



BUSHFIRE ASSESSMENT REPORT

Residential Subdivision (Boundary Adjustment) and Infill Development

Raymond Terrace Road, Chisholm

Prepared for Allam Development No 1 Pty Ltd



Bushfire Planning Australia

Stuart Greville

Accredited Bushfire Practitioner

BPAD-26202

☎ 0400 917 792

✉ stuart@bfpa.com.au

BPA Reference: 2225 Munro

Prepared for Allam Developments No.1 Pty Ltd

c/o ADW Johnson

Attention: Andrew Biller

✉ andrewb@adwjohnson.com.au



Disclaimer and Limitation

This report is prepared solely for Allam Development No 1 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: 2225 - Boundary Adjustment & Infill Development

Version	Status	Purpose	Author	Review Date
1	Draft	Draft for Review	Katrina Greville	24 January 2025
2	Draft	Draft for Client Review	Stuart Greville	30 January 2025
3	Final	Final for Submission	Stuart Greville	30 January 2025

Certification

As the author of this Bushfire Assessment Report (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 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: 30 January 2025



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



Table of Contents

Terms and Abbreviations	v
Executive Summary	1
1. Introduction	3
1.1. Aims and Objectives	3
2. Site Description	4
2.1. Bushfire Prone Land	6
2.3. Approved Development	8
2.4. Proposed Development	8
3. Bushfire Hazard Assessment	9
3.1. Vegetation Assessment	9
3.2. Slope Assessment	13
3.3. Slope & Vegetation Assessment Results	16
3.4. Significant Environmental Features	19
3.5. Threatened Species, populations or ecological communities	19
3.6. Aboriginal Objects	19
4. Bushfire Protection Measures	20
4.1. Asset Protection Zones	20
4.1.1. Determining the Appropriate Setbacks	22
4.2. Access	23
4.3. Services - water, electricity and gas	23
4.3.1. Water	23
4.3.2. Electricity	23
4.3.3. Gas	23
4.5. Emergency Services	24
4.6. Construction Standards - Bushfire Attack Level	25
4.7. Landscaping and Vegetation Management	27
5. Conclusion and Recommendations	28
6. References	29

Figures

Figure 1: Maitland LEP 2011- Land Use Zone	4
Figure 2: Site Locality Plan.....	5
Figure 3: Bushfire Prone Land Map (NSW RFS 2021).....	7
Figure 4: Proposed Development - Lot 211 to 213.....	8
Figure 5: Aerial Image of subject lots within the Munro development	10
Figure 6: NSW State Vegetation Type Mapping (DPIE 2023).....	12
Figure 7: Slope Survey Plan (LiDAR)	14
Figure 8: Slope Survey Plan (DEM)	15
Figure 9: Slope and Vegetation Assessment.....	18
Figure 10: Explanation of an Asset Protection Zone.....	21
Figure 11: Asset Protection Zone profile	21
Figure 12: NSW Rural Fire Brigade - Thornton	24
Figure 13: NSW Fire & Rescue - East Maitland.....	24
Figure 14: BAL Plan.....	26

Tables

Table 1: Site Details	4
Table 2: Slope and Vegetation Assessment Results.....	17
Table 3: Required APZ setback - FDI @ 100	22
Table 4: Required Bushfire Attack Level.....	25

Plates

Plate 1: Looking north across the Munro development towards the bushfire hazard within the riparian corridor.....	11
---	----

Appendices

Appendix A: Proposed Plan of Subdivision

Appendix B: AHIMS Search Results

Appendix C: Planning for Bushfire Protection 2019 - Compliance Table

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
BC Act	NSW Biodiversity Act 2016
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
BFSA	Bush Fire Safety Authority
BURA	Bush Fire Urban Release Area
DoE	Commonwealth Department of the Environment
DPI Water	NSW Department of Primary Industries – Water
EP& A Act	NSW Environmental Planning and Assessment Act 1979
EP&A Regs	NSW Environmental Planning and Assessment Regulation 2000
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

Executive Summary

Bushfire Planning Australia (BPA) has been engaged by Allam Development No 1 Pty Ltd (the 'Client') to undertake a Bushfire Assessment Report (BAR) to support the residential subdivision (boundary adjustment) and infill development within the approved residential subdivision (known as the 'Munro' property) located at 581 Raymond Terrace Road, Chisholm; legally referred to as Lot 81 DP1302072. The proposed development applies to 3 lots within the approved 132 lot subdivision of the parent lot (Munro).

The proposed development includes two components:

- ❑ **Residential Subdivision:** being a boundary adjustment for approved Lots 211, 212 and 213 DP1283787
- ❑ **Infill Development:** being the construction of a carpark (Lot 211), two dwellings for the purpose of a sales office (Lot 212) and a display home (Lot 213).

The development of the Munro property was originally approved under Development Application DA19-652 by Maitland City Council (MCC) on 28 April 2020 as a 132-lot residential development. The development was assessed by the NSW Rural Fire Service (RFS) for compliance under the RFS document Planning for Bushfire Protection 2006 (PBP 2006). A Bush Fire Safety Authority (BFSA) was issued by the RFS on 10 October 2019 subject to conditions.

The 3 lots the subject of this assessment are all greater than 100m from the identified bushfire hazard. The bushfire hazard is contained to a narrow riparian corridor located to the north of the subject lots. As such, this BAR found the site is not exposed to a measurable bushfire hazard as all land between the 3 lots and the nearest bushfire hazard is approved for residential housing. Furthermore, all land up to and greater than 100m from the subject lots is also approved for low density residential housing. The surrounding land must be managed as an Inner Protection Area (IPA) in accordance with the development consent issued for the 132-lot subdivision.

The following key recommendations have been designed to enable the proposed development to achieve the aims and objectives of PBP 2019:

Asset Protection Zones

1. At the issue of a subdivision certificate and in perpetuity, the entire site 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;

Construction and Design

2. 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;

Water and Utilities

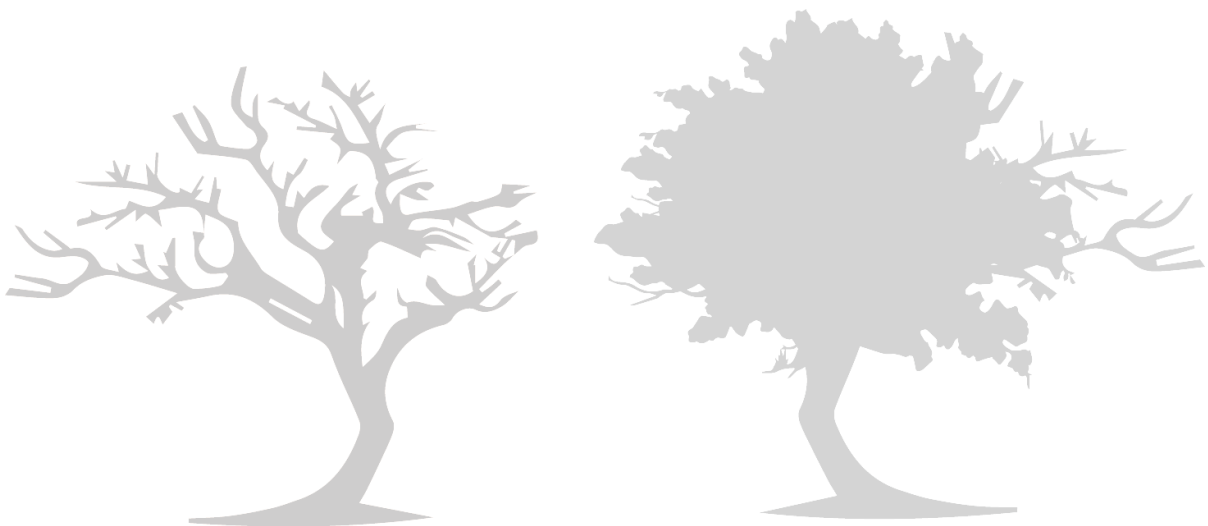
3. The new buildings are to be connected to a reliable water supply network and that suitable fire hydrants are located throughout the development site that are clearly marked and provided for the purposes of bushfire protection. Fire hydrant spacing, sizing and pressure shall comply with AS2419.1 2005 and section 5.3.3 of PBP 2019; and

Landscaping

4. Consideration should be given to landscaping and fuel loads on site to decrease potential fire hazards on site.

This assessment has been made based on the bushfire hazards observed in and around the site at the time of inspection and production.

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 cannot guarantee that the area will not be affected by bushfire at some time.



1. Introduction

Bushfire Planning Australia (BPA) has been engaged by Allam Development No 1 Pty Ltd (the 'Client') to undertake a Bushfire Assessment Report (BAR) to support residential subdivision and infill development within the approved Sophia Waters residential subdivision (known as the 'Munro' property) located at 581 Raymond Terrace Road, Chisholm; legally referred to as Lot 81 DP1302072 and hereafter referred to as the 'site' (**Figure 2**).

The proposed development includes two components:

- ❑ Residential Subdivision: being a boundary adjustment for approved Lots 211, 212 and 213 DP1283787
- ❑ Infill Development: being the construction of a carpark (Lot 211), two dwellings for the purpose of a sales office (Lot 212) and a display home (Lot 213).

The assessment aims to consider and assess the bushfire hazard and associated potential bushfire threat relevant to the proposed development, and to outline the minimum mitigative measures which would be required in accordance with the provisions of the New South Wales Rural Fire Service (RFS) publication *Planning for Bushfire Protection 2019* (PBP 2019) that has been released and adopted through the *Environmental Planning and Assessment Amendment* (Planning for Bushfire Protection) *Regulation 2007* 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 a defensible 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); and
- ❑ Ensure that utility services are adequate to meet the needs of firefighters.

2. Site Description

Table 1: Site Details

Address	581 Raymond Terrace Road, Chisholm
Title	Lot 81 DP1302072 (Lots 211, 212 & 213)
LGA	Maitland City Council
Site Area	1,530 m ²
Land Use Zone	R1 General Residential (Figure 1)
Bushfire Prone Land	Vegetation Category 1 (Figure 3)
Context	The site is north of Raymond Terrace Road and is cleared as part of the approved development (DA19-652). A vegetation riparian corridor exists to the north of the proposed development (>100m) whilst surrounding lands to the east, south and west of the site are cleared in preparation of future development. A residential subdivision exists to the south of the site and is separated by Raymond Terrace Road.
Topography	The site is flat.
Fire History	The site lies within a local government area with a Fire Danger Index (FDI) rating of 100.

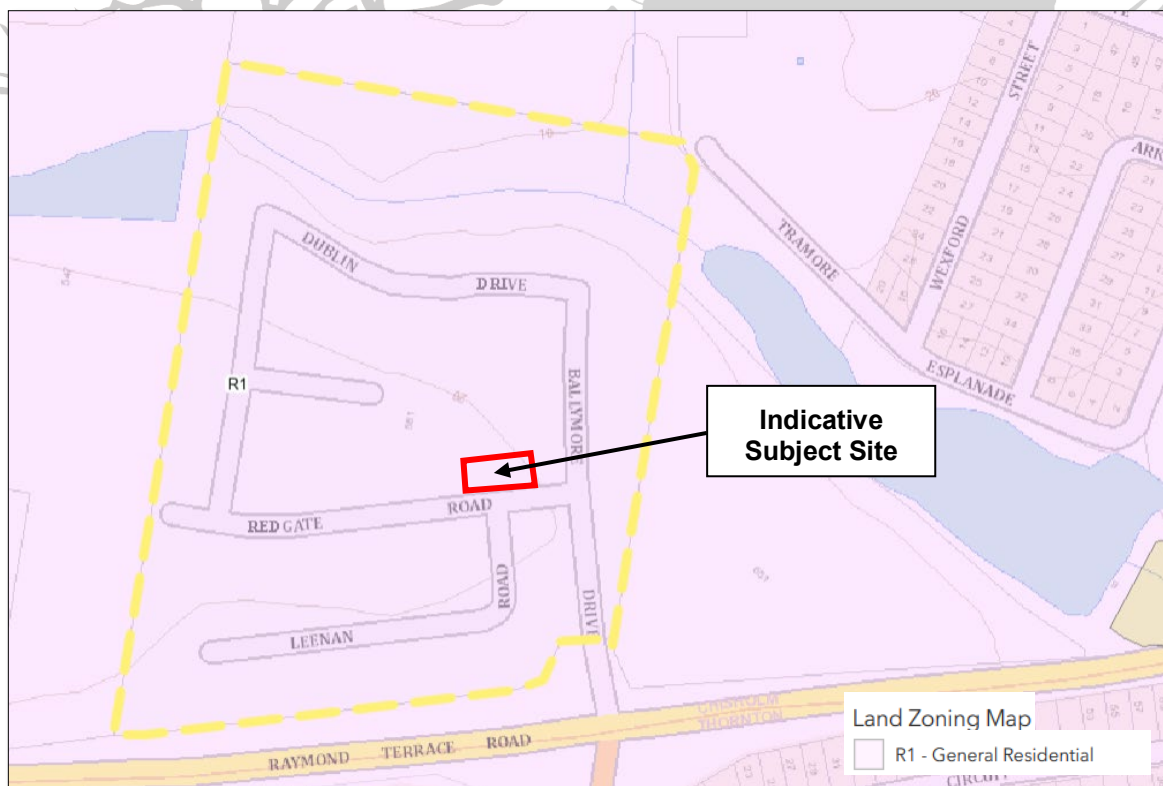





Figure 1: Maitland LEP 2011- Land Use Zone

Figure 2

Site Location



-  Subject Site
-  100m Buffer
-  140m Buffer

SOURCE:
Base Map © Department of Customer Service
2020



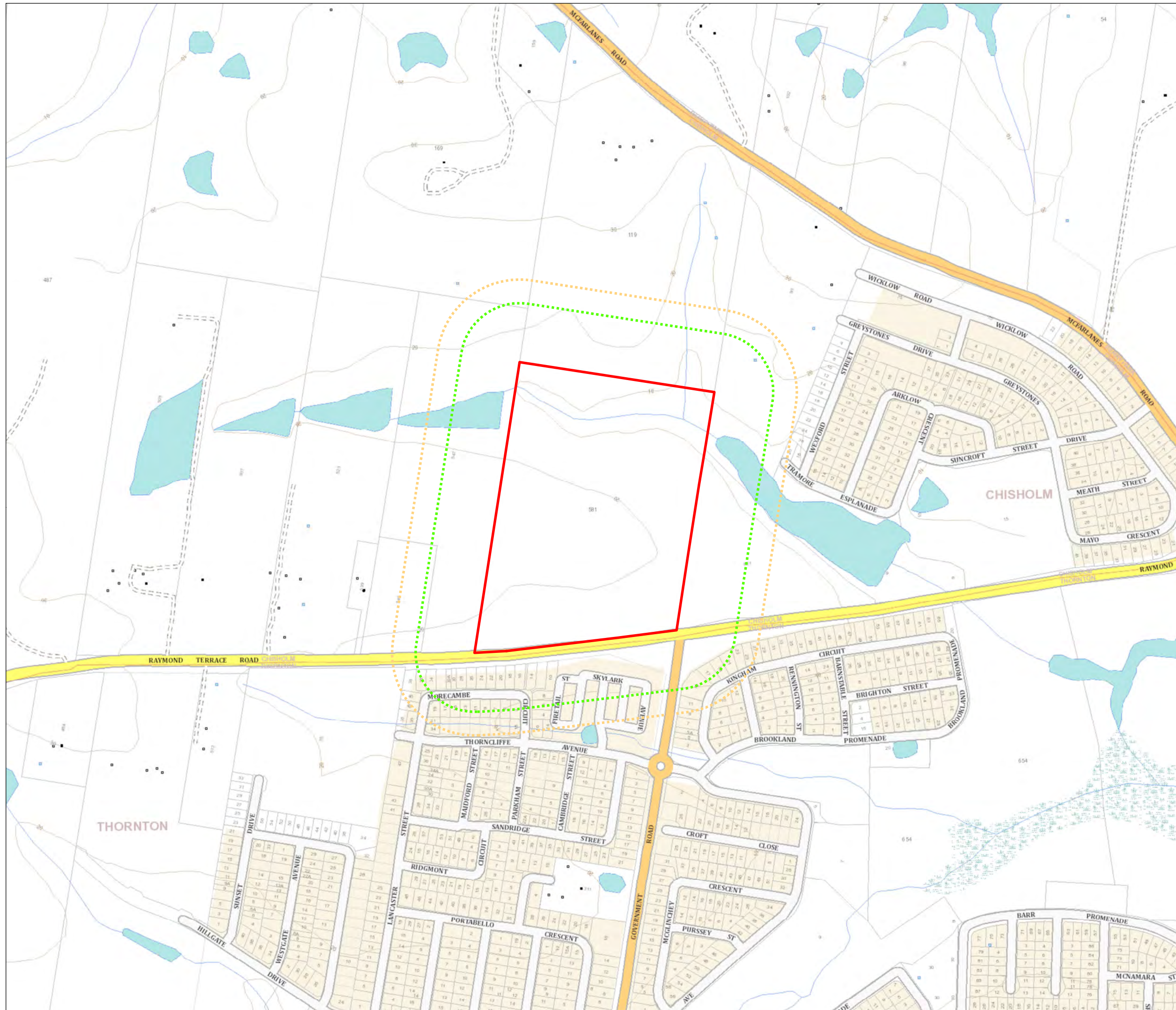
0 100 200 300
Meters

A3 Scale: 1:6,000

File:2225-ChisholmMunro-Fig1-SiteLocation-220223 Date: 23/03/2022

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 3 demonstrates the entire approved Munro site is mapped as Vegetation Category 1 bushfire prone land with exception of an isolated section of Vegetation Category 2 and Vegetation Category 3 located in south-eastern corner and north-eastern corner of the site respectively.

The proposed development site, being lots 211, 212 & 213 within the approved Munro development site are currently identified as Vegetation Category 1 bushfire prone land. It is noted all mapped bushfire prone land within and beyond the site has now been cleared as part of approved developments therefore leaving the riparian corridor (> 100m) north the site (Vegetation Category 1) as the primary bushfire hazard.



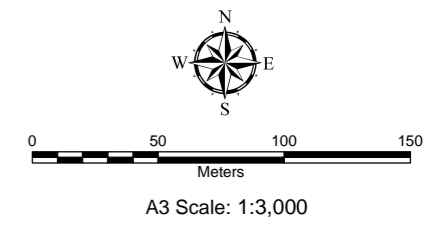
Figure 3

NSW Bush Fire Prone Land



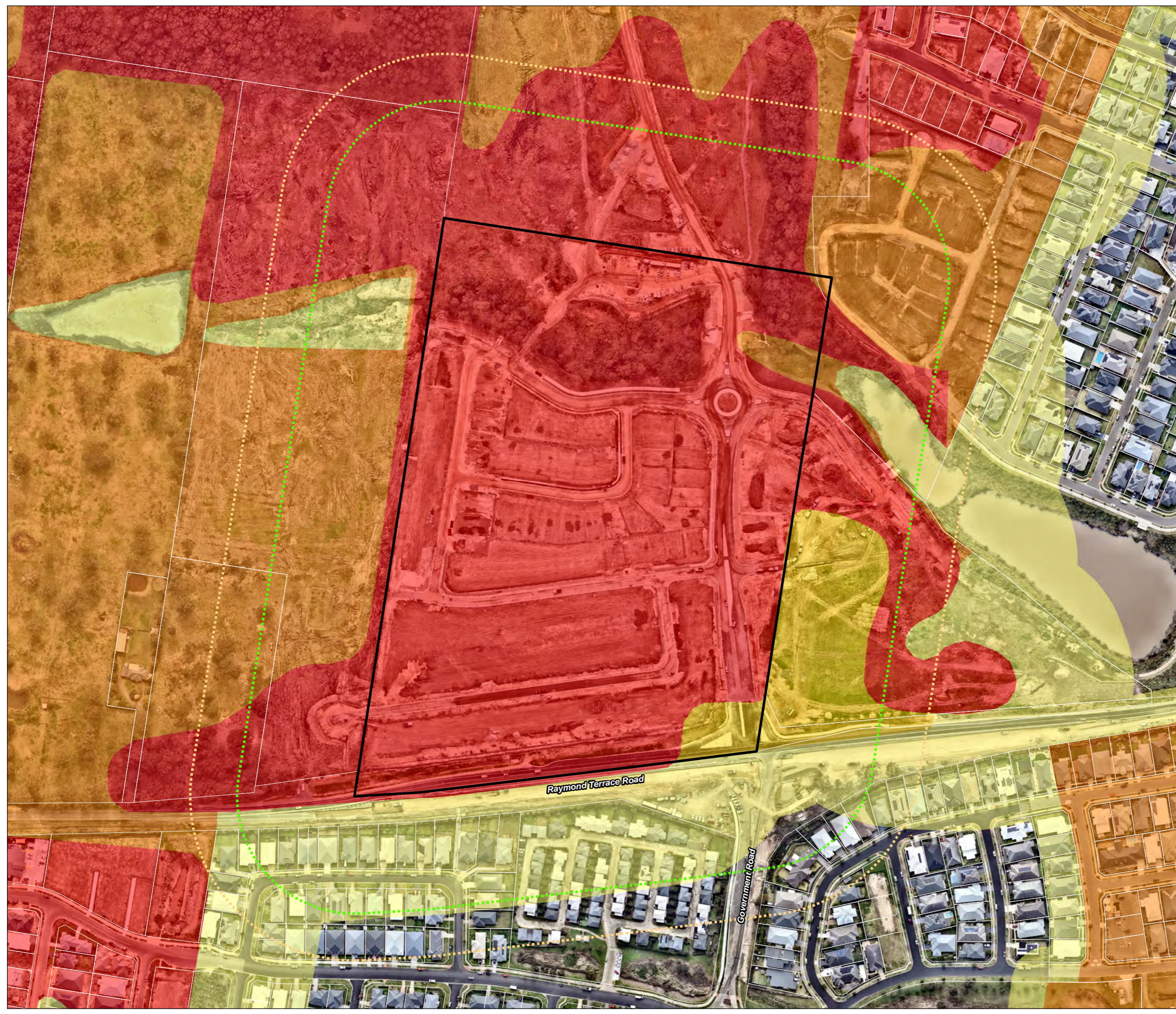
- Subject Site
- 100m Buffer
- 140m Buffer
- Bushfire Prone Land**
 - Vegetation Category 1
 - Vegetation Category 2
 - Vegetation Category 3
 - Buffer

SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2025
Aerial photo: NearMap 22/08/2024
NSW Bush Fire Prone Land: NSW Rural Fire Service
2021



File:2225-ChisholmMunro-Fig2-BFPL-240130 Date: 30/01/2025

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



2.3. Approved Development

Development Consent was issued under DA19-652 for a Torrens Title subdivision including 132 residential lots and associated infrastructure. The approved development is designed in accordance with the Thornton North Master Plan.

There are multiple approved developments to under construction to the north, east and west of the site.

2.4. Proposed Development

The proposed development (**Figure 4**) exists within the approved 'Munro' site (DA19-652) and includes two components being:

- ❑ Residential Subdivision: being a boundary adjustment for approved Lots 211, 212 and 213 DP1283787
- ❑ Infill Development: being the construction of a carpark (Lot 211), two dwellings for the purpose of a sales office (Lot 212) and a display home (Lot 213).

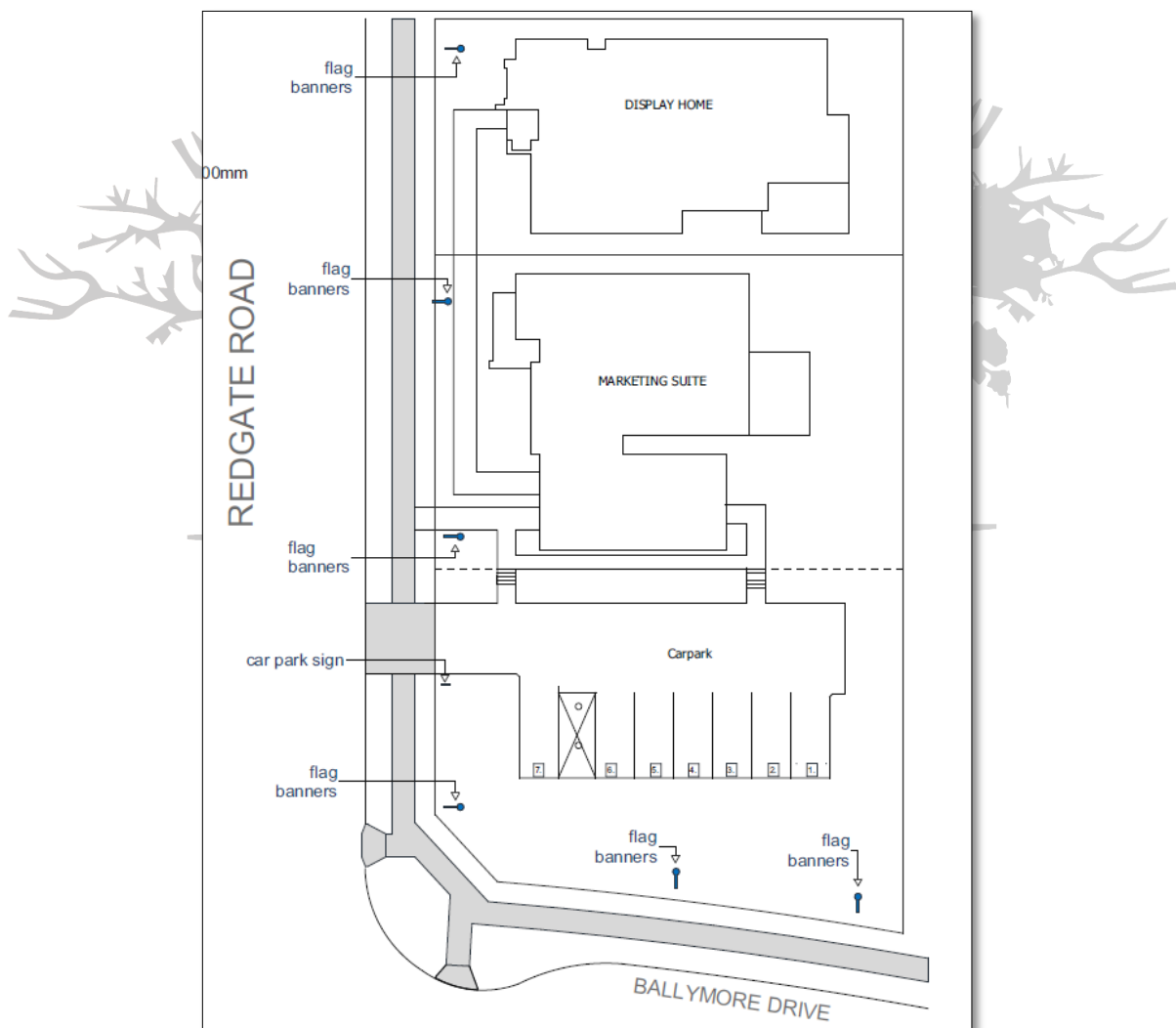


Figure 4: Proposed Development - Lot 211 to 213

3. Bushfire Hazard Assessment

3.1. Vegetation Assessment

Vegetation classification over the site and surrounding area has been carried out as follows:

- ❑ Aerial Photograph Interpretation to map the vegetation classification and extent;
- ❑ Review of LiDAR point cloud data (NSW LPI);
- ❑ Reference to NSW State Vegetation Type, NSW Department of Planning, Industry and Environment 2023 (**Figure 6**); and
- ❑ Site inspection completed by Stuart Greville.

In accordance with PBP 2019, an assessment of the existing vegetation over a distance of 140m in all directions from the site was undertaken. Vegetation that may be considered a bushfire hazard was identified within the previously approved development and identified as a *forest*, namely *Hunter Macleay Dry Sclerophyll Forest* according to both PBP 2019 and Keith vegetation classifications. This hazard is greater than 100m from the proposed development. The findings of the site inspection were compared to the NSW State Vegetation Type mapping (**Figure 6**) and any inconsistencies between the mapping sources were quantified during the site inspection and are discussed within this assessment.

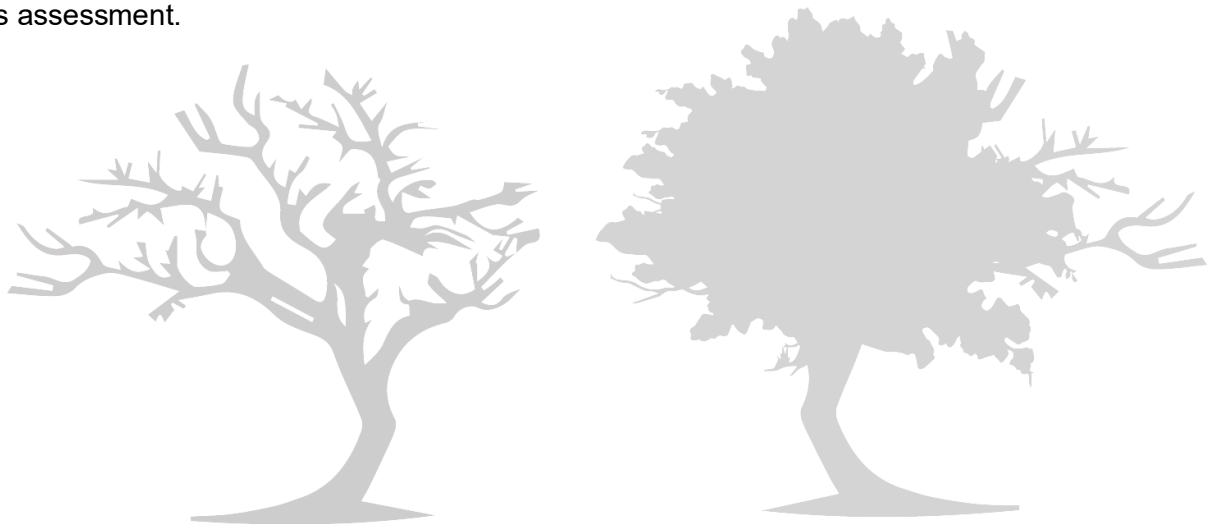




Figure 5: Aerial Image of subject lots within the Munro development



Plate 1: Looking north across the Munro development towards the bushfire hazard within the riparian corridor

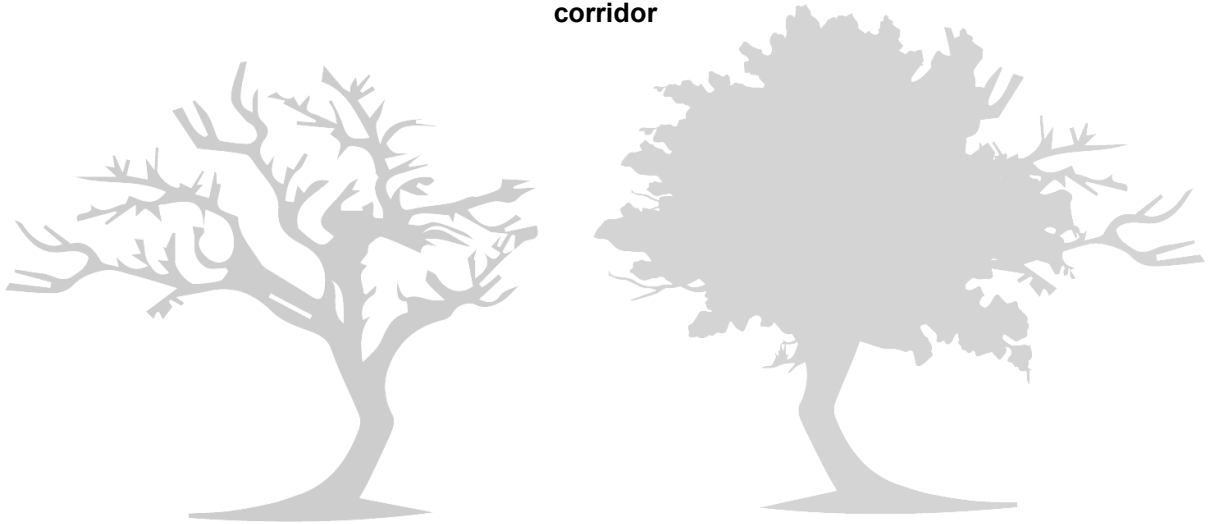


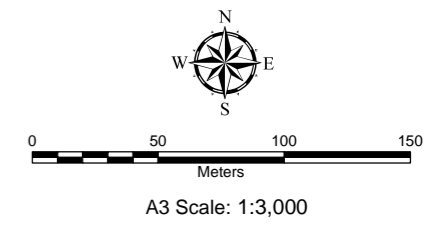
Figure 6

NSW Bush Fire Prone Land



- Subject Site
 - 100m Buffer
 - 140m Buffer
- Vegetation Class**
- Coastal Floodplain Wetlands
 - Coastal Freshwater Lagoons
 - Hunter-Macleay Dry Sclerophyll Forests

SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2025
Aerial photo: NearMap 22/08/2024
Vegetation: © State Government of NSW and
Department of Planning and Environment 2024



File:2225-ChisholmMunro-Fig3-Vegetation-NSW-SVT-2501 Date: 30/01/2025

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



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; and
- ❑ Site inspection completed by Stuart Greville (Bushfire Planning Australia).

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.






The effective slope in all directions is shown in **Figure 7**, **Figure 8** and **Table 2**.








Figure 7

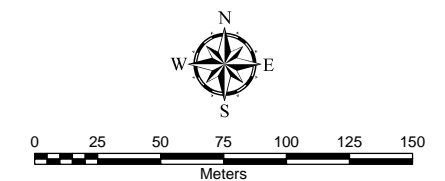
Slope Analysis: LiDAR



-  Subject Site
-  100m Buffer
-  140m Buffer
-  Contour (5m)
-  Contour (1m)

- Slope**
-  0° - 5°
 -  5° - 10°
 -  10° - 15°
 -  15° - 20°
 -  >20°

SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2021
Aerial photo: NearMap 15/12/2021
Surface analysis: Derived from LiDAR - Newcastle 1
metre Resolution Digital Elevation Model ©
Department Finance, Services and Innovation 2014



A3 Scale: 1:3,000

File:2225-ChisholmMunro-Fig6-SlopeLiDAR-220223 Date: 23/03/2022

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

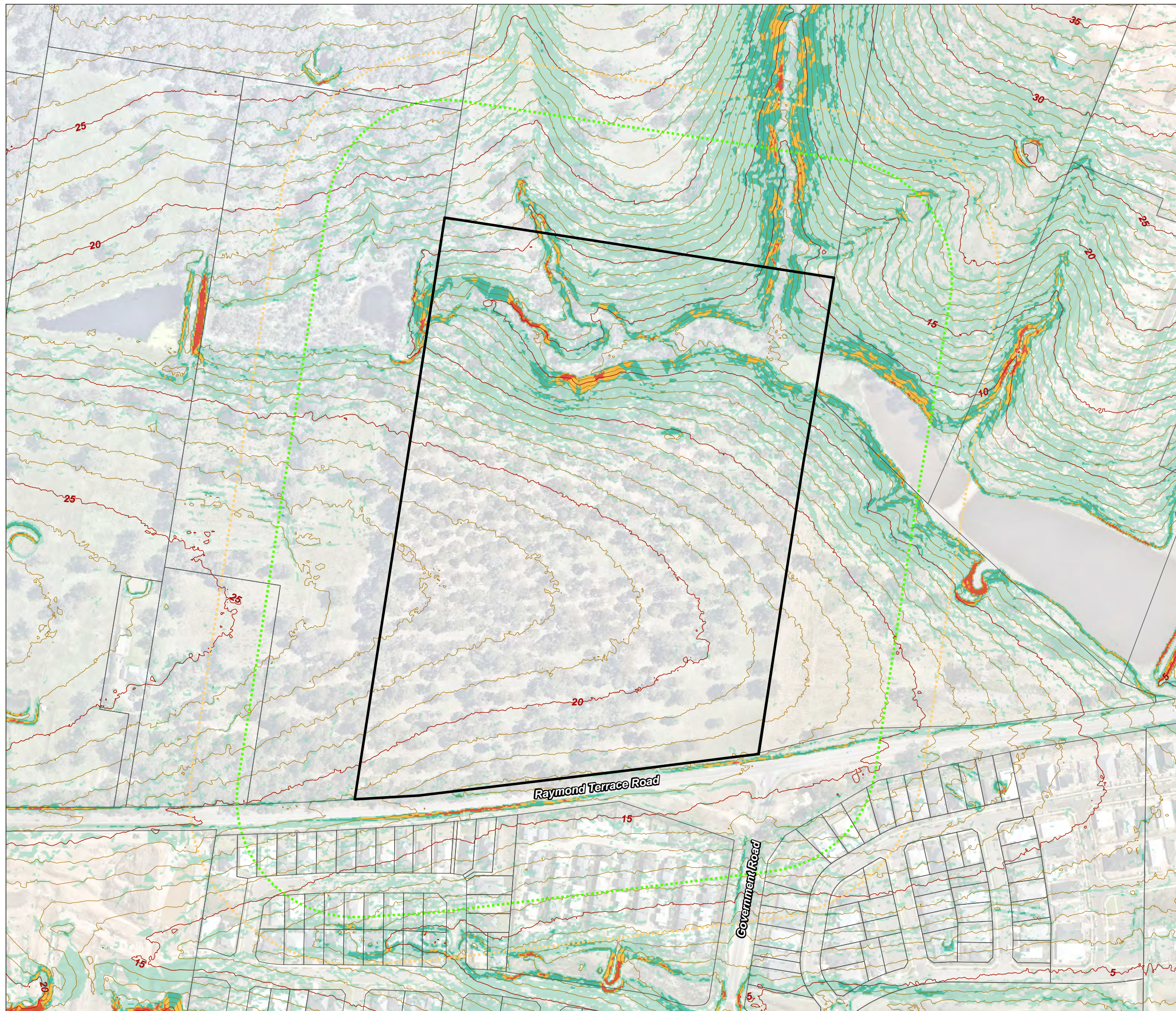








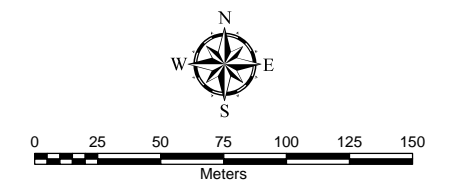
Figure 8

Digital Elevation Model



-  Subject Site
-  100m Buffer
-  140m Buffer
-  Contour (5m)
-  Contour (1m)
- Elevation (AHD)**
-  High : 36m
Low : 2m

SOURCE:
Cadastral Boundary: NSW Department of Finance,
Services and Innovation 2021
Surface analysis: Derived from LiDAR - Newcastle 1
metre Resolution Digital Elevation Model ©
Department Finance, Services and Innovation 2014



A3 Scale: 1:3,000

File:2225-ChisholmMunro-Fig5-DTM-220223 Date: 23/03/2022

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

3.3. Slope & Vegetation Assessment Results

The site inspection formed part of a reliability assessment to determine whether the site's mapped characteristics were consistent with the actual slope and vegetation characteristics observed on the site.

It was confirmed during the site inspection, the predominant vegetation and primary bushfire hazard is the riparian corridor located greater than 100m north of the site, identified as a *forest*; specifically, *Hunter Macleay Dry Sclerophyll Forest* vegetation formation in accordance with the descriptions contained in Keith.

Within and beyond 140m surrounding the site in all directions are approved residential subdivisions that are currently cleared in preparation for construction. Cleared lands are not required to be considered for the purposes of PBP 2019.

The final bushfire hazard assessment defining vegetation classifications and effective slope is shown in **Table 2** and **Figure 9**.





Table 2: Slope and Vegetation Assessment Results

Transect (100m)	Vegetation Description	Vegetation Classification (PBP 2019)	Slope
Lots 11, 12 & 13	Cleared land, approved residential lots and roads >100m from nearest bushfire hazard	Excluded (Approved Development)	N/A
North	Northern section of the approved Munro residential development (DA19-652)	Excluded (Approved Development)	N/A
East	Approved residential development known as Sophia Waters	Excluded (Approved Development)	N/A
South	Southern section of the approved Munro residential development (DA19-652)	Excluded (Approved Development)	N/A
West	Western section of the approved Munro residential development (DA19-652)	Excluded (Approved Development)	N/A
Riparian Corridor	Riparian corridor within the approved Munro residential development (DA19-652) greater than 100m north of the proposed Lots 11, 12 & 13	Forest (Hunter Macleay Dry Sclerophyll Forest)	Downslope



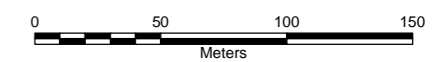
Figure 9

Slope & Vegetation Assessment



- | | | | |
|--|----------------------------------|-------------------------|--|
| | Subject site | | RL |
| | Chisholm Munro development site | | Downslope transect |
| | 100m Buffer | | Upslope transect |
| | 140m Buffer | Vegetation Class | |
| | Contour (5m) | | Coastal Floodplain Wetlands |
| | Contour (1m) | | Hunter - Macleay Dry Sclerophyll Forests |
| | Approved residential subdivision | | Not native vegetation |

SOURCE:
Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024
Vegetation: Bushfire Planning Australia 2024
Aerial photo: NearMap 22/08/2024
Surface analysis: Derived from LIDAR - Newcastle 1 metre Resolution Digital Elevation Model © Department Finance, Services and Innovation 2014



A3 Scale: 1:3,000

File: 2225-ChisholmMunroSalesOffice-Fig1-SlopeVeg-250127
Date: 27/01/2025

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



3.4. Significant Environmental Features

There are no known environmental features of significance within the development footprint or the balance of the site.

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. All bushfire mitigation measures; including APZs have considered the existing and potential biodiversity values to minimise impact where possible.

3.6. Aboriginal Objects

A search of the AHIMS database (results contained in **Appendix B**) revealed there are no Aboriginal sites or places recorded in or near the subject site within a 50-metre buffer.



4. Bushfire Protection Measures

This 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 satisfied; including the matters considered by the RFS necessary to protect persons, property and the environment from the danger that may arise from a bushfire.

4.1. Asset Protection Zones

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) as shown in **Figure 10** and **Figure 11**.

An APZ can include the 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.

The 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.

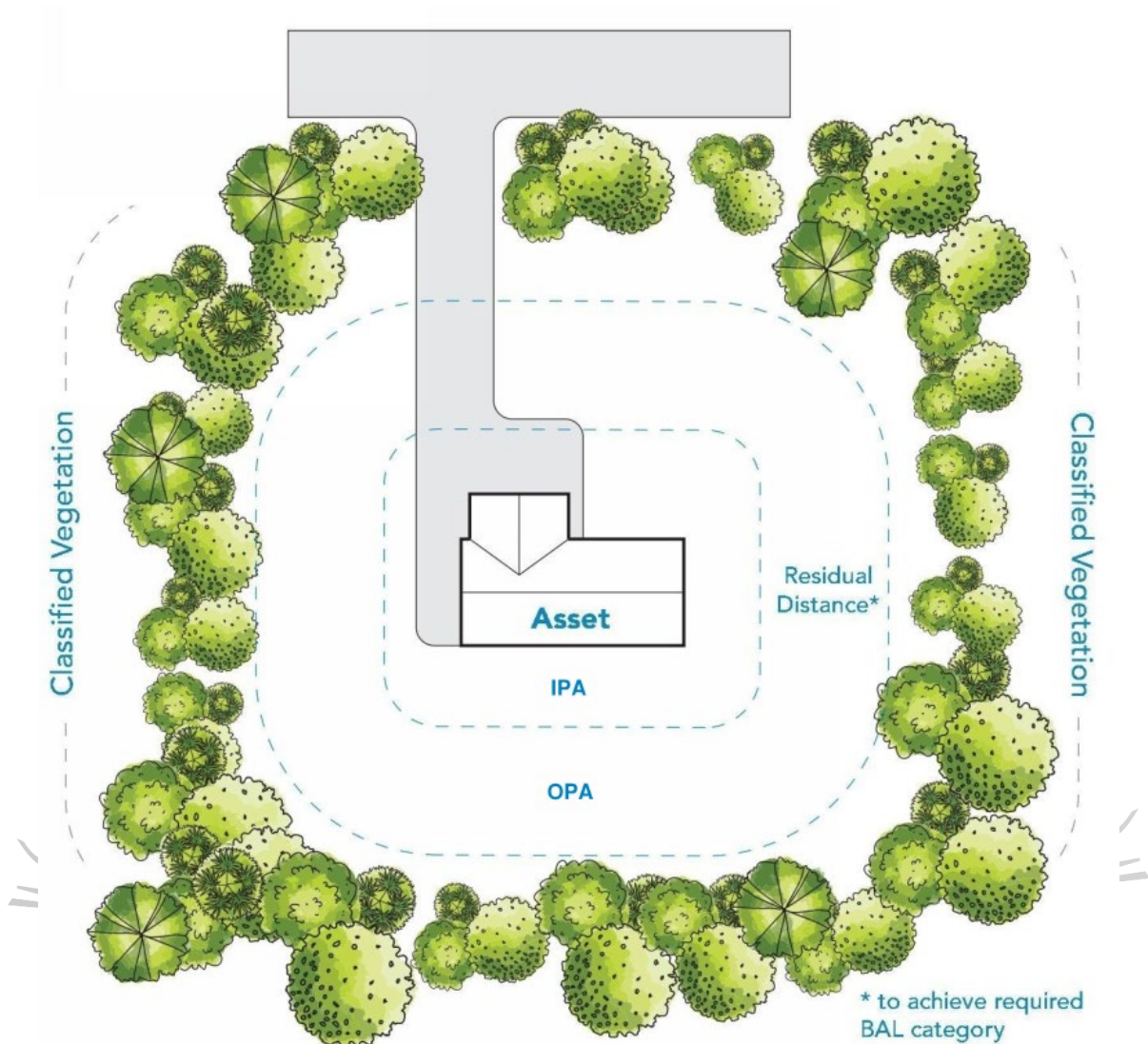


Figure 10: Explanation of an Asset Protection Zone

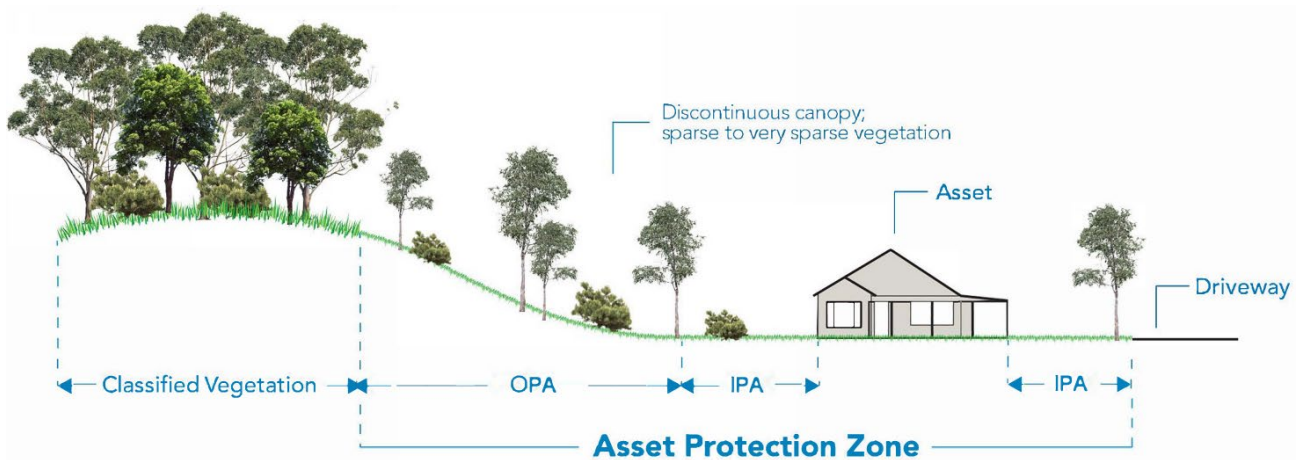


Figure 11: Asset Protection Zone profile

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-satisfy solution.

As the 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 are able to accommodate a dwelling that will not be exposed to radiant heat levels exceeding 29kW/m².

The required and recommended APZs detailed in **Table 3** are considered to be acceptable in this instance and satisfies the Performance Criteria for APZs outlined in Table 5.3a of PBP 2019. These are demonstrated in **Figure 14**.

Table 3: Required APZ setback - FDI @ 100

Transect	Vegetation Classification (PBP 2019)	Slope	PBP 2019 (Table A1.12.2)
Lots 11, 12 & 13	Excluded (Approved Development)	N/A	N/A
North	Excluded (Approved Development)	N/A	N/A
East	Excluded (Approved Development)	N/A	N/A
South	Excluded (Approved Development)	N/A	N/A
West	Excluded (Approved Development)	N/A	N/A
Riparian Corridor	Forest (Hunter Macleay Dry Sclerophyll Forest)	Downslope	>100m

4.2. Access

In the unlikely event of a serious bushfire, it will be essential to ensure that adequate ingress/ egress and the provision of defensible space are afforded in the subdivision layout for all future dwellings.

Access to the proposed development will continue to be provided via Redgate Road as per the approved Munro development (DA19-652) which is in accordance with Table 5.3b of PBP 2019.

Refer to **Appendix A** for the development plans indicating the proposed access arrangements.

4.3. Services - water, electricity and gas

4.3.1. Water

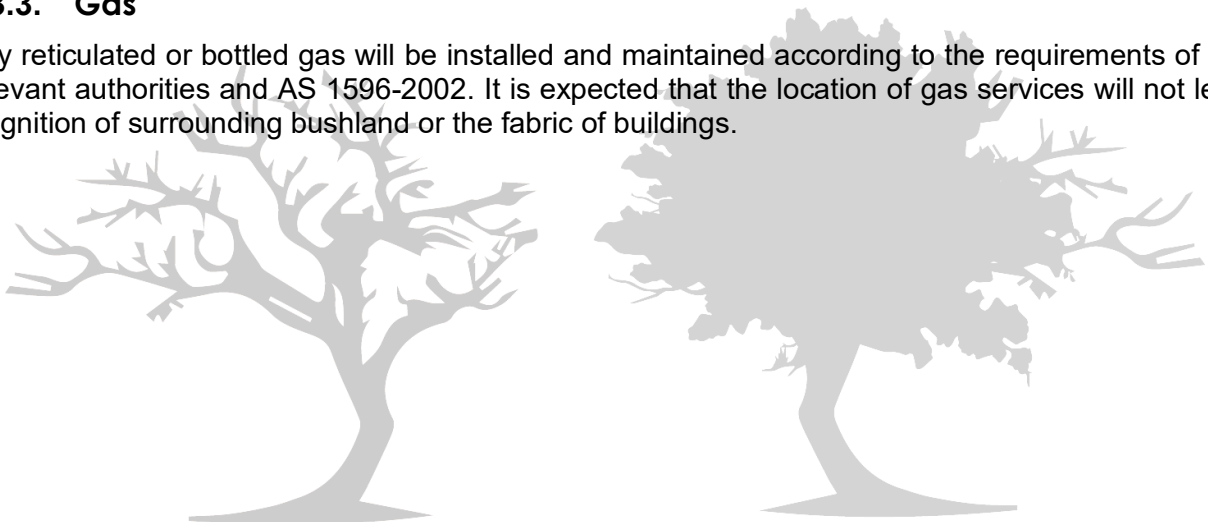
A reticulated water supply is able to be connected to all new lots in accordance with Table 5.3c of PBP 2019.

4.3.2. Electricity

Any new electricity services will be supplied and located underground.

4.3.3. Gas

Any reticulated or bottled gas will 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. Emergency Services

There is a NSW Rural Fire Brigade located at Kooralbyn Street, Thornton within 3.4km and approximately 6 minutes from the site (**Figure 12**). A second NSW Fire and Rescue Service fire station is located at 1 Chelmsford Drive, Metford within 8.9km (approximately 11 minutes) from the site (**Figure 13**).

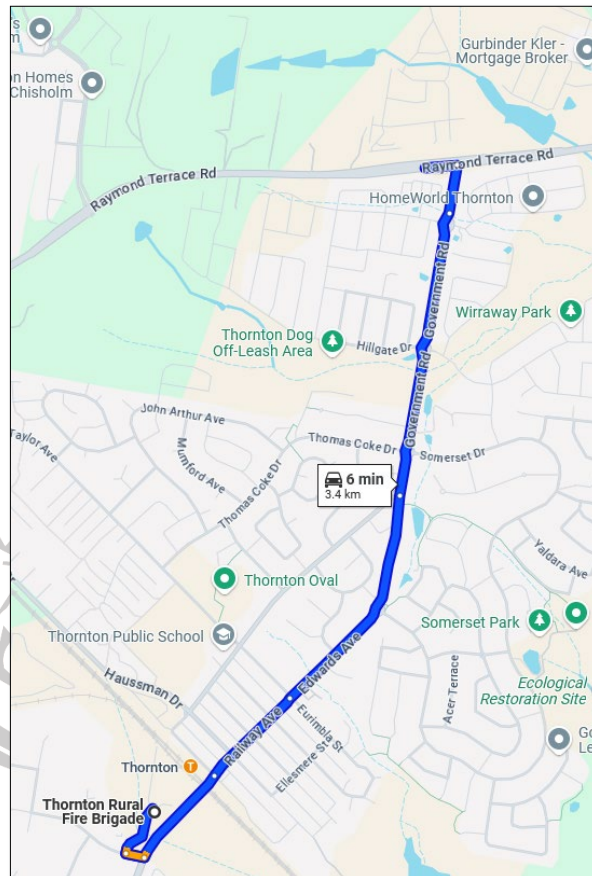


Figure 12: NSW Rural Fire Brigade - Thornton

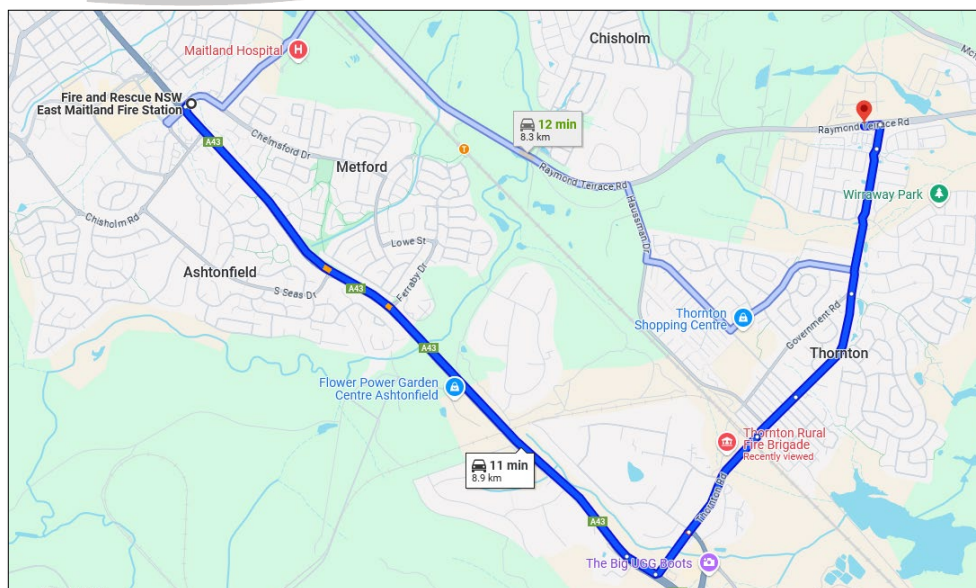


Figure 13: NSW Fire & Rescue - East Maitland

4.6. Construction Standards - Bushfire Attack Level

All buildings must satisfy the Performance Requirements of the National Construction Code: Building Code of Australia (BCA). Part 2.3 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, any forthcoming habitable buildings must satisfy the requirements of Part 3.7.4 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 GFDI = 100;
- ❑ Flame temperature = 1090K;
- ❑ Slope = flat;
- ❑ Vegetation classification = *cleared lands (excluded)*; and
- ❑ Building location.

The primary bushfire hazard is identified as the riparian corridor within the approved Munro development, however this is located greater than 100m north of the proposed development and is therefore not considered for the purposes of the PBP 2019.

The BAL for the proposed buildings has been determined as **BAL-LOW**

The BAL rating is based on insufficient risk to warrant specific construction requirements. It is predicated on low threat vegetation and the nearest bushfire hazard being >100m from the site.

The recommended BALs are shown in **Table 4** and **Figure 14**.

Table 4: Required Bushfire Attack Level

Transect	Vegetation Classification (PBP 2019)	Slope	APZ Provided (<29kW/m ²)	Distance from Hazard	Bushfire Attack Level (BAL)
Lots 11, 12 & 13	Excluded (Approved Development)	0.0° - <5.0° Downslope	>100m	>100m	BAL-LOW

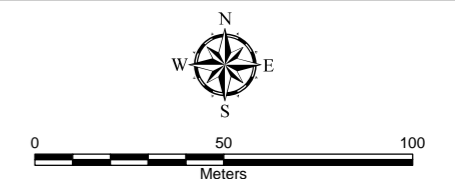
Figure 14

Subdivision BAL Plan



- | | |
|--|--|
| Subject site | Asset Protection Zone (Temporary) |
| Chisholm Munro development site | Required Bushfire Attack Levels (AS3959-2018) |
| 100m Buffer | BAL - FZ |
| 140m Buffer | BAL - 40 |
| Vegetation Class | BAL - 29 |
| Coastal Floodplain Wetlands | BAL - 19 |
| Hunter-Macl... Dry Sclerophyll Forests | BAL - 12.5 |
| Not native vegetation | BAL - Low |

SOURCE:
 Cadastral Boundary: NSW Department of Finance, Services and Innovation 2024
 Vegetation: Bushfire Planning Australia 2024
 Aerial photo: NearMap 22/08/2024

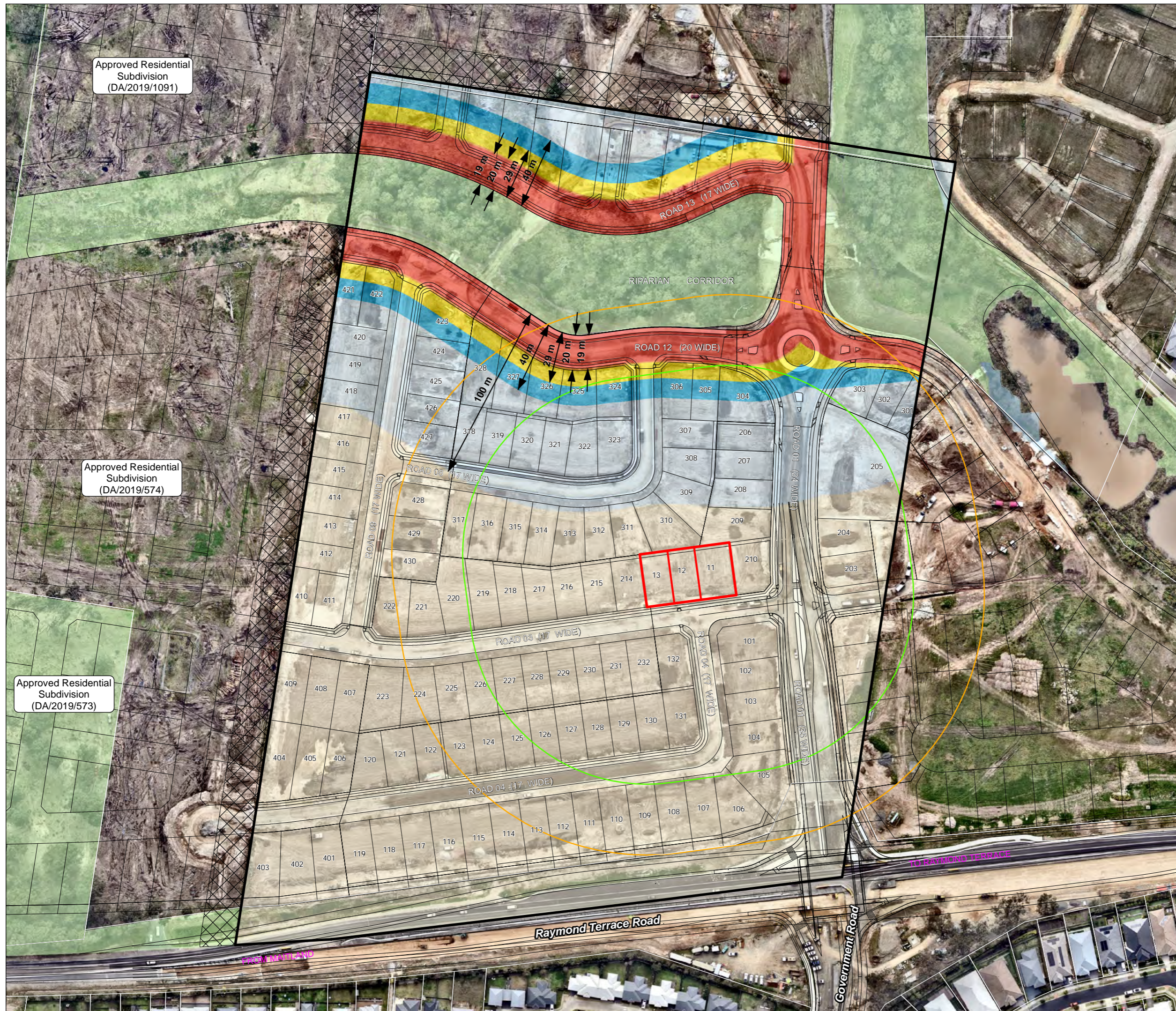


A3 Scale: 1:2,000

File:2225-ChisholmMunroSalesOffice-Fig2-BALs-250127 Date: 27/01/2025

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



4.7. 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.

Generally 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; and
- ❑ Create discontinuous or gaps in the vegetation to slow down or break the progress of fire towards the dwellings.

Landscaping within APZs and IPAs should give due regard to fire retardant plants and ensure that fuel loads do not accumulate as a result of the selected plant varieties.

The principles of landscaping for bushfire protection aim to:

- ❑ Prevent flame impingement on dwellings;
- ❑ Provide a defensible space for property protection;
- ❑ Reduce fire spread;
- ❑ Deflect and filter embers;
- ❑ Provide shelter from radiant heat; and
- ❑ Reduce wind speed.

Plants that are less flammable have the following features;

- ❑ High moisture content and / or high levels of salt;
- ❑ Low volatile oil content of leaves;
- ❑ Smooth barks without 'ribbons' hanging from branches or trunks; and
- ❑ Dense crown and elevated branches.

Avoiding understorey planting and regular trimming of the lower limbs of trees also assists in reducing fire penetration into the canopy. Rainforests species such as Syzygium and figs are preferred to species with high fine fuel and/or oil content. Trees with loose, fibrous or stringy bark should be avoided. These trees can easily ignite and encourage ground fire to spread up to, and then through the crown of trees. Consideration should be given to vegetation fuel loads present on site with particular attention to APZs.

Careful thought must be given to the type and physical location of any proposed site landscaping. Inappropriately selected and positioned vegetation has the potential to 'replace' any previously removed fuel load.

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 essential that any landscaped areas and surrounds are subject to ongoing fuel management and reduction to ensure that fine fuels do not build up.

5. Conclusion and Recommendations

Bushfire Planning Australia (BPA) has been engaged by Allam Development No 1 Pty Ltd (the 'Client') to undertake a Bushfire Assessment Report (BAR) to support the residential subdivision (boundary adjustment) and infill development within the approved residential subdivision (known as the 'Munro' property) located at 581 Raymond Terrace Road, Chisholm; legally referred to as Lot 81 DP1302072. The proposed development applies to 3 lots within the approved 132 lot subdivision of the parent lot (Munro).

The proposed development includes two components:

- ❑ Residential Subdivision: being a boundary adjustment for approved Lots 211, 212 and 213 DP1283787
- ❑ Infill Development: being the construction of a carpark (Lot 211), two dwellings for the purpose of a sales office (Lot 212) and a display home (Lot 213).

The 3 lots the subject of this assessment are all greater than 100m from the identified bushfire hazard. The bushfire hazard is contained to a narrow riparian corridor located to the north of the subject lots. As such, this BAR found the site is not exposed to a measurable bushfire hazard as all land between the 3 lots and the nearest bushfire hazard is approved for residential housing. Furthermore, all land up to and greater than 100m from the subject lots is also approved for low density residential housing. The surrounding land must be managed as an Inner Protection Area (IPA) in accordance with the development consent issued for the 132-lot subdivision.

The following key recommendations have been designed to enable the proposed development to achieve the aims and objectives of PBP 2019:

Asset Protection Zones

1. At the issue of a subdivision certificate and in perpetuity, the entire site 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;

Construction and Design

2. 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;

Water and Utilities

3. The new buildings 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 2005 and section 5.3.3 of PBP 2019; and

Landscaping

4. Consideration should be given to landscaping and fuel loads on site to decrease potential fire hazards on site.

This assessment has been made based on the bushfire hazards observed in and around the site at the time of inspection and production.

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 cannot guarantee that the area will not be affected by bushfire at some time.

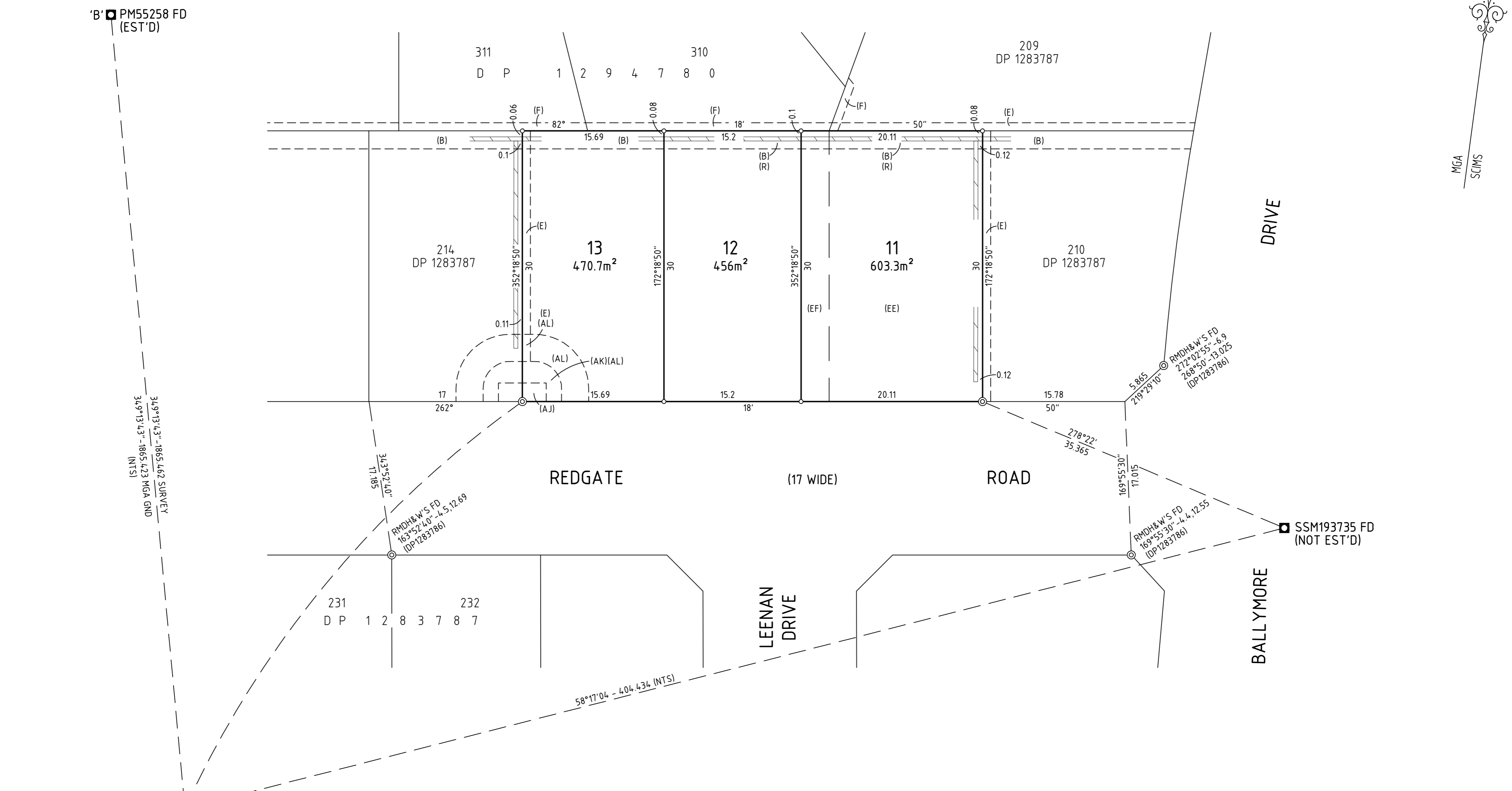
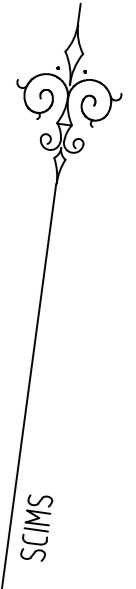
6. References

- ❑ 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: Proposed Plan of Subdivision and Architectural Drawings





MARK	MGA CO-ORDINATES		CLASS	PU	METHOD	STATE
	EASTING	NORTHING				
PM55258	372 872.091	6 375 921.971	B	0.02	FROM SCIMS	FOUND
PM83573	373 220.645	6 374 089.798	B	0.02	FROM SCIMS	FOUND
SSM58479	372 623.871	6 374 103.797	B	0.02	FROM SCIMS	FOUND
SSM193735	373 564.26	6 374 300.99	D	-	EDM TRAVERSE	FOUND
DATE OF SCIMS COORDINATES: 18-11-2024			MGA ZONE: 56		MGA DATUM: 2020	
COMBINED SCALE FACTOR: 0.999791						

NOTE: ALL RETAINING WALLS ARE IRREGULAR CONCRETE SLEEPER RETAINING WALLS
 (B) EASEMENT TO DRAIN WATER 2 WIDE (NO.2) (DP1283787)
 (E) EASEMENT FOR SUPPORT AND MAINTENANCE 0.9 WIDE (NO.3) (DP1283787)
 (F) EASEMENT FOR SUPPORT AND MAINTENANCE 0.9 WIDE (NO.4) (DP1283787)
 (AJ) EASEMENT FOR ELECTRICITY AND OTHER PURPOSES 5.3 WIDE (DP1283786)
 (AK) RESTRICTION ON THE USE OF LAND (No.10) (DP1283786)
 (AL) RESTRICTION ON THE USE OF LAND (No.11) (DP1283786)
 (EE) BENEFITED BY (E) EASEMENT FOR SUPPORT AND MAINTENANCE 0.9 WIDE (No.3)(DP1283787)
 (EF) BENEFITED BY (F) EASEMENT FOR SUPPORT AND MAINTENANCE 0.9 WIDE (No.4)(DP1283787)
 (R) EASEMENT TO DRAIN WATER 2 WIDE

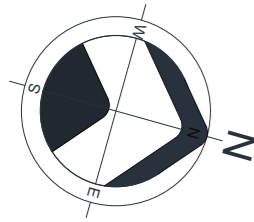
PRELIMINARY ONLY

THIS PLAN IS PRELIMINARY ONLY AND IS SUBJECT TO COUNCIL APPROVAL, FINAL DESIGN, CONSTRUCTION, FINAL SURVEY AND REGISTRATION AT NSW LAND REGISTRY SERVICES. EASEMENTS, POSITIVE COVENANTS AND RESTRICTIONS ON THE USE OF LAND MAY BE CREATED UPON REGISTRATION OF THE PLAN WHICH ARE NOT SHOWN IN THIS PRELIMINARY VERSION OF THE PLAN.

SURVEYOR Name: MURRAY PAUL EDWARDS Date: JANUARY 2025 (DA) Reference: 240294-DP-006-A	PLAN HEADING PLAN OF SUBDIVISION OF LOTS 211, 212 & 213 DP 1283787	L.G.A.: MAITLAND Locality: CHISHOLM Reduction Ratio 1: 300 Lengths are in metres	REGISTERED
--	--	---	------------



REV: D- 15.01.25
 DRAWN: 00.00.00
 CONSTRUCTION: 00.00.00



Lot 12
455.99m²
Lot 11
603.90m²

Real Property Description
Subdivision of Lots 211 and 212 in DP1283787 into lots 11 and 12 (see subdivision plan)

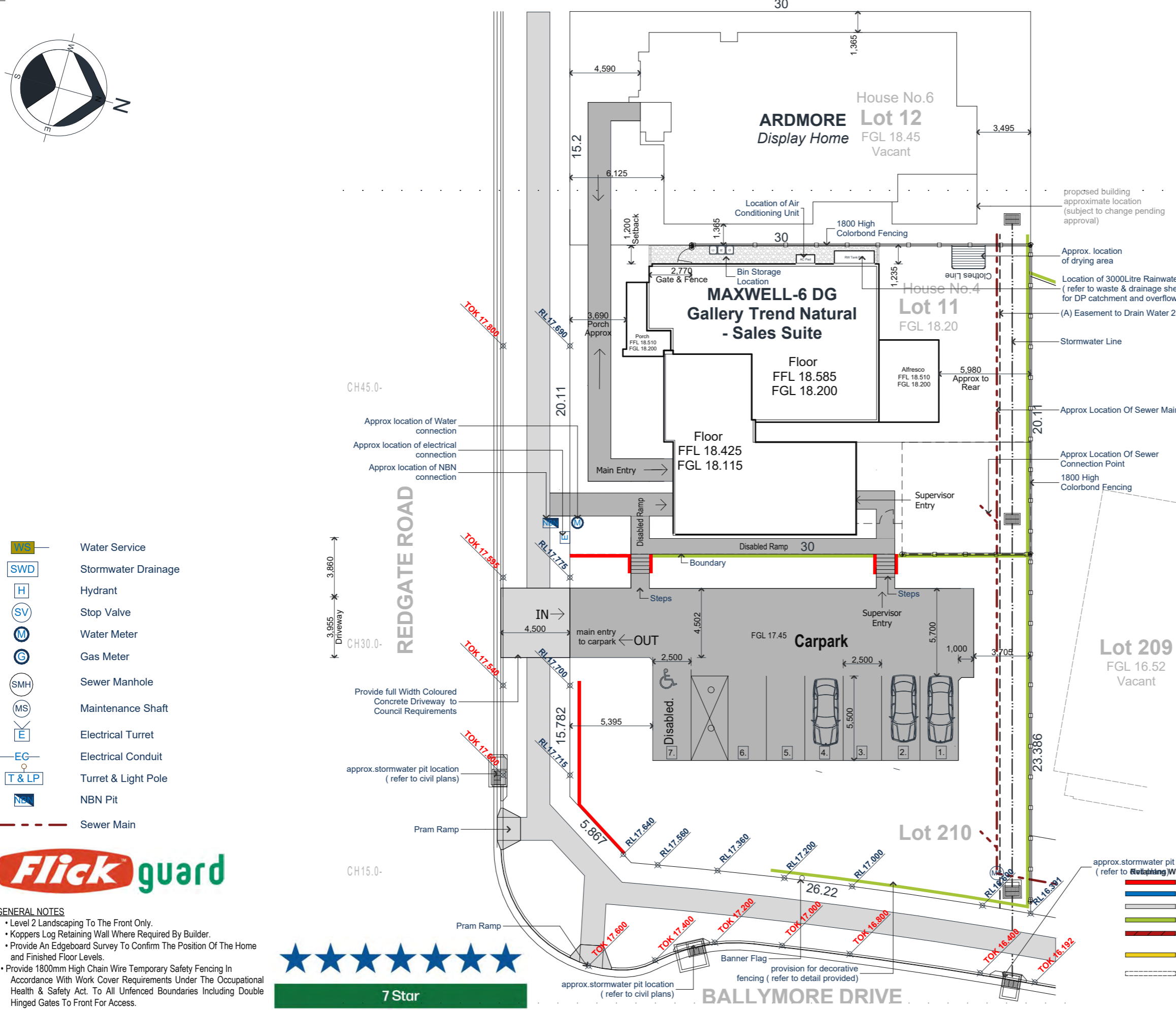
Gas Available

- Water Service
- Stormwater Drainage
- Hydrant
- Stop Valve
- Water Meter
- Gas Meter
- Sewer Manhole
- Maintenance Shaft
- Electrical Turret
- Electrical Conduit
- Turret & Light Pole
- NBN Pit
- Sewer Main



GENERAL NOTES

- Level 2 Landscaping To The Front Only.
- Koppers Log Retaining Wall Where Required By Builder.
- Provide An Edgeboard Survey To Confirm The Position Of The Home and Finished Floor Levels.
- Provide 1800mm High Chain Wire Temporary Safety Fencing In Accordance With Work Cover Requirements Under The Occupational Health & Safety Act. To All Unfenced Boundaries Including Double Hinged Gates To Front For Access.



- proposed building approximate location (subject to change pending approval)
- Approx. location of drying area
- Location of 3000Litre Rainwater Tank (refer to waste & drainage sheet for DP catchment and overflow direction)
- (A) Easement to Drain Water 2m Wide
- Stormwater Line
- Approx Location Of Sewer Main
- Approx Location Of Sewer Connection Point
- 1800 High Colorbond Fencing

All retaining walls are to engineers details

Site benched at RL 18.200

ALL LEVELS ARE TO A.H.D. UNLESS NOTED OTHERWISE

- Excavated Bank
 - Pebble
 - Crossing.
 - Driveway.
 - Footpath
 - Footpath - Nature Strip
- Retaining Wall Legend**
- Masonry Retaining (builders wall)
 - Timber Retaining Wall (builders wall)
 - Existing Retaining Wall
 - Civil Retaining Wall
 - Housing Approved Retaining Wall (Built by Civil)
 - Garden Wall
 - Proposed Wall on Neighbouring Lot, Not Part of this Application.

REV: D- 15.01.25
 DRAWN: 00.00.00
 CONSTRUCTION: 00.00.00

OLD NAMING

WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960



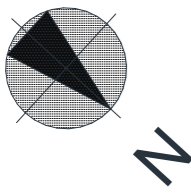
Allam Homes Pty Limited
Level 3, 11 Brookhollow Ave.
Norwest 2153, NSW
ACN 003 798 883 ABN 33 003 798 883
Ph 02 47322422 Fx 02 47211811
www.allam.com.au

ALL RIGHT RESERVED.
This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.

MAXWELL-6 DG
Gallery Trend Natural

Site Address
Allam Homes Pty Ltd
Lot 11 & 12 Redgate Road
Sophia Waters (Chisholm), NSW

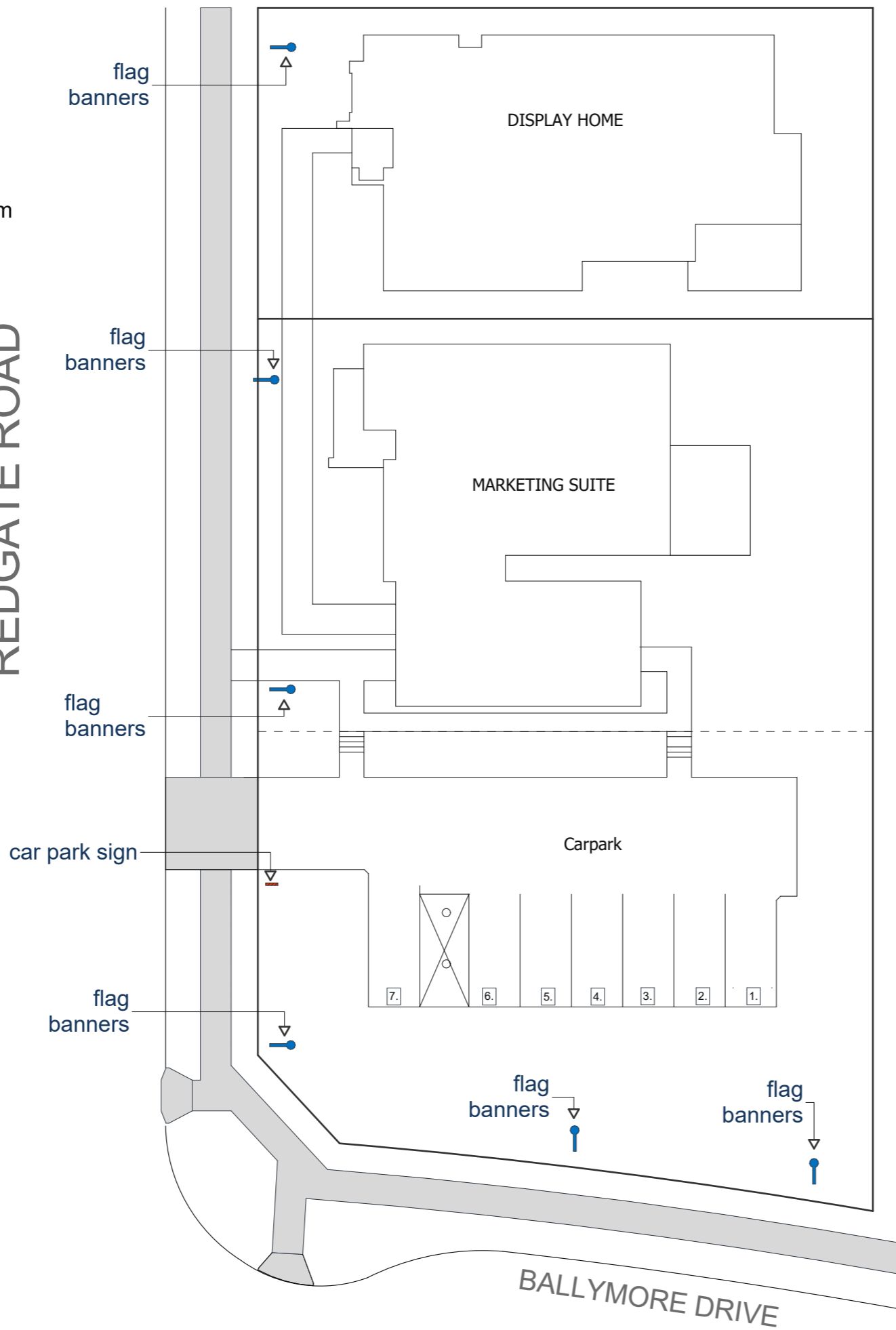
SITE INSTRUCTIONS		Site - Sales Suite		Last Amended	Scale
GENERAL:	0	09.03.22	Revision/Date/Version	RS/FO	1:200
HOUSE:	0	09.03.22	D- 15.01.25.v22	Job No	Sheet
			2MX6129800	54506	01.04



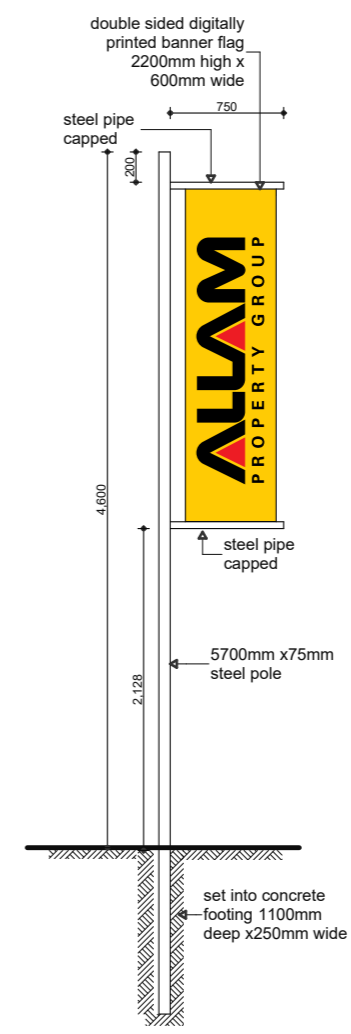
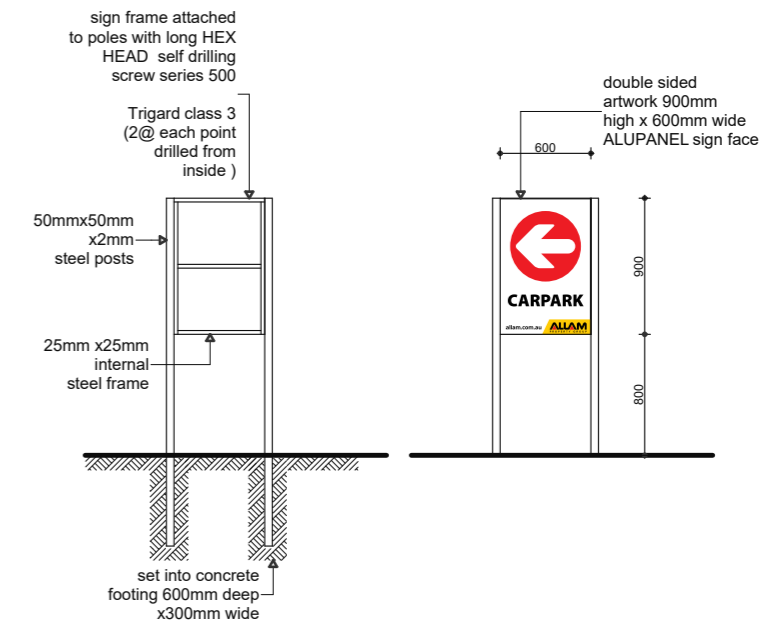
SIGNAGE LEGEND

- Car Park sign 600mmx900mm
- flag banners

REDGATE ROAD



BALLYMORE DRIVE



REV: D- 15.01.25
 DRAWN: 00.00.00
 CONSTRUCTION: 00.00.00



PLANTING SCHEDULE

Code	Botanical Name	Common Name	Expected Mature Height	Install Size	Spacing	Quantity*
TREES						
COR CAL	<i>Corymbia ficifolia 'Calypso'</i>	Pink Flowering Gum	6m	100L	As Shown	2
MAG LIT	<i>Magnolia 'Little Gem'</i>	Magnolia	4m	100L	As Shown	3
LAG NAT	<i>Lagerstroemia indica x fauriei 'Natchez'</i>	White Crepe Myrtle	6m	100L	As Shown	5
TRI LUS	<i>Tristanopsis laurina 'Luscious'</i>	Water Gum	8m	100L	As Shown	3
SHRUBS						
AGA blu	<i>Agave 'Blue Glow'</i>	Foxtail Agave	0.3-0.6m	200mm	As Shown	13
BUX mic	<i>Buxus microphylla</i>	Common Box	0.5m**	200mm	500mm Centres	25
CRA blu	<i>Crassula ovata 'Bluebird'</i>	Blue Bird	0.6m	200mm	As Shown	26
ERE hyg	<i>Eremophila Hygrophana</i>	Aussie Blue Bells Bush	0.6m	200mm	As Shown	74
LOR pur	<i>Loropetalum chinense 'Purple Pixie' (PEACK)</i>	Purple Pixie	0.3-0.4m	200mm	As Shown	58
MUR pan	<i>Murraya paniculata</i>	Orange Jasmine	2m	200mm	750mm Ctrs	90
RHA ind	<i>Rhaphiolepis indica 'Snow Maiden' height</i>	Indian Hawthorne	0.8m	200mm	500mm Ctrs	54
GRASSES AND GROUNDCOVERS						
CAR gla	<i>Carpobrotus glaucescens</i>	Sea Fig	0.2m	140mm	3/m2 or 3/Lm	88
COR sta	<i>Correa alba 'Star Showers'</i>	Native Fuchsia Ground Cover	0.3m	140mm	3/m2 or 3/Lm	111
DIA tas	<i>Dianella tasmanica 'Destiny' (TAS100)</i>	Variiegated Dianella	0.35m	140mm	4/Lm	59
GAR aug	<i>Gardenia augusta 'O So Fine'</i>	Dwarf Gardenia	0.3m	140mm	3/m2 or 3/Lm	140
LIR mus	<i>Liriope muscari 'Evergreen Giant'</i>	Evergreen Giant Liriope	0.5m	140mm	4/m2 or 3/Lm	59
SEN man	<i>Senecio mandraliscae</i>	Blue Chalksticks	0.3-0.45m	140mm	3/m2 or 3/Lm	273

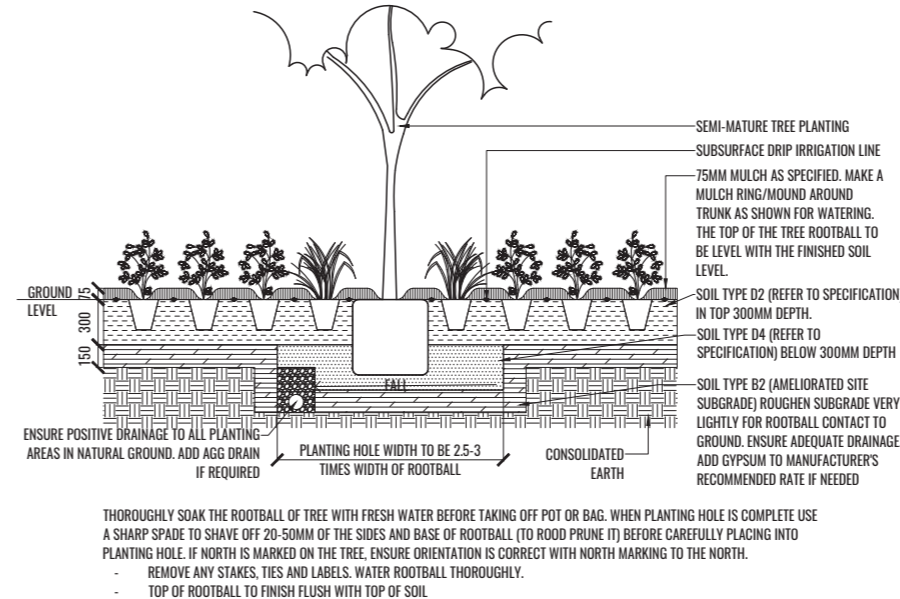
* Final numbers to be confirmed at Construction Certificate stage
 ** To be trimmed to height indicated

PLANT IMAGES

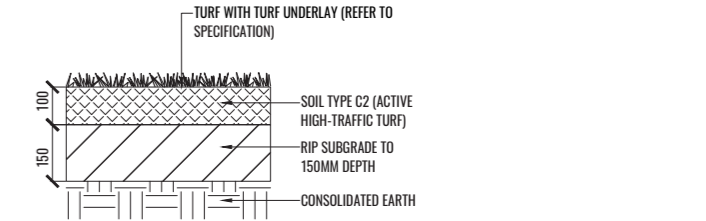


TYPICAL DETAILS

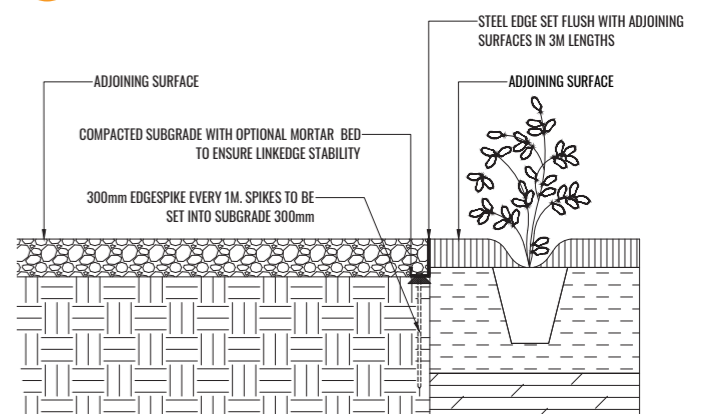
TREE/SHRUB SIZE AND QUALITY TO BE TO NATSPEC STANDARD. SPECIES IS TO BE AS PER PLAN AND PLANT SCHEDULE. ENSURE ONLY HEALTHY AND VIGOROUS, DISEASE FREE, WELL MAINTAINED PLANTS ARE USED. TAKE CARE TO ENSURE FOLIAGE, BRANCHES, TRUNKS AND ROOT CROWNS ARE NOT DAMAGED BEFORE, DURING AND AFTER PLANTING. ENSURE OPTIMUM MAINTENANCE AND ESTABLISHMENT OF TREES/SHRUBS OCCURS AS SOON AS THEY ARE AT SITE



1 MASS PLANTING AND TREE DETAIL
 TYPICAL SECTION SCALE 1:25



2 TURF DETAIL
 TYPICAL SECTION SCALE 1:10

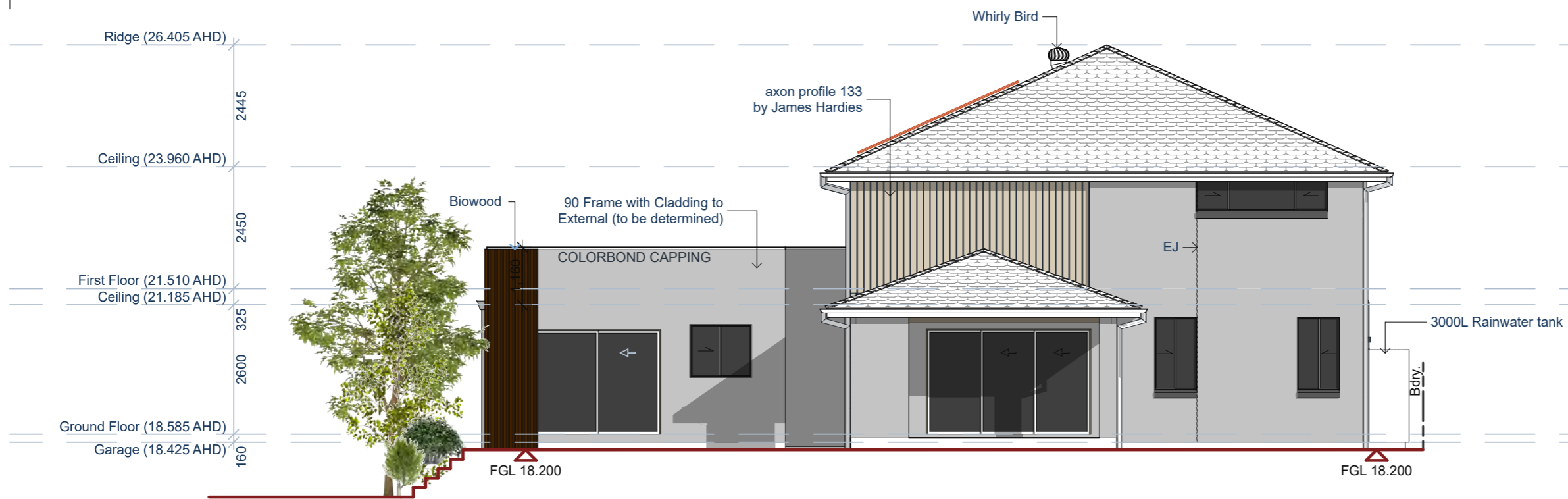


3 STEEL EDGE DETAIL
 TYPICAL SECTION SCALE 1:10

LEGEND

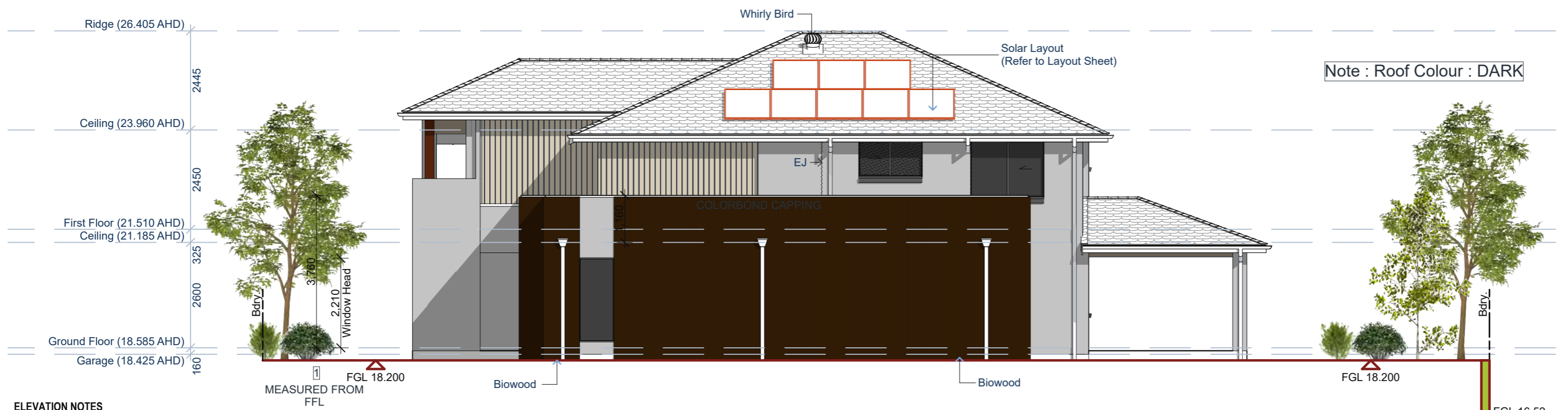
	LOT BOUNDARY		PROPOSED GROUNDCOVER PLANTING		STEPPING PAVES IN FEATURE VOLCANIC PEBBLES		FLAG BANNERS TO ALLAM'S DETAIL		EASEMENT TO DRAIN WATER (2M WIDE)
	TREE PLANTING		TURF		CONCRETE PATH		CARPARK SIGNAGE TO TO ALLAM'S DETAIL		ROOT BARRIER
	ACCENT SHRUB		PAVING		AIR CONDITIONING UNIT		ALUMINUM FENCE TO ALLAM'S DETAIL		LOCATION OF WATER CONNECTION
	MASS HEDGE / SHRUB PLANTING		DECORATIVE PEBBLE		BOLLARD (1M HIGH) TO ALLAM'S DETAIL		STEEL GARDEN EDGE		LOCATION OF ELECTRICAL CONNECTION
							STORMWATER LINE		MAINTENANCE SHAFT FOR SEWER
							SEWER LINE		

To Provide 138 on Reveals
Battens At 35mm



Note : Roof Colour : DARK

North Elevation (A)



Note : Roof Colour : DARK

East Elevation (B)

- ELEVATION NOTES**
- Indicates Obscure Glazing (To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame

REV: D- 15.01.25
DRAWN: 00.00.00
CONSTRUCTION: 00.00.00



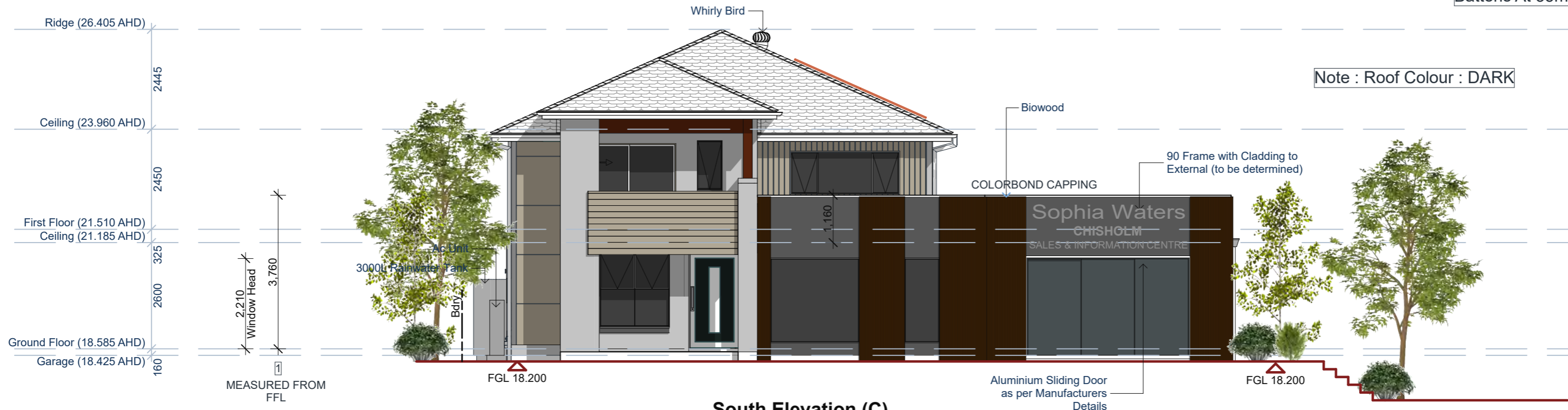
WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960

	Allam Homes Pty Limited Level 3, 11 Brookhollow Ave. Norwest 2153, NSW ACN 003 798 883 ABN 33 003 798 883 Ph 02 47322422 Fx 02 47211811 www.allam.com.au	ALL RIGHT RESERVED. This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.	MAXWELL-6 DG <i>Gallery Trend Natural</i>		Site Address Allam Homes Pty Ltd Lot 11 No.4 Redgate Road Sophia Waters (Chisholm), NSW		SITE INSTRUCTIONS Elevation A/B - Sales Suite		Last Amended RS/FO		Scale 1:100	
					GENERAL: 0 09.03.22 HOUSE: 0 09.03.22		Revision/Date/Version D- 15.01.25.v22		Serial 2MX6129800		Job No 54506	

© 2024 Allam Homes Pty Ltd. DO NOT SCALE OFF ARCHITECTURAL DRAWINGS NCC 2022-OCT COMPLIANT (D)

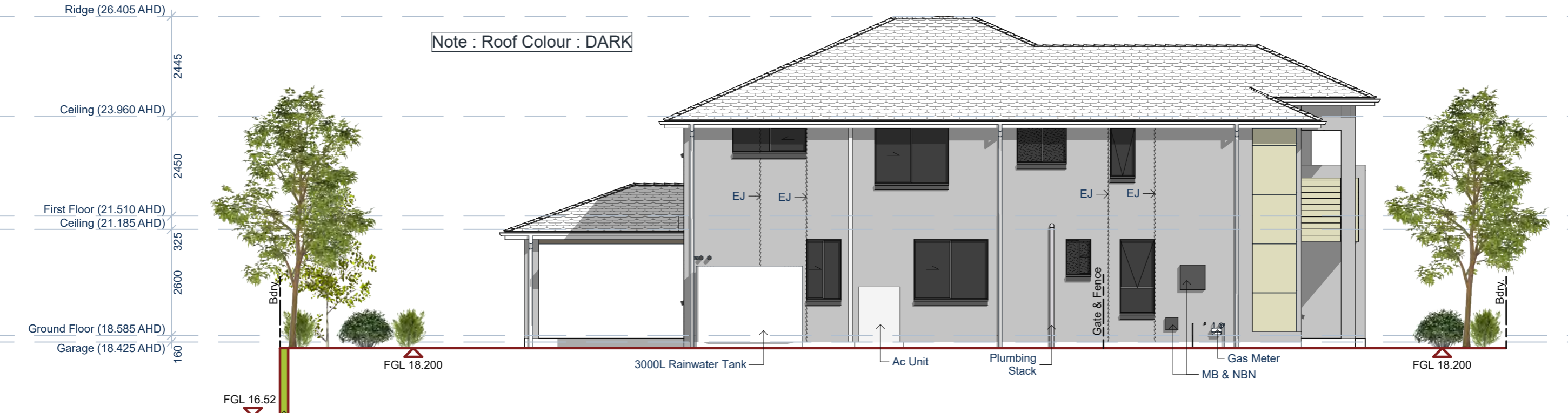
To Provide 138 on Reveals
Battens At 35mm

Note : Roof Colour : DARK



South Elevation (C)

Note : Roof Colour : DARK



West Elevation (D)

- ELEVATION NOTES**
- Indicates Obscure Glazing (To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame

REV: D- 15.01.25
DRAWN: 00.00.00
CONSTRUCTION: 00.00.00



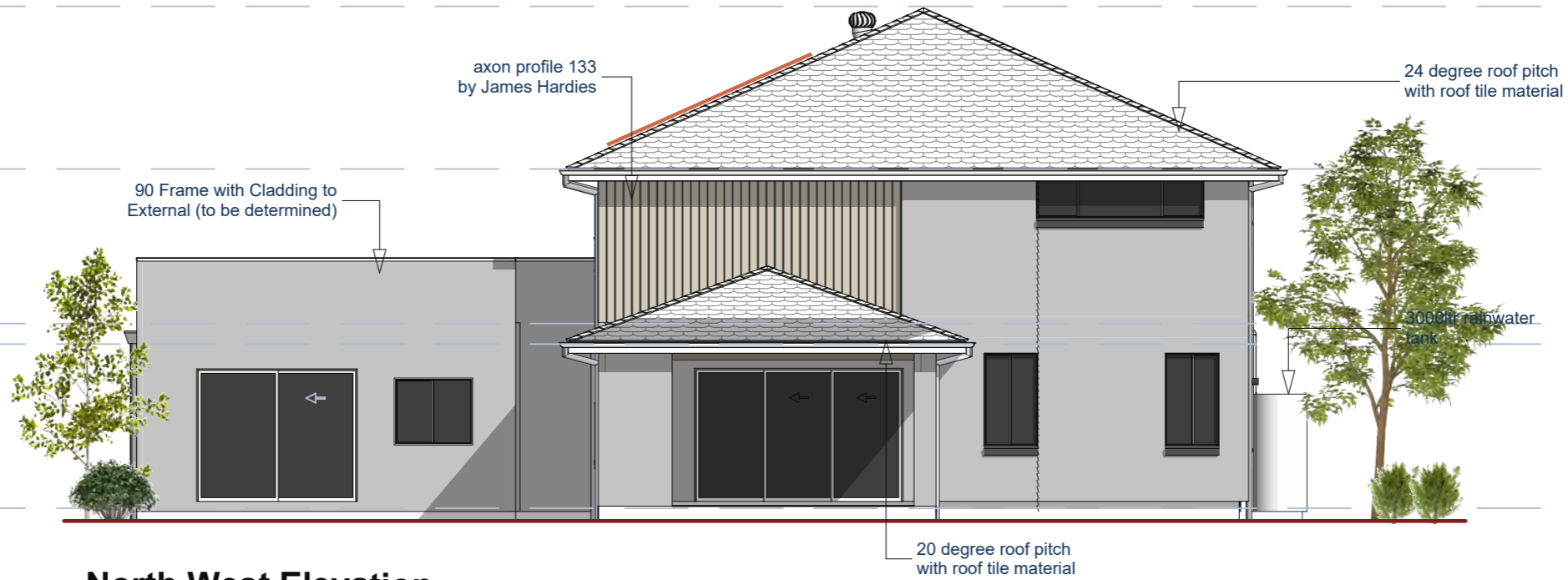
WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960

	Allam Homes Pty Limited Level 3, 11 Brookhollow Ave. Norwest 2153, NSW ACN 003 798 883 ABN 33 003 798 883 Ph 02 47322422 Fx 02 47211811 www.allam.com.au	ALL RIGHT RESERVED. This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.	MAXWELL-6 DG <i>Gallery Trend Natural</i>		Site Address Allam Homes Pty Ltd Lot 11 No.4 Redgate Road Sophia Waters (Chisholm), NSW		SITE INSTRUCTIONS Elevation C/D - Sales Suite		Last Amended RS/FO		Scale 1:100					
							GENERAL: 0 09.03.22		Revision/Date/Version D- 15.01.25.v22		Serial 2MX6129800		Job No 54506		Sheet 01.10	
							HOUSE: 0 09.03.22									

© 2024 Allam Homes Pty Ltd. DO NOT SCALE OFF ARCHITECTURAL DRAWINGS NCC 2022-OCT COMPLIANT (D)

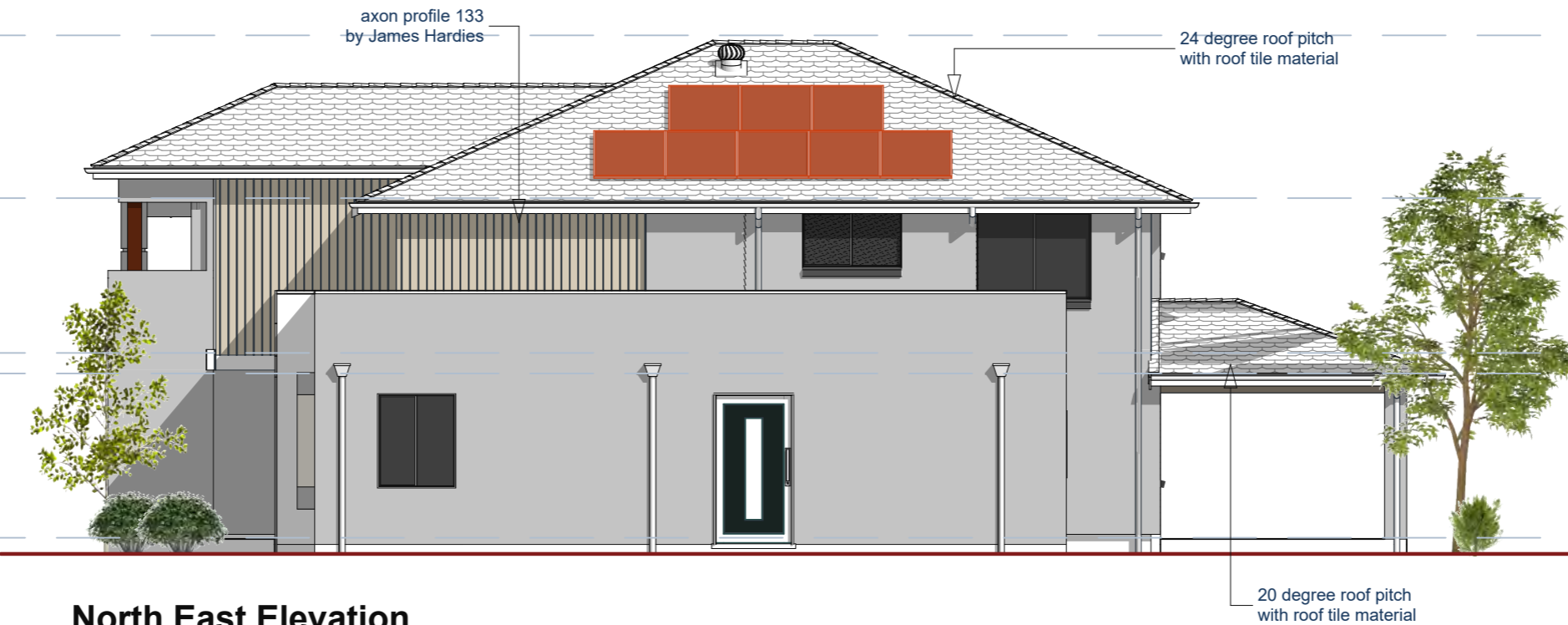
Lot 211 - Granny Flat design:
Standard SG Glazing: Default Generic
 - Throughout:- **Aluminium Framed // Single Glazed // Clear or Obscure**
 - **Front Entry Door:- Timber Framed // Single Glazed // Glazing insert over 25%**

Ridge (26.536 AHD)
 2576
 Ceiling (23.960 AHD)
 2450
 First Floor (21.510 AHD)
 Ceiling (21.185 AHD)
 325
 2600
 Ground Floor (18.585 AHD)



North West Elevation

Ridge (26.536 AHD)
 2576
 Ceiling (23.960 AHD)
 2450
 First Floor (21.510 AHD)
 Ceiling (21.185 AHD)
 325
 2600
 Ground Floor (18.585 AHD)



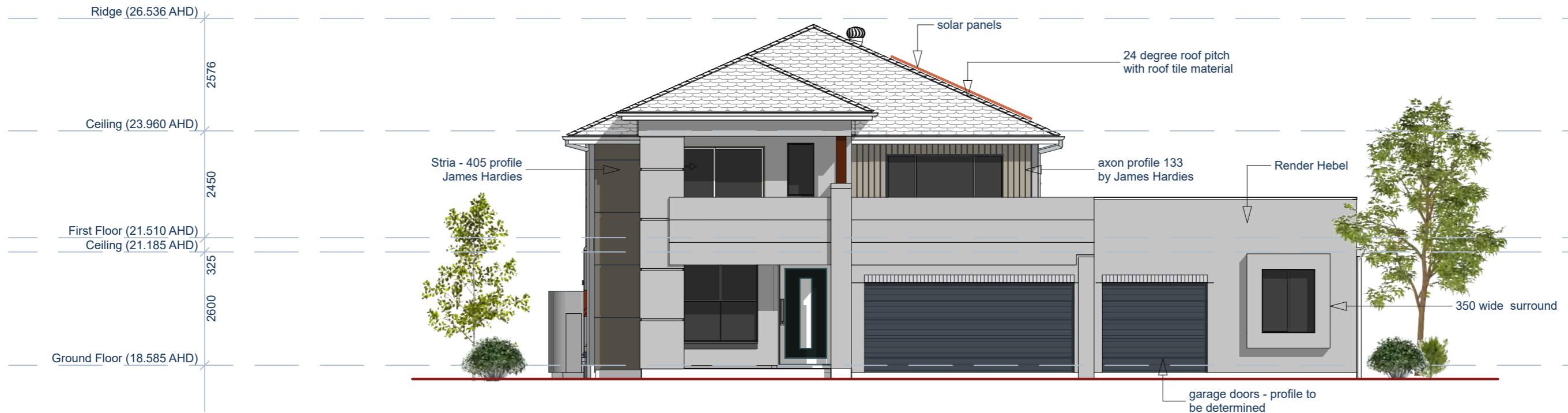
North East Elevation

- ELEVATION NOTES**
- Indicates Obscure Glazing
(To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame

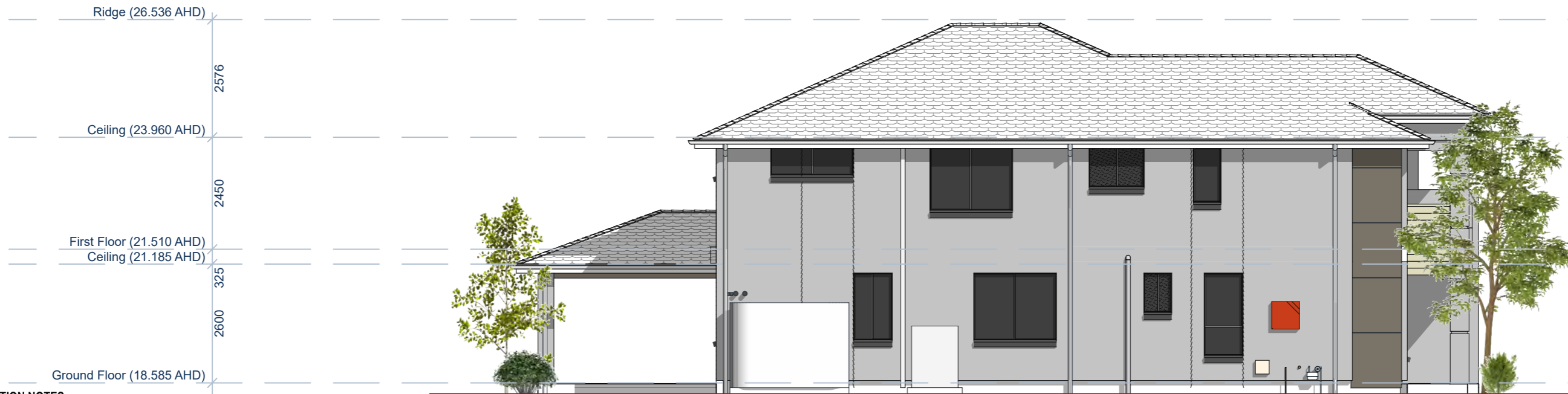
REV: D- 15.01.25
DRAWN: 00.00.00
CONSTRUCTION: 00.00.00



Lot 211 - Granny Flat design:
Standard SG Glazing: Default Generic
 - Throughout:- Aluminium Framed // Single Glazed // Clear or Obscure
 - Front Entry Door:- Timber Framed // Single Glazed // Glazing insert over 25%



South East Elevation



South West Elevation

- ELEVATION NOTES**
- Indicates Obscure Glazing (To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame

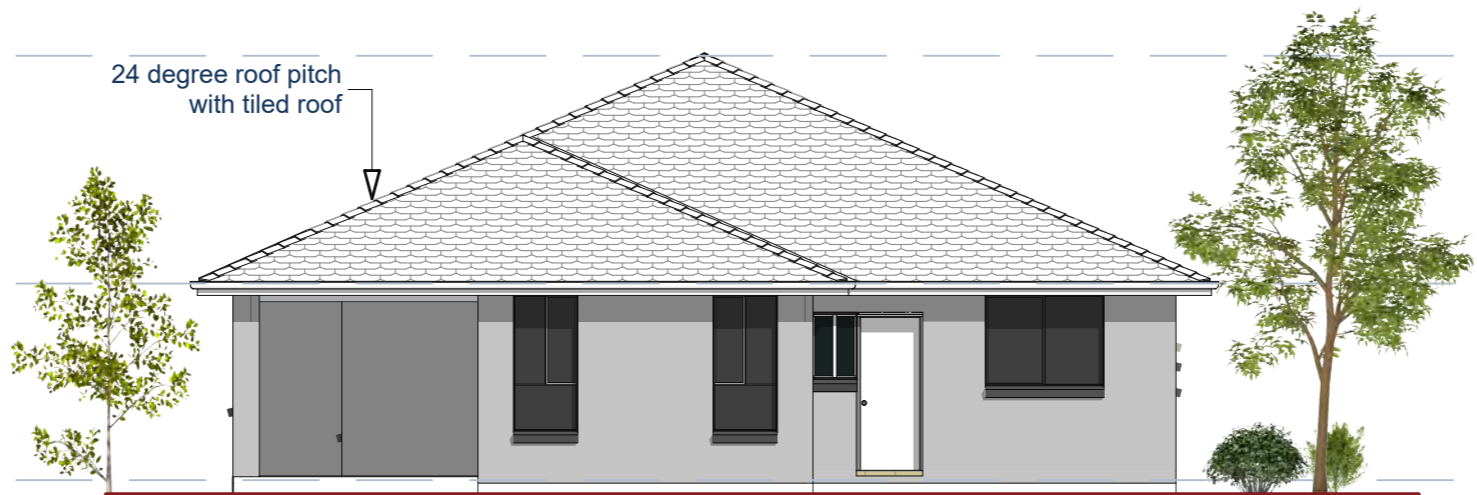
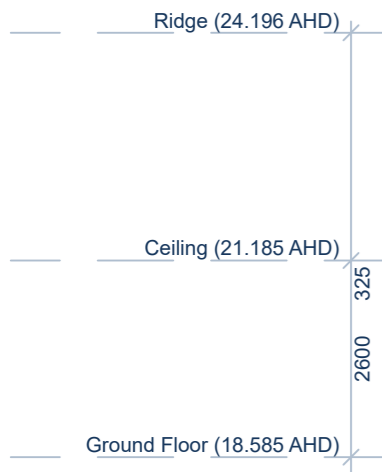
REV: D- 15.01.25
DRAWN: 00.00.00
CONSTRUCTION: 00.00.00



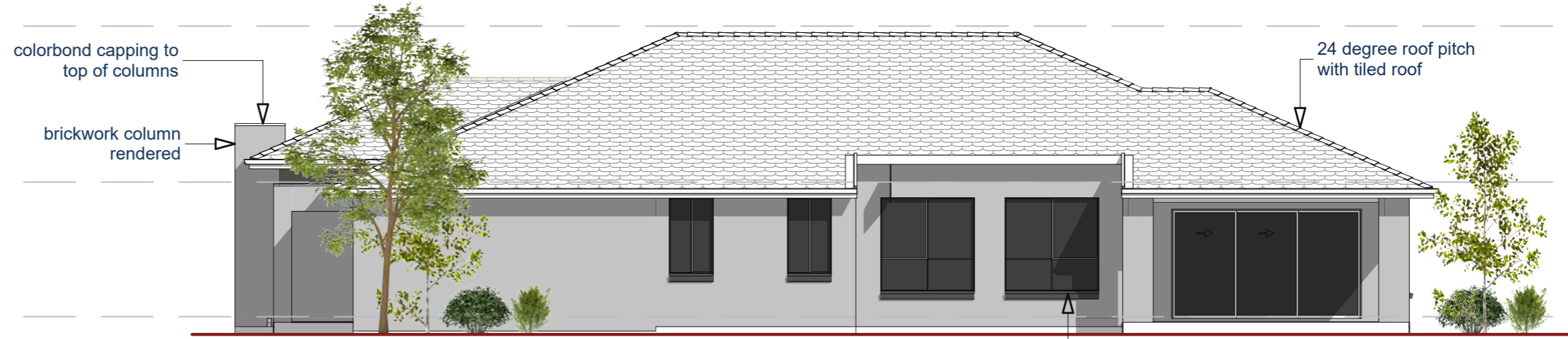
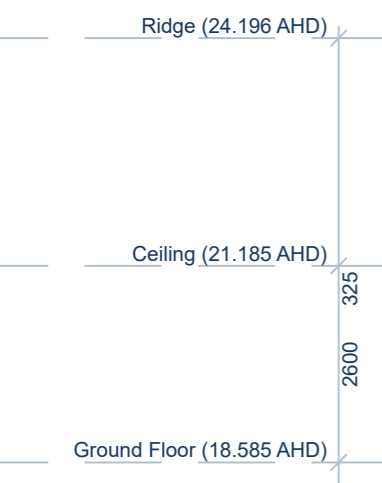
WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960

	Allam Homes Pty Limited Level 3, 11 Brookhollow Ave. Norwest 2153, NSW ACN 003 798 883 ABN 33 003 798 883 Ph 02 47322422 Fx 02 47211811 www.allam.com.au	ALL RIGHT RESERVED. This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.	MAXWELL-6 DG <i>Gallery Trend Natural</i>		Site Address Allam Homes Pty Ltd Lot 11 No.4 Redgate Road Sophia Waters (Chisholm), NSW		SITE INSTRUCTIONS		Elevations		Last Amended RS/FO		Scale 1:100			
							GENERAL: 0 09.03.22		Revision/Date/Version D- 15.01.25.v22		Serial 2MX6129800		Job No 54506		Sheet 01.18	
							HOUSE: 0 09.03.22									

© 2024 Allam Homes Pty Ltd. DO NOT SCALE OFF ARCHITECTURAL DRAWINGS NCC 2022-OCT COMPLIANT (D)



North West Elevation



North East Elevation

REV: D- 15.01.25
 DRAWN: 00.00.00
 CONSTRUCTION: 00.00.00

- ELEVATION NOTES**
- Indicates Obscure Glazing
(To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame



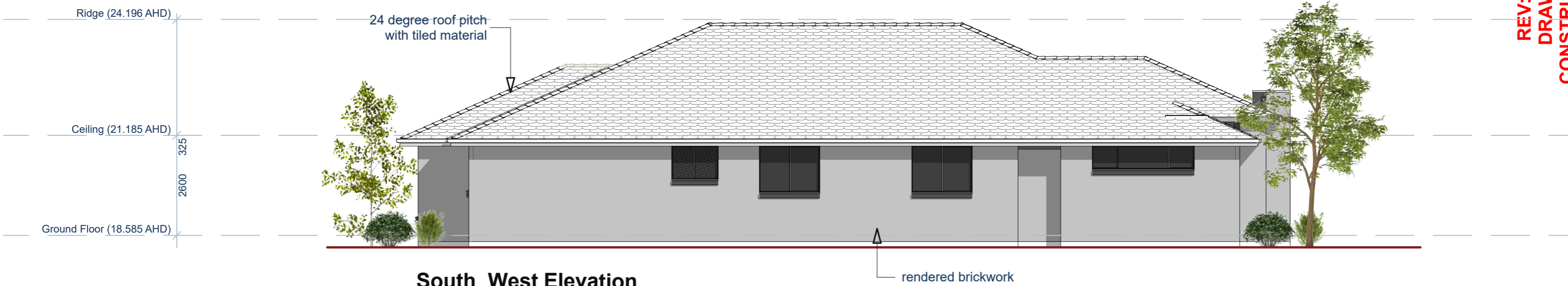
WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960

	Allam Homes Pty Limited Level 3, 11 Brookhollow Ave. Norwest 2153, NSW ACN 003 798 883 ABN 33 003 798 883 Ph 02 47322422 Fx 02 47211811 www.allam.com.au		ALL RIGHT RESERVED. This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.		ARDMORE <i>Metro</i>		Site Address Allam Homes Pty Ltd Lot 12 No.6 Redgate Road Sophia Waters (Chisholm), NSW		SITE INSTRUCTIONS Display Elevation AB		Last Amended RS/FO		Scale 1:100	
	GENERAL: 0 09.03.22		Revision/Date/Version D- 15.01.25.v22		Serial 2MX6129800		Job No 54506		Sheet 01.56		HOUSE: 0 09.03.22			

© 2024 Allam Homes Pty Ltd. DO NOT SCALE OFF ARCHITECTURAL DRAWINGS NCC 2022-OCT COMPLIANT (D)



South East Elevation



South West Elevation

REV: D- 15.01.25
 DRAWN: 00.00.00
 CONSTRUCTION: 00.00.00

- ELEVATION NOTES**
- ☒ Indicates Obscure Glazing
(To be read in conjunction with floor plans)
 - * Locate expansion joints in accordance with Clause 5.6.8 of NCC and located behind downpipes where possible.
 - * All verges 200mm unless otherwise noted
 - * Provide brick threshold and cover strip to head of sliding aluminium doors.
 - * Provide cover strips around entry doors
 - * Refer To Floor Plans for restricted window openings.
 - * Wall wrap to be in accordance with Clause 10.8.1 of the NCC and AS4200.1 and installed to comply with AS4200.2
 - * Lightweight cladding to be installed over 35mm battens to timber frame



WARNING: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DETAILS. ALL DISCREPANCIES TO BE REPORTED TO DESIGN OFFICE PRIOR TO CONSTRUCTION (ALLAM DESIGN DEPARTMENT) ON (02) 4702 5960

	Allam Homes Pty Limited Level 3, 11 Brookhollow Ave. Norwest 2153, NSW ACN 003 798 883 ABN 33 003 798 883 Ph 02 47322422 Fx 02 47211811 www.allam.com.au		ALL RIGHT RESERVED. This plan is the property of Allam Homes Pty Ltd. Copyright in this document is owned by Allam Homes Pty Ltd. Under the provisions of the Copyright ACT 1968 and is intended for use only as authorised by Allam Homes Pty Ltd.		ARDMORE <i>Metro</i>		Site Address Allam Homes Pty Ltd Lot 12 No.6 Redgate Road Sophia Waters (Chisholm), NSW		SITE INSTRUCTIONS Display Elevation CD		Last Amended RS/FO		Scale 1:100		
	GENERAL: 0 09.03.22		Revision/Date/Version D- 15.01.25.v22		Serial 2MX6129800		Job No 54506		Sheet 01.57						
	HOUSE: 0 09.03.22														

© 2024 Allam Homes Pty Ltd. DO NOT SCALE OFF ARCHITECTURAL DRAWINGS NCC 2022-OCT COMPLIANT (D)

Appendix B: AHIMS Search Results



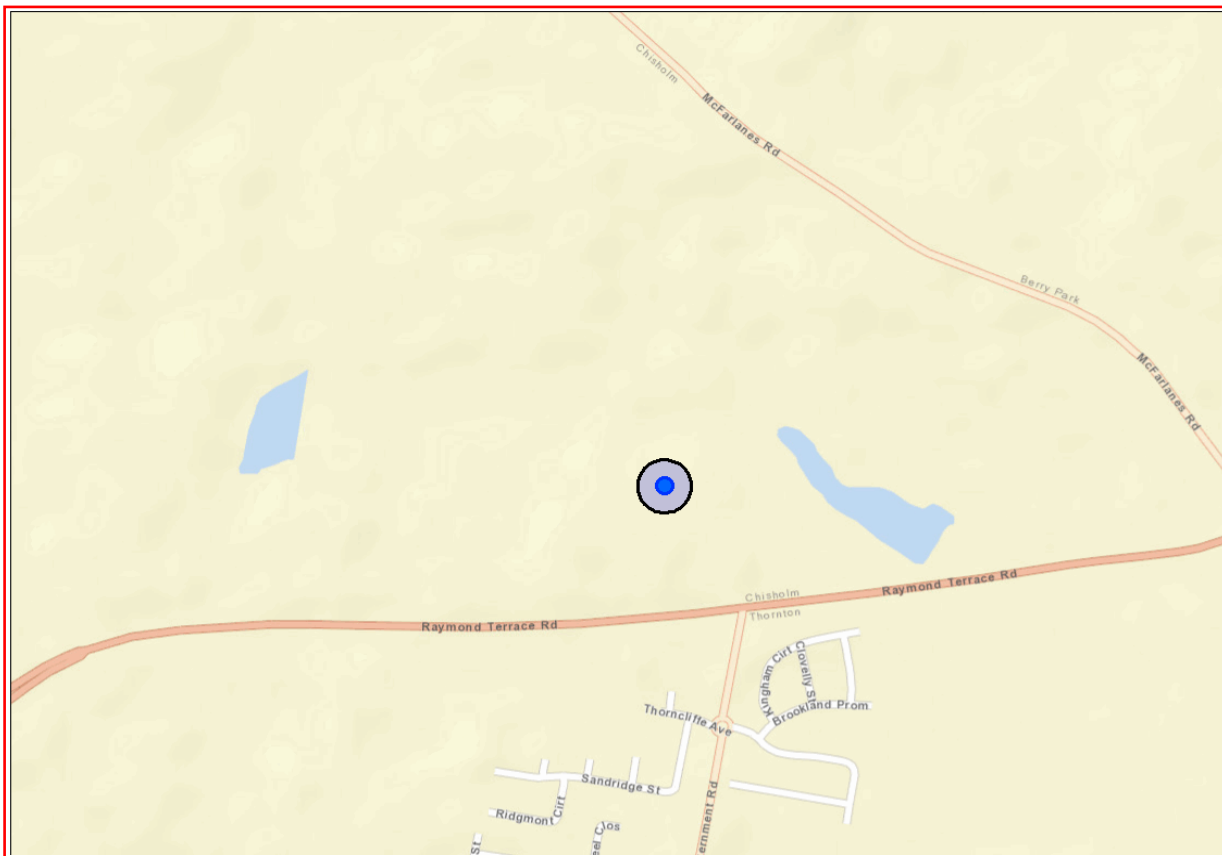
Katrina Greville
21 Costata Crescent
Adamstown New South Wales 2289
Attention: Katrina Greville
Email: klmukevski@bigpond.com

Date: 30 January 2025

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address : 581 RAYMOND TERRACE ROAD CHISHOLM 2322 with a Buffer of 50 meters, conducted by Katrina Greville on 30 January 2025.

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 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 \(https://www.legislation.nsw.gov.au/gazette\)](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 to 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.
- This search can form part of your due diligence and remains valid for 12 months.

Appendix C: Planning for Bushfire Protection 2019 - Compliance Table

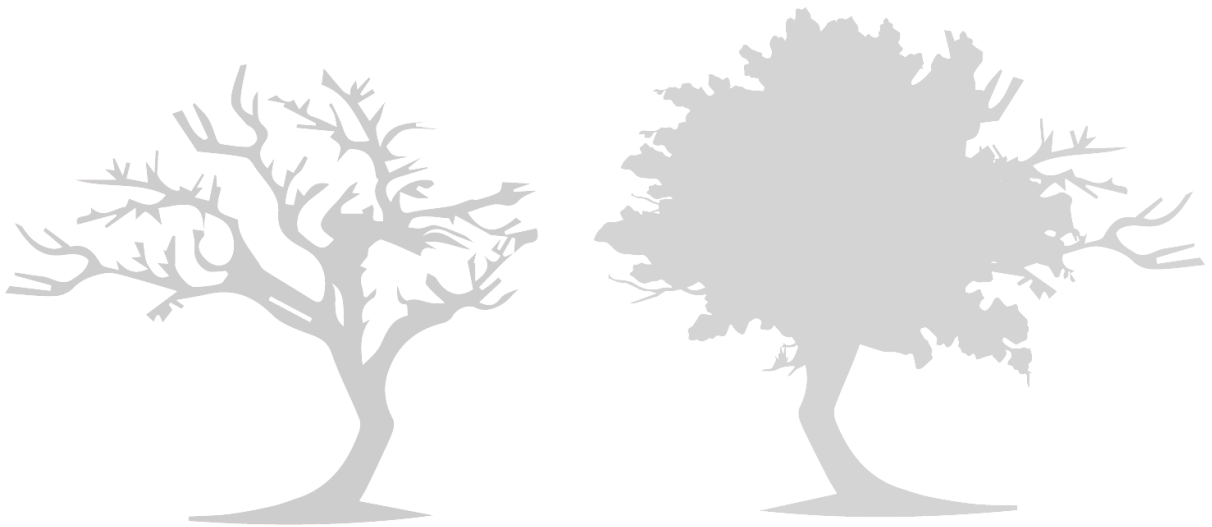


Table 1: Aims and Objectives of Planning for Bushfire Protection 2019

Objectives	Satisfied	Comment
<ul style="list-style-type: none"> Afford buildings and their occupants protection from exposure to a bush fire 	✓	<p>The proposed dwellings to be used as a display home and a sales office are located greater than 100m from the nearest bushfire hazard. Both dwellings have immediate and direct access to a new public road providing several evacuation routes.</p>
<ul style="list-style-type: none"> Provide for a defensible space to be located around buildings 	✓	<p>The proposed dwellings to be used as a display home and a sales office are located greater than 100m from the nearest bushfire hazard. Defensible space by way of a minimum 100m wide APZ is provided to ensure radiant heat levels are below critical limits (29kW/m²)</p>
<ul style="list-style-type: none"> Provide appropriate separation between a hazard and buildings, which, in combination with other measures, prevent the likely fire spread to buildings 	✓	<p>The proposed dwellings to be used as a display home and a sales office are located greater than 100m from the nearest bushfire hazard. Defensible space by way of a minimum 100m wide APZ is provided to ensure radiant heat levels are below critical limits (29kW/m²)</p>
<ul style="list-style-type: none"> Ensure that safe operational access and egress for emergency service personnel and residents is available 	✓	<p>The existing public road, Redgate Road, provides safe operational access for emergency personnel.</p>
<ul style="list-style-type: none"> Provide for ongoing management and maintenance of BPMs 	✓	<p>The owner will be responsible for the management and maintenance of the private property.</p>
<ul style="list-style-type: none"> Ensure that utility services are adequate to meet the needs of firefighters 	✓	<p>The development includes all essential utility services to meet the needs of firefighters; including a reliable water supply.</p>

Table 2: Performance Criteria and Acceptable Solutions for infill development (Chapter 7 PBP 2019)

	Intent of Measure	Acceptable Solutions	Complies	Comment
<p>✓ - Acceptable Solution AS - Alternative Solution</p>				
<p>7.4 Bush Fire Protection Measures Table 7.4a Intent of Measures: <i>To minimise the risk of bushfire attack and provide protection for emergency services personnel, residents and others assisting firefighting activities.</i></p>				
ASSET PROTECTION ZONES	APZs are provided commensurate with the construction of the building; and A defensible space is provided.	An APZ is provided in accordance with Tables A1.12.2 or A1.12.3 in Appendix 1.	✓	The proposed dwellings to be used as a display home and a sales office are located greater than 100m from the nearest bushfire hazard.
	APZs are managed and maintained to prevent the spread of a fire towards the building.	APZs are managed in accordance with the requirements of Appendix 4 of PBP.	✓	The landowner holds the responsibility for ensuring that APZs are properly managed and maintained, aligning with strategies to prevent the spread of fire towards the building.
	The APZ is provided in perpetuity.	APZs are wholly within the boundaries of the development site.	✓	Although the land will be managed as an APZ, a positive covenant is not required.
	APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is negated.	APZ are located on lands with a slope less than 18°	✓	The land has a grade less than 5° downslope
	Home-base child care: the building must not be exposed to radiant heat levels exceeding 29kW/m ² (1090K).	An APZ is provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	N/A	
ACCESS	Fire fighters are provided with safe all weather access to structures and hazardous vegetation.	Property access roads are two-wheel drive, all-weather roads	✓	The proposed dwellings are directly accessible from Redgate Road, which is a public, two-way, all weather road.
	The capacity of access roads is adequate for firefighting vehicles.	The capacity of the road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges and causeways are to clearly indicate load rating.	✓	Redgate Road is a public road with sufficient capacity for operation firefighting vehicles.

Intent of Measure	Acceptable Solutions	Complies	Comment	
<p>✓ - Acceptable Solution</p> <p>AS - Alternative Solution</p>				
	There is appropriate access to water supply	Hydrants are provided in accordance with the relevant clauses of AS2419.1:2005; There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	✓	An existing reticulated water supply present in Redgate Road. The proposed dwellings have been connected to the reticulated water supply in accordance with Table 7.4a of PBP 2019.
	Firefighting vehicles can access the dwelling and exit the property safely.	At least one alternative property access road is provided for individual dwellings or groups of dwellings that are located more than 200m from a public through road.	✓	The Munro residential development is part of wider urban release area containing a new public road network comprising a series of roads leading to the north, south and west.
WATER SUPPLIES	An adequate water supply is provided for firefighting purposes	Reticulated water is to be provided to the development, where available	✓	An existing reticulated water supply present in Redgate Road. The proposed dwelling is able to be connected to the water supply in accordance with Table 7.4a of PBP 2019.
		A static water supply is provided where no reticulated water is available	N/A	
	Water supplies are located at regular intervals	Fire hydrant spacing, design and sizing comply with AS2419.1:2005;	✓	The nearest fire hydrant is within 30m of the site.
		Hydrants are not located within any road carriageway;	✓	
	The water supply is accessible and reliable for firefighting operations	Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	✓	
	Flows and pressure are appropriate.	Fire hydrant flows and pressures comply with AS2419.1:2005.	✓	
	The integrity of the water supply is maintained.	All above ground water service pipes external to the building are metal, including and up to any taps.	✓	
A static water supply is provided for firefighting purposes in areas where reticulated water is not available	Static water supplies shall comply with Table 5.3d	N/A		

Intent of Measure	Acceptable Solutions	Complies	Comment	
<p>✓ - Acceptable Solution AS - Alternative Solution</p>				
ELECTRICITY SERVICES	Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings.	Where practicable, electrical transmission lines are underground.	✓	The proposed dwellings will be connected to the existing underground electricity supply.
		Where overhead electrical transmission lines are proposed as follows: → lines are installed with short pole spacing (30 metres), unless crossing gullies, gorges or riparian areas; and → no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines	N/A	
GAS SERVICES	Location of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	Reticulated or bottled gas is installed and maintained in accordance with AS 1596:2014 and the requirements of relevant authorities, metal piping is to be used.	✓	The dwellings will be connected to a compliant gas supply.
		All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side;	✓	
		Connections to and from gas cylinders are metal:	✓	
		Polymer-sheathed flexible gas supply lines are not used; and	✓	

	Intent of Measure	Acceptable Solutions	Complies	Comment
<p>✓ - Acceptable Solution</p> <p>AS - Alternative Solution</p>				
CONSTRUCTION STANDARDS	The proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact.	BAL is determined in accordance with Tables A1.12.5 to A1.12.7; and Construction provided in accordance with the NCC and as modified by section 7.5.	✓	The BAL for the proposed dwelling has been determined as BAL-LOW The BAL rating is based on insufficient risk to warrant specific construction requirements. It is predicated on low threat vegetation and the nearest bushfire hazard being >100m from the site.
	Proposed fences and gates are designed to minimise the spread of bushfire.	Fencing and gates are constructed in accordance with section 7.6.	✓	
	Proposed Class 10a buildings are designed to minimise the spread of bushfire.	Class 10a buildings are constructed in accordance with section 8.3.2.	N/A	
LANDSCAPING	Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Compliance with the NSW RFS 'Asset protection zone standards' (see Appendix 4); A clear area of low-cut lawn or pavement is maintained adjacent to the house; Fencing is constructed in accordance with section 7.6; and Trees and shrubs are located so that: → the branches will not overhang the roof; → the tree canopy is not continuous; and → any proposed windbreak is located on the elevation from which fires are likely to approach.	✓	All landscaping is the responsibility of the landowner.
EMERGENCY MANAGEMENT	Home-based child care		N/A	

Table 3: Performance Criteria and Acceptable Solutions for Residential Subdivisions (Chapter 5 PBP 2019)

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
✓ - Acceptable Solution AS - Alternative Solution				
5.3.1 APZs Table 5.3a <i>Intent of Measure: To provide sufficient space and maintain reduced fuel loads, so as to ensure radiant heat levels at buildings are below critical limits and to prevent direct flame contact with a building.</i>				
ASSET PROTECTION ZONES	Potential building footprints must not be exposed to radiant heat levels exceeding 29kW/m ² on each proposed lot.	APZs are provided in accordance with Tables A1.12.2 and A1.12.3 based on the FFDI.	✓	The proposed dwellings to be used as a display home and a sales office are located greater than 100m from the nearest bushfire hazard.
	APZs are managed and maintained to prevent the spread of a fire towards the building.	The APZ is managed in accordance with the requirements of Appendix 4	✓	All new landowners will be required to manage their respective lot as an IPA.
	The APZ is provided in perpetuity.	APZs are wholly within the boundaries of the development site.	✓	There are no exceptional circumstances that would require an APZ to be located external to the development site.
	APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is negated.	The APZ is not located on lands with a slope exceeding 18°	✓	The maximum slope of the site is 4.0° downslope or less.
LANDSCAPING	Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Landscaping is in accordance with APZ standards (see Appendix 4). Fencing is constructed in accordance with section 7.6.	✓	All new landscaping has considered the requirements of APZs per Appendix 4. All new fencing will be colorbond or similar non-combustible material.
5.3.2 Access Table 5.3b <i>To provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area.</i>				
ACCESS (General Requirements)	Fire fighters are provided with safe all-weather access to structures	Property access roads are two-wheel drive, all-weather roads	✓	No new roads are proposed
		Perimeter roads are provided for residential subdivisions of three or more allotments	✓	
		Subdivisions of three or more allotments have more than one access in and out of the development	✓	

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
<p>✓ - Acceptable Solution</p> <p>AS - Alternative Solution</p>				
		Traffic management devices are constructed to not prohibit access by emergency services vehicles.	✓	
		Access roads must provide suitable turning areas in accordance with Appendix 3.	✓	
	The capacity of access roads is adequate for firefighting vehicles.	The capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating.	✓	No new roads are proposed.
	There is appropriate access to water supply.	Hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression.	✓	All lots are connected to a reticulated water supply.
		Hydrants are provided in accordance with AS2419.1:2005	✓	
		There is suitable access for Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	✓	
PERIMETER ROADS	Perimeter access roads are designed to allow safe access and egress for medium rigid firefighting vehicles while occupants are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface.	There are two-way sealed roads.	✓	No new roads are proposed.
		8m carriageway width kerb to kerb.	✓	
		Hydrants are to be located clear of parking areas.	✓	
		There 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° and average grade is 10°.	✓	



PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
<p>✓ - Acceptable Solution</p> <p>AS - Alternative Solution</p>				
		The road crossfall does not exceed 3°.	✓	
		A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches; and	✓	
NON-PERIMETER ROADS	Non-perimeter access roads are designed to allow safe access and egress for medium rigid firefighting vehicles while occupants are evacuating.	Minimum 5.5m width kerb to kerb.	✓	No new roads are proposed.
		Parking is provided outside of the carriageway.	✓	
		Hydrants are to be located clear of parking areas.	✓	
		There 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° and average grade is 10°.	✓	
		The road crossfall does not exceed 3°.	✓	
	A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches is provided.	✓		
PROPERTY ACCESS	Firefighting vehicles can access the dwelling and exit the property safely.	There are no specific access requirements in an urban area where an unobstructed path (no greater than 70m) is provided between the most distance external part of the proposed dwelling and the nearest part of the public access road.	N/A	
		In circumstances where this cannot occur, the	N/A	

PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
✓ - Acceptable Solution AS - Alternative Solution				
		A static water supply is provided where no reticulated water is available	N/A	
		Static water supplies shall comply with Table 5.3d	N/A	
	Water supplies are located at regular intervals	Fire hydrant spacing, design and sizing comply with AS2419.1:2005;	✓	A reticulated water supply is provided.
		Hydrants are not located within any road carriageway;	✓	
	The water supply is accessible and reliable for firefighting operations	Reticulated water supply to urban subdivisions uses a ring main system for areas with perimeter roads.	✓	
	Flows and pressures are appropriate	Fire hydrant flows and pressures comply with AS2419.1:2005.	✓	
The integrity of the water supply is maintained	All above ground water service pipes are metal, including and up to any taps.	✓	A reticulated water supply is provided.	
ELECTRICITY	Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings.	Where practicable, electrical transmission lines are underground.	✓	The proposed new lots will be connected to the existing underground electricity service.
		Where overhead electrical transmission lines are proposed as follows: → lines are installed with short pole spacing (30 metres), unless crossing gullies, gorges or riparian areas; and → no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines	N/A	

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMPLIES	COMMENT
<p>✓ - Acceptable Solution AS - Alternative Solution</p>			
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">GAS</p>	<p>Location of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.</p>	<p>Reticulated or bottled gas is installed and maintained in accordance with AS 1596:2014 and the requirements of relevant authorities, metal piping is to be used.</p> <p>All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side;</p> <p>Connections to and from gas cylinders are metal:</p> <p>Polymer-sheathed flexible gas supply lines are not used; and</p> <p>Above-ground gas service pipes are metal, including and up to any outlets.</p>	<p style="text-align: center;">✓</p> <p>Any new gas connections will be underground and will be unlikely to create an additional hazard risk to surrounding bushland.</p>