

BUSHFIRE HAZARD ASSESSMENT REPORT

PROPOSED CHURCH DEVELOPMENT

**LOT 22 DP 1296583
171 JOHN OXLEY DRIVE,
PORT MACQUARIE**

**CLIENT:
THE POINT CHURCH**

SEPTEMBER 2024

This report has been prepared by David Pensini - Building Certification and Environmental Services with all reasonable skill, care and diligence for The Point Church.

The information contained in this report has been gathered from discussions with representatives of The Point Church, a review of the plans provided by The Point Church and experience.

No inspection or assessment has been undertaken on other aspects of the proposed development outside the scope of this report.

This report does not imply, nor should it be implied, that the proposed development will comply fully with relevant legislation.

The report shall not be construed as relieving any other party of their responsibilities or obligations.

David Pensini - Building Certification and Environmental Services disclaims any responsibility The Point Church and others in respect of any matters outside the scope of this report.

The report is confidential, and the writer accepts no responsibility of whatsoever nature, to third parties who use this report, or part thereof is made known. Any such party relies on this report at their own risk.

For and on behalf of David Pensini - Building Certification and Environmental Services.

Prepared by: David Pensini

Signed:



Dated: 9th September 2024



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			Prepared by	Verified by	Approved by
		Name	David Pensini		David Pensini
		Signature			

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1.0 INTRODUCTION

The land which comprises the subject site is currently known as Lot 22 DP 1296583, 171 John Oxley Drive, Port Macquarie.

It is proposed to construct and operate a Church and associated infrastructure on the subject site.

This report is based on site assessments carried out on the 30th of January and 5th September 2024.

It is noted that Church developments are integrated development under Section 91 of the Environmental Planning and Assessment Act, 1979 and a Special Fire Protection Purpose (SFPP) development which requires a Bush Fire Safety Authority under Section 100B of the Rural Fires Act, 1997.

The purpose of this report is to demonstrate that the bushfire risk is manageable for the proposed Church development having regard to relevant requirements of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019.

NOTE

The information contained in this report has been gathered from field surveys and experience and has been completed in consideration of the following legislation.

- *Rural Fires Act 1997.*
- *Environmental Planning and Assessment Act 1979.*
- *National Construction Code.*
- *Council Local Environment Plans and Development Control Plans where applicable.*
- *NSW Rural Fire Services, Planning for Bushfire Protection, 2019.*
- *AS 3959 - 2018 Construction of Buildings in Bushfire Prone Areas.*

The report recognizes the fact that no property and lives can be guaranteed to survive a bushfire attack. The report examines ways the risk of bushfire attack can be reduced where the site falls within the scope of the legislation.

The report is confidential, and the writer accepts no responsibility of whatsoever nature to third parties who use this report or part thereof is made known. Any such party relies on this report at their own risk.

This report has been based upon the vegetation characteristics observed at the time of site inspection. No responsibility is taken where the vegetation characteristics of the subject site or surrounding areas is changed or modified beyond that which is presented within this report. In this regard the identification of managed vegetation was based upon conditions observed at the time of site inspection. No responsibility is accepted where vegetation management regimes are altered from that which was evident at the time of site inspection.

1.1 Objectives

The objectives of this report are to:

- Ensure that the proposed development of the subject site as a Church and associated infrastructure has measures sufficient to minimize the impacts of bushfires; and
- Reduce the risk to property and the community from bushfire.

1.2 Legislative Framework

On 1st August 2002 the Environmental Planning and Assessment Act 1979 and the Rural Fires Act 1997 were both amended to enhance bush fire protection through the development assessment process.

In broad terms, the planning considerations provide two main steps. These involve:

(i) Strategic Planning through:

- Mapping of bush fire prone.
- Determining suitable bush fire requirements during the preparation of a Local Environmental Plan and/or Development Control Plan; and
- The identification of the extent to which land is bushfire prone.

(ii) Development assessment through:

- obtaining a bush fire safety authority (BFSA) for residential or rural-residential subdivision and special fire protection purpose developments in bushfire prone areas from the Rural Fire Service (RFS).
- seeking advice from the RFS in relation to infill and other developments in bushfire prone areas that cannot comply with the requirements of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019; and
- the application of additional requirements of the National Construction Code (NCC) in relation to construction standards for Class 1, 2, 3, 4 and some Class 9 buildings in bushfire prone areas.

It is noted that this report focuses upon the development assessment processes associated with the proposed development of the subject site as a Church and associated infrastructure.

The proposed development is a Special Fire Protection Purpose (SFPP) development and as such is Integrated Development and has a requirement for a Bush Fire Safety Authority (BSFA) under Section 100B of the Rural Fires Act 1997.

1.2.1 Objectives for Special Fire Protection Purpose Developments

It is noted that the proposed Church development is subject to the relevant requirements of Chapter 6 of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019.

The specific objectives for Special Fire Purpose Protection developments as provided for by NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 are to:

- *minimise levels of radiant heat, localised smoke and ember attack through increased APZ, building design and siting.*
- *provide an appropriate operational environment for emergency service personnel during firefighting and emergency management.*
- *ensure the capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development; and*
- *ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants.*

It is noted that the proposed Church development is consistent with the above objectives together with the relevant acceptable solutions/standards which are applicable to the subject site and proposed development.

This report will therefore detail the relevant compliance issues associated with NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 as relevant to the proposed Church development.

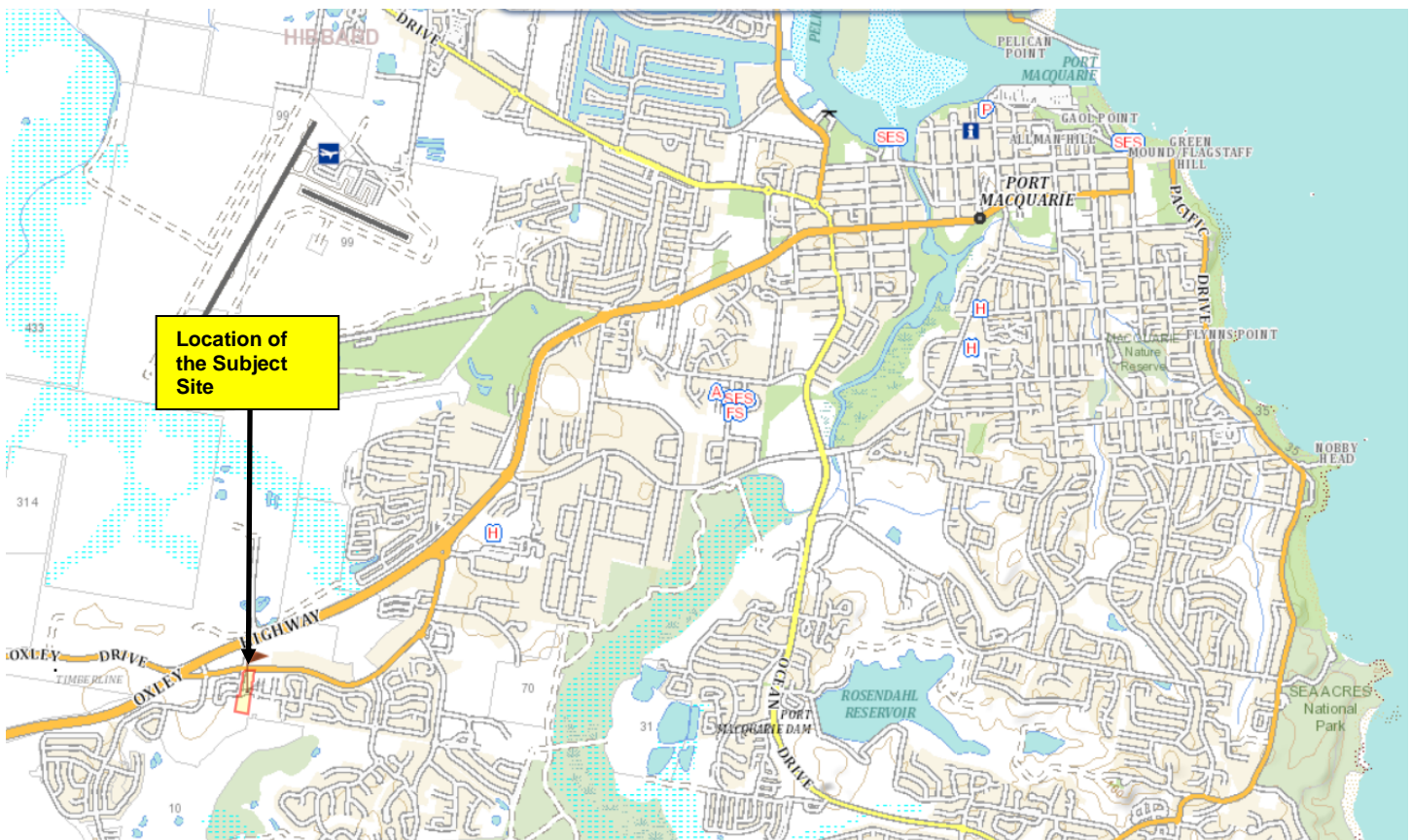
1.3 Location

The subject site comprises a single allotment of land, which is currently known as Lot 22 DP 1296583, 171 John Oxley Drive, Port Macquarie and is situated within the Port Macquarie-Hastings Council local government area. With a population of approximately 65,000, Port Macquarie serves as the regional centre for the Port Macquarie-Hastings local government area.

Being located to the west of the Lake Innes urban growth area, which is located on the southwestern fringes of the urbanized area of Port Macquarie, the land within this area has and will continue to experience significant urban expansion with a transitional urban fringe land use setting and context.

The character of the locality is that of an urban fringe area with residential development expanding into residentially zoned parcels of land that exist in the locality, refer to **Figure 1** below.

Figure 1 - Site Location



The subject site is located within the South Lindfield urban growth precinct to the west of existing residential areas with significant recent and historic residential development to the east of the subject site. A recently constructed residential subdivision also extends to the west of the subject site whilst at distance to the southwest of the subject site is the Ascot Park Residential Estate.

Beyond the John Oxley Drive road reserve to the north are undeveloped parcels of land before a transition to the Oxley Highway corridor with largely undeveloped land to the north of

the highway. To the south of the subject site are the grounds of the Innes Gardens Lawn Cemetery and Crematorium together with large areas of undeveloped land.

The closest Fire Service is located approximately 3.4km to the northeast of the subject site, (Port Macquarie Fire Brigade), with the closest Fire Control Centre being at Wauchope which is 20 kilometers west or 20 minutes by car from Port Macquarie.

1.4 Site Description

The subject site comprises a single Torrens Title allotment which is described as Lot 22 DP 1296583, 171 John Oxley Drive, Port Macquarie. The subject site is rectangular in shape and has an area of 1.85 hectares, refer to **Appendix 1**.

The subject site is generally vacant of improvements with the historic dwelling which existed on the subject site demolished some time ago.

Access to the subject site is provided by way of frontages to John Oxley Drive to the north and Annabella Drive which adjoins the northern and central portions of the western property boundary.

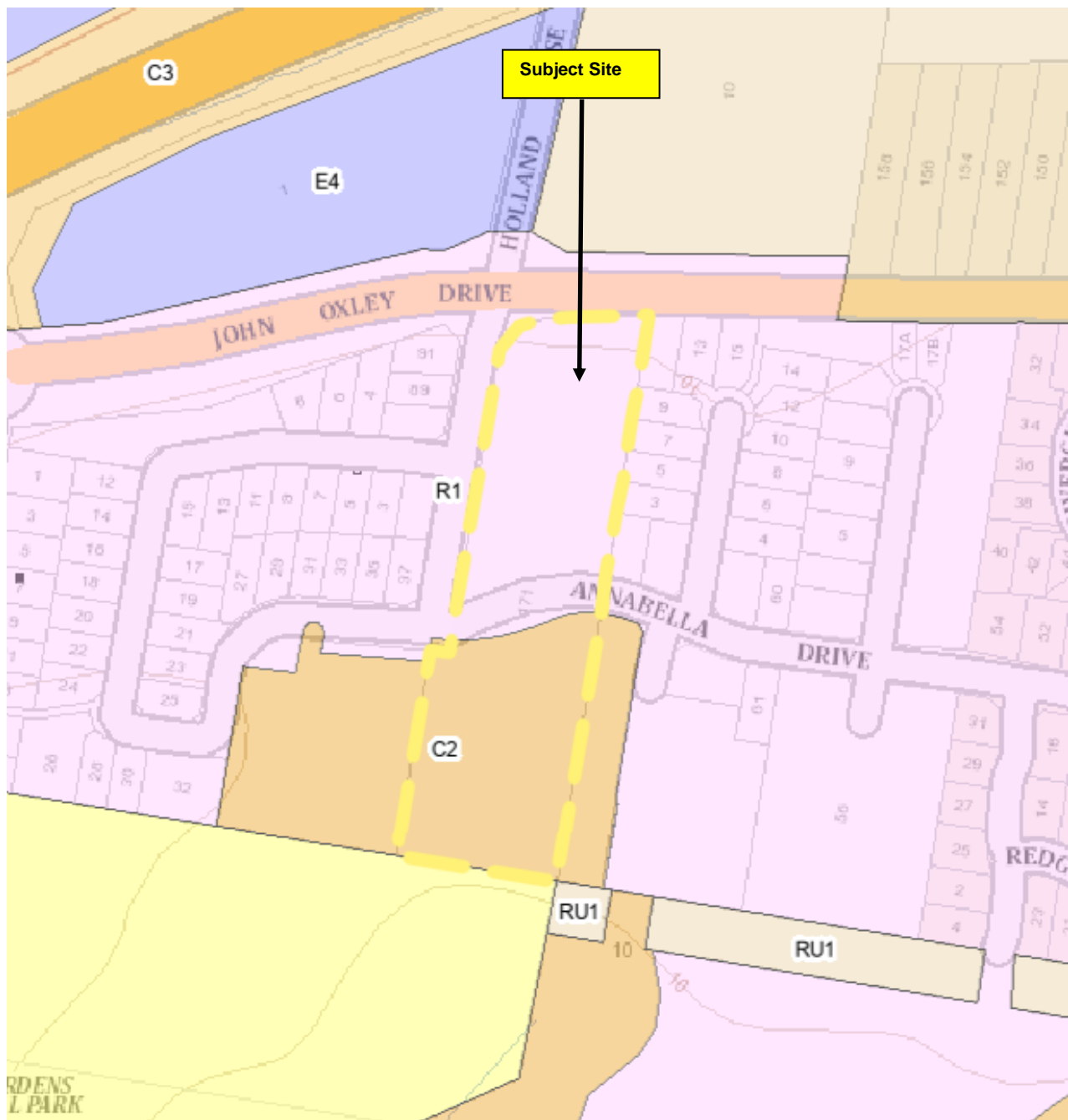
The topography of the subject site and the immediate surrounding area is dominated by a small west to east ridgeline the crest of which is present centrally on the subject site which provides for gentle south to north downslope conditions over the northern portion of the subject site and on adjoining and adjacent land with a transition to southerly downslopes over the southern portion of the subject site. The west to east relief of the ridgeline provides for the presence of gentle west to east crossfall conditions in the southern portion of the subject site.

Vegetation on the subject site consists of grasses with scattered trees in the northern and central areas of the subject site with Wet Sclerophyll Forest present in the southern portion of the site. Managed vegetation associated with developed residential lots extend to the east and west of the subject site. It is however noted that the area of Wet Sclerophyll Forest which is present in the southern portion of the subject site extends into the southern portion of the adjoining land to the west. Grasslands with scattered and clusters of trees extend to the north of the subject site whilst managed vegetation associated with the Innes Gardens Lawn Cemetery and Crematorium extend to the south of the subject site although areas of Forest and Coastal Swamp Forest are also present in the southern aspect.

It is noted that a planned westerly extension of the existing Annabella Drive public road bisects the southern central portion of the subject site with this missing piece of public road infrastructure linking sections of Annabella Drive which are present to the east and west of the subject site.

The subject site has a split land use zoning with residentially zoned (R1) land in the northern and central portions of the subject site with the southern portion of the site zoned for environmental conservation (C2) purposes, refer to **Figure 2** below.

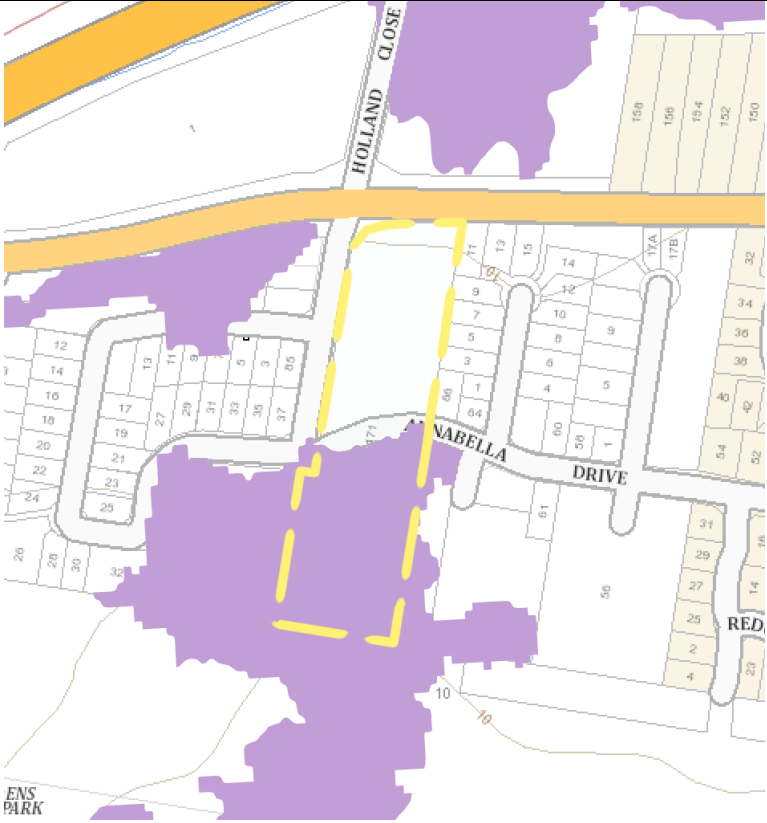
Figure 2 – Land Use Zoning



The environmental and heritage features of the subject site are summarized as follows.

Table 1 – Environmental and Heritage Features

ENVIRONMENTAL/HERITAGE FEATURE	COMMENT
Riparian corridors	There are no riparian corridors on the subject site.
SEPP (Resilience and Hazards), 2021	The subject site is not identified as being subject to the provisions of the SEPP.
SEPP (Biodiversity and Conservation) 2021	The southern portion of the subject site is identified as having biodiversity values.

	 <p>Biodiversity Values Mapping</p> <p>It is however noted that the proposed Church development is located to the north of the proposed Annabella Drive extension with the land to the north of the road corridor not mapped as having Biodiversity values.</p> <p>The assessment of this issue is however outside the scope of this report.</p>
<p>Areas of geological interest</p>	<p>The subject site does not contain any land or area of geological interest.</p> <p>It is noted that the subject site is not identified as potentially containing Acid Sulphate Soils.</p> <p>Based upon the nature of the proposed development and the rural residential land use history of the subject site it is considered that land contamination issues will not be an impediment to the proposed Church development.</p>
<p>Environmental protection zones</p>	<p>The northern and central portions of the subject site are zoned Residential (R1) in accordance with Port Macquarie Hastings Local Environmental Plan, 2011.</p> <p>It is however noted the southern portion of the subject site is zoned for environmental protection purposes (C2), refer to Figure 2 above.</p> <p>The area of the subject site which are zoned for environmental protection purposes does not form part of the area which is proposed to be developed as a church and associated</p>

	infrastructure.
Land slip	It is noted that the subject site does not contain areas of steep slopes therefore land slip is not considered to be an issue for the subject site or proposed church development.
Flood prone land	The subject site is not identified as being flood prone land via Port Macquarie-Hastings Councils LEP, 2011.
Bushfire prone land	The subject site is identified as being bushfire prone land for the purposes of the Environmental Planning and Assessment Act, 1979 and the Rural Fires Act 1997, refer to Section 2.2 of this report.
National Park Estate or other Reserves	The subject site does not form part of the National Park Estate or other Reserves.
Threatened species, populations, endangered ecological communities and critical habitat	Threatened species, populations, endangered ecological communities and critical habitat are unlikely to be present in the area of the proposed development as vegetation disturbance and removal has been already occurred in the area of the proposed church development. The assessment of this issue is however outside the scope of this report.
OEH Key Habitats and Corridors	The subject site, in the area of the proposed development, is unlikely to form part of OEH key habitats and corridors due to the level of historic vegetation disturbance and removal however this issue is to be the subject of separate assessment. The assessment of this issue is outside the scope of this report.
Aboriginal Heritage	Items of aboriginal heritage are unlikely to be present in the area of the proposed development as the subject site has been the subject of disturbance and alteration over time however this issue is to be the subject of separate assessment. The assessment of this issue is however outside the scope of this report.

1.5 Development Proposal

It is proposed to develop the subject site for the purposes of a Church and associated infrastructure, refer to **Appendix 2**.

The main components of the proposed development are:

- Main Church building which is located adjacent to the northern portion of the western boundary of the subject site.
- Ancillary uses building which includes hall, meeting, office, administration, kitchen and multi-purpose usage areas. This building is located adjacent to the northern portion of the eastern boundary of the subject site.
- Carparking Area – a large carparking area is proposed for the central portion of the subject site.

It is noted that the southern portion of the subject site is not proposed to be developed with this area of land retaining its bushland setting with this area of the subject site zoned for environmental protection purposes.

Access to the proposed Church development is to be via an internal access road system which will connect with Annabella Drive which already adjoins the subject site to the west as well as a connection with the proposed extension of Annabella Drive which will bisect the southern central portion of the subject site. The approach to access and egress from the proposed development provides for alternatives of travel to and from the proposed development.

Whilst John Oxley Drive adjoins the subject site along its northern property boundary there will be no direct access from the proposed development to or from John Oxley Drive.

1.6 Fauna and Flora Issues

A fauna and flora evaluation has not been undertaken in conjunction with this bushfire hazard assessment and as such issues pertaining to fauna and flora are outside the scope of this report.

Issues associated with any vegetation removal or modification which is required in order to comply with the requirements of the report have not been the subject of assessment as part of the preparation of this report.

2.0 BUSHFIRE HAZARD ASSESSMENT

2.1 Procedure

Several factors need to be considered in determining the bushfire hazard for the subject site and proposed development. These factors are slope, vegetation type, and distance from hazard, access/egress and fire weather. Each of these factors has been reviewed in determining the bushfire protection measures which are applicable to the subject site and proposed development.

Assessment of the slopes and vegetation structures on and surrounding the subject site was carried out by David Pensini - Building Certification and Environmental Services on 30th January 2024 and 5th September 2024.

The assessment of slope and vegetation being carried out in accordance with Appendix 1 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.

2.2 Hazard Vegetation

Current bushfire hazard vegetation mapping, refer to **Figure 3** below, indicates that vegetation of bushfire significance to the subject site is located as follows:

- Category 1 vegetation – areas of Category 1 vegetation are located in the southern and central portions of the subject site and adjacent to the northern portions of the and eastern and western boundaries of the subject site.
- Category 2 vegetation – an area of Category 2 vegetation is located on adjoining land to the west of the subject site.
- Category 3 vegetation – areas of Category 3 vegetation are located in the northern and central areas of the subject site and on adjoining land to the north, south and east.

Figure 3 – Extract from Bushfire Risk Mapping



Inspection of the subject site and surrounds indicates that the bushfire prone land mapping does not appear to accurately indicate the extent of bushfire hazard vegetation with significant areas of Category 2 and 3 vegetation removed from adjoining and adjacent land to the east and west of the subject site as part of recent residential subdivision construction activities.

All areas of Category 1 hazard vegetation have also been removed from the central and northern portions of the subject site whilst regular vegetation management activities provide for a managed land classification for the areas of grasslands on the subject site.

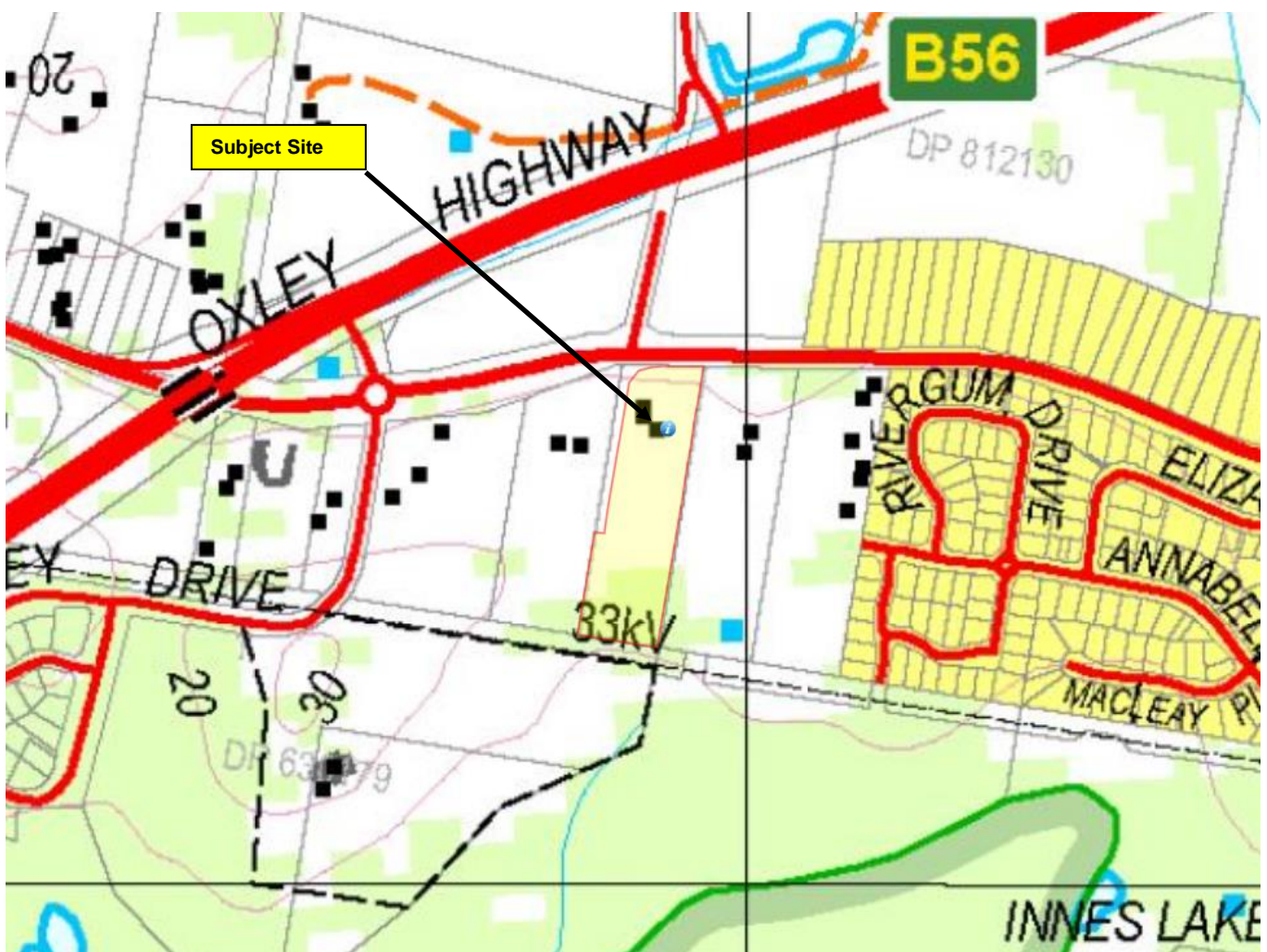
2.3 Slope

Slope is a major factor to consider when assessing the bushfire risk of any development which is subject to compliance with the requirements of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019. Therefore, the slope of the subject site and surrounding area, (to a distance of 100m), was measured using a Suunto PM-5/360 PC Clinometer in addition to the use of available topographic information.

The topography of the subject site and the immediate surrounding area is dominated by a small west to east ridgeline the crest of which is present centrally on the subject site which provides for gentle south to north downslope conditions over the northern portion of the subject site and on adjoining and adjacent land with a transition to southerly downslopes over the southern portion of the subject site. The west to east relief of the ridgeline provides for the presence of gentle west to east crossfall conditions in the southern portion of the subject site.

The topographic features of the subject site and adjoining and adjacent land can be seen in **Figure 4** below.

Figure 4 – Topographic Features of Locality



The following table indicates the slopes which have been adopted for the purposes of this bushfire hazard assessment.

Table 2 – Hazard Vegetation Slopes

HAZARD DIRECTION	SLOPE	UPSLOPE/DOWNSLOPE
North	2° - 3°	Down slope
South/Southwest	3° - 4°	Down slope

The above slopes were considered when assessing the Asset Protection Zone and Bushfire Attack Level requirements which would be applicable to the proposed development of the subject site.

2.4 Vegetation Assessment

The vegetation on and surrounding the subject site was assessed over a distance of 140m from the proposed development.

The vegetation formations were classified using the system adopted as per Keith (2004) and in accordance with Appendix 1 of NSW Rural Fire Service, ***Planning for Bushfire Protection***, 2019.

The following vegetation characteristics were identified as being relevant to the bushfire hazard assessment.

2.4.1 Vegetation on Subject Site

Vegetation on the subject site consists of grasses with scattered trees in the northern and central areas of the subject site with an area of Wet Sclerophyll Forest is present in the southern portion of the site.



Grasslands with scattered trees over the northern and central areas of the subject site



**Wet Sclerophyll
Forest vegetation
in the southern
portion of the
subject site**

Because of the proposed development managed vegetation will be present in the northern and central areas of the subject site whilst the existing area of Wet Sclerophyll Forest will be present in the southern portion of the subject site. The transition between managed and forest vegetation will be defined by Annabella Drive the extension of which will bisect the subject site.

2.4.2 Vegetation on Adjoining and Adjacent Land

Bushfire hazard vegetation identification in the various aspects of the subject site provided the following information.

Managed vegetation associated with developed residential allotments extend for >140m to the east and west of the subject site and accordingly no areas of hazard vegetation were assessed as being present within these aspects. It is however noted that the area of Wet Sclerophyll Forest which is present in the southern portion of the subject site also extends into the southern portion of the adjoining land to the west.



**Managed
vegetation within
residential lots to
the east of the
subject site**



**Managed
vegetation within
residential lots to
the west of the
subject site**



**Wet Sclerophyll
Forest on
adjoining land to
the southwest of
the subject site**

Grasslands with scattered and clusters of trees extend to the north of the subject site. Whilst a managed vegetation classification could be adopted for the northern aspect based upon the presence of an ongoing vegetation management regime in adopting a conservative approach to bushfire hazard assessment a grassland classification was identified for the northern aspect.



**Grasslands with
scattered trees to
the northeast of
John Oxley Drive**



Grasslands with scattered trees to the northwest of John Oxley Drive

Managed vegetation associated with the Innes Gardens Lawn Cemetery and Crematorium extends to the south of the subject site although areas of Forest and Coastal Swamp Forest are also present in the southern aspect.



Managed vegetation associated with Innes Gardens Lawn Cemetery and Crematorium on adjacent land to the south/southwest of the subject site



Remnants of forest vegetation on adjacent land to the south/southeast of the subject site

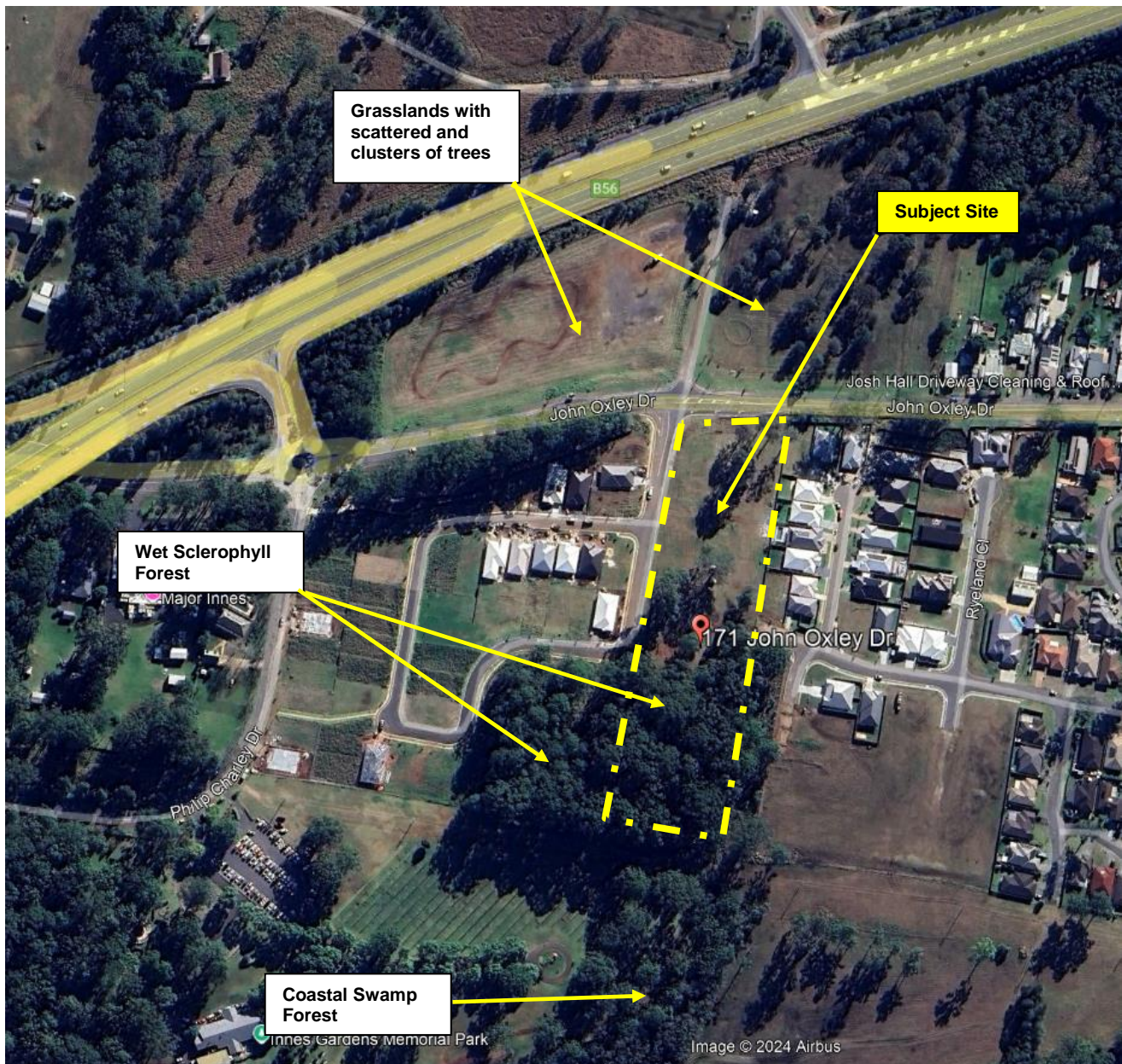
The following table indicates the various vegetation structures adjoining/adjacent to the subject site and the vegetation classifications which have been determined in accordance with Appendix 1 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 as being relevant to the subject site and proposed development.

Table 3 – Summary of Vegetation Characteristics and Classifications

ASPECT	VEGETATION DESCRIPTION	VEGETATION CLASSIFICATION (PfBP 2019 - Keith 2004)
North	Grasslands with scattered and clusters of trees within undeveloped land to the north of John Oxley Drive	Grasslands
South/Southwest	Wet Sclerophyll Forest vegetation retained in the southern portion of the subject site and within the southeastern portion of the adjoining land to the west.	Wet Sclerophyll Forest

An indication of the relationship of the vegetation of bushfire significance to the subject site and proposed Church development is presented in **Figure 5** below.

Figure 5 - Vegetation Relationships to Subject



2.5 Fire Danger Index

The fire weather for the subject site is assumed on the worst-case scenario.

In accordance with NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019, NSW Rural Fire Service, **NSW Local Government Areas FDI**, May 2017 and Table 2.1 of AS 3959 - 2018, the fire weather for the site is based upon the 1:50 year fire weather scenario and has a Fire Danger Index (FDI) of 80.

3.0 BUSHFIRE THREAT REDUCTION MEASURES

The following bushfire issues and constraints have been identified through considering the requirements of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 in relation to the proposed Church development.

In order to reduce the bushfire threat, it is suggested the following measures be included in any strategy developed for the proposed Church development.

3.1 NSW Rural Fire Services, Planning for Bushfire Protection, 2019

3.1.1 Defendable Space/Asset Protection Zones

To ensure that the aims and objectives of NSW Rural Fire Service, **Planning for Bushfire Protection** 2019 are achieved for the proposed development of the subject land, an Asset Protection Zone (APZ) between the asset and the hazard should be provided.

An APZ provides for; minimal separation for safe firefighting, reduced radiant heat, reduced influence of convection driven winds, reduced ember viability and dispersal of smoke. The APZ consists of an Inner Protection Area (IPA) and Outer Protection Area (OPA). The IPA is an area closest to the buildings that incorporates defendable space and is used for managing heat intensities at the building surface. The OPA is positioned adjacent to the hazard and the purpose of the OPA is to reduce the potential length of flame by slowing the rate of spread, filtering embers and suppressing the crown fire.

NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 provides that a defendable space is.

An area adjoining an asset that is managed to reduce combustible elements and is free from constructed impediments. It is a safe working environment in which active firefighting can be undertaken to defend the structure, before and after the passage of a bush fire.

The following assessment of APZ requirements which are relevant to the proposed Church development is provided as follows.

(i) Special Fire Protection Purpose Developments

It is noted that places of public assembly developments, (including churches), require APZ's in accordance with Special Fire Protection Purposes (SFPP) requirements of Chapter 6 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.

APZ's in SFPP situations must be such that radiant heat levels of greater than 10kW/m² will not be experienced by occupants or emergency workers entering or exiting a building.



The relevant performance criteria and acceptable solutions for APZ's for developments which are subject to the SFPP requirements are provided as follows.

Table 4 – APZ Performance Requirements (SFPP Developments)

Performance Criteria		Acceptable Solutions
Intent of measures: to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.		
The intent may be achieved where:		
Radiant heat levels of greater than 10kW/m ² (calculated at 1200K) will not be experienced on any part of the building.		The building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1.
APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.		APZs are located on lands with a slope less than 18 degrees.
APZs are managed and maintained to prevent the spread of fire to the building. The APZ is provided in perpetuity.		The APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site; APZ are wholly within the boundaries of the development site; and Other structures located within the APZ need to be located further than 6m from the refuge building.

In this regard Tables 6.8a and A1.12.1 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 provide that the following APZ's would be applicable to the proposed Church development on the basis of it being SFPP development.

Table 5 - Asset Protection Zone Requirements (PfBP 2019)

DIRECTION OF HAZARD	VEGETATION TYPE	SLOPE	IPA	OPA	TOTAL REQUIRED APZ	MINIMUM APZ ACHIEVABLE (to SFPP Buildings)	COMPLIANCE (with Minimum APZ Requirements)
North	Grasslands	3° - 4° Down slope	40m	-	40m	>40m**	
South/South east	Wet Sclerophyll Forest	2° - 3° Down slope	54m	25m	79m	Minimum 79m**	

****Note: includes the John Oxley and Annabella Drives road reserves to the north and south of proposed development**

Having regards to the above it is considered that the minimum required Asset Protection Zones can be provided to the proposed Church development in compliance with the acceptable solutions contained in Tables 6.8a and A1.12.1 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.

Compliance with the minimum required APZ's is indicated in **Appendix 3** of this report.

It is further noted that the above assessment of APZ requirements does not take into account the significant topographic shielding which will be available to the proposed development by virtue of the ridgeline crest which is located at distance to the south of the proposed development.

Based upon the proposed development design it is considered that the intent of the requirement for the provision of Asset Protection Zones as required by Chapter 6 of NSW Rural Fire Services, *Planning for Bushfire Protection*, 2019 can be satisfied for the proposed Church development.

3.1.2 Defendable Space/Asset Protection Zone Management

The minimum required APZ areas as provided for in **Table 4** above, must be provided and managed so as to comply with the standards which are applicable to Asset Protection Zones as follows.

(i) Inner Protection Area (IPA)

An IPA should provide a tree canopy cover of less than 15% and should be located greater than 2 metres from any part of the roofline of a building.

Garden beds of flammable shrubs are not to be located under trees and should be no closer than 10m from an exposed window or door.

Trees should have lower limbs removed up to a height of 2 metres above the ground.

(ii) Outer Protection Area (OPA)

An OPA should provide a tree canopy cover of less than 30% and should have the understorey managed (mowed) to treat all shrubs and grasses on an annual basis in advance of the fire season (usually September).

In this regard, it will be necessary to provide and maintain for the life of the proposed Church development the minimum Asset Protection Zones as required by **Table 5** of this report.

3.1.3 Operational Access and Egress

Access to and from the proposed Church development is to be via private access road/carparking infrastructure which connects with Annabella Drive which already adjoins the subject site along its western boundary. A secondary access road connection will also be provided to the Annabella Drive extension which will bisect the southern central portion of the subject site. The existing and proposed sections of Annabella Drive are and will be bitumen sealed, all weather, two-wheel drive public through roads which provide for alternatives of travel to and from the subject site and proposed development.



Current eastern extent of Annabella Drive immediately to the east of the subject site



Proposed path of Annabella Drive through the central portion of the subject site



**Annabella Drive
immediately to the
west of the
subject site**

Travel to the north from the proposed development along Annabella Drive for approximately 100m provides for connection with John Oxley Drive which is the major connecting road in the locality. It is noted that whilst John Oxley Drive adjoins the northern boundary of the subject site no vehicular access is permitted to the subject site from this road.



**John Oxley Drive
immediately to the
north of the
subject site**


It is noted that the presence of John Oxley Drive and the future extension of Annabella Drive across the southern central portion of the subject site provides for a perimeter road approach to the identified areas of hazard vegetation.

It is further noted that the internal access roads, carparking areas and supporting infrastructure associated with the proposed Church development are positioned so as to separate the areas of Forest hazard vegetation in the southern aspect from the proposed Church development buildings.


Movement to and from the proposed Church development will therefore be predominately from the east and west from areas protected from the impacts of bushfire.

An assessment of compliance of the proposed development with the relevant access provisions of Table 6.8b of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 is provided as follows.

Table 6 - Acceptable Solutions (Access Roads)

Intent of measures: to provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area.		
Performance Criteria	Acceptable Solutions	Compliance Comment
The intent may be achieved where:		
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	<p>SFPP access roads are two-wheel drive, all-weather roads.</p> <p>Access is provided to all structures.</p> <p>Traffic management devices are constructed to not prohibit access by emergency services vehicles.</p> <p>Access roads must provide suitable turning areas in accordance with Appendix 3; and</p> <p>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.</p>	<p> Design of all internal roads to comply where relevant. Specifically.</p> <ul style="list-style-type: none"> • access roads are two-wheel drive, all-weather roads. • Design provides for access to all structures. • Design provides for 'through road' outcome with no dead ends. • Road design is based upon two-way movement of vehicles. <p>The location of the car park in the central portion of the subject site provides for high levels of access to the proposed buildings on the subject site.</p> <p>Additionally, the presence of John Oxley Drive to the north of the subject site and Annabella Drive to the west of the church buildings also provides for high levels of access to the proposed buildings.</p> <p>Annabella Drive to the south of the proposed development and John Oxley Drive to the north will act as perimeter roads to the areas of bushfire hazard vegetation which are relevant</p>

		to the proposed development. The presence of access driveways onto Annabella Drive to the south and west of the subject site provides alternative options for travel to and from the proposed development.
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.	✓ Design of all internal roads to comply where relevant
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. Hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005; and	✓ Design of all internal roads to comply where relevant
Perimeter Roads		
Perimeter access roads are designed to allow safe access and egress for 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. Minimum 8m carriageway width kerb to kerb. Parking is provided outside of the carriageway width. 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 degrees and average grade of not more than 10 degrees. The road crossfall does not exceed 3 degrees. A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.	✓ The future design and construction of the extension of Annabella Drive across the southern central portion of the subject site is to comply where relevant.

Non-Perimeter Roads		
Non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating.	<p>Minimum 5.5m carriageway width kerb to kerb.</p> <p>Parking is provided outside of the carriageway width.</p> <p>Hydrants are located clear of parking areas.</p> <p>There are through roads, and these are linked to the internal road system at an interval of no greater than 500m.</p> <p>Curves of roads have a minimum inner radius of 6m.</p> <p>The maximum grade road is 15 degrees and average grade of not more than 10 degrees.</p> <p>The road crossfall does not exceed 3 degrees; and</p> <p>A minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.</p>	 Design of all internal roads to comply where relevant.

Based upon the separation of the proposed Church building infrastructure from the areas of bushfire hazard vegetation it is considered that the requirements of Chapter 6 of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 for the provision of access and egress to the proposed Church development can be satisfied.

3.1.4 Services - Water, Gas and Electricity

As set out in Section 6.8.3 of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019, Special Fire Protection Purpose developments in bushfire prone areas must maintain a water supply reserve dedicated to firefighting purposes.

Given that the proposed Church development provides for the occupation of the subject site by a large number of people, the proposed development will have access to the reticulated water supply, the extension of which will be required by Port Macquarie Hastings Council to service the proposed development. In this regard the provision of a reticulated town water supply to the proposed development will provide a water supply that is available for firefighting purposes.

It is however noted that in accordance with NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 the determination of a guaranteed water supply is to be made by the water supply authority where mains water supply is available. It is specifically noted that compliance requires the availability of hydrant coverage to the proposed development.


Electricity supply is available and is available for connection to the proposed development. Reticulated gas services are not available to the site; however, any reticulated or bottled gas supply is to be installed and maintained in accordance with AS1596 and the requirements of the relevant authorities. Metal piping is to be used. All fixed gas cylinders are to be kept clear of all flammable materials to a distance of 10m and shielded on the hazard side of the installation.

If gas cylinders need to be kept close to a building, the release valves are to be directed away from the building and at least 2m away from any combustible material, so that they do not act as a catalyst to combustion. Connects to and from gas cylinders need to be metal. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.

The incorporation into the proposed development of the relevant provisions of the following acceptable solutions as provided for by Table 6.8c of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 will ensure compliance with the intent for the provision of services to the proposed Church development on the subject site.

Table 7 - Service Provision Requirements (PfBP 2019)

Intent of measures: to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.		
Performance Criteria	Acceptable Solutions	Compliance Comment
The intent may be achieved where:		
Water Supply		
An adequate water supply for firefighting purposes is installed and maintained.	Reticulated water is to be provided to the development, where available.	✓ Design of all services to comply where relevant.
Water supplies are located at regular intervals. The water supply is accessible and reliable for firefighting operations	Fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005; and Hydrants are not located within any road carriageway; and Reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.	✓ Design of all services to comply where relevant.
Flows and pressure are appropriate.	Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.	✓ Design of all services to comply where relevant.
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.	✓ Design of all services to comply where relevant.
Electricity Services		
Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	Where practicable, electrical transmission lines are underground. Where overhead, electrical transmission lines are proposed as follow: <ul style="list-style-type: none"> lines are installed with short pole spacing (30m), 	✓ Design of all services to comply where relevant.

	<p>unless crossing gullies, gorges or riparian areas; and</p> <ul style="list-style-type: none"> no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 <i>Guideline for Managing Vegetation Near Power Lines</i>. 	
Gas Services		
Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	<p>Reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used.</p> <p>All fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side.</p> <p>Connections to and from gas cylinders are metal.</p> <p>If gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion.</p> <p>Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.</p> <p>Above-ground gas service pipes external to the building are metal, including and up to any outlets.</p>	 Design of all services to comply where relevant.

3.1.5 Landscaping

Landscaping is a major cause of fire spread to buildings and therefore any future landscaping within the proposed development will need careful planning to produce gardens that do not contribute to the spread of a bushfire.

Appendix 4 of NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019, contains standards that are applicable to the provision and maintenance of landscaping. Any landscaping proposed to be undertaken in conjunction with the proposed development is to comply with the principles contained in Appendix 4 of NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019.

Compliance with Appendix 4 of **NSW Rural Fire Services, Planning for Bushfire Protection**, 2019, will satisfy the intent of the bush fire protection measures that are applicable to the provision of landscaping in conjunction with the proposed Church development on the subject site.

3.1.6 Emergency Evacuation Planning


It is considered that the location and nature of the subject development is such that evacuation may be required.


NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019 provides that evacuation prior to an emergency event may be a relevant bushfire threat management measure for the form of development which is the subject of this report.

In this regard an Emergency Evacuation Plan incorporating bushfire evacuation is required to be prepared for the proposed Church development prior to the occupation of the individual buildings.

The Emergency Management arrangements for the proposed development should reflect the relevant requirements of Clause 6.8.4 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019 and summarized as follows.

Table 8 – Emergency Management Planning Compliance Requirements

<i>Intent of measures: to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.</i>		
Performance Criteria	Acceptable Solutions	Compliance Comment
The intent may be achieved where:		
Ecotourism: A Bush Fire Emergency Management and Evacuation Plan is prepared	<ul style="list-style-type: none"> A Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan, and AS 3745:2010. For proposals in isolated or remote areas which involve large travel distances through bush fire prone vegetation, the following issues should be determined and addressed: <ul style="list-style-type: none"> the amount of travel likely to be generated during an emergency evacuation. the capacity of the broader road network to facilitate safe emergency evacuation. limitations/constraints inherent in the road system; and management of potential traffic conflicts (such as emergency vehicles versus evacuating members of the 	 To comply

	<p>public).</p> <ul style="list-style-type: none"> The Bush Fire Emergency Management and Evacuation Plan must consider a mechanism for the early relocation of occupants on days when adverse fire weather is notified, or adverse fire activity occurs in the local government area in which the development operates. <p>Note: A copy of the Bush Fire Emergency Management and Evacuation Plan shall be provided to the Local Emergency Management Committee for its information prior to occupation of the development.</p>	
Appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan	<p>An Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and detailed plans of all emergency assembly areas including onsite and off.</p> <p>Site arrangements as stated in AS 3745:2010 are clearly displayed, and an annually emergency evacuation is conducted.</p>	 To comply

The development and implementation of an Emergency Evacuation Plan as provided for in this report which encompasses the proposed Church development will provide for a bushfire threat management outcome which is consistent with the performance objectives of Chapter 6 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.

3.2 Construction of Buildings in Bushfire Prone Areas

3.2.1 General

It is noted that NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019 seeks to modify certain provisions of the AS 3959 – 2018 construction standard in particular the determination of the Bushfire Attack Levels which are relevant to residential buildings. In this regard in NSW the determination of Bushfire Attack Levels is to be in accordance with Appendix 1 of NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019 and not AS 3959 – 2018.

It is also noted that NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019 provides for modifications to some of the construction standards of AS 3959 – 2018 with these requirements prevailing over the requirements of the Australian Standard.

3.2.2 Bushfire Attack Levels

The following table indicates the Bushfire Attack Levels applicable to the proposed Church buildings.

Table 9 - Construction Standard Assessment for the Proposed Church Buildings

ASPECT	VEGETATION	SLOPE	DISTANCE TO HAZARD (AFTER APZ'S HAVE BEEN PROVIDED)	AS 3959-2018 BUSHFIRE ATTACK LEVEL (BAL)
North	Grasslands	3° - 4° Down slope	>40m	BAL 12.5
South/South east	Wet Sclerophyll Forest	2° - 3° Down slope	Minimum 79m	BAL 12.5

The information presented in the above table indicates that under the worst-case spatial separation scenario between the proposed Church buildings and areas of bushfire hazard vegetation, the proposed buildings would be subjected to a Bushfire Attack Level of BAL 12.5.

Having regard to the above it is considered that the BAL 12.5 construction requirements of AS3959 – 2018, as amended by NSW Rural Fire Services, ***Planning for Bushfire Protection***, 2019, are adequate and appropriate in the circumstances in relation to the proposed Church buildings as these construction requirements will appropriately respond to the level of bushfire attack which has been assessed as applicable for the subject site and proposed development.

3.2.3 Fences and Gates

Fences and gates may play a significant role in the vulnerability of structures during a bush fire. With regard to new fences and gates:

- All new fences in bush fire prone areas should be made of either hardwood or non-combustible material.
- Where the fence is within 6m of the building or in areas of BAL 29, they should only be made of non-combustible material.

4.0 REQUIREMENTS

The following requirements are provided in response to the proposed Church development of land known as Lot 22 DP 1296583, 171 John Oxley Drive, Port Macquarie, as provided for in **Appendix 2** of this report.

- (i) Asset Protection Zones are to be provided to the proposed development in accordance with Section 3.1.1 of this report, in particular **Table 5**.

In this regard all areas of the subject site to the north and including the proposed Annabella Drive road reserve must be created and managed at all times so as to comply with the standards which are applicable to Inner Protection Areas.

- (ii) The design and construction of the internal access road infrastructure which is required to service the proposed Church development is to comply with the acceptable solutions provided for in Table 6.8b of NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019.
- (iii) Water and other services are to be provided to the proposed development in accordance with the requirements detailed in Section 3.1.4 of this report.
- (iv) Adopt the landscaping principles in accordance with Section 3.1.5 of this report.

Compliance with Appendix 4 of **NSW Rural Fire Services, Planning for Bushfire Protection**, 2019, will satisfy the intent of the bush fire protection measures that are applicable to the provision of landscaping in conjunction with the proposed Church development on the subject site.

- (v) An Emergency/Evacuation Plan which is relevant to the occupation and operation of the Church development is to be prepared and implemented prior to the occupation of the proposed Church development buildings. The Emergency and Evacuation Plan is to comply with the relevant requirements of Clause 6.8.4 NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.
- (vi) The design and construction of the individual Church buildings is to comply with the BAL 12.5 Construction Requirements of AS 3959 – 2018 as modified by NSW Rural Fire Services, **Planning for Bushfire Protection**, 2019, refer to **Appendix 4** of this report
- (vii) With regard to new fences and gates:
 - a) All new fences in bush fire prone areas should be made of either hardwood or non-combustible material.
 - b) Where the fence is within 6m of the building or in areas of BAL 29, they should only be made of non-combustible material.

5.0 CONCLUSION

It is considered that the proposed Church development of land known as Lot 22 DP 1296583, 171 John Oxley Drive, Port Macquarie is at risk of bushfire attack; however, it is in our opinion that with the implementation of the bushfire threat reduction measures and consideration of the recommendations in this report, the bushfire risk is manageable for the proposed Church development.

With the implementation of the recommendations, it is considered that it will be possible for the proposed Church development to meet the applicable acceptable solutions as provided for in Chapter 6 of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2019.

This report is however contingent upon the following assumptions and limitations.

Assumptions

- (i) For a satisfactory level of bushfire safety to be achieved regular inspection and testing of proposed measures, building elements and methods of construction, specifically nominated in this report, is essential and is assumed in the conclusion of this assessment.
- (ii) There are no re-vegetation plans in respect to hazard vegetation and therefore the assumed fuel loading will not alter.
- (iii) It is assumed that the building works will comply with the DTS provisions of the NCC including the relevant requirements of Australian Standard 3959 – 20189.
- (iv) The vegetation characteristics of the subject site and surrounding land remain unchanged from that observed at the time of inspection.
- (v) The information contained in this report is based upon the information provided for review, refer to **Appendix 2**.

No responsibility is accepted for the accuracy of the information contained within the above plans.

Limitations

- (i) The data, methodologies, calculations and conclusions documented within this report specifically relate to the building and must not be used for any other purpose.
- (ii) A reassessment will be required to verify consistency with this assessment if there is building alterations and/or additions, change in use, or changes to the risk reduction strategy contained in this report

6.0 REFERENCES

NSW Rural Fire Services, **Planning for Bushfire Protection**, 2006

NSW Rural Fire Services, **Planning for Bushfire Protection**, 2001

AS 3959-2009 **Construction of Buildings in Bushfire Prone Areas**

Keith David 2004, Ocean **Shores to Desert Dunes, The Native Vegetation of New South Wales and the ACT**, Department of Environment and Conservation

Luke, R H and A G Mc Arthur 1978, **Bushfires in Australia**, Australian Government Publishing Service Canberra

Victorian Department of Natural Resources and Environment and the Country Fire Authority 1999, **Fire in the Australian Landscape**, NRE and CFA

Geoffrey C, Lindenmayer D, Dovers S 2003, **Australia Burning, Fire Ecology, Policy and Management Issues**, CSIRO Publishing

Cheney P and Sullivan A 1997, **Grassfires, fuel, weather and fire behaviour**, CSIRO Publishing

Bushfire CRC, 2006, **Research and Investigation into the Performance of Residential Boundary Fencing Systems in Bushfires**, CSIRO Manufacturing & Infrastructure Technology, Fire Science & Technology Laboratory, Bushfire Research

Disclaimer

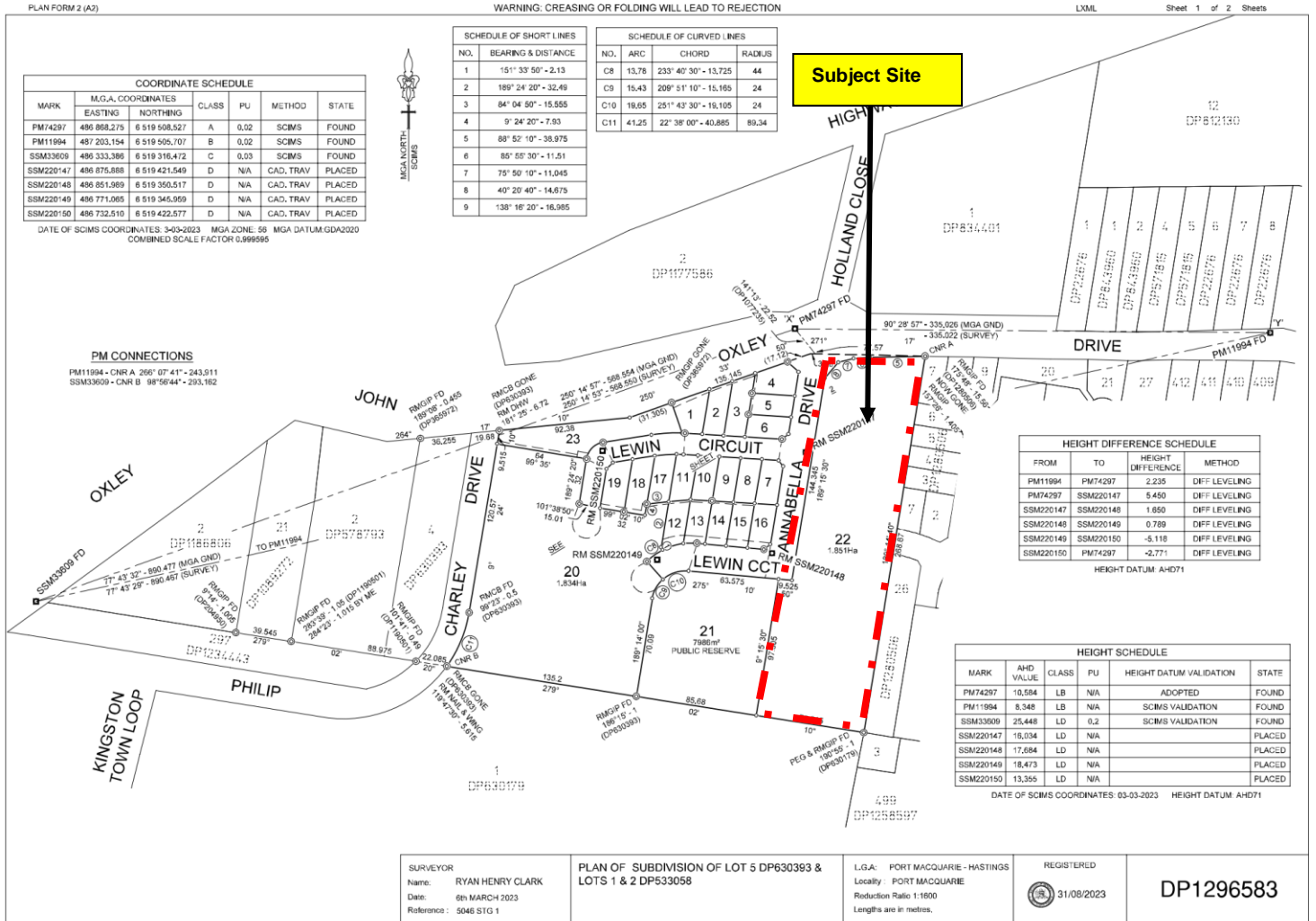
The findings referred to in this report are those which, in the opinion of the author, are required to meet the requirements of NSW Rural Fire Service, **Planning for Bushfire Protection**, 2006. It should be noted that the Local Authority having jurisdiction for the area in which the property is located may, within their statutory powers, require different, additional or alternative works/requirements to be carried out other than those referred to in this report.

This report has been prepared partially on information provided by the client. Information provided by the client in respect of details of construction.

The author denies any legal liability for action taken as a consequence of the following:

- The Local Authority requiring alternative or additional requirements to those proposed or recommended in this report.
- Incorrect information, or mis-information, provided by the client with regard the proposed building which are in good faith included in the strategies proposed in this report and later found to be false.

APPENDIX 1 Subject Site





PRELIMINARY DA SUBMISSION

A1



REV	DATE	DESCRIPTION	
0-00	Work 0	CONCEPT DESIGN	4
	Project		
C	12/12/2019	CONCEPT DESIGN	4
B	09/01/2019	CONCEPT DESIGN	4
A	26/02/2018	CONCEPT DESIGN	4

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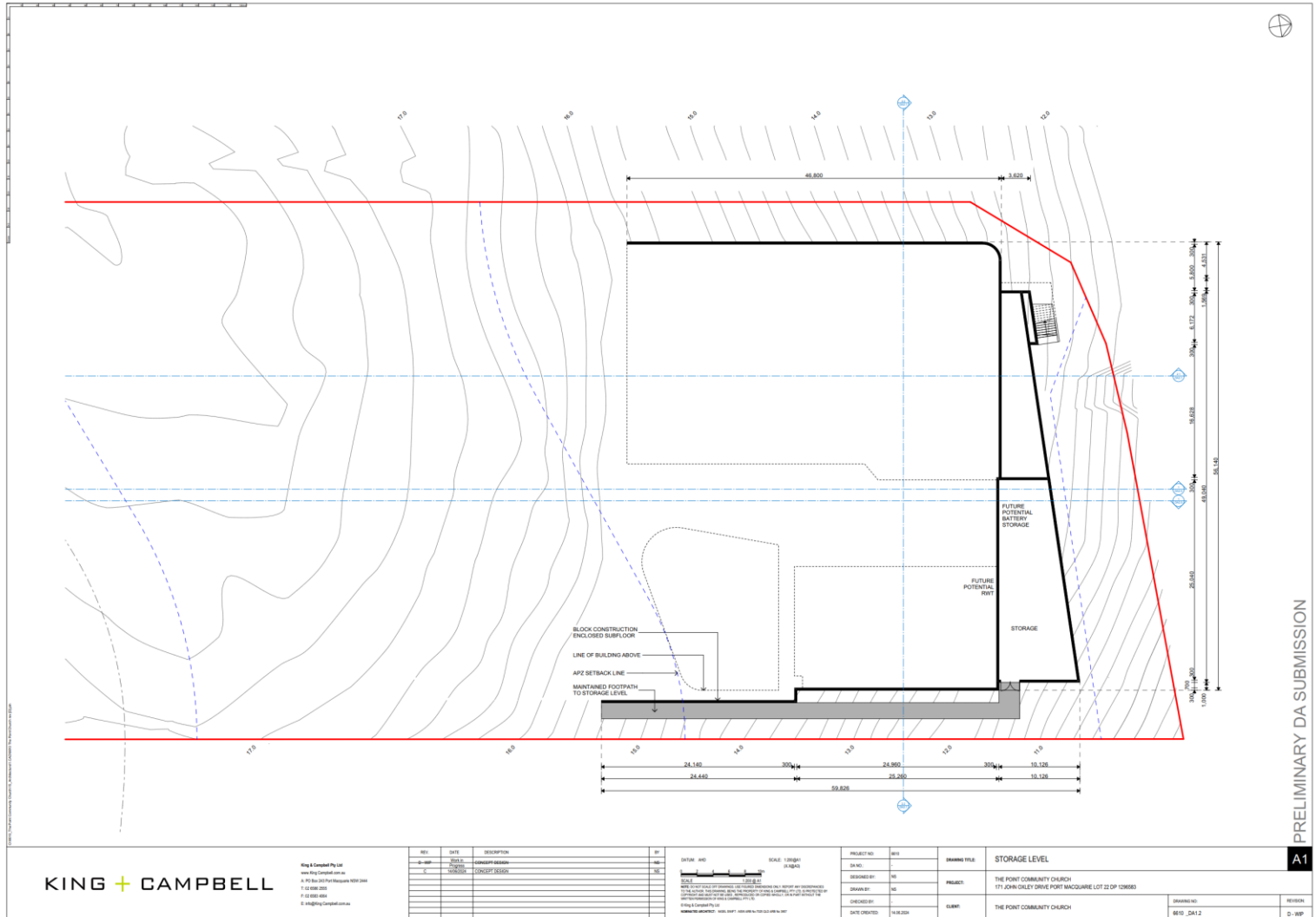
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REGISTERED ARCHITECT: 14053, 14057, 14058 AND 14059 (A1 AND A2)

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OR NO.:	-	
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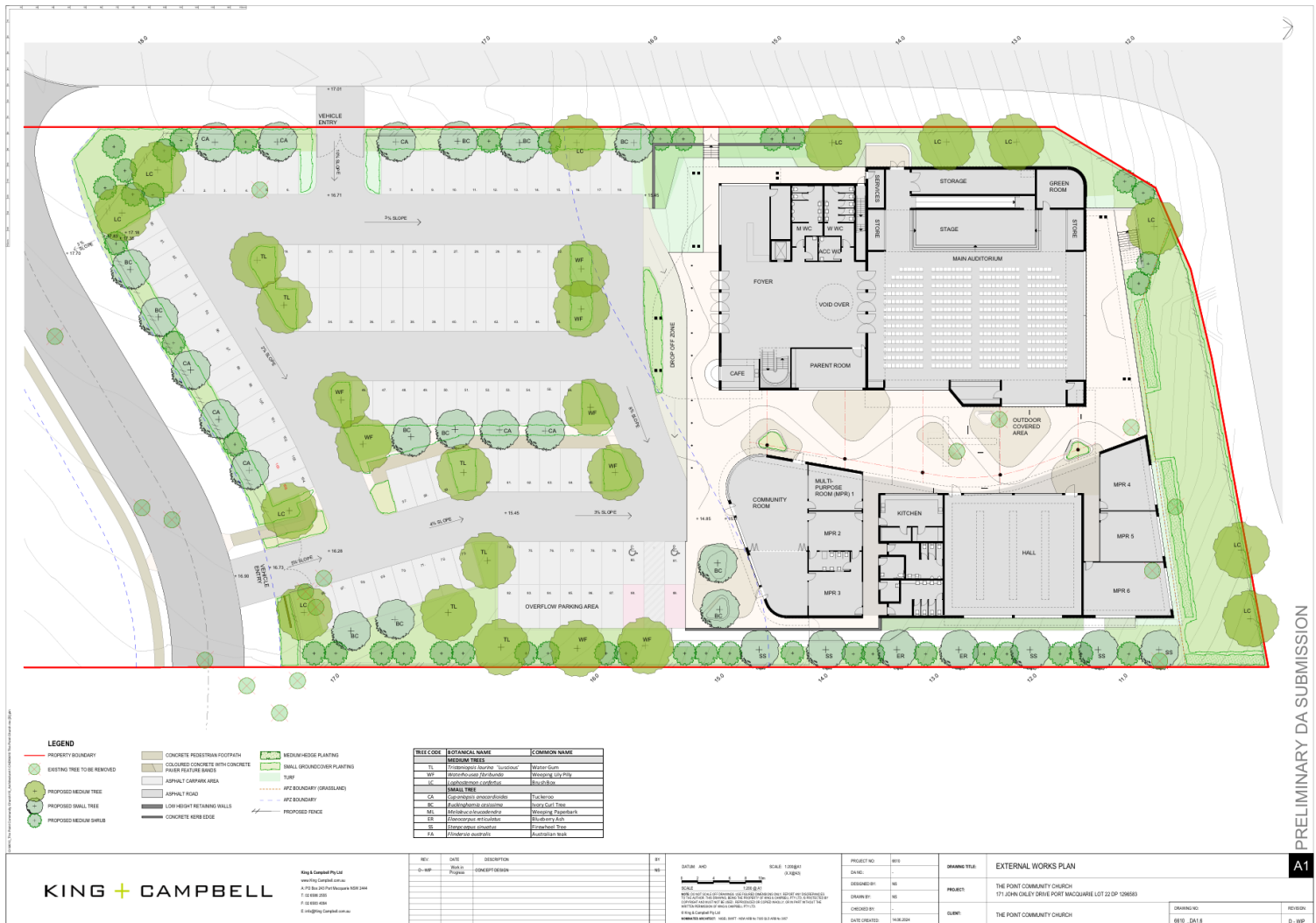
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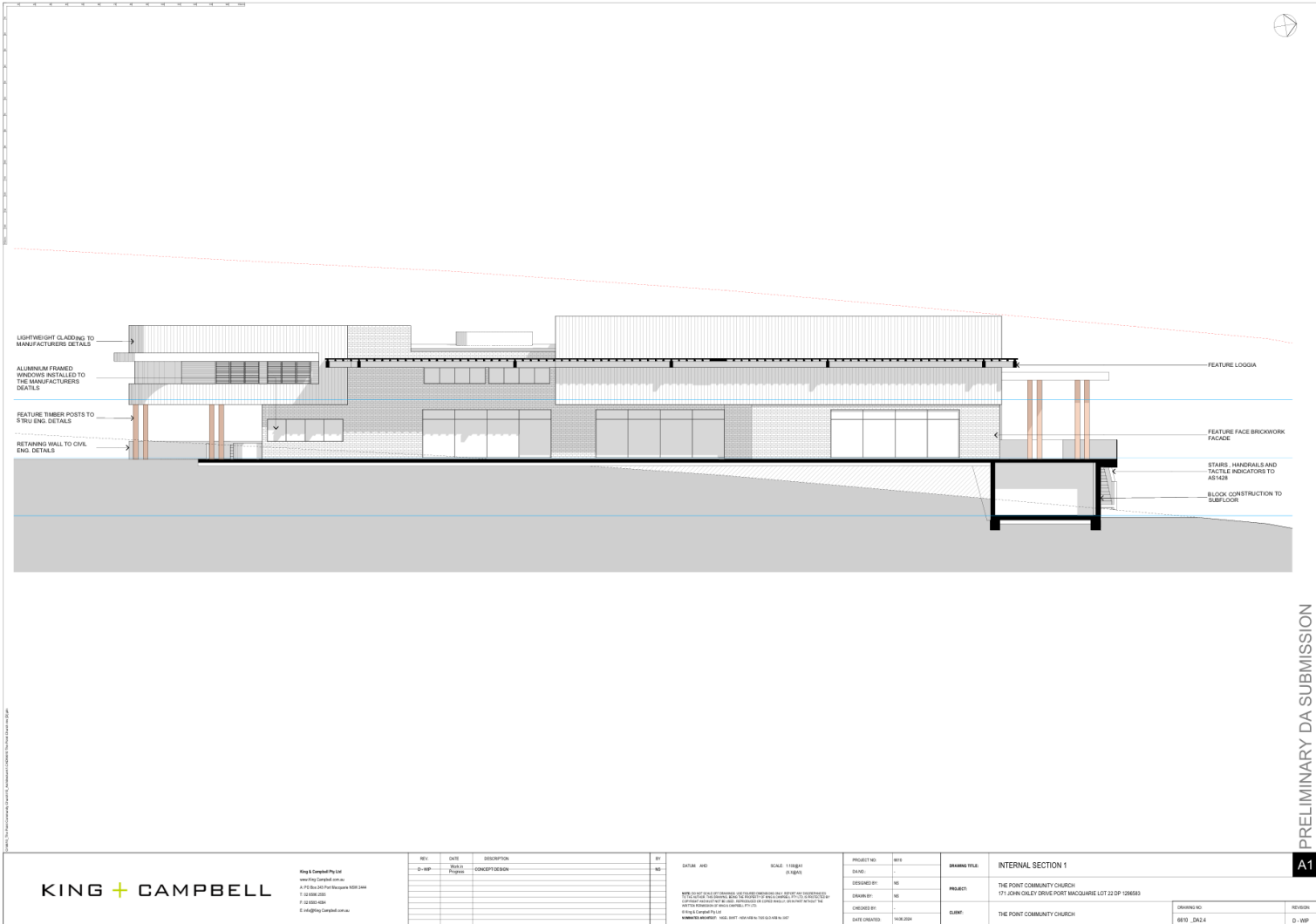


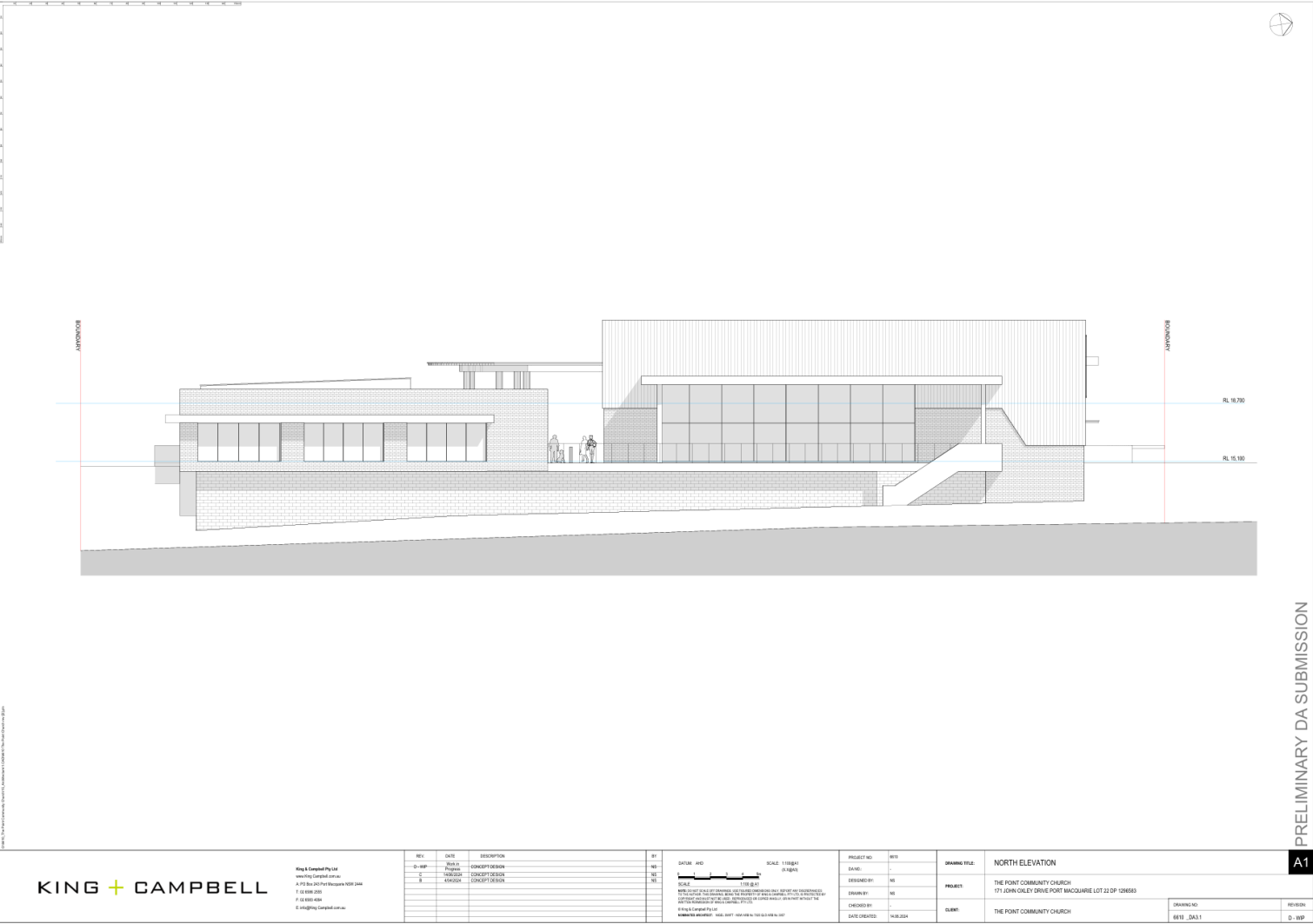




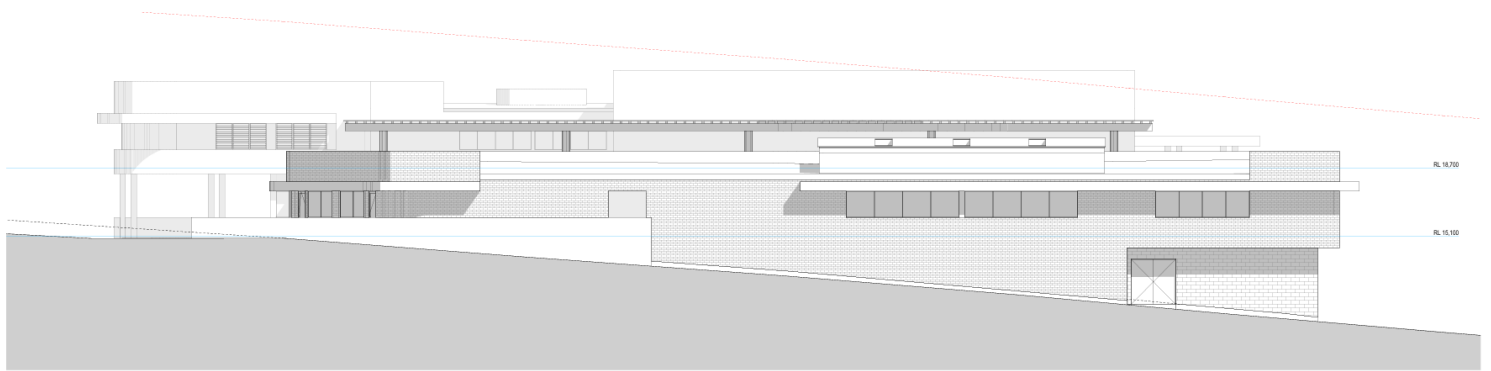








<div><div>KING + CAMPBELL</div><div><div>King & Campbell Pty Ltd</div><div>www.kingandcampbell.com.au</div><div>A 170 Box 200 Port Macquarie NSW 2444</div><div>T 02 6566 2200</div><div>F 02 6566 4444</div><div>E k+c@kingandcampbell.com.au</div></div></div>	REV	DATE	DESCRIPTION	BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	D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PRELIMINARY DA SUBMISSION

A1

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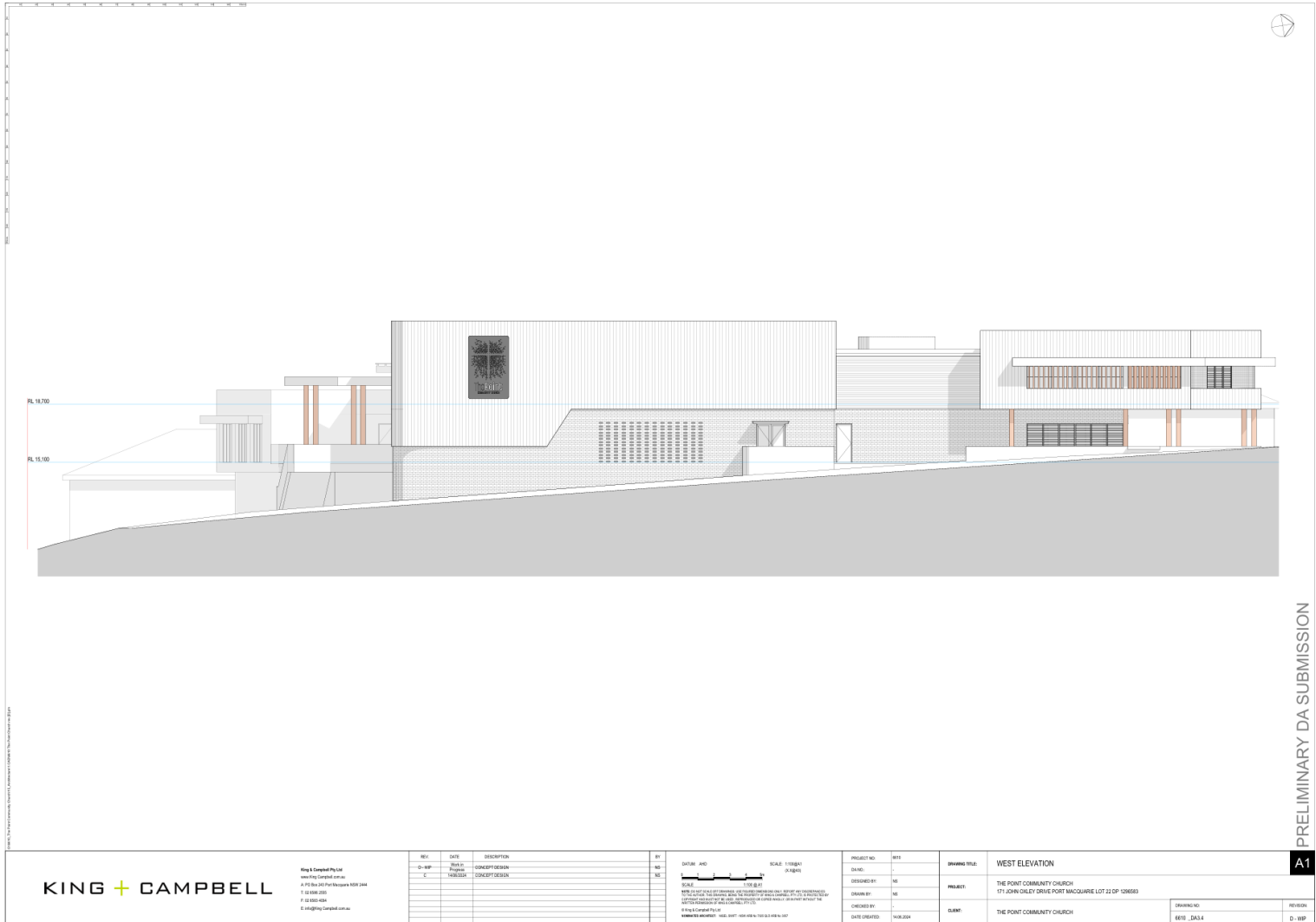
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DATE: 2024/09/10	SCALE: 1:1000

PROJECT NO:	NS
DATE:	2024/09/10
DESIGNED BY:	NS
DRAWN BY:	NS
CHECKED BY:	NS
DATE: 2024/09/10	2024/09/10

DRAWING TITLE:	EAST ELEVATION			A1
PROJECT:	THE POINT COMMUNITY CHURCH 171 JOHN OXLEY DRIVE PORT MACQUARIE LOT 22 DP 128583			
CLIENT:	THE POINT COMMUNITY CHURCH			
	DRAWING NO:	REVISION:		
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PRELIMINARY DA SUBMISSION

A1

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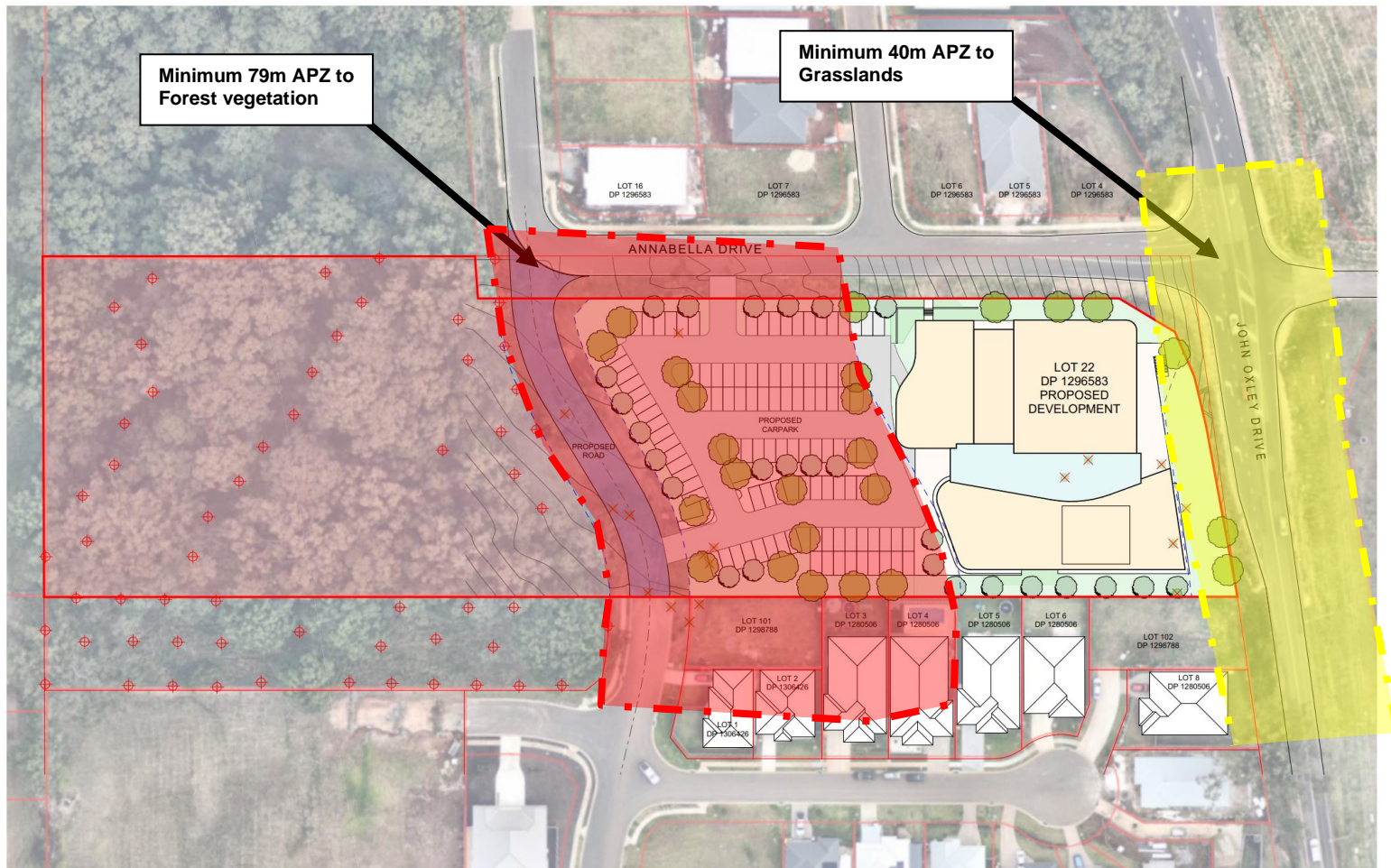
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REV	DATE	DESCRIPTION	BY
0 - RFP	Rev 1	CONCEPT DESIGN	MS
1	2024/09/04	CONCEPT DESIGN	MS

DATE: 04/09/2024 SCALE: 1:1000
DRAWN BY: MS
CHECKED BY: MS
DATE CREATED: 04/09/2024

PROJECT NO.	001	DRAWING TITLE:	WEST ELEVATION
DATE:	04/09/2024	PROJECT:	THE POINT COMMUNITY CHURCH 171 JOHN OXLEY DRIVE PORT MACQUARIE LOT 22 DP 1205653
DESIGNED BY:	MS	CLIENT:	THE POINT COMMUNITY CHURCH
DRAWN BY:	MS	DRAWING NO:	001A
CHECKED BY:	MS	DATE:	04/09/2024
DATE CREATED:	04/09/2024	REV:	0 - RFP

APPENDIX 3 APZ Compliance Concept



INDICATIVE ONLY
NOT TO SCALE

APPENDIX 4

PBP 2019 Amendments to AS 3959 – 2018

7.5.2 NSW State Variations under G5.2(a)(i) and 3.10.5.0(c)(i) of the NCC

Certain provisions of AS 3959 are varied in NSW based on the findings of the Victorian Bush Fires Royal Commission and bush fire industry research.

The following variations to AS 3959 apply in NSW for the purposes of NSW G5.2(a)(i) of Volume One and NSW 3.10.5.0(c)(i) of Volume Two of the NCC;

- clause 3.10 of AS 3959 is deleted and any sarking used for BAL-12.5, BAL-19, BAL-29 or BAL-40 shall:
 - be non-combustible; or
 - comply with AS/NZS 4200.1, be installed on the outside of the frame and have a flammability index of not more than 5 as determined by AS 1530.2; and
- clause 5.2 and 6.2 of AS 3959 is replaced by clause 7.2 of AS 3959, except that any wall enclosing the subfloor space need only comply with the wall requirements for the respective BAL; and
- clause 5.7 and 6.7 of AS 3959 is replaced by clause 7.7 of AS 3959, except that any wall enclosing the subfloor space need only comply with the wall requirements for the respective BAL; and
- fascias and bargeboards, in BAL-40, shall comply with:
 - clause 8.4.1(b) of AS 3959; or
 - clause 8.6.6 of AS 3959.

7.5.3 Construction in the flame zone

The flame zone is the area that has significant potential for sustained flame contact during a bush fire. The flame zone is determined by the calculated distance at which the radiant heat of the design fire exceeds 40kW/m².

The NCC references AS 3959 and the NASH Standard. The NSW variation to the NCC excludes both AS 3959 and the NASH Standard as a Deemed to Satisfy solution for buildings that are required to be constructed to BAL-FZ as defined in AS 3959.

Although Chapter 9 of AS 3959 and the NASH Standard has not been adopted, they should still be used as a basis for a performance based solution demonstrating compliance with the performance requirements of the NCC and PBP for construction in the flame zone.

All flame zone developments should be sited and designed to minimise the risk of bush fire attack. Buildings should be designed and sited in accordance with appropriate siting and design principles to ensure the safest protection from bush fire impacts.