the entire concept masterplan, including Stage 1.

4.4.3. Gas

Any reticulated or bottled gas should be installed and maintained according to the requirements of the relevant authorities and AS 1596-2002. It is expected that the location of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.





4.5. Construction Standards: Bushfire Attack Level

All buildings must satisfy the Performance Requirements of the National Construction Code: Building Code of Australia (BCA). Part H7P5 of Volume 2 of the BCA applies to dwellings located within designated bushfire areas, which are defined as:

Land which has been designated under a power in legislation as being subject, or likely to be subject to, bushfires.

Accordingly, all forthcoming habitable buildings must satisfy the requirements of Part H7D4 (NSW) of the BCA. The *Deemed-to-Satisfy* (DTS) provision of the BCA can only be achieved if dwellings in bushfire prone areas are constructed in accordance with Australian Standard *AS3959-2018 Construction of buildings in bushfire prone areas*. Alternatively, the DTS provisions can also be achieved if the habitable building is constructed in accordance with the NASH Standard 'Steel Framed Construction in Bushfire Areas'.

Building design and the materials used for construction of future dwellings should be chosen based on the information contained within AS3959-2018, and accordingly the designer/architect should be made aware of this recommendation.

The determinations of the appropriate bushfire attack level (BAL) is based on the maximum potential radiant heat exposure. BALs are based upon parameters such as weather modelling, fire-line intensity, flame length calculations, as well as vegetation and fuel load analysis. The determination of the BAL is derived by assessing the:

- Relevant FDI = 100;
- \Box Flame temperature = 1090K;
- □ Slope = varied;
- □ Vegetation classification = Forest, Grassland and Freshwater Wetlands; and
- Building location.

The BALs for each transect across the concept masterplan have been calculated and provided in **Table 4** and shown in **Figure 18**.

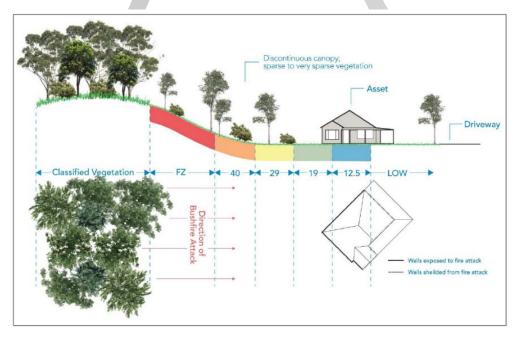


Figure 17: Bushfire Attack Level

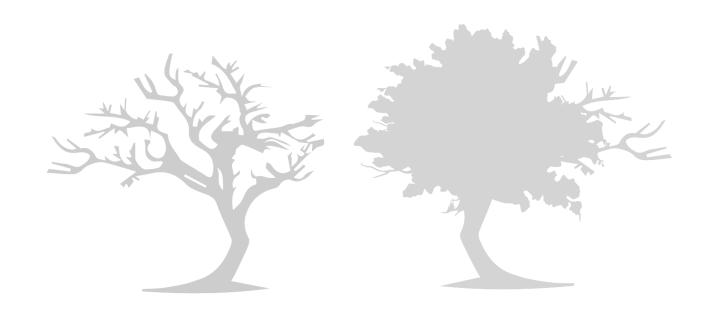


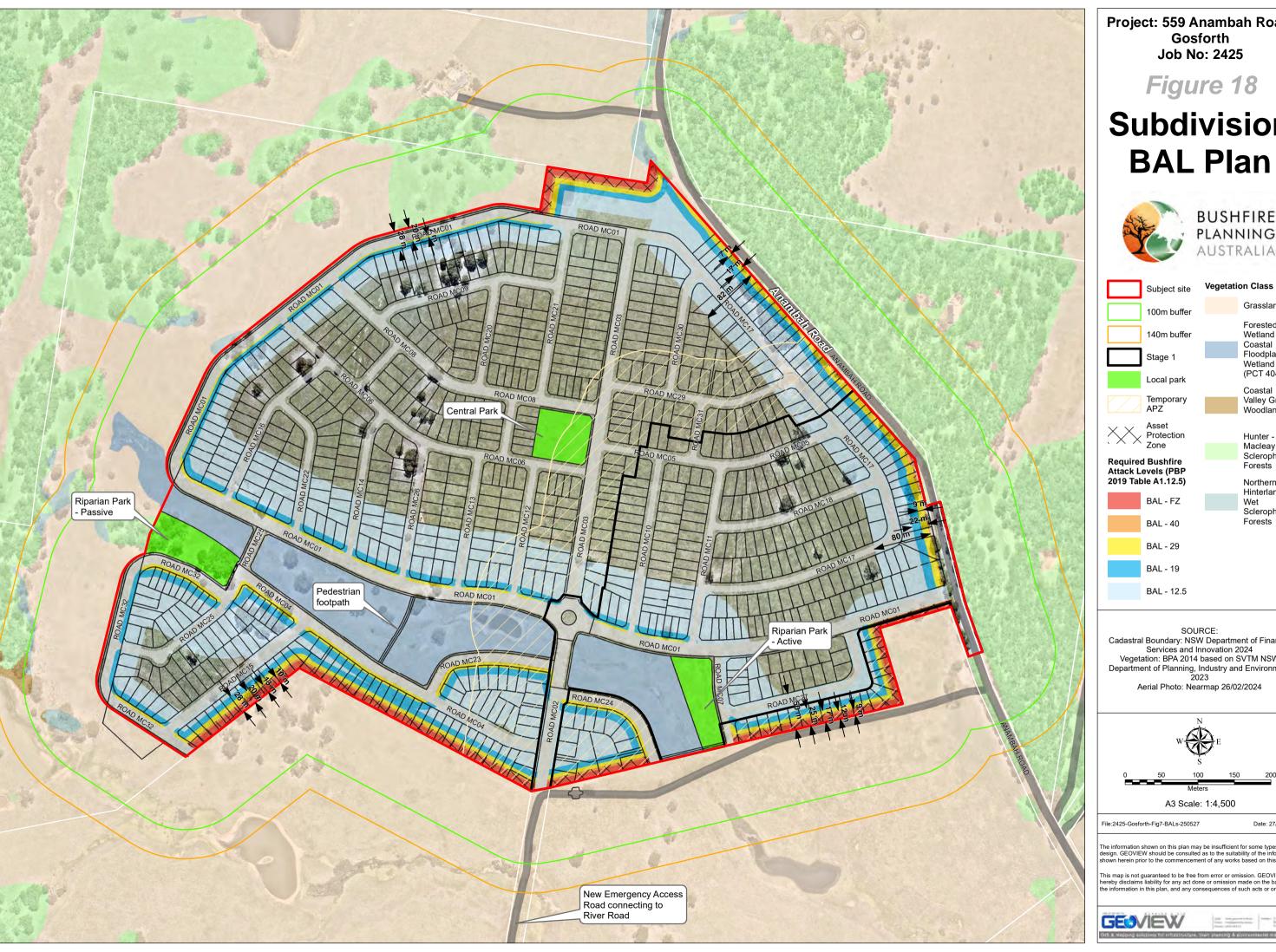
Table 4: Required BALs - Concept Masterplan

| Transect | Vegetation Classification (PBP 2019) | Slope | APZ Table A1.12.2 | APZ 29kW/m2 (AS3959- 2018) | Distance from Hazard PBP A1.12.5 | Bushfire Attack Level (BAL) |
|----------------|--|-------------------------|-------------------------|-------------------------------------|--|-----------------------------------|
| | | | | | 0m-<22m | BAL-FZ |
| | Forest | 0.0°-<5.0° | | | 22m-<29m | BAL-40 |
| T1 | (Hunter Macleay | (<2.0°) | 29m | 17m | 29m-<40m | BAL-29 |
| | Dry Sclerophyll Forest) | Downslope | | | 40m-<54m | BAL-19 |
| | | | | | 54m-<100m | BAL-12.5 |
| | | | | | 0m-<22m | BAL-FZ |
| | Forest | 0.0°-<5.0° | | | 22m-<29m | BAL-40 |
| T2b | (Hunter Macleay | (<2.0°) | 29m | 17m | 29m-<40m | BAL-29 |
| | Dry Sclerophyll Forest) | Downslope | | | 40m-<54m | BAL-19 |
| | | | | olle and | 54m-<100m | BAL-12.5 |
| | | | | . 20 | 0m-<28m | BAL-FZ |
| | Forest | 5.0°-<10.0° | ~4 | | 28m-<36m | BAL-40 |
| Т3 | (Hunter Macleay | (6.2°) | 36m | 21m | 36m-<49m | BAL-29 |
| | Dry Sclerophyll Forest) | Downslope | 3 | | 49m-<65m | BAL-19 |
| U | , | | | | 65m-<100m | BAL-12.5 |
| T4 T0 | Grassland | 0.0°-<5.0° Downslope | 12m | 12m | 0m-<9m | BAL-FZ |
| T4-T8, T17, | | | | | 9m-<12m | BAL-40 |
| T20 & | | | | | 12m-<17m | BAL-29 |
| T21 | | | | | 17m-<25m | BAL-19 |
| | | | | | 25m-<50m | BAL-12.5 |
| | Γ9 <i>Grassland</i> | -5.0° Upslope | 10m | 10m | 0m-<8m | BAL-FZ |
| | | | | | 8m-<10m | BAL-40 |
| 19 | | | | | 10m-<15m | BAL-29 |
| | | | | | 15m-<22m | BAL-19 |
| | | | | | 22m-<50m | BAL-12.5 |
| | | | | | 0m-<10m | BAL-FZ |
| T10, | Grassland | 2.20 | 13m | 13m | 10m-<13m | BAL-40 |
| T18 & | | 6.3° Downslope | | | 13m-<20m | BAL-29 |
| T19 | | | | | 20m-<28m | BAL-19 |
| | | | | | 28m-<50m | BAL-12.5 |
| | | 0.0°-<5.0° Downslope | | | 0m-<4m | BAL-FZ |
| T14, | Freshwater Wetlands | | 6m | 6m | 4m-<6m | BAL-40 |
| T15, T16 | | | | | 6m-<8m | BAL-29 |
| | | | | | 8m-<12m | BAL-19 |



| Transect | Vegetation Classification (PBP 2019) | Slope | APZ Table A1.12.2 | APZ 29kW/m2 (AS3959- 2018) | Distance from Hazard PBP A1.12.5 | Bushfire Attack Level (BAL) |
|----------|--|-------|-------------------------|-------------------------------------|--|-----------------------------------|
| | | | | | 12m-<100m | BAL-12.5 |





Project: 559 Anambah Road, Gosforth Job No: 2425

Figure 18

Subdivision BAL Plan



Grassland

Forested

Coastal

Hunter -Macleay Dry Sclerophyll

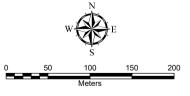
Forests Northern Hinterland

Sclerophyll

Valley Grassy Woodlands

Wetland -Coastal Floodplain Wetland (PCT 4042)'

SOURCE: Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024 Vegetation: BPA 2014 based on SVTM NSW Department of Planning, Industry and Environment 2023



A3 Scale: 1:4,500

The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

his map is not guaranteed to be free from error or omission. GEOVIEW ereby disclaims liability for any act done or omission made on the basis on the information in this plan, and any consequences of such acts or omissi





4.6. Emergency Services

There is a NSW Fire & Rescue Station located at 2 Mustang Drive, Rutherford, approximately 5.4km or 5 minutes drive away from the site (**Figure 19**). This station would likely be first responders in an emergency.

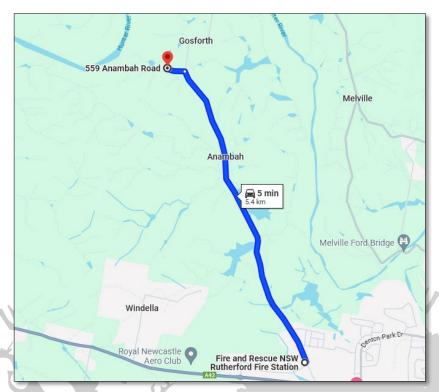


Figure 19: NSW Fire & Rescue - Rutherford



5. Conclusion and Recommendations

This Amended Bushfire Assessment Report has been prepared specifically to address the matters raised in the NSW Rural Fire Service Request for Further Information (RFI) issued on 12 November 2024 regarding DA/2024/763 and the subsequent correspondence dated 11 July 2025. The compliance demonstrated within this report is not the result of a prescriptive, one-size-fits-all approach; instead, it is founded on the core principle that PBP 2019 is a sophisticated, performance-based policy document. This methodology provides the necessary flexibility to tailor bushfire protection measures directly to the unique risks, constraints, and landscape of the Anambah site.

The subdivision layout has been revised in response to the RFI to ensure full compliance with Table 5.3b of PBP 2019. Key changes reflected in this amended report include:

| ☐ The inclusion of a continuous western perimeter road (8.0m wide). |
|---|
|---|

- □ Redesign of all non-perimeter roads to achieve a 5.5m trafficable carriageway with an additional 2.5m verge or parking provision.
- □ Updated Slope and Vegetation Assessment, with slope classifications verified by a registered surveyor.

The revised subdivision layout and bushfire protection measures are now consistent with recent RFS approved subdivisions across the Hunter Region, where similar performance-based solutions for non-perimeter roads have been supported through General Terms of Approval or General Notes.

It is recommended that in finalising the General Terms of Approval for this subdivision, the RFS adopt a consistent approach to these approvals by omitting any condition or Acceptable Solution wording requiring that "parking is provided outside the carriageway width." The proposed 8.0m wide non perimeter roads fully satisfy the Performance Criteria of Table 5.3b of PBP 2019 and ensure safe operational access, effective evacuation capacity, and alignment with the intent of Section 5.3.2 of PBP 2019.

This amended report demonstrates that the proposed development is now fully compliant with the applicable bushfire protection requirements of PBP 2019 and is suitable to proceed to the issue of General Terms of Approval under Section 100B of the Rural Fires Act 1997.

The amendments to the proposed development have demonstrated the aims objectives of PBP 2019 can be achieved, subject to the following key recommendations:

Asset Protection Zones

- 1. All land within the site zoned R1 Residential; excluding the riparian corridors shall be managed as an Inner Protection Area (IPA) as outlined within Appendix 4 of PBP 2019 and the RFS document Standards for asset protection zones.
- 2. Asset Protection Zones (APZ) shall be provided as indicated on **Figure 12**.

Landscaping

- 3. Vegetation within road verges (including swales) to be consistent with a grassland vegetation classification with tree canopy less than 10% at maturity.
- **4.** Vegetation with the stormwater basins; including associated batters shall be planted consistent with a *freshwater wetland* vegetation classification with tree canopy less than 10% at maturity.
- **5.** Consideration should be given to landscaping and fuel loads on site to decrease potential fire hazards on site in accordance with Appendix 4 of PBP 2019.

Access

- **6.** Perimeter roads shall be constructed in accordance with the engineering design plans (**Appendix A**) and the following general requirements of Table 5.3b of PBP 2019:
 - a. Minimum 8.0m wide pavement width measured kerb to kerb



- b. Hydrants are located clear of parking areas
- c. Curves of roads have a minimum inner radius of 6m
- d. The road crossfall does not exceed 3 degrees
- e. A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches is provided
- 7. Non-perimeter roads shall be constructed in accordance with the engineering design plans (**Appendix A**) and the following general requirements of Table 5.3b of PBP 2019:
 - a. Minimum 5.5m wide pavement width measured kerb to kerb
 - b. Hydrants are located clear of parking areas
 - c. Curves of roads have a minimum inner radius of 6m
 - d. The road crossfall does not exceed 3 degrees
 - e. A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches is provided
- **8.** A temporary access road shall be provided during the staged construction of the development to provide an alternate secondary access to the New England Highway via River Road.
- 9. Any temporary turning heads shall be constructed in accordance Appendix A3.3 of PBP 2019.

Services

10. All new lots are to be connected to a reliable water supply network and that suitable fire hydrants are located throughout the development site that are clearly marked and provided for the purposes of bushfire protection. Fire hydrant spacing, sizing and pressure shall comply with AS2419.1 2021 and section 5.3.3 of PBP 2019.

Construction

11. All future dwellings to be constructed on the proposed lots shall have due regard to the specific considerations given in the National Construction Code: Building Code of Australia (BCA) which makes specific reference to Australian Standard AS3959-2018 Construction of buildings in bushfire prone areas (AS3959-2018) and the NASH Standard Steel Framed Construction in Bushfire Prone Areas.

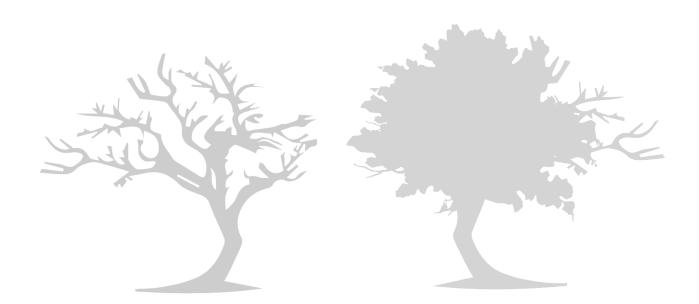
This report has presented a comprehensive, evidence-based justification for the access provisions proposed for the Anambah residential subdivision. This assessment has been made based on the bushfire hazards observed in and around the site at the time of inspection and production and demonstrates the development has satisfied the aims and objectives of Planning for Bushfire Protection 2019 (PBP 2019).

Finally, should the above recommendations be implemented, the existing bushfire risk should be suitably mitigated to offer an acceptable level of protection to life and property for those persons and assets occupying the site, but they do not and <u>cannot</u> guarantee that the area will <u>not</u> be affected by bushfire at some time and that property and life damage/loss will not occur.



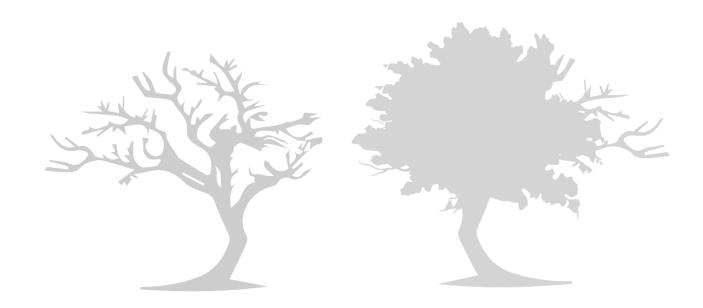
6. References

- Keith, D. (2004). Ocean Shores to Desert Dunes The Native Vegetation of New South Wales and the ACT.
- □ NSW Rural Fire Service (2005). *Standards for Asset Protection Zones*. NSW Rural Fire Service.
- NSW Rural Fire Service (2019). Planning for Bushfire Protection A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners.
- Ramsay, GC and Dawkins, D (1993). *Building in Bushfire-prone Areas Information and Advice*. CSIRO and Standards Australia.
- ☐ Rural Fires and Environmental Assessment Legislation Amendment Act 2002.
- □ Standards Australia (2018). AS 3959-2018: Construction of Buildings in Bushfire-prone Areas.





Appendix A: Plan of Proposed Concept Masterplan & Stage 1 Residential Subdivision



DATE 28.08.24 29.08.24 29.05.25 AMENDMENT(S)
ORIGINAL ISSUE 177 DP874171 P P P CHX RIVER LASCELLES

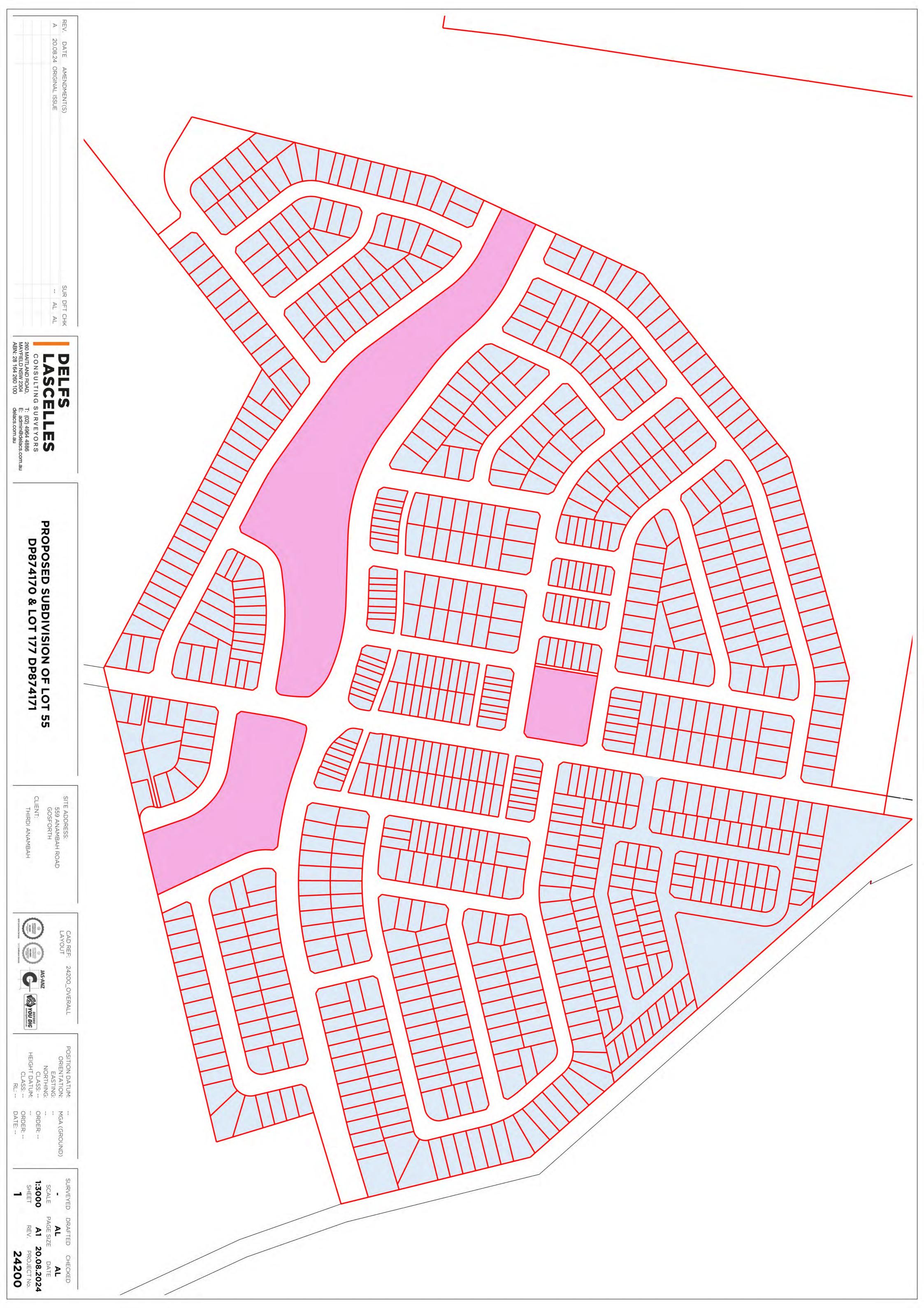
CONSULTING SURVEYORS

260 MAITLAND ROAD,
MAYFIELD NSW 2304
ABN: 28 164 260 100

CONSULTING SURVEYORS

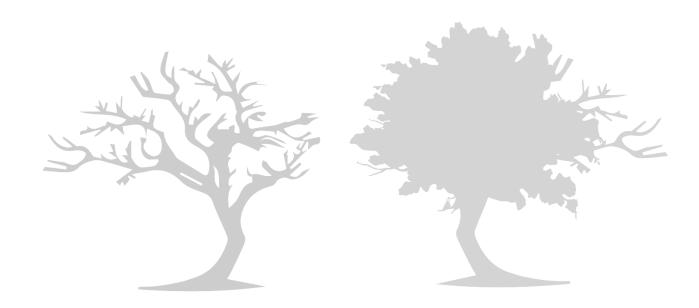
E: admin@delacs.com.au

delacs.com.au ROAD (UNFORMED) 462m² 539 462m² 538 37.0 462m² 537 462m² 536 462m² 535 5 540 462m² 534 5 462m² 533 462m² 532 462m² 531 462m² 529 37.0 2m² 530 528 527 522m² 13.25 509 450m² 55 34.0 34.0 34.0 13.25 507 526 450m² 513 450m² 514 450m² 515 516 450m²
34.0 518 450m² 519 507m² **PROPOSED** 450m² 203 25 m² 202 25 149 5114 m² PUBLIC RESERVE 201 34.0 302 13.25 204 301 303 369m² 438 304 305 306 307 439 STAGE 1 SUBDIVISION OF LOT DP874170 437 85 12.0 9 436 9 372m² 8 244 504m² 539m² 34 419 453m²_{34.} PT 148 (10.82 Ha) TOTAL 11.05 Ha 347 540m² 243 455m² 435 546m²,4.90 418 451m² 346 458m² 242 451m² 146 304m² 29.53 147 302m² 28.97 207 453m² 417 452m² 456m² 345 454m² 434 459m² 34.42 241 453m² 119 304m² 208 450m² 0.42 451m² 310 455m² 344 450m² 433 457m² 909.12 450m² 118 302m 240 452m² 209 450m² 415 451m² 311 452m² 343 450m² 432 452m² 239 453m² 127 453m² 210 450m² 312 452m² 342 450m² 431 452m² 413 450m² 238 450m² 128 453m² 430 450m² 141 450m² 341 450m² (A) - EASEMENT TO DRAIN WATER VARIABLE WIDTH 412 450m² 314 452m² 237 451m² 429 450m² 340 450m² 140 450m² 129 455m² 428 450m² 236 452m² 339 450m² 139 450m² 130 453m² SITE ADDRESS: 559 ANAMBAH ROAD GOSFORTH CLIENT: THIRDI ANAMBAH 427 450m² 338 450m² 235 453m² 138 450m² 317 450m² 131 460m² 426 450m² 337 450m² 234 451m² 110 451m² 4.59 GOV 137 450m² 216 450m² 318 450m² 132 8 481m² 336 450m² PT 148 (1.03 Ha) 233 451m² 109 455m² 335 450m² 232 455m² 108 456m² n2424 218 450m² 470m² 423 °% 409 334 450m² 134 458m² 231 451m² 525m² 408 ₩ 471m²422 219 450m² 107 467m² 525r 407 230 456m² 220 450m² 525m² 106 506m² 332 450m²_u 421 525m 405 CAD REF: Sequencing 331 514m² 23.86 330 501m² 525m² 228 452m² 534m², 329 571m² 104 472m² 497m² 402 № 227 452m² 24200_ 514m 103 480m² 9 NOU DIG 323 504m² Stage 1_Rev C -102 489m² 324 576m² 42.0 225 448m² 325 525m² 326 525m² 327 525m² 328 525m² 56 DP874170 POSITION DATUM:
ORIENTATION:
EASTING:
NORTHING:
CLASS: -HEIGHT DATUM:
CLASS: -RL: --HABMANA DAOR MGA (GROUND)
-ORDER: --ORDER: --PR - DENOTES PUBLIC RESERVE 1A 1B 1C 1C 1D 1E TOTAL SURVEYED 1:1000 SHEET _ 48 LOTS + PR
44 LOTS
47 LOTS
39 LOTS
43 LOTS
221 + PR DRAFTED REV. **28.05.25**PROJECT No. 24200 CHECKED DATE





Appendix B: AHIMS Search Results



Your Ref/PO Number: 2425 Gosforth

Client Service ID : 922361

Date: 21 August 2024

Katrina Greville

21 Costata Crescent

Adamstown New South Wales 2289

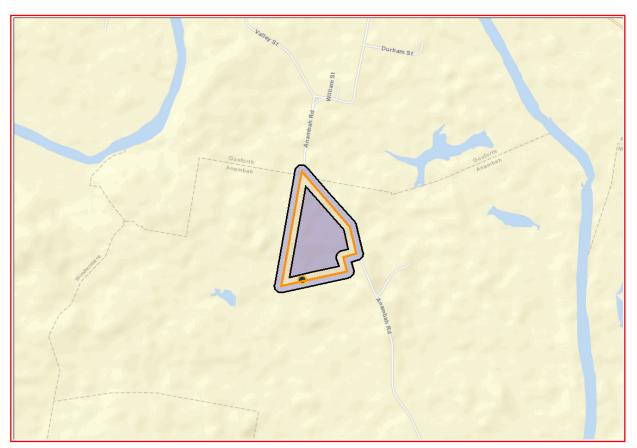
Attention: Katrina Greville

Email: klmukevski@bigpond.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot: 55, DP:DP874170, Section: - with a Buffer of 50 meters, conducted by Katrina Greville on 21 August 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0 Aboriginal places have been declared in or near the above location.*

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.

ABN 34 945 244 274

Email: ahims@environment.nsw.gov.au

Web: www.heritage.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.

Your Ref/PO Number: 2425 Gosforth Pt2

Client Service ID: 922362

Katrina Greville Date: 21 August 2024

21 Costata Crescent

Adamstown New South Wales 2289

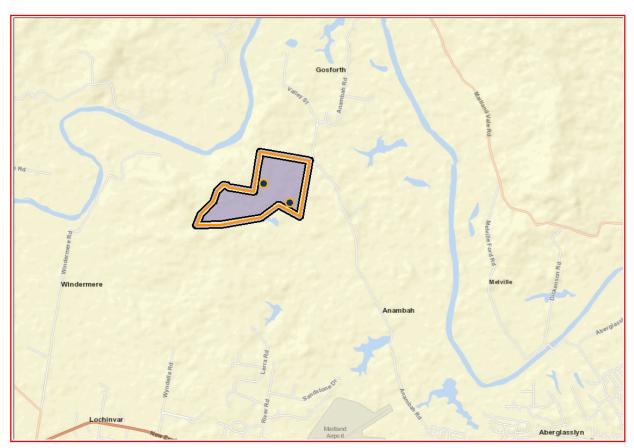
Attention: Katrina Greville

Email: klmukevski@bigpond.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot: 177, DP:DP874171, Section: - with a Buffer of 50 meters, conducted by Katrina Greville on 21 August 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| 2 Aboriginal sites are recorded in or near the above location. |
|--|
|--|

0 Aboriginal places have been declared in or near the above location.*

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.

ABN 34 945 244 274

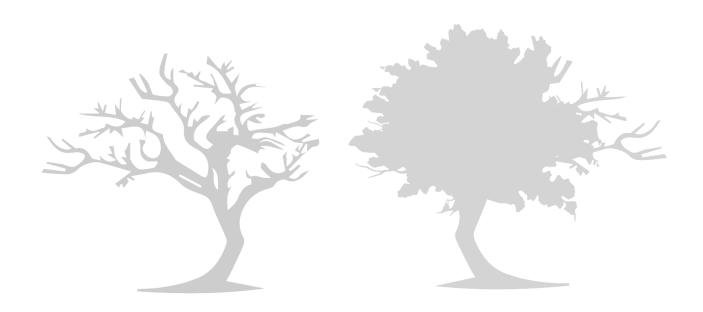
Email: ahims@environment.nsw.gov.au

Web: www.heritage.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.



Appendix C: Landscape Masterplan



4.0 Masterplan

4.3 Landscape Concept Masterplan



TaylorBrammer





Ref: 2424 Anambah Date: 23 June 2025

Adam Small NSW Rural Fire Service Locked Bag 17 GRANVILLE NSW 2142

Attention: Adam Small

NSW Rural Fire Service Request for Information

Council Ref: CNR-73930

DA/2024/763

RFS Ref: DA20240927003999-Original-1

Development: s100B – Subdivision – Torrens Title Subdivision Address: 559 Anambah Road, Gosforth NSW 2320

We refer to your correspondence dated 12 November 2024 regarding the above-mentioned Development Application, which is currently under assessment by Maitland City Council. This letter provides a formal response to the Request for Further Information (RFI) issued by the NSW Rural Fire Service.

An Amended Bushfire Assessment Report has been prepared to address the matters raised in the RFI. The amended report includes:

- ☐ An updated Slope and Vegetation Assessment with verified slope transects; and
- □ Confirmation that Perimeter Roads and Non-Perimeter Roads are now compliant with the access provisions of Table 5.3b of Planning for Bush Fire Protection 2019 (PBP 2019), consistent with similar subdivisions recently approved by the NSW RFS.

We provide the following information in response:

1. Roads and Access

The subdivision is served by three formal vehicular access points, each designed to meet both Council's road standards and the Performance Criteria of Table 5.3b of PBP 2019 as shown in **Attachments 1 - 4**. These comprise:

- Main Collector Road (MC01) the primary 15.4m wide carriageway connecting to Anambah Road, provides all-hours public ingress and egress for residents and service vehicles.
- 2. **Secondary Emergency Access (MC02)** a dedicated 6.0m wide sealed emergency route branching from the southern end of Road MC02 and continues south along an existing road reserve connecting the existing cul-de-sac at River Road, secured with lockable RFS-standard gates to support fire-fighting appliances and orderly evacuation when required.
- 3. **Temporary Stage 1 Access** an interim access point off Anambah Road immediately north of Stage 1, facilitating construction traffic and an alternative egress route.





Perimeter Road Design (Western Boundary)

The revised concept masterplan incorporates a continuous perimeter road along the entire western boundary of the development site. We confirm that all perimeter roads adjoining the bushfire hazard interface have a minimum kerb-to-kerb width of 10.5 metres and are fully compliant with the Acceptable Solutions of Table 5.3b of PBP 2019. These perimeter roads provide direct access to the western bushland interface and riparian corridor and have been purposefully designed to facilitate safe two-way access for firefighting vehicles and residents evacuating the site.

All roads identified for potential tactical firefighting access have been designed with a minimum kerb-to-kerb width of 11.0 metres, ensuring unobstructed passage for RFS appliances and water carts. The proposed road network ensures that firefighting operations occur on appropriately sized roads, while internal roads such as MC17 maintain safe two-way egress for residents without constraining emergency access.

Non-Compliant Internal (Non-Perimeter) Roads – Carriageway Widths

☐ A minimum 5.5m wide trafficable carriageway, and

□ Parking provided outside that 5.5m width.

vehicle access.

The following response focuses specifically on the local non-perimeter roads, which are proposed with an 8.0 metre wide carriageway. These internal roads are not located on the bushfire interface and have been assessed as a performance-based solution under PBP 2019. However, it is important to clarify that the non-perimeter roads do in fact comply with the Acceptable Solutions under Table 5.3b of PBP 2019, which requires:

| The proposed local roads provide exactly this configuration—a 5.5m clear carriageway with an | |
|---|----|
| additional 2.5m sealed verge or pavement suitable for on-street parking, positioned outside the | |
| main traffic lane. This design maintains full compliance with PBP 2019's Acceptable Solutions for | ١c |
| non-perimeter roads, while also enabling safe on-street parking without impeding emergency | |

Justification for 8.0m Local Street Widths - Performance Considerations

While compliant as outlined above, the following additional factors demonstrate the suitability of the 8.0m road layout in achieving PBP 2019's intent for safe access and egress:

| uic o. | off foad layout in achieving for 2019 3 liftent for sale access and egress. |
|--------|---|
| 1. On | -Street Parking Demand is Low |
| | All dwellings will provide a minimum of two off-street parking spaces, with additional |
| | capacity for two vehicles on driveways, accommodating up to four vehicles per lot. |
| | The average vehicle ownership in Maitland LGA is 1.9 per dwelling, indicating that on-site parking is sufficient to meet normal residential needs without reliance on kerbside parking |
| | During bushfire emergencies, visitor vehicles are unlikely to be present as official advice directs people to avoid such areas, and most vehicles would be removed during evacuation, reducing kerbside congestion. |
| ۰. | C. LARTHEM M. C. L. L. D. C. E. C. C. |

2. Functional Width Maintained During Emergencies

| If vehicles were parked on both side | es of the street, a | a clear width of 4 | .0 metres remains, |
|--------------------------------------|---------------------|--------------------|--------------------------------------|
| which: | | | |





- Is consistent with conservative performance-based assessments previously accepted by the RFS in similar contexts;
- o Is navigable by firefighting vehicles under emergency conditions;
- o Benefits from regular driveway gaps (typically every 10m), creating passing bays;
- Is supported by good sight distances allowing early detection and yielding to oncoming emergency vehicles.

| 2 | ı | im | hati | Evacuation | Traffic |
|----|---|----|------|------------|---------|
| J. | ᆫ | ши | nea | Evacuation | Hanne |

- Even under conservative modelling, an 8.0m wide local street servicing ~22 lots is expected to generate only 23 vehicle trips during evacuation.
- ☐ These trips are dispersed across time, and the internal road network is highly interconnected, ensuring multiple evacuation paths and low conflict potential with emergency vehicles.

4. Non-Perimeter Roads Are Not Firefighting Access Routes

- The 8.0m wide roads are not situated adjacent to the bushfire hazard interface and do not serve as primary firefighting access routes.
- □ All tactical access to the hazard areas is provided via compliant 10.5m or greater perimeter roads, designed specifically for this purpose.
- ☐ Therefore, the local roads serve only to convey evacuating residents to safer parts of the subdivision and do not require the same design standard as interface roads.

The proposed local road design for the residential subdivision satisfies the Performance Criteria and Acceptable Solutions of Table 5.3b of PBP 2019 for non-perimeter roads and demonstrates strong performance against the overarching intent of the policy. The layout ensures:

| Compliance with minimum carriageway widths and parking configurations; |
|--|
| Effective evacuation and emergency access; |
| Limited and low-conflict traffic volumes; and |
| Separation from bushfire-prone vegetation. |

Consistency with Recent RFS Approvals

The access provisions are consistent with the RFS's expectations for similar residential subdivision approvals across the Hunter and Central Coast Regions. Specifically, the RFS has recently supported 8.0 metre wide non-perimeter roads in a number of comparable subdivisions, where the design provides:

| A minimum 5.5 m trafficable carriageway; and |
|--|
| Parking located outside of the 5.5 m width, or managed to ensure emergency vehicle |
| access. |

Examples include:

- 25 Wyndella Road, Lochinvar (CNR-56339, DA/2023/415) RFS BFSA issued 17 April 2025, excluding parking restrictions for all roads located greater than 30m from a grassland bushfire hazard or 100m from a bushfire hazard.
- □ 51 Station Lane, Lochinvar (CNR-40679, DA/2022/511) RFS BFSA issued 7 July 2024, permitting 8.0 m carriageway width for non-perimeter roads.





- □ 442 Louth Park Road, Louth Park (CNR-49186, DA/2022/1260) RFS BFSA issued 1 July 2024, with RFS accepting a performance-based solution for road widths.
- 464 Cessnock Road, Gillieston Heights (CNR-37287, DA/2022/193) RFS BFSA issued 17 July 2024, explicitly accepting 8.0 m carriageway for perimeter roads and 5.5 m for non-perimeter.
- □ 514 Newline Road, Raymond Terrace (CNR-50421, 16-2013-599-1) RFS BFSA issued 12 April 2023, approving 8.0 m wide non-perimeter roads with on-street parking.
- □ 523 Raymond Terrace Road, Chisholm (CNR-56410, DA/2023/433) RFS BFSA issued 3 April 2024, adopting 5.5 m for non-perimeter roads and 8.0 m for perimeter roads.
- □ Windermere Road, Windermere (CNR-49659, DA/2022/1332) RFS BFSA issued 27 May 2024, approving a merit-based variation for non-perimeter roads in a low-risk subdivision.

Beyond explicit conditions to omit any condition stipulated a parking requirement (or parking restriction), the RFS has employed various mechanisms to support performance-based solutions for road access. This includes issuing General Notes within Bush Fire Safety Authorities, such as for 51 Station Lane, Lochinvar, where an 8m carriageway with parking was allowed due to low bushfire risk. Similarly, the recent approval at 25 Wyndella Road, Lochinvar excluding all parking restrictions for roads greater than 30m from a *grassland* bushfire hazard; demonstrating a pragmatic and risk-based approach by the RFS, where prescriptive parking restrictions are relaxed in areas of lower bushfire risk. The non-perimeter roads in the Anambah subdivision are similarly situated away from the immediate bushfire hazard interface and serve a comparable function. Furthermore, the RFS has directly approved performance-based solutions for access, as seen in the 442 Louth Park Road and 464 Cessnock Road, Gillieston Heights BFSAs, explicitly stating their support or acceptance of such solutions based on specific circumstances and justification.

The proposed 8.0 metre wide non-perimeter roads for this subdivision adopt the same design approach, a compliant 5.5 m carriageway plus an additional 2.5 m verge or parking provision, consistent with these recent RFS-supported examples.

In finalising the General Terms of Approval, we respectfully request that the RFS adopt a consistent approach to recent subdivision approvals by omitting any condition or Acceptable Solution wording that requires "parking is provided outside the carriageway width." The proposed 8.0 m wide non-perimeter roads, with a 5.5 m trafficable carriageway and an additional 2.5 m verge or parking provision, demonstrably satisfy the performance criteria and intent of Table 5.3b of PBP 2019. Furthermore, as seen in the RFS's recent Bush Fire Safety Authorities for projects including 51 Station Lane, Lochinvar, 442 Louth Park Road, and Windermere Road, the RFS has employed flexible mechanisms such as General Notes, specific plan approvals, and acceptance of performance-based solutions to appropriately manage this matter without imposing prescriptive parking conditions. We therefore seek confirmation that the General Terms of Approval for this application will reflect this contemporary and pragmatic RFS practice.





The following recommended conditions are considered appropriate to satisfy the requirements of PBP 2019:

Access Requirements

The intent of measures is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area

Access roads must comply with the following requirements of Table 5.3b of Planning for **Bush Fire Protection 2019:** □ the proposed access roads must be in accordance with the Concept Master Plan – Road Layout, Drawing No. 250055-MP-001-02 H, Revision H, dated 27 May 2025 prepared by Groundswell Engineers □ subdivisions of three or more allotments have more than one access in and out of the development: 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; dead end roads are not recommended, but if unavoidable, are not more than 200 metres in length, incorporate a minimum 10 metres outer radius turning circle and are clearly sign posted as a dead end; □ where kerb and guttering is provided on perimeter roads, roll top kerbing should be used to the hazard side of the road; one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression: ☐ 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; hvdrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression; Perimeter roads shall be comply with the following general requirements of Table 5.3b of Planning for Bush Fire Protection 2019: □ are two-way sealed roads; □ minimum 8m carriageway width kerb to kerb; ■ 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. □ Safe, two-way access for firefighting appliances at all times. Non-perimeter roads shall comply with the following general requirements of Table 5.3b of Planning for Bush Fire Protection 2019: ■ are two-way sealed roads;

minimum 5.5m carriageway width kerb to kerb;
 hydrants are located clear of parking areas;





| ш | 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. |
| | Safe, two-way access for firefighting appliances at all times. |
| | Parking requirements shall not apply to the sections of road that are not located on |
| | 'bush fire prone land', (i.e. greater than 30m from a Grassland hazard and 100m of a |
| | bushfire hazard) as per Figure 14: Subdivision BAL Plan of the Bushfire Assessment |
| | Report (prepared by Bushfire Planning Australia, dated 23 June 2025, Rev 5. Ref 2425) |

2. Effective Slope Assessment – South-Western Aspect

The slope analysis within the Bushfire Threat Assessment has been updated to reflect verified slope measurements derived from a detailed LiDAR survey. This survey was prepared by Delf Lascelles Consulting Surveyors and is referenced as '24200 LiDAR Detail' dated 9/4/2024

The updated Slope and Vegetation Assessment contained in the Amended Bushfire Assessment Report (**Figure 9**) now accurately delineates slope transects and effective slope values across the site, including the south-western aspect. This updated data confirms that the majority of slope conditions in the south-west range from 1.0° to 5.9° downslope, with specific transects (e.g., T18, T19, T21) validating the classification originally used in the bushfire assessment.

This LiDAR-derived slope verification satisfies the RFS request for supporting survey evidence prepared by a registered surveyor.

We trust this response is sufficient to allow the RFS to prepare and issue General Terms of Approval, and subsequently allow Council to continue to determine the application, however, should any further information be required, please do not hesitate to contact the undersigned via phone on 0400 917 792 or email at stuart@bfpa.com.au.

Yours sincerely

Stuart Greville
Director
Accredited Bushfire Practitioner
BPAD-26202



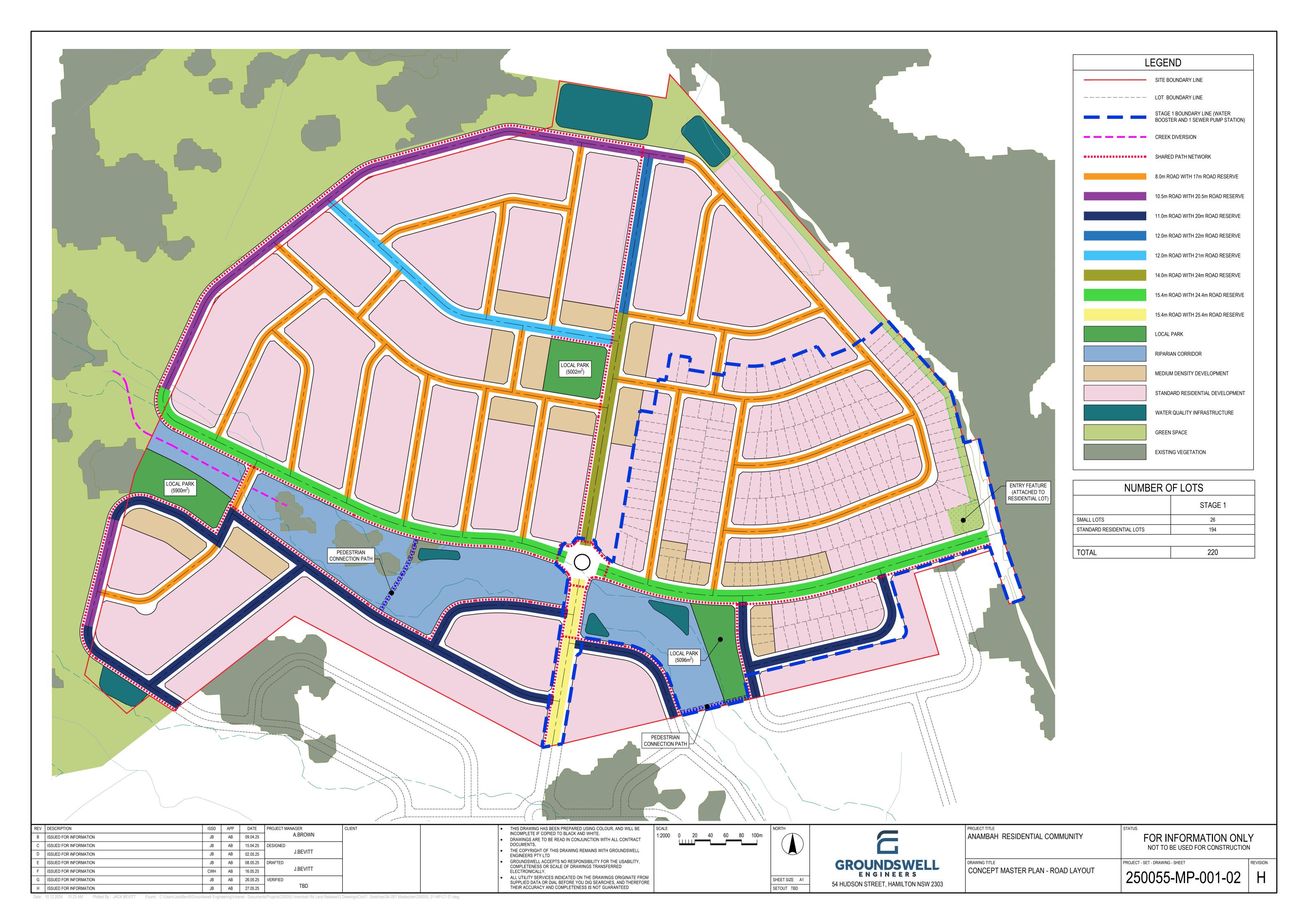
ATTACHMENTS

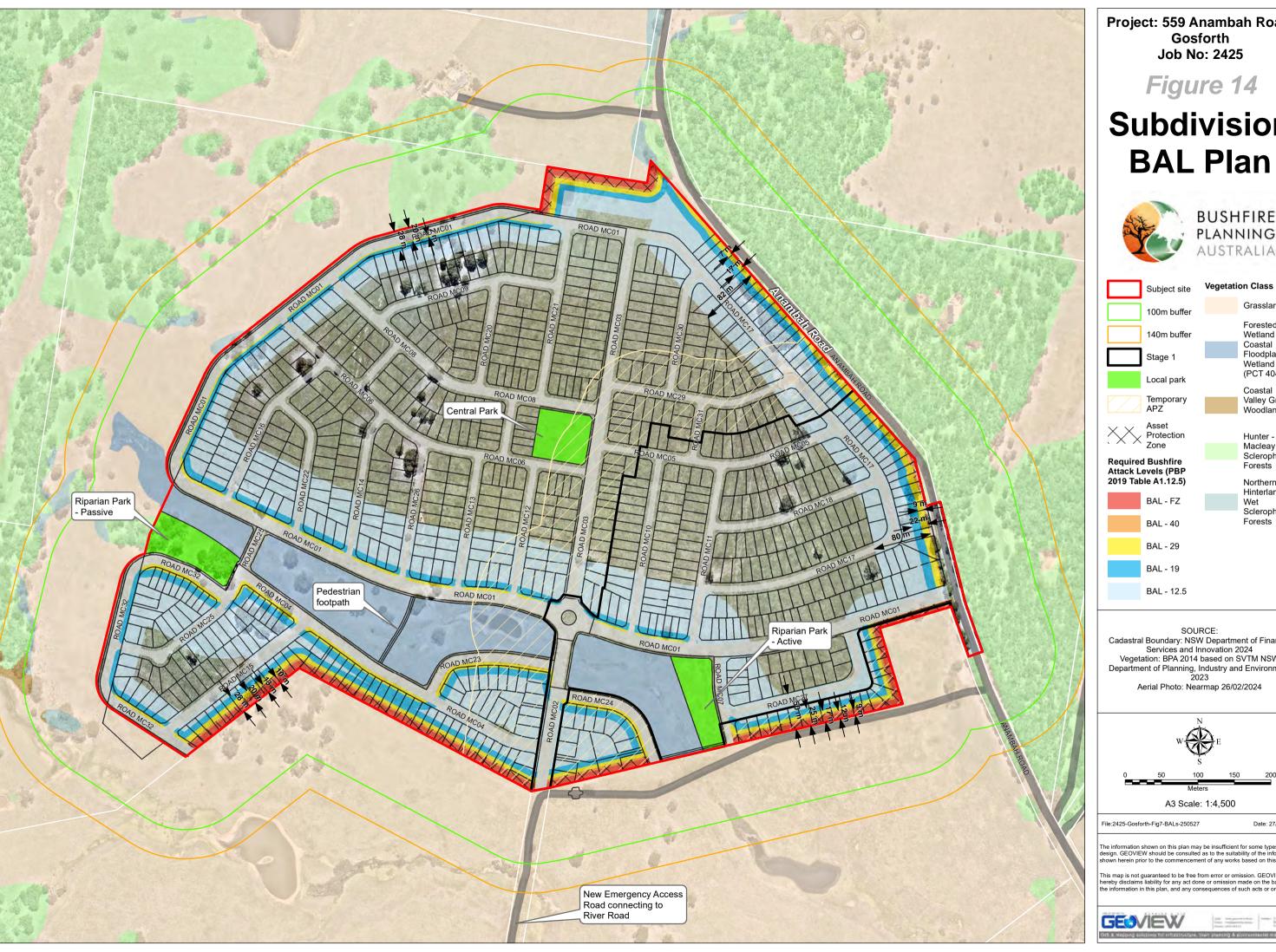
| | Attachment 1: Conce | pt Master Plan - | Road Layout, | Groundswell | Engineers |
|---|----------------------------|------------------|----------------------------------|-------------|-----------|
| _ | A44 I 40 0 I II | | | | |

☐ Attachment 2: Subdivision BAL Plan, Bushfire Planning Australia

☐ Attachment 3: Proposed Access Arrangements, Bushfire Planning Australia

☐ Attachment 4: Emergency Fire Access Plan, Groundswell Engineers





Project: 559 Anambah Road, Gosforth Job No: 2425

Figure 14

Subdivision BAL Plan



Grassland Forested

> (PCT 4042)' Coastal Valley Grassy

Woodlands

Hunter -Macleay Dry Sclerophyll

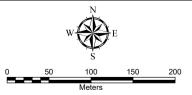
Forests Northern Hinterland

Sclerophyll

Wetland -Coastal Floodplain Wetland

SOURCE: Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024 Vegetation: BPA 2014 based on SVTM NSW Department of Planning, Industry and Environment 2023

Aerial Photo: Nearmap 26/02/2024



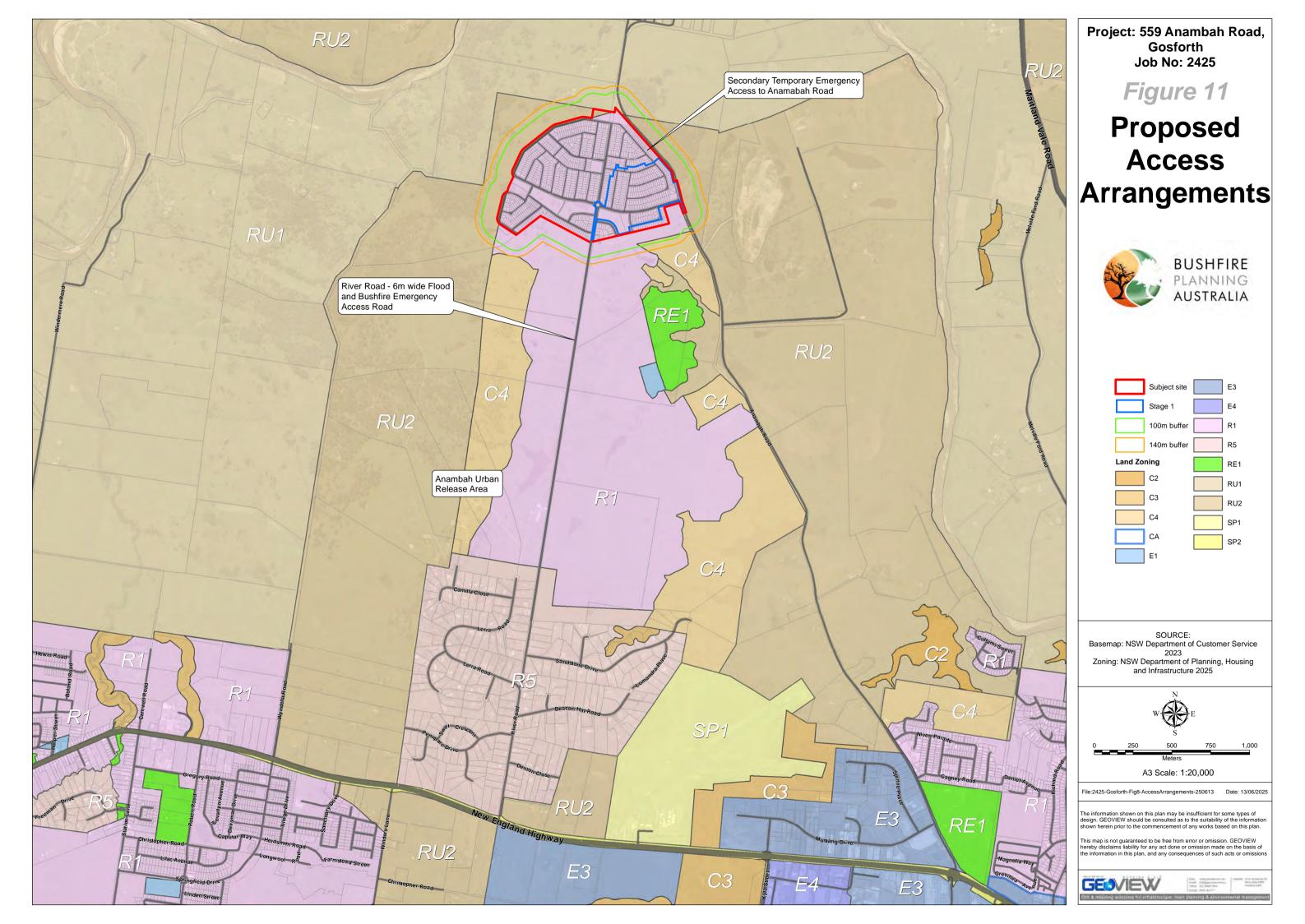
A3 Scale: 1:4,500

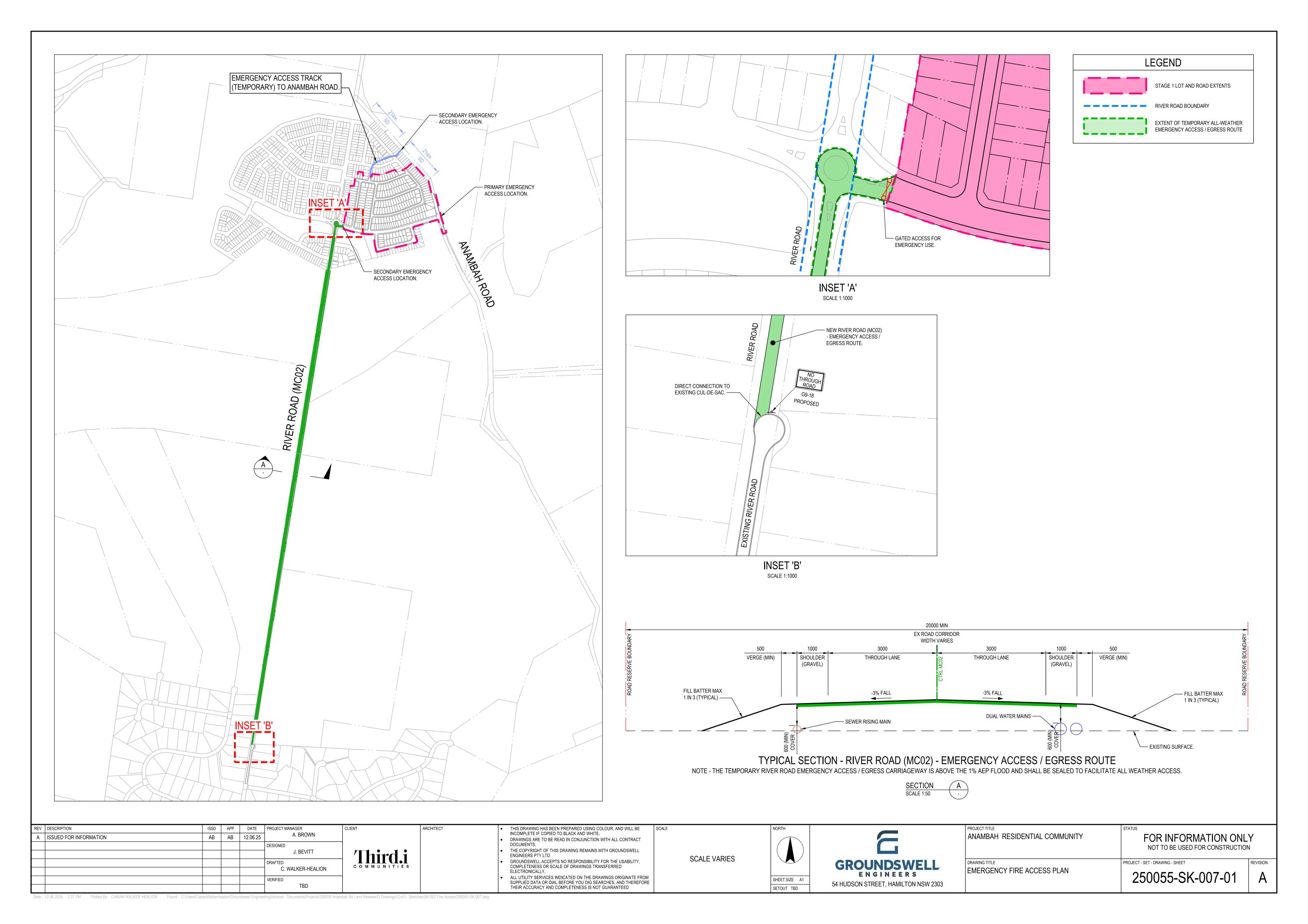
The information shown on this plan may be insufficient for some types of design. GEOVIEW should be consulted as to the suitability of the information shown herein prior to the commencement of any works based on this plan.

his map is not guaranteed to be free from error or omission. GEOVIEW ereby disclaims liability for any act done or omission made on the basis on the information in this plan, and any consequences of such acts or omissi













Ref: 2424 Anambah

Date: 18 July 2025

Nika Fomin NSW Rural Fire Service Locked Bag 17 GRANVILLE NSW 2142

Attention: Nika Fomin

NSW Rural Fire Service Request for Information

Council Ref: CNR-73930

DA/2024/763

RFS Ref: **DA20240927003999-S38-2**

Development: s100B – Subdivision – Torrens Title Subdivision Address: 559 Anambah Road, Gosforth NSW 2320

We refer to your correspondence dated 11 July 2025 regarding the above-mentioned Development Application, which is currently under assessment by Maitland City Council. This letter provides a formal response to the Request for Further Information (RFI) issued by the NSW Rural Fire Service.

Our assessment and justification for this position are outlined below, addressing the points raised in your letter.

1. Non-Perimeter Roads & Maitland Council Development Control Plan (DCP)

Your letter suggests the proposed 8.0 metre non-perimeter roads do not comply with the required 5.5-metre carriageway width outlined in Table 5.3b of PBP 2019. This interpretation appears to be based on a review of the Maitland Development Control Plan (MDCP) 2011. The RFS's statutory role is to assess development applications against the requirements of PBP 2019. A council DCP is not the relevant assessment benchmark for the RFS and should not form the basis of your assessment. The application of a DCP is a matter for the local council, and under the *Environmental Planning and Assessment Act 1979*, a DCP serves only as a guide. It is understood that the RFS does not assess referrals against the various council planning instruments and engineering guidelines across NSW, and an application in the Maitland LGA should be no different. Furthermore, this development is part of a Concept Plan which will function as a site-specific DCP under Cl. 6.3 of the EP&A Act. As such, the RFS references to the general provisions of the Maitland DCP 2011 are irrelevant.

The proposed 8.0 metre non-perimeter roads are fully compliant with the Acceptable Solutions in Table 5.3b of PBP 2019. The design provides a 5.5-metre clear trafficable carriageway, with an additional 2.5-metre verge for on-street parking, positioned outside the main traffic lane. This configuration directly satisfies the PBP 2019 requirement for a minimum 5.5m carriageway with parking provided outside that width.

2. Emergency Access to River Road

We note the RFS's position that locked gates for emergency access are not supported. The proposed development provides two points of access to Anambah Road as required in Table 5.3b. The additional emergency egress route to the south along River Road is being provided as an alternate access for flooding. It will therefore still be provided to ensure connectivity and an alternate evacuation path and will effectively act as a third point of access for bushfire. For clarification,





however, we do not consider the River Road alignment is necessary to achieve compliance with PBP 2019.

The access requirements for this emergency route, including the gate, will be provided (as a minimum standard) in accordance with the *NSW Fire Trail Standards 2023*, specifically the section on "Trail Access and Access/Egress Points". Under Ch 3.4.4 of PBP 2019, where a fire trail is incorporated into a development, the fire trail must be designed, constructed and maintained in accordance with the NSW RFS Fire Trail Standard. This standard provides detailed criteria for access control mechanisms, including that any gate must be operable by a single person in a practical timeframe and have sufficient setbacks and clearance for the safe parking of an appliance. The design will adhere to these state-wide standards, which represent the appropriate benchmark for this type of access.

3. Transect T2 – slope assessment

Regarding the comment about T2, we would like to confirm that the bushfire protection measures have been provided for the entire length of Anambah Road. This has been determined based on a worst-case scenario assessment, considering a slope of 0-5 degrees downslope. LiDAR and field survey show effective slopes under the forest hazard across Anambah Road vary from -0.5° upslope at T2b to 1.4° downslope at T1; being north of lots 321 and 322. To ensure a precautionary approach, we have already assessed both transects (T1–T2a) as "0.0-<5.0 downslope", the most onerous category likely to occur. The recommended APZ south of Lots 321 and 322 was calculated on a 5.0-<10.0 downslope (T3). Accordingly, the recommended APZs and BALs shown in the previously provided plan remain in accordance with the requirements of PBP 2019. Notwithstanding, it is noted the APZ required to ensure each lot is not exposed to radiant heat levels exceeding 29kW/m² is between 17m (T1, T2a, T2b) and 21m (T3) based on a Method 2 (AS3959-2018) assessment.

Conclusion – Statutory Compliance and BFSA Requirement

- 1. The design satisfies all Acceptable Solutions of PBP 2019 for roads, access, APZs, water supply, and emergency egress.
- 2. RFS references to Maitland DCP are not relevant to the statutory test under PBP 2019 and the Rural Fires Act.
- 3. Under the Act, the RFS must issue a Bush Fire Safety Authority where the development complies with PBP 2019.

A revised Bushfire Assessment Report has been prepared to support the above. We trust this response is sufficient to allow the RFS to prepare a Bush Fire Safety Authority and issue General Terms of Approval, and subsequently allow Council to continue to determine the application, however, should any further information be required, please do not hesitate to contact the undersigned via phone on 0400 917 792 or email at stuart@bfpa.com.au.

Yours sincerely

Stuart Greville
Director
Accredited Bushfi

Accredited Bushfire Practitioner

BPAD-26202





23 July 2025

Surbhi Chhabra NSW Rural Fire Service Development Assessment & Planning Email: surbhi.chhabra@rfs.nsw.gov.au

Dear Surbhi,

RE: Road Hierarchy Categorisation – Bushfire Planning Compliance 559 Anambah Road Gosforth NSW 2320, 177//DP874171, 55//DP874170 DA/2024/763
RFS Reference DA20240927003999-S38-2

On behalf of Thirdi Communities, I am writing in relation to the above development application and in support of the accompanying bushfire assessment prepared in accordance with Planning for Bush Fire Protection 2019 (PBP 2019). As additional information to the subdivision application, we have prepared a Road Hierarchy Plan which categorises all proposed roads in accordance with their bushfire function under PBP 2019.

The purpose of this is to provide clarity to both RFS and Council so that RFS can issue a bushfire safety authority, under section 100B of the *Rural Fires Act 1997*, with sufficient detail to enable Council and the applicant to implement its requirements.

The plan identifies and distinguishes between the following three road types:

1. Perimeter Roads

These roads directly interface with bushfire-prone vegetation located along the perimeters of the site and at riparian interfaces. As required under Table 5.3a of PBP 2019, these have been designed to:

- Provide a minimum 8m carriageway plus parking;
- Function as through-roads (not dead-ends); and
- Be co-located with an adjoining Asset Protection Zone (APZ) on the bushfire-exposed side.

2. Non-Perimeter Roads

These are internal roads located within the subdivision that do not adjoin bushfire-prone vegetation. They are designed primarily to support local traffic circulation and safe egress, while maintaining compliance with Table 5.3b of PBP 2019. It is proposed that these roads will provide a 5.5m wide carriageway plus 2.5m wide parking lanes either side (total kerb to kerb width of 10.5m).

3. Standard Urban Roads (Outside Bushfire-Prone Land)

A small number of proposed roads are located wholly outside mapped bushfire-prone land and are not within influencing distance of any bushfire hazard. These roads have been designed in accordance with Council's engineering standards and are not subject to the bushfire access requirements under PBP 2019.



The attached Road Hierarchy Plan clearly identifies the extent and location of each road type to demonstrate compliance with the applicable standards under PBP 2019.

We trust this provides the necessary clarity regarding road function and classification for the purpose of bushfire protection planning. Should you require further information, please contact me on 0407 094 925 or at brian@thirdigroup.com.au.

Sincerely,

BRIAN SWAINE

HEAD OF THIRD.I COMMUNITIES





