



REVIEW OF ENVIRONMENTAL FACTORS

Change of Use of Portable
Administration Buildings to Classrooms

Pacific Coast Christian School

www.epmprojects.com.au
Level 13, 67 Albert Avenue
Chatswood NSW 2067

Tel. 02 9452 8300

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Date	Author	Rev. No.	Scope of Revision
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Contents

1. INTRODUCTION4

1.1. Overview.....4

1.2. School Information.....4

1.3. Scope of Works.....4

1.4. Certification.....5

1.5. Architectural Plans.....6

1.6. Site Information.....6

2. PROPOSED WORKS8

2.1. Justification of Proposal.....8

2.2. Definition of Proposed Works.....8

2.3. Summary of Proposed Works.....8

3. STATUTORY FRAMEWORK 10

3.1. Assessment against relevant provisions of T&I SEPP..... 10

3.2. Assessment against other relevant SEPPs..... 12

3.3. Tweed Local Environmental Plan 2014..... 13

3.4. Development Control Plans..... 13

3.5. Additional Relevant Legislation..... 14

3.6. Consultation and Notification..... 14

4. ENVIRONMENTAL IMPACT ASSESSMENT..... 17

4.1. Site Constraints..... 17

4.2. Environmental Risk..... 19

4.3. Section 171 Considerations..... 19

5. CONCLUSION 22

6. MITIGATION MEASURES..... 23

6.1. Authorised Documents..... 23

6.2. Mitigation Measures..... 23

GLOSSARY OF TERMS..... 25

APPENDIX A – ARCHITECTURAL PLANS 26

APPENDIX B – CERTIFICATE OF TITLE AND DEPOSITED PLAN 27

APPENDIX C – SECTION 10.7 PLANNING CERTIFICATE..... 28

APPENDIX D – BUSHFIRE RISK ASSESSMENT..... 29

APPENDIX E – BUSHFIRE SAFETY AUTHORITY 30

APPENDIX F – FLOOD IMPACT STATEMENT 31

APPENDIX G – WASTE MANAGEMENT PLAN..... 32

APPENDIX H – BCA STATEMENT 33

APPENDIX I – FIRE ENGINEERING REPORT 34

1. INTRODUCTION

1.1. Overview

This Review of Environmental Factors (REF) has been prepared by EPM Projects for Pacific Coast Christian School (PCCS). The Review relates to the proposed change of use of three (3) portable admin buildings to classrooms at Pacific Coast Christian School, located at 3A Acacia Street, Tweed Heads South (the site).

This REF has been prepared pursuant to the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP).

In addition, this document also considers the Department of Planning and Environment's *Guidelines for Division 5.1 Assessments* (Dated: June 2022) as required under Section 170 of the EP&A Regulation, together with the *NSW Code of Practice for Part 5 Activities for Registered Non-Government Schools* (Dated: August 2017).

The proposal is identified pursuant to Section 3.37(1)(a)(ii) of the T&I SEPP as the "operation of... a portable classroom (including a modular or prefabricated classroom) that is not more than 2 storeys high." The proposal is thus capable of being carried out as 'development permitted without consent' pursuant to the provisions of Part 3.4 Schools – specific development controls, of this instrument.

This REF concludes that by adopting the mitigation measures identified, that any environmental impacts associated with the project will be negligible.

1.2. School Information

Detail	Description
School Name	Pacific Coast Christian School
School Address	3A Acacia Street, Tweed Heads South
Lot(s) and DP(s)	Lot 1, Deposited Plan (DP) 1247160
Local Government Area	Tweed Shire Council
Location of Proposed Works	North of the playing fields, near the centre of the school site
Land Owner	Pacific Group of Christian Schools Limited
Easements and Covenants	Reservations and conditions in favour of the crown. Easements to drain water, sewage, multi-purpose electrical installation and underground powerlines. Mortgage to Commonwealth Bank of Australia.

1.3. Scope of Works

Detail	Description
What are the proposed works?	Change of use of portable admin buildings to classrooms.
Does the project involve works outside the School establishment?	No – the proposed works are within the existing school boundary.
Will the project result in any increase in student numbers?	No

1.4. Certification

This REF provides a true and fair review of the Proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposal. The information contained in this REF is neither false nor misleading.

Person who prepared the REF:	Annabel Johnson
Position and Qualifications:	Senior Planner BSc (Hons) Geography, UK MSc Urban Planning, UK Member of the Royal Town Planning Institute (UK)
Person who reviewed the REF:	Stephen Earp
Position and Qualifications:	Head of Planning B. Planning (Hons), UWS Registered Planner Plus (EIA)
Signature:	Date:
	

I have examined this REF and the Certification and accept the REF on behalf PCCS.

Name of CEM Reviewing Officer:	
Position:	
Signature:	Date:

I accept this REF on behalf of PCCS, as a public authority (pursuant to Schedule 1 of the EP&A Regulation) and determine that the Proposal can proceed subject to the mitigation measures in **Section 6** being implemented before the carrying out of works and occupation of the facilities.

Name of Delegated Officer:	
Designation:	
Signature:	Date:

1.5. Architectural Plans

All Architectural Plans prepared by Stanton Dahl Architects and ATCO which detail the proposed works are listed below and are provided at **Appendix A**.

Drawing Name	Drawing No.	Issue	Date
Stanton Dahl Architects			
Site Existing Proposed Demountable	MP01a	01	06/11/2023
ATCO			
Site Plan	231013SP-A100	B	22/11/2023
Plan	231013SP-A200	B	22/11/2023
Plan - Roof	231013SP-S210	B	22/11/2023
Plan – Covered Walkway	231013SP-A220	B	22/11/2023
Plan - Access	231013SP-A230	B	22/11/2023
Section - Access	231013SP-A231	B	22/11/2023
Elevations	231013SP-A300	B	22/11/2023
Foundation Plan	231013SP-A400	C	22/11/2023

1.6. Site Information

The subject site is legally known as Lot 1 DP 1247160 and commonly referred to as 3A Acacia Street, Tweed Heads South. The irregular shaped allotment is approximately 3.8ha in area and has a frontage to Acacia Street to the north.

The site is located on the western side of Fraser Drive and bounded by low density residential dwellings to the northern and eastern boundaries. To the south of the site lies two (2) estate developments of eighty three (83) and forty five (45) residential dwellings, owned by Fraser Cove Residential Estate and The Villas Fraser Cove respectively. A masterplan for the site also includes a convenience store at the entryway of the estate. It is unknown when the estate development is likely to be completed. Immediately to the west of the site are playing fields associated with Pacific Coast Christian School and to the south-east, opposite Fraser Drive is the Pioneer Country Club which the estate developments will sit adjacent to.

Pacific Coast Christian School campus provides co-educational facilities for preparatory to senior school age students. The campus comprises various specialist classrooms, GLAs, administration areas and sporting facilities. The vehicular entrance to the school is via two (2) driveways from Acacia Street.

A Certificate of Title and Deposited Plan for the allotment subject to the proposed works are included at **Appendix B**. The proposed works would be located to the north of the playing fields, near the centre of the site as shown in **Figure 1**.



Figure 1: Aerial photograph of site indicating location of proposed works (in yellow) (source: Nearmap, dated 28 December 2023).

2. PROPOSED WORKS

2.1. Justification of Proposal

PCCS is proposing the change of use of the three (3) portable administration buildings to classrooms. The buildings were installed for staff use as exempt development under the T&I SEPP, however it has become apparent that the arrangement of teaching spaces within the School required these buildings to be classrooms. While no changes to overall student capacity is proposed, these spaces are required to resolve difficulties and challenges with existing classroom arrangements.

2.2. Definition of Proposed Works

The proposed works are identified as development permitted without consent pursuant to Section 3.37(1)(a)(ii) of the T&I SEPP, and so can be carried out under Part 5 of the EP&A Act.

For the purposes of Part 5 of the EP&A Act, the proposal is defined as 'works or an 'activity'. Any reference to 'development', 'works or an 'activity' is considered to have the same meaning for the purposes of this assessment.

2.3. Summary of Proposed Works

The proposal entails the change of use of three (3) administration buildings to classrooms, on the northern side of the playing fields near the centre of the site (**Figures 2, 3 and 4**). Architectural Plans have been prepared by Stanton Dahl Architects and ATCO (**Appendix A**) which identify the location and layout of the buildings within the PCCs site.

No physical works are proposed as part of the proposed operation of the buildings for the purposes of classrooms.



Figure 2: Extract of Site Plan (source: ATCO).

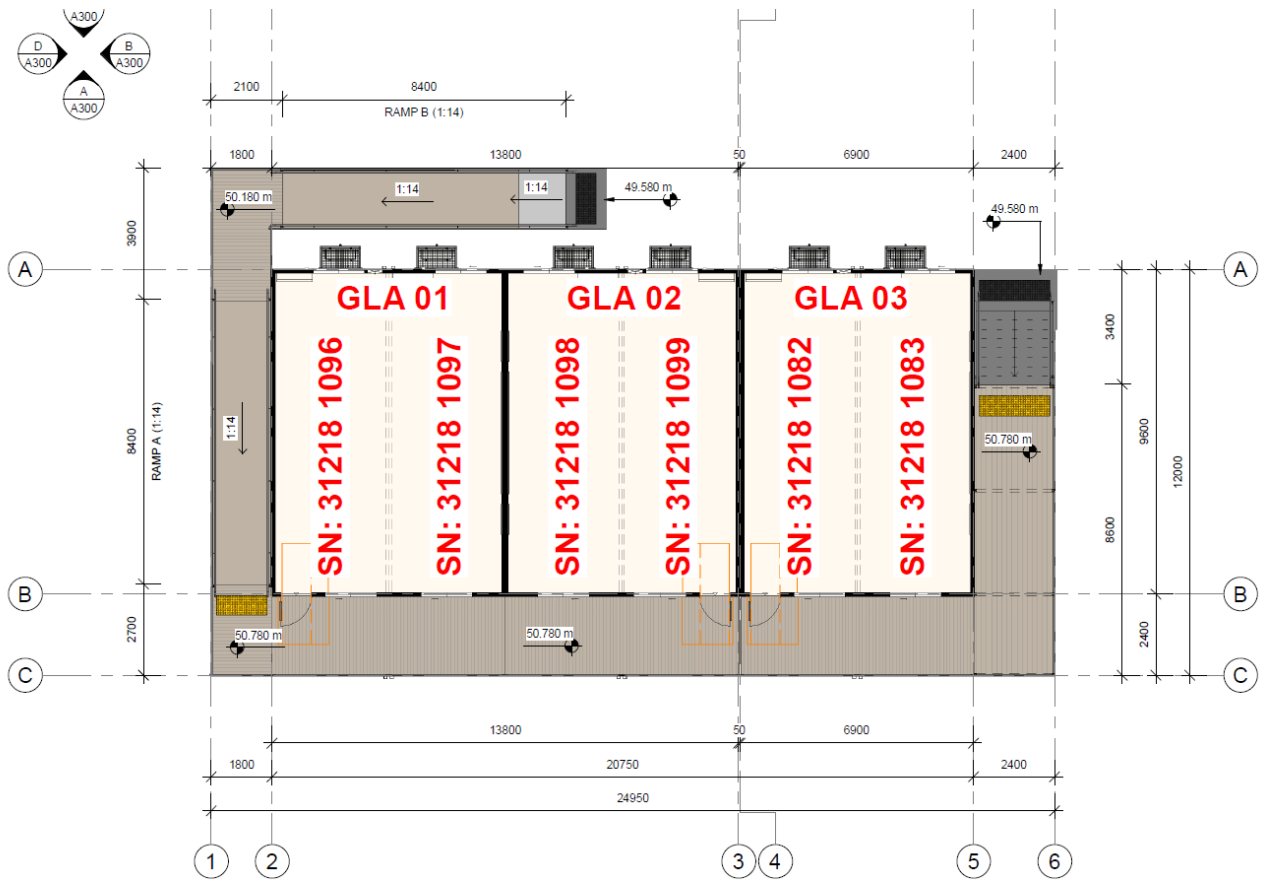


Figure 3: Extract of Plan (source: ATCO).

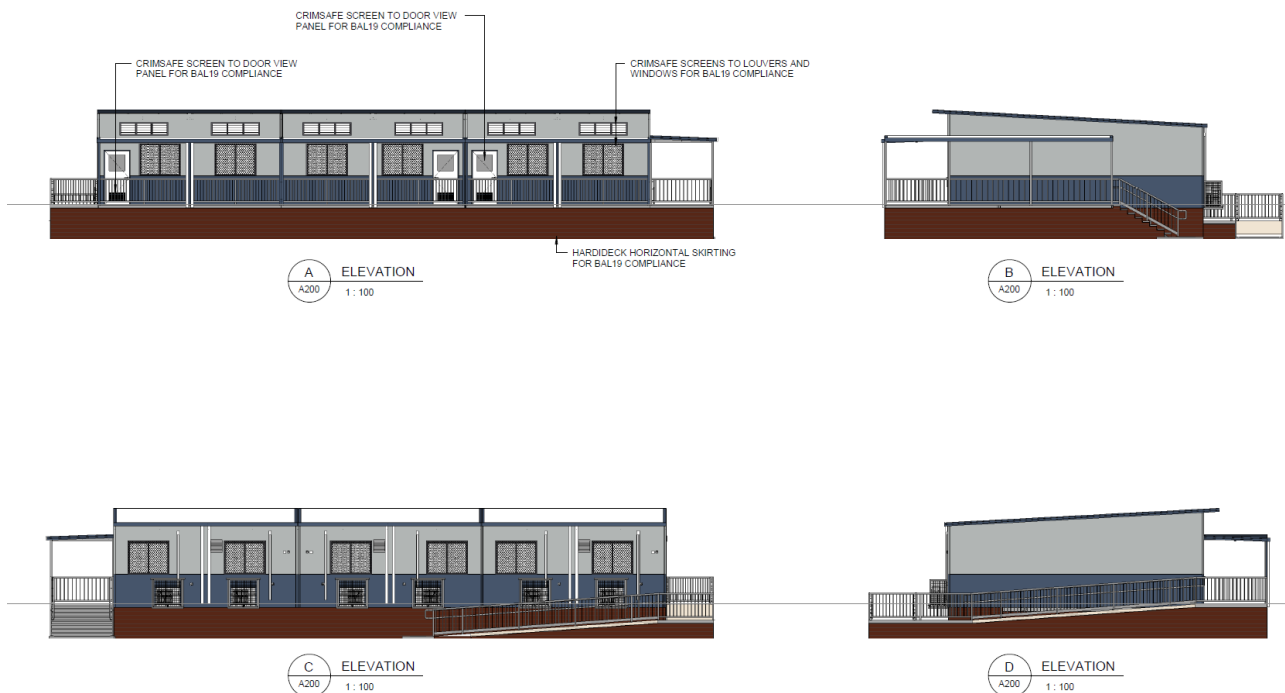


Figure 4: Extract of elevation (source: ATCO).

3. STATUTORY FRAMEWORK

The works as described within **Section 2.3** of this Report are required to be assessed “to the fullest extent possible” against the applicable statutory framework pursuant to Part 5 of the EP&A Act and must take into consideration the environmental factors set out under Section 171 of the EP&A Regulation.

This section of the REF will provide an overview of the planning context for the site, together with an assessment against the relevant matters for consideration.

The following table provides an overview of the planning context for the portion of the site subject to the proposal.

Planning Matter	Assessment
Local Environmental Plan (LEP)	Tweed Local Environmental Plan 2014
Zoning	R1 General Residential
Are the works being carried out in a prescribed zone?	Yes, the R1 zone is a prescribed zone pursuant to Section 3.34 of T&I SEPP.
Permissibility	Development for the purpose of a school is permissible with consent in the R5 zone under Section 3.34 of T&I SEPP.
FSR Control	The site is mapped as having a floor space ratio of 2:1.
Acid Sulfate Soils	The site is mapped as containing Class 2 acid sulphate soils. This is discussed further below.
HOB Control	The site is mapped as having a building height restriction of 13.6m.
Is the site ‘environmentally sensitive land’ under any environmental planning instrument?	No, however the site is identified as being within the “proximity area for Coastal Wetlands” under the Resilience and Hazards SEPP, discussed further below.
Does the site comprise bushfire prone land?	Yes – the site is mapped for Vegetation Buffer and Vegetation Category 1 and 3 (Figure 7). The location of the proposed works is within land mapped for Vegetation Buffer only. This matter is discussed further below.
Is the site listed as a Heritage Item or is it within a Heritage Conservation Area?	No
List any other environmental constraints identified as applying to the site	The site is a flood control lot. The site or part of the site is also within the flood planning area and subject to flood related development controls. This matter is discussed further below.

A copy of the Section 10.7(2)(5) Planning Certificate prepared by Tweed Shire Council, dated 11 April 2024 is provided as **Appendix C**.

3.1. Assessment against relevant provisions of T&I SEPP

The works are proposed to be carried out as development permitted without consent pursuant to the provisions of the T&I SEPP. Accordingly, an assessment of the proposal against the relevant provisions of the T&I SEPP is provided in the following table:

T&I SEPP – Relevant Provisions	Assessment	Complies
Part 3.2 General Division 1 - consultation and notification		
3.8 Consultation with Councils – development with impacts on council-related infrastructure or services	The works will not involve impacts on council-related infrastructure or services and therefore consultation is not required under this clause.	N/A
3.9 Consultation with Councils – Development with impacts on local heritage.	The site is not identified as a local heritage item. Therefore, notification of Tweed Shire Council is not required under this clause.	N/A

T&I SEPP – Relevant Provisions	Assessment	Complies
3.10 Notification of Councils and State Emergency Service – Development on Flood Liable Land	<p>The land is identified as being flood liable land, however s3.10(1) identifies that notification is required for all work “other than demolition of buildings or structures, or internal works to existing buildings”. The proposed works comprise only the change of use / operation of the building for the purpose of classrooms (no physical works), and involves effectively only internal use/works to existing buildings.</p> <p>Therefore, notification of Tweed Shire Council and the SES is not required under this clause.</p>	N/A
3.11 Consideration of Planning for Bush Fire Protection	<p>The land is mapped as comprising bushfire prone land (refer Figure 7 below). As discussed in Section 4.1 of this REF, the proposed development comprises development for a special fire protection purpose (SFPP) pursuant to s100B of the Rural Fires Act 1997, and requires consideration of Planning for Bush Fire Protection for the purposes of supporting a Bush Fire Safety Authority (BFSA) application.</p> <p>A Bushfire Risk Assessment prepared by Building Code & Bushfire Hazard Solutions Pty accompanies this application (Appendix D) which considers Planning for Bushfire Protection. The assessment concludes that subject to the recommended bushfire safety measures and consideration of the site-specific bushfire risk assessment, when combined, they will provide a reasonable and satisfactory level of bushfire protection to the proposed development. These outcomes are supported through a BFSA issued by the RFS on 3 April 2024 (Appendix E).</p>	Yes
3.12 Consultation with public authorities other than Councils	<p>The works will not trigger the requirement for consultation with any prescribed public authorities under this clause, including the requirement to consult with Transport for NSW (TfNSW) under s3.12(3)(a), being “development that will result in the school being able to accommodate 50 or more additional students”, as the proposed classrooms do not cater for any additional student enrolments, and are only providing capacity for 15 students per classroom (i.e. accommodation for 45 students).</p>	N/A
Part 3.4 Schools – specific development controls		
3.37 Schools – development permitted without consent		
(1) Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing or approved school	<p>The works are being carried out within the boundaries of an existing school being Pacific Coast Christian School.</p>	Yes
(a) construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of— (ii) a portable classroom (including a modular or prefabricated classroom) that is not more than 2 storeys high, or	<p>The proposed works for the change of use of the portable admin buildings to classrooms will remain no more than 2 storeys high.</p>	Yes
(2) Subsection (1) applies only if the development does not require an alteration of traffic arrangements, for example, a new vehicular access point to the school or a change in location of	<p>The proposed works will not require any alteration of traffic arrangements.</p>	Yes

T&I SEPP – Relevant Provisions	Assessment	Complies
<i>an existing vehicular access point to the school.</i>		
<i>(3) Subsection (1)(a) applies only if the development does not result in a prohibited increase in student or staff numbers.</i>	The proposed works will not result in an increase in student or staff numbers. The proposed classrooms do not cater for any additional student enrolments, and are only providing capacity for 15 students per classroom (i.e. accommodation for 45 students).	Yes
<i>(4) Nothing in this section authorises the carrying out of development in contravention of any existing condition of the development consent currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, car parking, vehicular movement, traffic generation, loading, waste management, landscaping or student or staff numbers.</i>	The proposed works will not cause the contravention of any existing condition of the development consent that is currently operating in relation to hours of operation, noise, car parking, vehicular movement, traffic generation, loading, waste management, landscaping or student and staff numbers.	Yes
<i>(6) This section does not apply to development for the purposes of campus student accommodation.</i>	The proposed works do not relate to development for the purposes of campus student accommodation.	Yes
3.38 Notification of carrying out certain development without consent		
<i>(1) This section applies to development to which section 3.37(1)(a) applies.</i>	The proposed works are being undertaken pursuant to section 3.37(1)(a) and therefore notification of the works has been carried out in accordance with Section 3.38 of the SEPP T&I. This is discussed further at Section 3.4 below.	Yes

3.2. Assessment against other relevant SEPPs

The site is identified on the Coastal Wetlands and Littoral Rainforests Area Map as being subject to the “proximity area for Coastal Wetlands” (**Figure 5**) under the provisions of State Environmental Planning Policy (Resilience and Hazards) 2021 (R&H SEPP). Section 2.8 of the R&H SEPP sets out the following provisions for development on land in proximity to coastal wetlands or littoral rainforest:

(1) Development consent must not be granted to development on land identified as “proximity area for coastal wetlands” or “proximity area for littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on—

(a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or

(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.

The above establish matters that must be considered before development consent is granted, and therefore do not strictly apply to the proposed works (which do not require development consent), however to ensure that the assessment has been carried out to the fullest extent possible, these provisions have been addressed as follows.

The proposed development involves only the operation / use of existing buildings for the purposes of classrooms, and therefore the proposal will not result in any impact on the biophysical, hydrological or ecological integrity of the adjacent coastal wetland area. Further, the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland will not be impacted by

the proposed activity. Accordingly, further assessment of impacts upon the adjoining coastal wetlands area associated with the proposal are not required. No mitigation measures are required.

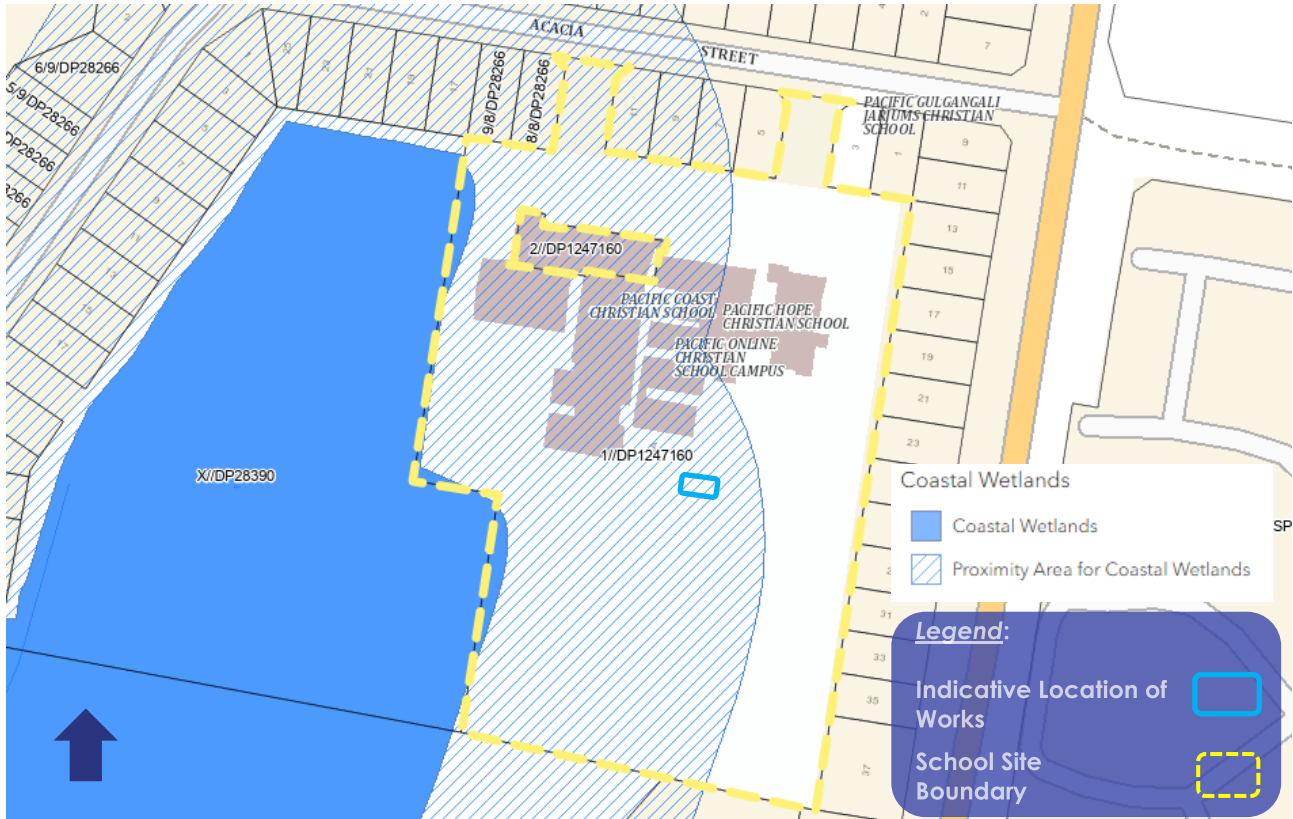


Figure 5: Coastal Wetlands and Littoral Rainforests Area Map (Source: ePlanning Spatial Viewer).

3.3. Tweed Local Environmental Plan 2014

Tweed Local Environmental Plan 2014 (TLEP) provides a broad range of statutory provisions, however TLEP is not a mandatory consideration as the T&I SEPP is the relevant planning instrument for the proposed works and development permitted without consent is not subject to local planning controls.

Notwithstanding, this assessment notes that TLEP maps the site as being subject to Class 2 Acid Sulfate Soils, and accordingly under clause 7.1 requires that any works below the natural ground surface or which are likely to lower the water table must be subject to an acid sulfate soils management plan. The proposed activity involves no physical works and therefore does not trigger this requirement. Further consideration of impacts from acid sulfate soils is therefore not required.

3.4. Development Control Plans

Tweed Development Control Plan 2008 (TDCP) provides a broad range of development and precinct planning controls. There are no controls specifically for educational establishments or controls which apply to development including bushfire.

It is noted that assessment against the TDCP is not a mandatory consideration as the T&I SEPP is the relevant planning instrument for the proposed works and development permitted without consent is not subject to local planning controls.

However, Section A3 relates to 'Development of Flood Liable Land' and includes a chapter on Lower Tweed. The chapter addresses flood behaviour, development generally on flood liable land,

including residential, commercial and industrial development. Flood impacts are discussed further at **Section 4.1**.

3.5. Additional Relevant Legislation

Section 6.28 of the EP&A Act applies to the works as they are being carried out on behalf of a public authority and requires that the works do not commence unless it is certified to “comply with the Building Code of Australia”.

A BCA Assessment Statement has been prepared by BSGM (**Appendix H**) which confirms that the proposal is capable of meeting the applicable requirements of the Building Code of Australia, subject to construction documentation and the adoption of fire engineering solutions as documented in the Fire Engineering Report prepared by WalkerBai (**Appendix I**). The outcomes of these reports are factored into the mitigation measures / terms of this REF as outlined in **Section 6**.

The following legislation is applicable to the works proposed at PCCS. The works are not inconsistent with the relevant provisions of the following legislation (where applicable):

- NSW Legislation:
 - *Local Government Act 1993*
 - *Work Health and Safety Act 2011*
 - *Work Health Safety Regulation 2017*
 - *Waste Avoidance and Resource Recovery Act 2011*
- Commonwealth Legislation:
 - *Environment Protection and Biodiversity Conservation Act 1999*
 - *Disability Discrimination Act 1992*

3.6. Consultation and Notification

Pursuant to the assessment carried out in **Section 3.1** of this document, the proposal has been assessed against the consultation and notification requirements of s3.38 of the T&I SEPP.

These provisions require that prior to carrying out the works, written notice of the intention to carry out the development be provided to Council and occupiers of adjoining land.

On 4 April 2024, written notice of the intention to carry out the development was issued to Tweed Shire Council and to the following adjoining properties (shown in **Figure 6**):

- 1 Acacia Street, Tweed Heads South
 - *(3 Acacia Street, Tweed Heads South is owned by PCCS)*
- 4 Acacia Street, Tweed Heads South
- 5 Acacia Street, Tweed Heads South
- 6 Acacia Street, Tweed Heads South
- 7 Acacia Street, Tweed Heads South
- 8 Acacia Street, Tweed Heads South
- 9 Acacia Street, Tweed Heads South
 - *(11 Acacia Street, Tweed Heads South is owned by PCCS)*
- 13 Acacia Street, Tweed Heads South
- 14 Acacia Street, Tweed Heads South

- 15 Acacia Street, Tweed Heads South
- 16 Acacia Street, Tweed Heads South
- 17 Acacia Street, Tweed Heads South
- 18 Acacia Street, Tweed Heads South
- 9 Fraser Drive, Tweed Heads South
- 11 Fraser Drive, Tweed Heads South
- 13 Fraser Drive, Tweed Heads South
- 15 Fraser Drive, Tweed Heads South
- 17 Fraser Drive, Tweed Heads South
- 19 Fraser Drive, Tweed Heads South
- 21 Fraser Drive, Tweed Heads South
- 23 Fraser Drive, Tweed Heads South
- 25 Fraser Drive, Tweed Heads South
- 27 Fraser Drive, Tweed Heads South
- 29 Fraser Drive, Tweed Heads South
- 31 Fraser Drive, Tweed Heads South
- 33 Fraser Drive, Tweed Heads South
- 35 Fraser Drive, Tweed Heads South

- *(37 and 39 Fraser Drive, Tweed Heads South are owned by PCCS)*

The prescribed period of 21 days concluded on 25 April 2024. As of the date of this final Report, no responses have been received from Council or any of the above adjoining properties. Accordingly, the statutory consultation and notification requirements have been fulfilled in accordance with the requirements of s3.38 of the T&I SEPP.

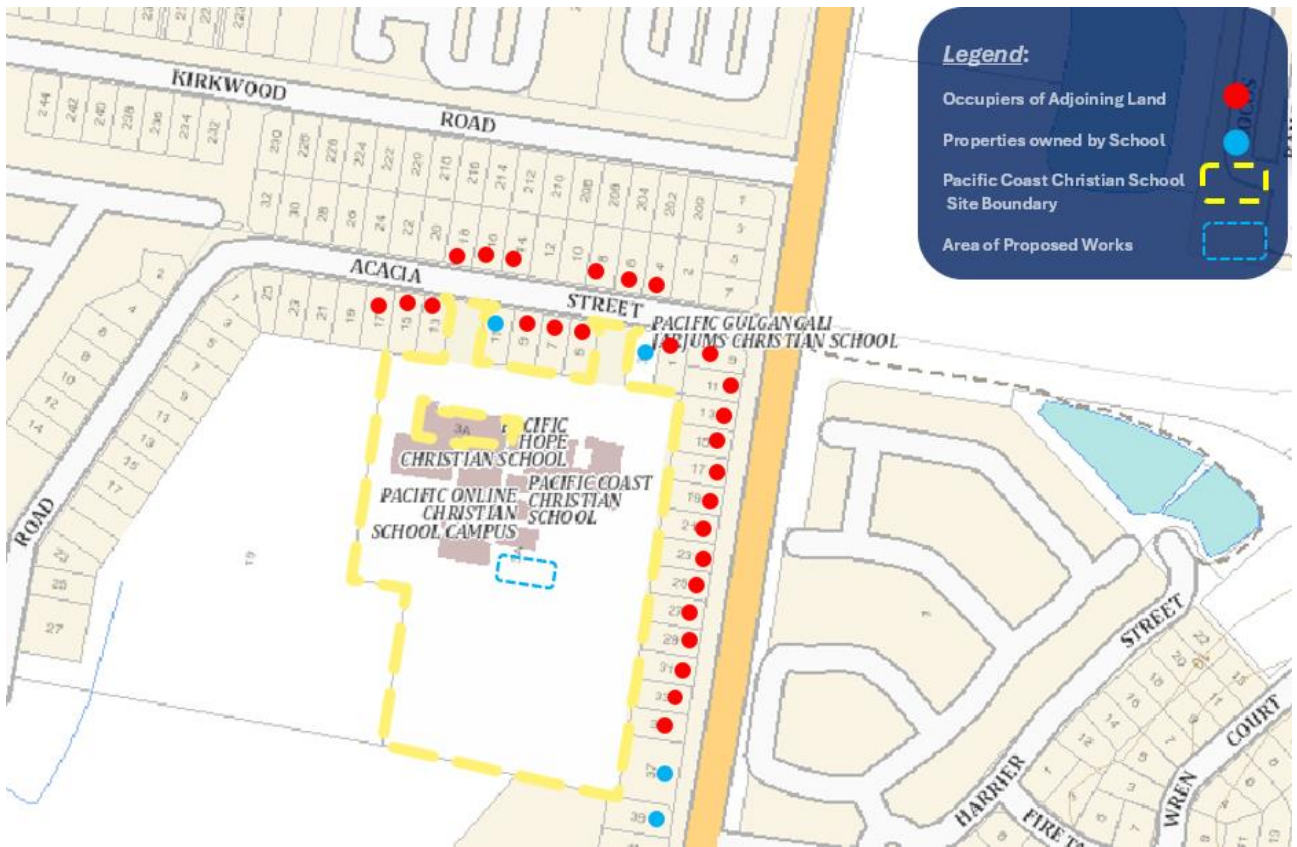


Figure 6: Resident Notification Map (Source: ePlanning Spatial Viewer).

4. ENVIRONMENTAL IMPACT ASSESSMENT

This section of the REF will enable an environmental impact assessment of the proposed works, applying a methodology of considering any potential for environmental risk arising from site constraints, identifying any potential risks associated with the carrying out of the works, and outlining mitigation procedures and control measures appropriate to respond to any risks identified.

Further, an assessment of the works against the factors which must be taken into account when assessing the impact of an activity on the environment pursuant to Section 171 of the EP&A Regulation is then provided in the following section.

4.1. Site Constraints

The assessment carried out under this REF has considered a range of potential constraints for the site, including matters relating to bushfire, heritage, contamination, flooding, threatened species, Aboriginal cultural significance, acid sulphate soils, land slip, and other matters. The site constraints relevant to this assessment is in relation to bushfire risk and flooding which is discussed below.

Bushfire

The site is partially mapped “Vegetation Buffer” and “Vegetation Category 1” on Tweed Shire Council’s Bush Fire Prone Land Map (**Figure 7**), with proposed works within the vegetation buffer.



Figure 7: Bushfire Prone Land Map (Source: ePlanning Spatial Viewer).

In order to assess whether the works require a Bushfire Safety Assessment under the *Rural Fires Act 1997* (RF Act), reference is made to the definition of a school, being an educational establishment, within the *Standard Instrument – Principal Local Environmental Plan 2006*:

Educational Establishment means a building or place used for education (including teaching), being –

- (a) a **school**, or
- (b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.

Section 100B of the RF Act provides that schools are a *special fire protection purpose* (SFPP) and therefore as the proposed works will be carried out within the land recorded as Vegetation Category 3, there are requirements for a Bush Fire Safety Authority (BFSA) under the RF Act.

A Bushfire Assessment Report prepared by Building Code & Bushfire Hazard Solutions accompanies this application (**Appendix D**). The assessment concludes that subject to the recommended bushfire safety measures and consideration of the site specific bushfire risk assessment, when combined, they will provide a reasonable and satisfactory level of bushfire protection to the proposed development.

As required, a BFSA has been issued by NSW Rural Fire Service (NSW RFS) (**Appendix E**). NSW RFS has considered the information submitted and as a result confirms that the proposed development will meet the NSW Rural Fire Service requirements for Bush Fire Safety under s100b of the Rural Fires Act 1997, subject to the following conditions:

“1. The entire property shall be managed as an inner protection area in accordance with Appendix 4.1.1 of 'Planning for Bush Fire Protection 2019'.

2. The subject classrooms shall comply with section 3 and section 6 (BAL 19) Australian Standard AS3959-2018 'Construction of buildings in bushfire-prone areas' or the relevant requirements of the NASH Standard – Steel Framed Construction in Bushfire Area (incorporating amendment A - 2015). The subject classrooms shall also comply with the construction requirements in Section 7.5 of 'Planning for Bush Fire Protection 2019'.

3. Compliance with Specification 43 provisions for S43C14 Vehicular access of NCC 2022 is modified as follows:

Access roads for special fire protection purpose (SFPP) developments shall comply with following requirements of

Table 6.8b of 'Planning for Bush Fire Protection 2019':

- a) SFPP access roads are two-wheel drive, all-weather roads;
- b) have a load bearing capacity and unobstructed and height and width to permit the operation and passage of fire fighting vehicles;
- c) provide access to all structures;
- d) access roads must provide suitable turning areas in accordance with Appendix 3; and
- e) provide reasonable pedestrian access from the vehicular access to the building.

4. Any new or extension of existing electricity and/or gas services is to comply with Table 6.8c of 'Planning for Bush Fire Protection 2019'.

5. A Bush Fire Emergency Management and Evacuation Plan shall comply with the following requirements of section 6.8.4 of 'Planning for Bush Fire Protection 2019':

- a) Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the applicable document(s) as follows:
 - i. The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;

- ii. Australian Standard AS 3745:2010 Planning for emergencies in facilities; and
 - iii. Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable).
- b) the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.

Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development."

It should be noted that it is the responsibility of PCCS that these conditions are complied with. Accordingly, these are included as a mitigation measures of this Report (refer **Section 6**).

Flooding

A Flood Property Report obtained from Council indicates the site is a flood control lot (**Appendix F**).

Cozen Regan Group has prepared a Flood Impact Statement (**Appendix F**) which sets out that due to the site being deemed a "flood-controlled lot" it is subject to assessment under the provisions of Development Control Plan Section A3 - Development of Flood Liable Land. The statement sets out the following:

"Under the provisions of section A3.2 and A3.3.2 and from the information obtained, the site has been determined:

1. *To have the building above the nominated flood level (RL2.60),*
2. *To be in a low flood flow area,*
3. *To be constructed of flood compliant materials, and*
4. *Has in place a previously approved emergency response provision."*

As such, the existing offices are deemed to be compliant with the requirements of Development Control Plan Section A3 - Development of Flood Liable Land, Section A3.2 and A3.3. No further assessment of the Flood Impact is required, and no mitigation measures are required to address flood risk.

4.2. Environmental Risk

As the activity is minor and contained within the existing school site boundaries, there are no environmental risks which require further assessment or consideration in order to avoid impacts.

4.3. Section 171 Considerations

Section 171 of the EP&A Regulation details factors that must be taken into account when assessing the impact of an activity on the environment. The table overleaf provides an assessment of these considerations.

EC2267 – Pacific Coast Christian School

Proposed Change of Use of Admin Buildings to Classrooms –
Review of Environmental Factors

Section 171 Review of Environmental Factors	Assessment	Mitigation Required
Any environmental impacts on a community?	The proposed works will result in negligible environmental impacts on the community.	Nil
Any transformation of a locality?	The proposed works will not result in any transformation of a locality, they are limited to the change of use of admin buildings to classrooms within an existing school campus.	Nil
Any environmental impact on the ecosystems of the locality?	The proposed works will result in negligible environmental impacts on the ecosystems of the locality. No tree removal is required to facilitate the proposed works or meet the bushfire safety requirements as set out in the Bushfire Assessment Report and conditions within the BFSAs issued by NSW Rural Fire Service (Appendix D and Appendix E).	Mitigation measure relating to implementation of recommendations of Bushfire Risk Assessment and conditions of Bushfire Safety Authority
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	The proposed works will not be visible from the public realm and therefore, will not reduce aesthetic, recreational, scientific or other environmental quality or value of the locality.	Nil
Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	As the proposed works are located within an existing school site and visually contained within the “body” of the existing developments on site. The proposal will result in negligible effects on a locality, place or building.	Nil
Any impact on the habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>)?	The carrying out of the proposed works will result in negligible impact on the habitat of any protected animals, as no tree removal is required to facilitate the proposed works.	Nil
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	The proposed works will not endanger any species of animal, plant or other form of life.	Nil
Any long-term effects on the environment?	The proposed works will result in negligible long-term effects on the environment.	Nil
Any degradation of the quality of the environment?	The proposed works will not result in degradation of the quality of the environment.	Nil
Any risk to the safety of the environment?	The Bushfire Assessment Report (Appendix D) outlines measures that are required to be adopted to ensure the safety of the environment is maintained. These measures are reinforced through the requirements of the BFSAs issued by the NSW RFS (Appendix E).	Mitigation measure relating to implementation of recommendations of Bushfire Risk Assessment and conditions of Bushfire Safety Authority
Any reduction in the range of beneficial uses of the environment?	The proposed works will not result in the reduction in the range of beneficial uses of the environment.	Nil

EC2267 – Pacific Coast Christian School

Proposed Change of Use of Admin Buildings to Classrooms –
Review of Environmental Factors

Section 171 Review of Environmental Factors	Assessment	Mitigation Required
Any pollution of the environment?	The carrying out of the proposed works will not result in the pollution of the environment, subject to mitigation measures relating to construction	Nil
Any environmental problems associated with the disposal of waste?	There will be no environmental problems associated with the disposal of waste as confirmed in the Waste Management Plan prepared by Pacific Coast Christian School (Attachment G).	Nil
Any increased demands on resources (natural or otherwise) which are, or are likely to become, in short supply?	The proposed works will not result in any increased demands on resources.	Nil
Any cumulative environmental effect with other existing or likely future activities?	The existing and future use of the site will remain as a school site as a result of these works and therefore there will be no cumulative environmental effect arising from the works.	Nil
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	The works will have no impact on coastal processes or hazards.	Nil
Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1?	The Tweed Shire Council Local Strategic Planning Statement 2020 sets out a 20-year vision for land use in the local areas, the special character and values that are to be preserved and how change will be managed into the future.	Nil
Any other relevant environmental factors?	There are no other relevant environmental factors that require assessment in relation to the proposed works.	Nil

5. CONCLUSION

This document has reviewed the proposal, assessed the works against the relevant statutory framework and has carried out an environmental impact assessment, pursuant to the requirements of the EP&A Act, EP&A Regulation, the T&I SEPP and the Code.

The proposal is identified as *“occupation of... a portable classroom (including a modular or prefabricated classroom) that is not more than 2 storeys high.”*

Specialist assessment of BCA compliance has accompanied this assessment and has found the proposed works to be consistent with applicable plans and policies. A mitigation measure relating to BCA compliance (including fire engineering solutions) has been included to ensure these outcomes are achieved.

Specialist assessment of bushfire safety and compliance with Planning for Bushfire Protection has accompanied this assessment and includes recommendations to be adopted to ensure bushfire risks are minimised or avoided. Conditions within the BFSAs issued by NSW Rural Fire Service must also be complied with and is included as a mitigation measure.

This assessment has found that there are no unreasonable or detrimental impacts resulting from the minor works assessed under this REF and accordingly they can proceed pursuant to the Mitigation Measures set out under **Section 6**.

6. MITIGATION MEASURES

6.1. Authorised Documents

The development shall take place in accordance with the following plans prepared by Stanton Dahl Architects and ATCO:

Drawing Name	Drawing No.	Issue	Date
Stanton Dahl Architects			
Site Existing Proposed Demountable	MP01a	01	06/11/2023
ATCO			
Site Plan	231013SP-A100	B	22/11/2023
Plan	231013SP-A200	B	22/11/2023
Plan - Roof	231013SP-S210	B	22/11/2023
Plan – Covered Walkway	231013SP-A220	B	22/11/2023
Plan - Access	231013SP-A230	B	22/11/2023
Section - Access	231013SP-A231	B	22/11/2023
Elevations	231013SP-A300	B	22/11/2023
Foundation Plan	231013SP-A400	C	22/11/2023

The development shall also take place in accordance with the following documentation:

Document Name	Author	Issue	Date
Bushfire Assessment Report	Building Code & Bushfire Hazard Solutions	A	20 February 2024
Bushfire Safety Authority	NSW Rural Fire Service	A	3 April 2024
Flood Impact Statement	Cozen Regan Group	A	3 May 2024
Waste Management Plan	Cozen Regan Group	A	9 April 2024
BCA Statement	BSGM Consulting Building Surveyors	-	8 July 2024
Fire Engineering Report	WalkerBai Fire Engineering	001	3 July 2024

6.2. Mitigation Measures

6.2.1 Copies of Approved Plans and Conditions/Mitigation Measures to be Kept On-Site

A copy of the approved plans and conditions/mitigation measures must be kept at an appropriate location on-site where the works are taking place and must be available for inspection on request.

6.2.2 Copies of REF to be Kept on School Website

In accordance with the requirements of the NSW Code of Practice of Part 5 activities for registered non-government schools (August 2017):

- A copy of the REF and Decision Statement are to be published on the school's website for a minimum period of 5 years from the commencement of the works.
- A copy of the REF and Decision Statement are to be provided to any member of the public who requests a copy in accordance with the requirements of Section 5.2 of the Code of Practice.

6.2.3 Amendment Tracking

Where a minor amendment to a plan approved under a condition/mitigation measure or an amendment to an approved condition/mitigation measure forming part of this REF determination to correct a typo is required, an amendment register for the REF must outline the proposed amendment, demonstrate the need for the proposed amendment and demonstrate why the proposed amendment is considered to be substantially the same as the approved REF.

If amending a plan approved under a condition/mitigation measure, the amendment register must also outline how the environmental impacts of the proposed amendment have already been considered and how it will reduce the overall environmental impact of the approved REF. Each amendment is required to be endorsed by the school and is required to be published on the school's website along with the REF and Decision Statement.

6.2.4 Compliance with Conditions/Mitigation Measures

All relevant personnel, including contractors and their subcontractors must be made aware of these conditions/ mitigation measures and the requirement to undertake the works as per these conditions/mitigation measures.

6.2.4 BCA Compliance

The proposed works are to be carried out as described and assessed in the BCA Assessment Statement prepared by BSGM, dated 8 July 2024, and in the Fire Engineering Report prepared by Walker Bai, dated 3 July 2024, such that the works will comply with the applicable requirements of the Building Code of Australia 2022.

6.2.5 Bushfire

The proposed works are to be carried out in accordance with the recommendations within the Bushfire Assessment Report prepared by Building Code & Bushfire Hazard Solutions Pty Limited, dated 20 February 2024 and the conditions set out in the Bushfire Safety Authority issued by NSW Rural Fire Service dated 3 April 2024.

6.2.7 Waste Management

The management of waste during the operation of the development must be in accordance with the Waste Management Statement prepared by Pacific Coast Christian School dated 9 April 2024.

GLOSSARY OF TERMS

- **BCA or Building Code of Australia** means the document, published by or on behalf of the
- **Consent Authority** means the authority having the function to determine a development application or an application for a CDC, and includes a Council or other entity specified by the EP&A Act, EP&A Regulation or an environmental planning instrument.
- **Development Application** means an application for development consent pursuant to Part 4 of the EP&A Act to carry out development but does not include an application for a complying development certificate.
- **DCP or Development Control Plan** means a development control plan in force pursuant to Division 6 of Part 3 of the EP&A Act
- **Environmental Planning Instrument** means an environmental planning instrument (including a SEPP or LEP but not including a DCP) made Pursuant to Part 3 of the EP&A Act
- **EP&A Act** means the *Environmental Planning & Assessment Act 1979* (NSW)
- **EP&A Regulation** means the *Environmental Planning and Assessment Regulation 2021* (NSW)
- **Exempt Development** means a development which is specified in an environmental planning instrument as not requiring development consent or an approval Pursuant to Part 5 of the EP&A Act
- **LEP** means a Local Environmental Plan made Pursuant to Division 4 of Part 3 of the EP&A Act
- **LGA** means Local Government Area
- **Planning Certificate** means a certificate made by a Council specifying matters relating to land in accordance with the provision of Section 149 of the EP&A Act.
- **REF** means a Review of Environmental Factors prepared pursuant to *Part 5 of the Environmental Planning and Assessment Act 1979*
- **SEPP** means a State Environmental Planning Policy made Pursuant to Division 2 of Part 3 of the EP&A Act
- **Standard Instrument** means the *Standard Instrument - Principal Local Environmental Plan*
- **T&I SEPP** mean the *State Environmental Planning Policy (Transport and Infrastructure) 2021*

APPENDIX A – ARCHITECTURAL PLANS



VIEW INDICATIVE ONLY

231013SP
 PACIFIC COAST CHRISTIAN SCHOOL
 3A ACACIA ST TWEED HEAD SOUTH NSW 2486
 RPD: 1DP1247160

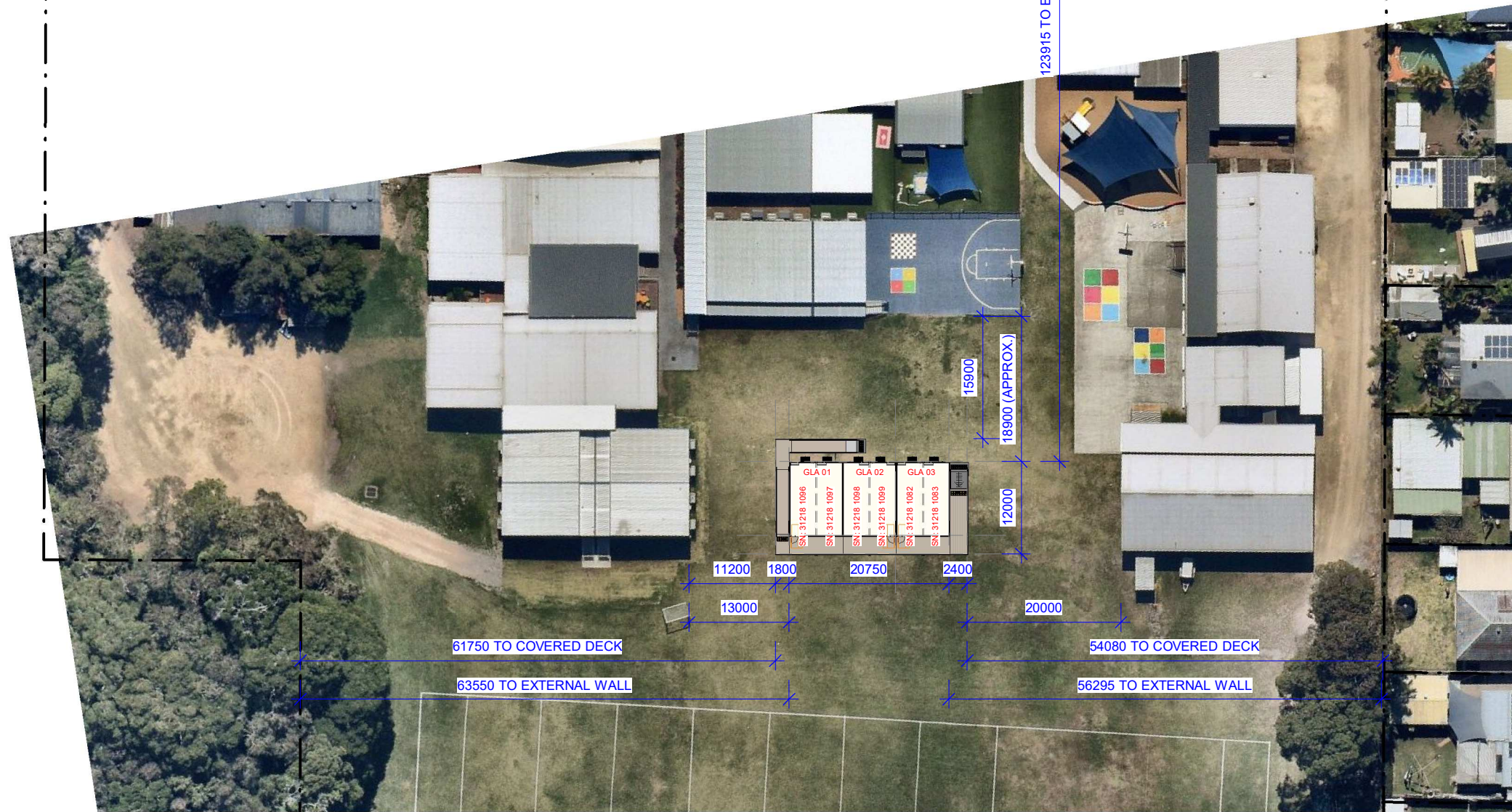
PROPOSED NEW CLASSROOMS

SERIAL NUMBERS:
 31218 1096-1099
 31218 1082-1083

DRAWING LIST		
SHEET NUMBER	SHEET NAME	CURRENT REVISION
A000	TITLE PAGE	B
A100	SITE PLAN	B
A200	PLAN	B
A210	PLAN - ROOF	B
A220	PLAN - COVERED WALKWAY	B
A230	PLAN - ACCESS	B
A231	SECTION - ACCESS	B
A300	ELEVATIONS	B
A400	FOUNDATION PLAN	C



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 55 TONKA STREET, LUSCOMBE, QLD 4207
 P.O. BOX 393, BEENLEIGH, QLD 4207
 PHONE: (07) 3412 8600
 ABN: 71 083 902 309
 EMAIL: ASLAu.Sales@atco.com



BAL19

CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION
 DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS OVERALL DIMENSIONS EXCLUDE EXTERNAL CLADDINGS U.N.O.
 ALL CONSTRUCTION TO COMPLY WITH NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND APPLICABLE AUSTRALIAN STANDARDS
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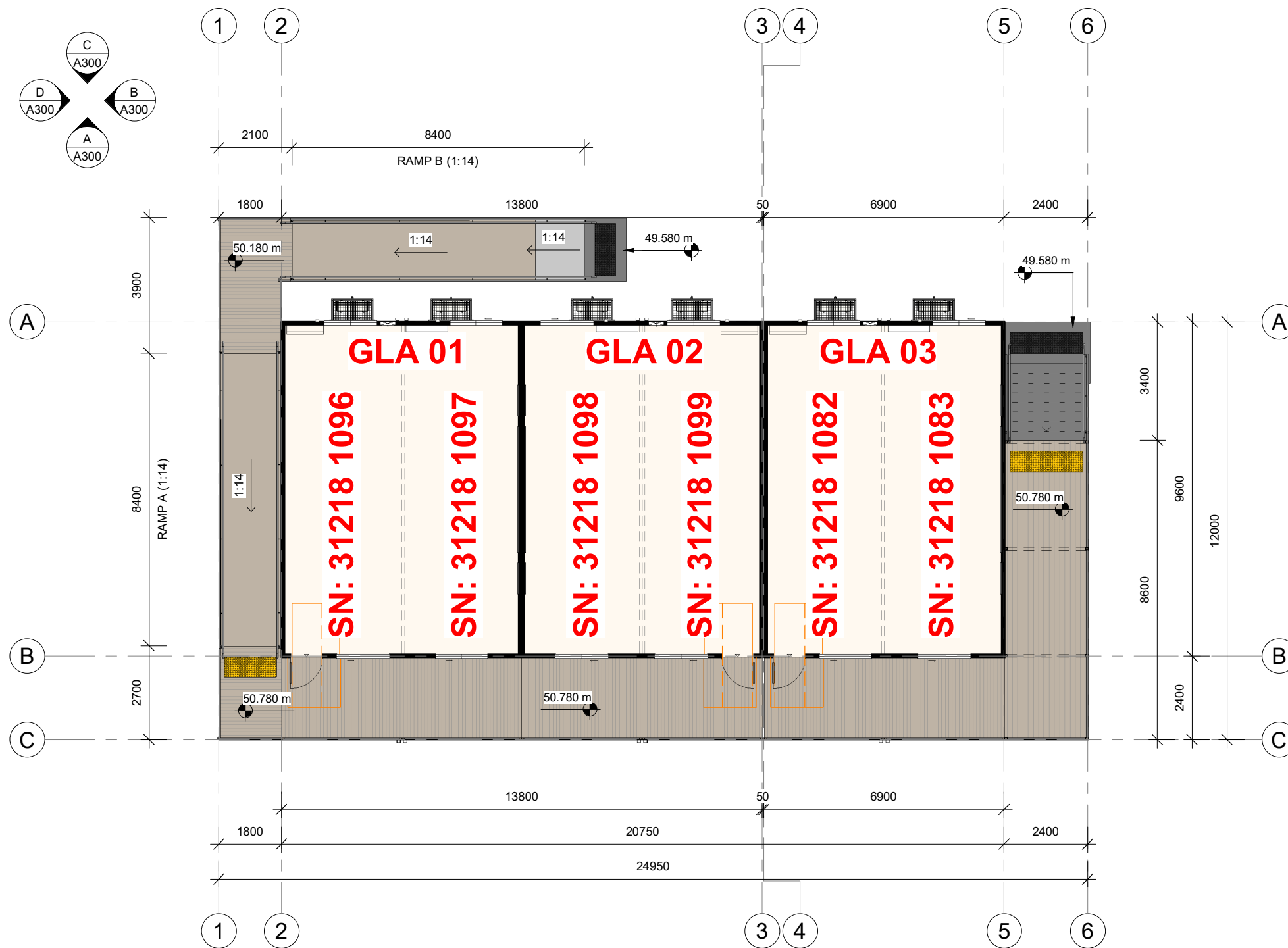
REV	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

SERIAL NUMBERS: .
 31218 1096-1099
 31218 1082-1083

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 ABN: 71 083 902 309
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CLIENT
 PACIFIC COAST CHRISTIAN SCHOOL
 DESCRIPTION
 PROPOSED NEW CLASSROOMS
 ADDRESS
 3A ACACIA ST TWEED HEAD SOUTH NSW 2486
 RPD: 1DP1247160

TITLE		SCALE AT A2	
SITE PLAN		1 : 500	
PROJECT No.	BNEP/02216	DRAWING NUMBER	231013SP -A100
REVISION	B		



1 PLAN
1 : 100

BAL19

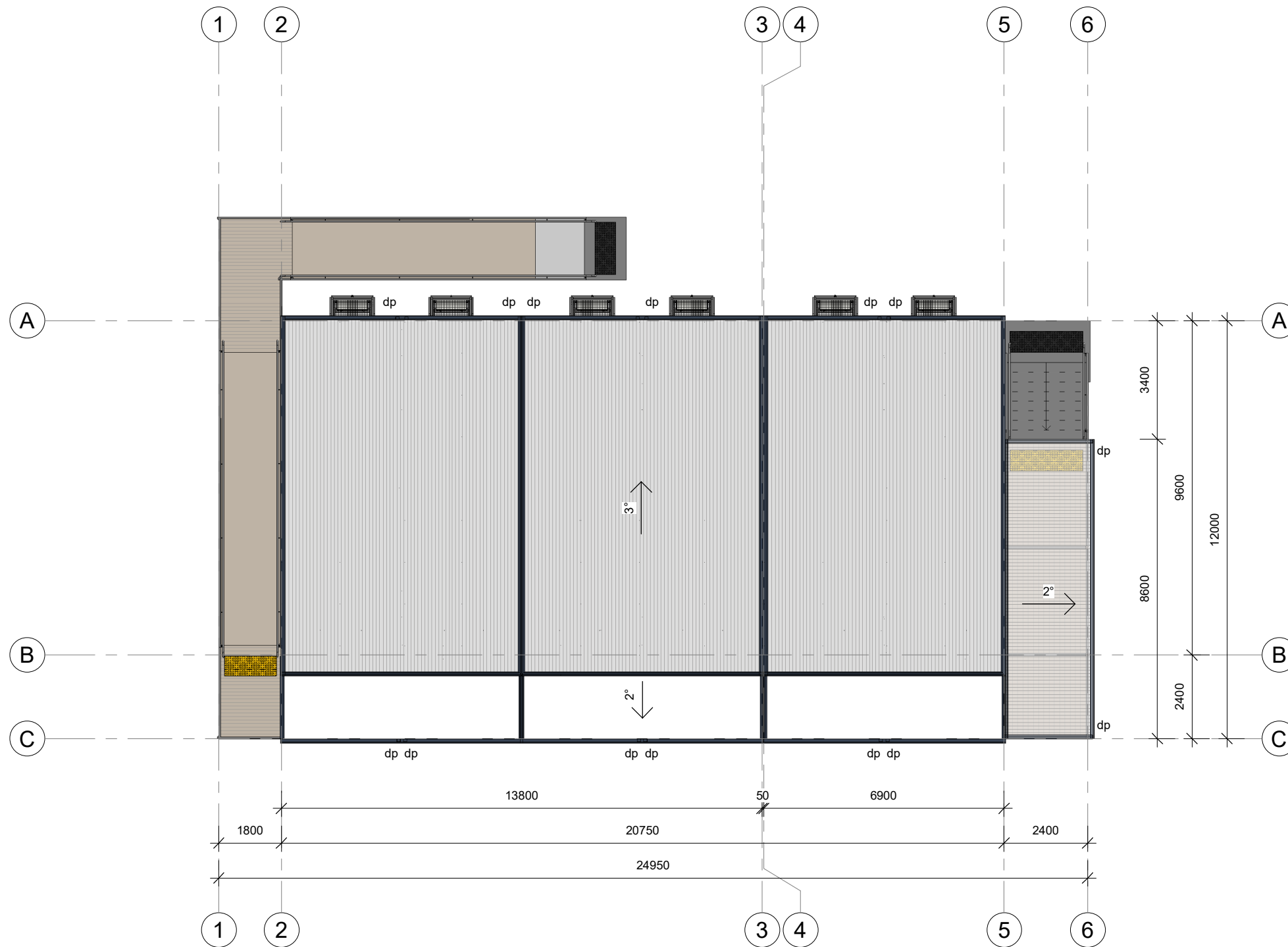
CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION
DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS
OVERALL DIMENSIONS EXCLUDE EXTERNAL CLADDINGS U.N.O.
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REV	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

SERIAL NUMBERS: .
31218 1096-1099
31218 1082-1083

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CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE PLAN
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 1 : 100
RPD: 1DP1247160	DRAWING NUMBER 231013SP -A200
	REVISION B



1 PLAN - ROOF
1 : 100

BAL19

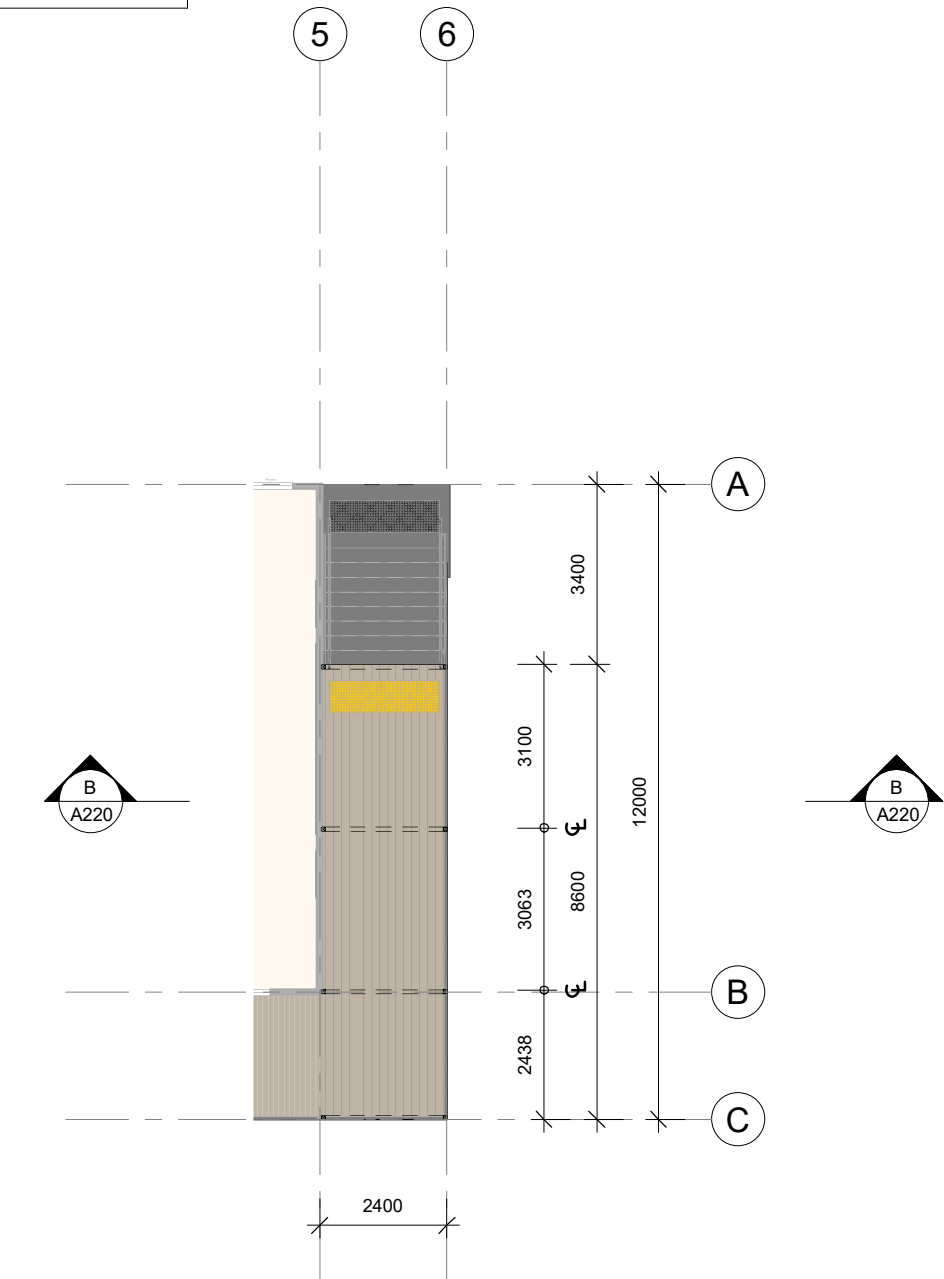
REV	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

SERIAL NUMBERS: .
31218 1096-1099
31218 1082-1083

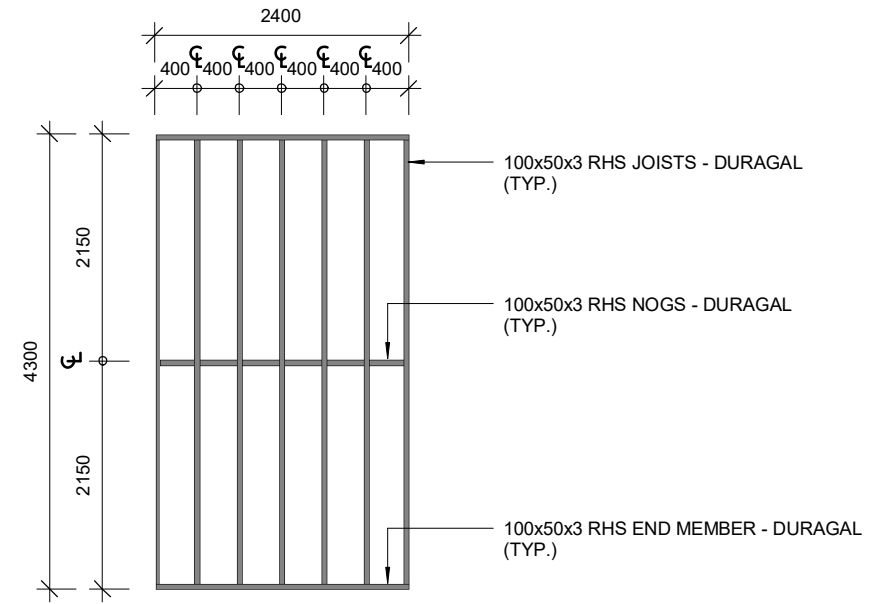
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ABN: 71 083 902 309
EMAIL: ASLAu.Sales@atco.com

CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE PLAN - ROOF
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 1 : 100
RPD: 1DP1247160	DRAWING NUMBER 231013SP -A210
	REVISION B

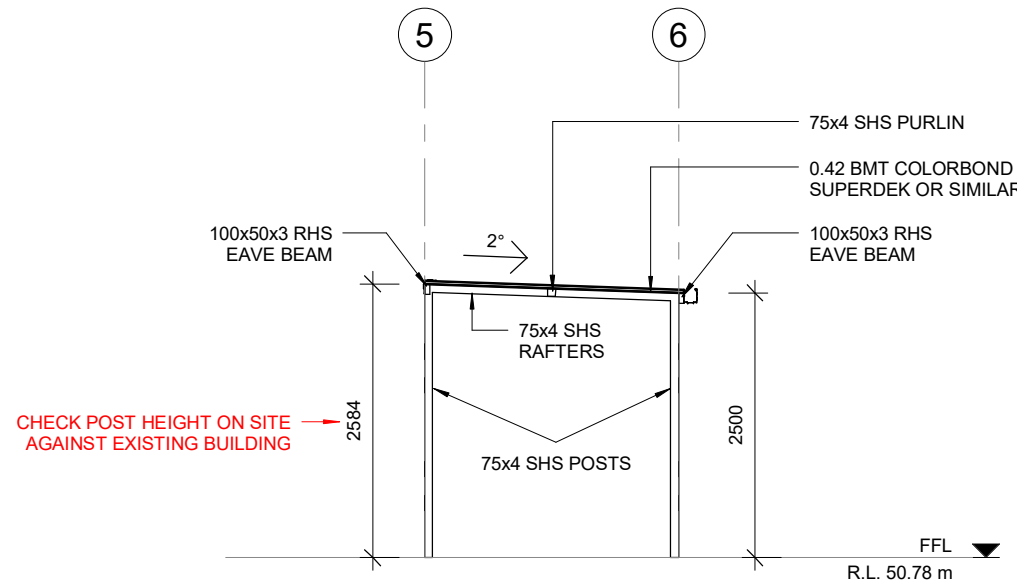


1 PLAN - COVERED WALKWAY
1 : 100



A TYPICAL DECK FRAME
1 : 50

NOTE:
1. ALL MEMBERS TO BE HOT DIP GALVANISED (U.N.O.)
2. ALL WELDS TO BE MIN. 6 CFW (U.N.O.)



B TYPICAL PORTAL FRAME
1 : 50

CHECK POST HEIGHT ON SITE AGAINST EXISTING BUILDING

BAL19

REV	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

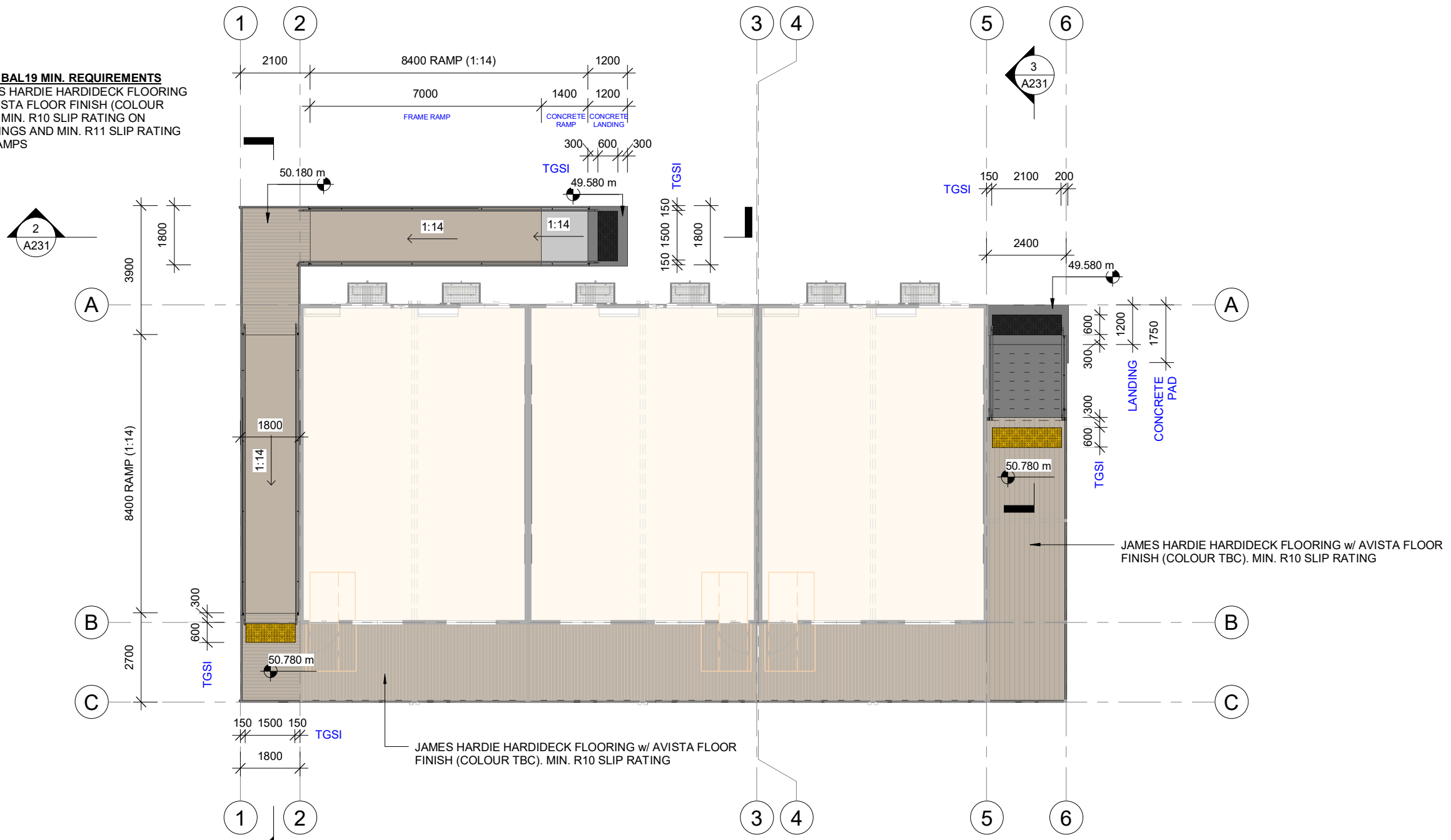
SERIAL NUMBERS:
31218 1096-1099
31218 1082-1083

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CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE PLAN - COVERED WALKWAY
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 As indicated
RPD: 1DP1247160	DRAWING NUMBER 231013SP -A220
	REVISION B



NOTES - BAL19 MIN. REQUIREMENTS
 1. JAMES HARDIE HARDIDECK FLOORING w/ AVISTA FLOOR FINISH (COLOUR TBC). MIN. R10 SLIP RATING ON LANDINGS AND MIN. R11 SLIP RATING TO RAMPS



1 PLAN - ACCESS
 1 : 100

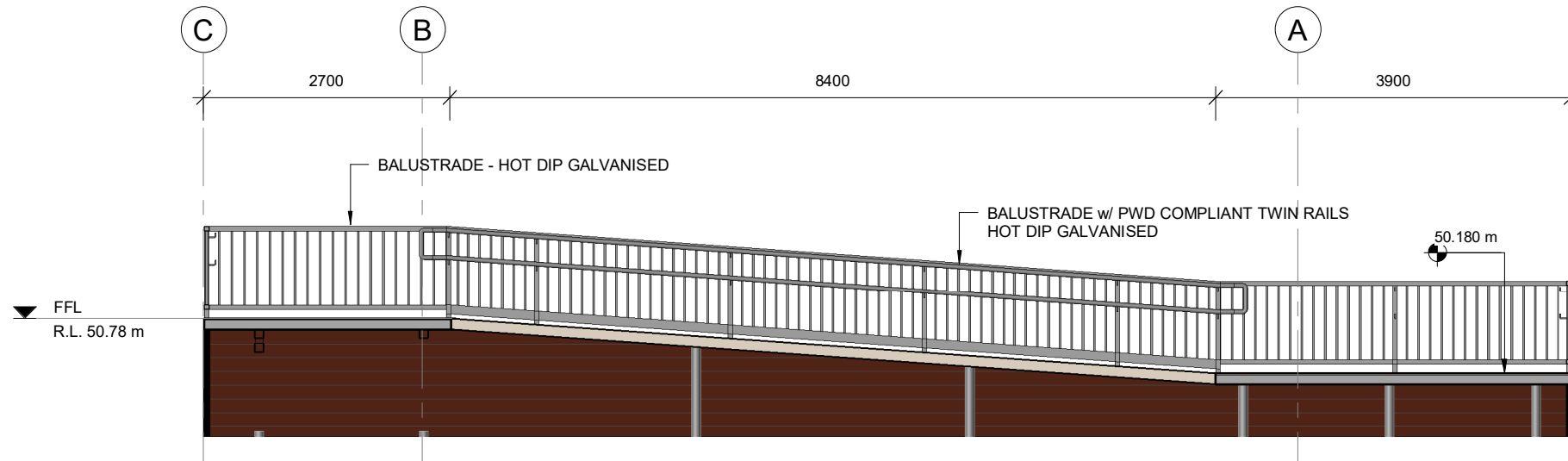
BAL19

REV	DESCRIPTION	DATE	BY	CHK'D
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B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

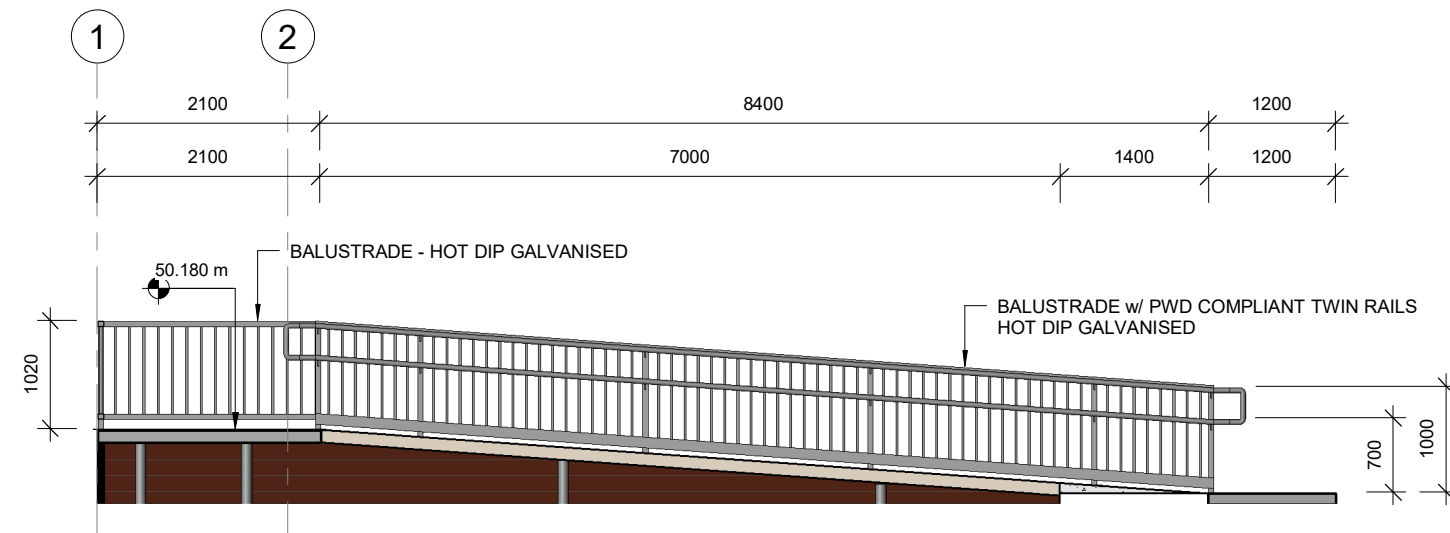
SERIAL NUMBERS: .
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 31218 1082-1083

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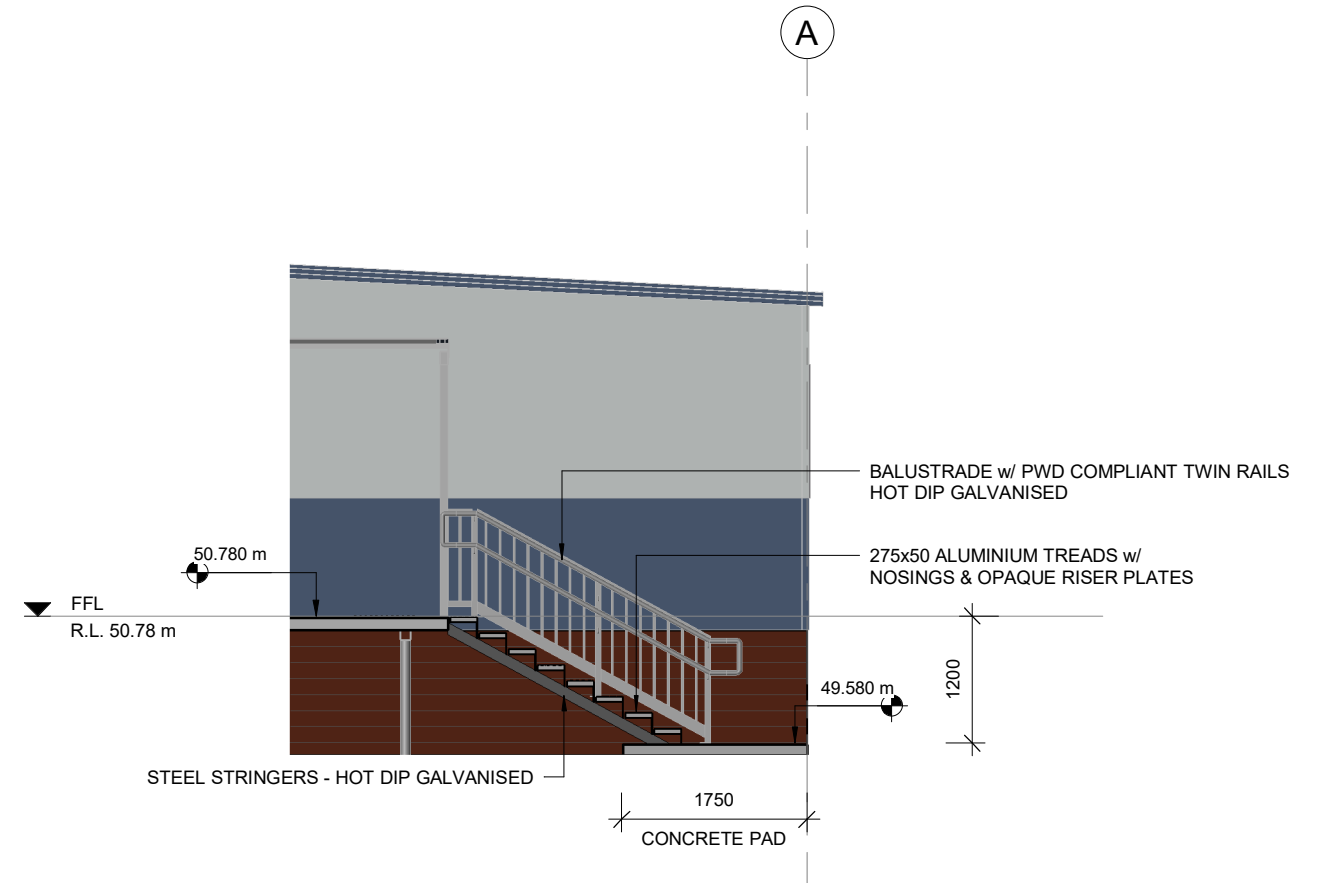
CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE PLAN - ACCESS
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 1 : 100
RPD: 1DP1247160	DRAWING NUMBER 231013SP -A230
	REVISION B



1 SECTION - RAMP A
A230 1:50



2 SECTION - RAMP B
A230 1:50



3 SECTION - STAIR A
A230 1:50

BAL19

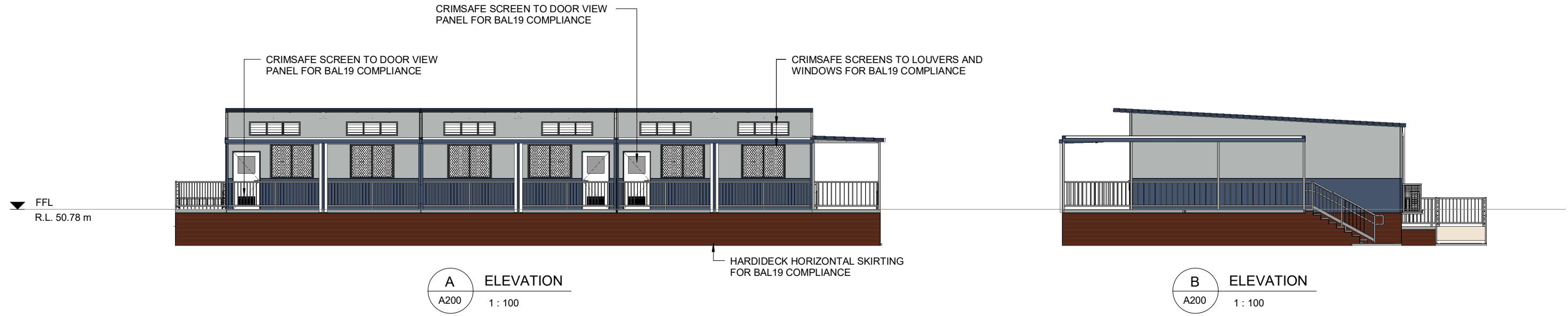
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A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

SERIAL NUMBERS:
31218 1096-1099
31218 1082-1083

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FAX: 71 983 902 309
EMAIL: ASLAu.Sales@atco.com

CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE SECTION - ACCESS
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 1:50
RPD: 1DP1247160	DRAWING NUMBER 231013SP-A231
	REVISION B



BAL19

CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION				
REV	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	
DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS OVERALL DIMENSIONS EXCLUDE EXTERNAL CLADDINGS U.N.O.				
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31218 1082-1083

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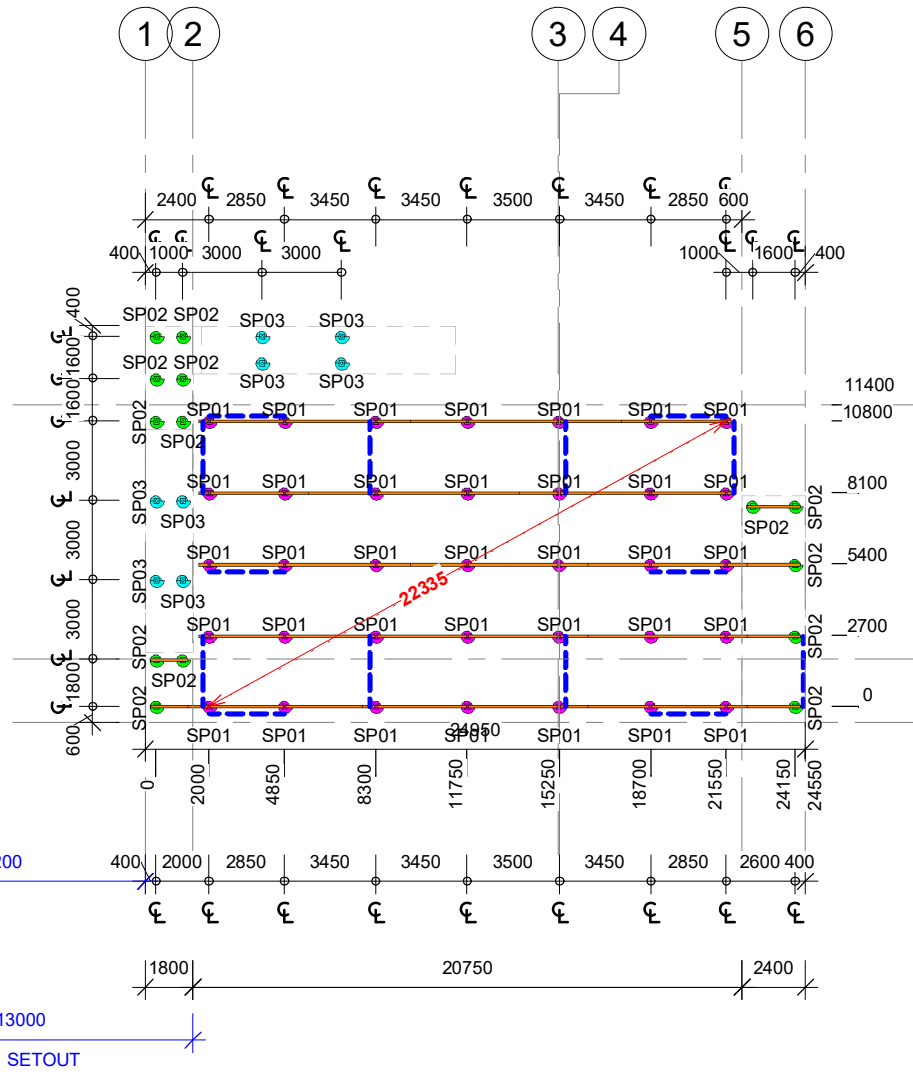
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ABN: 71 083 902 309
EMAIL: ASLAu.Sales@atco.com

CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE ELEVATIONS
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 1:100
RPD: 1DP1247160	DRAWING NUMBER 231013SP-A300
	REVISION B

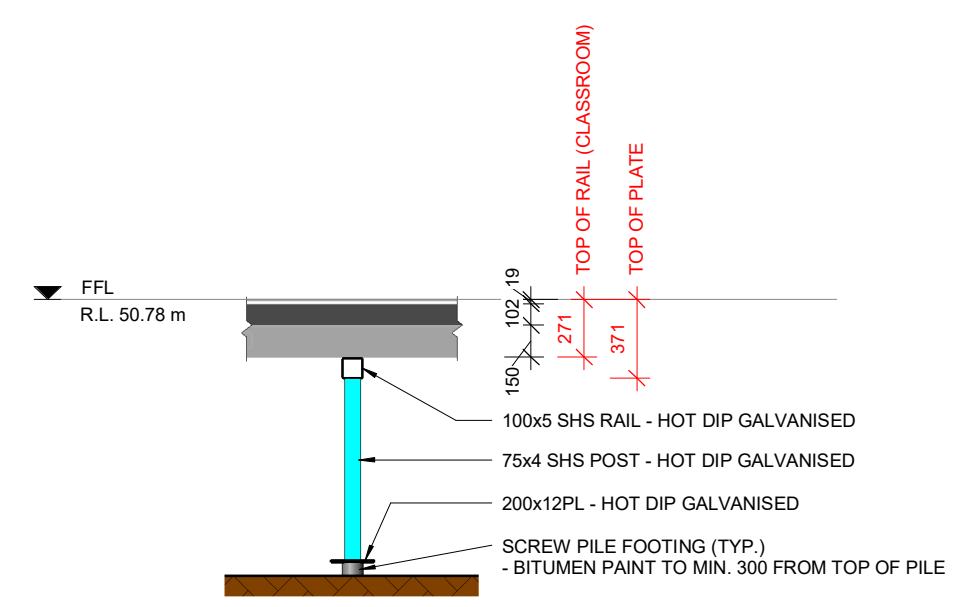


NEW CLASSROOM WALL
ALIGNS WITH EXISTING
CLASSROOM

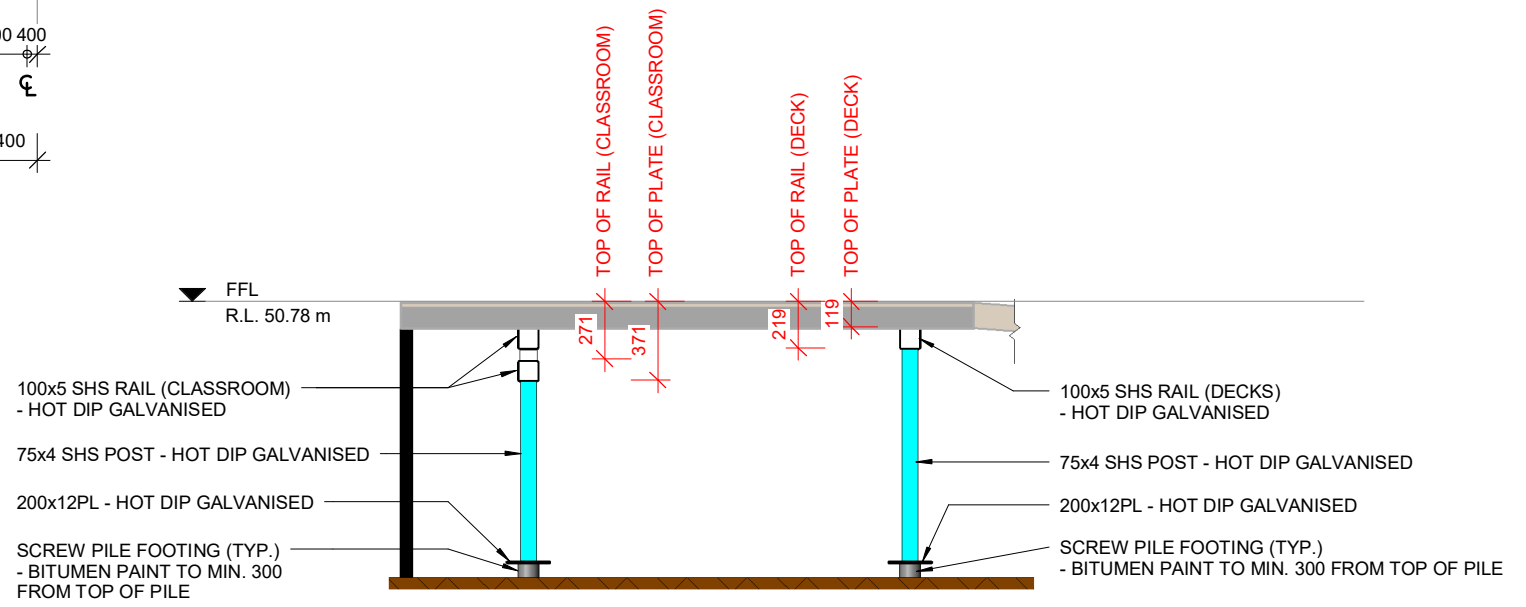


1 FOOTING LAYOUT
1 : 200

FOOTING SCHEDULE - SCREW PILES		
MARK	DESCRIPTION	QTY
SP01	FOOTING - SCREW PILE w LEVEL MASTER TOP (CLASSROOMS)	35
SP02	FOOTING - SCREW PILE w LEVEL MASTER TOP (DECKS)	14
SP03	FOOTING - SCREW PILE (RAMPS)	8
TOTAL SCREW PILES: 57		



A SECTION - CLASSROOM
1 : 25



B SECTION - DECK
1 : 25

BAL19

REV	DESCRIPTION	DATE	BY	CHKD
A	ISSUED FOR CERTIFICATION	17.10.23	TT	
B	CHANGED TO PLATE ON GROUND WITH POST	24.10.23	TT	
C	NEW LOCATION & UPDATED DETAILS	22.11.23	TT	

SERIAL NUMBERS:
31218 1096-1099
31218 1082-1083

ATCO

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LUSCOMBE, QLD 4207
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PHONE: (07) 3412 8600
ABN: 71 083 902 309
EMAIL: ASLAu.Sales@atco.com

CLIENT PACIFIC COAST CHRISTIAN SCHOOL	TITLE FOUNDATION PLAN
DESCRIPTION PROPOSED NEW CLASSROOMS	PROJECT No. BNEP/02216
ADDRESS 3A ACACIA ST TWEED HEAD SOUTH NSW 2486	SCALE AT A2 As indicated
RPD: 1DP1247160	DRAWING NUMBER 231013SP-A400
	REVISION C

EC2267 – Pacific Coast Christian School

Proposed Change of Use of Admin Buildings to Classrooms –
Review of Environmental Factors



APPENDIX B – CERTIFICATE OF TITLE AND DEPOSITED PLAN



FOLIO: 1/1247160

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
10/4/2024	10:48 AM	4	5/6/2023

LAND

LOT 1 IN DEPOSITED PLAN 1247160
AT TWEED HEADS SOUTH
LOCAL GOVERNMENT AREA TWEED
PARISH OF TERRANORA COUNTY OF ROUS
TITLE DIAGRAM DP1247160

FIRST SCHEDULE

PACIFIC GROUP OF CHRISTIAN SCHOOLS LIMITED (T AT143774)

SECOND SCHEDULE (7 NOTIFICATIONS)

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
- 2 DP1039569 EASEMENT TO DRAIN WATER 5 METRE(S) WIDE AND VARIABLE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 3 DP1039569 EASEMENT TO DRAIN SEWAGE 3 METRE(S) WIDE AND VARIABLE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 4 DP1039569 RESTRICTION(S) ON THE USE OF LAND
- 5 DP1267313 EASEMENT FOR MULTI-PURPOSE ELECTRICAL INSTALLATION 4.2 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1267313
- 6 DP1267313 EASEMENT FOR UNDERGROUND POWERLINES 2 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1267313
- 7 AT143775 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

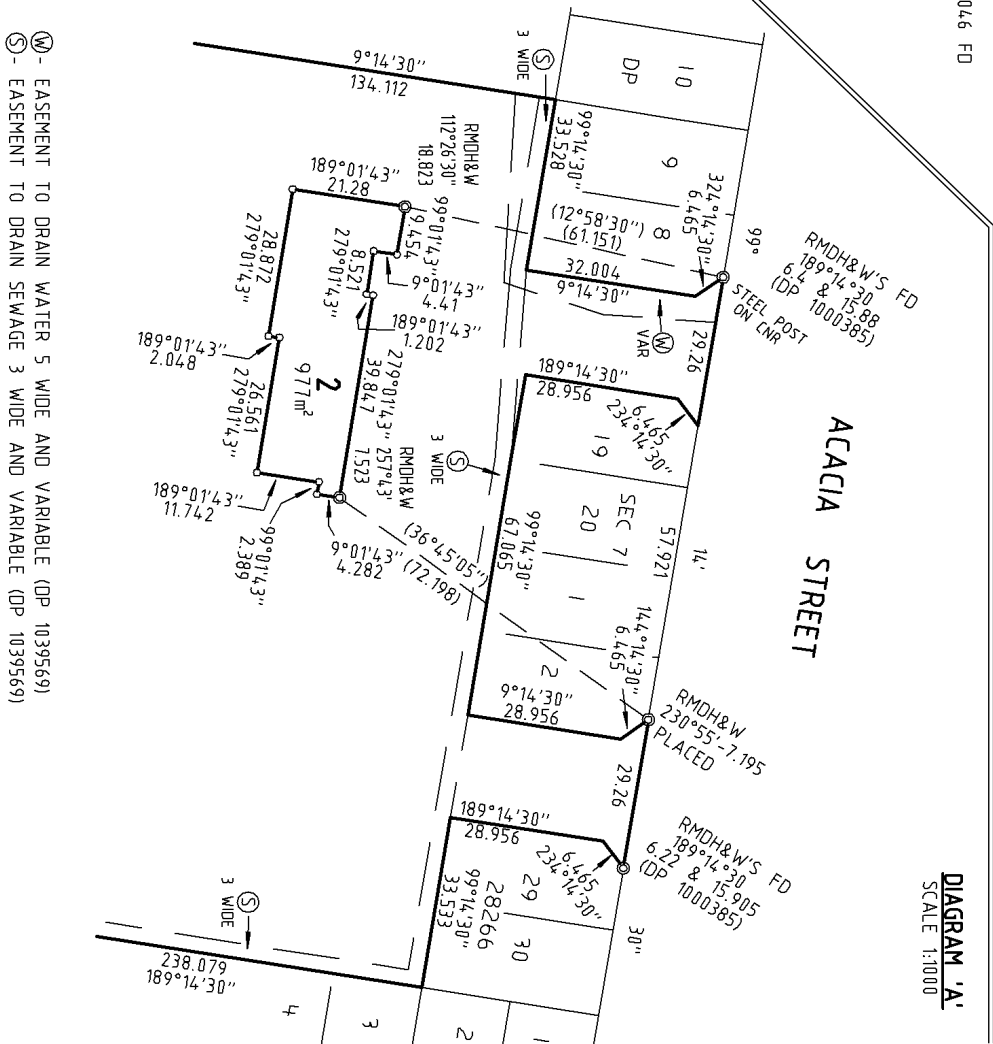
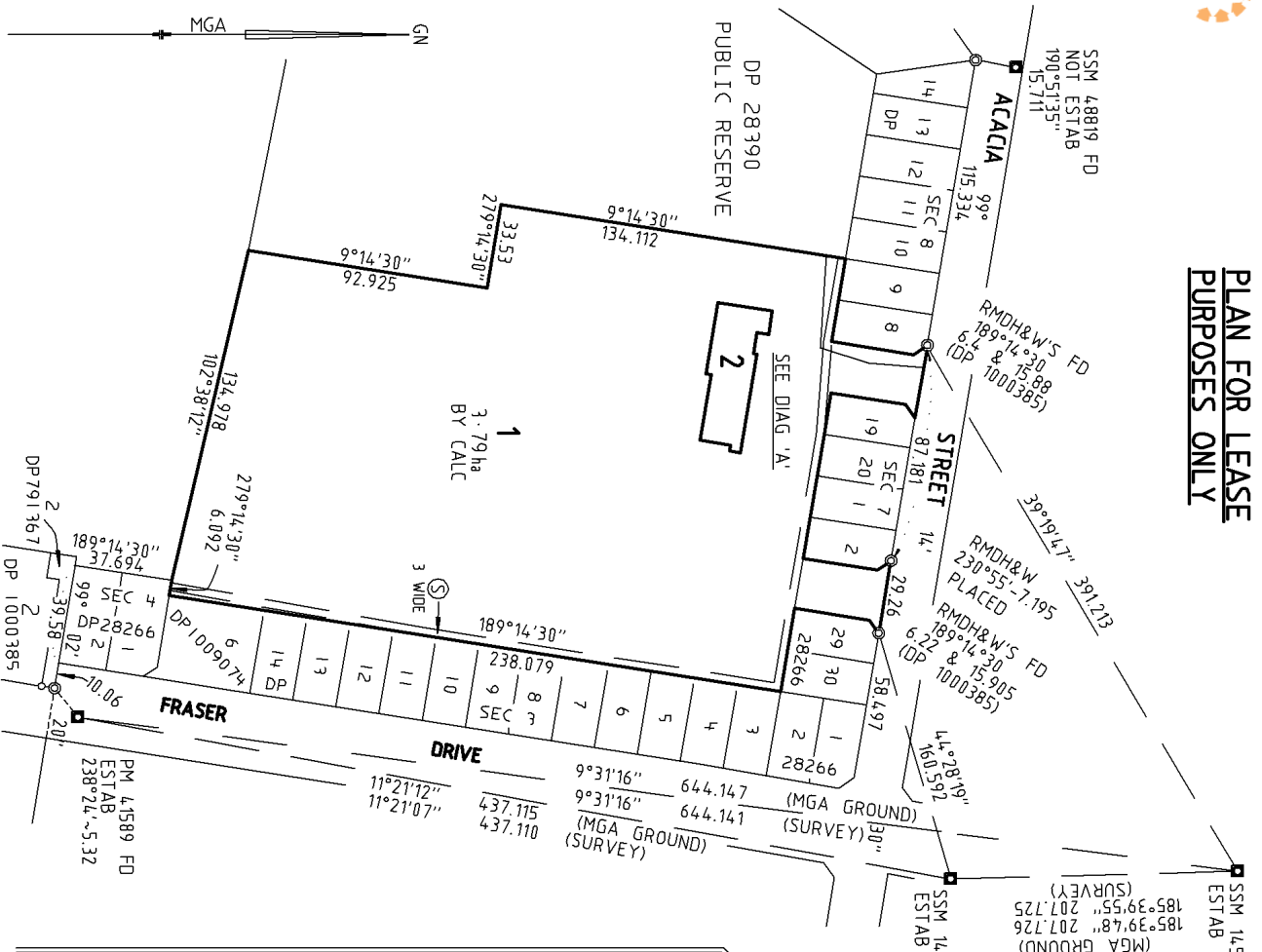
NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



**PLAN FOR LEASE
PURPOSES ONLY**



COORDINATE SCHEDULE	
MARK	M.G.A. CO-ORDINATES
PM4.1589	551205.024
SSM14.5517	551311.532
SSM14.6046	551291.041
SSM14.8819	550953.
DATE OF SCIMS COORDINATES:	10-04-2018
COMBINED SCALE FACTOR:	0.999626
ORIENTATION ADOPTED:	SSM 4.1589 - SSM 14.5517

MARK	E	N	CLASS	ORDER	METHOD	STATE
PM4.1589	B	B	B	2	FROM SCIMS	FOUND
SSM14.5517	B	B	B	2	FROM SCIMS	FOUND
SSM14.6046	B	B	B	2	FROM SCIMS	FOUND
SSM14.8819	U	U	U	U	FROM SCIMS	FOUND

DATE OF SCIMS COORDINATES: 10-04-2018 MGA DATUM: GDA94
 COMBINED SCALE FACTOR 0.999626 MGA ZONE: 56

DIAGRAM 'A'
SCALE 1:1000

Surveyor: **BARBIE RICHARD GREEN**
 LANDSURV PLY LTD, 14 END
 STREET, TWEED HEADS, NSW
Date: 20-04-2018
Reference: 38319.9

**PLAN OF SUBDIVISION OF LOT 8 DP 1039569
FOR LEASE PURPOSES**

LGA: TWEED SHIRE
Locality: TWEED HEADS SOUTH
Reduction Ratio 1 : 2000


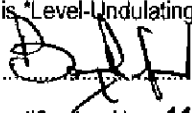
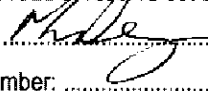
Registered:
 29.10.2018

DP1247160


20	10	20	30	40	50	60	70	80	90	100	110	120	130	140
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Table of mm

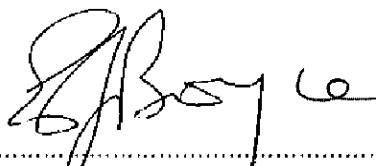
Lengths are in metres

PLAN FORM 6 (2017)	DEPOSITED PLAN ADMINISTRATION SHEET	Sheet 1 of 2 sheet(s)
Office Use Only	Office Use Only	
Registered:  29.10.2018	DP1247160	
Title System: TORRENS		
PLAN OF SUBDIVISION OF LOT 8 DP1039569 FOR LEASE PURPOSES	LGA: TWEED	
	Locality: TWEED HEADS SOUTH	
	Parish: TERRANORA	
	County: ROUS	
Survey Certificate	Crown Lands NSW/Western Lands Office Approval	
I, BARRIE RICHARD GREEN of LANDSURV PTY LTD, PO BOX 710, TWEED HEADS NSW 2485 a surveyor registered under the <i>Surveying and Spatial Information Act 2002</i> , certify that:	I, (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.	
*(a) The land shown in the plan was surveyed in accordance with the Surveying and Spatial Information Regulation 2017, is accurate and the survey was completed on 20.04.2018, or	Signature:	
*(b) The part of the land shown in the plan (*being/*excluding ** PART LOT 1) was surveyed in accordance with the Surveying and Spatial Information Regulation 2017, the part surveyed is accurate and the survey was completed on 20.04.2018 the part not surveyed was compiled in accordance with that Regulation, or	Date:	
*(c) The land shown in this plan was compiled in accordance with the Surveying and Spatial Information Regulation 2017.	File Number:	
Datum Line: PM41589 - SSM145517	Office:	
Type: *Urban/*Rural	Subdivision Certificate	
The terrain is: *Level-Undulating / *Steep-Mountainous.	I, <u>MICK DENNY</u>	
Signature:  Dated: <u>2.7.2018</u>	*Authorised Person/*General Manager/*Accredited Certifier, certify that the provisions of s.109J of the <i>Environmental Planning and Assessment Act 1979</i> have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.	
Surveyor Identification No: 1144	Signature: 	
Surveyor registered under the <i>Surveying and Spatial Information Act 2002</i>	Accreditation number:	
	Consent Authority: <u>TWEED SHIRE COUNCIL</u>	
	Date of endorsement: <u>19 JULY 2018</u>	
	Subdivision Certificate number: <u>SC18/0020</u>	
	File number:	
*Strike out inappropriate words.	*Strike through if inapplicable.	
**Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.		
Plans used in the preparation of survey/compilation. DP1039569 DP1000385	Statements of intention to dedicate public roads, create public reserves and drainage reserves, acquire/resume land.	
Surveyor's Reference: 38319 - 9	Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A	

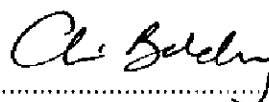
PLAN FORM 6A (2017) DEPOSITED PLAN ADMINISTRATION SHEET Sheet 2 of 2 sheet(s)

Office Use Only	Office Use Only
Registered:  29.10.2018	<h1>DP1247160</h1>
PLAN OF SUBDIVISION OF LOT 8 DP1039569 FOR LEASE PURPOSES	
Subdivision Certificate number: <u>SC18/0020</u> Date of Endorsement: <u>19 JULY 2018</u>	This sheet is for the provision of the following information as required: <ul style="list-style-type: none">• A schedule of lots and addresses - See 60(c) SSI Regulation 2017• Statements of intention to create and release affecting interests in accordance with section 88B Conveyancing Act 1919• Signatures and seals- see 195D Conveyancing Act 1919• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.

PACIFIC COAST CHRISTIAN SCHOOL LIMITED
ABN: 50 130 519 318



DIRECTOR
EDWIN JOHN BOYCE



SECRETARY
CHRISTOPHER ERIK BALDRY

MORTGAGEE - BANKWEST

EXECUTED by COMMONWEALTH BANK OF AUSTRALIA TRADING AS BANKWEST ABN: 48 123 123 124 by its duly constituted attorney under power of attorney no. Book 4838 No. 700

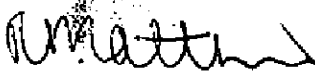
Dated 7th August 2012 who at the date hereof had no notice of revocation of such power of attorney in the presence of:



An Officer of the Bank

STEPHEN BARRY-SMITH
Witness name

by its attorneys



Signature

ROBERT JAMES MATTHEWS

Name

BANK MANAGER

Title

If space is insufficient use additional annexure sheet



Surveyor's Reference: 38319 - 9

APPENDIX C – SECTION 10.7 PLANNING CERTIFICATE

Planning Certificate under Section 10.7 (formerly Section 149)

Environmental Planning and Assessment Act, 1979

Land No. 84345

Applicant: InfoTrack
GPO Box 4029
SYDNEY NSW 2000

Certificate No: ePlanCer24/1008
Date of Issue: 11/04/2024
Fee Paid: \$168.00
Receipt No:

Your Reference:

eCustomer Reference: EC2267

Property Description: Lot 1 LP 1247160; No. 3A Acacia Street TWEED HEADS SOUTH

In accordance with the requirements of section 10.7 of the Environmental Planning and Assessment Act 1979 (as amended), the following prescribed matters relate to the land at the date of this certificate.

ITEM 1

Names of relevant planning instruments and development control plans

- (1) *The name of each environmental planning instrument and development control plan that applies to the carrying out of development on the land.*
- (2) *The name of each proposed environmental planning instrument and draft development control plan, which is or has been subject to community consultation or public exhibition under the Act, that will apply to the carrying out of development on the land.*
- (3) *Subsection (2) does not apply in relation to a proposed environmental planning instrument or draft development control plan if—*
 - (a) *it has been more than 3 years since the end of the public exhibition period for the proposed instrument or draft plan, or*
 - (b) *for a proposed environmental planning instrument—the Planning Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved.*
- (4) *In this section—*

proposed environmental planning instrument means a draft environmental planning instrument and includes a planning proposal for a local environmental plan.

Item 1(1)

The following local environmental planning instrument applies to the carrying out of development on the land:

Tweed Shire LEP 2014

The following State environmental planning policies (SEPPs) apply to the carrying out of development on the land.

State Environmental Planning Policy (Industry and Employment) 2021 - Chapter 3 Advertising and Signage

State Environmental Planning Policy (Housing) 2021 - Chapter 2 Affordable Housing

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 7 Canal Estate Development

State Environmental Planning Policy (Housing) 2021 - Chapter 3 Diverse Housing

State Environmental Planning Policy (Transport and Infrastructure) 2021 - Chapter 3 Educational Establishments and Child Care Facilities

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 3 Hazardous and Offensive Development

State Environmental Planning Policy (Primary Production) 2021 - Chapter 2 Primary Production and Rural Development

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 Remediation of Land

State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 2 Coastal Management

State Environmental Planning Policy (Transport and Infrastructure) 2021 - Chapter 2 Infrastructure

State Environmental Planning Policy (Resources and Energy) 2021 - Chapter 2 Mining, Petroleum Production and Extractive Industries

State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 Vegetation in non-rural areas

State Environmental Planning Policy (Planning Systems) 2021

State Environmental Planning Policy (Sustainable Buildings) 2022

Item 1(2)

The following draft local environmental plan(s) and draft planning proposal(s) have been placed on public exhibition and apply to the carrying out of development on the land:

There are no draft Local Environmental Plans currently applying to the subject land.

Item 1(3)

The following development control plan(s) that have been prepared in draft or adopted may apply to the carrying out of development on the land:

Section A1 - Residential and Tourist Development Code

Section A2 - Site Access and Parking Code

Section A3 - Development of Flood Liable Land

Section A4 - Advertising Signs Code

Section A5 - Subdivision Manual

Section A6 - Biting Midge and Mosquito Control

Section A7 - Child Care Centres

Section A8 - Brothels Policy

Section A9 - Energy Smart Homes Policy

Section A10 - Exempt and Complying Development

Section A13 - Socio Economic Impact Assessment

Section A15 - Waste Minimisation and Management

Section A16 - Preservation of Trees or Vegetation

Section A17 - Business, Enterprise Corridor and General Industrial Zones

Section A18 - Heritage

Section A19 - Biodiversity and Habitat Management

Section B3 - Banora Point West - Tweed Heads South

ITEM 2

Zoning and land use under relevant planning instruments

The following matters for each environmental planning instrument or draft environmental planning instrument that includes the land in a zone, however described—

- (a) *the identity of the zone, whether by reference to—*
 - (i) *a name, such as “Residential Zone” or “Heritage Area”, or*
 - (ii) *a number, such as “Zone No 2 (a)”,*
- (b) *the purposes for which development in the zone—*
 - (i) *may be carried out without development consent, and*
 - (ii) *may not be carried out except with development consent, and*
 - (iii) *is prohibited,*
- (c) *whether additional permitted uses apply to the land,*
- (d) *whether development standards applying to the land fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions,*
- (e) *whether the land is in an area of outstanding biodiversity value under the [Biodiversity Conservation Act 2016](#),*
- (f) *whether the land is in a conservation area, however described,*
- (g) *whether an item of environmental heritage, however described, is located on the land.*

Item 2(a-c)

The subject land is within the following zone(s) and is affected by the following landuse table:

Zone R1 General Residential

1 Objectives of zone

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To encourage the provision of tourist accommodation and related facilities and services in association with residential development where it is unlikely to significantly impact on amenity or place demands on services beyond the level reasonably required for residential use.

2 Permitted without consent

Environmental facilities; Environmental protection works; Home occupations

3 Permitted with consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Food and drink premises; Group homes; Home industries; Hostels; Kiosks; Markets; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Tank-based aquaculture; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Camping grounds; Caravan parks; Cemeteries, Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries;

Information and education facilities; Local distribution premises; Marinas; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Recreation facilities (major); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Wharf or boating facilities; Wholesale supplies

[End of Zone R1 Table]

Item 2(d)

Whether development standards applying to the land fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions:

Not applicable.

Item 2(e) - Biodiversity Value:

The subject land is not in an area of outstanding biodiversity value under the [Biodiversity Conservation Act 2016](#).

Item 2(f) - Conservation Area:

The subject land is not within a heritage conservation area identified within the applicable Tweed Local Environmental Plan.

Item 2(g) - Item of Environmental Heritage:

The subject land does not contain nor constitute an item of environmental heritage as listed in the applicable Tweed Local Environmental Plan.

Other Clauses under Tweed Local Environmental Plan 2000 (if this Plan applies)

The subject land is not affected by any special clauses in Tweed Local Environmental Plan 2000.

ITEM 3

Contributions Plans:

- | |
|--|
| <p>(1) <i>The name of each contributions plan under the Act, Division 7.1 applying to the land, including draft contributions plans.</i></p> <p>(2) <i>If the land is in a special contributions area under the Act, Division 7.1, the name of the area.</i></p> |
|--|

The following contributions plan(s) apply (or may apply depending upon proposed future development) to the subject land:

Section 94 Plan No 1 - Banora Point West/Tweed Heads South Open Space Contribution

Section 94 Plan No 4 - Tweed Road Contribution Plan

Section 94 Plan No 11 - Tweed Shire Library Facilities

Section 94 Plan No 12 - Bus Shelters

Section 94 Plan No 13 - Eviron Cemetery

Section 94 Plan No 15 - Developer Contributions for Community Facilities

Section 94 Plan No 18 - Council Administration Offices and Technical Support Facilities

Section 94 Plan No 22 - Cycleways

Section 94 Plan No 26 - Shirewide/Regional Open Space

Section 94 Plan No 32 - Developer Contributions for Heavy Haulage

ITEM 4

Complying Development

- (1) *If the land is land on which complying development may be carried out under each of the complying development codes under [State Environmental Planning Policy \(Exempt and Complying Development Codes\) 2008](#), because of that Policy, clause 1.17A(1)(c)–(e), (2), (3) or (4), 1.18(1)(c3) or 1.19.*
- (2) *If complying development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.*
- (3) *If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that—*
 - (a) *a restriction applies to the land, but it may not apply to all of the land, and*
 - (b) *the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.*
- (4) *If the complying development codes are varied, under that Policy, clause 1.12, in relation to the land.*

Part 3 Housing Code

No. Complying Development under the Housing Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land identified on an Acid Sulfate Soils Map as being Class 1 or Class 2
- * land that is within an environmentally sensitive area

Part 3A Rural Housing Code

No. Complying Development under the Rural Housing Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land identified on an Acid Sulfate Soils Map as being Class 1 or Class 2
- * land that is within an environmentally sensitive area

Part 3B Low Rise Housing Diversity Code

No. Complying Development under the Low Rise Housing Diversity Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land identified on an Acid Sulfate Soils Map as being Class 1 or Class 2
- * land that is within an environmentally sensitive area

Part 3C Greenfield Housing Code

No. Complying Development under the Greenfield Housing Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land identified on an Acid Sulfate Soils Map as being Class 1 or Class 2
- * land that is within an environmentally sensitive area

Part 4 Housing Alterations Code

No. Complying Development under the Housing Alterations Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 4A General Development Code

No. Complying Development under the General Development Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 5 Industrial and Business Alterations Code

No. Complying Development under the Industrial and Business Alterations Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 5A Industrial and Business Buildings Code

No. Complying Development under the Industrial and Business Buildings Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 5B Container Recycling Facilities Code

No. Complying Development under the Container Recycling Facilities Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 6 Subdivisions Code

No. Complying Development under the Subdivisions Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 7 Demolition Code

No. Complying Development under the Demolition Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 8 Fire Safety Code

No. Complying Development under the Fire Safety Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land that is within an environmentally sensitive area

Part 9 Agritourism and Farm Stay Accommodation Code

No. Complying Development under the Agritourism and Farm Stay Accommodation Code may not be carried out on this land. The land is affected by specific land exemptions:

- * land identified on an Acid Sulfate Soils Map as being Class 1 or Class 2
- * land that is within an environmentally sensitive area

Qualifying Statement on Council Data Affecting this Item

Tweed Shire Council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land. A restriction applies to the land, but it may not apply to all of the land.

ITEM 5

Exempt Development

- (1) *If the land is land on which exempt development may be carried out under each of the exempt development codes under [State Environmental Planning Policy \(Exempt and Complying Development Codes\) 2008](#), because of that Policy, clause 1.16(1)(b1)–(d) or 1.16A.*
- (2) *If exempt development may not be carried out on the land because of 1 of those clauses, the reasons why it may not be carried out under the clause.*
- (3) *If the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land, a statement that—*
 - (a) *a restriction applies to the land, but it may not apply to all of the land, and*
 - (b) *the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land.*
- (4) *If the exempt development codes are varied, under that Policy, clause 1.12, in relation to the land.*

Yes. Exempt Development may be carried out on this land subject to an assessment of compliance with the requirements of the SEPP.

Qualifying Statement on Council Data Affecting this Item

Tweed Shire Council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land. A restriction applies to the land, but it may not apply to all of the land.

ITEM 6

Affected building notices and building product rectification orders

- (1) Whether the council is aware that—
- (a) an affected building notice is in force in relation to the land, or
 - (b) a building product rectification order is in force in relation to the land that has not been fully complied with, or
 - (c) a notice of intention to make a building product rectification order given in relation to the land is outstanding.
- (2) In this section—
- affected building notice** has the same meaning as in the [Building Products \(Safety\) Act 2017](#), Part 4.
- building product rectification order** has the same meaning as in the [Building Products \(Safety\) Act 2017](#).

Item (1)(a-c)

Council is not aware of any affected building notice or building product rectification order or a notice of intention to make a building product rectification order for the subject land.

ITEM 7

Land reserved for acquisition:

Whether an environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

The subject land is not identified as being subject to acquisition by a public authority (as referred to in section 3.15 of the EP&A Act 1979) under the provisions of any environmental planning instrument deemed or draft environmental planning instrument.

ITEM 8

Road Widening and Road Realignment:

- Whether the land is affected by road widening or road realignment under—*
- (a) the [Roads Act 1993](#), Part 3, Division 2, or
 - (b) an environmental planning instrument, or
 - (c) a resolution of the council.

Item 8(a-c)

The subject land is not affected by any road widening or realignment proposal under either Division 2 or Part 3 of the Roads Act, 1993, any environmental planning instrument or any resolution of the Council.

ITEM 9

Flood related development controls

- (1) If the land or part of the land is within the flood planning area and subject to flood related development controls.
 - (2) If the land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls.
 - (3) In this section—
- flood planning area** has the same meaning as in the *Floodplain Development Manual*.
- Floodplain Development Manual** means the *Floodplain Development Manual (ISBN 0 7347 5476 0)* published by the NSW Government in April 2005.

probable maximum flood has the same meaning as in the Floodplain Development Manual.

Item 9(1-3)

- (1) The land is a flood control lot. Council is aware that the land or part of the land is within the flood planning area and subject to flood related development controls. Flood related development controls, such as the Tweed Local Environmental Plans and minimum floor levels, are prescribed by Development Control Plan Section A3 - Development of Flood Liable Land. Property Flood Reports that provide general flood risk information for this land are available on Council's website.

Floodplain Risk Management Study

The subject land is situated within the low flow area under the Tweed Valley Floodplain Risk Management Study (and Draft Plan) 2005 - Part 2 Planning Controls for High Flow Areas dated August 2006.

- (2) The land or part of the land is not affected by the probable maximum flood.

ITEM 10

Council and other public authority policies on hazard risk restrictions

- (1) *Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bush fire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.*
- (2) *In this section—*
- adopted policy means a policy adopted—**
- (a) *by the council, or*
- (b) *by another public authority, if the public authority has notified the council that the policy will be included in a planning certificate issued by the council.*

Land Slip:

The council has not adopted a policy to restrict development of the subject land because of the likelihood of land slip. Geotechnical investigations may be required prior to development of some sites, depending upon the characteristics of the site and the nature of development proposed.

Bushfire:

The Council has adopted a policy to restrict development of the subject land because of the likelihood of bushfire hazard (see Item 11 below).

Tidal Inundation:

Council has no records that indicate that the land is affected by tidal inundation. Accordingly, the Council has not adopted a policy to restrict development of the land in respect of tidal inundation.

Subsidence:

Council records do not indicate that the land is affected by subsidence. Accordingly, the Council has not adopted a policy to restrict development of the land in respect to subsidence.

Acid Sulfate Soils:

The subject land is identified as Class 2 on Councils "Acid Sulfate Soil Planning Map" under the relevant Tweed Local Environmental Plan.

Contamination:

Council has by resolution, adopted a policy which may restrict development of the subject land in respect of potential contamination of that land.

Due to the historical nature of land uses in the Tweed Shire, there is a possibility that land previously used for such purposes as agriculture, industrial, residential, commercial or similar uses would contain contamination. Enquiries should be made at the Council for any information held in their files and enquiries should also be made with all other relevant authorities. Tweed Shire Council has not yet prepared any detailed information as to whether this land is contaminated land.

Coastal Hazards:

This property is not affected.

Aircraft Noise:

Noise Associated with Aircraft Operations at Coolangatta Airport

Council advises that based on assessment in accordance with the Australian Noise Exposure Forecast System (ANEF as endorsed by the Civil Aviation Authority) forming part of AS2021-1994 (Acoustics - Aircraft Noise Intrusion - Building Siting and Construction), this property may be affected by noise associated with aircraft operations at Gold Coast Airport. For more detailed information on aircraft noise and ANEF charts contact the Queensland Airports Ltd, Gold Coast Airport or phone (07) 5589 1100 or facsimile (07) 5536 2838. In this regard the current Australian Standard is AS2021-2000 (Acoustics - Aircraft Noise Intrusion - Building Siting and Construction).

Any Other Risk:

Council has adopted a policy to restrict development of the subject land due to the following other identified risk:

- **Cattle Tick Dip Sites:**

Council records do not indicate that the land is or has been used as a Cattle Tick Dip Site.

ITEM 11

Bush Fire Prone Land

- | |
|--|
| <p>(1) <i>If any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under the Act, section 10.3, a statement that all or some of the land is bush fire prone land.</i></p> <p>(2) <i>If none of the land is bush fire prone land, a statement to that effect.</i></p> |
|--|

The subject land is identified as bush fire prone land in accordance with the Bush Fire Prone Land map certified in accordance with Section 10(3) of the Environmental Planning and Assessment Act 1979, as amended.

ITEM 12

Loose-fill asbestos insulation

<p><i>If the land includes residential premises, within the meaning of the Home Building Act 1989, Part 8, Division 1A, that are listed on the Register kept under that Division, a statement to that effect.</i></p>

The land is not known to be affected or listed on any register.

ITEM 13

Mine Subsidence:

<p><i>Whether the land is declared to be a mine subsidence district, within the meaning of the Coal Mine Subsidence Compensation Act 2017.</i></p>
--

No

ITEM 14

Paper subdivision information

- (1) *The name of a development plan adopted by a relevant authority that—*
 - (a) *applies to the land, or*
 - (b) *is proposed to be subject to a ballot.*
- (2) *The date of a subdivision order that applies to the land.*
- (3) *Words and expressions used in this section have the same meaning as in this Regulation, Part 10 and the Act, Schedule 7.*

There is no paper subdivision information relating to this land.

ITEM 15

Property Vegetation Plans

If the land is land in relation to which a property vegetation plan is approved and in force under the [Native Vegetation Act 2003](#), Part 4, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

The subject land is not affected by a Property Vegetation Plan under the Native Vegetation Act 2003.

ITEM 16

Biodiversity Stewardship Sites:

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under the [Biodiversity Conservation Act 2016](#), Part 5, a statement to that effect, but only if the council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

Note—

Biodiversity stewardship agreements include biobanking agreements under the [Threatened Species Conservation Act 1995](#), Part 7A that are taken to be biodiversity stewardship agreements under the [Biodiversity Conservation Act 2016](#), Part 5.

Council has not been notified of the existence of any biodiversity stewardship agreements by the Chief Executive of the Office of Environment and Heritage.

ITEM 17

Biodiversity certified land:

If the land is biodiversity certified land under the [Biodiversity Conservation Act 2016](#), Part 8, a statement to that effect.

Note—

Biodiversity certified land includes land certified under the [Threatened Species Conservation Act 1995](#), Part 7AA that is taken to be certified under the [Biodiversity Conservation Act 2016](#), Part 8.

Council is not aware of any Biodiversity Certifications on this site.

ITEM 18

Orders under Trees ([Disputes between Neighbours](#)) Act 2006

Whether an order has been made under the [Trees \(Disputes Between Neighbours\) Act 2006](#) to carry out work in relation to a tree on the land, but only if the council has been notified of the order.

Council has not been notified of any Order made under the Trees (Disputes between Neighbours) Act 2006 to carry out work in relation to a tree on the land.

ITEM 19

Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

- (1) If the [Coastal Management Act 2016](#) applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the [Local Government Act 1993](#), section 496B, for coastal protection services that relate to existing coastal protection works.
- (2) In this section—
existing coastal protection works has the same meaning as in the [Local Government Act 1993](#), section 553B.
- Note—**
Existing coastal protection works are works to reduce the impact of coastal hazards on land, such as seawalls, revetments, groynes and beach nourishment, that existed before 1 January 2011.

The subject site is not affected by any Annual Charges for coastal protection services under the *Local Government Act 1993*.

ITEM 20

Western Sydney Aerotropolis

- Whether under [State Environmental Planning Policy \(Precincts—Western Parkland City\) 2021](#), Chapter 4 the land is—
- (a) in an ANEF or ANEC contour of 20 or greater, as referred to in that Chapter, section 4.17, or
- (b) shown on the [Lighting Intensity and Wind Shear Map](#), or
- (c) shown on the [Obstacle Limitation Surface Map](#), or
- (d) in the “public safety area” on the [Public Safety Area Map](#), or
- (e) in the “3 kilometre wildlife buffer zone” or the “13 kilometre wildlife buffer zone” on the [Wildlife Buffer Zone Map](#).

Not applicable to Tweed Shire.

ITEM 21

Development consent conditions for seniors housing

If [State Environmental Planning Policy \(Housing\) 2021](#), Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

State Environmental Planning Policy (Housing) 2021, Chapter 3, Part 5 applies to the land.

There are no historic development consents relating to Seniors Housing on the land.

ITEM 22

Site compatibility certificates and development consent conditions for affordable rental housing

- (1) Whether there is a current site compatibility certificate under [State Environmental Planning Policy \(Housing\) 2021](#), or a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land and, if there is a certificate—
- (a) the period for which the certificate is current, and
- (b) that a copy may be obtained from the Department.
- (2) If [State Environmental Planning Policy \(Housing\) 2021](#), Chapter 2, Part 2, Division 1 or 5 applies to the land, any conditions of a development consent in relation to the land that are of a kind referred to in that Policy, section 21(1) or 40(1).
- (3) Any conditions of a development consent in relation to land that are of a kind referred to in [State Environmental Planning Policy \(Affordable Rental Housing\) 2009](#), clause 17(1) or 38(1).

(4) *In this section—*

former site compatibility certificate means a site compatibility certificate issued under [State Environmental Planning Policy \(Affordable Rental Housing\) 2009](#).

Item (1)(a-b)

There are no current site compatibility certificates under State Environmental Planning Policy (Housing) 2021, or a former site compatibility certificate that council is aware of in relation to the land.

Item (2)

State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2 applies to the land.

There are no development consents of a kind referred to in State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, section 21(1) or 40(1) relating to the land.

Item (3)

There are no development consents of a kind referred to in State Environmental Planning Policy (Affordable Rental Housing) 2009, clause 17(1) or 38(1) relating to the land.

Prescribed matters in accordance with the Contaminated Land Management Act 1997

The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

- (a) *that the land to which the certificate relates is significantly contaminated land within the meaning of that Act – if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,*
- (b) *that the land to which the certificate relates is subject to a management order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,*
- (c) *that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act – if it is the subject of such an approved proposal at the date when the certificate is issued,*
- (d) *that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act – if it is subject to such an order at the date when the certificate is issued,*
- (e) *that the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such a statement has been provided at any time to the local authority issuing the certificate.*

(a) Significantly Contaminated Land

As at the date of this certificate, Council has not been notified by the NSW Environment Protection Authority (EPA) that the land is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.

(b) Management Order

As at the date of this certificate, Council has not been notified by the NSW Environment Protection Authority (EPA) that the land is the subject of a management order within the meaning of the Contaminated Land Management Act 1997.

(c) Approved Voluntary Management Proposal

As at the date of this certificate, Council has not been notified by the NSW Environment Protection Authority (EPA) that the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.

(d) Ongoing Maintenance Order

As at the date of this certificate, Council has not been notified by the NSW Environment Protection Authority (EPA) that the land is the subject of an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.

(e) Site Audit Statement

As at the date of this certificate, Council has not been notified that the land is the subject of a site audit statement within the meaning of Part 4 of the Contaminated Land Management Act 1997. Council has not been notified/provided with a copy of any site audit statement pertaining to the subject land.

Certificate No: ePlanCer24/1008
Date: 11/04/2024



Additional Information Pursuant to Section 10.7(5) of the Environmental Planning and Assessment Act, 1979

Development Approval/s

The following development consents have been issued within the last five (5) years.

Application	Decision	Appeal	Date	Description
CDC19/0045	Approved		26/04/2019	Tenancy fitout to create a new student domestic kitchen and café area within an existing single storey building.
DA21/0946	Approved		29/11/2022	alterations and additions to educational establishment (two storey extension to existing school hall)

Draft Environmental Planning Instruments

Council has resolved to prepare a Draft Local Environmental Plan Amendment (Environmental Zones Review - PP14/0004) relating to the subject land.

Tree Preservation Orders

The subject land is not affected by Council's Tree Preservation Orders.

Height under either Tweed Local Environmental Plan 2000, Tweed City Centre Local Environmental Plan 2012 or Tweed Local Environmental Plan 2014

The land is restricted to a 13.6 metre height limit under Tweed Local Environmental Plan 2014

Future Road Corridor

The subject land is not identified as being subject to future road corridor as identified in Tweed Road Contribution Plan No. 4 (as referred to in Section 26 of the EP&A Act 1979).

Future Road Widening

The subject land is not identified as being subject to future road widening as identified in Tweed Road Contribution Plan No. 4 (as referred to in Section 26 of the EP&A Act 1979).

Farmland Protection

The subject land is not affected by any Farmland Protection.

Tweed Coast Comprehensive Koala Plan of Management

The subject land is affected by the Tweed Coast Comprehensive Koala Plan of Management.

Residential Living Within and Near Rural Zones

Residential living within and near rural zones may be exposed to noise and impacts from existing and future neighbouring farming activities.

The following "Living and Working in Rural Areas" handbook published by DPI NSW provides a more detailed explanation of these impacts:

https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0010/234001/Living-and-working-in-rural-areas-complete.pdf

NOTE: *The information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2021.*

Information provided under Section 10.7(2) is in accordance with the matters prescribed under Schedule 2 of the Environmental Planning and Assessment Regulation 2021.

When information pursuant to Section 10.7(5) is requested, the Council is under no obligation to furnish any particular information pursuant to that Section. The absence of any reference to any matters affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.

In addition to the above information you may wish to obtain advice on additional matters affecting the site. A certificate under Section 10.7(5) of the Environmental Planning and Assessment Act 1979 may provide advice on the following additional matters:

- *Development Approval/s issued within the last five years;*
- *Draft Environmental Planning Instruments;*
- *Tree Preservation Orders;*
- *Further Information Regarding Contamination;*
- *Height under Tweed Local Environmental Plan 2000; Tweed City Centre Local Environmental Plan 2012 and Tweed Local Environmental Plan 2014*
- *Aircraft Noise;*
- *Future Road Corridor;*
- *Future Road Widening; and*
- *Farmland Protection*

Council draws your attention to Section 10.7(6) which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to subsection (5).

Please contact the Development Assessment Unit for further information about any instruments or affectations referred to in the Certificate.



TROY GREEN
GENERAL MANAGER

Per

APPENDIX D – BUSHFIRE RISK ASSESSMENT

Bushfire Assessment Report

Proposed:
**Demountable
Building**

At:
**Pacific Coast Christian
School, 3A Acacia Street,
Tweed Heads South**

Reference Number: 240308

20 February 2024



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

Tel: (02) 9457 6530

PO Box 124
Berowra NSW 2081
ABN 19 057 337 774

www.bushfirehazardsolutions.com.au



Contents

	<u>Page No.</u>
Copyright and Disclaimer	2
List of Abbreviations	3
Executive Summary	4
1.0 Introduction	5
2.0 Legislative Requirements	6
3.0 Purpose of Report	7
4.0 Scope of Report	7
5.0 Compliance Table and Notes	7 - 8
6.0 Aerial view	9
7.0 Site Assessment	10 - 14
8.0 Bushfire Assessment	15 - 22
9.0 Recommendations	23 - 24
10.0 Conclusion	25
11.0 Annexure	26
- List of referenced documents and attachments	
- Attachments	

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Legal status:

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

Section 4.14 applications (under the Environmental Planning and Assessment Act 1979) and all infill development applications *may be* referred by Council to the NSW Rural Fire Service for review and concurrence during the DA process. S100B applications under the Rural Fires Act 1997 (subdivisions and Special Fire Protection Purpose Developments), Flame Zone determinations and Alternate Solutions *must be* referred by Council to the NSW Rural Fire Service for review and receipt of a Bushfire Safety Authority (BSA) or other such recommended conditions from the NSW Rural Fire Service before the consent can be granted.

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

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

Disclaimer:

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

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Version Control				
Version	Date	Author	Reviewed by	Details
1	20/02/2024	Andrew Muirhead	Stuart McMonnies	Final Report

List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2018 as amended
BAL	Bushfire Attack Level
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Tweed Shire Council
DA	Development Application
ELVIS	Elevation and Depth Foundation Spatial Data
EP&A Act	<i>Environmental Planning and Assessment Act - 1979</i>
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NASH	National Association of Steel-framed Housing
NCC	National Construction Code
NP	National Park
NSP	Neighbourhood Safer Place
OPA	Outer Protection Area
PBP	<i>Planning for Bush Fire Protection – 2019 as amended</i>
ROW	Right of Way
RF Act	<i>Rural Fires Act - 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

Executive Summary:

Building Code and Bushfire Hazard Solution P/L has been commissioned to prepare an independent Bushfire Assessment Report for the proposed alterations to an existing educational establishment known as Pacific Coast Christian School, located at 3A Acacia Street Tweed Heads South.

The proposed works relate to the installation of new demountable classroom building within an existing school.

Tweed Shire Council's Bushfire Prone Land Map identifies the subject property as partially containing Category 1 vegetation and the Vegetation Buffer therefore the subject site is considered 'bushfire prone'.

Schools are listed Special Fire Protection Purpose (SFPP) development under section 100b of the *Rural Fires Act 1997*. As the proposal involves a listed SFPP development on bushfire prone land the development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).

SFPP development is assessed under Chapter 6 'Special Fire Protection Purpose Developments' of *Planning for Bush Fire Protection 2019* (PBP).

The minimum required APZ was determined from the Table A1.12.1 of PBP to be 67 metres to the south and from bushfire design modelling to be 60 metres to the west.

The location of the proposed works provides an Asset Protection Zone (APZs) of 63 metres to the west and >100 metres to the south. The APZs consist of maintained grounds and hard surfaced areas within the subject property.

The proposal has been designed as far from the identified hazards as possible and exceeds the minimum required APZs for new SFPP development.

The highest Bushfire Attack Level to the proposed building was determined from Table A1.12.6 of PBP to be 'BAL 12.5'.

In accordance with Table 2 of the addendum to PBP (and S43C10 NCC 2022) the demountable building must comply with BAL 19 and subsequently comply with sections 3 and 6 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018 and the additional construction requirements detailed in section 7.5 of PBP.

The proposal satisfies all relevant specifications and requirements of *Planning for Bush Fire Protection 2019* and the addendum to *Planning for Bush Fire Protection*.

1.0 Introduction

The development proposal relates to alterations and additions within an existing educational establishment known as the Pacific Coast Christian School, located at 3A Acacia Street Tweed Heads South.

The proposed works relate to the installation of new demountable building.

Tweed Shire Council's Bushfire Prone Land Map identifies the subject property as partially containing Category 1 Vegetation and the Vegetation Buffer therefore the subject site is considered 'bushfire prone'.

Schools are listed Special Fire Protection Purpose (SFPP) development under section 100b of the *Rural Fires Act 1997*.

As the proposal involves a listed SFPP development on bushfire prone land the development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).



Figure 01: Extract from Tweed Shire Council's Bushfire Prone Land Map

2.0 Legislative Requirements

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

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

2.1 *Rural Fires Act 1997*

Schools are a listed Special Fire Protection Purpose (SFPP) under section 100b (6a) of the *Rural Fires Act 1997*.

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

2.2 *Environmental Planning & Assessment Act 1979*

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

2.3 *Rural Fires Regulation 2022*

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

2.4 *Planning for Bush Fire Protection*

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

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

- Chapter 1 - Aim and Objectives
- Chapter 6 - Special Fire Protection Purpose Developments

3.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide the Rural Fire Service with an independent bushfire assessment together with appropriate recommendations for both new building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that the NSW Rural Fire Service may elect to place within any consent conditions.

4.0 Scope of this Report

The scope of this report is limited to providing a bushfire assessment and recommendations for the subject property. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

5.0 Compliance Tables & Notes

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

	North	East	South	West
Vegetation Structure	Managed land	Managed land	Coastal Swamp Forest	Coastal Swamp Forest
Slope	n/a	n/a	0 degrees and across	0 degrees and across
Required Asset Protection Zone (New SFPP)	n/a	n/a	67 metres*	60 metres**
Available Asset Protection Zone	n/a	n/a	>100 metres	>63 metres
Significant Landscape Features	Existing school buildings	Existing school buildings and neighbouring allotments	Sporting oval	Existing school buildings
Threatened Species	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Aboriginal Relics	APZ Existing	APZ Existing	APZ Existing	APZ Existing
Bushfire Attack Level	n/a	n/a	BAL Low	BAL 12.5**

* Determined from Table A1.12.1 of PBP

** Determined from Bushfire Design Modelling (attached)

Compliance Summary of Bushfire Protection Measures			
Bushfire Protection Measure	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.03
Construction Standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03
Access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8.03
Water Supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03
Gas and Electrical Supplies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.03

Asset Protection Zones Compliance

One of the objectives underpinning Planning for Bush Fire Protection is to provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings.

The available Asset Protection Zones (APZ) was measured to be >100 metres to the south and >63 metres to the west. The APZs consist of maintained grounds within the subject property.

The APZs will continue to be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

Construction Level Compliance

The highest Bushfire Attack Level to the proposed demountable building was determined from Table A1.12.6 of PBP to be 'BAL 12.5'.

In accordance with Table 2 of the addendum to PBP (and S43C10 NCC 2022) the demountable building must comply with BAL 19 and subsequently comply with sections 3 and 6 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018 and the additional construction requirements detailed in section 7.5 of PBP.

6.0 Aerial view of the subject allotment

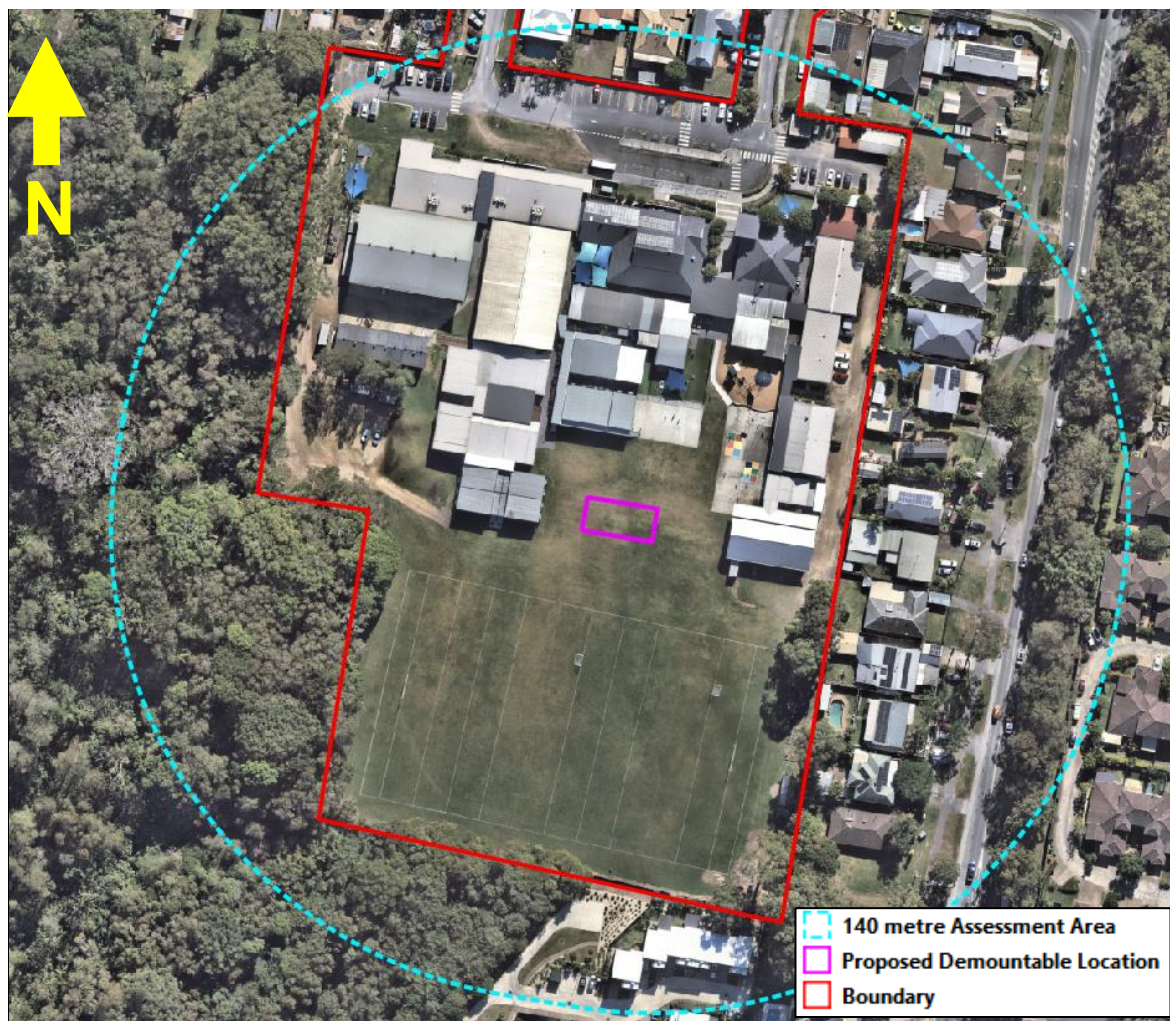


Figure 02: Aerial view of the subject area. Courtesy Nearmap (June 2023)

7.0 Bushfire Assessment

Multiple detailed site inspections have been undertaken of the subject site by representatives of Building Code & Bushfire Hazard Solutions P/L. In addition to the collected site data this assessment has relied on:

- Aerial imagery of the subject area (NSW Spatial Services & Nearmap);
- 1 metre contour mapping of the subject area (Elevation and Depth Foundation Spatial Data – Geoscience Australia)
- NSW Planning Portal Spatial Viewer
- Vegetation Mapping (Vegetation NSW)

7.01 Location

The subject site contains an existing educational establishment known as Pacific Coast Christian School and is located at 3A Acacia Street Tweed Heads South.

The subject site is zoned R1: General Residential and located within Tweed Shire Council’s Local Government Area.

The subject property has two street accesses to Acacia Street to the north and abuts similar zoned allotments to the north, east and south and a vegetated allotment to the south and west.

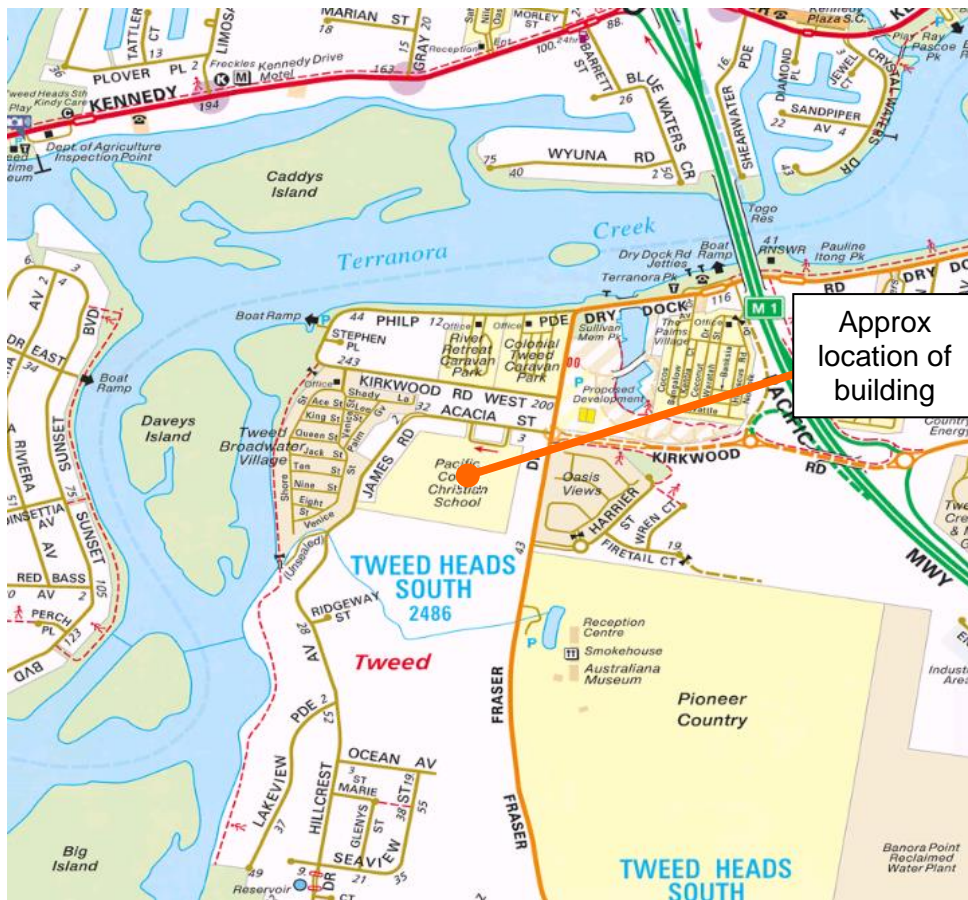


Figure 03: Extract from street-directory.com.au

7.03 Vegetation

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

The vegetation posing a hazard was found to consist of trees 10 – 20 metres high with a canopy cover of 30 - 70% with a limited understorey of emerging trees and native grasses.

The vegetation posing a hazard to the west was found to be mapped (Vegetation NSW) as Northern Melaleuca quinquenervia Swamp Forest (PCT: 4004) and Far North Brush Box-Bloodwood Wet Forest (PCT: 3147) which have a vegetation class of Coastal Swamp Forests and North Coast Wet Sclerophyll Forests respectively.

For the purpose of PBP we have determined the vegetation to the south and west to be Coastal Swamp Forest.

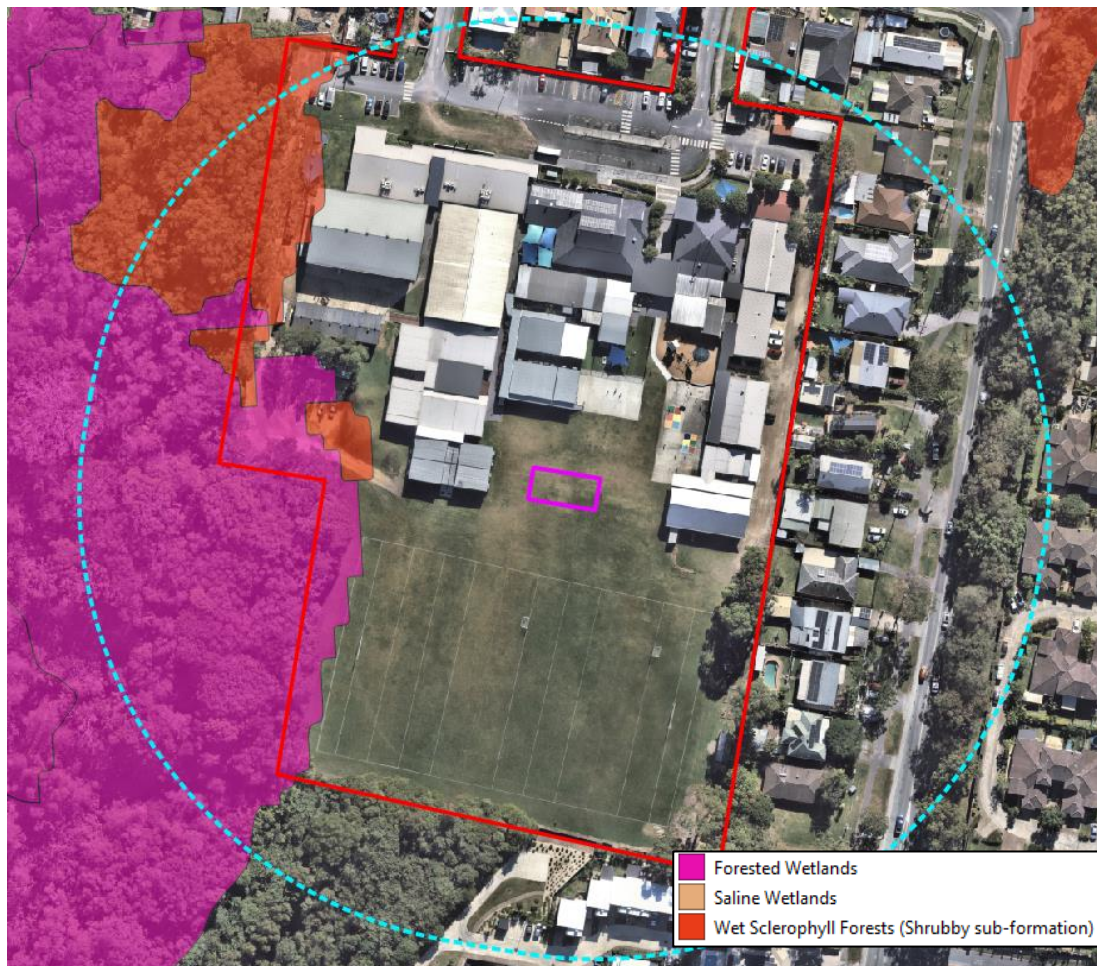


Figure 04: Aerial view of the subject area overlaid with vegetation mapping (Vegetation NSW)



Photograph 01: View into the vegetation to the west of the subject building.



Photograph 02: View across the oval towards to vegetation to the south.

7.04 Slope and Topography

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

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

The slope that would most significantly influence bushfire behaviour was determined from topographic imagery (1 metre contours) in conjunction with site observations to be:

- 0 degrees and across slope within the hazard to the south and west

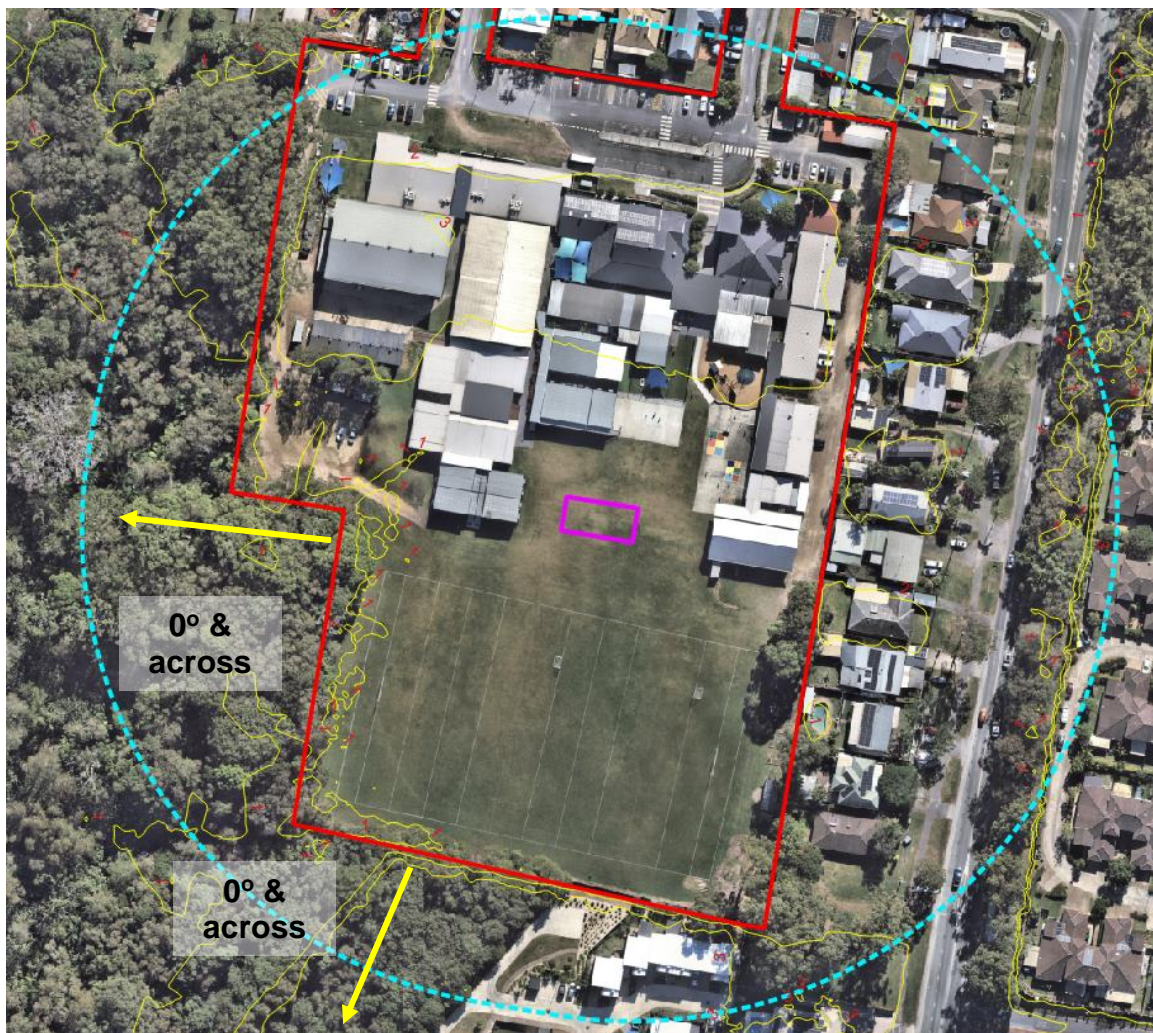


Figure 05: Extract from ELVIS – Geoscience Australia (1m contours)

7.04 Fire Weather

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

In accordance with the NSW Rural Fire Service publication 'NSW Local Government Areas FDI' (2017) Tweed Shire Council form part of the Far North Coast Region Fire Weather District and attracts an FFDI of 80.

7.05 Fire History

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

In this instance the site or surrounding sites have not been impacted by a bushfire with the closest fire being >2.8 kilometres to the east which occurred back in the 2001-02 fire season (source NPWS Fire History dataset).

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

8.0 Bushfire Protection Measures

8.01 Planning for Bush Fire Protection - 2019

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

Bushfire prone land are defined as those areas;

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

Tweed Shire Council's Bushfire Prone Land Map identifies the subject property as partially containing Category 1 Vegetation and the Vegetation Buffer, therefore the site is considered 'bushfire prone'.

Schools are listed Special Fire Protection Purpose (SFPP) development under section 100b of the *Rural Fires Act 1997*.

As the proposal involves a listed SFPP development on bushfire prone land the development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).

SFPP development is usual assessed under Chapter 6 'Special Fire Protection Purpose Developments' of *Planning for Bush Fire Protection 2019* (PBP).

In this instance the proposal must satisfy the aim and objectives detailed in Chapter 1 'Introduction' and specific objectives and bushfire protection measures detailed in Chapter 6 'Special Fire Protection Purpose Developments' of PBP. The additional provisions outlined in the addendum to PBP (2022) have also been addressed.

8.02 Specific Objectives

The following table outlines the objectives that apply to existing SFPP development under section 6.4 'Development of existing SFPP facilities' of PBP and our comments on the proposal's compliance or otherwise.

Objective	Comment
<i>provide an appropriate defensible space;</i>	The proposed works exceed the minimum required APZs for a new SFPP development.
<i>site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition;</i>	The proposed works will be situated in a BAL 12.5 area. The available APZs will minimise potential for material ignition.

Objective	Comment
<i>provide a better bush fire protection outcome for existing buildings;</i>	<p>The proposed works exceed the minimum required APZs for a new SFPP development.</p> <p>The Bushfire Emergency Management and Evacuation Plan will also be updated as part of this application.</p>
<i>new buildings should be located as far from the hazard as possible and should not be extended towards or situated closer to the hazard than the existing buildings (unless they can comply with section 6.8);</i>	<p>The proposed building does not extend closer to the hazard than existing buildings on site.</p>
<i>ensure there is no increase in bush fire management and maintenance responsibility on adjoining land owners without their written confirmation;</i>	<p>There is no increase in bush fire management and maintenance responsibilities on adjoining land owners as a result of the proposal.</p>
<i>ensure building design and construction enhances the chances of occupant and building survival; and</i>	<p>The proposed building is within a BAL 12.5 area and exceeds the minimum required APZs.</p>
<i>provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads).</i>	<p>It has been recommended that the Bushfire Emergency and Evacuation Management Plan be updated as part of this application.</p> <p>The subject site has street frontage to a public road which has capacity to accommodate a timely evacuation of the site away from any bushfire hazard.</p>

8.03 Bushfire Protection Measures

Section 6.8 ‘Bush fire protection measures’ of PBP outlines the specific Bushfire Protection Measures (BPMs) applicable to Special Fire Protection Purpose development, including APZs, Landscaping, Construction, Access, Services & Emergency Management Plan.

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

Asset Protection Zones

Asset Protection Zones for new Special Fire Protection Purpose (SFPP) development are determined from Table A1.12.1 of PBP or bushfire design modelling achieving a radiant heat impact of no more than 10kW/m² at the closest point of the available building footprint.

The minimum required APZ was determined from the Table A1.12.1 of PBP to be 67 metres to the south and determined from bushfire design modelling to be 60 metres to the west.

The location of the proposed works provides an Asset Protection Zone (APZs) of >100 metres to the south and 63 metres to the west. The APZs consist of maintained grounds within the subject property.

All existing APZs within the subject site not built upon will continue to be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

Building construction, siting & design

Australian Standard 3959 – 2018 'Construction of buildings in bushfire-prone areas' (AS3959) specifies construction standards for buildings within various Bushfire Attack Levels as determined by Planning for Bush Fire Protection – 2019.

AS3959 provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ.

Correlation between bushfire impact and AS3959		
Bushfire Attack Level	Maximum radiant heat impact (kW/m ²)	Level of construction under AS3959-2018
Low		No special construction requirements
12.5	≤12.5	BAL - 12.5
19	>12.5 to 19.0	BAL - 19
29	>19.0 to 29.0	BAL - 29
40	>29.0 to 40.0	BAL - 40
Flame Zone	>40.0	BAL FZ No deemed to satisfy provisions

The highest Bushfire Attack Level to the proposed building was determined from Table A1.12.6 of PBP to be 'BAL 12.5'.

In accordance with Table 2 of the addendum to PBP (and S43C10 NCC 2022) the demountable building must comply with BAL 19 and subsequently comply with sections 3 and 6 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018 and the additional construction requirements detailed in section 7.5 of PBP.

Property Access

Clear access to the property is available from Acacia Street and the surrounding road network. Persons seeking to egress the proposed building are able to do so via the internal road and existing road infrastructure.

The loop road along the northern boundary is available through the bus zone so that fire appliances do not need to perform a turn around on site.

Fire appliances have direct access to the hazard interface via the existing overflow carpark onsite for hazard reduction or fire suppression activities.

The Acceptable Solution listed in Table 3 of the addendum to PBP requires the provision of a 6 metre wide unobstructed path around the subject building.

The site constraints, including presence of existing school buildings and open space, prevent the ability to install new perimeter roads the subject building. Compliance with Table 3 of the addendum to PBP must therefore be addressed by satisfying the Performance Criteria, being;

Firefighting vehicles are provided safe, all-weather access to structures and hazardous vegetation.

The subject building is located adjacent an existing sports field, which is accessed via access drives along both the eastern and western property boundaries. The access road provides an all-weather surface and is capable of carrying a fully loaded firefighting appliance.

There is also ample turning opportunity for a firefighting appliance, either in front of the subject building or further west at the carpark or on the oval. Loop access is also available across the oval / grassed area to the eastern access road.

The most distant existing point of the subject building is located within 70 metres of the existing access road.

The existing access provisions are considered adequate to provide safe operational access for emergency service personnel in suppressing a bushfire or undertaking property protection activities. It also provides firefighting vehicles safe, all-weather access to structures and hazardous vegetation.

The existing access in our opinion satisfies the performance criteria of Table 3 of the addendum to PBP.

We request that the NSW RFS specifically acknowledge this modification in the issued Bush Fire Safety Authority in accordance with NSW G5D3 NCC 2022.

The access is considered adequate for occupant evacuation and fire service access.

Water Supply & Utilities

The subject property is connected to the existing towns water main for its commercial needs. Existing hydrants are available in Acacia Street and surrounding streets for the replenishment of attending fire services.

The existing hydrant network is within 70 metres to the most distant internal point of the new works and is considered adequate for the replenishment of attending fire services and will satisfy Table 4 of the addendum to PBP.

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

The proposed building will have a new connection to the existing underground electrical network.

Emergency management arrangements

The intent of the Emergency Management Plan measure is to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.

This assessment includes a recommendation that the existing Bushfire Emergency Management Plan for the School be updated to capture the new building.

8.04 Aim & Objectives of PBP

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

Aim / Objective	Comment
<p>The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.</p>	<p>With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.</p>
<p>(i) afford buildings and their occupants protection from exposure to a bush fire;</p>	<p>The proposed building works are within a BAL 12.5 area.</p> <p>The existing APZs will afford the building and its occupants protection from the exposure to bushfires.</p>
<p>(ii) provide for a defensible space to be located around buildings;</p>	<p>The existing APZs provide a defensible space around the building.</p>
<p>(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;</p>	<p>The Asset Protection Zones to the proposed building works provides for appropriate setbacks and minimises potential material ignition.</p>
<p>(iv) ensure that appropriate operational access and egress for emergency service personnel and occupants is available;</p>	<p>The existing access arrangements have been reviewed and are considered adequate for fire-fighter access and occupant evacuation.</p>

Objective	Comment
<p>(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and</p>	<p>All APZs within the subject site will be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication ‘Standards for Asset Protection Zones’.</p> <p>Any future Landscaping is to comply with the provisions of Appendix 4 of PBP.</p>
<p>(vi) ensure that utility services are adequate to meet the needs of firefighters.</p>	<p>The subject site has existing hydrants located within Acacia Street with a new hydrant to be located within 70 metres of the proposed building.</p> <p>Existing water supply is adequate to meet the needs of attending fire services.</p>

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

8.05 Submission Detail

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

Submission Detail	Response
<i>(a) a description (including the address) of the property on which the development the subject of the application is proposed to be carried out,</i>	See section 7.01
<i>(b) a classification of the vegetation on and surrounding the property (out to a distance of 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in Planning for Bush Fire Protection,</i>	See section 7.02
<i>(c) an assessment of the slope of the land on and surrounding the property (out to a distance of 100 metres from the boundaries of the property),</i>	See section 7.03
<i>(d) identification of any significant environmental features on the property,</i>	The site is not mapped with any significant environmental features.
<i>(e) the details of any threatened species or threatened ecological community under the Biodiversity Conservation Act 2016 that is known to the applicant to exist on the property,</i>	No new environmental impact is proposed as part of this application.
<i>(f) the details and location of any Aboriginal object (within the meaning of the National Parks and Wildlife Act 1974) or Aboriginal place (within the meaning of that Act) that is known to the applicant to be situated on the property,</i>	No known sites
<i>(g) a bush fire assessment for the proposed development (including the methodology used in the assessment) that addresses the following matters—</i>	See section 8.0
<i>(i) the extent to which the development is to provide for setbacks, including asset protection zones,</i>	See section 8.03
<i>(ii) the siting and adequacy of water supplies for fire fighting,</i>	See section 8.03
<i>(iii) the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency,</i>	Egress is available from the subject building via existing public roads and internal roads away from the identified hazard. These roads are considered adequate to accommodate a timely evacuation from the site.

Submission Detail	Response
<i>(iv) whether or not public roads in the vicinity that link with the fire trail network have two-way access,</i>	There are no registered fire trails within the local area.
<i>(v) the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response,</i>	See section 8.03
<i>(vi) the adequacy of bush fire maintenance plans and fire emergency procedures for the development site,</i>	See section 8.03
<i>(vii) the construction standards to be used for building elements in the development,</i>	See section 8.03
<i>(viii) the adequacy of sprinkler systems and other fire protection measures to be incorporated into the development,</i>	There is no existing bushfire sprinkler system, nor is one proposed. See section 8.03 for all bushfire protection measures
<i>(ix) any registered fire trails on the property,</i>	There are no classified fire trails within the subject site.

9.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with Planning for Bush Fire Protection – 2019 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas - 2018.

Asset Protection Zones

1. At the commencement of building works and in perpetuity all grounds within the subject property shall continue to be managed as an inner protection area (IPA) as outlined within Appendix 4 of 'Planning for Bush Fire Protection 2019' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

Construction

2. That the proposed new building works shall comply with sections 3 and 6 (BAL 19) of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' – 2018.
3. That all new construction shall comply section 7.5 of *Planning for Bushfire Protection 2019*.

Emergency Management

4. That the bushfire emergency management plan be updated to capture the new building and to be consistent with the NSW Rural Fire Service guidelines.

Services (where applicable)

Electricity:

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

Gas:

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

NCC – Specification 43

- **We request that the NSW RFS specifically acknowledge that the access provisions at S43C14 are not applicable in the issued Bush Fire Safety Authority in accordance with NSW G5D3 NCC 2022.**

10.0 Conclusion

Tweed Shire Council's Bushfire Prone Land Map identifies the subject property as partially containing Category 1 Vegetation and the Vegetation Buffer therefore the subject site is considered 'bushfire prone'.

Schools are listed Special Fire Protection Purpose (SFPP) development under section 100b of the *Rural Fires Act 1997*.

As the proposal involves a listed SFPP development on bushfire prone land the development must obtain a Bush Fire Safety Authority from the Commissioner of the NSW Rural Fire Service (RFS).

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

It is of our opinion that the proposal can satisfy all relevant specifications and requirements of PBP.

We are therefore in support of the development.

Should you have any enquiries regarding this project please contact our office.

Prepared by
Building Code & Bushfire Hazard Solutions



Andrew Muirhead

Bushfire Consultant
Graduate Certificate in Bushfire Protection
Diploma of Engineering
FPA Australia BPAD Level 2 Accredited Practitioner
BPAD Accreditation No. BPAD46966



Reviewed by
Building Code & Bushfire Hazard Solutions P/L



Stuart McMonnies

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



11.0 Annexure 01

List of Referenced Documents

Australian Building Codes Board (2022). *National Construction Code Volume One - Building Code of Australia*. ABCB

ELVIS -Elevation -Foundation Spatial Data. Elevation.fsdf.org.au. Available at: <http://elevation.fsdf.org.au/>

Keith, D. (2004). "Ocean Shores to Desert Dunes" Department of Environment and Conservation, Sydney

NSW Department of Planning and Environment (2019). *Planning Portal*. Accessed at: <https://www.planningportal.nsw.gov.au/>

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

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

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

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

Stanton Dahl Architects (2024) *Masterplan Site Existing* (Project No; 2841.22, Drawing No; MP01, Revision#; 02, Date 15/01/2024)

Acknowledgements to:

Geoscience Australia
Nearmap
Street-directory.com.au

Attachments

Attachment 01: Bushfire Design Modelling



NBC Bushfire Attack Assessment Report V4.1

AS3959 (2018) Appendix B - Detailed Method 2

Print Date: 15/02/2024

Assessment Date: 15/02/2024

Site Street Address: Pacific Coast Christian School, Tweed Heads

Assessor: Stuart McMonnies; Bushfire Hazard Solutions

Local Government Area: Tweed

Alpine Area: No

Equations Used

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001/Vesta/Catchpole

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

Run Description: West - Min APZ

Vegetation Information

Vegetation Type: Coastal Swamp Forests

Vegetation Group: Forested Wetlands

Vegetation Slope: 0 Degrees

Vegetation Slope Type: Level

Surface Fuel Load(t/ha): 22.6

Overall Fuel Load(t/ha): 34.1

Vegetation Height(m): 1.4

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 0 Degrees

Site Slope Type: Level

Elevation of Receiver(m) Default

APZ/Separation(m): 60

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 95

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 80

Program Outputs

Level of Construction: BAL 12.5

Peak Elevation of Receiver(m): 8.87

Radiant Heat(kW/m²): 10

Flame Angle (degrees): 77

Flame Length(m): 18.2

Maximum View Factor: 0.117

Rate Of Spread (km/h): 2.17

Inner Protection Area(m): 0

Transmissivity: 0.768

Outer Protection Area(m): 0

Fire Intensity(kW/m): 38225

Run Description: West - RHF

Vegetation Information

Vegetation Type: Coastal Swamp Forests

Vegetation Group: Forested Wetlands

Vegetation Slope: 0 Degrees

Vegetation Slope Type: Level

Surface Fuel Load(t/ha): 22.6

Overall Fuel Load(t/ha): 34.1

Vegetation Height(m): 1.4

Only Applicable to Shrub/Scrub and Vesta

Site Information

Site Slope: 0 Degrees

Site Slope Type: Level

Elevation of Receiver(m) Default

APZ/Separation(m): 63

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1200

Calculation Parameters

Flame Emissivity: 95

Relative Humidity(%): 25

Heat of Combustion(kJ/kg) 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 80

Program Outputs

Level of Construction: BAL 12.5

Peak Elevation of Receiver(m): 8.9

Radiant Heat(kW/m2): 9.2

Flame Angle (degrees): 78

Flame Length(m): 18.19

Maximum View Factor: 0.108

Rate Of Spread (km/h): 2.17

Inner Protection Area(m): 39

Transmissivity: 0.765

Outer Protection Area(m): 24

Fire Intensity(kW/m): 38225

APPENDIX E – BUSHFIRE SAFETY AUTHORITY



NSW RURAL FIRE SERVICE

EPM Projects
Level 13,
67 Albert Avenue
Chatswood NSW 2067
raitken@epmprojects.com.au

Our reference: DA20240228000818-Original-1

ATTENTION: Ryan Aitken

Date: Wednesday 3 April 2024

Dear Ryan

**State Environmental Planning Policy (Transport and Infrastructure) 2021
SFPP – School
3A ACACIA STREET TWEED HEADS SOUTH NSW 2486, 1//DP1247160**

I refer to your correspondence received by the NSW Rural Fire Service on 29 February 2024 seeking a Bush Fire Safety Authority for the above proposal.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and a Bush Fire Safety Authority, under section 100B of the *Rural Fires Act 1997*, is now issued subject to the following conditions:

Asset Protection Zones

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.

1. The entire property shall be managed as an inner protection area in accordance with Appendix 4.1.1 of 'Planning for Bush Fire Protection 2019'.

Construction Standards

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.

2. The subject classrooms shall comply with section 3 and section 6 (BAL 19) Australian Standard AS3959-2018 'Construction of buildings in bushfire-prone areas' or the relevant requirements of the NASH Standard - Steel Framed Construction in Bushfire Areas (incorporating amendment A - 2015). The subject classrooms shall also comply with the construction requirements in Section 7.5 of 'Planning for Bush Fire Protection 2019'.

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
F (02) 8741 5550
www.rfs.nsw.gov.au

Access – Internal Roads

The intent of measures is to provide safe operational access for emergency services personnel in suppressing a bush fire while residents are accessing or egressing an area.

3. Compliance with Specification 43 provisions for S43C14 Vehicular access of NCC 2022 is modified as follows: Access roads for special fire protection purpose (SFPP) developments shall comply with following requirements of Table 6.8b of 'Planning for Bush Fire Protection 2019':

- a) SFPP access roads are two-wheel drive, all-weather roads;
- b) have a load bearing capacity and unobstructed and height and width to permit the operation and passage of fire fighting vehicles;
- c) provide access to all structures;
- d) access roads must provide suitable turning areas in accordance with Appendix 3; and
- e) provide reasonable pedestrian access from the vehicular access to the building.

Water and Utility Services

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.

4. Any new or extension of existing electricity and/or gas services is to comply with Table 6.8c of 'Planning for Bush Fire Protection 2019'.

Emergency and Evacuation Planning Assessment

The intent of measures is to provide suitable emergency and evacuation arrangements for occupants of SFPP developments.

5. A Bush Fire Emergency Management and Evacuation Plan shall comply with the following requirements of section 6.8.4 of 'Planning for Bush Fire Protection 2019':

- a) Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the applicable document(s) as follows:
 - i. The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;
 - ii. Australian Standard AS 3745:2010 Planning for emergencies in facilities; and
 - iii. Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable).
- b) the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants.

Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.

General Advice

The recommendations are based on the Site Plan prepared by ATCO, titled 'Proposed New Classrooms', Project No: BNEP/02216, dated 22 November, 2023 (Revision B) and the 'Bushfire Assessment Report' prepared by Building Code & Bushfire Hazard Solutions Pty Limited dated 20 February, 2024.

The NSW RFS recognises the approach adopted in the National Construction Code 2022 (NCC 2022) for determining and certifying evidence of suitability for materials, construction, and designs.

Prescriptive compliance with Specification 43 (sections S43C3, S43C4, S43C5, S43C6, S43C7, S43C8, S43C9, S43C12 and S43C13) is specified. Performance-based solutions proposed in lieu of compliance with the prescriptive provisions of Specification 43 (sections S43C3, S43C4, S43C5, S43C6, S43C7, S43C8, S43C9,

S43C12 and S43C13 of NCC 2022) need to be assessed in accordance with the NCC 2022 by the Certifying Authority.

For any queries regarding this correspondence, please contact Neil Pengilly on 1300 NSW RFS.

Yours sincerely



Allyn Purkiss
**Acting Manager Planning & Environment Services
Built & Natural Environment**



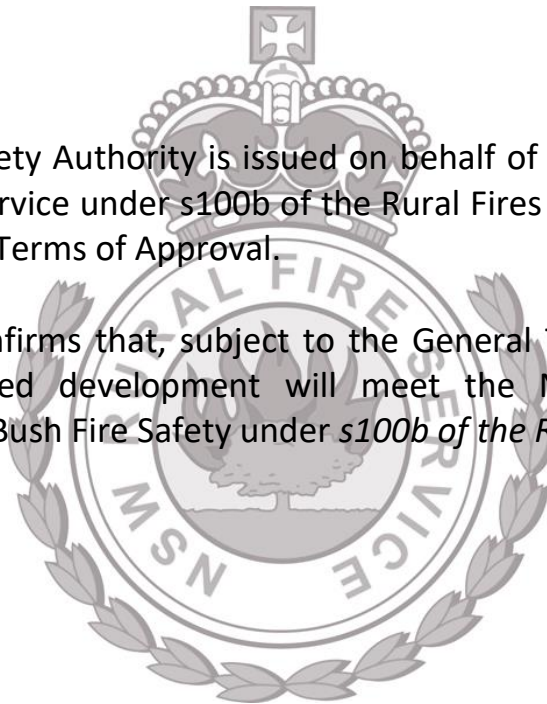
NSW RURAL FIRE SERVICE

BUSH FIRE SAFETY AUTHORITY

School – Pacific Coast Christian School
3 Acacia Street Tweed Heads South NSW 2486, 1//DP1247160
RFS Reference: DA20240304000865-Original-1

This Bush Fire Safety Authority is issued on behalf of the Commissioner of the NSW Rural Fire Service under s100b of the Rural Fires Act (1997) subject to the attached General Terms of Approval.

This authority confirms that, subject to the General Terms of Approval being met, the proposed development will meet the NSW Rural Fire Service requirements for Bush Fire Safety under *s100b of the Rural Fires Act 1997*.



Allyn Purkiss

**Acting Manager Planning & Environment Services
Built & Natural Environment**

Wednesday 3 April 2024

APPENDIX F – FLOOD IMPACT STATEMENT

Ref: 240184

3 May 2024

Pacific Coast Christian School
c/-EPM Projects
Level 3, 67 Albert Avenue
Chatswood NSW 2067

Attention: Mr Anesh Parmar

Dear Sir,

**RE: FLOOD IMPACT STATEMENT
LOT 1 LP 1247160
3a ACACIA STREET, TWEED HEADS SOUTH**

Cozens Regan Group Pty has been commissioned by EPM Projects to review the impact on site flooding associated with the change of use of office buildings to classroom buildings including internal fit out, installed on site at 3a Acacia Street, Tweed Heads South.

The intent of the flood impact statement is to support a Review of Environmental Factors assessment for works proposed as development permitted without consent for the change of use of office buildings to classroom buildings including internal fit out, recently installed on the site.

The following information was provided for assessment:

- Site Plan – showing the location of the constructed classrooms. (Attachment A)
- Building Location Plan with assumed datum (Attachment B)
- Building Plans (Attachment C)
- Site Survey Plan in AHD (Attachment D)

In addition, a current Flood Property Report was obtained from council and is contained in Attachment E.

Assessment of the impact on site flooding was undertaken using these documents against the requirements of the current Tweed Shire Council Development Control Plans and/or State Environmental Planning Polices.

Site Flood Conditions

From the Flood Property Report the design flood level was determined to be 2.6AHD. Based on this information and the detail site survey (Attachment D), in the area the offices have been constructed, flooding will occur. The existing ground level around the offices is in the order of 1.47 AHD.

The flood level is also consistent with that in Development Control Plan Section A3 - Development of Flood Liable Land, Clause A3.3.1.

The Flood Property Report also identifies that the area is in a low flood flow area, thus conveyance of flood flows is not required to be considered as the flood velocities are expected to be less than three meters per second (3m/s), thus impact loading is also not required to be assessed.

Flood storage maybe relevant for review and considered for impact under Sections A3.2 and A3.3 of the Development Control Plan Section A3 - Development of Flood Liable Land. This is considered below.

DIRECTORS:

- J.A. WILLIAMS - A.T.J. GIBBONS
- T.W. NELSON - B.D. WELLAUER

Existing Office Building

The offices constructed are low set, portable buildings set on steel columns and beams. The subfloor is clad to prevent persons from entering the sub-floor area. Under the building is open and able to be flooded.

The elevated building has a floor level, that has been assessed from the assumed datum document (Attachment B) against the site survey file (Attachment D) resulting in determination of the constructed floor level at 2.67AHD. The floor level is above the design flood level; however, the supporting structures are below the flood level.

All building elements below the flood level appear to be constructed of flood compatible material, being galvanise steel members.

The floor level is not required to be above the design flood level as the offices are not considered as a habitable building.

Flood storage within the building envelope is reduced by the supporting sub-structure that is below the design flood level.

Policies and Compliance

Review of Flood Property Report issued by Tweed Shire Council, contained in Attachment E, indicates that the lot is deemed as a “**flood control lot**”. The following advice is provided:

FLOOD RELATED DEVELOPMENT CONTROLS

*(1) **The land is a flood control lot.** Council is aware that the land or part of the land is within the flood planning area and subject to flood related development controls. Flood related development controls, such as the Tweed Local Environmental Plans and **minimum floor levels**, are prescribed by Development Control Plan Section A3 - Development of Flood Liable Land. Property Flood Reports that provide general flood risk information for this land are available on Council's website.*

*(2) **The land is a flood control lot.** Council is aware that the land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls in the Tweed Local Environmental Plans and Development Control Plans. Flood related development controls, such as evacuation routes and/or refuges, are prescribed by Development Control Plan Section A3 - Development of Flood Liable Land. Property Flood Reports that provide general flood risk information for this land are available on Council's website.*

Based on the supplied information, the site is flood affected and has a natural surface below the design flood level of RL2.60. As the lot is deemed as a “flood-controlled lot” it is subject to assessment under the provisions of Development Control Plan Section A3 - Development of Flood Liable Land.

Flood Impact Assessment under the provisions of the State Environmental Planning Policy (Transport and Infrastructure) 2021, is not required.

Development Control Plan Section A3 - Development of Flood Liable Land, Section A3.2 and A3.3 applies to the site. Under the provisions of section A3.2 and A3.3.2 and from the information obtained, the site has been determined:

1. To have the building above the nominated flood level (RL2.60),
2. To be in a low flood flow area,
3. To be constructed of flood compliant materials, and
4. Has in place a previously approved emergency response provision.

Review of the provisions of A3.3 in particular Section A3.3.4, which is relevant to commercial developments, indicates that no assessment of flood impact is required, provided the development complies with Section A3.3.2.

The existing offices, as documented are **deemed to be compliant** with the requirements of Development Control Plan Section A3 - Development of Flood Liable Land, Section A3.2 and A3.3.

No further assessment of the Flood Impact is required.

Should you require any additional information please do not hesitate to contact me.

Yours faithfully



J.A. WILLIAMS
For and on behalf of
COZENS REGAN GROUP PTY LTD

Attachment A



Attachment B

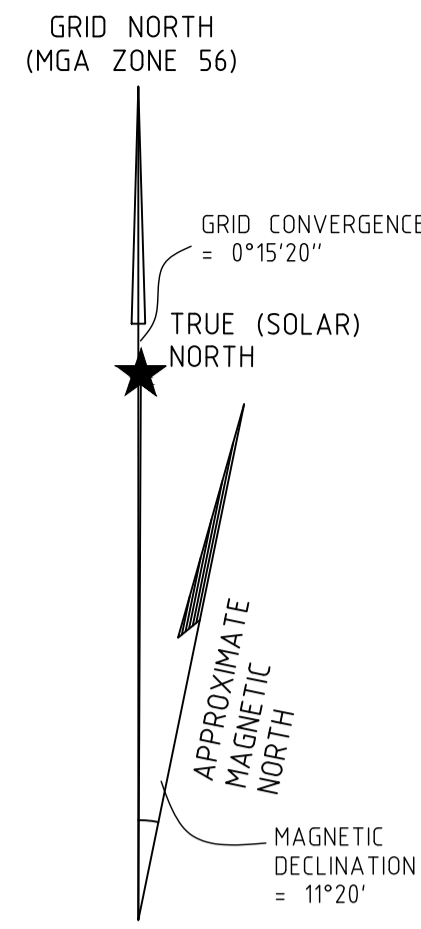


Attachment C



Attachment D





LEGEND

- PP POWER POLE
- LP LIGHT POLE
- UE UNDERGROUND ELECTRICITY (DETECTED)
- WMTR WATER METER
- HYD HYDRANT
- SV STOP VALVE
- UWM UNDERGROUND WATER MAIN (DETECTED)
- UWMP UNDERGROUND WATER MAIN (PLOTTED FROM DBYD)
- TELECOM TELECOMMUNICATIONS PIT
- UTF UNDERGROUND TELECOMMUNICATIONS - OPTIC FIBRE (DETECTED)
- UTD UNDERGROUND TELECOMMUNICATIONS (DETECTED)
- SWMH STORMWATER MANHOLE
- USM UNDERGROUND STORMWATER (PLOTTED FROM DBYD)
- SMW SEWER MANHOLE
- SIO SEWER INSPECTION OPENING
- US UNDERGROUND SEWER (SEWER)
- USP UNDERGROUND SEWER (PLOTTED FROM DBYD)
- SIGN SIGN
- TOG TOP OF GUTTER HEIGHT
- TD1200S30H20 DENOTES TREE-12m dia 30m SPREAD 20m HEIGHT

- (A) - EASEMENT FOR MULTI-PURPOSE ELECTRICAL INSTALLATION 4.2 WIDE (DP1267313)
- (B) - EASEMENT FOR UNDERGROUND POWERLINES 2 WIDE (DP1267313)
- (V) - EASEMENT TO DRAIN WATER 5 WIDE AND VARIABLE (DP1039569)
- (S) - EASEMENT TO DRAIN SEWAGE 3 WIDE AND VARIABLE (DP1039569)

NOTES

1. THE PURPOSE OF THIS SURVEY IS TO PRESENT TOPOGRAPHY AND DETAIL IN THE VICINITY OF PROPOSED WORKS TO THE WEST OF THE SITE NEAR THE HALL. IN THE AREA CLOUDED IN BLUE, ADDITIONALLY, TO LOCATE RECENT BUILDINGS CONSTRUCTED SINCE 2013 THROUGHOUT THE SITE AS CLOUDED IN BLUE.
2. OTHER DETAIL NOT WITHIN THE AREAS CLOUDED IN BLUE WAS SURVEYED PREVIOUSLY IN 2013 AND 2016 AND HAS NOT BEEN INVESTIGATED IN 2021.
3. UNDERGROUND SERVICES HAVE NOT BEEN LOCATED IN THE AREA OF SURVEY IN 2021. ONLY VISIBLE SURFACE INSTALLATIONS HAVE BEEN LOCATED.
4. UNDERGROUND SERVICES SHOULD BE LOCATED PRIOR TO COMMENCEMENT OF ANY WORKS OR EXCAVATION.
5. LEVEL DATUM IS AHD.
6. CONTOUR INTERVAL = 0.2m
7. CONTOURS ARE INDICATIVE OF GENERAL TOPOGRAPHY. DO NOT INFER CRITICAL LEVELS FROM CONTOURS.



<p>CLIENT: PACIFIC COAST CHRISTIAN SCHOOL</p>	<p>ALL UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY RELEVANT AUTHORITIES BEFORE ANY WORK IS COMMENCED</p>	<p>www.dialbeforeyoudig.com.au</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REVISION/DATE</th> <th>REVISION DETAILS</th> <th>REVISION BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISION/DATE	REVISION DETAILS	REVISION BY										<p>LANDSURV PTY LTD REGISTERED SURVEYORS & DEVELOPMENT CONSULTANTS 14 ENID STREET TWEED HEADS NSW 2485 Ph. (07) 55366467 Fax (07)55367489 email: macsurv@landsurv.com.au</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>DATE OF SURVEY</td><td>22.06.21</td></tr> <tr><td>DATE</td><td>23.06.21</td></tr> <tr><td>DRAWN</td><td>CBS</td></tr> <tr><td>CHECKED</td><td>BG</td></tr> <tr><td>CAD FILE No.</td><td>38319-10_DET</td></tr> </table>	DATE OF SURVEY	22.06.21	DATE	23.06.21	DRAWN	CBS	CHECKED	BG	CAD FILE No.	38319-10_DET	<p>DRAWING TITLE PARTIAL DETAIL SURVEY OF LOT 1 AND PART OF LOT 2 IN DP1247160 PACIFIC COAST CHRISTIAN SCHOOL 3A ACACIA STREET, TWEED HEADS SOUTH</p> <p>ORIGIN OF LEVELS SSM 48819 (RL 1.175 SCIMS) CONTOUR INTERVAL 0.2m</p>	<p>SCALE 1: 250 REVISION SHEET 4 OF 4 JOB No 38319-10</p>
REVISION/DATE	REVISION DETAILS	REVISION BY																										
DATE OF SURVEY	22.06.21																											
DATE	23.06.21																											
DRAWN	CBS																											
CHECKED	BG																											
CAD FILE No.	38319-10_DET																											

Attachment E



Property Flood Report

This Property Flood Report tells you what you need to know about this property and its flood risk. It shows flood and ground levels and provides information on nearby levees and river gauges, if applicable. To understand the terms used, please see the Flood Terms and Definitions section at the end of this report.

Property Address: 3A Acacia Street TWEED HEADS SOUTH 2486

Lot/Section/Deposited Plan: 1//LP1247160

Date Prepared: 12/08/2020

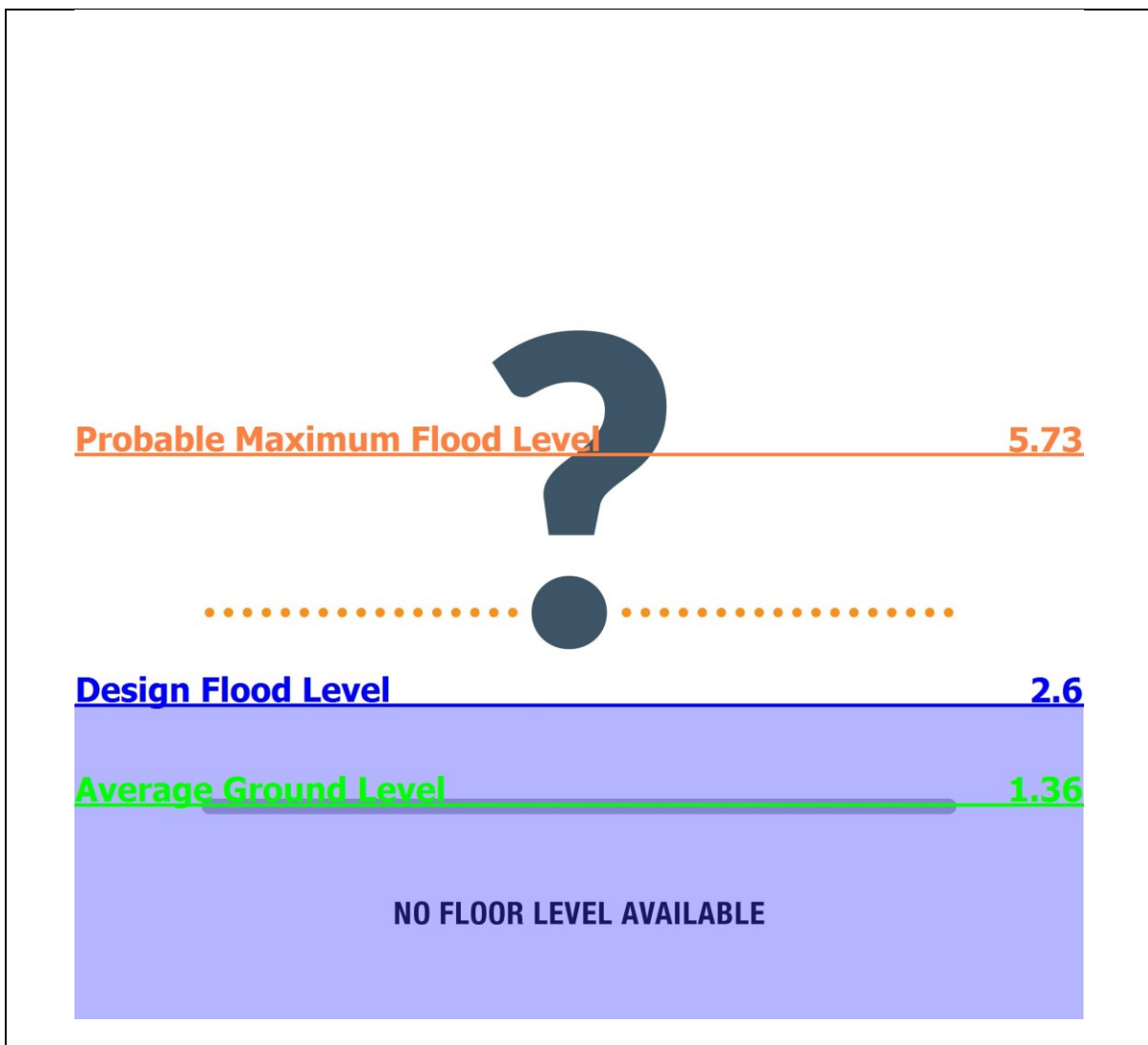


Figure 1: Flood and Ground Levels at 3A Acacia Street TWEED HEADS SOUTH 2486

The ground level provided above is taken at the centre of the property and is approximate only. If accurate levels are required this should be confirmed by a registered surveyor.

Be Prepared

Flood Warnings are issued by the Bureau of Meteorology (BoM). Warnings and real-time rainfall and river level information can be viewed on the BoM website (www.bom.gov.au).

NSW State Emergency Service (SES) distribute Flood Bulletins which add local consequences and safety information related to Flood Warnings. These products are distributed to community via local media and social media.

Planning now so that you know your risks and what to do if there is a flood can save your life, the lives of your family members, pets and others. It can also minimise damage to your property and possessions. The NSW State Emergency Service has tools available to assist you to prepare. Visit the SES website to start your Home Emergency Plan now.

Website: www.ses.nsw.gov.au

Flood & Storm Emergency: ☎ 132 500

Life Threatening Situations: ☎ 000



Tweed Shire Council have developed the Tweed Emergency Dashboard for all hazard emergency information. The purpose of this Emergency Dashboard is to provide Tweed residents with links, useful information and contacts in an emergency. Go to: <https://emergency.tweed.nsw.gov.au/>

Should you require any further information, please contact Council on (02) 6670 2400 or email us at tsc@tweed.nsw.gov.au

Technical Information

The below information is for those who are flood savvy or have a technical need to know more about Council's building development controls, such as surveyors, builders, certifiers, architects and engineers.

Property Address: 3A Acacia Street TWEED HEADS SOUTH 2486

Lot/Section/Deposited Plan: 1//LP1247160

Property Levels

Description	Minimum (m AHD)	Maximum (m AHD)
Approximate Ground Level	0.7	3.0
Approximate Floor Level (2012)	Not Available	

Planning Levels

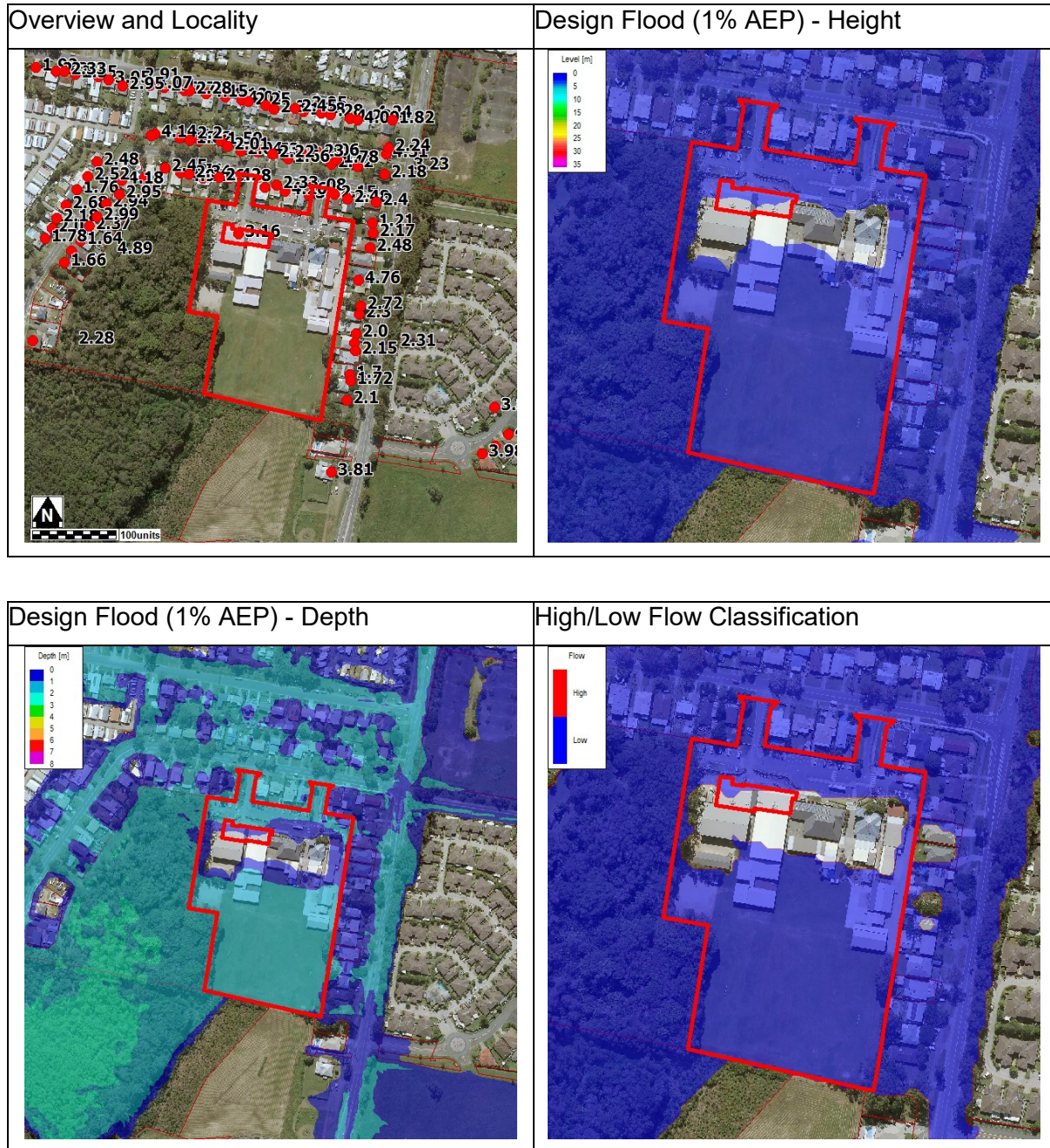
Planning Level	Level (m AHD)
Design Flood Level	2.6
Minimum Habitable Floor Level (Flood Planning Level)	3.1
Climate Change Design Flood Level*	2.9
Climate Change Habitable Floor Level*	3.4
High Flow Area	No
High Hazard Area	No

* Climate Change Levels are compulsory in new urban land release subdivision areas

Flooding Levels

Flood Event	Minimum Level (m AHD)	Maximum Level (m AHD)
20% AEP	N/A	N/A
5% AEP	1.9	2.1
1% AEP	2.2	2.3
Climate Change 2100 1% AEP	2.8	2.8
0.2% AEP	3.0	3.0
Probable Maximum Flood (PMF)	5.7	5.7

Mapping



Detailed mapping data, including flood mapping, can be sourced at Council's open data hub: www.tweed.nsw.gov.au/Mapping

For more information on Tweed Shire Flood Planning controls see the Tweed Local Environment Plan and Development Control Plan Section A3 – Development of Flood Liable Land at www.tweed.nsw.gov.au/PlanningPolicies

Information Sources

- **Ground Levels:** 2014 Airborne Laser Survey (LiDAR)
- **Existing Floor Levels:** 2011 and 2012 Floor Level Survey (Tweed Shire Council)
- **Flooding Levels:** Tweed Valley Flood Study Update 2009 and Tweed Byron Coastal Creeks Flood Study 2010 (BMT WBM)

Flood Terms and Definitions

- **Annual Exceedance Probability (AEP):** The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.
- **Average Recurrence Interval (ARI):** Similar to AEP. The long-term average number of years between the occurrence of a flood as big as (or larger than) the selected event.
- **metres above Australian Height Datum (m AHD):** The reference level for defining ground levels in Australia. The level of 0.0m AHD is approximately mean sea level.
- **Maximum and Minimum Ground Level** – Highest and lowest ground levels on the property based on available ground level information. A Registered Surveyor can confirm exact ground levels.
- **Surveyed Floor Level** – Approximate floor levels of dwellings, usually taken from the street. These are generally the level of the front step of the habitable level of the building most visible from the street frontage
- **Design Flood Level (DFL)** – A hypothetical flood representing a specific likelihood of occurrence. In Tweed Shire, for residential property, the peak of the modelled 1% AEP (100 Year ARI) flood is the Design Flood Level
- **Minimum Habitable Floor Level** – The minimum level in metres AHD at which habitable areas of development (generally including bedrooms, living rooms, kitchen, study, family and rumpus rooms) must be constructed. In Tweed Shire, this is Design Flood Level plus 0.5m of freeboard. Also known as 'Flood Planning Level'
- **Climate Change Floor Level** – 2100 Climate Change Design Flood Level plus 0.5m of freeboard. Climate Change Design Flood Level is based on reasonable predictions of increased rainfall intensity and sea level rise. See the Tweed Valley Flood Study Update 2009 – Climate Change for more information.
- **Probable Maximum Flood.** An extreme flood deemed to be the largest flood that could conceivably occur at a specific location. It is generally not physically or economically possible to provide complete protection against this flood event, but should be considered for emergency response etc. The PMF defines the extent of flood prone land (i.e. the floodplain).

Disclaimer

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Any person having regard to the information contained in this document is encouraged to seek, at their discretion, all other sources of information on the subject matter as they consider appropriate, which may include local knowledge and/or professional advice.

APPENDIX G – WASTE MANAGEMENT PLAN

Waste Management Plan

Proposed

3A ACACIA ST, TWEED HEADS STH, NSW 2486

09/04/2024

PACIFIC COAST CHRISTIAN SCHOOL

Demolition Stage

Materials on site			Destination		
			Reuse and recycling		Disposal
Type of materials	Estimated volume (m ³)	Estimated weight (tonnes)	On-site (specify proposed reuse or on-site recycling methods)	Off-site (specify contractor and recycling outlet)	Specify contractor and landfill site
Excavation material	N/A	N/A	N/A	N/A	N/A
Green waste	N/A	N/A	N/A	N/A	N/A
Bricks	N/A	N/A	N/A	N/A	N/A
Concrete	N/A	N/A	N/A	N/A	N/A
Timber	N/A	N/A	N/A	N/A	N/A
Plasterboard	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	N/A	N/A	N/A
Asbestos*	N/A	N/A	N/A	N/A	N/A
Other waste eg. Ceramic tiles, paints, plastics, PVC tubing, cardboard	N/A	N/A	N/A	N/A	N/A

* Should any Asbestos containing material (ACM) be identified it will be handled in accordance with relevant guidelines and procedures.

Construction Stage

Materials on site			Destination		
			Reuse and recycling		Disposal
Type of materials	Estimated volume (m ³)	Estimated weight (tonnes)	On-site (specify proposed reuse or on-site recycling methods)	Off-site (specify contractor and recycling outlet)	Specify contractor and landfill site
Excavation material	N/A	N/A	N/A	N/A	N/A
Green waste	N/A	N/A	N/A	N/A	N/A
Bricks	N/A	N/A	N/A	N/A	N/A
Concrete	N/A	N/A	N/A	N/A	N/A
Timber	N/A	N/A	N/A	N/A	N/A
Plasterboard	N/A	N/A	N/A	N/A	N/A
Metals	N/A	N/A	N/A	N/A	N/A
Asbestos	N/A	N/A	N/A	N/A	N/A
Other waste eg. Ceramic tiles, paints, plastics, PVC tubing, cardboard	N/A	N/A	N/A	N/A	N/A

Operational Stage

Number of Staff	3
Estimated number of visitors (per day)	2
Estimated garbage generation (litres per week)	5
Estimated recycling generation (litres per week)	5
Describe the equipment and systems used for managing garbage including the location and design of garbage rooms, the type/number of bins, cleaning of bins and movement of bins for collection	1 Bin in each Classroom
Describe the equipment and systems used for managing recycling including the location and design of recycling rooms, the type/number of bins, cleaning of bins and movement of bins for collection	1 Bin outside each classroom
Describe arrangements for access by occupants to waste facilities	By foot
Describe how noise associated with garbage disposal will be addressed	Collected by staff and taken to Disposal Skips
Describe facilities for cleaning bins and garbage rooms	Cleaned by staff
Describe measures to manage vermin and pests	Pest Controllers utilized across the school
Describe each stage of waste collection/transfer of bins and describe who will be responsible for each stage	As above and overseen by the Facilities Manager
Describe how this waste management plan will be implemented/made aware of	Staff are made aware by the cleaning staff and management if specifics are required

APPENDIX H – BCA STATEMENT

8th July 2024

EPM Projects
Level 13, 67 Albert Ave
Chatswood NSW 2067

Attention: Anesh Parmar

BUILDING CODE OF AUSTRALIA ASSESSMENT – CODE COMPLIANCE

3A ACACIA ST. TWEED HEADS SOUTH NSW 2486

1. INTRODUCTION

1.1 General

This report relates to the prefabricated portable buildings (3 of) to be located at 3A Acacia St. Tweed Heads NSW 2486. In particular the subject assessment relates to the proposed use of the prefabricated buildings being education and assembly for the Pacific Coast Christian School.

The subject property is located within the local government area of the Tweed Shire Council.

The report has been prepared as an initial review for the planning consultant to assist in providing planning advice for a compliance pathway (possibly applicable portable exemptions DPwC to be confirmed).

1.2 DESCRIPTION

The proposal is for the:

- Installation of the prefabricated buildings (3 of);
- The construction of perimeter walkways and ramps;
- Use the buildings for education purposes;

1.3 PURPOSE OF THE REPORT

This report has been prepared, on behalf of EPM, to establish building code compliance to the Building Code of Australia and relevant Acts and Regulations of the design development documentation for the proposed works.

1.4 REPORT BASIS

This report is based on (as applicable):

- i. Various documents as received by EPM and as identified in the attached Appendix 1. Note the Form 15 QLD certification letter should be reissued in accordance with NSW jurisdictional documents.
- ii. The Building Code of Australia 2022, inclusive of NSW variations (See Note 1).
- iii. Environmental Planning and Assessment Act 1979.
- iv. Environmental Planning and Assessment Regulation 2021.

1.5 EXCLUSIONS

This report provides advice pertaining compliance to BCA 2022 and does not consider the following except where specifically mentioned.

- i. Structural design (on the basis the structures are prefabricated and accredited (including the decks / walkways)). It is noted the structure is certified by a structural engineer.

2. BUILDING DESCRIPTION

2.1 The building classification relevant to the proposed use are:

Level	Building	
Ground	Proposed:	Class 9b School

2.2 The required type of construction under C1.1 of the BCA is Type C. This is the least resistant type of construction required by the BCA.

2.3 The building has a rise in storeys of 1.

3. PROVISION OF FIRE SERVICES

3.1 It is noted that the subject building (combined) is less than 500m² and as such does not attract fire hydrant , hose reel or sprinkler provisions AS2419.1, 2441, 2118 respectively).

3.2 Fire extinguishers are required in accordance with AS 2444.

4. FIRE SAFETY

4.1 All conditions of the NSW Rural Fire Service dated 3rd April 2024 are to be incorporated in the design and site conditions (ie permitter access and the like).

4.2 Fire Hazard properties of any material or assembly used in the building are required to comply with C2D11 of the NCC.

4.3 Fire compartment sizes comply under C3D3.

4.4 Fire Engineering Report WBF743 – 002 – 2024 Rev 001 addresses the non-compliance relating to specification 43 of the NCC.

5. ACCESS AND EGRESS

- 5.1 Exit travel distance do comply with clause D2D5 of the NCC
- 5.2 The unobstructed width of each exit or path of travel to an exit must not be less than 1m.
- 5.3 Tactile ground surface indicators are required to be provided to all ramps (top and bottom) constructed in the path of continuous exit.
- 5.4 A handrail is to be provided to both sides of the stairway at a minimum height of 865mm. Please provide handrails to steps.
- 5.5 A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without key from the side that faces a person seeking egress by:
- A single downward action on a single device which is located 900mm and 1.1m from the floor;
 - Be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch;
 - Have a clearance between the handle and back plate or door face at the centre grip section of the handle of not less than 35mm and not more than 45mm; or
- 5.6 Where the latch operation device referred to is not located on the door itself, it must be at least 25mm wide and located not less than 500mm from an internal corner accompanied with braille and tactile signage (push button).
- 5.7 The following areas are required to be accessible:

6. SERVICES AND EQUIPMENT

- 6.1 Fire extinguishers are to be provided in accordance with NCC E1D14 and AS 2444 – 2001.

7. SPECIFICATION 43

- 7.1 Buildings must be separated from classified vegetation as per table S43C2.
- 7.2 Building separation of 12m required unless FRL of not less than 60/60/60 is achieved.
- 7.3 Pathway of non-combustible construction (min 1.5m) to be constructed around the buildings and comply with Clause 7.
- 7.4 Operational use and tenability of the building is to be determined under clause 9.
- 7.5 Building to be constructed of BAL-19 or greater and comply with AS 3959.
- 7.6 Water supply and emergency power supply to be provided with a flow rate of not less than 4 hours.
- 7.7 Building vehicular access to be provided.
- 7.8 Fire Engineering Report WBF743 – 002 – 2024 Rev 001 addresses the non-compliance relating to specification 43 of the NCC. Particularly, the location of the building and characteristic of existing fire safety measures allow for compliance from a qualitative and deterministic assessment.

8. CONCLUSION

We are of the opinion that the proposed installation and associated use is capable of complying with the Building Code of Australia and will be subject to construction documentation that will provide appropriate details to demonstrate compliance.

Should you wish to discuss and matter further please do not hesitate to contact me on 0418505403.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Con Giazi', with a stylized flourish at the end.

Con Giazi
BSGM Pty Ltd

APPENDIX 1

Energy Efficiency Assessment	Nov 2023
Form 15 Glazing compliance	26 th Feb 2018
ATCO Compliance letter	30 th Jan 2024
ATCO Drawings certified	19 th Oct 2023
Structural Certification letter	19 th Oct 2023
ATCO architectural drawings	24 th Nov 2023
Fire Engineering Report – Walkerbai Fire	3 rd July 2024

APPENDIX I – FIRE ENGINEERING REPORT

FIRE ENGINEERING REPORT

NEW DEMOUNTABLE CLASSROOMS

PACIFIC COAST CHRISTIAN SCHOOL – 3A ACACIA
STREET, TWEED HEADS SOUTH, NSW

PROJECT NO: WBF743-002-2024

REVISION: 001

DATE: 3/07/2024

DOCUMENT AUTHORISATION

REVISION HISTORY

REVISION	DATE	DETAILS	PREPARED BY	APPROVED BY
Rev 0P1	28/06/2024	Preliminary issue for stakeholder comments	Tristan Goode	Michael Greenwood
Rev 001	3/06/2024	Updated based on stakeholder comments	Tristan Goode	Michael Greenwood

Table 1 – Document Revision History

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Fire Engineering Report

Pacific Coast Christian School – 3A Acacia Street, Tweed Heads South, NSW

WBF743-002-2024

Revision No: 001

3/07/2024

Prepared for:

EPM Projects
Level 13, 67 Albert Avenue,
Chatswood NSW 2067

Prepared by:

Tristan Goode

ME(fire), BE(Civil Hons)

M: +61 402685208

P: +61 1800 957 000

Email: tristan@walkerbai.com

www.walkerbai.com

Approved by:

Michael Greenwood

CPEng 3601797, NPER, MIEAust, RPEQ 15806, PE0001717,
BPB2570

WalkerBai Fire Engineering

P: +61 1800 957 000

Email: michael@walkerbai.com

www.walkerbai.com

EXECUTIVE SUMMARY

WalkerBai Fire Engineering Pty Ltd has been appointed by EPM Projects to undertake a fire engineering assessment for the construction of the three (3) new conjoined demountable classrooms at the existing school campus of Pacific Coast Christian School, located at 3A Acacia Street, Tweed heads South, NSW 2486.

The Fire Engineering Report (FER) outlines the deviations from the NCC Deemed-to-Satisfy provisions which are to be incorporated into the building solution and the fire engineering assessment used to demonstrate compliance with the Performance Requirements of the National Construction Code 2022 Volume 1 [1].

This document identifies those aspects of the design that have been demonstrated to comply with the Performance Requirements as demonstrated through the assessment methods recognised by the NCC rather than adopting a prescriptive solution that complies with the Deemed-to-Satisfy requirements of the NCC.

The following deviations from the prescriptive provisions of the NCC have been identified and are addressed as Performance Solutions within this report:

ITEM	DESCRIPTION OF PERFORMANCE SOLUTION(S)	NCC DTS PROVISION(S)	PERFORMANCE REQUIREMENT(S)
1	The new demountable classroom building is located on designated bushfire prone land and does not achieve strict compliance with Specification 43 of the NCC.	NSW G5D4(1), Specification 43	G5P2

Table 2 – Summary of Performance Solutions

FIRE SAFETY DESIGN

The Performance Solutions for the subject building are reliant on a number of preventative and protective fire safety measures, including management and housekeeping procedures. The building strategy in relation to design requirements, management procedures, and management requirements, is outlined below.

Note that all other items of fire and life safety, where not identified as being part of the Fire Engineering scope, (i.e. not identified as Performance Solutions in Table 2 of this document) are to be in accordance with the Deemed-to-Satisfy Provisions of the NCC 2022 Volume 1 [1].

SECTION/ PART	FIRE SAFETY MEASURES
Fire Hydrants	<ul style="list-style-type: none"> The school site shall have a managed and maintained bushfire emergency evacuation policy. This policy shall not include the subject demountable classroom building being utilised as a place of refuge in the event of bushfire. The school site shall be provided with a supply of water for fire-fighting purposes in accordance with Specification 43 Clause 11 (S43C11).
Ongoing Management and Housekeeping	<p>In addition to the design requirements and ongoing maintenance activities, the Fire Engineering analysis considers the following management procedures which are to be incorporated into the building’s Management in Use documentation or specific Fire Safety Management Plan by the Building Management:</p> <ul style="list-style-type: none"> Management and evacuation procedures Evacuation training is to be provided to members of staff. Training procedures are to consider specifically the Bushfire Emergency Planning & Evacuation document, and the movement of occupants away from the new demountable building to the north-east areas of the campus. Routine inspection of the common passageways to ensure that they always remain free from accumulated combustible items. Regular housekeeping to prevent the storage of combustibles adjacent/underneath the new demountable classroom building. The building shall be managed such that

SECTION/ PART	FIRE SAFETY MEASURES
	<p>any major fire hazards/external fuel loads be separated by not less than 10 m from the building.</p> <ul style="list-style-type: none"> • Regular housekeeping audits will be carried out to ensure that: <ul style="list-style-type: none"> ○ Combustibles are not stored adjacent to or in the path of exits. ○ Exit doors are not blocked or locked. • Vehicular access is provided to the perimeter of the campus buildings via a combination of carpark hardstand areas, gravel paths, and turfed paths across the school oval. These access paths shall have loadbearing capacity and unobstructed height and width to permit the operation and passage of firefighting vehicles.

Table 3 – Summary of Fire Safety Measures

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
TABLE OF CONTENTS.....	6
1 INTRODUCTION	7
1.1 BACKGROUND.....	7
1.2 APPLICABLE REGULATORY LEGISLATIONS AND BUILDING CODE OF AUSTRALIA	7
1.3 FIRE ENGINEERING PROCESS	7
1.4 SCOPE AND OBJECTIVES.....	7
1.5 RELEVANT STAKEHOLDERS & FIRE ENGINEERING TEAM.....	7
1.6 SOURCE OF INFORMATION	8
1.7 ASSUMPTIONS	8
1.8 LIMITATIONS	8
2 PRINCIPAL BUILDING CHARACTERISTICS.....	9
2.1 BUILDING OCCUPANCY	9
2.2 BUILDING LOCATION	9
2.3 PROXIMITY TO FIRE STATION(S).....	10
2.4 HAZARDS	10
2.5 BUILDING EGRESS.....	11
3 DOMINANT OCCUPANT CHARACTERISTICS	12
3.1 INTRODUCTION	12
4 PERFORMANCE SOLUTION 1 – APPLICATION OF SPECIFICATION 43	14
4.1 EXTENT OF PERFORMANCE SOLUTION.....	15
4.2 ASSESSMENT METHOD	15
4.3 FIRE SCENARIO AND DESIGN FIRE PARAMETERS.....	15
4.4 ASSESSMENT	17
4.5 CONCLUSION	24
5 REFERENCES	25
6 ACRONYMS	26

1 INTRODUCTION

1.1 Background

WalkerBai Fire Engineering Pty Ltd has been appointed by EPM Projects to undertake a fire engineering assessment for the construction of the three (3) new conjoined demountable classrooms at the existing school campus of Pacific Coast Christian School, located at 3A Acacia Street, Tweed heads South, NSW 2486.

This Fire Engineering Report (FER) has been prepared to demonstrate that the fire safety strategy satisfies the relevant Performance Requirements of the NCC 2022 Volume 1 [2] through a combination of Deemed-to-Satisfy and Performance Solutions.

The 'Fire Safety Design' is located in the Executive Summary of this Fire Engineering Report (FER). It outlines the key Fire Safety Measures expected to be implemented in this building, subject to favourable outcomes of the fire engineering process.

1.2 Applicable Regulatory Legislations and Building Code of Australia

The following NSW Regulatory Legislations and the Building Code of Australia are relevant to this project:

- Environmental Planning & Assessment Act 1979;
- Environmental Planning and Assessment Amendment (Fire Safety Reports) Regulation 2015;
- Rural Fires Act 1997;
- Planning for Bush Fire Protection 2019 (PBP); and
- National Construction Code (NCC) Series, Volume 1, Building Code of Australia 2022 for Class 2 – 9 Buildings [3].

1.3 Fire Engineering Process

The FER contains all the relevant design calculations and justification to show that the Performance Solutions contained within the FER comply with the Performance Requirements of the NCC. This FER is issued to all relevant stakeholders for their approval and once stakeholders' approval is gained the FER will be submitted to the Relevant Building Surveyor for approval.

1.4 Scope and Objectives

The objective of this report is to provide a systematic performance-based evaluation of the NCC DtS Variations of the subject building are identified in Table 2 of this report.

It is assumed that any other NCC DtS Variations not listed in Table 2 of this report are in accordance with the NCC DtS Provisions and relevant Regulations.

1.5 Relevant Stakeholders & Fire Engineering Team

The Fire Engineering team and other stakeholders for the project comprise the following people and organisations as listed in Table 4.

NAME	ORGANISATION	ROLE
Ryan Aitken	EPM Projects	Project Manager / Client Representative
TBC	TBC	Building Certifier
TBC	Building Code & Bushfire Hazard Solutions	Environmental Engineer / Bushfire Consultant
Michael Greenwood Alexandra Leschuk	WalkerBai Fire Engineering	Fire Safety Engineer

Table 4 – Relevant Stakeholders

1.6 Source of Information

The following sources of information have been used in the preparation of this document:

- National Construction Code 2022, Volume 1. Building Code of Australia Class 2 – 9 Buildings;
- Bushfire Assessment Report (Reference Number 2450308), dated 20 February 2024, prepared by Building Code & Bushfire Hazard Solutions Pty Limited;
- Pacific Coast Christian School Bushfire Emergency Management & Evacuation Plan (Reference Number 221316), prepared by Building Code & Bushfire Hazard Solutions Pty Limited, dated August 2022.
- Relevant architectural drawings provided by Atco Structures & Logistics Pty, Ltd. are listed in Table 5.

DRAWING NO	DRAWING NAME	DATE	REVISION
231013SP – A100	Site Plan	22.11.2023	B
231013SP – A200	Plan	22.11.2023	B
231013SP – A230	Plan – Access	22.11.2023	B
231013SP – A300	Elevations	22.11.2023	B
MP01a (Prepared by Stanton Dahl Architects)	Site Existing Proposed Demountable	6.11.2023	B

Table 5 – Relevant Drawings

1.7 Assumptions

The primary assumptions used to prepare this document are outlined below. Assumptions are based on practices nominated in the Australian Fire Engineering Guidelines and incorporate practical simplifications to maintain a simple analysis that is representative of a real fire and life safety situation. Assumptions are:

- Only one fire will occur at a time within the building.
- All essential services, equipment services and strategies will be maintained to the operational capacity to which they were designed and will correctly function during a fire situation.
- Prevention of arson, sabotage, and acts of malice are considered to be addressed by security systems and management procedures for the facility.
- Occupants will become aware of the fire through fire cues from the alarm system, respond to the cue, cope with the cue and attempt to avoid the fire, as intended by the NCC for safe evacuation.
- All other components of the building not addressed within this document will be installed to the requirements of the Deemed-to-Satisfy provisions of the Building Code of Australia applicable at the time of design.

1.8 Limitations

The following limitations apply to the Fire Engineering assessment that has been undertaken:

- The assessment does not assess property protection and associated business continuity or asset management issues. The assessment is confined to life safety issues.
- The assessment does not assess the level of contents and property protection or the level of business interruption within the subject building.
- The report assumes a complete and operational building and does not address the protection of the building during construction, renovation or demolition.
- The Fire Engineering assessment contained within this document is specific to this project. The findings and outcomes of the FER shall not be used outside the scope of this project.
- The analysis is limited to the assessment of single/accidental fires as intended by the NCC. The fire scenarios investigated within this document may be representative of intentional fires caused by an opportunistic arsonist; however multiple fires, severe acts of malice intent, terrorism, sabotage, or by wilful interference with fire and life safety systems are considered outside the scope of this assessment.

2 PRINCIPAL BUILDING CHARACTERISTICS

2.1 Building Occupancy

The subject building is located at the existing Pacific Coast Christian School, a campus that is understood to be comprised of 18 existing buildings.

The scope of works is applicable to the construction of a new demountable classroom building.

A summary of the building classification and usage is described in Table 6 below.

NCC PART / DESCRIPTION	CHARACTERISTICS
Part A6 / Building classification	Class 9b – Education
Clause C2D3 / Rise in Storeys (RIS)	1 (1 storey contained)
Clause C3D4 / Large Isolated Building	No
Clause C2D2 / Type of Construction	Type C
Schedule 3 / Effective Height	0 m (single storey)
Clause C3D3 / Floor Areas	Approximately 330 m ² (inclusive of all roofed areas, such as the external walkway/access paths).

Table 6 – Building occupancy and classification.

2.2 Building Location

The new demountable classroom building forms an addition to the existing Pacific Coast Christian School campus, located at 3A Acacia Street, Tweed Heads South, NSW 2846.

The school site is bound by Acacia Street to the north, Fraser Drive to the east (with residential areas between the school and street), and forested land to the west and south.

The general arrangement of the site, and location of the new demountable building within, is described further by Figure 1.

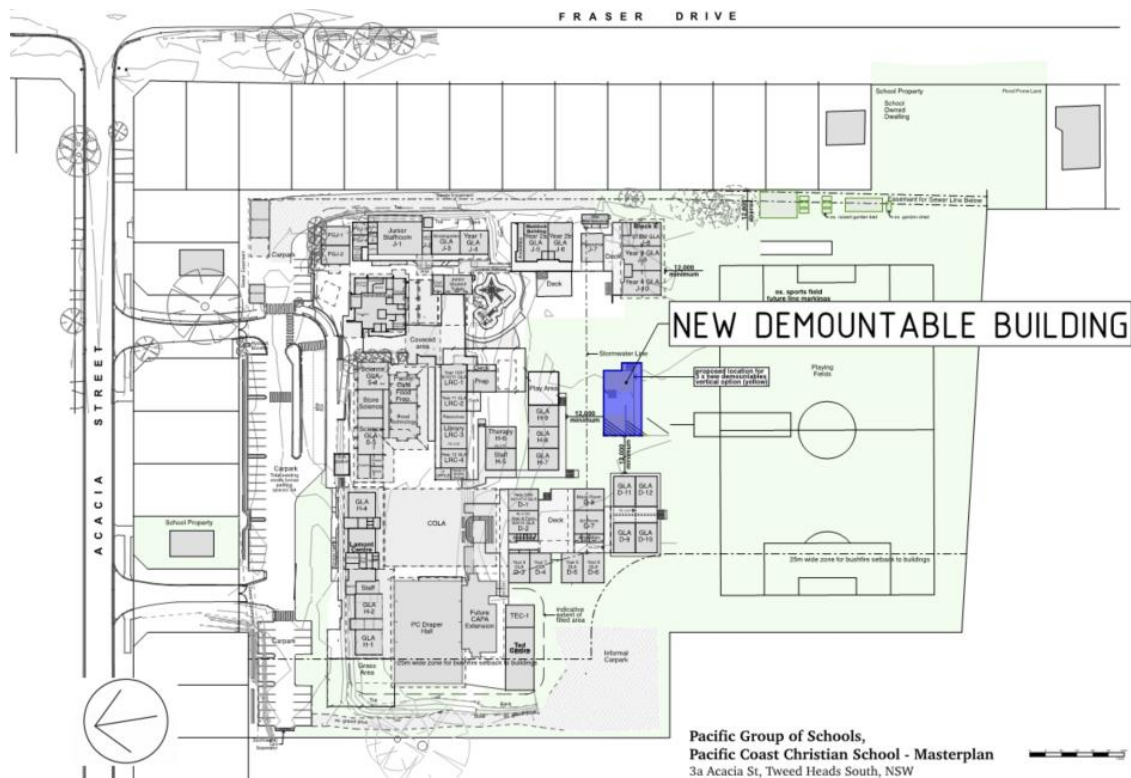


Figure 1 – School masterplan, with the subject new demountable building location highlighted in blue.

2.3 Proximity to Fire Station(s)

The subject building is located 2.3 km of Fire and Rescue NSW Tweed Fire Station. Access for fire brigade onto the site is facilitated via Acacia Street.

2.3.1 Fire Brigade Arrival Time

The time for fire brigade to arrive on site and begin firefighting operations is estimated in accordance with the Fire Brigade Intervention Model (FBIM) Manual Guideline (Version 3) [4]. The arrival time is the sum of multiple components relating to Charts 1, 2, 3 and 4 of the FBIM, and may be summarised as follows:

$$t_{arrival} = t_{receipt} + t_{dispatch} + t_{response} + t_{travel}$$

$t_{receipt}$ is the time for the occurrence of a fire event to be received and acknowledge by the fire brigade, and is taken as 60 seconds in accordance with the FBIM dataset Table C.

$t_{dispatch}$ is the time taken for fire brigade to be dispatched and has been assumed to be 30 seconds in accordance with the FBIM dataset Table D.

$t_{response}$ is the time taken for fire brigade personnel to respond, and is taken as 150 seconds noting that Fire and Rescue NSW Tweed Heads Fire Station is understood to have permanent staff [5], in accordance with the FBIM dataset Table E.

t_{travel} , or the expected Fire Brigade travel time from the fire station has been determined as being approximately 9 minutes (540 seconds) as per the methodology presented in the Fire Brigade Intervention Model Manual (Version 3.0) [4] and is summarised in the following table:

BUILDING ADDRESS	FIRE BRIGADE ADDRESS	DISTANCE	DAYS OF THE WEEK	TIME OF THE DAY	TIME RANGE
Pacific Coast Christian School – 3A Acacia Street, Tweed Heads South, NSW	Fire and Rescue NSW Tweed Heads Fire Station, 120F Coxs Rd, North Ryde NSW 2113	2.9 km	Tuesday	08:30	3-9 minutes
				12:00	4 minutes
				17:00	4 minutes
				23:00	4 minutes
			Friday	08:30	3-7 minutes
				12:00	4 minutes
				17:00	4 minutes
				23:00	4 minutes
			Saturday	08:30	4 minutes
				12:00	4 minutes
				17:00	4 minutes
				23:00	4 minutes

Table 7 – Travel time to the site (based on data from Google maps 2024)

Based on the above information, the time taken for fire brigade to arrive on site ready to undertake intervention procedures is approximately 780 seconds, or 13 minutes.

2.4 Hazards

The design fire scenarios and fire characteristics used in the Fire Engineering analysis are determined with consideration for the aspects of the building that are designed with Performance-Based criteria as opposed to the Deemed-to-Satisfy provisions. Fires typically occur due to the potential ignition sources, causing the available fuel load to combust.

Identifying these potential ignition sources and fuel loads in conjunction with the information provided by the Australian Fire Engineering Guidelines (AFEG) [6] and Fire Engineering Design Guidelines (FEDG) [7] allows for the worst-case credible fire hazards to be estimated for the different areas of the building. The results of this review are provided in Table 8.

AREA	IGNITION SOURCES	FUEL SOURCE	FUEL LOAD (MJ/m ²)
Class 9b – Learning areas	<ul style="list-style-type: none"> Short circuit of electrical wiring Electrical faults in fittings or distribution system Heating equipment Faults in electronics used by occupants (i.e. laptop chargers) 	<ul style="list-style-type: none"> Loose furnishings (i.e. chairs & desks) Joinery units (i.e. shelving) Garbage containers & wastepaper baskets Electrical equipment (i.e. computers) Linings & coverings (wall linings) 	<ul style="list-style-type: none"> Classroom: 300 [7] Office 420 [8]

Table 8 – Identified possible ignition sources and fuel loads.

2.5 Building Egress

Egress from the subject building is achieved via the main entry door to each GLA. Occupants then evacuate via the external walkway to the outside via the north-west or north-east paths. These egress provisions are shown in Figure 2.

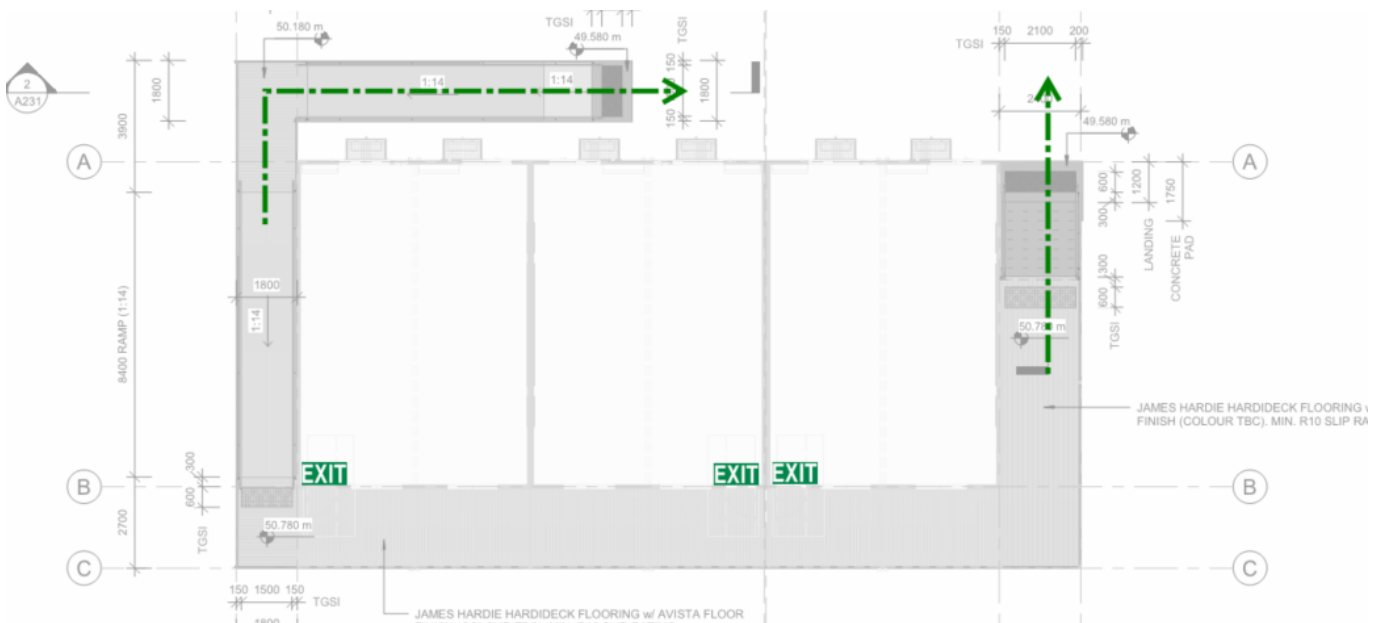


Figure 2 – new demountable building egress provisions.

3 DOMINANT OCCUPANT CHARACTERISTICS

3.1 Introduction

CHARACTERISTICS		
Type of occupants	In the subject building design, the key occupant categories may be defined as follows: <ul style="list-style-type: none"> • Staff • Students/Visitors 	
Occupant State	Staff	All forms of staff at the building are expected to be awake and alert when present, noting that would be carrying out work duties.
	Students/Visitors	Students and visitors are expected to be awake and alert.
Physical attributes	Staff	Staff are expected to be able bodied and capable of independently evacuating. A small proportion may require assistance; however it is assumed that these occupants would be accompanied by person(s) who could provide the required aid.
	Students/Visitors	Students and visitors are assumed to be able bodied and can independently evacuate if required. A small proportion may require assistance, however it is assumed that these occupants would be accompanied by person(s) who could provide the required aid.
Emergency training	Staff	Staff are expected to be trained for emergency evacuation procedures and be responsible for facilitating and managing the evacuation of students.
	Students/Visitors	Assumed no training.
Familiarity with the building	Staff	Staff would be very familiar with the building layout and assist visitors or people who require assistance during an emergency evacuation.
	Students/Visitors	Students and visitors may have varying degrees of familiarity with the building layout, and thus it is assumed that they would rely on signage and the like.
Distribution	Occupant numbers and population density are assumed to conform with the BCA requirements as outlined by Clause D1.13 and Table D1.13.	

Table 9 below shows the overview of building occupants' characteristics.

CHARACTERISTICS		
Type of occupants	In the subject building design, the key occupant categories may be defined as follows: <ul style="list-style-type: none"> • Staff • Students/Visitors 	
Occupant State	Staff	All forms of staff at the building are expected to be awake and alert when present, noting that would be carrying out work duties.
	Students/Visitors	Students and visitors are expected to be awake and alert.
Physical attributes	Staff	Staff are expected to be able bodied and capable of independently evacuating. A small proportion may require assistance; however it is

		assumed that these occupants would be accompanied by person(s) who could provide the required aid.
	Students/Visitors	Students and visitors are assumed to be able bodied and can independently evacuate if required. A small proportion may require assistance, however it is assumed that these occupants would be accompanied by person(s) who could provide the required aid.
Emergency training	Staff	Staff are expected to be trained for emergency evacuation procedures and be responsible for facilitating and managing the evacuation of students.
	Students/Visitors	Assumed no training.
Familiarity with the building	Staff	Staff would be very familiar with the building layout and assist visitors or people who require assistance during an emergency evacuation.
	Students/Visitors	Students and visitors may have varying degrees of familiarity with the building layout, and thus it is assumed that they would rely on signage and the like.
Distribution	Occupant numbers and population density are assumed to conform with the BCA requirements as outlined by Clause D1.13 and Table D1.13.	

Table 9 – Dominant occupant characteristics

4 PERFORMANCE SOLUTION 1 – APPLICATION OF SPECIFICATION 43

The following table outlines the summary of the Performance Solution, relevant NCC DtS Provision and assessment methodologies to comply with the relevant Performance Requirements.

ASSESSMENT PERFORMANCE SOLUTION SUMMARY		
Performance Solution	The subject site is located on designated bushfire prone land, and the building is a Class 9b school building, and is therefore subject to the requirements of Specification 43. The Performance Solution permits the building to not strictly meet the requirements of Specification 43.	
NCC Deemed-to-Satisfy Requirement	BCA NSW Clause G5D4(1), Specification 43	
NCC Performance Requirements	G5P2	
NCC Assessment Methods	<p>A Performance Solution is achieved by demonstrating:</p> <p><input checked="" type="checkbox"/> A2G2(1)(a) Compliance with all relevant Performance Requirements.</p> <p><input type="checkbox"/> A2G2(1)(b) The solution is at least equivalent to the Deemed-to-Satisfy Provisions.</p> <p>The assessment method(s) to justify the Performance Solution is to comply with the relevant Performance Requirements:</p> <p><input type="checkbox"/> A2G2(2)(a) Evidence of Suitability in accordance with Part A5 that shows the use of a material, product, form of construction or design meets the relevant Performance Requirements.</p> <p><input type="checkbox"/> A2G2(2)(b)(i) NCC Verification Method.</p> <p><input checked="" type="checkbox"/> A2G2(2)(b)(ii) Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.</p> <p><input type="checkbox"/> A2G2(2)(d) Comparison with the Deemed-to-Satisfy provisions.</p>	
Assessment Methods as per AFEG Guidelines	<input type="checkbox"/> Comparative	<input checked="" type="checkbox"/> Absolute
	<input checked="" type="checkbox"/> Qualitative	<input type="checkbox"/> Quantitative
	<input checked="" type="checkbox"/> Deterministic	<input type="checkbox"/> Probabilistic
	The assessment is comprised of a qualitative discussion considering the intent of the prescriptive and performance requirements, and demonstrating that this intent is satisfied through evaluation of the bushfire exposure to which the building would be subjected, the extent of the building and the emergency evacuation procedure applicable to the building.	
AFEG Sub Systems	Sub-system C: Fire spread, impact and control Sub-system D: Fire detection, warning and suppression Sub-system E: Occupant evacuation and control Sub-system F: Fire services intervention	
Acceptance Criteria	The design is considered acceptable as it is demonstrated that Performance Requirement G5P2 is satisfied and occupants originating within the subject building would not be exposed to an untenable indoor environment during a bushfire event, access to the building is sufficient and a water supply is available.	

Table 10 – PS1 Assessment Summary

4.1 Extent of Performance Solution

As described by the Bushfire Assessment Report prepared by Building Code & Bushfire Hazard Solutions Pty Limited, the Tweed Shire Council's Bushfire Prone Land Map identifies the Pacific Coast Christian School site as partially containing Category 1 vegetation and the Vegetation Buffer, and thus the site is considered to be 'bushfire prone'.

The NCC 2022 contains amendments to the bushfire protection measures, introducing Specification 43 – Bushfire protection for certain Class 9 buildings.

In accordance with NSW Clause G5D4(1), in a designated bushfire prone area the following must comply with Specification 43:

- (a) A Class 9a health care building
- (b) A Class 9b –
 - (i) Early childhood centre; or
 - (ii) Primary or secondary school
- (c) A Class 9c residential care building.

The subject site is located on designated bushfire prone land, and the building is a Class 9b school building, and is therefore subject to the requirements of Specification 43.

The Performance Solution permits the building to not strictly satisfy all requirements of Specification 43.

4.2 Assessment Method

The Performance Solution relies on a qualitative discussion considering the intent of the applicable Deemed-to-Satisfy requirements, the subject building's extent, its location, exposure to bushfire hazards and the wider site's evacuation policy to demonstrate that Performance Requirement G5P2 is satisfied on a performance basis.

The following fire engineering requirements shall be provided as part of the assessment:

- The school site shall have a managed and maintained bushfire emergency evacuation policy. This policy shall not include the subject demountable classroom building being utilised as a place of refuge in the event of bushfire.
- The building shall be managed such that any major fire hazards/external fuel loads be separated by not less than 10 m from the building.
- The school site shall be provided with a supply of water for fire-fighting purposes in accordance with Specification 43 Clause 11 (S43C11).
- Vehicular access is provided to the perimeter of the campus buildings via a combination of carpark hardstand areas, gravel paths, and turfed paths across the school oval. These access paths shall have loadbearing capacity and unobstructed height and width to permit the operation and passage of firefighting vehicles.

4.3 Fire Scenario and Design Fire Parameters

The design fire scenario relevant to the Performance Solution is considered as being a worst-case bushfire event in proximity of the school site. The extent and severity of the applicable bushfire event is based on the independent Bushfire Hazard Assessment Report (Reference No. 240308), prepared by Building Code & Bushfire Hazard Solutions Pty Limited.

The bushland to which the site is exposed is primarily located on the west and south boundaries of the site. This is described further by the aerial view overlaid with vegetation mapping and site photographs provided within the independent Bushfire Hazard Assessment report.

The severity of bushfire exposure of buildings is typically categorised by the required level of building construction as described by AS 3959 – 2018 – *Construction of Buildings in bushfire-prone areas*. There are six levels, ranging from

Bushfire Attack Level (BAL) Low, through to Bal Flame Zone, with each level corresponding to a maximum level of radiant heat impact.

The independent Bushfire Hazard Assessment report concluded, in accordance with Table A1.12.6 of the PBP, that the maximum exposure of the new demountable building to bushfire corresponds to a “BAL 12.5” rating. That is, the building is expected, in a worst-case bushfire scenario, to be exposed to maximum radiant heat fluxes of up to 12.5 kW/m². The radiant heat exposure of the site is further described by the contour map in Figure 5.

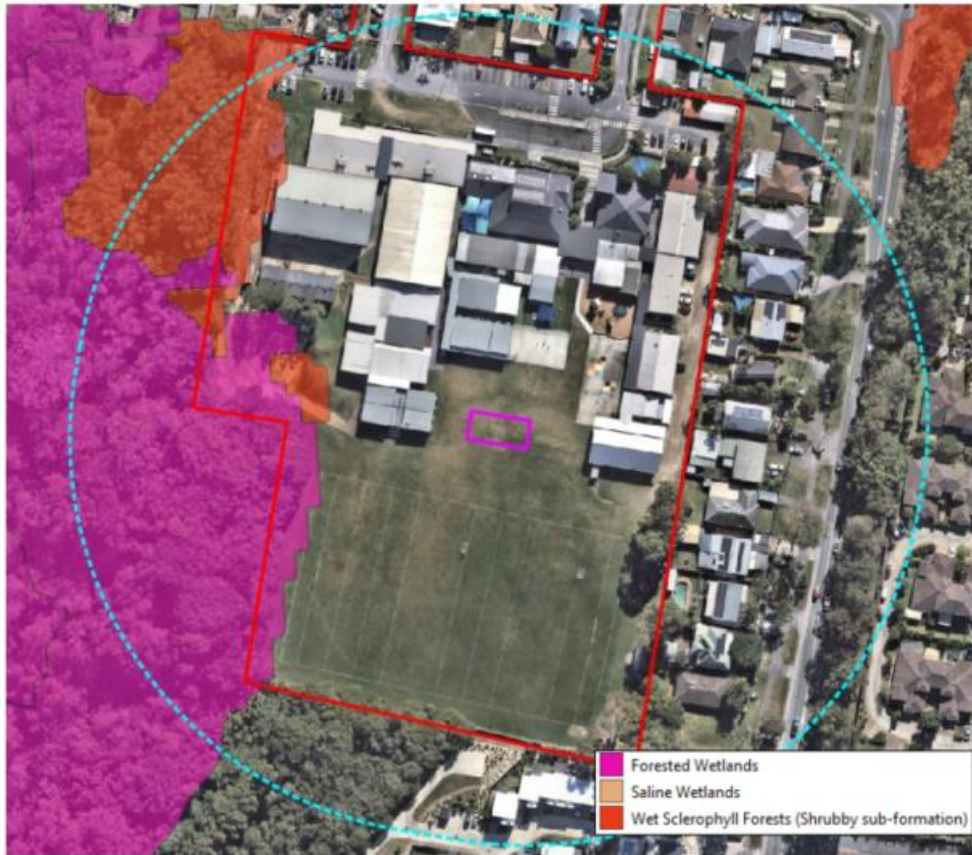


Figure 3 – Aerial view of the school site overlaid with vegetation mapping as per Vegetation NSW (courtesy of the Bushfire Hazard Assessment Report).



Figure 4 – Vegetation located to the west (left) and south (right) of the subject demountable building (courtesy of the Bushfire Hazard Assessment Report).

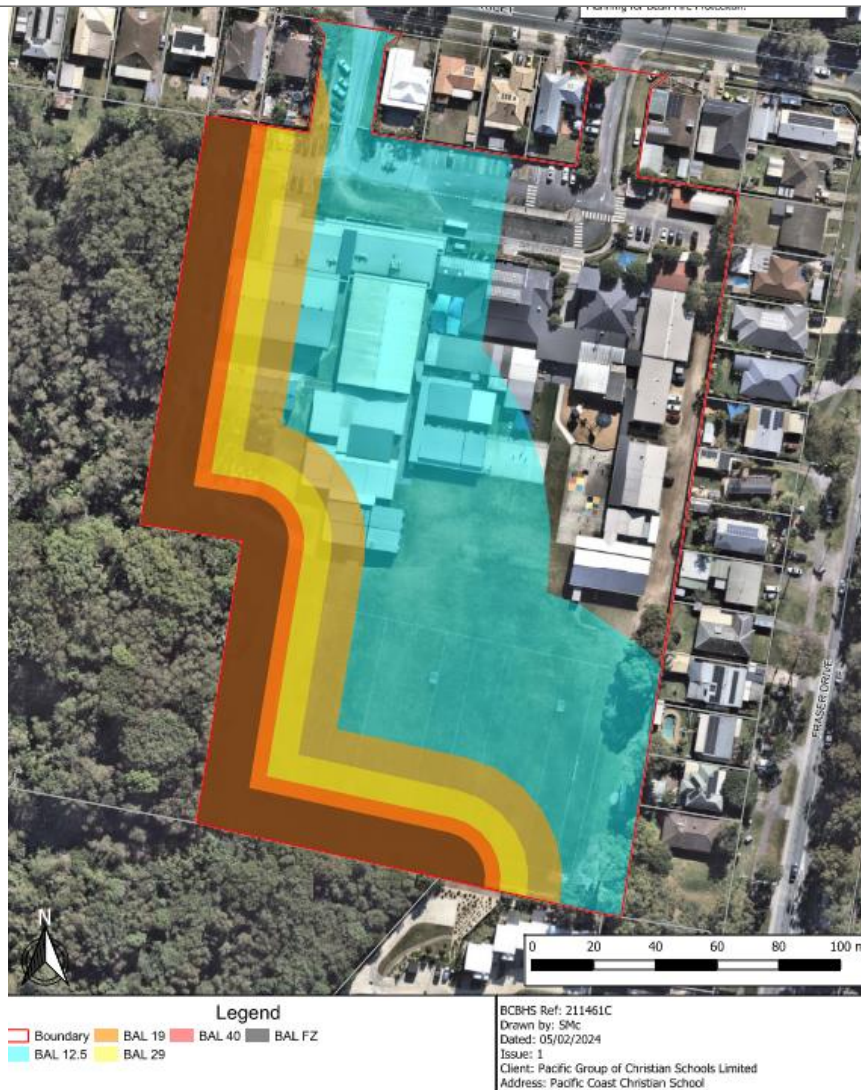


Figure 5 – Radiant heat exposure of PCCS.

4.4 Assessment

As described above in Section 4.3, the worst-case bushfire conditions to which the new demountable building is expected to be exposed corresponds to a maximum radiant heat flux of 12.5 kW/m². AS 1530.4-2005 – *Methods for fire tests on building materials, components and structures Part 4: Fire-resistance test of elements of construction* Table A3 details the typical radiant heat intensities for various phenomena. It states that the required heat flux for the ignition of timber or cotton fabric materials after a 'long period of exposure' in the presence of a pilot flame is 13 kW/m².

This threshold is greater than the expected radiant heat exposure of the new demountable classroom building in the event of a proximity bushfire, such that fire or flame spread to the subject building, is sufficiently unlikely.

The description of Performance Requirement G5P2 communicates two key objectives of Specification 43:

- 1) Prevent occupants from being exposed to hazardous conditions due to bushfire, and
- 2) Enable fire brigade intervention in the event of bushfire impacting on the site.

4.4.1 Occupant Safety

The prevention of occupant exposure to hazardous conditions in bushfire is dependent on the strategy adopted with respect to evacuation. Local councils constantly monitor the threat of bushfires and bushfire related conditions to provide schools and the like with early warning of potential bushfires, minimising the risk of the school being occupied

at the time of bushfire. On days that the bushfire danger level is declared as being 'Catastrophic', the school is understood to be closed, such that no occupants are present on site at the time of bushfire impingement on the site.

Notwithstanding this, it is noted that the school may be occupied on the day of a bushfire incident. As discussed within the Bushfire Emergency Management & Evacuation Plan, there are two primary options in the event of a bushfire incident: *early relocation* or *shelter-in-place*.

According to the Bushfire Emergency Management & Evacuation Plan, the early relocation option would require approximately 90 minutes to complete a full evacuation, i.e. students and staff, from the entirety of the school site. The total number of occupants this time is based on is 815. In the instance that early relocation is utilised, the building's ability to maintain tenability for occupants throughout a bushfire incident is not considered relevant, as the building would not be occupied at the time of bushfire. It is also noted, as per the Bushfire Emergency Management Evacuation Plan, that in the event the school is evacuated, unauthorised access is minimised through the closure of gates and the like. This is considered to mitigate the risk of person(s) outside of the school attempting to utilise the school as a place of refuge during bushfire, and potential sheltering in an area that is exposed to bushfire conditions.

Alternatively, the Chief Warden may evaluate the bushfire threat and determine that the time available to conduct an evacuation is insufficient, and the school must adopt a *shelter-in-place* approach. The vegetation that constitutes the bushfire risk to which the school and subject demountable building are exposed is concentrated to the west and south-west of the site, as highlighted in orange in Figure 6. The existing Bushfire Emergency Management & Evacuation Plan notes that, if the decision to *shelter-in-place* is adopted, that occupants of H1 and H2 shall relocate to H3 and H4, and students in TED 2 and 3, as well as D5 and D6, shall be relocated to other areas including Administration areas, while the Junior School may remain in situ. Therefore, the existing strategy revolves around those occupying the westernmost areas of the school relocating to less exposed spaces, noting the Junior School occupants may safely remain in place as it is positioned in the north-eastern corner of the site, where there is minimal bushfire exposure, noting it is shown as not being exposed to a BAL-rating in Figure 5.

Therefore, the Bushfire Emergency Management & Evacuation Plan shall be amended to include an additional requirement for the new demountable building, whereby occupants residing in the building, noting it is a building most exposed to the southern boundary, shall relocate towards the north-eastern side of the school site, such as the Food Tech building or Junior School. This movement is to be facilitated by trained members of staff.

4.4.2 Fire Brigade Intervention

With respect to fire brigade intervention, specific protection provided to the new demountable classroom building is not understood to be required. As described by Figure 5 and discussed above, the worst-case exposure of the building to radiant heat fluxes is not more than 12.5 kW/m^2 , which is less than the required heat fluxes for ignition of combustible materials (such as timber and cotton fabrics) in the presence of a pilot flame, as per the criteria suggested by AS 1530.4. Notwithstanding this, it is understood that the intent of Specification is to enable relative safety of fire brigade intervention to the wider school campus.

The water supply is understood to be Deemed-to-Satisfy compliant with respect to NCC S43C11, noting the school campus is served by an external feed fire hydrant system in accordance with AS 2419, Furthermore, vehicular access is provided to the perimeter of the campus buildings via a combination of carpark hardstand areas, gravel paths, and turfed paths across the school oval. This access is further illustrated in Figure 7.

Thus, it is concluded that the deviation from the Deemed-to-Satisfy provisions of Specification 43 would not impact on fire brigade intervention during a bushfire incident.

The demountable classroom building's compliance with the prescriptive provisions of Specification 43, and the extent of deviation from these provisions, is summarised in the following discussion.



Figure 6 – Bushland to which the school site is exposed.

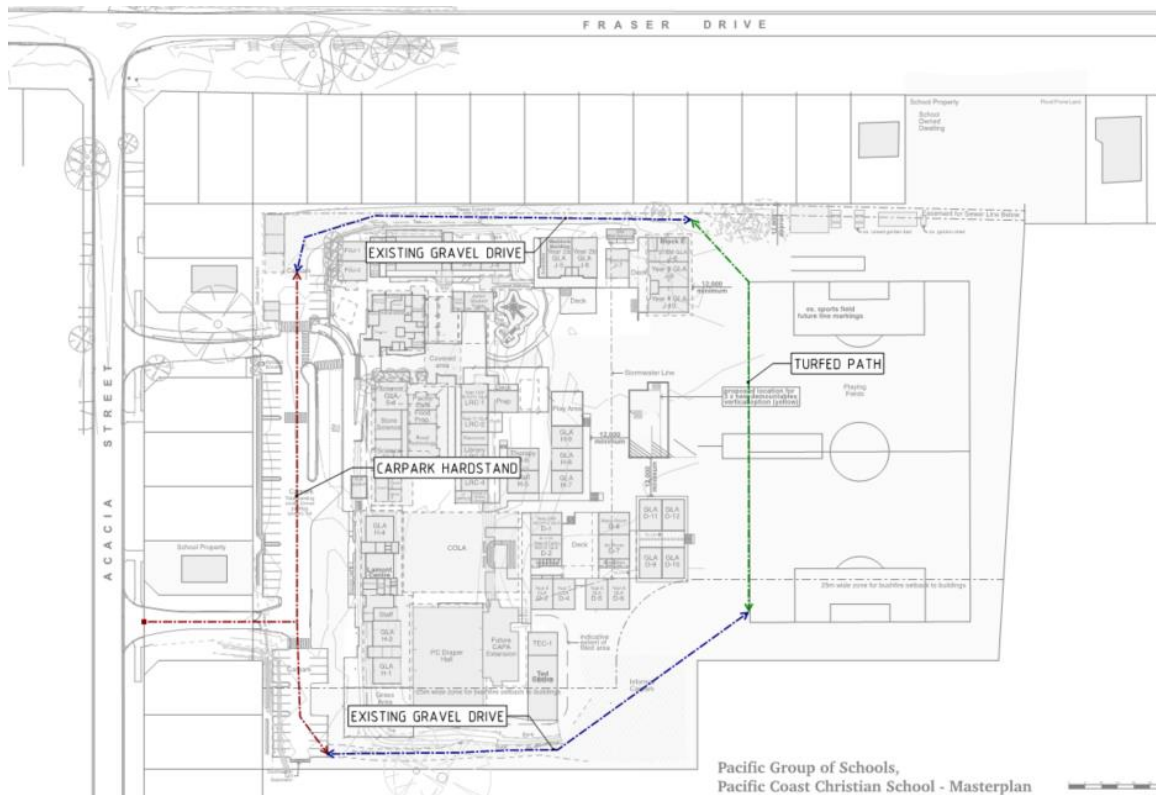


Figure 7 – Perimeter access provided to the school campus.

4.4.3 Summary of Compliance with Specification 43

The following table summarises each of the applicable Clauses of Specification 43, the subject demountable building's compliance or deviation from these Clauses, and the expected level of performance achieved during a bushfire incident.

SPECIFICATION 43 CLAUSE	COMPLIANCE	LEVEL OF PERFORMANCE
S43C2 – Separation of classified vegetation	Compliant 60 m separation of the building from high-risk vegetation is required. It is understood that >63 m separation is achieved from the bushland to the west, and >100 m from bushland to the south.	The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.
S43C3 – Separation between buildings	Compliant The building is located a minimum of 12 m from the adjacent GLA buildings (H-8/H-9 and D-11/D-12).	The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.
S43C4 – Separation from allotment boundaries & parking areas	Compliant The building is located central of the school campus, such that it is not within 10 m of an allotment boundary, nor adjacent any carparking.	The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.
S43C5 – Separation from hazards	Compliant A separation distance of not less than 10 m (or fire rated construction) is required from hazards such as full storage, waste bins, vehicles and the like. The area around the building is understood to be turfed and not used for storage. School management shall ensure that no bins or the like are stored against the building such that compliance is achieved.	The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.
S43C6 – Non-combustible pathway around the building	A continuous, non-combustible pathway 1.5 m wide is required around the building. In this case, an external balcony walkway is provided to the majority of the building, and the areas around the building are generally understood to be clear, flat grassed land.	The purpose of the non-combustible pathway is understood to provide prompt access or evacuation provisions to/from the building, with non-combustibility minimising the risk of the access from being impacted on by fire. As previously discussed, the building is not expected to be exposed to radiant heat fluxes due to bushfire that would result in flame spread to the building. The provided walkway, however, is understood to be non-combustible, and is considered to provided adequate

SPECIFICATION 43 CLAUSE	COMPLIANCE	LEVEL OF PERFORMANCE
		access to/from the building as all internal areas are provided with two-directions of travel either in or out of the building.
S43C7 – Access pathways	<p>Compliant</p> <p>Access pathways from the building to a road or open space are required, and must be identifiable, have an even surface and minimum width of 1 m. It is understood that compliance is achievable, noting access throughout the school for students and staff is provided, with the ability to travel to the road out of the site. It is also noted that occupants are understood to generally be familiar with the site, and subject to evacuation drills.</p>	The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.
S43C8 – Exposed external areas	<p>This clause requires that external areas designed to accommodate persons not within the building must be adequately protected from radiant heat fluxes.</p> <p>The building is comprised of 3 conjoined GLAs, with occupants remaining onsite in the event of bushfire being relocated to areas of the school less exposed to bushfire conditions. The requirement is therefore not applicable to the building.</p>	<p>This requirement is not considered applicable to the building, such that Performance Requirement GF5P2 is inherently satisfied. The objective of the clause is to protect occupants that may not be able to be accommodated within the building in bushfire (i.e. due to crowding).</p> <p>It is understood that occupants would not reside within the building in the event of bushfire and would instead be relocated to less exposed areas of the school such as the north-east buildings or Food Tech building. Occupations requiring assistance would be aided by trained staff.</p>
S43C9 – Internal tenability	<p>S43C9 requires that the building be provided with air handling systems and the like capable of maintaining tenable conditions (i.e. internal temperatures of 25 °C and prevention of smoke ingress) for a period of not less than 4 hours.</p> <p>The building is not provided with such systems.</p>	<p>This requirement is not considered applicable to the building. The intent of this Clause is to protect occupants, operating under the assumption that a shelter-in-place approach may be required as the building may be used as a place of refuge in accordance with the NCC.</p> <p>As discussed above, these systems are not considered required as in no credible bushfire scenario would occupants be expected to shelter within the subject demountable building. It is understood that if the Chief Fire</p>

SPECIFICATION 43 CLAUSE	COMPLIANCE	LEVEL OF PERFORMANCE
		<p>Warden for the site determines that a shelter-in-place approach is required in response to bushfire, it forms part of the site’s Bushfire Emergency & Evacuation strategy that all occupants within the demountable building would relocate to less exposed areas of the campus, such as to the northeast where the buildings are not classified as being exposed to bushfire. In the event that occupants are not capable of evacuating due to mobility issues and the like, it is understood that rained staff members would provide assistance to mitigate this risk.</p>
<p>S43C10 – Building envelope</p>	<p>Compliant</p> <p>S43C1-0 requires that the building envelope be constructed in accordance with AS 3959 – BAL 19 or greater.</p> <p>While the building is only exposed to BAL 12.5 conditions, it is understood that the building will comply with the requirements for BAL 19.</p>	<p>The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.</p>
<p>S43C11 – Supply of water for fire-fighting purposes</p>	<p>Compliant</p> <p>The school campus is provided throughout with an external fire hydrant system, understood to be installed in accordance with AS 2419. Water for bushfire-fighting purposes is permitted by the clause to consists of a fire hydrant system complying with E1D2.</p>	<p>The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.</p>
<p>S43C12 – Emergency power supply</p>	<p>The building is required by S42C12 to be provided with an emergency power supply supporting building systems for not less than 4 hours and 2 hours after the passing of a bushfire front.</p> <p>The building is not provided with an emergency power supply.</p>	<p>This requirement is not considered applicable to the building. Specification 43 operates under the assumption that the building is an assembly building and may serve as the shelter-in-place option for potentially large numbers of occupants. This requirement aims to facilitate the tenability requirements required above, and power firefighting equipment.</p> <p>In this case, the building has a floor area less than 500 m² and is comprised of three demountable GLAs. Systems to sustain tenability are not required as in no credible bushfire scenario is it</p>

SPECIFICATION 43 CLAUSE	COMPLIANCE	LEVEL OF PERFORMANCE
		<p>expected that the building would act as a place of refuge, In the event of the shelter-in-place option being implemented by the school, it is understood that occupants originating within the subject building would be transported to other areas of the site.</p> <p>With respect to fire brigade equipment, the subject building does not house any fire pumps or the like, with the campus' firefighting equipment located in other areas of the campus, not in proximity of the subject building.</p>
<p>S43C13 – Signage</p>	<p>Compliant</p> <p>Signage is required by Specification 43 to warn occupants against the storage of combustible materials under or adjacent the building.</p> <p>It is understood that signage shall be provided as required to achieve compliance, and it shall form part of the school's management to prevent the accumulation of combustibles in proximity or underneath the building.</p>	<p>The level of performance is considered to satisfy Performance Requirement G5P2 inherently, as Deemed-to-Satisfy compliance is achieved.</p>
<p>S43C14 – Vehicular Access</p>	<p>S43C14 specifies that vehicular access must be provided to the building as if it were considered a large, isolated building.</p> <p>In this case, the demountable classroom building is not a standalone building, and forms part of an existing school campus alongside 18 existing structures. Vehicle access is provided to the site as a whole, rather than the individual building.</p>	<p>The level of performance achieved by the arrangement is considered commensurate with the intent of Specification 43, and G5P2 of the NCC.</p> <p>In the event fire brigade intervention during a bushfire incident is necessitated, it is not expected that fire brigade would aim to protect the demountable building only, and would instead carry out intervention to the school site as a whole. Continuous vehicle access around the school campus is provided via a combination of carpark hardstand areas, existing gravel drives and turfed areas such as the oval. It is considered that this vehicle access, illustrated by Figure 7, satisfies the operational needs of fire brigade.</p>

Table 11 – Summary of Compliance and Level of Performance of subject building with respect to Specification 43.

4.5 Conclusion

Based on the above discussions, it has been demonstrated that the objectives of Specification 43, to protect building occupants and facilitate fire brigade intervention in the event of a bushfire incident in vicinity of the subject building are provided for through a combination of design parameters, evacuation management and procedures, and firefighting systems. Performance Requirement G5P2 is therefore satisfied for the building.

5 REFERENCES

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6 ACRONYMS

ACRONYM	MEANING
ABCB	Australian Building Codes Board
AFAC	Australasian Fire and Emergency Service Authorities Council
AFEG	Australian Fire Engineering Guidelines
AS	Australian Standard
ASE	Alarm Signalling Equipment
ASET	Available Safe Evacuation Time
BOWS	Building Occupant Warning System
CFA	Country Fire Authority
DTS	Deemed -to- Satisfy
ERL	Expected Risk to Life
EWIS	Emergency Warning Intercom System
FCE	Fire Cost Expectation
FBIM	Fire Brigade Intervention Model
FCC	Fire Control Centre
FCR	Fire Control Room
FEB	Fire Engineering Brief
FER	Fire Engineer Report
FIP	Fire Indicator Panel
HRR	Heat Release Rate
IFEF	International Fire Engineering Guidelines
IFSS	International Fire Safety Standards
ISO	International Organisation for Standardisation
NCC	National Construction Code
PBDB	Performance Based Design Brief
RSET	Required Safe Evacuation Time
SS	Sub-System