ACT Government
Chief Minister, Treasury and Economic Development

Freedom of Information Publication Coversheet

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

FOI Reference: CMTEDDFOI 2023-327

Information to be published	Status
1. Access application	Published
2. Decision notice	Published
3. Documents and schedule	Published
4. Additional information identified	No
5. Fees	Waived
6. Processing time (in working days)	45
7. Decision made by Ombudsman	N/A
8. Additional information identified by Ombudsman	N/A
9. Decision made by ACAT	N/A
10. Additional information identified by ACAT	N/A

From: [redacted]
To: CMTEDD FOI
Subject: Re: New FOI request for CMTEDD - request for re-scpope
Date: Monday, 11 September 2023 6:06:16 PM

Option 2 please.

Thank you!!

On Mon, 11 Sept 2023, 4:19 pm CMTEDD FOI, <CMTEDDFOI@act.gov.au> wrote:

OFFICIAL

[redacted]

Thank you for your response.

I would like to clarify that the revised scope I suggested in my previous email, is worded specifically enough, that the three points you have listed in your last email would be captured in the document search. Additionally, because you have requested "all documents for all construction during the period 2017 – to present, the scope may possibly capture additional information which may not necessarily, be what you are after. It is also worth noting that this is quite a large scope, which could impact on how quickly the decision can be finalised and provided to you.

For clarity, can you please confirm if your preference to progress is **option 1** or **option 2** (noting option 2 is likely to be a much larger request and may capture information you may not require):

Option 1:

i. A copy of the Building Approval (BA) document for the **Maintenance Shed**, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939).
ii. A copy of all Building Approvals (BA) documents for **footings/slab or pavements for Brindabella Christian College demountables** on block 4, Section 41, Lyneham from 2017 to date.
iii. A copy of the Building Approval (BA) and the Certificate of Occupancy for the **Junior School**, (relating to DA201629628)

Option 2:

- Copies of the following documentation for **all construction on block 4, section 41, Lyneham** (Brindabella Christian College), **from the period of 2017 till September 2023** (to date).

    i. **Building Approvals**

    ii. **Certificates of Occupancy**

    iii. **Certificates of Use**

    iv. **Exemption declarations**

    v. **Correspondence or advice regarding exemptions or exempt work**

    vi. **Stop Work Orders**

* Note: this option will include documents searches to obtain the following:

- A copy of the Building Approval (BA) document for the **Maintenance Shed**, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939).
- A copy of all Building Approvals (BA) documents for **footings/slab or pavements for Brindabella Christian College demountables** on block 4, Section 41, Lyneham from 2017 to date.
- A copy of the Building Approval (BA) and the Certificate of Occupancy for the **Junior School**, (relating to DA201629628)

Please do not hesitate to contact me should you with to discuss the matter over the phone.

Kind regards,

Jess

Freedom of Information Coordinator | Information Access Team

Phone: 02 6207 7754 | Email: CMTEDDFOI@act.gov.au

Corporate | Chief Minister, Treasury and Economic Development Directorate | ACT Government

Level 1, 220 London Circuit, Canberra ACT 2601 | GPO Box 158 Canberra ACT 2601 | act.gov.au

From: [redacted]>
Sent: Monday, 11 September 2023 3:56 PM
To: CMTEDD FOI <CMTEDDFOI@act.gov.au>
Subject: Re: New FOI request for CMTEDD - request for re-scpope

Thank you Jess

Could part 2 please be expanded a little, thank you!

...Specifically, please ensure searches for the following information is conducted:

- A copy of the Building Approval (BA) document for the **Maintenance Shed**, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939).
- All Building Approvals (BA) documents for **footings/slab or pavements for Brindabella Christian College demountables** on block 4, Section 41, Lyneham from 2017 to date.
- Building Approval and the Certificate of Occupancy for the Junior School, DA201629628.

On Mon, 11 Sept 2023, 2:24 pm CMTEDD FOI, <CMTEDDFOI@act.gov.au> wrote:

> OFFICIAL
>
> Good afternoon [redacted]
>
> I refer three requests for information, transferred from the EPSDD to CMTEDD, today, 11 September 2023 (see below summaries):
>
> | Application | Current Scope |
> |---|---|
> | **(1)** | The following documentation for all construction on block 4, section 41 Lyneham, from the period of 2017 till |

	September 2023 (to date). i. Building Approvals ii. Certificates of Occupancy iii. Certificates of Use iv. Exemption declarations v. Correspondence or advice regarding exemptions or exempt work vi. Stop Work Orders
(2)	A copy of the Building Approval (BA) document for the Brindabella Christian College Maintenance Shed, on block 4, Section 41 lodged in 2017. • Corresponding to DA 201630939.
(3)	A copy of the Building Approval (BA) documents for the footings/slab or pavements for Brindabella Christian College demountables on block 4, Section 41. • The slab/ pavement /footings would have been laid sometime between 2017 and 2019, as these demountables were relocated within the block sometime between 2017 and 2019.

After revieing the scope of the above requests, it is apparent that the information you are seeking in applications (2) and (3), would be captured under application (1).

Therefore, I recommend we consolidate your requests. The most efficient way to do this is to withdraw applications (2) & (3) and specify some additional notes in application (1).

Below I have revised the scope for application (1), pending your approval:

Revised Scope for 'application (1)'
Copies of the following documentation for <u>all construction on block 4, section 41, Lyneham</u> (Brindabella Christian College), <u>from the period of 2017 till September 2023</u> (to date). i. **Building Approvals** ii. **Certificates of Occupancy** iii. **Certificates of Use** iv. **Exemption declarations** v. **Correspondence or advice regarding exemptions or exempt work** vi. **Stop Work Orders** Specifically, please ensure searches for the following information is conducted: • A copy of the Building Approval (BA) document for the **Maintenance Shed**, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939). • A copy of the Building Approval (BA) documents for **the footings/slab or pavements for Brindabella Christian College demountables** on block 4, Section 41, Lyneham. (The slab/ pavement /footings would have been laid sometime between 2017 and 2019)

May I kindly ask that you review the above revised scope for application (1) and provide your comments and approval to withdraw applications (2) and (3), so that the initial document searches can commence.

Kind regards,

Jess

Freedom of Information Coordinator | Information Access Team

Phone: 02 6207 7754 | Email: CMTEDDFOI@act.gov.au

Corporate | Chief Minister, Treasury and Economic Development Directorate | ACT Government

Level 1, 220 London Circuit, Canberra ACT 2601 | GPO Box 158 Canberra ACT 2601 | act.gov.au

ACT Government
Chief Minister, Treasury and Economic Development

Our ref: CMTEDDFOI 2023-327

[redacted]

FREEDOM OF INFORMATION REQUEST

I refer to your application under section 30 of the *Freedom of Information Act 2016* (the Act), which was transferred in part from Environment, Planning and Sustainable Development Directorate and received by the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) on 11 September 2023. CMTEDD accepted transfer of parts 1-3, and 4-5 of your request. In that request you sought access to the following:

- *"I am writing to you to seek information and correspondence about construction on Block 4. Section 41, Lyneham.*
  Specifically, please share:
    - *Building Approvals*
    - *Certificates of Occupancy*
    - *Certificates of Use*
    - *Exemption declarations*
    - *Correspondence or advice regarding exemptions or exempt work*
    - *Stop Work Orders*

  For all construction on block 4, section 41 Lyneham, from the period of 2017 till September 2023 (to date).

  This is in the public interest regarding the ACT Building, Planning and Development, and Education laws and regulations being upheld, Transport safety, and amenity of the Lyneham community, and safety and functionality of the Brindabella Christian College, including student capacity and safety of buildings.

  I wish to have my name withheld from the application and not shared with the line areas please."

On 11 September 2023 you were contacted by a Freedom of Information Officer to rescope your application under section 34 of the Act. On 11 September 2023 you confirmed your agreement to the following revised scope:

- *"Copies of the following documentation for* ***all construction on block 4, section 41, Lyneham*** *(Brindabella Christian College),* ***from the period of 2017 [01 January 2017] till September 2023*** *(to date)[11 September 2023].*

    i. ***Building Approvals***

    ii. ***Certificates of Occupancy***

iii. ***Certificates of Use***

iv. ***Exemption declarations***

v. ***Correspondence or advice regarding exemptions or exempt work***

vi. ***Stop Work Orders***

** Note: this option will include documents searches to obtain the following:*

- *A copy of the Building Approval (BA) document for the **Maintenance Shed**, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939).*
- *A copy of all Building Approvals (BA) documents for **footings/slab or pavements for Brindabella Christian College demountables** on block 4, Section 41, Lyneham from 2017 to date.*
- *A copy of the Building Approval (BA) and the Certificate of Occupancy for the **Junior School**, (relating to DA201629628)."*

Authority

As an appointed Information Officer under section 18 of the Act by the Director-General of CMTEDD, I am authorised to make a decision on access or amendment to government information in the possession or control of CMTEDD.

Timeframes

In accordance with section 40 of the Act, CMTEDD was required to provide a decision on your access application 24 October 2023. However, following on from third party consultations, the due date is now 14 November 2023.

Decision on access

Searches were completed for relevant documents and 113 documents were identified that falls within the possible scope of your request, excluding duplicates.

I have included as **Attachment A** to this decision the schedule of relevant documents. This provides a description of each of the documents that fall within the scope of your request and the access decision for of those document documents. Due to the size and complexity of the documents the material has been divided into binders, according to the building activity.

Additional Information

Documents within scope were related to the following building activities:

- Binder 1 - Stop Work Notice
- Binder 2 - Solar PV Installation
- Binder 3 - Part 1 - Proposed Demountable
- Binder 3 - Part 2 - Proposed Demountable
- Binder 4 - Junior school
- Binder 5 - Maintenance Shed
- Binder 6 - Relocation of Demountable
- Solar PV Installation – Binder 7

I have decided to grant **full access** to 8 documents and **partial access** to 94 of documents and refused access, or **fully exempted** 19 documents from release, as I consider them to contain information that would, on balance, be contrary to the public interest to disclose under the test set out in section 17 of the Act, or outside scope of your requested information.

My access decisions are detailed further in the following statement of reasons and the documents released to you are provided as **Attachment B** to this letter.

In accordance with section 54(2) of the Act a statement of reasons outlining my decisions is below.

Statement of Reasons

In reaching my access decisions, I have taken the following into account:

- the Act;
- *Human Rights Act 2004* (HR Act);
- *Building Act 2004* (Building Act);
- *Building (Fees) Determination 2023*
- the content of the documents that fall within the scope of your request; and
- third party consultation.

Exemption claimed

My reasons for deciding not to grant access to the identified documents and components of these documents are as follows:

Information that would, on balance, be contrary to the public interest to disclose under the test set out in section 17 of the Act

None of the identified documents contain information that is considered to be contrary to the public interest under schedule 1 of the Act.

Public Interest

The Act has a presumption in favour of disclosure. As a decision maker I am required to decide where, on balance, public interests lies. As part of this process I must consider factors favouring disclosure and non-disclosure.

In *Hogan v Hinch* (2011) 243 CLR 506, [31] French CJ stated that when 'used in a statute, the term [public interest] derives its content from "the subject matter and the scope and purpose" of the enactment in which it appears'. Section 17(1) of the Act sets out the test, to be applied to determine whether disclosure of information would be contrary to the public interest. These factors are found in subsection 17(2) and Schedule 2 of the Act.

Taking into consideration the information contained in the documents found to be within the scope of your request, I have identified that the following public interest factors are relevant to determine if release of the information contained within these documents is within the 'public interest'.

Factors favouring disclosure in the public interest (Sch 2 s 2.1(a) of the Act):

(a) disclosure of the information could reasonably be expected to do any of the following:

(i) promote open discussion of public affairs and enhance the government's accountability;

(ii) contribute to positive and informed debate on important issues or matters of public interest; and

(viii) reveal the reason for a government decision and any background or contextual information that informed the decision.

The release of this information may possibly help to create positive and informed discussions and enhance the government's accountability including accountability related to building approvals. I consider that disclosing the contents of the information sought could reasonably contribute to discussion of public affairs. The release of information will provide insight into processes undertaken with regards to business activities related to building and certification activities undertaken by the ACT Government. I note the information relates to government decisions, impacting on the private sector, such as the decision to issue certificates of occupancy.

I am satisfied that this is a relevant consideration favouring disclosure in this case, and in the interests of enhancing open discussion.

I have placed substantial weight on the above factors favouring disclosure. The release of this information can reasonably be expected to provide some background and context into the administration and decision-making process relating to compliance activities handled by Access Canberra.

However, these factors are required to be balanced against those factors favouring non-disclosure.

Factors favouring nondisclosure in the public interest (Sch 2 s 2.2(a) of the Act):

(a) disclosure of the information could reasonably be expected to do any of the following:

(ii) prejudice the protection of an individual's right to privacy or any other right under the Human Rights Act 2004;

(iii) prejudice security, law enforcement and public safety;

(xi) prejudice trade secrets, business affairs or research of an agency or person.

Having reviewed the documents, I consider the protection of an individual's right to privacy is a significant factor. I have decided that their right to privacy in relation to their personal information has a higher weighting not to disclose, than the public interest has in disclosing this information. I am of the view that disclosure of employee names and contact information could prejudice their individual rights to privacy under the *Human Rights Act 2004*.

Section 12 of the HR Act, concerning privacy and reputation, states:

"Everyone has the right—

(a) not to have his or her privacy, family, home or correspondence interfered with unlawfully or arbitrarily; and
(b) not to have his or her reputation unlawfully attacked"

Individuals working for the third parties have a right to privacy and reputation under section 12 of the HR Act. Personal information, such as names, mobile numbers and emails have been redacted of third parties. However, position titles have not been redacted. I have afforded their right to privacy significant weight.

I consider that the protection of an individual's right to privacy, especially in the course of dealings with the ACT Government is a significant factor as the parties involved have provided their personal contact information for the purposes of working with the ACT Government. I have considered the information and in my opinion the protection of these individuals' personal details (such as personal signatures which are not publicly available) outweighs the benefit which may be derived from releasing them. I consider that these individuals are entitled to expect that the personal information they have supplied as part of this process to the ACT Government will be dealt with in a manner that protects their privacy.

In addition, the protection of personal information for an individual when engaging with government during review and certification processes, in my opinion, outweighs the benefit which may be derived from releasing the personal information of an individual or individuals involved in this matter. In this instance, I have decided that release of personal information of individuals who have engaged with government as part of a compliance and certification processes, is contrary to the public interest as this information could also prejudice an individual's rights to privacy under the *Human Rights Act 2004*.

Schedule 2 section 2.2(a)(xi) allows for government information to be withheld from release if disclosure of the information could reasonably be expected to prejudice the trade secrets, business affairs or research of an agency or person. I note that the disclosure of some of the information in scope, could potentially impact on the competitive commercial activities of the businesses who supplied material in this process. These materials contain information about their business affairs, detailed plans, cost of works, and reports prepared in response to compliance activities. This is a serious issue and I weight this provision substantially.

Having applied the test outlined in section 17 of the Act and deciding that release of some of the information contained in the documents is not in the public interest to release, I have chosen to redact this specific information in accordance with section 50(2). Noting the pro-disclosure intent of the Act, I am satisfied that redacting only the information that I believe is not in the public interest to release will ensure that the intent of the Act is met and will provide you with access to information held by CMTEDD within the scope of your request.

I give greater weight to protecting the business affairs of companies dealing with the Directorate, where I have deemed that it could reasonably be expected for those companies to be negatively impacted by release of information about them. I have

decided that the factor favouring nondisclosure has greater weight than the factors favouring disclosure. Therefore, the information has been redacted from the record.

In my consideration of the public interest test, I note that some of the material could also be redacted under schedule 2, section 2.2(a)(iii) where release of the information may prejudice public safety. This includes a reasonable assumption that personal information of third parties, if published, may be used to harass or intimidate third parties if they were identified, as well as published information for a private school could risk public safety.

Third Parties Views

Third parties were consulted on the release of section 38 of the Act. Some third parties raised objection to the disclosure of information within the scope of your request, providing various reasons for the objection.

One reason provided included that the plans contained commercial value to third parties. I note that the ACT government is not the author of some of the documents within scope of your request and the ACT Government holds these documents due to legislative procedures under the *Building Act 2004*. Some third parties argued that they did not want their intellectual property shared publicly without financial compensation.

Manteena Commercial Pty Ltd and Major Projects Canberra [2021] ACTOFOI 9 (8 September 2021) considered the issue of a reasonable expectation that the information if released could prejudice the competitive commercial activities of the ACT government and its agencies. In this case the ACT Ombudsman stated that, at paragraph 61:

> *Information has a commercial value if:*
>
> - *it is valuable for the purposes of carrying on the commercial activity in which that agency or other person is engaged (i.e., because it is important or essential to the profitability or viability of a continuing business operation, or a pending 'one-off' commercial transaction); or*
> - *a genuine arms-length buyer is prepared to pay to obtain that information from that agency or person, such that the market value of the information would be destroyed or diminished if it could be obtained from a government agency which has possession of it.*

Some information has been redacted on the basis that it could reasonably be expected to prejudice the competitive commercial activities of third parties, where the information was created by third parties. Furthermore, some of the documents such as building plans in binder 3, contain documents that are subject to copyright and publishing these documents would infringe copyright.

I afford the factors of protecting third party privacy and protecting public safety and the third party business interests significant weight.

Following significant third party consultation, I have decided to redact information that may also cause harm if released, such as third party private information like names and email addresses. I have also decided to redact documents, such as building plans for the

interior of buildings where the information is not publicly known on safety grounds due to the harm that may be caused if this information was used inappropriately.

Having applied the test outlined in section 17 of the Act and deciding that release of personal information contained in the documents is not in the public interest to release, I have chosen to redact this specific information in accordance with section 50(2). Noting the pro-disclosure intent of the Act, I am satisfied that redacting only the information that I believe is not in the public interest to release will ensure that the intent of the Act is met and will provide you with access to the majority of the information held by CMTEDD within the scope of your request.

Some documents that I have decided to released in full, were previously publicly available, but have been superseded. Examples include data sheets, and the updated versions of these documents are publicly available at the date of my decision. I have decided that it is not contrary to third party interests under the section 17 public interest test to release this information.

The amounts of fees listed on documents such as invoices has been redacted noting the total figure relates to third party commercially sensitive information, including part of the fee being calculated as a percentage of the cost of the work.

Please note that building fees and levies, payable under a disallowable instrument made each year under section 150 of the *Building Act* are publicly available, and published on the ACT Legislation Register . The current one is the *Building (Fees) Determination 2023*, available here: https://legislation.act.gov.au/View/di/2023-123/current/html/2023-123.html

Previous, repealed, fee determinations are also published on the ACT Legislation register according to year, such as the *Building (Fees) Determination 2017*: https://legislation.act.gov.au/di/2017-148/

Nineteen documents have been identified in the schedule as being refused, as I consider that these documents contains information that I consider, on balance, to be contrary to the public interest to disclose under the test set out in section 17 of the Act or they contain information which is out of scope.

Charges

Pursuant to *Freedom of Information (Fees) Determination 2017 (No 2)* processing charges are applicable for this request because the total number of pages to be released to you exceeds the charging threshold of 50 pages. However, the charges have been waived in accordance with section 107(2)(b) of the Act.

Online publishing – Disclosure Log

Under section 28 of the Act, CMTEDD maintains an online record of access applications called a disclosure log. Your original access application, my decision and documents released to you in response to your access application will be published on the CMTEDD disclosure log 3 days after the date of my decision. Your personal contact details will not be published.

You may view CMTEDD disclosure log at https://www.cmtedd.act.gov.au/functions/foi.

Ombudsman Review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is published in CMTEDD disclosure log, or a longer period allowed by the Ombudsman.

We recommend using this form *Applying for an Ombudsman Review* to ensure you provide all of the required information. Alternatively, you may write to the Ombudsman at:

The ACT Ombudsman
GPO Box 442
CANBERRA ACT 2601

Via email: actfoi@ombudsman.gov.au

ACT Civil and Administrative Tribunal (ACAT) Review

Under section 84 of the Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision. Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal
Allara House
15 Constitution Avenue
GPO Box 370
Canberra City ACT 2601
Telephone: (02) 6207 1740
http://www.acat.act.gov.au/

Should you have any queries in relation to your request please contact the Information Access Team by telephone on 6207 7754 or email CMTEDDFOI@act.gov.au.

Yours sincerely,

Emma Hotham
Information officer
Information Access Team
Chief Minister, Treasury and Economic Development Directorate

14 November 2023

ACT Government
Chief Minister, Treasury and Economic Development

FREEDOM OF INFORMATION REQUEST SCHEDULE

WHAT ARE THE PARAMETERS OF THE REQUEST	Reference NO.
"Copies of the following documentation for all construction on block 4, section 41, Lyneham (Brindabella Christian College), from the period of 2017 [01 January 2017] till September 2023 (to date)[11 September 2023]. *i. Building Approvals* *ii. Certificates of Occupancy* *ii. Certificates of Use* *v. Exemption declarations* *v. Correspondence or advice regarding exemptions or exempt work* *vi. Stop Work Orders* ** Note: Please ensure the following construction work is searched for.* ▪ *A copy of the Building Approval (BA) document for the Maintenance Shed, on block 4, Section 41, Lyneham, lodged in 2017 (corresponding to DA 201630939).* ▪ *A copy of all Building Approvals (BA) documents for footings/slab or pavements for Brindabella Christian College demountables on block 4, Section 41, Lyneham from 2017 to date.* ▪ *A copy of the Building Approval (BA) and the Certificate of Occupancy for the Junior School, (relating to DA201629628)"*	CMTEDDFOI 2023-327

Ref No	Binder Number	Page number	Description	Date	Status	Reason for Exemption	Online Release Status
1	1	1	Stop Work Document: Email -Subject: "Stop Notice – B4S41 Lyneham"	13/02/2023	Partial	Sch 2, S 2.2(a)(ii)	Yes
2	1	2-6	Stop Work Document: Stop Notice	13/02/2023	Partial	Sch 2, S 2.2(a)(ii)	Yes
3	1	7	Stop Work Document: Email -Subject: "Stop Notice – B4S41 Lyneham"	10/08/2023	Partial	Sch 2, S 2.2(a)(ii)	Yes
4	1	8-10	Stop Work Document: Stop Notice	10/08/2023	Partial	Sch 2, S 2.2(a)(ii)	Yes
5	2	1	Solar PV installation Document -Plans - Approved plan 01-B2019238 – (vA54539802)	20/07/2017-30/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
6	2	2-3	Solar PV installation Document - Document – Appointment of a builder and Application for commencement Notice	29/01/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
7	2	4-5	Solar PV installation Document -Document – Application for Building Commencement Notice - unsigned	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
8	2	6-7	Solar PV installation Document - Document – Appointment of a Certifier and Application for Building Approval	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes

9	2	8-11	Solar PV installation Document - Appointment of a certifier application for building approval, including building approval certificate-(4 pages)	29/01/2018-30/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
102	2	12-13	Solar PV installation Document Site Work Notice	30/01/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
11	2	14-15	Solar PV installation Document -Building Approval	30/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
12	2	16-	Solar PV installation Document – Building Commencement Notice	30/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
13	2	37	Solar PV installation Document - Building Approval Fees and Levies Tax Invoice	30/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
14	2	38	Solar PV installation Document – ACT Government - Creditor invoice and payment history	01/02/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
15	2	39	Solar PV installation Document - Building Approval Fees and Levies Receipt	02/02/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
16	2	40	Solar PV installation Document – BPay - NAB authorisation form	02/02/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
17	2	41-43	Solar PV installation Document -Certificate of Occupancy - Application for certificate of occupancy and use	20/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
18	2	44-45	Solar PV installation Document - Certificate of Occupancy - Application for Certificate of Occupancy and Use - unsigned	undated	Partial	Sch 2, s 2.2(a)(ii)	Yes
19	2	46-47	Solar PV installation Document - Certificate of Occupancy - Certification of Completion of Building Work	01/02/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
20	2	48-49	Certificate of Occupancy and Use Checklist - Commercial	02/02/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
21	2	50	Solar PV installation Document - Certificate of Occupancy - Certificate of Occupancy and Use	02/02/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes
22	3	1-7	B2023500-Proposed demountable – Plans - Approved Plan - 01-Issue for construction date	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
23	3	8-9	B2023500-Proposed demountable – Plans - Approved Plan -02-Building Approval	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
24	3	10-17	B2023500-Proposed demountable – Plans - Approved Plan -03	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
25	3	18-33	B2023500-Proposed demountable – Plans - Approved Plan -04	15/02/2023	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
26	3	34-55	B2023500-Proposed demountable – Plans - Approved Plan -05	15/02/2023	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
27	3	56	B2023500-Proposed demountable – Plans - Hydraulic – for certification	25/01/2021	Partial	Sch 2 s 2.2(a)(xi)	Yes

28	3	57-58	B2023500-Proposed demountable - Plans – Other	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
29	3	59-60	B2023500-Proposed demountable – Documents - Alternative Solution Review_03	13/02/2023	Refused	Sch 2 s 2.2(a)(xi)	Yes
30	3	61-127	B2023500-Proposed demountable – Documents - Alternative Solution Review_04	17/11/2020	Full		Yes
31	3	128	B2023500-Proposed demountable - Invoice	17/02/2023	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
32	3	129	B2023500-Proposed demountable – Documents - Building approval -01	13/02/2021	Refused	Sch 2 s 2.2(a)(xi)	Yes
33	3	1130	B2023500-Proposed demountable – Documents - Building approval -02	18/09/2020	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
34	3	131-176	B2023500-Proposed demountable – Documents- Building approval -04 -	09/02/2023	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
35	3	177-180	B2023500- Proposed demountable - Documents - Building approval -05	18/11/2021	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
36	3	181-182	B2023500-Proposed demountable – Documents - Building approval -06 – Certificate	02/06/2021	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
37	3	183-184	B2023500-Proposed demountable - Documents - Building approval -07 - certificate of compliance	19/03/2021	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
38	3	156-157185-86	B2023500-Proposed demountable – Documents - Building approval -08	16/03/2021	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
39	3	158-159187-188	B2023500-Proposed demountable - Documents - Building approval - 09	17/03/2021	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
40	3	189	B2023500-Proposed demountable – Documents - Building approval -10	27/08/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
41	3	190-204	B2023500-Proposed demountable – Documents - Building approval -11	25/02/2020	Full		Yes
42	3	205-212	B2023500-Proposed demountable – Documents - Building approval - 12	25/02/2020	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
43	3	213-216	B2023500-Proposed demountable – Documents - Building approval -13	2020	Full		Yes

44	3	217-247	B2023500-Proposed demountable – Documents - Building approval -14	11/07/2019	Full		Yes
45	3	248-250	B2023500-Proposed demountable – Documents - Building approval -15 - Wall batt data sheet	November 2021	Full		Yes
46	3	251-252	B2023500-Proposed demountable – Documents - Building approval -16 Lysaght-data sheet	February 2020	Full		Yes
47	3	253-270	B2023500-Proposed demountable - Documents Building approval -18	undated	Refused	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	No
48	3	271-272	B2023500-Proposed demountable - Documents Building approval	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
49	3	273-275	B2023500-Proposed demountable – Documents-commencement Notice Application	undated	Partial	Sch 2, s 2.2(a)(ii)	Yes
50	3	276-277	B2023500-Proposed demountable – Documents-Application for commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
51	3	278-279	B2023500-Proposed demountable – Documents-Application for commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
52	3	280-281	B2023500-Proposed demountable – Documents-Building commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
53	3	282-285	B2023500-Proposed demountable – Documents - certifier appointment	undated	Partial	Sch 2, s 2.2(a)(ii)	Yes
54	3	286-287	B2023500-Proposed demountable – Documents – Appointment of certifier	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
55	3	288-289	B2023500-Proposed demountable – Documents - DA Exempt checklist	15/02/2023	Partial	Sch 2, s 2.2(a)(ii)	Yes
56	3	-290-303	B2023500-Proposed demountable – Documents	29/03/2021	Partial	Sch 2, s 2.2(a)(ii)	Yes
57	3 - Part 2	1-22	B2023500-Proposed demountable – Documents - Building approval -17 - Warrington fire	11/08/2020	Full		Yes
58	4	1-12	B20164644- Junior School – Plans – Approved Plan - 01	20/12/2017	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
59	4	13-30	B20164644- Junior School – Plans – Approved Plan - 04	undated	Partial	Sch 2, s 2.2(a)(ii)	Yes
60	4	31	B20164644- Junior School – Documents –Invoice	30/01/2018	Partial	Sch 2, s 2.2(a)(ii)	Yes

61	4	32-33	B20164644- Junior School – Documents – building approval	18/10/2016	Partial	Sch 2 s 2.2(a)(xi)	Yes
62	4	34-35	B20164644- Junior School – Certificate of Occupancy – Application for Building Commencement Notice	undated	Partial	Sch 2, s 2.2(a)(ii)	Yes
63	4	36-37	B20164644- Junior School – Certificate of Occupancy- Building Commencement Notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
64	4	38-39	B20164644- Junior School – Certificate of Occupancy - Certificate of Occupancy and Use Application-02	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
65	4	40	B20164644- Junior School – Invoice	01/02/2016	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
66	4	41-42	B20164644- Junior School – Documents -certificate of completion of building work	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
67	4	43-46	B20164644- Junior School – CoO – Application for Certificate of occupancy and use	29/01/2018	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
68	4	47-48	B20164644- Junior School – CoO – Application for Certificate of occupancy	undated	Partial	Sch 2, s 2.2(a)(xi)	Yes
69	4	49	B20164644- Junior School – Certificate of occupancy and Use	02/02/2018	Partial	Sch 2, s 2.2(a)(xi)	Yes
70	4	50	B20164644- Junior School – CoO - Checklist	undated	Full		Yes
71	5	1	B20174355 – Maintenance Shed – Plans – Approved Plans – elevations and sections	18/01/2017	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
72	5	2-4	B20174355 – Maintenance Shed – Plans – Approved Plans – site - floor	18/01/2017	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
73	5	5-7	B20174355 – Maintenance Shed – Plans – Approved Plans – structural	18/01/2017	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi))	Yes
74	5	8-9	B20174355 – Maintenance Shed – Plans – Documents – 2017810 check Building Approval Commercial Lodgement checklist	18/10/2017	Full		Yes
75	5	10	B20174355 – Maintenance Shed – Plans – Documents – invoice	18/10/2017	Partial	Sch 2 s 2.2(a)(xi)	Yes
76	5	11-12	B20174355 – Maintenance Shed – Plans – Documents –building approval	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
77	5	13-16	B20174355 – Maintenance Shed – Plans – Documents	18/01/2017	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
78	5	17-19	B20174355 – Maintenance Shed – Plans – Documents – Appointment of a builder and application for commencement notice	18/01/2017	Partial	Sch 2, s 2.2(a)(ii)	Yes
79	5	20-21	B20174355 – Maintenance Shed – Plans – Documents –Application for building commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes

80	5	22-23	B20174355 – Maintenance Shed – Plans – Documents – building commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
81	5	24	B20174355 – Maintenance Shed – Plans – Documents – appointment of a certifier and application for building approval	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
82	6	1-6	B20202370 – Relocation of Demountable – Plans – Approved Plan-01	23/06/2020	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
83	6	7-14	B20202370 – Relocation of Demountable – Plans – Approved Plan-Floor	26/05/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
84	6	15	B20202370 – Relocation of Demountable – Plans – Approved Plan-Hydraulic	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
85	6	16-21	B20202370 – Relocation of Demountable – Plans – Approved Plan-Other	20/02/2020	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
86	6	22	B20202370 – Relocation of Demountable – Documents - Invoice	23/06/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
87	6	23	B20202370 – Relocation of Demountable – Documents – Fees and Levies Tax Invoice	23/06/2020	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
88	6	24-41	B20202370 – Relocation of Demountable – Documents – Building Approval - 01	28/01/2020	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
89	6	42-43	B20202370 – Relocation of Demountable – Documents – Building Approval	undated	Partial	Sch 2 s 2.2(a)(xi)	Yes
90	6	44-45	B20202370 – Relocation of Demountable – Documents – Appointment of a builder and application for commencement notice	26/02/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
91	6	46-47	B20202370 – Relocation of Demountable – Documents – Application for building commencement notice	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
92	6	48-49	B20202370 – Relocation of Demountable – Documents – Building commencement Notice	26/05/2020	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
93	6	50-52	B20202370 – Relocation of Demountable – Documents – Appointment of a certifier application for building approval	26/02/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
94	6	53-54	B20202370 – Relocation of Demountable – Documents – Appointment of a certifier and application for building approval	undated	Partial	Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)	Yes
95	6	55	B20202370 – Relocation of Demountable – Documents – Certifier appointment	26/02/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
96	6	56-57	B20202370 – Relocation of Demountable – Documents –Building Approval Commercial Lodgement checklist	24/06/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes
97	6	58	B20202370 – Relocation of Demountable – Certificate of Occupancy - email	24/06/2020	Partial	Sch 2, s 2.2(a)(ii)	Yes

98	**6**	**59-60**	**B20202370 – Relocation of Demountable – Certificate of Occupancy– Certificate of Completion**	**23/06/2020**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
99	**6**	**61-76**	**B20202370 – Relocation of Demountable – Certificate of Occupancy – Certificate of occupancy and use application**	**10/06/2020-23/06/2020**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
100	**6**	**77-78**	**B20202370 – Relocation of Demountable – Certificate of Occupancy and use**	**undated**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
101	**6**	**79**	**B20202370 – Relocation of Demountable – Certificate of Occupancy - Certificate of occupancy and use application – Certificate of occupancy**	**24/06/2020**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
102	**6**	**80-82**	**B20202370 – Relocation of Demountable – Certificate of Occupancy – COU Checklist Commercial**	**24/06/2020**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
103	**7**	**1**	**B20206746 – Solar PV Installation – Plans – Approved plan**	**08/10/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
104	**7**	**2**	**B20206746 – Solar PV Installation – Documents – Invoice for Fees and Levies**	**23/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
105	**7**	**3-5**	**B20206746 – Solar PV Installation – Documents – certifier approval letter**	**23/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
106	**7**	**6-7**	**B20206746 – Solar PV Installation – Documents – Building approval**	**23/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
107	**7**	**8-9**	**B20206746 – Solar PV Installation – Documents – Site work notice**	**23/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
108	**7**	**10-12**	**B20206746 – Solar PV Installation – Documents – Application for building commencement notice**	**12/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
109	**7**	**13-14**	**B20206746 – Solar PV Installation – Documents - Application for building commencement notice**	**undated**	**Partial**	**Sch 2, s 2.2(a)(ii)**	**Yes**
110	**7**	**15-16**	**B20206746 – Solar PV Installation – Documents – Building commencement Notice**	**23/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
111	**7**	**17-19**	**B20206746 – Solar PV Installation – Documents – Appointment of a certifier application for building approval**	**22/12/2020**	**Partial**	**Sch 2, s 2.2(a)(ii) Sch 2 s 2.2(a)(xi)**	**Yes**
112	**7**	**20-21**	**B20206746 – Solar PV Installation – Documents - B20206746 – Solar PV Installation – Documents – Appointment of a certifier application for building approval**	**undated**	**Partial**	**Sch 2 s 2.2(a)(xi)**	**Yes**
113	**7**	**22-23**	**B20206746 – Solar PV Installation – Documents - checklist**	**03/02/2021**	**Partial**	**Sch 2 s 2.2(a)(xi)**	**Yes**
Total No of Docs							

From: Buddhadasa, Ajith
To: Sch 2.2(a)(ii)
c: brendonmajor@bcc.act.edu.au
Subject: Stop Notice - B4 S41 Lyneham
Date: Monday, 13 ebruary 2023 3:32:00 PM
Attachments: image001.jpg
Stop Notice- B004 S041 - Lyneham - B lassroom building.pdf

OFFICIAL

Dear Sch 2.2(a)(ii)

Please find attached stop notice in relation to the classroom building being constructed on B4 S41 Lyneham – BCC School premise.
If you wish to discuss this further please contact me.

Regards

Ajith Buddhadasa
Assistant Director – Manager - Rapid Regulatory Response Team | Building and Planning Compliance
Construction Utilities and Environment Protection
Access Canberra | ACT Government
TP – 02 6205 8359
8 Darling Street, Mitchell| GPO Box 158 Canberra City ACT 2601 | http://www.act.gov.au/accesscbr

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

Contact Area	Contact email
Rapid Regulatory Response Team (RRRT)	rrt@act.gov.au

Builder name and license number	Lessee
Sch 2.2(a)(ii)	Brindabella Christian Education Limited

Suburb	Section	Block	Stage of development
Lyneham	41	4	

I Ajith Buddhadasa, Building Inspector, hereby **prohibit** the carrying out of building work, on the above-mentioned parcel of land pursuant to Section 53(1) of the *Building Act 2004*.

A site inspection was conducted on 09/02/2023 by Rapid Regulatory Response Team (RRRT) Inspectors in relation to the concerned two storey classroom building being constructed within the Brindabella Christian College (BCC) premise on B4 S41 Lyneham. Inspectors observed a two-storey structure of the building, roof over the building, stairwell structure and an elevated bridge connection being constructed (see Attachment 1 for photos).

The building is a two storey BCA Class 9b building which is not identified in Schedule 1 of the *Building Act 2004* as an exempt from requiring a building approval (BA). Therefore, the building being constructed required a BA.

Section 42 - **Requirements for carrying out building work:**
Section 42(1)(d) of the Building Act state that the building work must be carried out in accordance with the approved plans.

Section 51 - **Carrying out building work in contravention of s 42:**
Section 51(1) state that it is an offence for a license builder to carryout building work in contravention of Section 42 of the Building Act - Maximum penalty: 50 penalty units

Therefore, no further building work is to be carried out on site until a building approval for the development has obtained.

Building work is being carried out:

☒ (a) without a building approval having been issued for the work.

☐ (b) otherwise, than in accordance with the approved plans for the building work;

☐ (c) in accordance with a building approval that is, or part of which is, defective because it contains information that—

- (i) is false, misleading or inaccurate in a material respect; or
- (ii) conflicts with other information in the approval so that carrying out building work, or site work that materially affects the building work, in accordance with the approval or part—
  - (A) is not physically possible; or
  - (B) is unlikely to be physically possible without amending the building approval; or
  - (C) is likely to contravene this Act, another territory law or a condition of a consent that applies to the building work or a lease, licence, permit or other authority that applies to the land where the building work is being carried out; or;

☒ (d) contrary to a provision of this Act relating to the building work; or

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

☐ (e) if the building work is being carried out on a parcel of land held under lease from the Commonwealth—contrary to a provision, covenant or condition of the lease; or

☐ (f) for building work forming part of a development requiring development approval—without development approval; or

☐ (g) for building work forming part of a development with development approval—contrary to the approval, or a condition of the approval; or

☐ (h) for building work for an exempt building—so that the building, or part of the building, is or will be on an easement.

A tick in a box indicates the particular ground on which the notice is issued.

Ajith Buddhadasa

Sch 2.2(a)(ii)

13/02/2023

Building Inspector

Important Information

Section 142C – Applications for review - See reverse side for advisory information.
Provided in accordance with s 7 of the *ACT Civil and Administrative Tribunal Regulation 2009*

REVIEW OF THE DECISION BY THE ACT CIVIL AND ADMINISTRATIVE TRIBUNAL

You may apply to the ACT Civil and Administrative Tribunal (**ACAT**) for administrative review of this decision.

CONTACT DETAILS

Location	Contact details
ACT Civil and Administrative Tribunal Level 4, 1 Moore Street CANBERRA CITY ACT 2601	Website: www.acat.act.gov.au Email: tribunal@act.gov.au Telephone: (02) 6207 1740 Facsimile: (02) 6205 4855 Post: GPO Box 370, CANBERRA, ACT, 2601

APPLICATIONS TO THE ACAT

To apply for a review, obtain an application form from the ACAT. You can also download the Application for review of a decision form from the ACAT website.

TIME LIMITS FOR APPLICATIONS

The time limit to make a request for a review is 28 days from the date that you receive this Notice of Decision.

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

FEES

Applications to the ACAT, including an application to be joined as a party to a proceeding, require payment of a fee. You can apply to have the fee waived on the grounds of hardship, subject to approval (refer to section 22T of the *ACT Civil and Administrative Tribunal Act 2008*).

TRANSLATION AND INTERPRETER SERVICES

The ACT Government's translation and interpreter service runs 24 hours a day, every day of the week.

ENGLISH	If you need interpreting help, telephone:
ARABIC	إذا احتجت لمساعدة في الترجمة الشفوية ، إتصل برقم الهاتف :
CHINESE	如果你需要传译员的帮助，请打电话：
CROATIAN	Ako trebate pomoć tumača telefonirajte:
GREEK	Αν χρειάζεστε διερμηνέα τηλεφωνήσετε στο
ITALIAN	Se avete bisogno di un interprete, telefonate al numero:
MALTESE	Jekk għandek bżonn l-għajnuna t'interpretu, ċempel:
PERSIAN	اگر به ترجمه شفاهی احتیاج دارید به این شماره تلفن کنید:
PORTUGUESE	Se você precisar da ajuda de um intérprete, telefone:
SERBIAN	Ако вам је потребна помоћ преводиоца телефонирајте:
SPANISH	Si necesita la asistencia de un intérprete, llame al:
TURKISH	Tercümana ihtiyacınız varsa lütfen telefon ediniz:
VIETNAMESE	Nếu bạn cần một người thông-ngôn hãy gọi điện-thoại:

TRANSLATING AND INTERPRETING SERVICE

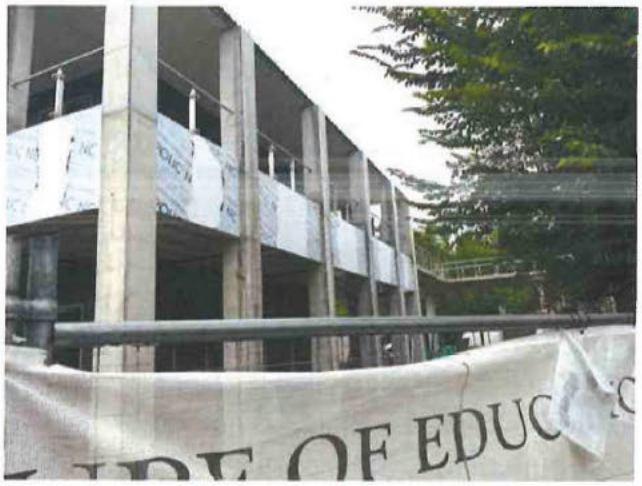
131 450

Canberra and District - 24 hours a day, seven days a week

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

Attachment 1:



ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

From: Mahajan, Shiwali
To: brendonmajor@bcc.act.edu.au; Sch 2.2(a)(ii)
Subject: Stop Notice -S41 B4 Lyneham
Date: Thursday, 10 August 2023 12:08:00 PM
Attachments: Stop Notice - S41 B4 Lyneham.docx.pdf
image002.png

OFFICIAL

Dear [redacted] and Brendon

Please find attached the Stop Notice for your consideration and necessary action.

Kind regards

Shiwali Mahajan

Building Inspector and Compliance Regulator l Rapid Regulatory Response Team
Construction, Environment and Workplace Protection
Access Canberra | ACT Government
TP – 02 6207 8629 / email: Shiwali.mahajan@act.gov.au
8 Darling Street, Mitchell| GPO Box 158 Canberra City ACT 2601 |
http://www.act.gov.au/accesscbr

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

Contact Area	Contact email
Rapid Regulatory Response Team (RRRT)	rrt@act.gov.au

Builder name	Lessee
Sch 2.2(a)(ii)	Brindabella Christian Education Limited

Suburb	Block	Stage of development
Lyneham	4	

I Ajith Buddhadasa, Building Inspector, hereby **prohibit** the carrying out of building work, on the above-mentioned parcel of land pursuant to Section 53(1) of the *Building Act 2004*.

A site inspection was conducted on 09/08/2023 by Rapid Regulatory Response Team (RRRT) Inspectors in relation to the concerned about no public notification of building works signage regarding construction of a 2-storey classrooms block and covered walkway still under construction since March 2021 NOR any building works notification or signage for new demountable buildings installed the week of 10/7/23. These demountable structures along Brigalow St boundary are encroaching significantly into Early Learning Centre (ELC) mandatory outdoor play designated area in breach of ELC licence.

The site inspection was conducted within the Brindabella Christian School (BCC) premise on B4 S41 Lyneham. At the time of inspection RRRT inspectors spoke to the building manager of BCC and he confirmed that builder is in process of obtaining a building approval for the demountable classroom structure. The building manager also confirmed that the Education Directorate officials had already visited the site on 09/08/2023 morning and they were satisfied that the outdoor open area provided to ELC complies with their requirement.

The building is a two storey BCA Class 9b building which is not identified in Schedule 1 of the *Building Act 2004* as an exempt from requiring a building approval (BA). Therefore, the building being constructed required a BA.

Section 42 - **Requirements for carrying out building work:**
Section 42(1)(d) of the Building Act state that the building work must be carried out in accordance with the approved plans.

Section 51 - **Carrying out building work in contravention of s 42:**
Section 51(1) state that it is an offence for a license builder to carryout building work in contravention of Section 42 of the Building Act - Maximum penalty: 50 penalty units

Therefore, no further building work is to be carried out on site until a building approval for the development has obtained.

Building work is being carried out:

☒ (a) without a building approval having been issued for the work.

☐ (b) otherwise, than in accordance with the approved plans for the building work;

☐ (c) in accordance with a building approval that is, or part of which is, defective because it contains information that—

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

(i) is false, misleading or inaccurate in a material respect; or

(ii) conflicts with other information in the approval so that carrying out building work, or site work that materially affects the building work, in accordance with the approval or part—

(A) is not physically possible; or

(B) is unlikely to be physically possible without amending the building approval; or

(C) is likely to contravene this Act, another territory law or a condition of a consent that applies to the building work or a lease, licence, permit or other authority that applies to the land where the building work is being carried out; or;

☒ (d) contrary to a provision of this Act relating to the building work; or

☐ (e) if the building work is being carried out on a parcel of land held under lease from the Commonwealth—contrary to a provision, covenant or condition of the lease; or

☐ (f) for building work forming part of a development requiring development approval—without development approval; or

☐ (g) for building work forming part of a development with development approval—contrary to the approval, or a condition of the approval; or

☐ (h) for building work for an exempt building—so that the building, or part of the building, is or will be on an easement.

A tick in a box indicates the particular ground on which the notice is issued.

Ajith Buddhadasa

10/08/2023

Building Inspector

Sch 2.2(a)(ii)

Important Information

Section 142C – Applications for review - See reverse side for advisory information.
Provided in accordance with s 7 of the *ACT Civil and Administrative Tribunal Regulation 2009*

REVIEW OF THE DECISION BY THE ACT CIVIL AND ADMINISTRATIVE TRIBUNAL

You may apply to the ACT Civil and Administrative Tribunal (**ACAT**) for administrative review of this decision.

CONTACT DETAILS

Location	Contact details
ACT Civil and Administrative Tribunal Level 4, 1 Moore Street CANBERRA CITY ACT 2601	Website: www.acat.act.gov.au Email: tribunal@act.gov.au Telephone: (02) 6207 1740 Facsimile: (02) 6205 4855 Post: GPO Box 370, CANBERRA, ACT, 2601

ACT Government
Chief Minister, Treasury and Economic Development

Stop Notice

APPLICATIONS TO THE ACAT

To apply for a review, obtain an application form from the ACAT. You can also download the Application for review of a decision form from the ACAT website.

TIME LIMITS FOR APPLICATIONS

The time limit to make a request for a review is 28 days from the date that you receive this Notice of Decision.

FEES

Applications to the ACAT, including an application to be joined as a party to a proceeding, require payment of a fee. You can apply to have the fee waived on the grounds of hardship, subject to approval (refer to section 22T of the *ACT Civil and Administrative Tribunal Act 2008*).

TRANSLATION AND INTERPRETER SERVICES

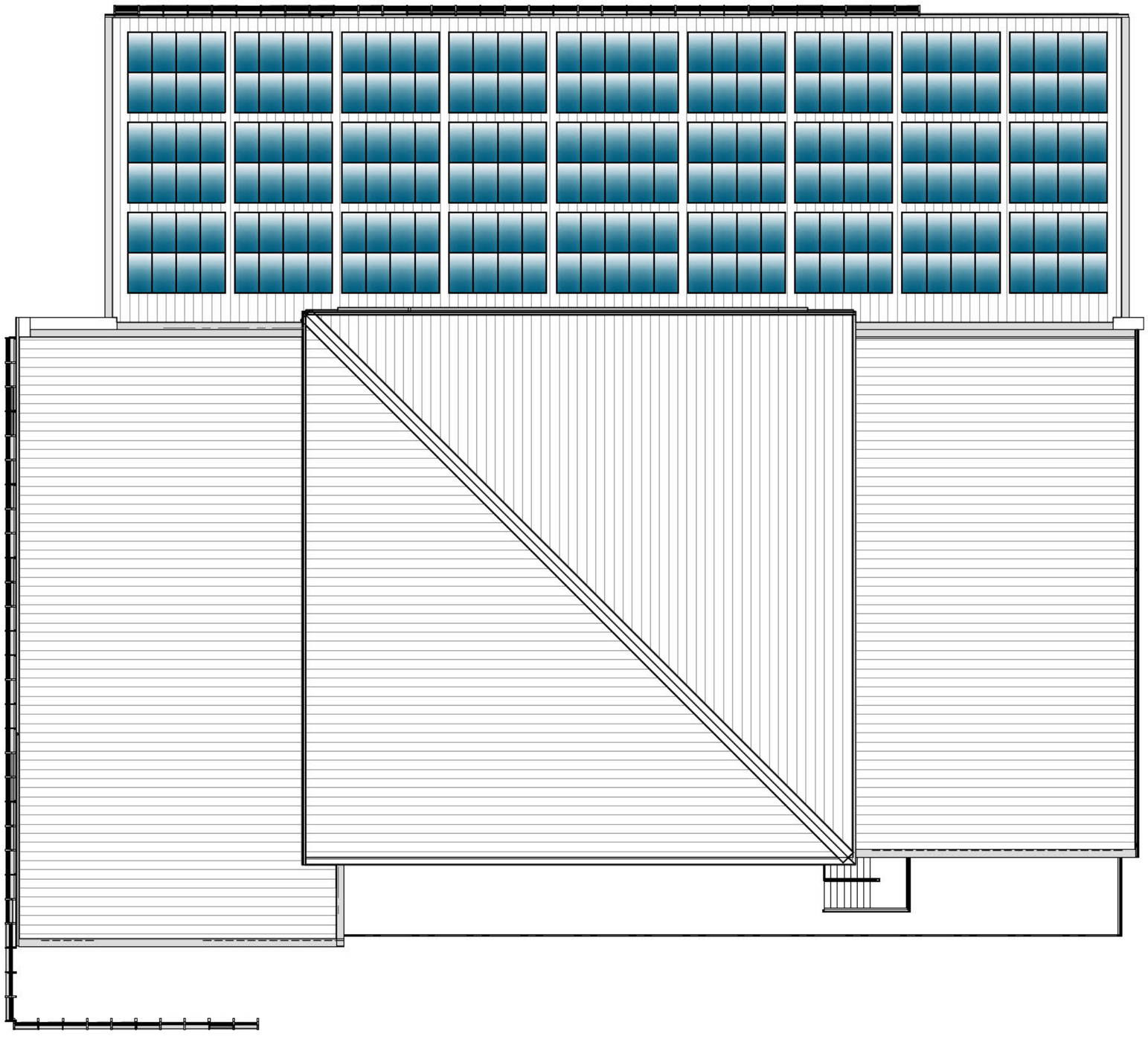
The ACT Government's translation and interpreter service runs 24 hours a day, every day of the week.

ENGLISH	If you need interpreting help, telephone:
ARABIC	إذا احتجت لمساعدة في الترجمة الشفوية ، إتصل برقم الهاتف :
CHINESE	如果你需要传译员的帮助，请打电话:
CROATIAN	Ako trebate pomoć tumača telefonirajte:
GREEK	Αν χρειάζεστε διερμηνέα τηλεφωνήσετε στο
ITALIAN	Se avete bisogno di un interprete, telefonate al numero:
MALTESE	Jekk għandek bżonn l-għajnuna t'interpretu, ċempel:
PERSIAN	اگر به ترجمه شفاهی احتیاج دارید به این شماره تلفن کنید:
PORTUGUESE	Se você precisar da ajuda de um intérprete, telefone:
SERBIAN	Ако вам је потребна помоћ преводиоца телефонирајте:
SPANISH	Si necesita la asistencia de un intérprete, llame al:
TURKISH	Tercümana ihtiyacınız varsa lütfen telefon ediniz:
VIETNAMESE	Nếu bạn cần một người thông-ngôn hãy goi điện-thoại:

TRANSLATING AND INTERPRETING SERVICE

131 450

Canberra and District - 24 hours a day, seven days a week



Sch 2.2(a)(ii)

BRINDABELLA
CHRISTIAN COLLEGE

Sch 2.2(a)(xi)

PV System Roof Layout

Brindabella Christian College
Junior School Building
136 Brigalow St, Lyneham ACT 2602

Sch 2.2(a)(xi)

ACT Government

Access Canberra

APPOINTMENT OF BUILDER & APPLICATION FOR COMMENCEMENT NOTICE

Building Act 2004, S151

In completing this form the owner is authorising the builder nominated below to apply to the appointed certifier to issue a Commencement Notice for the works detailed in this application form.

PART A **PROJECT DETAILS**

Block 4 **Section** 41 **Suburb** Lyneham **Unit No.**

Street Address 136 Brigalow Street Lyneham, ACT 2602

Certifier Name Sch 2.2(a)(ii)

Description of Building Works relevant to this application-*If more than 6 items please attach further details*

1. Installation of Solar Panels
2.
3.
4.

PART B **OWNER DETAILS – Please Print**

All owners must be listed — Owner 1 will be considered the contact person in relation to this application

Company Details Brindabella Christian Education Limited

Owner 1 Sch 2.2(a)(ii) **Owner 2**

Owner 3 **Owner 4**

Postal Address P.O Box 5103

Suburb Lyneham **State** ACT **Postcode** 2606

Phone Number Business Hours 02 6247 4644 **Mobile**

EMAIL ADDRESS Sch 2.2(a)(ii)

Approved form AF2016-79 approved by David Middlemiss, Construction Occupations Deputy Registrar on 02 August 2016 under section 151 of the *Building Act 2004*. This form repeals AF2014-72

Authorised by the ACT Parliamentary Counsel—also accessible at www.legislation.act.gov.au

PART C **APPOINTMENT OF BUILDER**

I/we the owner/s have appointed the person whose details appear below as the builder in relation to the building works described in this form

Licence Holders Name as it appears on licence card: Sch 2.2(a)(ii)

Licence Number: Sch 2.2(a)(ii) Class: Sch 2.2(a)(ii) Expiry Date: 11/01/21

List any conditions or endorsements on licence: Sch 2.2(a)(ii)

EMAIL ADDRESS: Sch 2.2(a)(ii)

PART D **NOMINEE'S DETAILS**

If the builder is a company or partnership provide details of the Nominee who will supervise the building

Nominee's Name: Sch 2.2(a)(ii)

Licence Number: Sch 2.2(a)(ii) Sch 2.2(a)(ii) Expiry Date: 11/01/21

Signature of Nominee: Date: 29/1/18

PART E **OWNER SIGNATURE/S– all owners must sign this form**

Owner 1: Sch 2.2(a)(ii) Signature: Sch 2.2(a)(ii) DATE:

Owner 2: Signature: DATE: 29/1/18

Owner 3: Signature: DATE:

Owner 4: Signature: DATE:

Sch 2.2(a)(ii)

PART F **BUILDER APPLICATION TO CERTIFIER FOR COMMENCEMENT NOTICE**

I hereby apply to the building certifier listed above for a commencement notice for the works detailed in Part A of this form in accordance with the Building Act 2004.

☐ A site sign was not required to be displayed prior to making this application.

☐ A site sign was required t[illegible]plication and I declare that a compliant sign was erected and displayed fo[illegible] Sch 2.2(a)(ii)

Signature of Builder: Date: 29/1/18

NOTE: There are penalties for deliberately givin[illegible] and Land Authority or Minister may revoke an approval if satisfied that the approval was obtained by frau[illegible]

PART G **INSURANCE OR FIDELITY CERTIFICATE**

For residential building work please provide details of insurance where applicable

Insurance Provider: Policy No.: Date Issued:

Approved form AF2016-79 approved by David Middlemiss, Construction Occupations Deputy Registrar on 02 August 2016 under section 151 of the *Building Act 2004*. This form repeals AF2014-72

Authorised by the ACT Parliamentary Counsel—also accessible at www.legislation.act.gov.au

ACT Government

Building Act 2004, S151

Application for Building Commencement Notice

Project ID: B2018238

Licensed builders must use this form to apply to the building certifier for a commencement notice in accordance with the Building Act 2004. An application can only be made if the building approval has been issued for the building work. A commencement notice must be issued by the building certifier before any building work can commence.

PART A - PROJECT DETAILS

Building approval issue date: 30/01/2018

Unit	Block	Section	District (Suburb)	Division	Jurisdiction
	4	41	CANBERRA CENTRAL	LYNEHAM	Australian Capital Territory

Full Name	Address	License Number	Expiry Date
Sch 2.2(a)(xi)	Sch 2.2(a)(ii)	Sch 2.2(a)(ii)	Sch 2.2(a)(ii)

Description of work to which application for Commencement Notice relates:

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Construction	Storeys	Area (m2)	Cost of Works ($)
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA	0	0.00	Sch 2.2(a)(xi)

Insurance provider:

Policy number:

Issue date: 30/01/2018

PART B - BUILDERS DETAILS

License holder's name: Sch 2.2(a)(ii)

License number:

License Expiry Date:

Business Address:

Phone Number:

Signature of builder:

_____ / /

(Individual, director for company or partner for partnership)

If the builder is a company or partnership provide details of the nominee who will supervise the building work

Nominee's name: Sch 2.2(a)(ii)

License number:

License Expiry Date:

Nominee's signature (if different to above): _____ / /

PART C - OWNER/LESSEE DETAILS

Name	Address
Brindabella Christian Education Ltd	PO Box 5103, Lyneham ACT 2006, AUSTRALIA

ADVISORY NOTE: Owners please ensure you have a written contract with the builder named in this application.
For residential building work requiring home owner insurance ensure that the same builders name is shown on the insurance policy.

PART D - OWNER/S OR AGENT SIGNATURE/S

Name	Signature	Date
Brindabella Christian Education Ltd		

NOTE: You may only make this application as an authorised agent on behalf of the owners of the property if you have appropriate written authorisation from ALL the owners and attach it to this application. This also applies if you are a part owner or joint owner making an application on behalf of the owners.

Privacy Notice: The personal information on this form is being collected to enable processing of your application and to enable auditing and compliance of builders and certifiers by the Government appointed auditor. The information that you provide may be disclosed to the Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be accessed by other government agencies and commercial organisations interested in building information.

PART E - BUILDER APPLICATION TO CERTIFIER FOR COMMENCEMENT NOTICE

I hereby apply to the building certifier listed above for a commencement notice for the works detailed in Part A of this form in accordance with the Building Act 2004.

☐ A site sign was NOT required to be displayed prior to making this application.

☐ A site sign WAS required to be displayed prior to making this application and I declare that a compliant sign was erected and displayed for the required period.

Signature of Builder/Nominee: _____ / /

NOTE: There are penalties for deliberately giving false and misleading information. Access Canberra or the Minister may revoke an approval if satisfied that the approval was obtained by fraud or misrepresentation.

ACT Government

Building Act 2004, S151

Appointment of a Certifier and Application for Building Approval

Project ID: B2018238

This form is to be completed by the Owner/s of the land to which the building work relates

PART A - PROJECT DETAILS

Unit	Block	Section	District (Suburb)	Division	Jurisdiction
	4	41	CANBERRA CENTRAL	LYNEHAM	Australian Capital Territory

PART B - OWNER DETAILS

Name	Address	Email Address
Brindabella Christian Education Ltd	PO Box 5103, Lyneham ACT 2006, AUSTRALIA	

PART C - APPOINTMENT OF CERTIFIER

As required under the Building ACT 2004 I/we herby advise that I/we the owner/s have appointed the person whose details appear below as the certifier in relation to the building works described in this form

Full Name	Address	License Number	Expiry Date
CERTIFIED BUILDING SOLUTIONS PTY LTD	PO Box 76 MITCHELL ACT 2911	200426203	2/09/2018

PART D - APPLICATION FOR BUILDING APPROVAL

I/we the owners of the abovementioned property hereby apply to the certifier named above to issue a building approval under Section 26 of the Building Act 2004 for the building works detailed in the following table

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Construction	Storeys	Area (m2)	Cost of Works ($)
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA	0	0.00	Sch 2.2(a)(xi)

I/we have provided the certifier with the information and documentation required to issue a building approval as specified in the Building (General) Regulation 2008.

PART E - AUTHORITY TO ACCESS BUILDING FILE

I/we hereby authorise the certifier to access the building file held by Access Canberra for the property which is the subject of this application for the purposes of obtaining information relevant to the issuing of a building approval and associated processes.

PART F - OWNER/S SIGNATURE/S

Name	Signature	Date
Brindabella Christian Education Ltd		

APPLICATION FOR BUILDING APPROVAL REQUIREMENTS Building (General) Regulations 2008

Where relevant the following information MUST be included in either the application or the plans accompanying the application for building approval:

General Requirements

- Estimated Cost of Works -as per Building (General) (Cost of Building Work) Determination 2011
- if the proposed building work to be carried out at or near a street or place that is open to or used by the public the application must contain details of the precautions proposed to be taken to protect the safety of people using the street or place while the building work is carried out
- the area of the parcel of land to which this application relates
- the class of the building according to the intended use of the building as proposed to be erected or altered;
- if applicable what fire-resisting construction type (under the building code) the building as proposed to be erected or altered will be.

Note: Fire-resisting construction type may not be applicable if an alternative solution under the building code is used.

- for an application relating to the erection of a class 1 building the site classification of the parcel of land
- for an application relating to the alteration of a class 1 building if the alteration will increase the building load carried by foundation material beyond the building load carried by the foundation before the alteration.
- the site classification of the parcel of land
- for an application relating to the alteration of a building the class and type of fire-resisting construction of the existing building classified under the building code and the materials used in the existing building

Note Fire-resisting construction type may not be applicable if an alternative solution under the building code is used.

- the number of storeys of the building as proposed to be erected or altered;
- the number of new dwellings (if any) created by the proposed building work;
- the floor area of the proposed building or proposed new part of the building;
- the materials to be used in the frame, floor, walls and roof of the proposed building or proposed new part of the building
- if a performance requirement of the building code is to be complied with by use of an alternative solution under the code -

(i) the performance requirement; and
(ii) the alternative solution; and
(iii) each assessment method used to show that the alternative solution complies with the performance requirement;

- if the building code does not state a standard of work in relation to any part of the proposed building work and it is intended to carry out that part of the proposed building work in accordance with a standard of work stated in another document -

(i) the nature of the proposed building work; and
(ii) the title of the document; and
(iii) each assessment method used to show that the proposed building work complies with the standard of work stated in the document.

Removal or demolition of building/s

- Details of the methods to be used in carrying out the proposed building work, including a work plan stated or set out in AS 2601 (Demolition of structures), as in force from time to time;
- the number of dwellings (if any) to be demolished.

Asbestos

- The application must include a description of the method proposed to be used to remove the bonded asbestos sheeting from the building.
- the application must include the following information:

(i) the method proposed to be used to remove the asbestos;
(ii) the approximate amount and kind of asbestos to be removed;
(iii) the equipment proposed to be used to remove the asbestos, including any personal protective equipment;
(iv) details of a program, prepared in accordance with the asbestos removal code, for monitoring airborne asbestos to be followed during the removal. be followed during the removal.

ACT Government

Access Canberra

APPOINTMENT OF A CERTIFIER
APPLICATION FOR BUILDING APPROVAL

Building Act 2004, S151

This form is to be completed by the Owner/s of the land to which the building work relates.

PART A **PROJECT DETAILS**

Block 4 **Section** 41 **Suburb** Lyneham **Unit No.**

Street Address 136 Brigalow Street Lyneham, ACT 2602

Description of Building Works relevant to this application-*If more than 4 items please attach further details*

Describe each item of building work in this building approval	BCA Occupancy Class	BCA Construction Type	Area (m^2)	Number of Storeys	Cost of Works (refer to building cost
1 Sch 2.2(a)(xi)	10b	N/A	-	N/A	Sch 2.2(a)(xi)
2					
3					
4					

Applicable approved requirements and reasons why building approval is not prevented from being issued

Is all work exempt from development approval?

☑ **YES** Attach assessment for exempt development checklist (if applicable)

☐ **NO** Provide reason/s or description of work: _____

Description of Attachments compliant with Division 3.3 Building Act 2004
Please attach any additional documentation not listed below

☑ Building Approval Plans

☐ n/a Referrals, consultations & consents outcomes

☑ Asbestos Advice - If documents accompanying building approval do not include an asbestos assessment report as per the Building Act 2004, the building approval must have an AA attached as per the Act

PART B **OWNER'S DETAILS – Please Print**

All owners must be listed

Owner 1 will be considered the contact person in relation to this application

Company Details Brindabella Christian Education Limited

ACN/ABN Number 100 229 669

Owner 1 Sch 2.2(a)(ii) **Owner 2** _____

Owner 3 _____ **Owner 4** _____

Approved form AF2016-85 approved by David Middlemiss, Construction Occupations Deputy Registrar on 10 August 2016 under section 151 of the *Building Act 2004* and revokes AF2016-80.

PART B continued — **OWNER/S DETAILS – Please Print**

Postal Address: P.O Box 5103

Suburb: Lyneham | State: ACT | Postcode: 2606

Phone Number Business Hours: 02 6247 4644 | Mobile:

EMAIL ADDRESS: Sch 2.2(a)(ii)

PART C — **APPOINTMENT OF CERTIFIER**

As required under the Building ACT 2004 I/we herby advise that I/we the owner/s have appointed the person whose details appear below as the certifier in relation to the building works described in this form

Company Details: Certified Building Solutions Pty Ltd

Name of Certifier: Sch 2.2(a)(ii) | ABN/ ACN: 110 342 482

Postal Address: P.O Box 76

Suburb: Mitchell | State: ACT | Postcode: 2911

Phone Number Business Hours: 02 6253 9911 | Mobile: Sch 2.2(a)(ii)

EMAIL ADDRESS: Sch 2.2(a)(ii)

PART D — **APPLICATION FOR BUILDING APPROVAL**

I/we the Owner/s of the abovementioned property hereby apply under Section 26 of the *Building Act 2004* to the certifier named above to issue a building approval for the building work described in this form. I/we have provided the certifier with information and documentation required to issue a building approval as specified in the *Building (General) Regulation 2008*.

PART E — **AUTHORITY TO ACCESS BUILDING FILE**

I/we hereby authorise the certifier to access the building file for the property which is the subject of this application for the purposes of obtaining information relevant to the issuing of a building approval and associated processes.

PART F — **OWNER/S SIGNATURE/S**

1st Owner's Signatu: Sch 2.2(a)(ii) Sch 2.2(a)(ii) | Date: 29/1/12

2nd Owner's Signatu: | Date:

3rd Owner's Signature: | Date:

4th Owner's Signature: | Date:

NOTE: There are penalties for deliberately giving false and misleading information. The Planning and Land Authority or Minister may revoke an approval if satisfied that the approval was obtained by fraud or misrepresentation.

Approved form AF2016-85 approved by David Middlemiss, Construction Occupations Deputy Registrar on 10 August 2016 under section 151 of the *Building Act 2004* and revokes AF2016-80.

APPLICATION FOR BUILDING APPROVAL REQUIREMENTS – Building (General) Regulations 2008

Where relevant the following information MUST be included in either the application or the plans accompanying the application for building approval:

General Requirements

- Estimated Cost of Works -as per *Building (General) (Cost of Building Work) Determination 2015*
- if the proposed building work to be carried out at or near a street or place that is open to or used by the public the application must contain details of the precautions proposed to be taken to protect the safety of people using the street or place while the building work is carried out
- the area of the parcel of land to which this application relates
- the class of the building according to the intended use of the building as proposed to be erected or altered;
- if applicable what fire-resisting construction type (under the building code) the building as proposed to be erected or altered will be
  Note: Fire-resisting construction type may not be applicable if an alternative solution under the building code is used
- for an application relating to the erection of a class 1 building the site classification of the parcel of land
- for an application relating to the alteration of a class 1 building if the alteration will increase the building load carried by foundation material beyond the building load carried by the foundation before the alteration
- the site classification of the parcel of land
- for an application relating to the alteration of a building the class and type of fire-resisting construction of the existing building classified under the building code and the materials used in the existing building
  Note Fire-resisting construction type may not be applicable if an alternative solution under the building code is used
- the number of storey's of the building as proposed to be erected or altered;
- the number of new dwellings (if any) created by the proposed building work;
- the floor area of the proposed building or proposed new part of the building;
- the materials to be used in the frame, floor, walls and roof of the proposed building or proposed new part of the building
- if a performance requirement of the building code is to be complied with by use of an alternative solution under the code -
  - (i) the performance requirement; and
  - (ii) the alternative solution; and
  - (iii) each assessment method used to show that the alternative solution complies with the performance requirement;
- if the building code does not state a standard of work in relation to any part of the proposed building work and it is intended to carry out that part of the proposed building work in accordance with a standard of work stated in another document -
  - (i) the nature of the proposed building work; and
  - (ii) the title of the document; and
  - (iii) each assessment method used to show that the proposed building work complies with the standard of work stated in the document.

Removal or demolition of building/s

- Details of the methods to be used in carrying out the proposed building work, including a work plan stated or set out in AS 2601 (Demolition of structures), as in force from time to time;
- the number of dwellings (if any) to be demolished.

Asbestos

- The application must include a description of the method proposed to be used to remove the bonded asbestos sheeting from the building
- the application must include the following information:
  - (i) the method proposed to be used to remove the asbestos;
  - (ii) the approximate amount and kind of asbestos to be removed;
  - (iii) the equipment proposed to be used to remove the asbestos, including any personal protective equipment;
  - (iv) details of a program, prepared in accordance with the asbestos removal code, for monitoring airborne asbestos to be followed during the removal.

Privacy Notice
The personal information on this form is provided to Access Canberra to enable the processing of your application. The collection of personal information is authorised by the *Building Act 2004*. If all or some of the personal information is not collected Access Canberra cannot process your application. The personal information you provide may be disclosed to Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be disclosed where authorised by law or court order, or where the Directorate reasonably believes that the use or disclosure of the information is reasonably necessary for enforcement-related activities conducted by, or on behalf of, an enforcement body. Access Canberra's Information Privacy Policy contains information about how you may access or seek to correct your personal information held by Access Canberra, and how you may complain about an alleged breach of the Territory Privacy Principles. Access Canberra Information Privacy Policy can be found at www.act.gov.au/accessCBR

CONTACT INFORMATION

Email:	**Post:**	**In Person:**
ACTPLAedeviopmentBA@act.gov.au	Access Canberra Building Services Shopfront Mitchell GPO Box 158 Canberra, ACT 2601	Please visit www.act.gov.au/accessCBR Or call **132281** to find an Access Canberra Shopfront.

Approved form AF2016-85 approved by David Middlemiss, Construction Occupations Deputy Registrar on 10 August 2016
under section 151 of the *Building Act 2004* and revokes AF2016-80.

CERTIFIED BUILDING CBS SOLUTIONS PTY LTD
ABN 27 110 342 482
Unit 1, 25-35
Buckland Street
MITCHELL ACT 2911
PO Box 76
MITCHELL ACT 2911
Telephone 02 6253 9911
Fax 02 6253 9922

Brindabella Christian Education Ltd
PO Box 5103
Lyneham ACT 2006

BUILDING APPROVAL CERTIFICATE

Location: Block 4 Section 41 Lyneham

Description of Building Work: Solar Panels to Building

BCA Occupancy Class: 10b

BCA Construction Type: N/A

Rise in Storeys: N/A

Building Approval.
Your application for building approval satisfies the Building Act 2004. Building approval is issued under s.28 of the Building Act 2004.

All work must comply with the:
1. Building Act 2004; and
2. National Construction Code 2016 Volume 1.

This approval expires three years from the date of this approval or at the expiry of the development approval, whichever occurs first.

Commencement
Building work may begin on the issue of the Building Commencement Notice.

Sincerely,

Sch 2.2(a)(ii)

Principal Building Surveyor
Certified Building Solutions Pty Ltd
COLA Lic No. 200426203

30/11/18

Reference No. 28947

Building Act 2004, s151

SITE WORK NOTICE

For section 28 (1A) of *the Building Act 2004*

To be completed by the appointed Building Certifier and submitted to the Construction Occupations Registrar within 7 days of issue

Lease/Site Details

Block	Section	Suburb	Division
4	41	LYNEHAM	

Unit No	Street Address
	136 BUCALOW

Building Approval Application and Site Work Details

This notice is issued in relation to the site work shown in the plans submitted as part of the application for a building approval dated made by the following applicants:

BRIMABELLA

on: *dated* 29 / 1 / 20 18

This notice applies to all site work in that application for which there is there is no—

(a) exemption assessment D notice stating that the site work is exempt development issued for the work not more than 3 months before the day the application was made;

(b) exemption declaration under the *Planning and Development Regulation 2008*, schedule 1, section 1.100A (1) (b) or section 1.100AB (1) (b) made by the planning and land authority; or

(c) current development approval issued in relation to the site work.

NOTE: Site work is development that is—

(a) building work; and

(b) work other than building work that—

(i) physically affects the place (the building site) where the building work is being carried out; and

(ii) if not carried out at the building site, is carried out near, and connected with, the building site.

Examples: putting up temporary fencing, installing measures for erosion control, building a house, damaging or removing a significant tree, laying paving for driveways and parking areas, installing landscaping, site clearing and excavation, erecting site signage, erecting a pergola

Building Certifier Details *Please Print*

Surname	First Name
Certified Building Solutions Pty Ltd	

Company Name	Certified Building Solutions Pty Ltd

Licence Number	Contact Number
200426203	(02) 6253 9911

Postal Address	PO Box 76

Suburb	State	Postcode
Mitchell	ACT	2911

Building Certifier Statement

I state that:

- the plans for the building work(s) to which the application for building approval relates show all the information necessary to establish that the site work is exempt development under the *Planning and Development Act 2007*, section 133; and
- the site work is exempt development; and
- I have assessed that the site work is exempt development for the following reasons and in accordance with the following provisions of the *Planning and Development Regulation 2008* and Territory Plan Codes:

The building work(s), as described on part A of the Appointment of Certifier Application for Building Approval Form, have been assessed against Part 1.2 & Part 1.3, Schedule 1 of Planning and Development Regulations 2008. They are consistent with the following sections of schedule 1 as nominated in the tables below. (Please tick all relevant)

Table 1: Building work(s) are exempt as per the Single Dwelling Housing Development Code

☐	Assessment has been made under the Single Dwelling Housing Development Code(SDHDC)*	
	☐ Development on Old Res. Land (1.100)	*Please list any further details below:*
	☐ Development on New Res. Land (1.100AA)	
	☐ 1N Exemption Applies (1.100AB, 1.100AB)	
	☐ Demolition under SDHDC (1.100B, 1.101)	

*Please see attached copy of CBS Single Dwelling Assessment for Exempt Development sheet

Table 2: Building work(s) are exempt as per the following section of Schedule 1

☐	Internal alterations (1.20)	☐	Photovoltaic Panels (1.27A
☐	Low impact window & doors (1.21)	☐	Roofed class 10a – enclosed or open to one side (1.45)
☐	High impact window & doors (1.21a)	☐	Roofed class 10a – unenclosed or partially open (1.46)
☐	External refinishing of building (1.22)	☐	Class 10a – external deck (1.48
☐	Maintenance (1.23)	☐	Class 10a – external verandas (1.49)
☐	Chimney/Flue/Vents (1.25)	☐	Retaining Walls (1.53)
☐	External Heater or Cooler (1.27)	☐	Swimming Pool (1.54)
☐	*Other Please list:*		

Table 3: Amended building work(s) are exempt as per the following section of Schedule 1

☐	The building works(s), as per the amended stamped building approval, are within the permitted construction tolerances for horizontal siting and height tolerances schedule 1A (1A.10, 1A.11)
☐	*Other Please list:*

Please list any further information that may be relevant in deciding that the works are exempt under Schedule 1 as identified above

Sch 2.2(a)(ii)

Building Certifier Signatu (or nominee)

Date of Issue 30 / 1 / 2018

s a serious offence

Privacy Notice

The personal information on rate (EPD). The collection of personal information is authorised by the *Building Act 2004*. If all or some of the required personal information is not collected this notice is not considered complete. The personal information provided may be disclosed to Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be disclosed where authorised by law or court order, or where the EPD reasonably believes that the use or disclosure of the information is reasonably necessary for enforcement-related activities conducted by, or on behalf of, an enforcement body. EPD's Information Privacy Policy contains information about how you may access or seek to correct your personal information held by EPD, and how you may complain about an alleged breach of the Territory Privacy Principles. The EPD Information Privacy Policy can be found at www.environment@act.gov.au.

Contact Details:

Environment and Planning Directorate
GPO Box 158, Canberra City 2601
Phone: (02) 6207 1923 TTY: (02) 6207 2622
Business Hours: 8.30am to 4.30pm weekdays (excluding Public Holidays)
Email: **epdcustomerservices@act.gov.au** Website: **www.environment@act.gov.au**

Customer Service Centres
8 Darling Street Mitchell, ACT 2911
16 Challis Street Dickson ACT 2602

ACT Government

Building Act 2004, S151

Building Approval

Project ID: B2018238

PART A - PROJECT DETAILS

Unit	Block	Section	Division (Suburb)	District	Jurisdiction
	4	41	LYNEHAM	CANBERRA CENTRAL	Australian Capital Territory

PART B - WORKS REQUIRING BUILDING APPROVAL

Item of building work to which this Building Approval relates:

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Construction	Storeys	Area (m2)	Cost of Works ($)
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA	0	0.00	Sch 2.2(a)(xi)

The following work is exempt from development approval:

- Heating and cooling installations

PART C - CERTIFIERS DECLARATION

I declare that in issuing this building approval under section 28 of the Building Act 2004:

- I am satisfied on reasonable grounds that the plans meet each applicable approval requirement under section 29 and is not prevented from being issued under section 30 or section 30A
- I have supplied all documents as required under 3.3 Building Act 2004
- I have prepared a notice (building approval certificate) certifying what approval requirements apply to the application and why the building approval is not prevented from being issued; and
- I have given the building approval certificate to the applicant.

In performing services as a certifier in relation to the work detailed in this application I am not in breach of my entitlement to act as a certifier in accordance with the Building Act 2004.

Full Name	Address	License Number	Expiry Date
CERTIFIED BUILDING SOLUTIONS PTY LTD	PO Box 76 MITCHELL ACT 2911	Sch 2.2(a)(ii)	2/09/2018

Date Issued : 30/01/2018

NOTES

Utilities

This application must also be accompanied by a Statement of Compliance from each relevant utility provider (for water, sewerage, electricity and stormwater) which confirms that the location and nature of earthworks, utility connections, proposed buildings, pavements and landscape features comply with utility standards, access provisions and asset clearance zones.

Note 1: If there is no stormwater easement or Territory owned stormwater pipes located within the property boundary, a "Statement of Compliance" for stormwater from TAMS (Asset Acceptance) is not required to be obtained.

Note 2: Where there is conflict between planning and utility requirements, the utility requirements take precedence over other codified or merit provisions.

Utilities – Demolition Only

This application must be accompanied by a Statement of Endorsement for utilities (including water, sewerage, electricity and stormwater) stating that:
- all network infrastructure on or immediately adjacent to the site has been identified on the plan
- all potentially hazardous substances and conditions (associated with or resulting from the demolition process) that may constitute a risk to utility services have been identified
- all required network disconnections have been identified and the disconnection works comply with utility requirements
- all works associated with the demolition comply with and are in accordance with utility asset access and protection requirements

Note: The documentation provided to the utility provider for endorsement must be consistent with the documentation that forms part of a development approval or the documentation verified as exempt from requiring development approval by a licensed certifier.

Asbestos Advice

If documents accompanying building approval do not include an asbestos assessment report as per the Building Act 2004, the building approval must have an Asbestos Advice attached as per the Act

Privacy Notice: The personal information on this form is being collected to enable processing of your application and to enable auditing and compliance of builders and certifiers by the Government appointed auditor. The information that you provide may be disclosed to the Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be accessed by other government agencies and commercial organisations interested in building information.

ACT Government

Building Act 2004, S151

Building Commencement Notice

Project ID: B2018238

PART A - PROJECT DETAILS

Unit	Block	Section	District (Suburb)	Division	Jurisdiction
	4	41	CANBERRA CENTRAL	LYNEHAM	Australian Capital Territoty

Certifier's Details

Full Name	Address	License Number	Expiry Date
CERTIFIED BUILDING SOLUTIONS PTY LTD	PO Box 76 MITCHELL ACT 2911	Sch 2.2(a)(ii)	2/09/2018

Building approval issue date: 30/01/2018

Building Commencement Notice Required for:

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Construction	Area (m2)	Cost of Works ($)
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA	0.00	Sch 2.2(a)(xi)

PART B - BUILDERS DETAILS

License holder's name: Sch 2.2(a)(ii)

License number:

License Expiry Date: 11/01/2021

Business Address:

Phone Number:

If the builder is a company or partnership provide details of the nominee who will supervise the building work

Nominee's name: Sch 2.2(a)(ii)

License number:

License Expiry Date: 11/01/2021

PART C - CERTIFIER'S DECLARATION

Issue date of commencement notice: 30/01/2018

Name of Certifier Issuing Notice: CERTIFIED BUILDING SOLUTIONS PTY LTD

Declaration:
This commencement notice is issued in accordance with the Building Act 2004, to the licensed builder stated above authorising the commencement of the stated building work. The issue of this commencement notice indicates that I am satisfied that the builders license authorises the work in the building approval. Where applicable for residential building work, I have been provided with a residential building insurance policy or fidelity certificate.

PLEASE NOTE:
A copy of the application for this commencement notice, this notice and where applicable the residential building insurance policy or fidelity certificate, must be given to the construction occupations registrar within one (1) week of the issue date.

This building commencement notice will end if-

(a) for residential building work- the work is no longer insured; or
(b) the building approval for the work ends

Privacy Notice: The personal information on this form is being collected to enable processing of your application and to enable auditing and compliance of builders and certifiers by the Government appointed auditor. The information that you provide may be disclosed to the Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be accessed by other government agencies and commercial organisations interested in building information.

Building Approval Fees and Levies Tax Invoice

TO THE PAYEE

c/o Brindabella Christian Education Ltd

PO Box 5103, ,

Lyneham ACT 2006

Access Canberra Building Services

ABN 16 479 763 216
8 Darling Street Mitchell
GPO Box 158 ACT 2601
Access Canberra Homepage: www.act.gov.au/accesscbr

Invoice Date:30/01/2018 Time:2:55:41 PM

Invoice Number: 3100455538

Block - Section - Division - District	Building Levy	Training Levy	Fees Paid	Total
4 - 41 - LYNEHAM - CANBERRA CENTRAL Ref # - 28947	Sch 2.2(a)(xi)			
Total	Sch 2.2(a)(xi)			

No GST applies to these fees and levies.

PAYMENT REQUIRED WITHIN 14 DAYS OF INVOICE ISSUE DATE

Payment Options

Biller Code: Sch 2.2(a)(xi)
Ref: Sch 2.2(a)(xi)

Telephone & Internet Banking – BPAY®
Call your bank, credit union or building society to make this payment from your cheque, savings or credit card account. More info: www.bpay.com.au

Internet
Visit www.accesscanberra.act.gov.au and search "Building Approvals and Payments" and then follow links to pay by credit card (MasterCard or Visa)

Phone
Telephone (02) 6207 1923 8.30am - 4.30pm Mon - Fri and have your credit card details handy (MasterCard and Visa).

In Person
Access Canberra Building Services Shopfront Only: 8.30am – 4.30pm Mon – Fri . Cash, Cheque, EFTPOS, Credit card (Mastercard and Visa). CashLink Code – 34 0075

Brindabella Christian College
Creditor Invoice & Payment History

1/02/2018 to 1/02/2018

Batch	Invoice Reference	Date	Description	Inv. Amt	Payment Amt	Batch & Type	Ref.	Pay Date	
5	3100455538	1/02/2018	12Building Approval Fees and Levies/Canberra Cent	Sch 2.2(a)(i)					I
	3100455538		Building Approval Fees and Lev	Sch 2.2(a)(i)	7	A	Sch 2.2(a)(xi)		P
ACT ACCESS	Acess Canberra Building Services			Sch 2.2(a)(ii)	Sch 2.2(a)(ii)				
				Sch 2.2(a)(ii)	Sch 2.2(a)(i)				

Building Approval Fees and Levies Receipt

Access Canberra Building Services

CERTIFIED BUILDING SOLUTIONS PTY LTD

PO Box 76 MITCHELL ACT 2911

ABN 16 479 763 216
16 Challis Street Dickson
GPO Box 158 ACT 2601
Access Canberra Homepage: www.act.gov.au/accesscbr

Payment Received: 2/2/2018

Payment for Invoice Number: 3100455538

Block	Section	District	Division	Building Levy	Training Levy	Workcover	Total Levies	Fees Paid
4	41	CANBERRA CENTRAL	LYNEHAM	Sch 2.2(a)(xi)				
			Total					

No GST applies to these fees and levies.


Sch 2.2(a)(xi), Sch 2.2(a)(ii)

ACT Government | Access Canberra

APPLICATION FOR CERTIFICATE OF OCCUPANCY AND USE

Building Act 2004, S151

WARNING TO OWNERS

It is recommended that owners seek appropriate advice to determine whether the building work and other contract requirements have been completed satisfactorily before signing this form. This form should **not be** signed before the completion of building work.

PART A PROJECT DETAILS

Block/s 4 Section 41 Suburb Lyneham Unit No.

Street Address 136 Brigalow Street Lyneham, ACT 2602

Describe each item of building work to which this application relates: If more than 6 items please attach further details

1. Solar Panels
2.
3.
4.

Name of Certifier: Sch 2.2(a)(ii) CBS

PART B OWNER/LESSEE DETAILS

FULL NAME OF ALL OWNERS – All owners must be listed or application will not be processed
Please Print - Owner 1 will be considered the contact person in relation to this application

Company Details Brindabella Christian Education Limited

Owner 1 Sch 2.2(a)(ii) Sch 2.2(a)(ii) Owner 2

Owner 3 Owner 4

Postal Address PO Box 5103

Suburb Lyneham State ACT Postcode 2006

Phone Number Business Hours 02 6247 4644 Mobile

EMAIL ADDRESS Sch 2.2(a)(ii)

Approved form AF2016-77 approved by David Middlemiss, Construction Occupations Deputy Registrar on 02 August 2016 under section 151 of the *Building Act 2004 and revokes* AF2014-82

PART C **DECLARATION BY OWNER/S**

I am/we are: the owner(s) of the above described land

I am/we are satisfied that the building work and related requirements have been completed and hereby apply for a Certificate of Occupancy or Use in respect of the above described work to be issued and (select one option only):

☑ Email Sch 2.2(a)(ii)

☐ send certificate by post to the owner(s) address ☐ held for collection from Building Services Shopfront - Mitchell

☐ Other _____

PART D **SIGNATURE/S OF OWNER/S**

This form should **not be** signed before the completion of building work.

1*Owner's Signature	Sch 2.2(a)(ii)	Date	29/1/18
2nd Owner's Signature		Date	
3rd Owner's Signature		Date	
4th Owner's Signature		Date	

NOTE: There are penalties for deliberately giving false and misleading information.
The Planning and Land Authority or Minister may revoke an approval if satisfied that the approval was obtained by fraud or misrepresentation.

Once this form has been completed you should give it to your certifier to lodge or hand deliver to:

Access Canberra
Building Services Shopfront,
8 Darling Street
Mitchell ACT 2911

Privacy Notice
The personal information on this form is provided to Access Canberra to enable the processing of your application. The collection of personal information is authorised by the *Building Act 2004*. If all or some of the personal information is not collected Access Canberra cannot process your application. The personal information you provide may be disclosed to Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be disclosed where authorised by law or court order, or where the Directorate reasonably believes that the use or disclosure of the information is reasonably necessary for enforcement-related activities conducted by, or on behalf of, an enforcement body. Access Canberra's Information Privacy Policy contains information about how you may access or seek to correct your personal information held by Access Canberra, and how you may complain about an alleged breach of the Territory Privacy Principles. Access Canberra Information Privacy Policy can be found at www.act.gov.au/accessCBR

CONTACT INFORMATION

Email:
ACTPLAedeviopmentBA@act.gov.au

Post:
Access Canberra
Building Services
Shopfront Mitchell
GPO Box 158
Canberra, ACT 2601

In Person:
Please visit
www.act.gov.au/accessCBR
Or call **132281** to find an
Access Canberra Shopfront.

Approved form AF2016-77 approved by David Middlemiss, Construction Occupations Deputy Registrar on 02 August 2016 under section 151 of the *Building Act 2004 and revokes* AF2014-82

CERTIFIED BUILDING SOLUTIONS

INSPECTION REPORT

PO Box 76
Mitchell ACT 2911

TELEPHONE (02) 6253 9911
Fax (02) 6253 9922

Suburb	Section	Block	Unit
LYNEHAM	41	4	

Builder: Sch 2.2(a)(ii)

Inspection Stage: FINAL

An inspection of the building work has been carried out:

As a result of that inspection I hereby certify that the building work complies with section 42 of the Building Act ***2004***. ☑

As a result of that inspection I have formed the opinion that the building work is not in compliance with section 42 of the Building Act ***2004***. Please re-book this inspection stage when rectified. ☐

The following matters require your attention:

☐ Work may proceed to the next stage.

☑ Work completed and the registrar would be justified in issuing a Certificate of Occupancy under section 69(2)

Sch 2.2(a)(ii) 1/12/18

ACT Government

Building Act 2004, S151

Application for Certificate of Occupancy and Use

Project ID: B2018238C1

If this application is incomplete or documentation is inadequate this application may not be accepted for lodgement and the certificate of occupancy and use may not be issued.

WARNING TO OWNERS
It is recommended that owners seek appropriate advice to determine whether the building work and other contract requirements have been completed satisfactorily before signing this form. This form should not be signed before the completion of building work.

PROJECT DETAILS

Unit	Block	Section	Division (Suburb)	District	Jurisdiction
	4	41	LYNEHAM	CANBERRA CENTRAL	Australian Capital Territory

Description of Works

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Const.	Unit	BCN ID	Builder
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA		Sch 2.2(a)(ii)	Sch 2.2(a)(ii)

OWNER/LESSEE DETAILS

Name	Address	Email Address
Brindabella Christian Education Ltd	PO Box 5103, Lyneham ACT 2006, AUSTRALIA	

DECLARATION BY OWNER

I am/we are:

- the owner(s) of the above described land
- the agent authorised by the owner(s) to apply for a Certificate of Occupancy and Use on their behalf, and I have attached a letter of authority

I am/we are satisfied that the building work and related requirements have been completed and hereby apply for a Certificate of Occupancy and Use in respect of the above described work to be issued and (select one option only):

- sent by post to the owner(s) address
- sent by post to the agent's address; or
- held for collection from the Mitchell Customer Service Centre

This form should not be signed before the completion of building work.

Signature/s of Owners – all owners must sign if agent has not been appointed

Name	Signature	Date
Brindabella Christian Education Ltd		

Once complete, you should return this form to your certifier to lodge or return to the Access Canberra Building Services Shopfront, 8 Darling Street, Mitchell ACT 2911.

Privacy Notice: The personal information on this form is being collected to enable processing of your application and to enable auditing and compliance of builders and certifiers by the Government appointed auditor. The information that you provide may be disclosed to the Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be accessed by other government agencies and commercial organisations interested in building information.

ACT Government

Building Act 2004, S151

Certification of Completion of Building Work

Project ID: B2018238/A

If this application is incomplete or documentation is inadequate this application may not be accepted for lodgement and the Certificate of Occupancy and Use may not be issued.

PART A - PROJECT DETAILS

Unit	Block	Section	District (Suburb)	Division	Jurisdiction
	4	41	CANBERRA CENTRAL	LYNEHAM	Australian Capital Territory

Plan Registration Number
B2018238/A

Description of Works

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Construction	Unit	BCN ID	Builder
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA		Sch 2.2(a)(ii)	Sch 2.2(a)(ii)

The project involved electrical work

The project did not involve plumbing or sanitary drainage work

The project did not involve gas work

This building work is not subject to an alternative solution under BCA

PART B - CERTIFIERS DECLARATION

I am satisfied that the building work detailed in the application is complete. I hereby certify that:

(a) I have provided all the relevant documents required by subsection 48(2) of the Building Act 2004 with this application as uploaded;

(b) the documentation relating to the building approval has been marked in accordance with the requirements of the Building Act 2004;

(c) The building work has been completed in accordance with the requirements of the Building Act 2004 and substantially in accordance with the approved plans;

(d) The building or part of the building as erected or altered is structually sufficient, sound and stable for the purposes for which it is intended to be occupied or used; and

(e) The Registrar can issue a Certificate of Occupancy and Use

Full Name	Address	License Number	Expiry Date
CERTIFIED BUILDING SOLUTIONS PTY LTD	PO Box 76 MITCHELL ACT 2911	200426203	2/09/2018

Date Issued: 1/02/2018 3:18:08 PM

Privacy Notice: The personal information on this form is being collected to enable processing of your application and to enable auditing and compliance of builders and certifiers by the Government appointed auditor. The information that you provide may be disclosed to the Australian Bureau of Statistics, ACT Revenue Office and the Taxation Office. The information may also be accessed by other government agencies and commercial organisations interested in building information.

Block: 4 **Section: 41** **Suburb: Lyneham** **Unit No**

Project Number: B2018238 **Certifier: Certified Building Solutions**

General Documents	Yes	No	Comments
Application For Certificate of Occupancy and Use signed by ALL Lessees	☒	☐	
Government Fees paid	☒	☐	
Certificate of Completion of Building Work	☒	☐	
Has a 69(2B) Completion of Building Work and application for COU been applied for?	☐	☒	If yes, refer to ESDDCAT Date referred / /20
Has all work described in the BA been applied for	☒	☐	If no, it may be a partial COU.
Has a 69(3) been applied for?	☐	☒	If yes, refer to ESDDCAT Date referred / /20
If a Development Application (DA) was relevant, was the work completed within the timeframe specified in the Notice of Decision (NOD)?	☐	☐ ☒	N/A – Exempt from DA.
Electrical	☒	☐	☐ N/A
Plumbing	☐	☐	☒ N/A
Gas	☐	☐	☒ N/A
Alternative Solution	☐	☐	☒ N/A
Certifiers Documents	**Yes**	**No**	**Comments**
Final inspection record stating that the building work is compliant with section 42 of the Building Act 2004	☒	☐	
Alternative Solution	☐	☐	☒ N/A
Survey Plan	☐	☐	☒ N/A
Insurance Certificate if work incorporates a class 1 or 2 under 3 storeys and cost of works greater than $12,000	☐	☐	☒ N/A
Asbestos clearance certificate if work involves Asbestos Removal	☐	☐	☒ N/A

Fire Approval Certificates ☒ N/A			
Fire Brigade approval for the erection of a commercial building larger than 500sqm	☐	☐	This document will have "ACT FIRE & RESCUE FIRE SECTION PLAN REPORT "on the front page.
Fire Brigade approval for the use of an alternative solution regarding fire protection	☐	☐	This document will have "ACT FIRE & RESCUE ALTERNATIVE SOLUTION REVIEW "on the front page.
Fire compliance/solution certificate	☐	☐	
Certifiers Documents ☒ N/A	**Yes**	**No**	**Comments**
Waterproofing certificates	☐	☐	☐ N/A
Glazing Certificate	☐	☐	☐ N/A
Termite certificates	☐	☐	☐ N/A
Truss certificates	☐	☐	☐ N/A
Insulation certificate	☐	☐	☐ N/A
Amendments ☒ N/A	**Yes**	**No**	**Comments**
Amendments fully described in eDevelopment	☐	☐	
Amendments clouded & listed on plans	☐	☐	
Plans stamped with certifier stamp	☐	☐	
Is work substantially different – not more than 1% change to original proposal	☐	☐	If yes, refer to ESDDCAT Date referred / /20
Government fees paid	☐	☐	

Officer Name: Jim Bobolas
Date: 02/02/18
Additional Comment COU issued

Certificate of Occupancy and Use

Certificate No.: **B2018238C1**

Access Canberra Building Services

ABN 16 479 763 216
8 Darling Street Mitchell
GPO Box 158 ACT 2601
www.act.gov.au/accesscbr

This Certificate is issued in accordance with Section 69 (2) of the Building Act 2004.

The building work listed on this certificate has been completed substantially in accordance with the prescribed requirements and is considered fit for occupation and use.

Unit	Block	Section	Division (Suburb)	District	Jurisdiction
	4	41	LYNEHAM	CANBERRA CENTRAL	Australian Capital Territory

Plans
B2018238/A

Building Works

Class of Occupancy	Nature of Work	Project Item Description	Other Description	Type Of Const.	Unit	BCN ID	Builder
10b	Other	DA EXEMPT-SEE DESCRIPTION	PV Installation to Roof	NA		Sch 2.2(a)(ii)	Sch 2.2(a)(ii)

Comments **Important Note:**

1. Residential building statutory warranties and residential insurance do not apply in relation to building work.

2. The issue, under this Part, of a certificate in respect of a building or portion of a building does not affect the liability of a person to comply with the provisions of a law of the territory (including this Act) relating to the building or portion of the building.

Issued by: Jim Bobolas

Delegate of the ACT Construction Occupations Registrar.

Issued on: 02/02/2018

PROPOSED DEMOUNTABLES

AT

BLOCK 4 SECTION 41, LYNEHAM ACT

GENERAL

G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND OTHER RELEVANT REFERENCE DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO SUPERINTENDENT FOR DECISION BEFORE PROCEEDING.

G2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS. FIGURED DIMENSIONS ONLY SHALL BE USED. SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER, FROM ARCHITECTURAL DRAWINGS. ALL DISCREPANCIES SHALL BE REFERRED TO ARCHITECT FOR RESOLUTION.

G3. DURING CONSTRUCTION, STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERLOADED. TEMPORARY SUPPORT SHALL BE PROVIDED BY THE BUILDER IN ORDER TO KEEP THE WORKS AND ANY EXCAVATIONS STABLE AT ALL TIMES.

G4. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT STANDARDS AUSTRALIA CODES, AND THE BUILDING CODE OF AUSTRALIA.

G5. THE STRUCTURAL COMPONENTS DETAILED ON THE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED FOR THE FOLLOWING LOADS:

- I) LIVE LOADS IN ACCORDANCE WITH AS 1170 - PART 1
- II) WIND LOADS IN ACCORDANCE WITH AS 1170 - PART 2 TERRAIN CATEGORY 3 REGION: A3

G6. THE RELEVANT PROVISIONS OF AS 1170.4 - 1993 HAVE BEEN APPLIED FOR A TYPE 'I' STRUCTURE WITH AN EARTHQUAKE DESIGN CATEGORY, OF 'H'.

G7. CONSTRUCTION USING THE STRUCTURAL DRAWINGS SHALL NOT COMMENCE UNTIL A CONSTRUCTION CERTIFICATE IS ISSUED BY THE PRINCIPAL CERTIFYING AUTHORITY.

G8. THE CONTRACTOR SHALL GIVE AT LEAST FORTY-EIGHT HOURS NOTICE OF ANY INSPECTIONS OF STRUCTURAL WORK.

SITE PREPARATION NOTES

SP1. BUILDER TO PROVIDE AND VERIFY SITE CLASSIFICATION PRIOR TO CONSTRUCTION.

SP2. REMOVE ALL ORGANIC AND FOREIGN MATTER FROM SITE. GRADE ROLL AND PREPARE TO AS 3798.

SP3. NO SIGNIFICANT SILTY MATERIALS ARE TO BE INCORPORATED WITHIN THE SOIL PROFILE SUPPORTING THE SLAB (OTHERWISE TECHNICAL ADVICE MUST BE SOUGHT AS TO THE LONG TERM INTEGRITY OF THE PLATFORM).

SP4. IF THE SITE IS BENCHED WITH A CUT AND FILL APPLICATION THE FILL IS TO BE CERTIFIED BY A QUALIFIED PRACTICING GEOTECHNICAL ENGINEER OTHERWISE STRUCTURAL PIERS MUST BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ENGINEERING DESIGN ADOPTING SUSPENDED WORKS.

SP5. COMPACTED FILL TO AS 3798 AND AS 2870.

SP6. GRADING OF THE NATURAL OR FILL LEVELS ARE TO FALL AWAY FROM THE SLAB FACE ENSURING NO PONDING OF RAINWATER OR EROSION MATERIAL.

SP7. SUBSOIL DRAINS CONSTRUCTED WHERE DESIRABLE TO ALLEVIATE SUBTERRANEAN WATER AND POTENTIAL EXCESSIVE MOISTURE RETENTION WITHIN THE STRUCTURAL PLATFORM.

SP8. ALL EXCAVATIONS FOR DRAINAGE (SEWER AND STORMWATER) RUNNING PARALLEL OR WITHIN THIS VICINITY NOT TO EXTEND BELOW A LINE DRAWN AT 45 DEGREE + 300mm TO THE HORIZONTAL FOR CLAY AND 30 DEGREES + 300mm FOR SAND OR GRANULAR MATERIAL FROM THE BOTTOM OF THE FOOTING OR EXCAVATED BASE OF PIERS.

SP9. ALL DRAINAGE EXCAVATIONS TO BE REINSTATED WITH COMPACTED GRANULAR TYPE FILL COMPACTED TO 90% M.M.D.D.

SP10. MINIMUM DESIGN BEARING CAPACITY FOR STRUCTURAL PLATFORMS TO BE 50KPa (U.N.O) WHERE CONCRETE SLABS ARE TO BE SUPPORTED.

SP11. BUILDER TO ISSUE CSIRO REPORT TO HOMEOWNER: "GUIDE TO HOMEOWNERS ON FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE".

FOOTINGS

F1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 100 KPa.

F2. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.

F3. FOOTINGS SHALL BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION. IF CONCRETE IS NOT PLACED IMMEDIATELY AFTER EXCAVATION OF FOOTING, PROVIDE A 50mm BLINDING LAYER OF WEAK (15MPa) CONCRETE TO THE BASE OF EXCAVATION FOUNDATION.

F4. EXCAVATE FOR FOUNDATIONS TO THE REQUIRED SIZES AND DEPTH. FOOTING FOUNDING LEVELS ARE PROVISIONAL SUBJECT TO ACTUAL SITE CONDITIONS.

BONDEK/CONDECK FORMWORK

B1. UNLESS NOTED OTHERWISE BONDEK PANELS SHALL BE 1.0mm

B2. BONDEK PANELS ARE TO BE SECURELY FIXED OR HELD DOWN TO PREVENT DISPLACEMENT DUE TO CONSTRUCTION LOADING OR WIND UPLIFT PRIOR TO CONCRETING.

B3. FIX BONDEK PANELS TO STEELWORK BY PUDDLE WELDING, DRIVE PINS, OR OTHER SUITABLE METHODS. SLIP JOINTS SHALL BE LOCATED AS SHOWN.

B4. FIXING TO MASONRY IS NOT NECESSARY PROVIDED CONCRETE IS PLACED IMMEDIATELY AFTER PANELS ARE LAID. TOP COURSE OF BRICKWORK IS TO BE STRAIGHT AND LEVEL. IF REQUIRED PROVIDE LAYER OF SMOOTH HARD MORTAR. SLIP JOINTS SHALL BE PROVIDED AT ALL MASONRY SUPPORTS UNLESS NOTED OTHERWISE.

B5. BEFORE CONCRETE IS PLACED, ANY ACCUMULATED DEBRIS, GREASE OR ANY OTHER SUBSTANCE WILL NEED TO BE REMOVED TO ENSURE CLEAN BONDING SURFACE. ANY PONDED RAINWATER SHOULD BE REMOVED BY BLOWING OR SWEEPING.

B6. FASTENING OF SIDE LAP JOINTS OF BONDEK SHALL BE IN ACCORDANCE WITH LYSAGHT PUBLICATIONS, AND GENERALLY ONE 10-24x16mm SELF-DRILLING TAPPING SCREW IS REQUIRED MID-SPAN FOR SUPPORT SPACING OF 2750mm OR GREATER. FOR POINT LOAD RATINGS OR EXPOSED SOFFITS ADDITIONAL FIXINGS MAY BE REQUIRED.

B7. UNLESS NOTED OTHERWISE PROPPING OF THE BONDEK SHALL BE IN ACCORDANCE WITH LYSAGHT PUBLICATIONS.

B8. PROPS SHOULD NOT BE REMOVED UNTIL CONCRETE HAS REACHED SUFFICIENT STRENGTH.

STRUCTURAL STEELWORK

S1. DESIGN CONFORMS TO AS 4100. FABRICATION AND ERECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROVISIONS OF AS 4100 AND AS/NZS 5131.

S2. UNLESS NOTED OTHERWISE, ALL STEEL SHALL CONFORM TO THE FOLLOWING AUSTRALIAN STANDARDS, IN RESPECT OF GRADE AND CONDITIONS OF SUPPLY:

COMPONENT	STANDARD	MIN GRADE
ROLLED SECTIONS	AS/NZS 3679.1; TS 102	300
WELDED SECTIONS	AS/NZS 3679.2; TS 102	300
FLAT BARS	AS/NZS 1594; TS 102	300
PLATE/FLOOR PLATE	AS/NZS 3678; TS 102	250
HOLLOW SECTIONS - CHS	AS 1163; TS 102	C350
HOLLOW SECTIONS - SHS/RHS	AS 1163; TS 102	C450
PURLINS/GIRTS	AS 1397	G450
SHEAR STUDS	AS/NZS 1554.2	300

TEST CERTIFICATES CONFIRMING CONFORMANCE ISSUED BY SUPPLIER SHALL BE AVAILABLE FOR INSPECTION.

ALL STRUCTURAL STEEL SHALL BE SOURCED FROM MILLS WITH A RELEVANT JOINT ACCREDITATION SYSTEM OF AUSTRALIA AND NEW ZEALAND (JAS-ANZ) ACCREDITED THIRD-PARTY CERTIFICATION SYSTEM SUCH AS THE AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS (ACRS) SCHEME. ALTERNATIVE SOURCING OF THIRD-PARTY CERTIFIED STRUCTURAL STEEL SHALL BE SUBMITTED FOR REVIEW AND MUST BE APPROVED PRIOR TO THE COMMENCEMENT OF PROCUREMENT.

S3. MEMBER SIZES SHALL BE AS SHOWN ON THE STRUCTURAL DRAWINGS.

S4. THE CONTRACTOR SHALL PREPARE WORKSHOP (SHOP DETAIL) DRAWINGS AND SHALL SUBMIT COPIES OF EACH DRAWING FOR EXAMINATION OF CONNECTION DETAILS. FABRICATION SHALL NOT COMMENCE UNTIL THE WORKSHOP DRAWINGS HAVE BEEN APPROVED. APPROVAL WILL BE PROVIDED FOR MEMBER SIZES AND CONNECTION STRENGTHS, BUT WILL NOT EXTEND TO DIMENSIONS. ALL DIMENSIONS AND SETOUTS SHALL BE OBTAINED FROM ARCHITECTURAL DRAWINGS. SHOULD VARIATIONS BE NECESSARY TO THE STRUCTURAL DETAILS PROVIDED, THESE SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL BEFORE BEING INCLUDED ON SHOP DETAIL DRAWINGS. SHOP DETAIL DRAWINGS SHALL CLEARLY INDICATE:

- DIMENSIONS OF ITEMS, IDENTIFICATION AND STEEL GRADE
- LOCATION, TYPE AND SIZE OF WELDS/BOLTS
- PROCEDURES NECESSARY FOR SHOP AND SITE ASSEMBLY
- ORIENTATION OF MEMBERS
- CAMBER
- LOCATION OF TEMPORARY CONNECTIONS AND BRACING
- SURFACE PREPARATION METHOD AND COATING SYSTEM
- WELDING AND BOLTING CATEGORIES
- SHOP DETAILS SHALL PROVIDE FOR FIXING OR SUPPORT OF ANY BUILDING ELEMENTS SHOWN ON ARCHITECTURAL DRAWINGS

S5. ALL WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. ALL WELDS FOR STRUCTURAL STEEL SHALL BE WELD CATEGORY GP, UNLESS NOTED OTHERWISE. ELECTRODES SHALL BE TO AS 1553, AS1858 AS 2203 OR AS 2717 AS APPROPRIATE BASED ON THE YIELD STRENGTH OF THE STEEL TO BE WELDED, AS DEFINED IN THE TABLES BELOW:

NOMINAL YIELD STRENGTH OF STEEL TO BE WELDED	TO CONFORM WITH AUSTRALIAN STANDARDS
< 500 MPa	AS/NZS 1554.1
> 500 MPa; <690 MPa	AS/NZS 1554.4

WELD CONSUMABLES:

NOMINAL YIELD STRENGTH OF STEEL TO BE WELDED	NOMINAL TENSILE STRENGTH OF WELD METAL Fuw
ALL STEEL WITH GRADE < 300 MPa	430 MPa
ALL STEEL WITH 300<GRADE<450 MPa	490 MPa
QUENCH AND TEMPERED STEEL <690 MPa	760 MPa

S6. BOLTING CATEGORIES ARE IDENTIFIED ON THE DRAWINGS IN THE FOLLOWING MANNER:

- 4.6/S - COMMERCIAL BOLTS OF GRADE 4.6 TO AS1111, SNUG TIGHTENED TO AS/NZS 5131.
- 8.8/S - HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS1252.1, SNUG TIGHTENED TO AS/NZS 5131.
- 8.8/TB - HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS1252.1, FULLY TENSIONED TO AS/NZS 5131.
- 8.8/TF - HIGH STRENGTH BOLTS OF GRADE 8.8 TO AS1252.1, FULLY TENSIONED TO AS/NZS 5131. AS A FRICTION TYPE JOINT WITH FAYING SURFACES LEFT UNCOATED.

S7. UNLESS NOTED OTHERWISE, HOLES SHALL BE 2mm LARGER THAN THE NOMINAL BOLT DIAMETER. WHERE SLOTTED OR OVERSIZE HOLES ARE PERMITTED ON THE STRUCTURAL DRAWINGS, THEY SHALL COMPLY WITH AS 4100. HAND FLAME CUTTING OF BOLT HOLES IS NOT PERMITTED.

S8. UNLESS NOTED OTHERWISE, ALL BOLTS AND WASHERS SHALL BE GALVANISED TO AS/NZS 1214.

S9. FABRICATION AND ERECTION TOLERANCES SHALL COMPLY WITH AS 4100, SECTION 14 AND AS/NZS 5131, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.

S10. ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP. PROVIDE STRUCTURAL MEMBERS IN SINGLE LENGTHS UNLESS SPLICES ARE SHOWN ON THE STRUCTURAL DRAWINGS.

S11. ALL STEELWORK SHALL BE TEMPORARILY BRACED IN A SECURE MANNER IN ORDER TO STABLISE THE STRUCTURE DURING ERECTION.

S12. FOR EACH GROUP OF ANCHOR BOLTS PROVIDE A TEMPLATE WITH SETTING OUT LINES CLEARLY MARKED FOR POSITIONING THE BOLTS WHEN CASTING IN.

S13. ALL LOAD INDICATOR WASHERS SHALL BE SHERARDIZED. PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS, WITH BREATHER HOLES IF MEMBERS ARE TO BE HOT DIP GALVANISED.

S14. NON-DESTRUCTIVE WELD EXAMINATION SHALL BE AS FOLLOWS:

TYPE OF WELD AND CATEGORY	EXAMINATION METHOD	EXTENT (%) OF TOTAL WELD LENGTH
FILLET WELDS	VISUAL INSPECTION	100
BUTT WELDS,GP	VISUAL INSPECTION	100
BUTT WELDS,SP	VISUAL INSPECTION	100
BUTT WELDS,SP	RADIOGRAPHIC OR ULTRASONIC INSPECTION	10

(NON-DESTRUCTION WELD EXAMINATION (NDE) TABLE)

S15. ALL ROD BRACING TO HAVE GRADE S (STRUCTURAL) TURNBUCKLES. THE CAPACITY OF THE TURNBUCKLE IS TO EXCEED THE ULTIMATE CAPACITY OF THE ROD.

S16. THE MINIMUM SURFACE PREPARATION AND TREATMENT OF STEELWORK SHALL BE IN ACCORDANCE WITH AS 2312, AS FOLLOWS:

LOCATION	AS2312 ATMOSPHERIC CORROSION CATEGORY	MINIMUM YEARS TO FIRST MAINTENANCE
INTERNAL	CATEGORY C1 - VERY LOW	25+
EXTERNAL	CATEGORY C3 - MEDIUM	25+

- TOP COATS TO BE IN ACCORDANCE WITH THE ARCHITECTS SPECIFICATION.
- ALL PAINT TO BE APPLIED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- ALL STEELWORK NOT ENCASED IN CONCRETE OR 'GALVANISED' SHALL HAVE THE SURFACES CLEANED BY ABRASIVE BLAST CLEANING TO CLASS 2-1/2 STANDARD IN ACCORDANCE WITH AS 1627.4.
- ALL AREAS INACCESSIBLE AFTER FABRICATION SHALL BE CLEANED AND PAINTED PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED ALL STEEL SURFACES SHALL BE COATED WITH:
  a) LUXAPRIME ZINC PHOSPHATE, OR APPROVED EQUIVALENT, TO A DRY FILM THICKNESS OF 75 MICRONS AND;
  b) TOP COATS TO BE IN ACCORDANCE WITH THE ARCHITECTS SPECIFICATION. ALL PAINT TO BE APPLIED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. MEMBERS BUILT INTO WALLS NOT MARKED GALVANISED TO BE COATED WITH JOTAPRIME TO 75 MICRONS NO TOP COAT OR EQUAL.
- WHERE NOTED 'GALVANISED', STEELWORK SHALL BE CHEMICALLY DESCALED AND CLEANED IN ACCORDANCE WITH AS1627.5 TO REMOVE ALL RUST, MILL SCALE, OIL, GREASE AND FOREIGN MATTER OF ALL DESCRIPTION LEAVING A UNIFORM SURFACE OF CLEAN METAL OR A TIGHTLY ADHERING COATING OF ZINC OR IRON PHOSPHATE. STEELWORK SHALL THEN BE GALVANISED IN ACCORDANCE WITH AS 1650 BY IMMERSING IN A BATH OF MOLTEN ZINC TO PRODUCE A ZINC COATING WHICH SOLIDIFIES TO A DRY FILM MASS IN ACCORDANCE WITH THE ABOVE TABLE TO AS 2312.
- ALL TRANSPORT AND ERECTION ABRASIONS, SITE WELDS, ETC. ARE TO BE REINSTATED BY THOROUGHLY WIRE BRUSHING ALL AFFECTED AREAS TO ACHIEVE A CLEAN SOUND SUBSTRATE AND PATCH COATED AS FOR PRIMING EXCEPT THAT THE MINIMUM FILM THICKNESS SHALL BE 50% GREATER THAN THE ORIGINAL PRIMER.
- GALVANISING SHALL BE TO AS 4680 (MEMBERS) OR AS 1214 (THREADED FASTENERS), AS APPROPRIATE.
- REMOVE ALL TEMPORARY CLEATS ON COMPLETION AND RESTORE THE SURFACE IN AN APPROVED MANNER.

S17. GROUT PACK UNDER ALL BASE PLATES. BEFORE GROUTING, SUPPORT BASE PLATES ON STEEL PACKERS OR WEDGES. GROUT UNDER BASE PLATES AND INTO CORED HOLES WITH 'CONBEXTRA GP' NON-SHRINK GROUT OR APPROVED EQUIVALENT. APPLY IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

- MINIMUM COMPRESSIVE STRENGTH = 40MPa
- MINIMUM THICKNESS = 15mm
- MAXIMUM THICKNESS = 40mm

S18. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, CONNECTION DETAILS SHALL BE IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS:

- ALL WELDS SHALL BE MINIMUM 6.0mm CONTINUOUS FILLET WELD (CFW) ALL ROUND.
- ALL STEEL TO STEEL BOLTED CONNECTIONS SHALL BE MINIMUM TWO M20 GRADE 8.8/S
- ALL PLATES SHALL BE MINIMUM 10mm THICK.

ALL DETAILING WHERE NOT SPECIFICALLY SHOWN SHALL BE IN ACCORDANCE WITH THE AUSTRALIAN STEEL INSTITUTE (ASI) CURRENT EDITIONS OF THE 'DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL' AND THE ASI STANDARDISED STRUCTURAL CONNECTION DETAILS CONTAINED THEREIN.

THE ENDS OF HOLLOW SECTION MEMBERS SHALL BE SEALED WITH NOMINAL 6.0mm THICK PLATES AND CONTINUOUS SEAL WELDED UNLESS NOTED OTHERWISE. IF HOLLOW SECTIONS ARE TO BE HOT-DIP GALVANISED, PROVIDE VENT AND DRAINAGE HOLES.

S19. HILTI HIT-RE500 V3 EPOXY OR APPROVED EQUIVALENT SHALL BE USED FOR ALL DRILL AND EPOXY CHEMICAL ANCHORS, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. CHEMICAL ANCHOR STUDS ARE TO BE GRADE 5.8 GALVANISED STUDS, UNLESS NOTED OTHERWISE.
MINIMUM EMBEDMENT DEPTHS ARE AS FOLLOWS:

- M12 CHEMICAL ANCHOR - 110mm EMBEDMENT
- M16 CHEMICAL ANCHOR - 125mm EMBEDMENT
- M20 CHEMICAL ANCHOR - 150mm EMBEDMENT
- M24 CHEMICAL ANCHOR - 170mm EMBEDMENT

NOTE: ALL CHEMICAL ANCHORS ARE TO HAVE MINIMUM 30mm COVER TO REAR CONCRETE FACE. CONTACT ENGINEER IF THE ABOVE LISTED EMBEDMENT DEPTHS CANNOT ACHIEVE THIS COVER.

S20. PROPRIETARY ITEMS (E.G. PURLINS, ROOF/WALL SHEETING, FERRULES, ANCHOR FIXINGS) SHALL BE INSTALLED WITH THE MANUFACTURERS SPECIFICATIONS.

S21. ANY LOADS HUNG FROM ROOF PURLINS ARE TO BE HUNG FROM WEB OF PURLIN ONLY. DO NOT HANG LOADS FROM FLANGED OR LIP OF PURLIN.

S22. WHERE ROOF SHEETING IS DIAGONALLY CUT, PROVIDE 100x75x2.5 UA COLD FORMED ANGLE TRIMMER FIXED TO ROOF BEAMS FOR SUPPORT OF SHEET EDGE, UNLESS NOTED OTHERWISE.

CONCRETE

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF AS 3600 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. PLACING OF CONCRETE SHALL GENERALLY BE IN ACCORDANCE WITH AS 3600 CLAUSE 19.1.

C2. CONCRETE QUALITY (U.N.O, ON OTHER STRUCTURAL DRAWINGS)

ELEMENT	STRENGTH GRADE	CEMENT TYPE	MIN. CEMENT CONTENT (Kg/M³)	MAX. AGG SIZE (mm)	MAX. SLUMP
PAD FOOTINGS	20	GP	250	20	80
STRIP FOOTINGS	20	GP	250	20	80
SLAB ON GROUND	20	GP	290	20	80
SUSPENDED SLABS/BEAMS	32	GP	290	20	80
BLOCK WALLS	32	GP	290	20	80
COLUMNS	40	GP	290	20	80

C3. MIX DESIGNS SHALL BE SUBMITTED FOR APPROVAL. THE USE OF BLENDED CEMENTS, FLYASH AND/OR CHEMICAL ADMIXTURES WILL NOT BE PERMITTED EXCEPT WITH PRIOR APPROVAL OF THE ENGINEER IN WRITING. IF FLYASH IS USED WITH APPROVAL THEN THIS SHOULD NOT EXCEED 80Kg/m³. CONCRETE AGGREGATE SHALL CONSIST OF CRUSHED RIVER GRAVEL OR BASALT IN ACCORDANCE WITH AS 2758.1. SLAG AGGREGATES WILL NOT BE PERMITTED.

C4. PROJECT ASSESSMENT SHALL BE IN ACCORDANCE WITH AS 1379. ALL ORGANISATIONS RESPONSIBLE FOR TESTING AND ASSESSMENT OF CONCRETE AND CONCRETE MATERIALS SHALL BE NATA REGISTERED. SAMPLING AND TESTING SHALL BE TO AS 1012.
ACCEPTANCE CRITERIA - AVERAGE MUST EXCEED REQUIRED VALUE, NO SAMPLE TO BE LESS THAN 85% OF REQUIRED VALUE.

C5. SUPPLY OF READY MIXED CONCRETE SHALL COMPLY WITH AS 1379.

C6. CLEAR CONCRETE COVER SHALL BE IN ACCORDANCE WITH TABLE BELOW UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.

ELEMENT	POURED AGAINST GROUND	POURED AGAINST SURFACE FORMS OR PLASTIC SHEETING	TOP
PAD AND STRIP FOOTINGS	65	50	50
SLABS ON GROUND	-	30	35
RETAINING WALLS	65	40	-
SUSPENDED FLOORS	-	25	25

C7. REINFORCEMENT SHALL GENERALLY COMPLY WITH AS 3600 CLAUSE 19.2. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION ON STRUCTURAL DRAWINGS. ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671. ALL WELDED MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS. REINFORCEMENT SYMBOLS:

- N GRADE 500N DEFORMED BAR TO AS4671
- R GRADE 250R ROUND BAR TO AS4671
- RL RECTANGULAR MESH GRADE 500L TO AS4671
- SL SQUARE MESH GRADE 500L TO AS4671
- TM TRENCH MESH GRADE 500L TO AS 4671

THE NUMBER IMMEDIATELY FOLLOWING THE N SYMBOL IS THE BAR DIAMETER IN MILLIMETERS. (E.G. N20 IS A ø20mm BAR GRADE 500N)

C8. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON PLASTIC TIPPED STEEL, PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THEN 900mm CENTERS BOTH WAYS. BARS ARE TO BE TIED AT ALTERNATE INTERSECTIONS WITH WIRE TIES. IN EXPOSURE CONDITIONS OF B2 OR C, USE ONLY PLASTIC CHAIRS.

C9. LAPS AND SPLICES SHALL BE MADE ONLY IN THE POSITIONS AND TO THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS. FABRIC SHALL BE LAPPED TWO TRANSVERSE WIRES PLUS 50mm JOGGLES TO BARS SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS. BUNDLED BARS SHALL BE TIED TOGETHER AT CENTERS OF 30 BAR DIAMETERS WITH THREE (3) WRAPS OF THE WIRE.

C10. DO NOT WELD REINFORCEMENT EXCEPT AS SHOWN ON THE DRAWINGS, OR AS APPROVED BY THE ENGINEER. IF APPROVED, SUCH WELDING SHALL COMPLY WITH AS 1554.3.

C11. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS. CONCRETE SIZES DO NOT INCLUDE THICKNESS OF APPLIED TOPPING IF APPROVED, SUCH WELDING SHALL COMPLY WITH AS 1554.3.

C12. NO PENETRATIONS, HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE APPROVAL OF THE ENGINEER.

C13. FOR CHAMFERS, GROOVES, REGLETS REFER TO ARCHITECTURAL DETAILS. MAINTAIN COVER AT ALL DETAILS.

C14. PLACE CONCRETE IN LAYERS SUCH THAT EACH SUCCEEDING LAYER IS BLENDED INTO THE PRECEEDING ONE BY THE COMPACTION PROCESS. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS COMPLETELY FILLING THE FORMWORK AND THOROUGHLY EMBEDDING THE REINFORCEMENT.

C15. COMPACTION: USE IMMERSION AND SCREED VIBRATORS ACCOMPANIED BY HAND METHODS AS APPROPRIATE TO REMOVE AIR BUBBLES AND COMPACT THE MIX. USE FORM VIBRATORS WHERE USE OF IMMERSED VIBRATORS IS IMPRACTICABLE. ENSURE CONCRETE IS FULLY COMPACTED AND ENTRAPPED AIR REMOVED, BUT AVOID OVER VIBRATION THAT MAY CAUSE SEGREGATION. DO NOT USE VIBRATORS TO MOVE CONCRETE ALONG THE FORMS.

C16. CURE AS SOON AS THE SURFACE OF THE CONCRETE HAS HARDENED SEVEN DAYS. CURE BY ONE OF THE FOLLOWING MEANS:

- PONDING OR CONTINUOUS SPRINKLING WITH WATER, OR
- THE USE OF WET COVERINGS SUCH AS HESSIAN OR SAND.

SHEETING MUST BE PROTECTED FROM WIND AND TRAFFIC.

C17. DURING HOT OR WINDY WEATHER, USE ALIPHATIC ALCOHOL SPRAYED ON AFTER SCREEDING TO PREVENT PLASTIC SHRINKAGE OF TOP SURFACE UNTIL CURING IS APPLIED.

C18. THE SUBCONTRACTOR SHALL GIVE AT LEAST TWENTY FOUR HOURS NOTICE SO THAT INSPECTION MAY BE MADE OF THE FOLLOWING:

- MEMBRANE INSTALLED ON THE SUB-BASE (WHERE APPLICABLE)
- REINFORCEMENT AND TENDONS FIXED IN PLACE;
- CORES AND EMBEDMENT FIXED IN PLACE;

NO CONCRETE SHALL BE PLACED UNTIL INSPECTION IS COMPLETED.

C19. UNDERLAY MEMBRANE SHALL BE HIGH-IMPACT RESISTANCE POLYETHYLENE FILM TO AS 1326 GRADE IR3. LAP JOINTS SHALL HAVE AT LEAST 200mm OVERLAP, SEALED WITH PRESSURE-SENSITIVE ADHESIVE TAPE. PLACE METAL OR PLASTIC PLATES UNDER REINFORCING CHAIRS TO AVOID PUNCTURING MEMBRANE

C20. MAKE CONSTRUCTION JOINTS WHERE SHOWN ON THE STRUCTURAL DRAWINGS. DO NOT RELOCATE OR ELIMINATE A CONSTRUCTION JOINT, DO NOT MAKE A CONSTRUCTION JOINT NOT SHOWN ON THE STRUCTURAL DRAWINGS, WITHOUT PRIOR APPROVAL OF THE ENGINEER. BEFORE FRESH CONCRETE IS PLACED AT A CONSTRUCTION JOINT, ROUGHEN AND CLEAN THE HARDENED CONCRETE SURFACE OF THE JOINT, SO THAT ALL SOFT MATERIAL FOREIGN MATTER AND LAITANCE IS REMOVED. JUST PRIOR TO PLACEMENT, DAMPEN THE HARDENED CONCRETE SURFACE, WITHOUT LEAVING FREE WATER JUST BEFORE PLACING CONCRETE.

C21. CONSTRUCTION SUPPORT PROPPING SHALL BE LEFT IN PLACE AS REQUIRED IN ORDER TO AVOID OVERSTRESSING A COMPLETED FLOOR DUE TO CONSTRUCTION LOADING. ALL BACKPROPPING SHALL BE APPROVED BY THE ENGINEER.

C22. BRICKWORK OR UNREINFORCED CONCRETE MASONRY BLOCKWORK SHALL NOT BE BUILT ON SUSPENDED CONCRETE SLABS OR BEAMS UNTIL SUPPORTING FORMWORK HAS BEEN REMOVED.

C23. CONDUITS AND PIPES SHALL BE LOCATED IN THE MIDDLE OF THE SLAB OR BEAM DEPTH AND SHALL BE SPACED HORIZONTALLY AT A MINIMUM OF 3 TIMES THE CONDUIT DIAMETER. CONDUITS AND PIPES

UNREINFORCED STONEWORK MASONRY

SM1. UNREINFORCED STONEWORK MASONRY SHALL GENERALLY BE IN ACCORDANCE WITH AS3700 UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.

SM2. STONE MASONRY ELEMENTS SHALL BE BUILT UP FROM RANDOMLY PLACED STONES, OF UNIFORM QUALITY AND FREE FROM DEFECTS LIABLE TO AFFECT ITS STRENGTH, APPEARANCE, AND DURABILITY UNDER THE INTENDED CONDITIONS OF USE.

SM3. STONE MASONRY SHALL BE SELECTED WITH REFERENCE TO THE ARCHITECTURAL INTENT FOR COLOUR AND PATTERNING.

SM4. CONSTRUCTION TOLERANCES FOR STONEWORK ELEMENTS SHALL GENERALLY COMPLY WITH TABLE 12.1 OF AS 3700. ALL LOAD BEARING STONE ELEMENTS SHALL DEVIATE FROM THE NOTED DIMENSIONS BY NO MORE THAN ±2.0mm. ALL NON-LOAD BEARING STONE ELEMENTS SHALL DEVIATE FROM THE NOTED DIMENSIONS BY NO MORE THAN ±10.0mm.

SM5. STONE SHALL BE NATURAL SANDSTONE OR GRANITE AND WILL BE CHECKED FOR DEFECTS AGAINST THE FOLLOWING CRITERIA:
a. SANDSTONE: MINOR SHALE LAMINAE OR INTERBEDS AND MINOR CONCENTRATIONS OF CARBONACEOUS MATERIAL (TEA LEAVES) ARE NOT ACCEPTABLE IN VISIBLE FACES.
b. GRANITE: IGNEOUS QUARRY STONE EXTRACTED IN BLOCKS CONTAINING NO MORE THAN A SMALL DEGREE OF MICROCRACKING.

SM6. MORTAR USED SHALL BE TYPE GP AND CONFORM TO AS 3972 AND WILL NOT CONTAIN ADMIXTURES UNLESS APPROVED IN WRITING. PIGMENTS USED IN THE MORTAR MIX SHALL FORM NO MORE THAN 10% OF THE CEMENT MASS BY WEIGHT.

SM7. ALL WALL TIES SHALL BE IN ACCORDANCE WITH AS 2699.1. MEDIUM DUTY TYPE A FOR CAVITIES LESS THAN 60MM AND HEAVY DUTY TYPE A WALL TIES FOR CAVITIES GREATER THAN 60mm WILL BE USED. WALL TIES SHALL BE BUILT IN AND EMBEDDED AT LEAST 50mm WITH A MINIMUM 15mm COVER FROM THE EXTERNAL FACE.

SM8. ISOLATE CONTACT SURFACES OF DISSIMILAR TYPES OF STONE WITH A MEMBRANE OR CONTROL JOINT. ALL SEDIMENTARY STONEWORK SHALL BE ISOLATED FROM BRICKWORK AND OTHER MASONRY TO PREVENT SALTS MOVEMENT.

SM9. WEEP HOLES FOR CAVITY OR RETAINING ELEMENTS SHALL BE FORMED BY OPEN PERPENDS OF A FULL STONE COARSE AND AT LEAST 8mm WIDTH. SPACING OF WEEP HOLES SHALL NOT EXCEED 1000mm UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.

ISSUE	DESCRIPTION	DATE	DRAWN
C	FOR CONSTRUCTION	01.12.20	JMc
B	FOR COORDINATION	17.11.20	JMc
A	FOR REVIEW	02.11.20	JMc

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DO NOT SCALE OFF DRAWINGS VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK.

PROJECT TITLE: PROPOSED DEMOUNTABLES

CLIENT: Sch 2.2(a)(xi)

DESIGNED BY: CPB
CHECKED BY: DMc
AUTHORISED BY:
DATE:

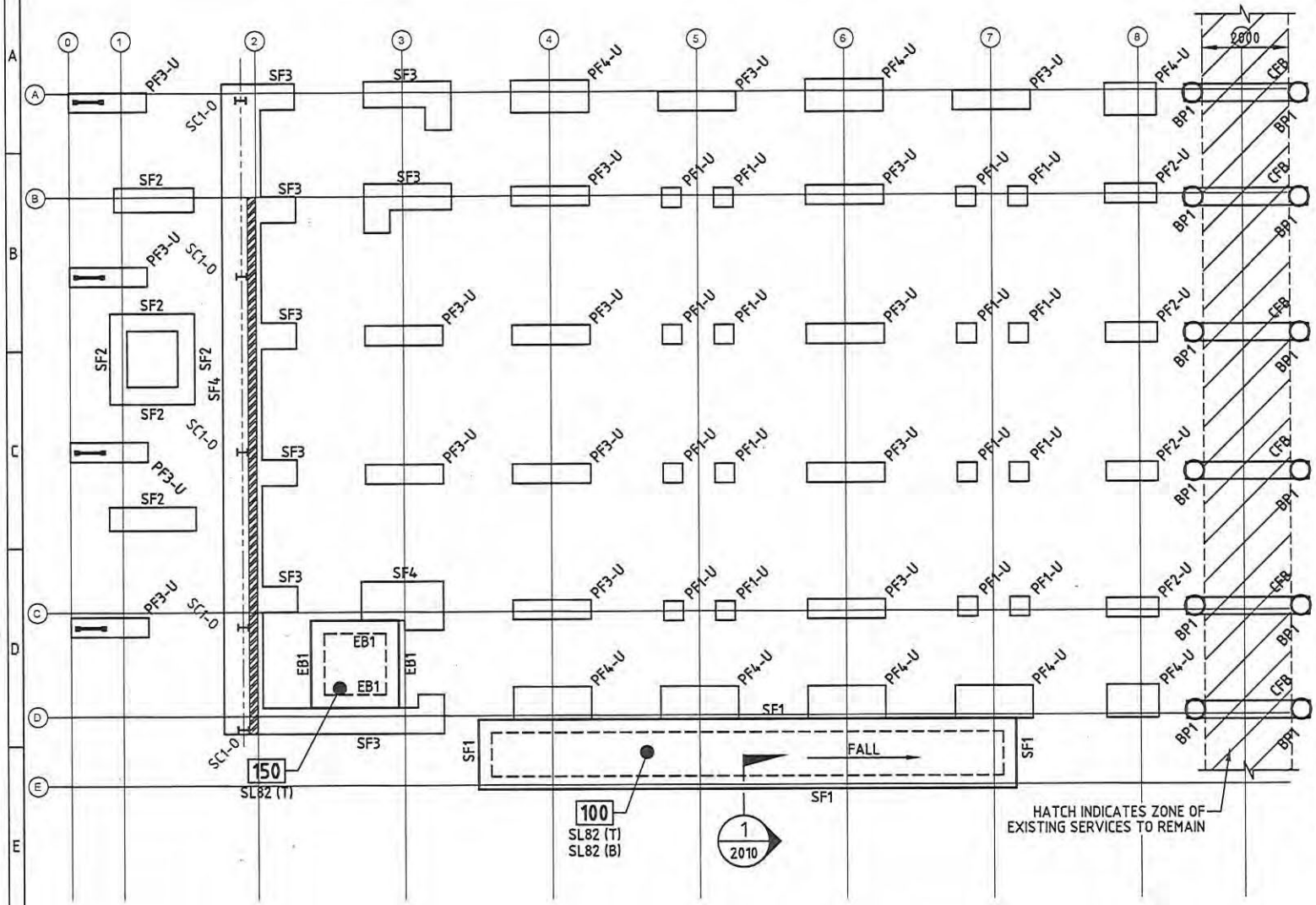
DRAWING TITLE: CONSTRUCTION NOTES

PROJECT LOCATION: BLOCK 4 SECTION 41 LYNEHAM ACT

SCALE: AS SHOWN AT A3

JOB NO.: 191504

DRAWING NO.: 0000



GENERAL ARRANGEMENT LEGEND

SCALE 1:100

100 SL82 (T)	: INDICATES SLAB THICKNESS AND MESH OVERALL U.N.O
SC1-0	: INDICATES COLUMN OVER
	: INDICATES 190mm COREFILLED BLOCK WORK OVER
PF1-U	: INDICATES CONCRETE PAD FOOTING – REFER TO SHEDULE

NOTES:
- REFER TO DRAWING 1010 FOR GROUND DETAILS
- SITE PREPARATION AND CONCRETE NOTES TO BE READ AND UNDERSTOOD PRIOR TO CONSTRUCTION.
- ARTICULATE ALL BRICKWORK AND DRAINAGE TO NCC.

PAD FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT	BEARING CAPACITY
BP1	ϕ450mm BORED PIER	MASS CONCRETE	250 kPa
CFB	400²x 2850L mm CONCRETE FOOTING BEAM	2N12 (TOP) 2N16 (BTM) N12-300cts	-
PF1	450² x 450mm DEEP PAD FOOTING	MASS CONCRETE	125 kPa
PF2	1200x600 x 500mm DEEP PAD FOOTING	5L12TM (TOP+BTM)	125 kPa
PF3	1800x600 x 500mm DEEP PAD FOOTING	5L12TM (TOP+BTM)	125 kPa
PF4	900x500mm DEEP PAD FOOTING	2/4L12TM (TOP+BTM)	125 kPa
SF1	300w x 500mm DEEP STRIP FOOTING	3L12TM (TOP+BTM)	125 kPa
SF2	400w x 500mm DEEP STRIP FOOTING	4L12TM (TOP+BTM)	125 kPa
SF3	600w x 500mm DEEP STRIP FOOTING	5L12TM (TOP+BTM)	125 kPa
SF4	900w x 500mm DEEP STRIP FOOTING	2/4L12TM (TOP+BTM)	125 kPa

NOTE:
- SELLICK CONSULTANTS TO BE NOTIFIED IF MINIMUM BEARING CAPACITY IF NOT ACHIEVED.
- ALL FOUNDING MATERIAL TO BE INSPECTED BY GEOTECHNICAL ENGINEER AND BEARING CAPACITY TO BE CONFIRMED.

ISSUE	DESCRIPTION	DATE	DRAWN
J	FOR CONSTRUCTION	22.02.21	JMc
I	FOR REVIEW	02.02.21	JMc
	Minor Amendments		
H	FOR CONSTRUCTION	16.12.20	JMc
	Minor Amendments		

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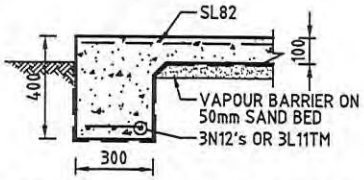
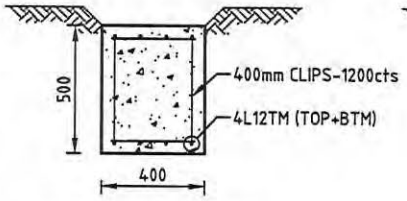
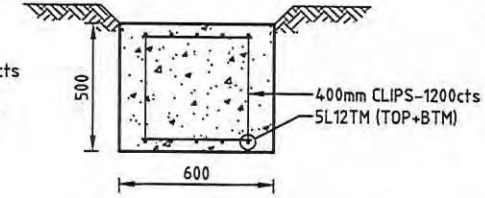
PROJECT TITLE: PROPOSED DEMOUNTABLE
CLIENT: Sch 2.2(a)(ii)
DESIGNED BY: CPB
CHECKED BY: DMc
AUTHORISED BY:
DATE:
DRAWING TITLE: FOOTING MARKING PLAN
PROJECT LOCATION: BLOCK 4 SECTION 41 LYNEHAM ACT
SCALE: AS SHOWN AT A3
JOB NO.: 191504
DRAWING NO.: 2000



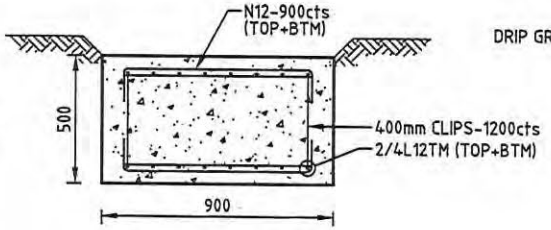
TYPICAL EDGE BEAM 'EB1'
SCALE 1:20



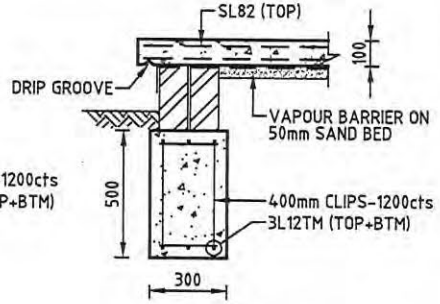
TYPICAL 'SF2'
SCALE 1:20



TYPICAL 'SF3'
SCALE 1:20

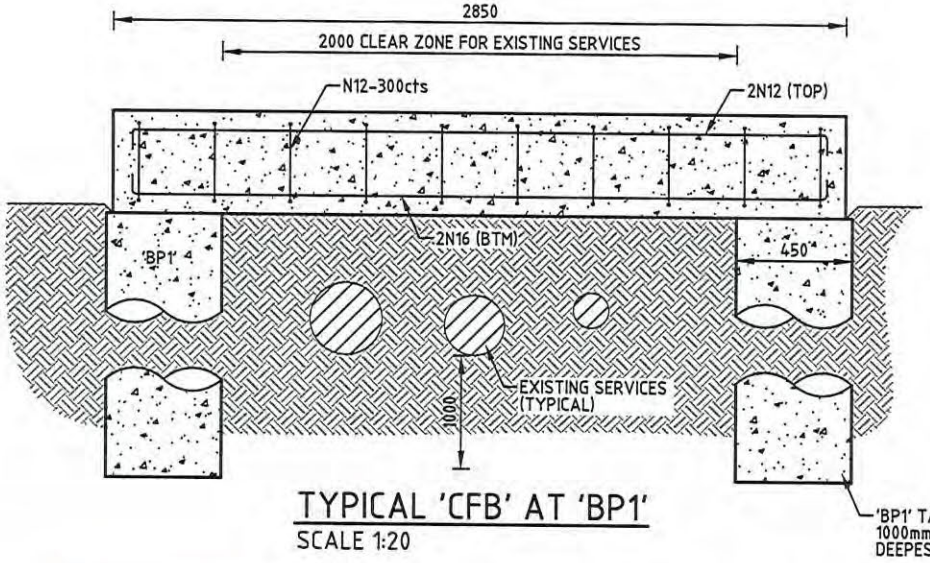


TYPICAL 'SF4'
SCALE 1:20



TYPICAL SF1

SECTION 1/2000
SCALE 1:20



TYPICAL 'CFB' AT 'BP1'
SCALE 1:20

ISSUE	DESCRIPTION	DATE	DRAWN
I	FOR CONSTRUCTION	22.02.21	JMc
H	FOR REVIEW	02.02.21	JMc
	Minor Amendments		
G	FOR CONSTRUCTION	16.12.20	JMc
	Minor Amendments		

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PROJECT TITLE
PORPOSED
DEMOUNTABLES

CLIENT
Sch 2.2(a)(xi)

DESIGNED BY CPB
CHECKED BY DMc
AUTHORISED BY
DATE

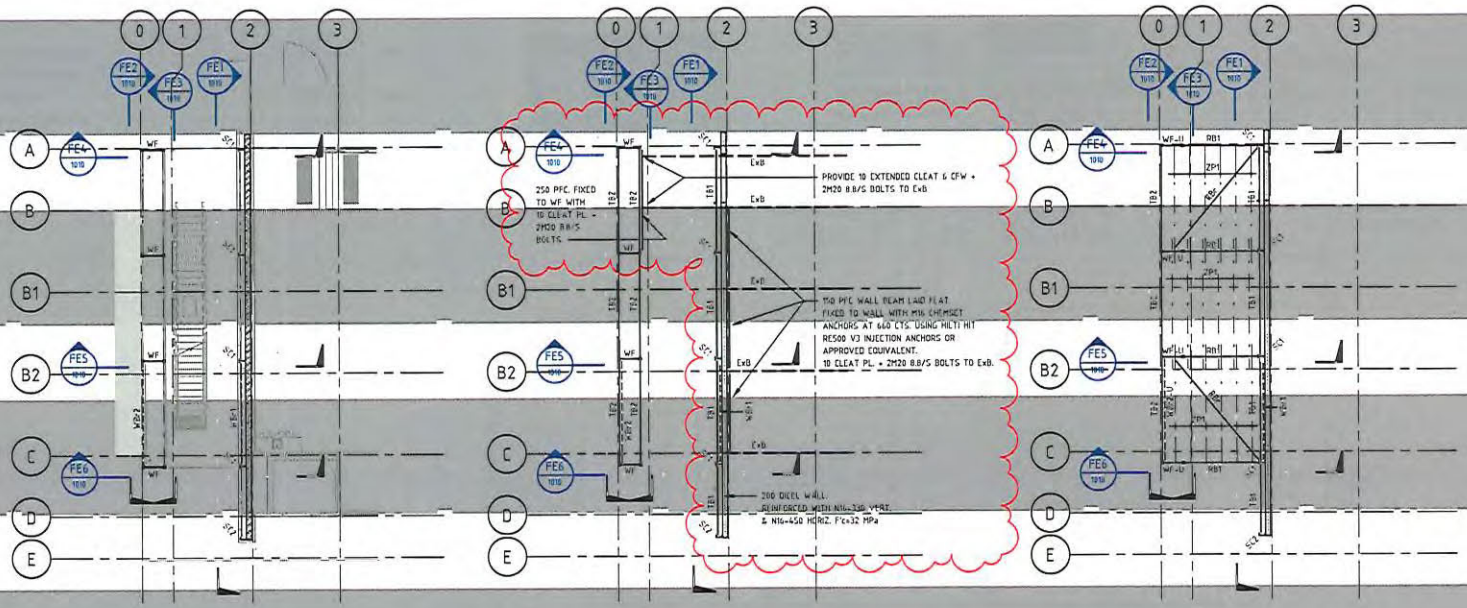
DRAWING TITLE
DETAILS
SHEET 1

PROJECT LOCATION
BLOCK 4 SECTION 41
LYNEHAM ACT

SCALE
AS SHOWN AT A3

JOB NO. 191504

DRAWING NO. 2010



GROUND LEVEL MARKING PLAN
SCALE 1 : 100

LEVEL 1 FRAMING MARKING PLAN
SCALE 1 : 100

ROOF FRAMING MARKING PLAN
SCALE 1 : 100

GENERAL ARRANGEMENT LEGEND

SC1	: INDICATES COLUMN NUMBER.
SC1 / SC2	: INDICATES COLUMN NUMBER UNDER.
WBr2	: INDICATES LOADBEARING WALL OR COLUMN OVER
	: INDICATES LOADBEARING WALL OR COLUMN UNDER.
WBr2 / WBr2	: INDICATES LOADBEARING WALL OR COLUMN UNDER & OVER.
+25mm	: INDICATES LOCATION & AMOUNT OF UPWARD PRECAMBER IN MEMBER.
SP	: INDICATES LOCATION OF SPLICE, REFER TYPICAL DETAILS.
MS	: INDICATES LOCATION OF MOMENT SPLICE, REFER TYPICAL DETAILS

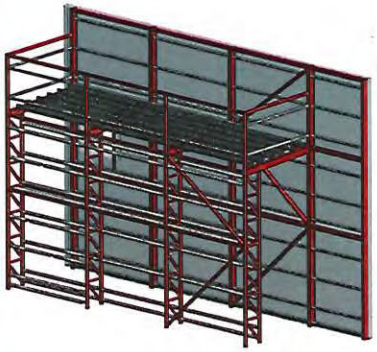
NOTES
- REFER TO DRAWING No. 0001 FOR CONSTRUCTION NOTES.
- REFER TO ARCHITECTS DRAWINGS FOR LOCATION & SETOUT OF ALL SLAB EDGES, COLUMNS, WALLS etc.

STEEL MEMBER SCHEDULE

MARK	TYPE	SIZE	REMARKS
B1	BEAM	460UB67.1	
PM1	PARAPET BEAM	250PFC	
PM2	PARAPET BEAM	100x100x6.0 SHS	
RB1	ROOF BEAM	310UB31.4	
RBr	ROOF BRACING	100x100x6.0 SHS	
SC1	STEEL COLUMN	250UB31.4	
SC2	STEEL COLUMN	250PFC	
TB1	TIE BEAM	150UC23.4	
TB2	TIE BEAM	100x100x6.0 SHS	
WBr1	WALL BRACING	150x100x5.0 RHS	
WBr2	WALL BRACING	100x100x6.0 SHS	
WF	WALL FRAME	100x100x6.0 SHS VERT. & AT WBr2 CONNECTION + 100x200x6.0 RHS HORIZ. + 75x75x6.0 SHS DIAG	FULLY WELDED FRAME (600 MIN. D/A WIDTH)

PURLIN & GIRTS MEMBER SCHEDULE

MARK	TYPE	SIZE	REMARKS
CG1	GIRT	C15019	AT 1200 MAX. CTS.
CG2	GIRT	C15019	AT 1200 MAX. CTS.
ZP1	PURLIN	Z15019	AT 600 MAX. CTS. + 1 ROW OF BRIDGING



PERSPECTIVE 3D - BUILDING VIEW 1

Rev	Description	Date	Approved
B	ISSUE FOR CONSTRUCTION	11.11.2021	DMc
A	ISSUE FOR CONSTRUCTION	19.04.2021	DMc

Scales: 0 10 20 30 40 50mm
1:1 @ A1

North

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Client: BRINDABELLA CHRISTIAN COLLEGE

Sch 2.2(a)(xi)

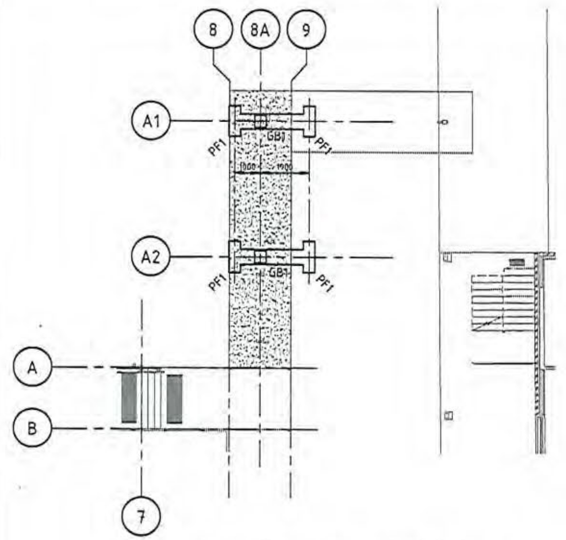
Status: FOR CONSTRUCTION

Original Size	A1	Drawn by	Drafting Check
Date Plotted		Designed by	Design Check
Coordinate System		Approved	Approved Date
Height Datum		Approved Signature	

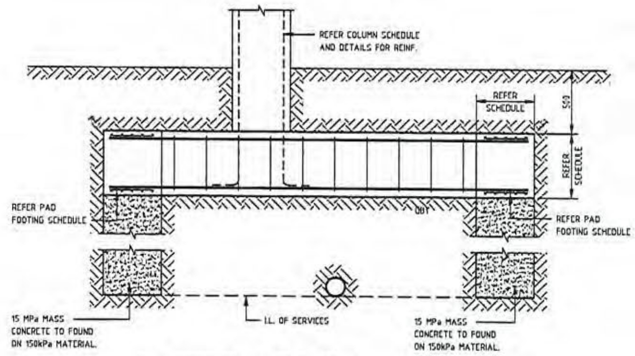
Project Name and Location: BRINDABELLA CHRISTIAN COLLEGE
136 BRIGALOW STREET, LYNEHAM ACT 2602

Drawing Title: BUILDING LINK FRAMING MARKING PLANS

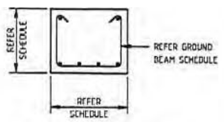
Project Number	Type	Discipline	Sub-Discipline	Dwg No	Rev
191504	DWG	STR	00	1000	B



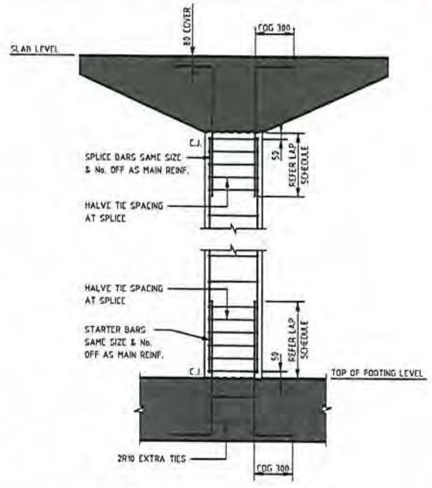
LINK BRIDGE FOOTING MARKING PLAN
SCALE 1:100



PAD FOOTING/GROUND BEAM DETAIL (PF1/GB1)
SCALE 1:20

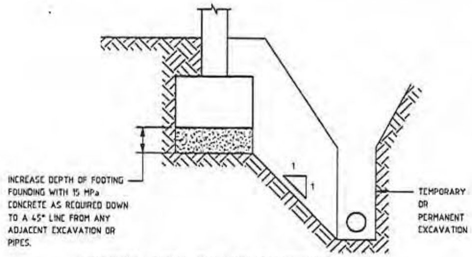


GROUND BEAM SECTION (GB1)
SCALE 1:20



TYPICAL COLUMN CC1 DETAIL
SCALE 1:20

TYPICAL COLUMN CC1 SECTION
SCALE 1:20



FOOTING ADJACENT EXCAVATION DETAIL
N.T.S

GENERAL ARRANGEMENT LEGEND

(symbol)	INDICATES COLUMN NUMBER.
(symbol)	INDICATES LOADBEARING WALL OR COLUMN OVER.
GB1/PF1	INDICATES FOOTING TYPE. REFER TO SCHEDULE FOR DETAILS.
(hatch)	INDICATES BASE OF PAD FOOTING TO BE LOWERED TO SUIT DEPTH OF ADJACENT FOOTING EXCAVATION.

NOTES:
- REFER TO DRAWING No. 0001 FOR CONSTRUCTION NOTES.
- SELLICK CONSULTANTS TO BE ADVISED IF MINIMUM BEARING CAPACITY NOT ACHIEVED
- ALL FOOTING MATERIAL TO BE INSPECTED BY GEOTECHNICAL ENGINEER AND BEARING PRESSURE TO BE CONFIRMED.

PAD FOOTING SCHEDULE

MARK	WIDTH	LENGTH	DEPTH	REINFORCEMENT	CONC. STRENGTH
PF1	450	1200	500	5L12TM TOP & BTM.	32MPa

GROUND BEAM SCHEDULE

MARK	WIDTH	DEPTH	REINFORCEMENT	CONC. STRENGTH
GB1	600	500	4N24 BTM. + 2N24 TOP + N12-250 OPEN TIES	32MPa

RC COLUMN SCHEDULE

MARK	TYPE	SIZE	REMARKS	CONC. STENGTH
CC1	RC COLUMN	450x450	8N24 VERT. + N12-300 TIES	32MPa

Rev	Description	Date	Approved
A	ISSUE FOR CONSTRUCTION	01.11.2021	DMc

Scales: As indicated @ A1

North

DO NOT SCALE OFF DRAWINGS. VERIFY ALL DIMENSIONS ON SITE PRIOR TO WORK

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Client: BRINDABELLA CHRISTIAN COLLEGE
Architect: Sch 2.2(a)(xi)

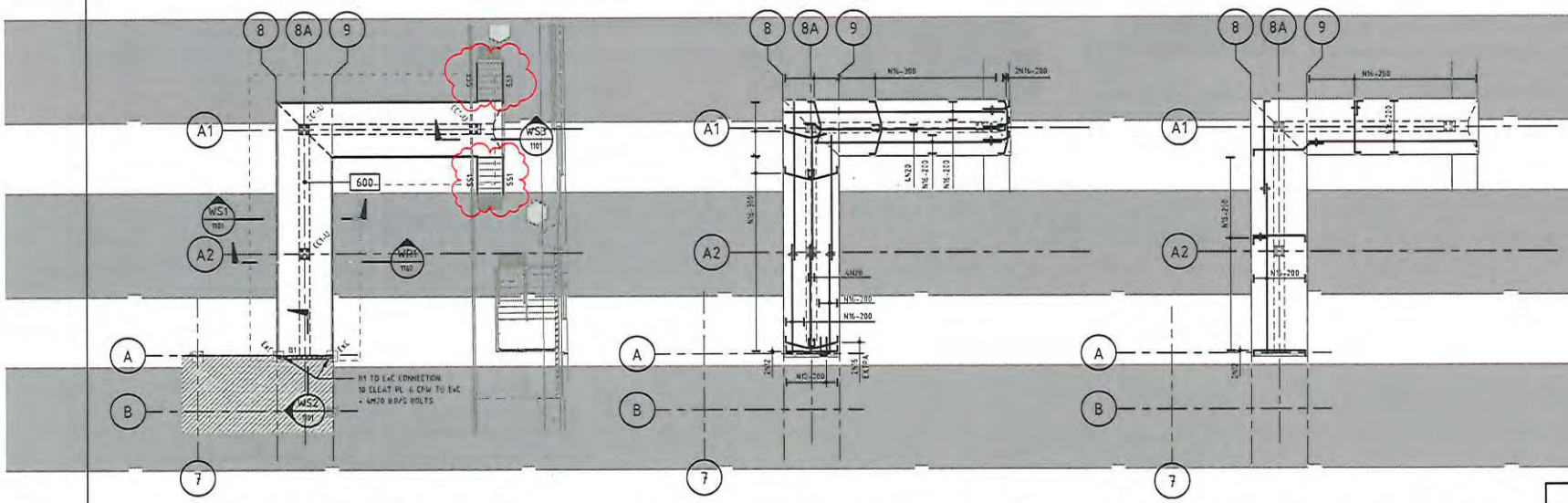
Status: FOR CONSTRUCTION

Original Size	A1	Drawn By		Drafting Check	
Date Plotted		Designed By		Design Check	
Coordinate System		Approved		Approved Date	
Height Datum		Approved Signature			

Project Name and Location: BRINDABELLA CHRISTIAN COLLEGE
136 BRIGALOW STREET, LYNEHAM ACT 2602

Drawing Title: LINK BRIDGE FOOTING MARKING PLAN & DETAILS

Project Number	Type	Discipline	Sub-Discipline	Drg No.	Rev
191504	DWG	STR	00	1100	A



LINK BRIDGE WALKWAY MARKING PLAN

SCALE 1 : 100

LINK BRIDGE WALKWAY BOTTOM REINFORCEMENT PLAN

SCALE 1 : 100

LINK BRIDGE WALKWAY TOP REINFORCEMENT PLAN

SCALE 1 : 100

GENERAL ARRANGEMENT LEGEND

F'c = 32MPa

- INDICATES COLUMN NUMBER.
- INDICATES COLUMN NUMBER UNDER.
- INDICATES LOADBEARING WALL OR COLUMN OVER.
- INDICATES LOADBEARING WALL OR COLUMN UNDER.
- INDICATES LOADBEARING WALL OR COLUMN UNDER & OVER.
- 200 INDICATES SLAB/BAND BEAM THICKNESS OVERALL U.N.O.
- 100 INDICATES STEP IN SLAB.
- INDICATES FLOOR PENETRATION LOCATION IN SLAB.
- INDICATES HYDRAULIC CAST-IN SLEEVE ZONE.
- INDICATES EXTENT AND SPAN DIRECTION OF BONDEK METAL FORMWORK DECKING WHICH ON OPPOSITE SIDES OF THE CONVENTIONALLY FORMED BANDS, SITE INSTALLERS NEED TO ENSURE BONDEK PANS ALIGN SO THE POST TENSIONING CAN REMAIN STRAIGHT AND ACHIEVE THE CORRECT LOW POINT DRAPE.
- INDICATES SHEAR CONNECTORS, REFER TO DRAWING No. 9201 FOR DETAILS.

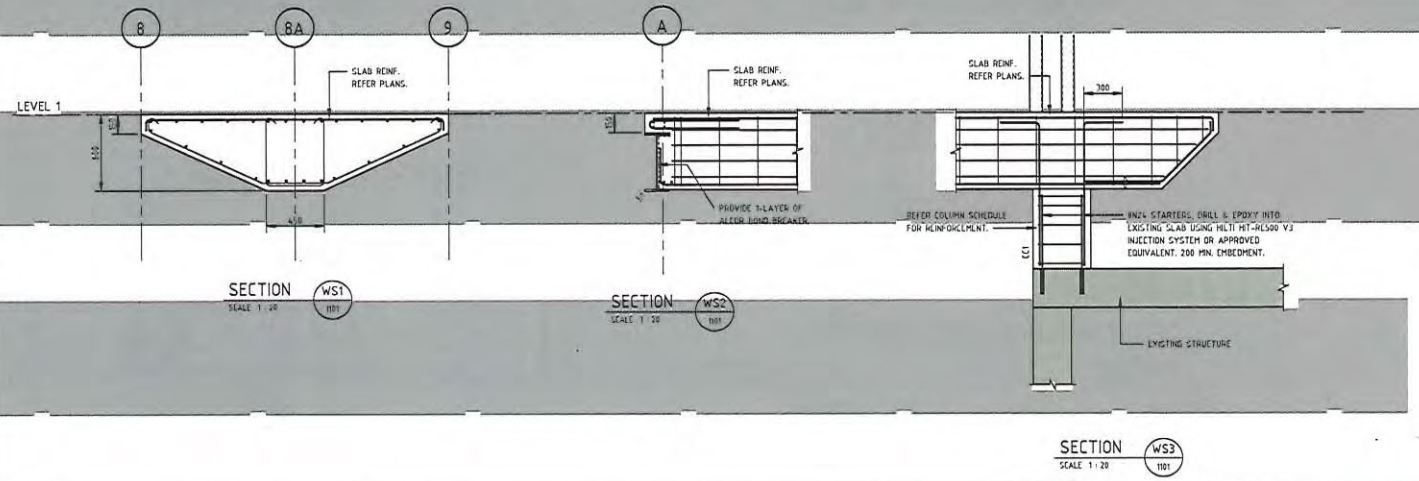
NOTES:
REFER TO DRAWING No. 0001 FOR CONSTRUCTION NOTES.
REFER TO ARCHITECT'S DRAWINGS FOR LOCATION & SETOUT OF ALL SLAB EDGES, COLUMNS, WALLS, NOGS, SETDOWNS etc.

RC COLUMN SCHEDULE

MARK	TYPE	SIZE	REMARKS	CONC. STENGTH
EC1	RC COLUMN	450x450	8N24 VERT. + N12-200 TIES	32MPa

STEEL MEMBER SCHEDULE

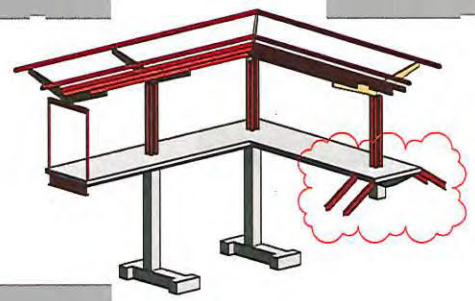
MARK	TYPE	SIZE	REMARKS
B1	BEAM	460UB67.1	
SS1	STAIR STRINGER	250PFC	



SECTION WS1 1101
SCALE 1 : 20

SECTION WS2 1101
SCALE 1 : 20

SECTION WS3 1101
SCALE 1 : 20



PERSPECTIVE 3D - LINK BRIDGE

Rev	Description	Date	Approved
B	ISSUE FOR CONSTRUCTION	11.01.2023	DMI
A	ISSUE FOR CONSTRUCTION	12.11.2021	DMI

Scales: As Indicated @ A1

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Client: BRINDABELLA CHRISTIAN COLLEGE

Architect

Sch 2.2(a)(xi)

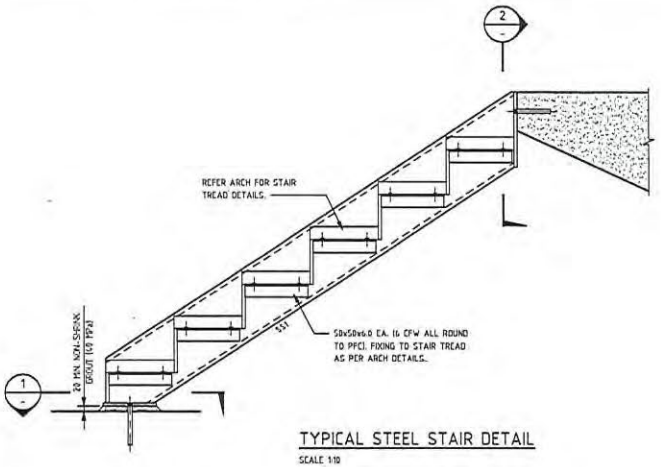
Status: FOR CONSTRUCTION

Original Size	A1	Drawn By	Drafting Check
Date Plotted		Designed By	Design Check
Coordinate System		Approved	Approved Date
Height Datum		Approved Signature	

Project Name and Location: BRINDABELLA CHRISTIAN COLLEGE
136 BRIGALOW STREET, LYNEHAM ACT 2602

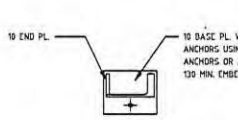
Drawing Title: LINK BRIDGE WALKWAY MARKING PLANS & DETAILS

Project Number	Type	Discipline	Sub-Discipline	Drg No.	Rev
191504	DWG	STR	00	1101	B



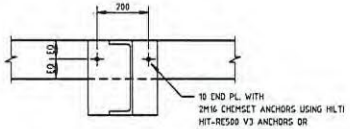
TYPICAL STEEL STAIR DETAIL

SCALE 1:10



SECTION 1

SCALE 1:10



SECTION 2

SCALE 1:10

Rev	Description	Date	Approved
A	ISSUE FOR CONSTRUCTION	11.01.2023	DMc

Scales: 1 : 10 @ A1

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Client: BRINDABELLA CHRISTIAN COLLEGE

Architect: Sch 2.2(a)(xi)

Status: FOR CONSTRUCTION

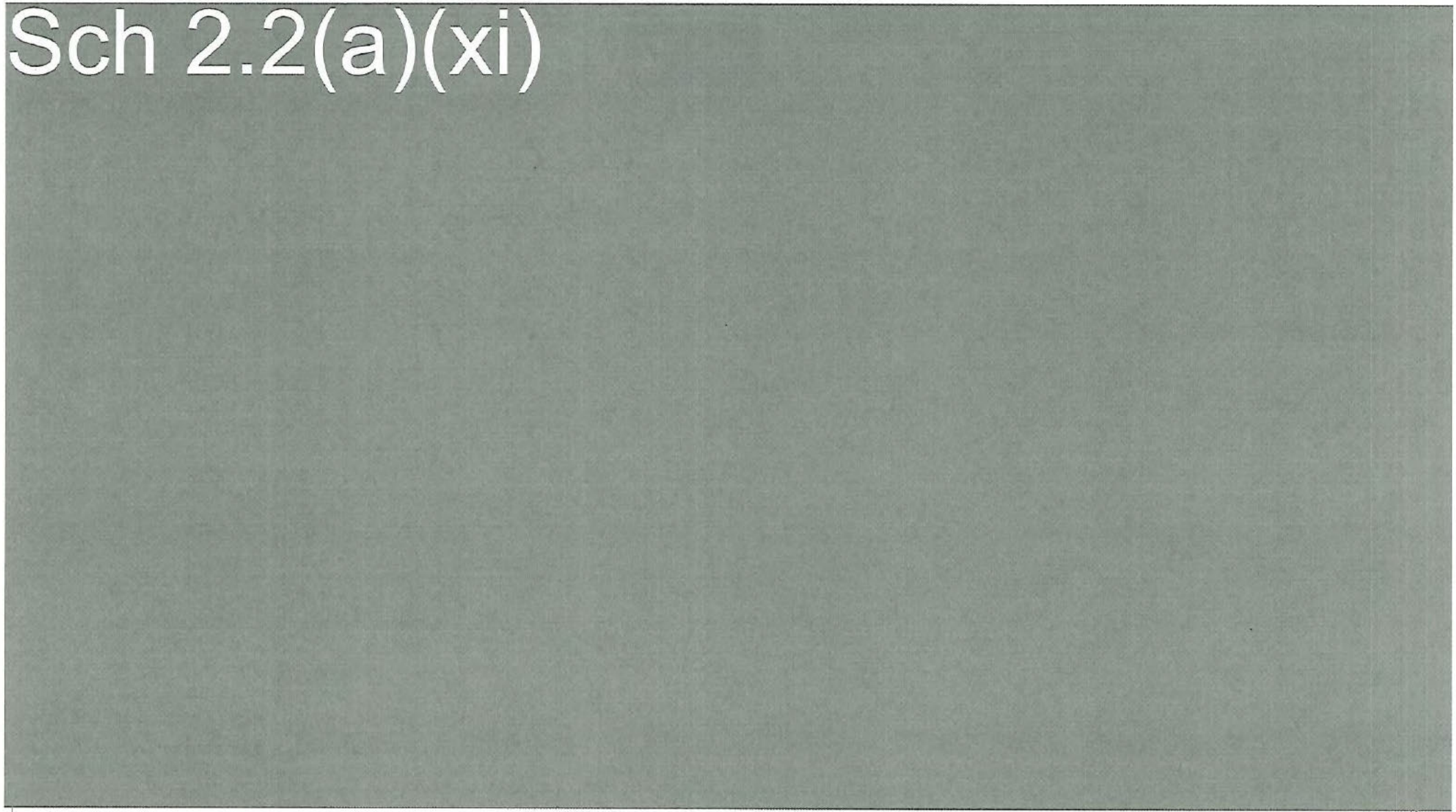
Original Size	A1	Drawn By	Drafting Check
Date Plotted		Designed By	Design Check
Coordinate System		Approved	Approved Date
Height Datum		Approved Signature	

Project Name and Location: BRINDABELLA CHRISTIAN COLLEGE
136 BRIGALOW STREET, LYNEHAM ACT 2602

Drawing Title: LINK BRIDGE WALKWAY STAIR DETAILS

Project Number	Type	Discipline	Sub-Discipline	Drg No.	Rev
191504	DWG	STR	00	1103	A

Sch 2.2(a)(xi)



SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	24.02.21	FOR CONSTRUCTION

Sch 2.2(a)(xi)

MINDABELLA CHRISTIAN COLLEGE

ENCOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

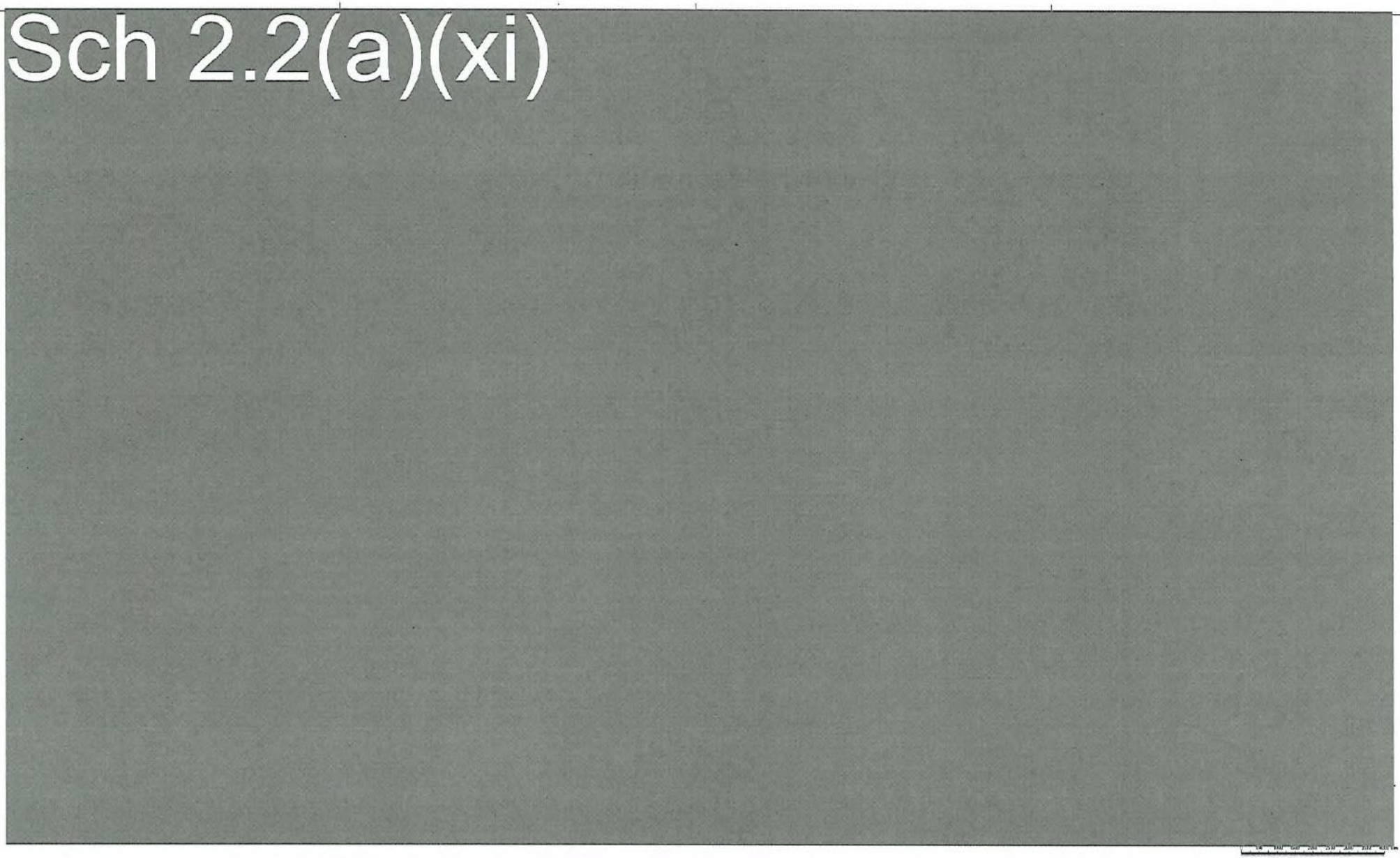
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: REFLECTED CEILING PLAN - GROUND FLOOR

Design Project Manager	Project Architect	Design Verifier
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A140	Amendment: A

Sch 2.2(a)(xi)



SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

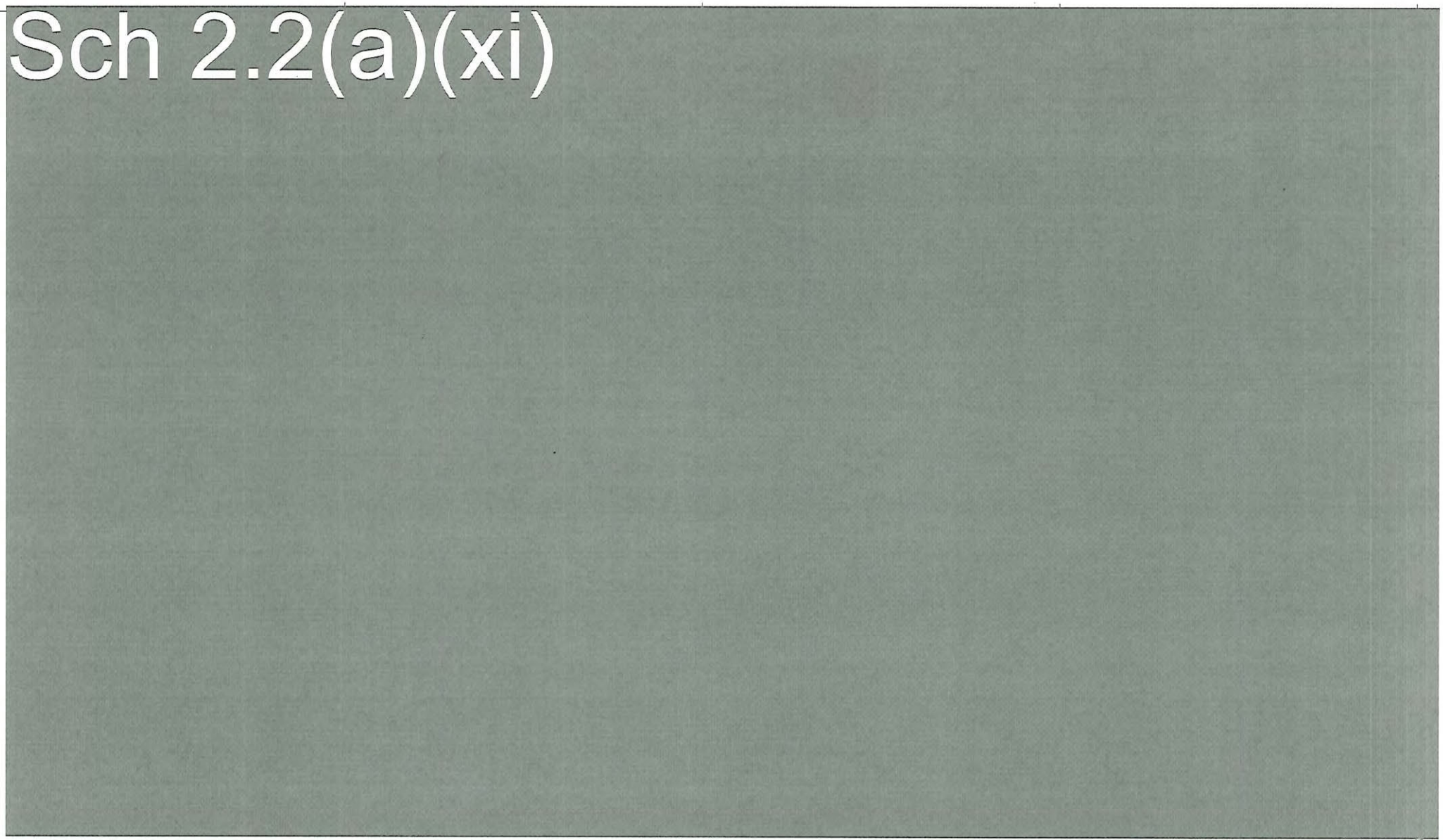
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: REFLECTED CEILING PLAN - LEVEL 1

Design Project Manager	Project Architect	Design Verifier
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A141	Amendment: A

Sch 2.2(a)(xi)



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SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Divison: LYNEHAM

Drawing Title:
Electrical - Data and Comms Layout - Level 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	
Project No:	Sheet No:	Amendment:

SCHEDULE

Sch 2.2(a)(xi)

REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

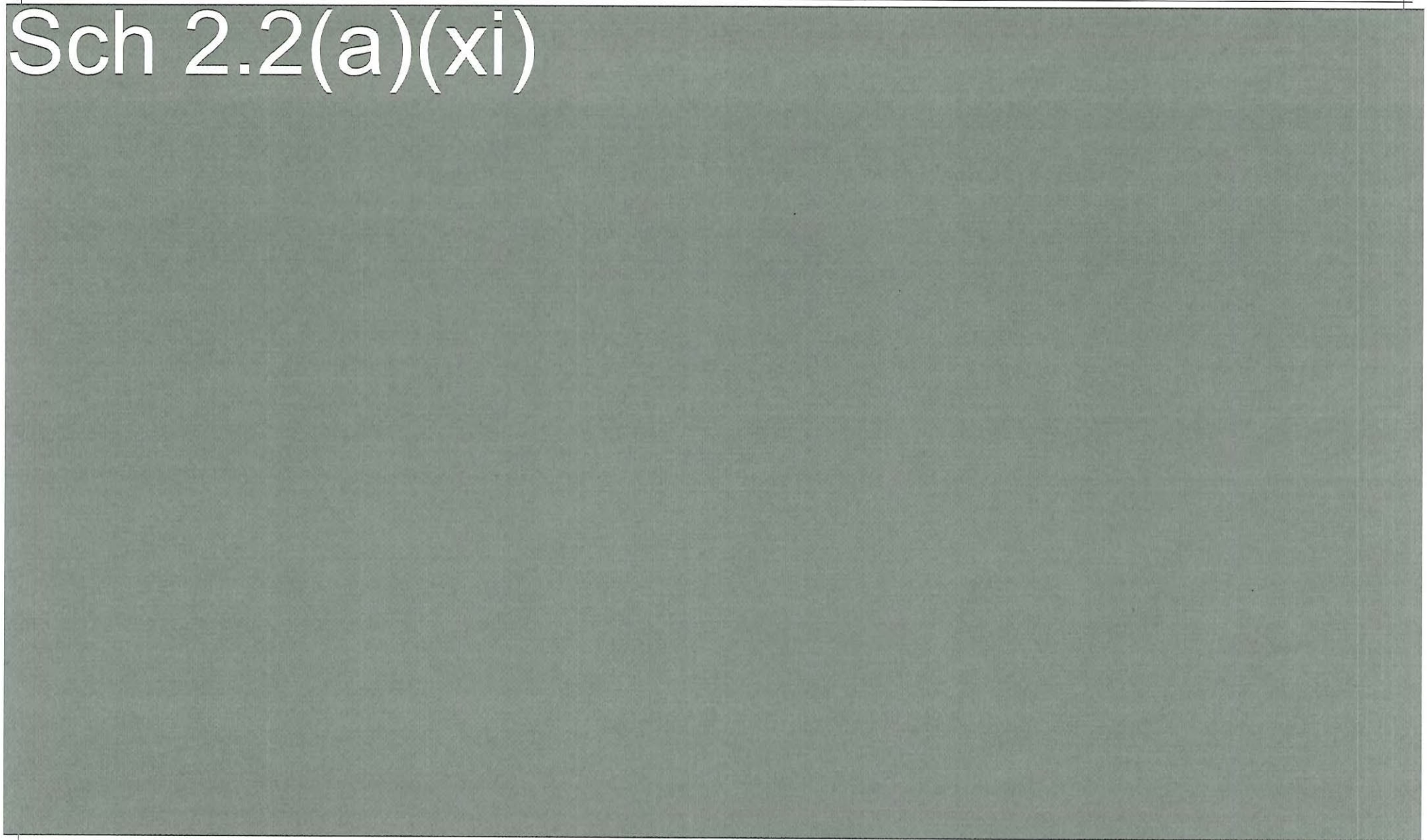
Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

Block:	Section:	Divison:
4	41	LYNEHAM

Drawing Title:
Electrical - Data and Comms
Ground Floor

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	SE
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)



REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

EX-SB Slim Blade slide connect exit

REL20 recessed emergency light d32 classification

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

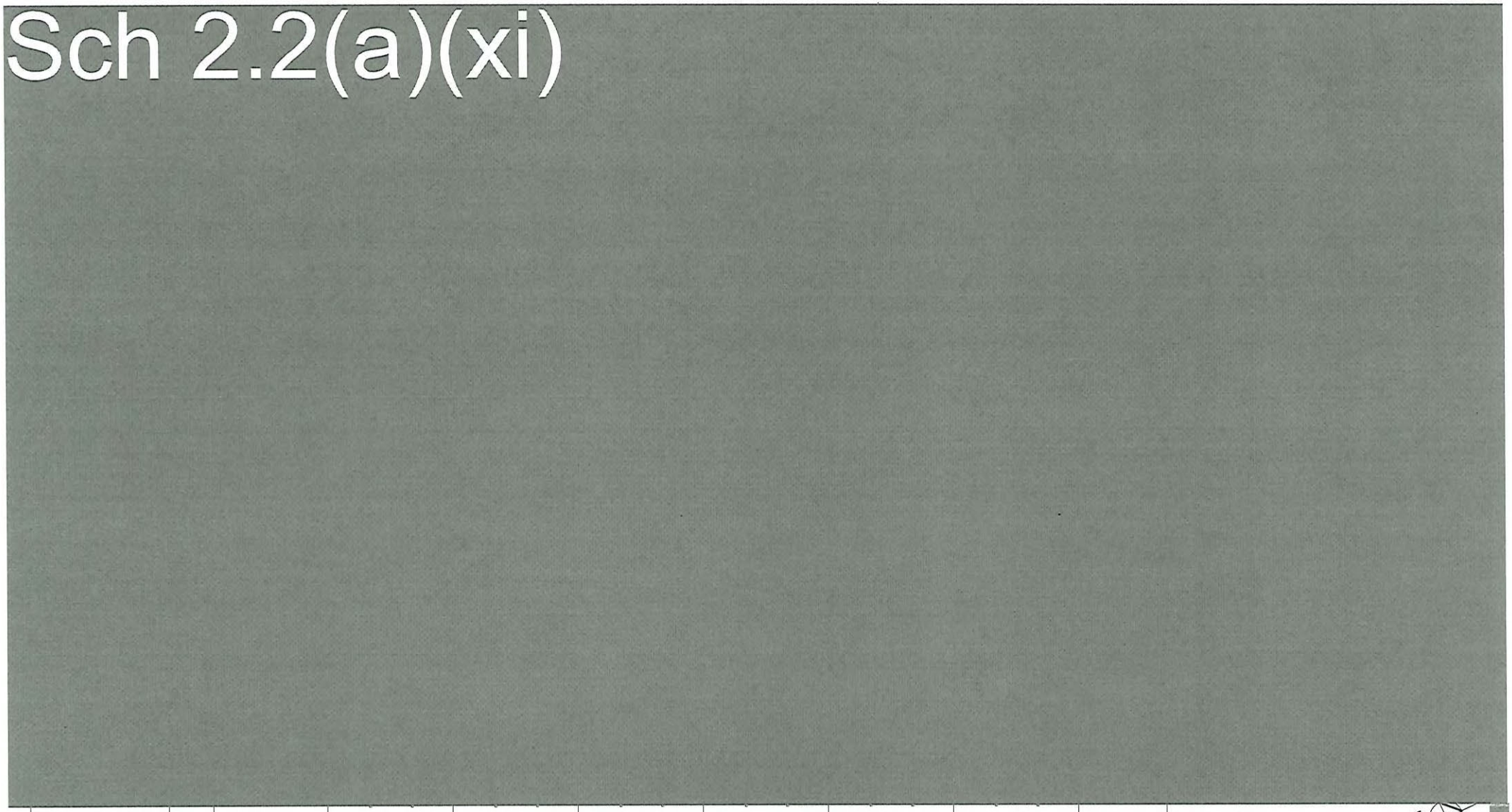
Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title:
Electrical - Emergency and Exit Lighting Ground Floor

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	SE
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)



500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

Project Status: For Building Approval

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Divison: LYNEHAM

Drawing Title: Electrical - Emergency and Exit Lighting Level 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)

0 500 1000 1500 2000 2500 3000 3500 4000 mm
SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
2	07.09.20	Building Approval

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: For Building Approval

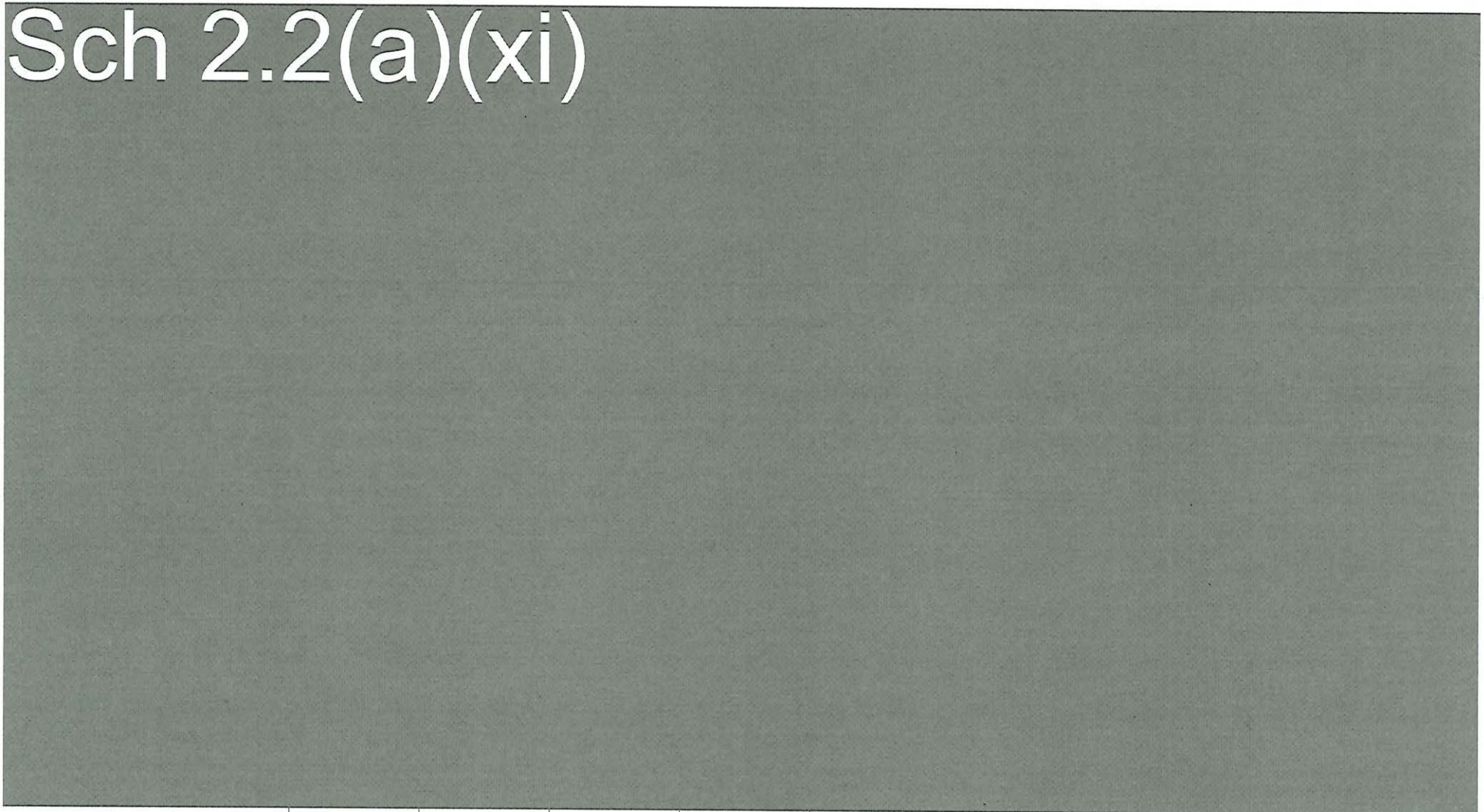
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

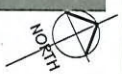
Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: Electrical - Lighting Layout - Ground Floor

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)





0 500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
2	07.09.20	Building Approval

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title:
Electrical - Lighting Layout - Level 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)

Sch 2.2(a)(xi)

[redacted]

0 500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: For Building Approval

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block:	Section:	Divison:
4	41	LYNEHAM

Drawing Title: Electrical - Power Layout - Level 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)

ISSUE	AMENDMENT	BY	DATE
		Sch 2.2(a)(ii)	
A	DESIGN PRELIMINARY		18.11.19
B	REVISED DECKING & LIFT		27.11.19
C	ADDED ELECTRICAL PLAN & REVISED DESIGN		16.03.20
D	ADDED PARAPET WALLS		02.04.20
E	REREVISED DP		12.05.20
F	REVISED FFL		29.05.20
G	REMOVED AMINITIES & OFFICE		29.05.2020
H	ADDED RAMP, LANDING & STAIRS BY CLIENT		22.07.2020
I	ADDED W1 UPSTAIRS & DELETED HANDRAILS		29.07.2020
J	ADDED NOTES		30.07.2020
K	REVISED GFL TO 571,250 & FLOORING THICK		06.08.2020
L	REDUCED THE ROOF'S RL TO SUIT MAX 4100		06.08.2020
M	REVISED ELECTRIC PLAN		10.09.2020
N	ADDED/AMENDED DETAILS		24.09.2020
P	UPDATED RLs		08.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDAT TYPICAL DETAILS		13.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE		19.10.2020
S	AMENDED DETAILS		26.10.2020
T	AS CLOUDED		09.11.2020

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)

Brindabella College

DATE 24.09.20

DRAWN BY TT

CHECKED BY DT

SCALE:

TITLE COVER PAGE

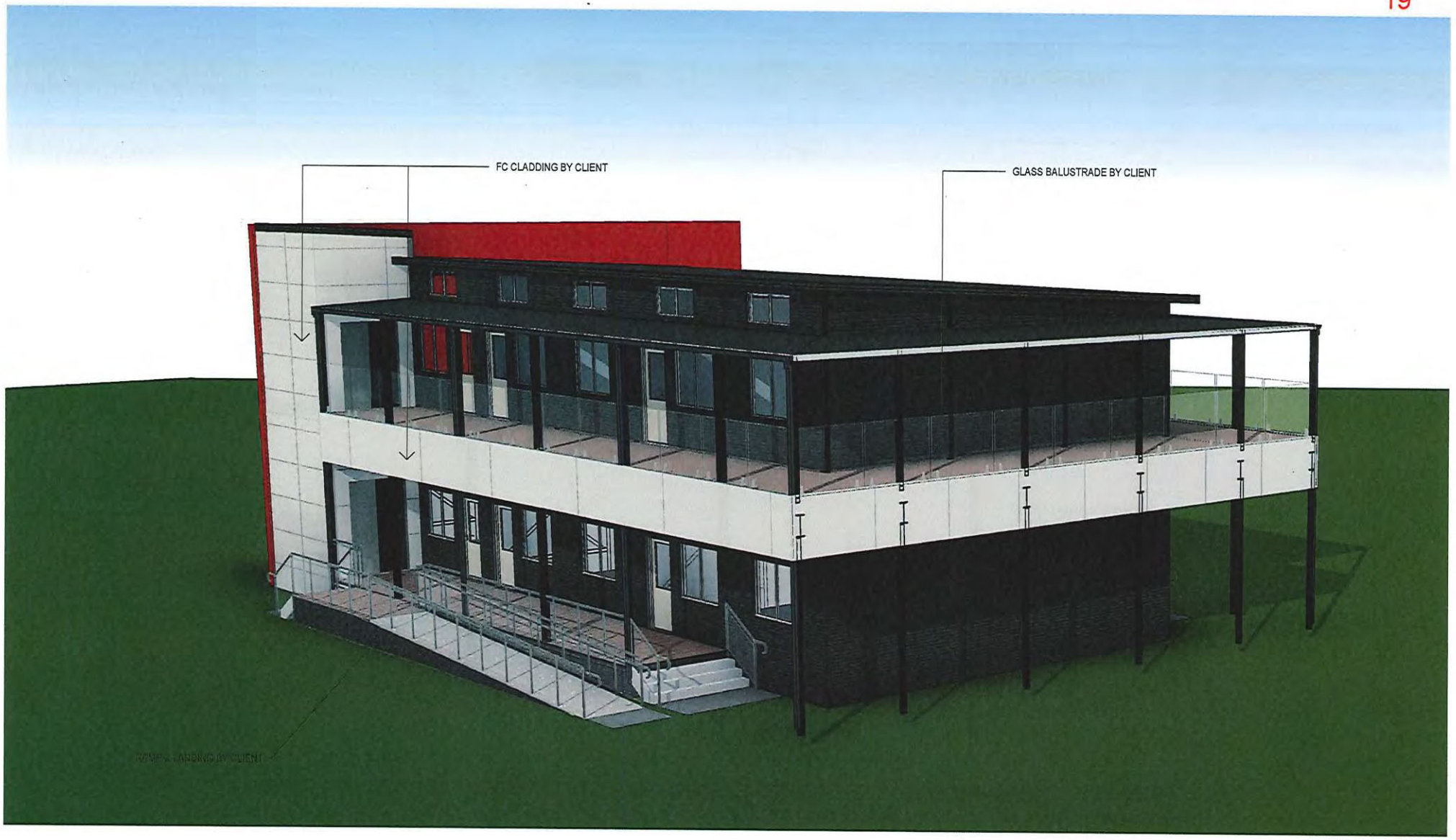
DRAWING NUMBER MS-200677- 000

BUILDING NUMBER

QUOTATION NUMBER 200677 REV T SHEET A3

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
M	REVISED ELECTRIC PLAN	TT	10.09.2020
L	REDUCED THE ROOF'S RL TO SUIT MAX 4100	TT	06.08.2020



Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)
Brindabella College

DATE 24.09.20

DRAWN BY TT

CHECKED BY DT

SCALE:

TITLE PERSPECTIVE

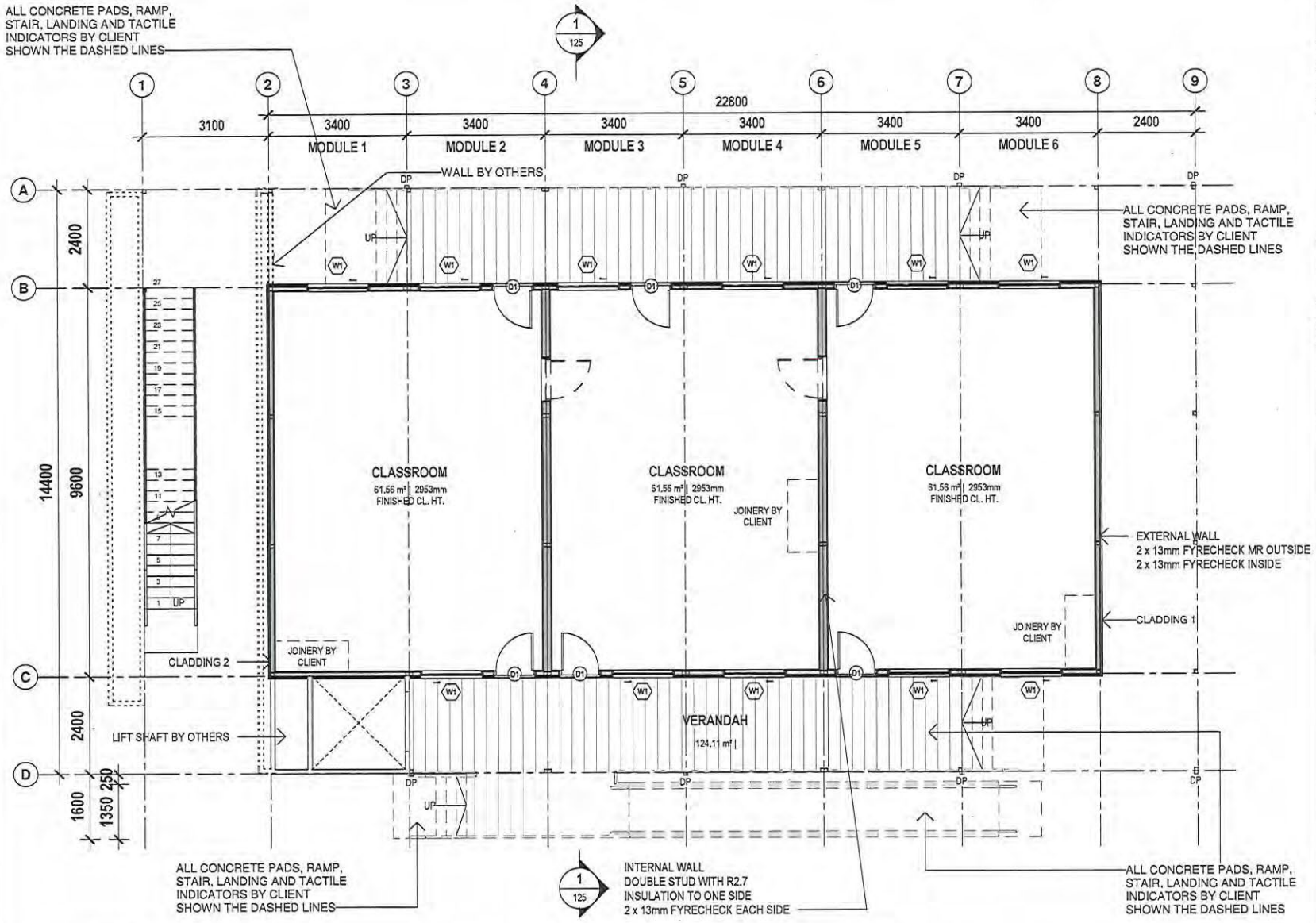
DRAWING NUMBER MS-200677- 001

BUILDING NUMBER

QUOTATION NUMBER 200677 REV T SHEET A3

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
F	REVISED FFL	TT	29.05.20



1 FLOOR PLAN
1 : 100

N 0 1 2 4 8m 1: 100

LEGEND

20

WINDOW SCHEDULE

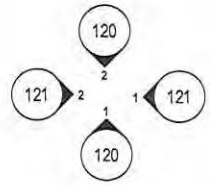
ITEM	DESCRIPTION	SILL HEIGHT	QTY
W1	Sliding Window: 1200H x 1496W	900	22
W2	Sliding Window: 600H x 1496W	2800	5

DOOR SCHEDULE

ITEM	DESCRIPTION	HEIGHT	QTY
D1	External Half Glass Door: 920W x 2040H	2088	12

LEGEND - KEYNOTE

DP DOWNPIPE



Sch 2.2(a)(ii)

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS/UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
H	ADDED RAMP, LANDING & STAIRS BY CLIENT	TT	22.07.2020

Sch 2.2(a)(ii)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

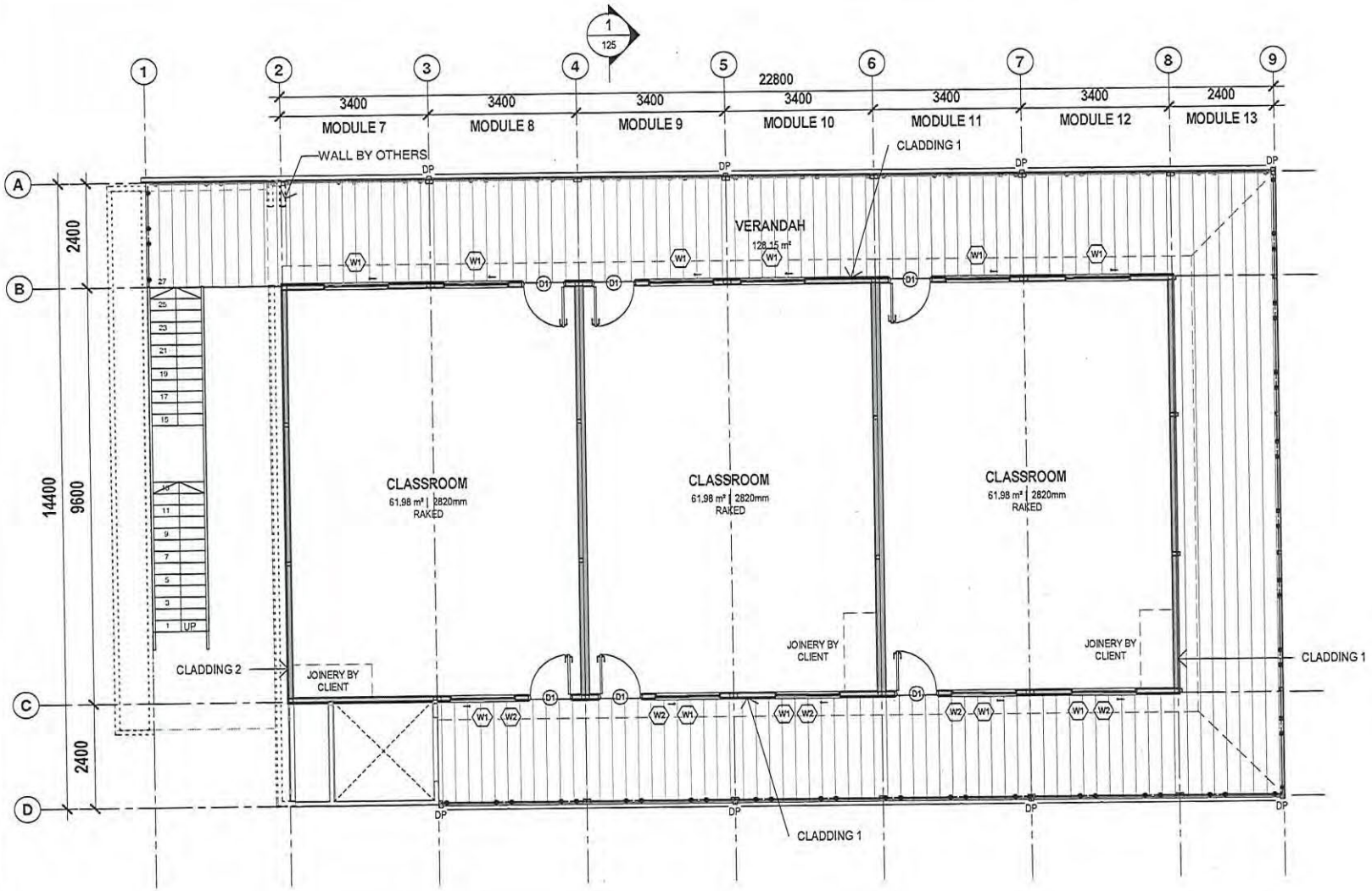
PROJECT
Sch 2.2(a)(xi)
Brindabella College

DATE 24.09.20
DRAWN BY TT
CHECKED BY DT
SCALE: 1 : 100

TITLE
GROUND FLOOR - GENERAL ARRANGEMENTS

DRAWING NUMBER MS-200677- 101
BUILDING NUMBER
QUOTATION NUMBER 200677
REV T
SHEET A3

9/11/2020 11:06:38 AM



LEGEND

WINDOW SCHEDULE

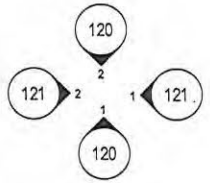
ITEM	DESCRIPTION	SILL HEIGHT	QTY
W1	Sliding Window: 1200H x 1496W	900	22
W2	Sliding Window: 600H x 1496W	2800	5

DOOR SCHEDULE

ITEM	DESCRIPTION	HEIGHT	QTY
D1	External Half Glass Door: 920W x 2040H	2088	12

LEGEND - KEYNOTE

DP DOWNPIPE



Sch 2.2(a)(ii)

N 0 1 2 4 8m 1:100

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
I	ADDED W1 UPSTAIRS & DELETED HANDRAILS	TT	29.07.2020

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)

Brindabella College

DATE 24.09.20

DRAWN BY TT

CHECKED BY DT

SCALE: 1 : 100

TITLE

LEVEL 1 - GENERAL ARRANGEMENTS

DRAWING NUMBER MS-200677- 102

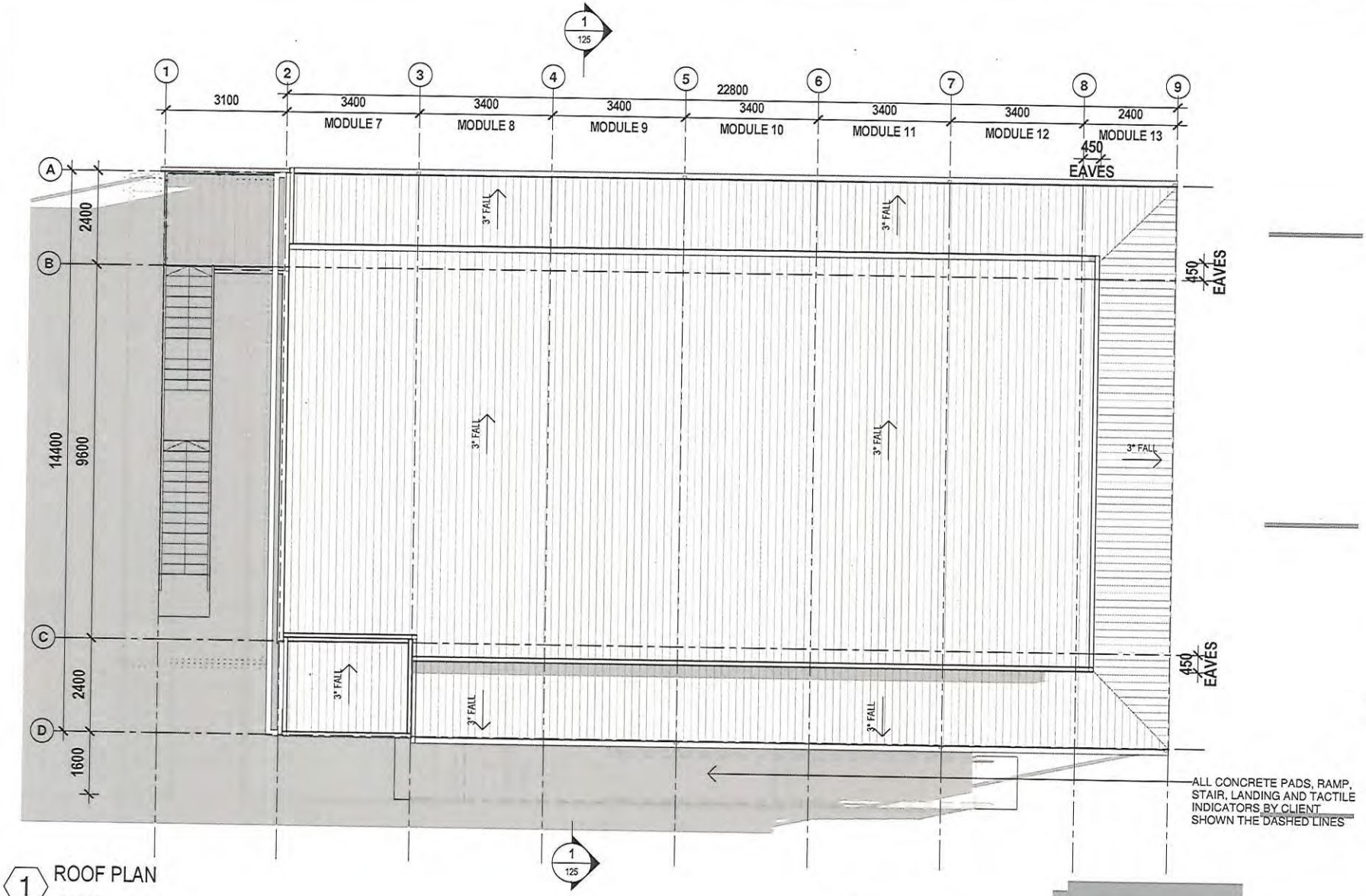
BUILDING NUMBER

QUOTATION NUMBER 200677

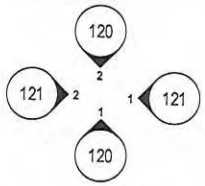
REV T

SHEET A3

9/11/2020 11:08:47 AM



1 ROOF PLAN
1 : 100



Sch 2.2(a)(ii)

N 0 1 2 4 8m
1 : 100

Sch 2.2(a)(xi)

LIENT APPROVAL

IGNATURE

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PROJECT
Sch 2.2(a)(xi)
Brindabella College

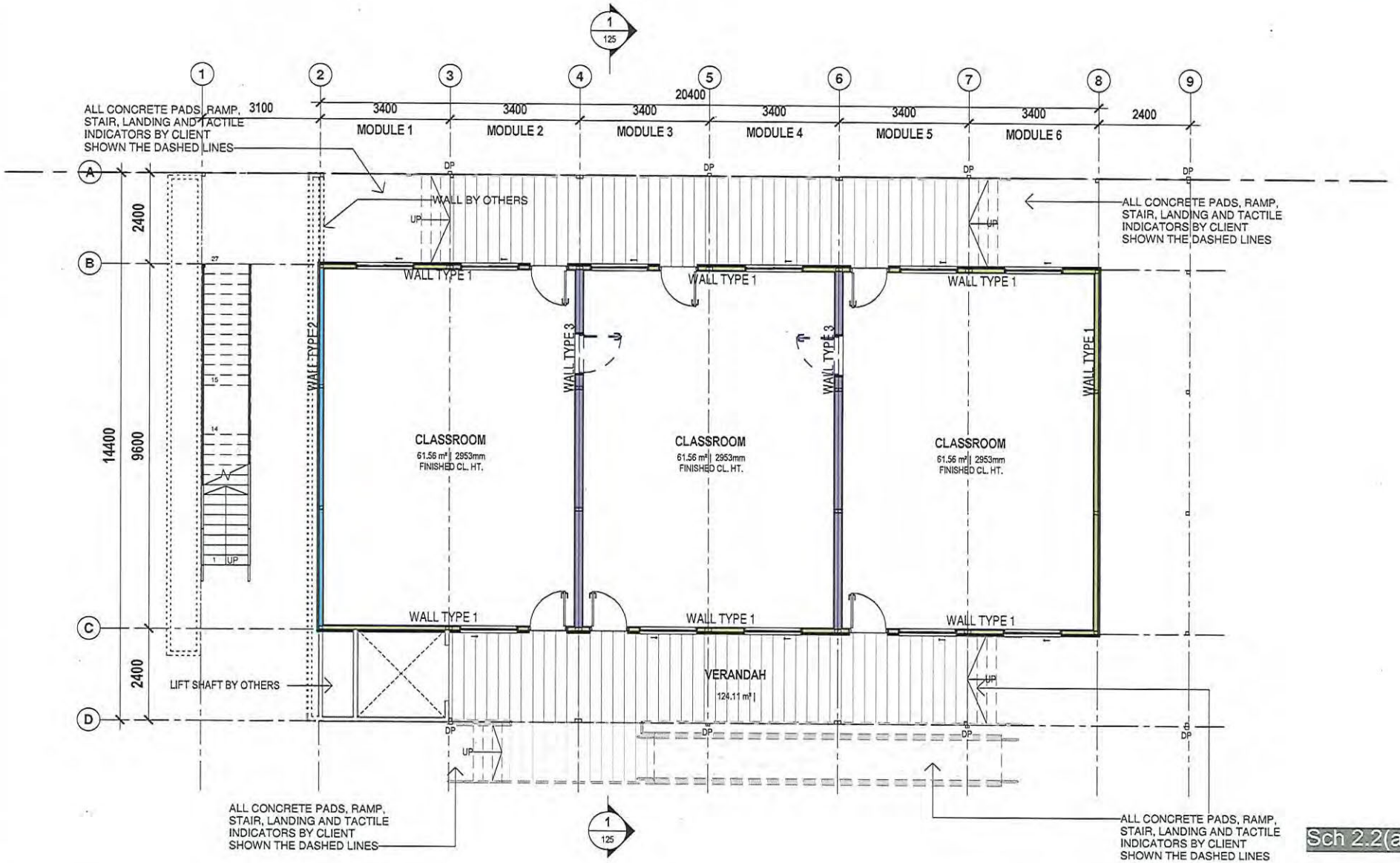
DATE	24.09.20
DRAWN BY	TT
CHECKED BY	DT
SCALE:	1 : 100

TITLE
ROOF PLAN

DRAWING NUMBER	MS-200677- 103
QUOTATION NUMBER	200677
BUILDING NUMBER	
REV	T
SHEET	A3

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
H	ADDED RAMP, LANDING & STAIRS BY CLIENT	TT	22.07.2020
E	REREVISED DP	TT	12.05.20



Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE .....

NAME .....

DATE .....

PROJECT

VAMOS GROUP
Brindabella College

DATE 24.09.20

DRAWN BY KM

CHECKED BY ML

SCALE: 1 : 100

TITLE

WALL TYPE PLAN - GROUND FLOOR

DRAWING NUMBER MS-200677- 106

BUILDING NUMBER

QUOTATION NUMBER 200677

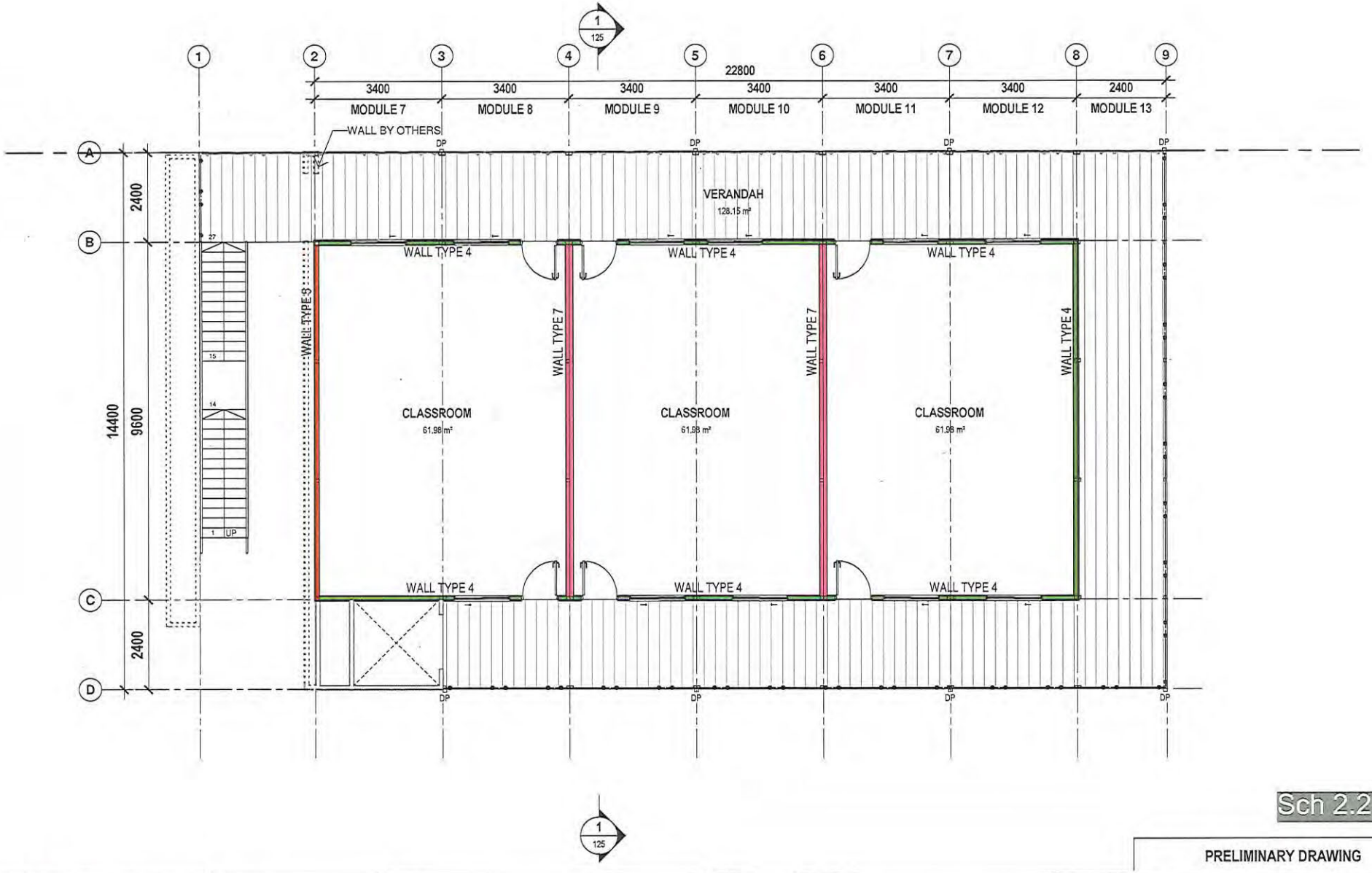
REV T

SHEET A3

9/11/2020 11:08:56 AM

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS,UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
G	REMOVED AMINITIES & OFFICE	TT	29.05.2020



Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)

Brindabella College

DATE 24.09.20

DRAWN BY KM

CHECKED BY ML

SCALE: 1 : 100

TITLE

WALL TYPE PLAN - FIRST FLOOR

DRAWING NUMBER MS-200677- 107

BUILDING NUMBER

QUOTATION NUMBER 200677

REV T

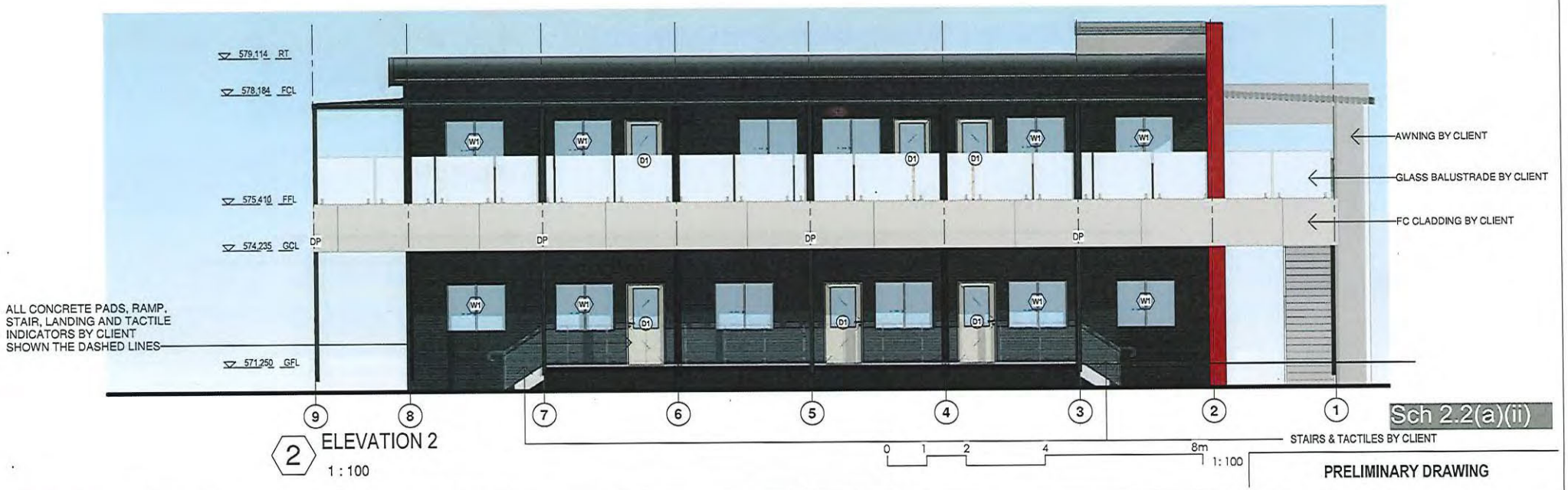
SHEET A3

9/11/2020 11:08:19 AM

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
I	ADDED W1 UPSTAIRS & DELETED HANDRAILS	TT	29.07.2020

1 ELEVATION 1
1 : 100



2 ELEVATION 2
1 : 100

Sch 2.2(a)(ii)

1 : 100

PRELIMINARY DRAWING

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT
Sch 2.2(a)(xi)
Brindabella College

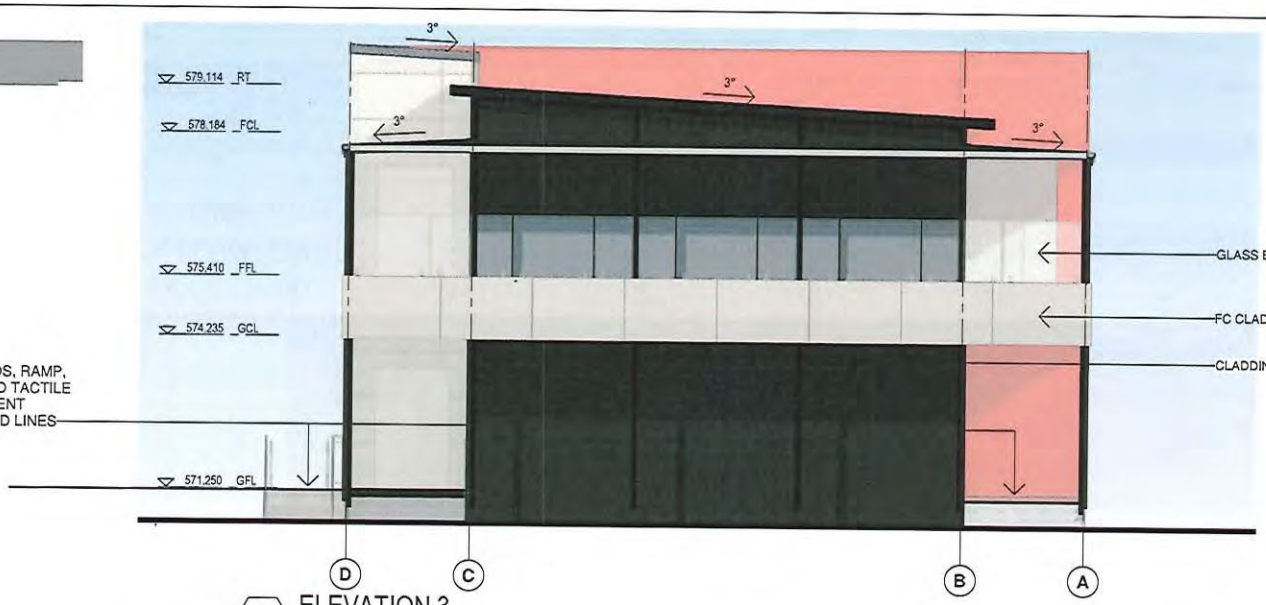
DATE	24.09.20
DRAWN BY	TT
CHECKED BY	DT
SCALE:	1 : 100

TITLE
EXTERNAL ELEVATIONS

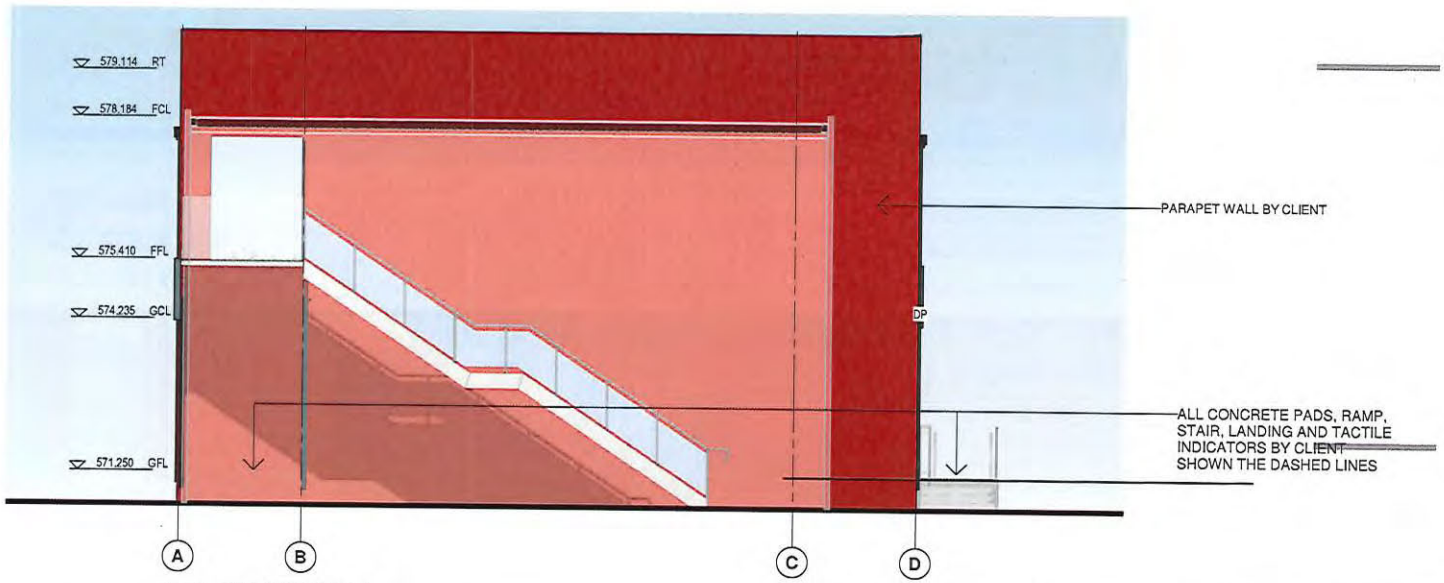
DRAWING NUMBER	MS-200677- 120
QUOTATION NUMBER	200677
BUILDING NUMBER	
REV	T
SHEET	A3

9/11/2020 11:09:02 AM

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
L	REDUCED THE ROOFS RL TO SUIT MAX 4100	TT	06.08.2020
K	REVISED GFL TO 571.250 & FLOORING THICKNESS	TT	06.08.2020



1 ELEVATION 3
1 : 100



2 ELEVATION 4
1 : 100

0 1 2 4 8m
1 : 100

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT
Sch 2.2(a)(xi)
Brindabella College

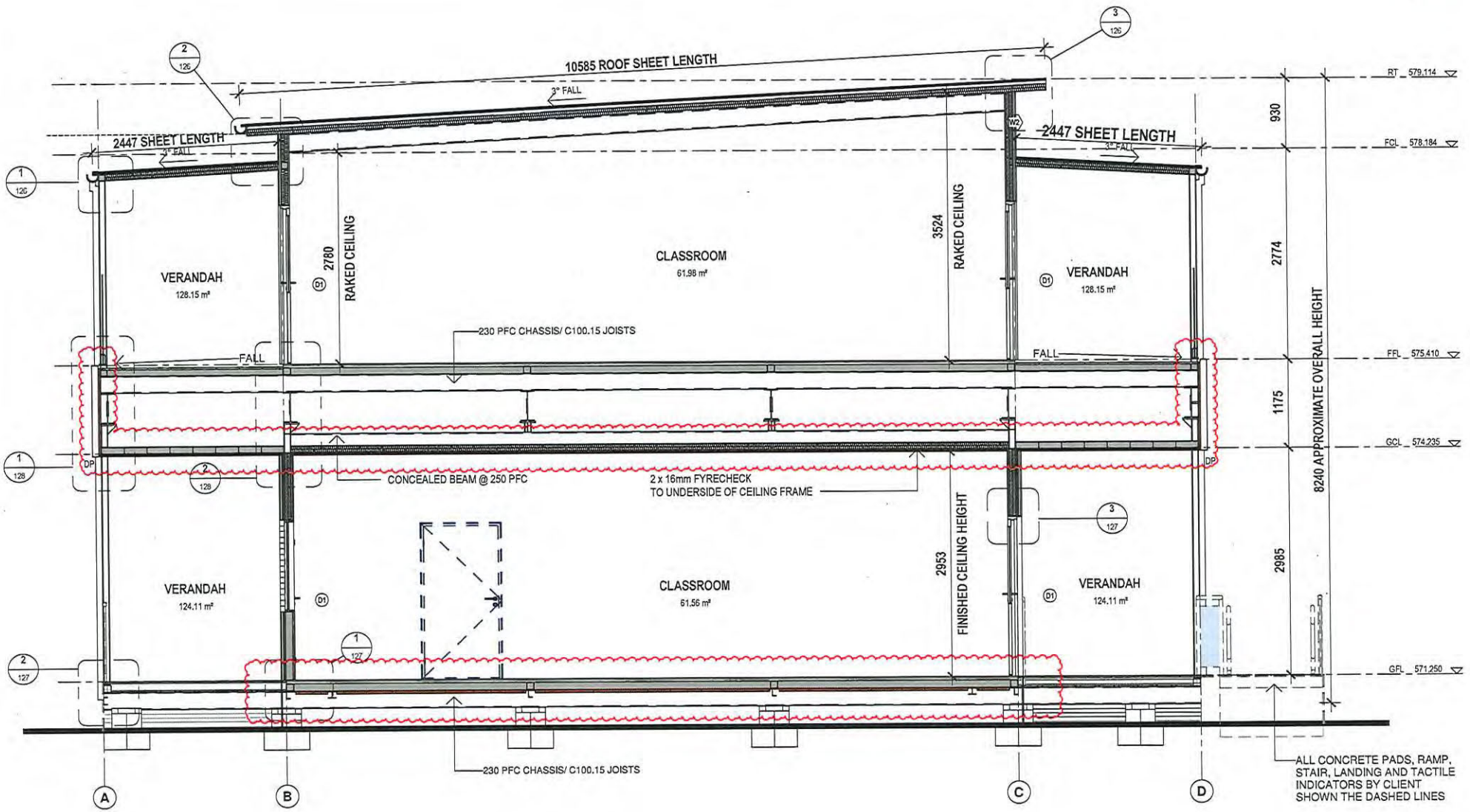
DATE 24.09.20
DRAWN BY TT
CHECKED BY DT
SCALE: 1 : 100

TITLE
EXTERNAL ELEVATIONS

DRAWING NUMBER MS-200677- 121
BUILDING NUMBER
QUOTATION NUMBER 200677
REV T
SHEET A3
9/11/2020 11:09:05 AM

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
L	REDUCED THE ROOF'S RL TO SUIT MAX 4100	TT	06.08.2020
K	REVISED GFL TO 571.250 & FLOORING THICKNESS	TT	06.08.2020



1 TYPICAL SECTION
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0 0.5 1 2 4m
1 : 50

NOTE: REFER TO FIRERAT Sch 2.2(a)(ii)

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
L	REDUCED THE ROOFS RL TO SUIT MAX 4100	TT	06.08.2020
K	REVISED GFL TO 571.250 & FLOORING THICKNESS	TT	06.08.2020

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

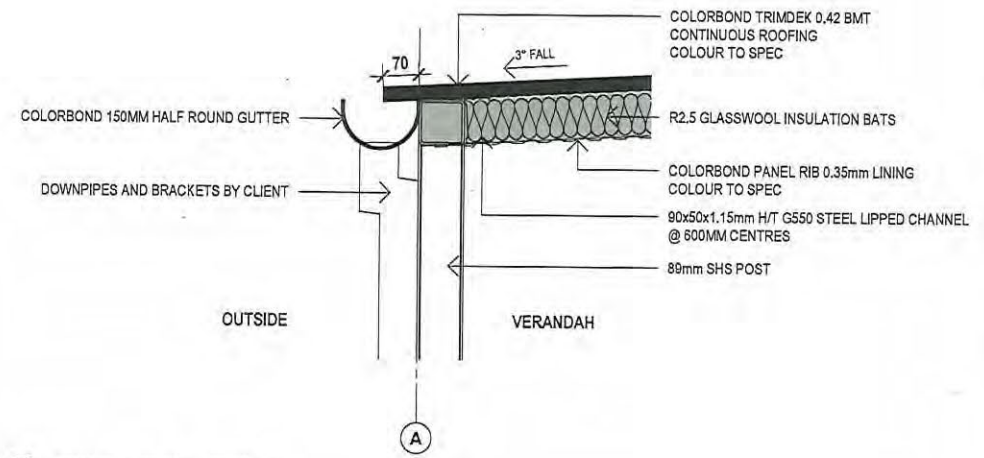
DATE .....

PROJECT
Sch 2.2(a)(xi)
Brindabella College

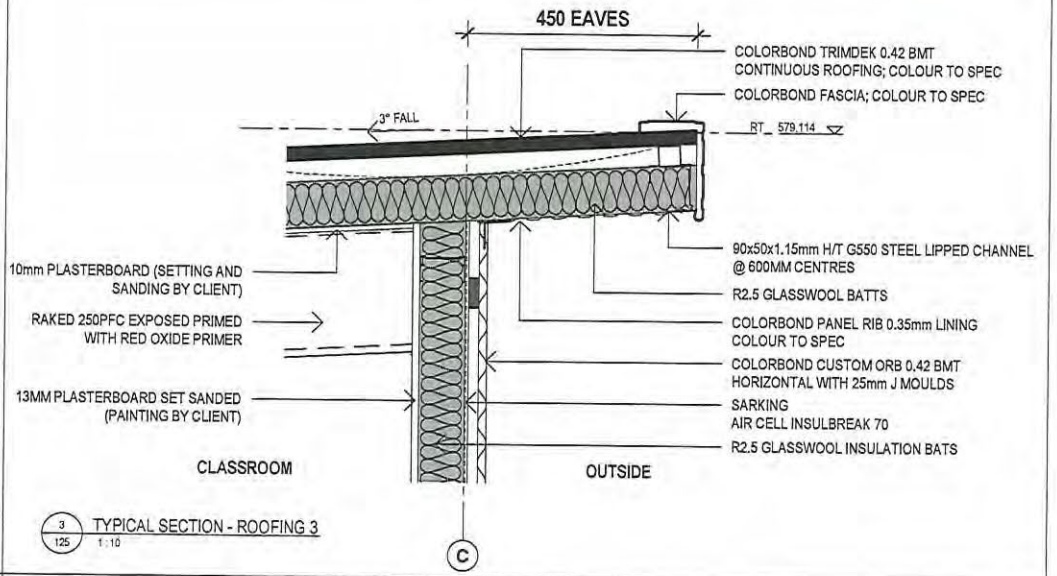
DATE 24.09.20
DRAWN BY TT
CHECKED BY DT
SCALE: 1 : 50

TITLE
SECTIONS

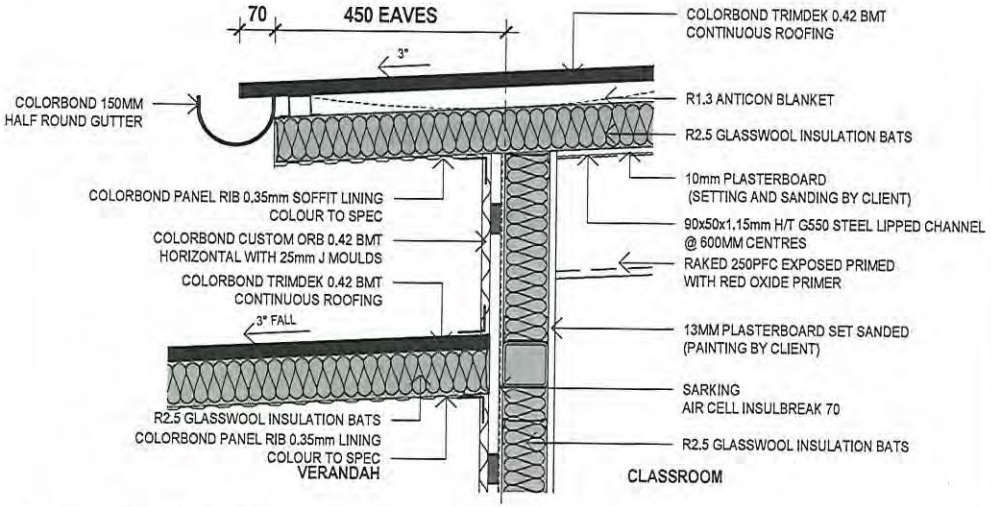
DRAWING NUMBER MS-200677- 125
QUOTATION NUMBER 200677
BUILDING NUMBER
REV T
SHEET A3



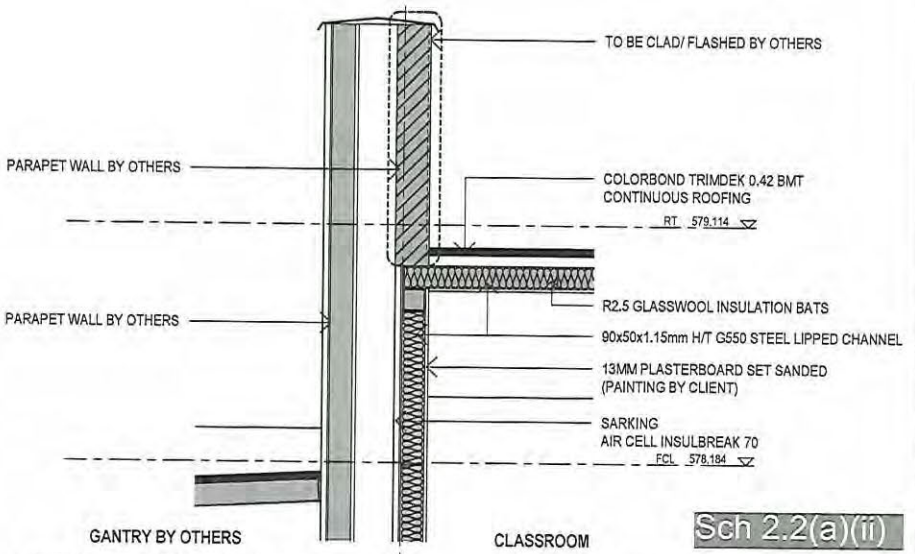
1/125 TYPICAL SECTION - ROOFING 1
1 : 10



3/125 TYPICAL SECTION - ROOFING 3
1 : 10



2/125 TYPICAL SECTION - ROOFING 2
1 : 10



4/125 TYPICAL SECTION - PARAPET/ EXTERNAL WALL
1 : 20

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT
Sch 2.2(a)(xi)
Brindabella College

DATE	24.09.20
DRAWN BY	KM
CHECKED BY	ML
SCALE	As Indicated

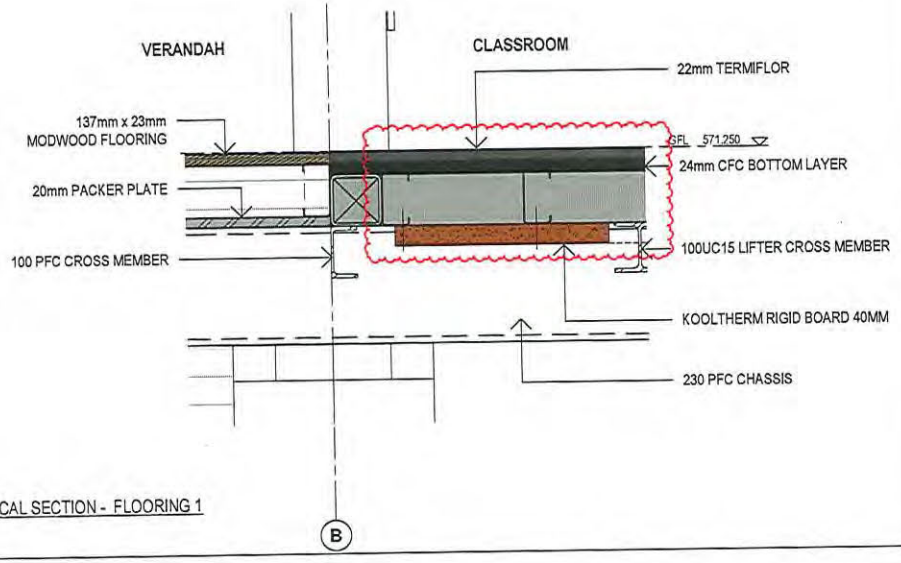
TITLE
TYPICAL DETAILS

DRAWING NUMBER	MS-200677- 126
BUILDING NUMBER	
QUOTATION NUMBER	200677
REV	T
SHEET	A3

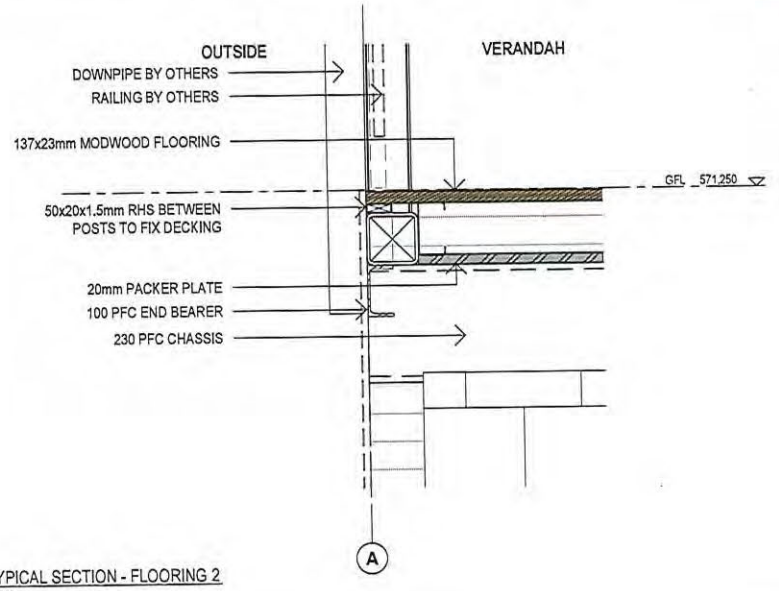
9/11/2020 11:09:11 AM

PRELIMINARY DRAWING

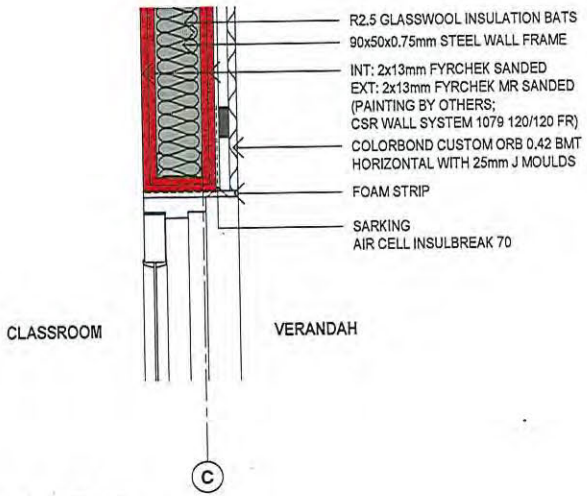
ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020



1/125 TYPICAL SECTION - FLOORING 1
1 : 10



2/125 TYPICAL SECTION - FLOORING 2
1 : 10



3/125 TYPICAL SECTION - EXT. DOOR/ WALL
1 : 10

Sch 2.2(a)(ii)

NOTE: REFER TO FIRERATING REPORT- TBC

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
O	AMENDED VERANDAH PACKER DETAILS	KM	29.09.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)

Brindabella College

DATE 24.09.20

DRAWN BY KM

CHECKED BY ML

SCALE: 1 : 10

TITLE

TYPICAL DETAILS

DRAWING NUMBER MS-200677- 127

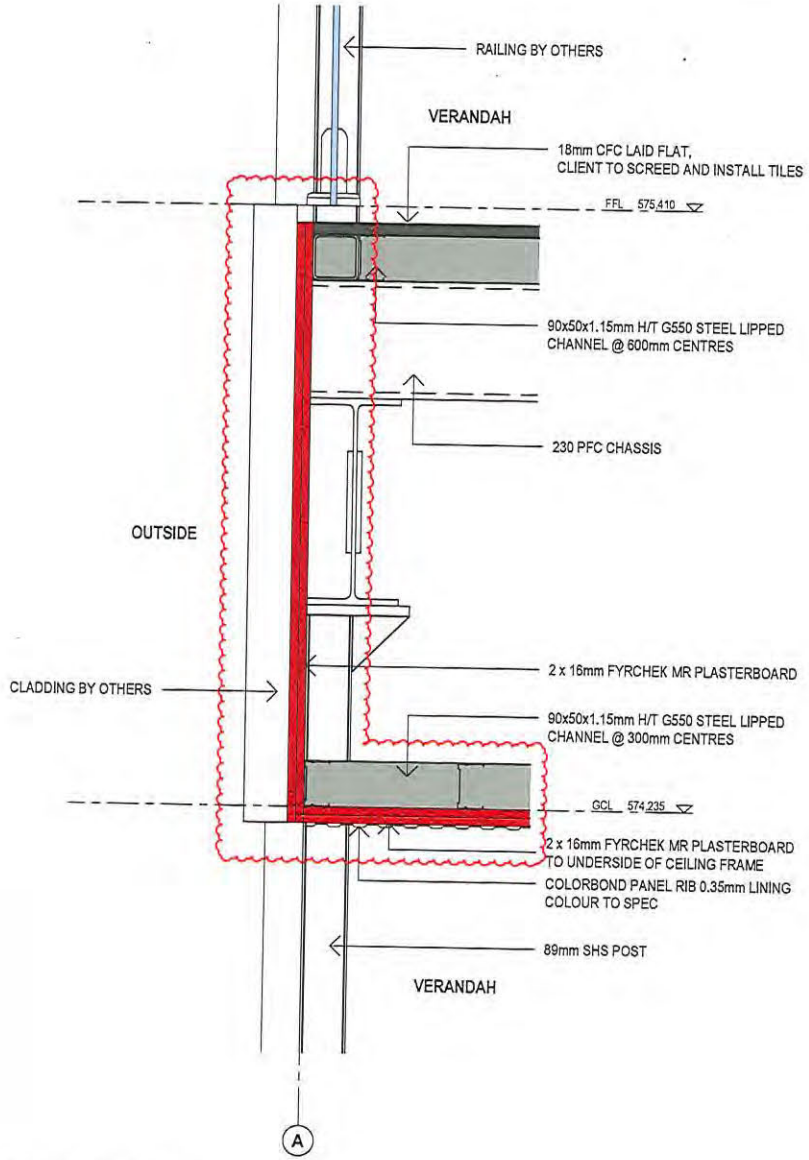
BUILDING NUMBER

QUOTATION NUMBER 200677

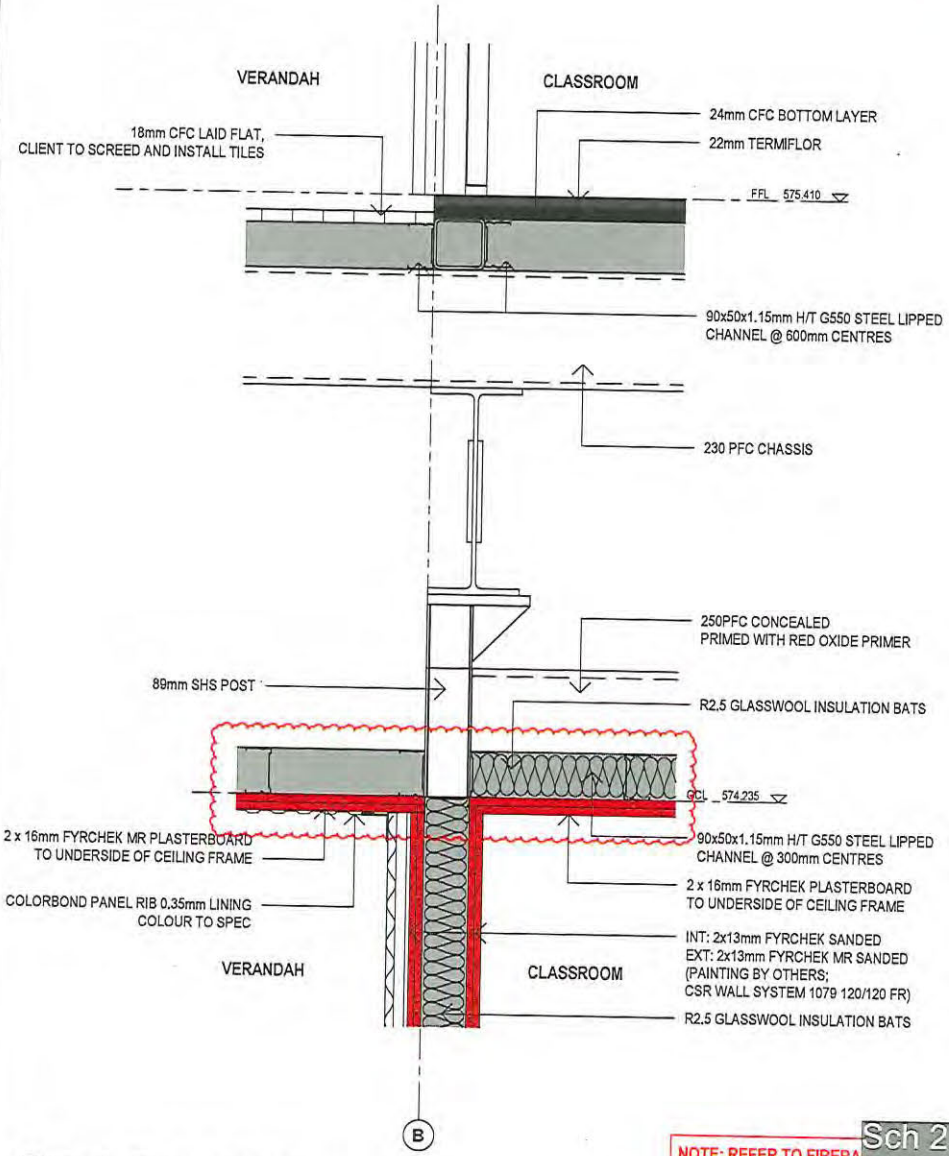
REV T

SHEET A3

9/11/2020 11:09:11 AM



1/125 TYPICAL SECTION - VERANDAH
1 : 10



2/125 TYPICAL SECTION - CLASSROOM
1 : 10

NOTE: REFER TO FIRERA

Sch 2.2(a)(ii)

Sch 2.2(a)(ii)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT
Sch 2.2(a)(ii)
Brindabella College

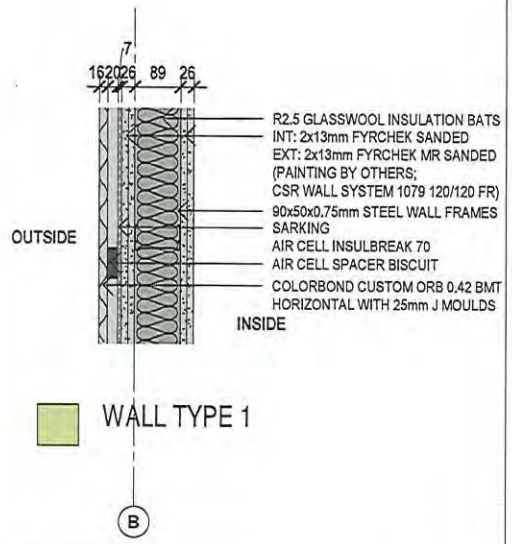
DATE 24.09.20
DRAWN BY KM
CHECKED BY ML
SCALE: 1 : 10

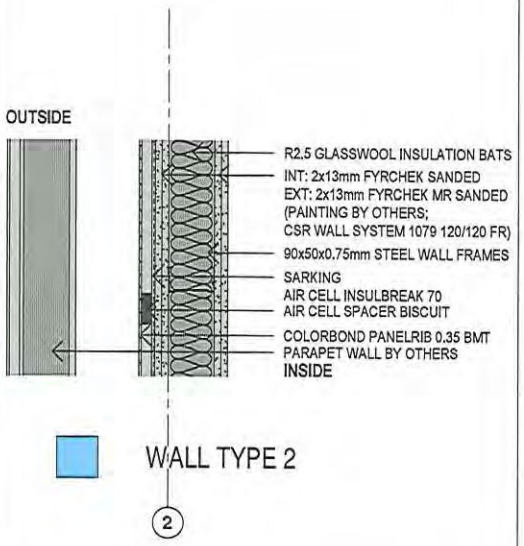
TITLE
TYPICAL DETAILS

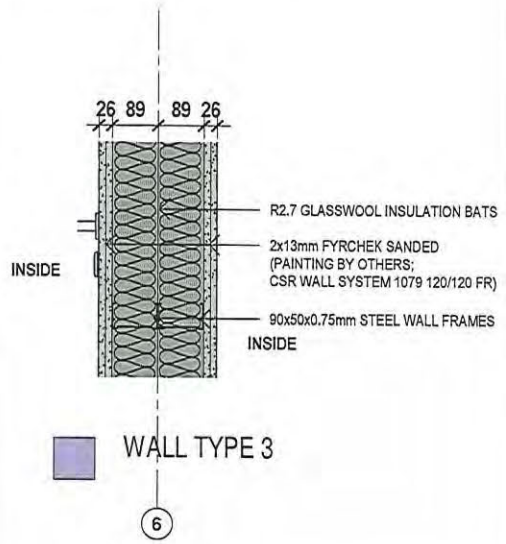
DRAWING NUMBER MS-200677- 128
BUILDING NUMBER
QUOTATION NUMBER 200677
REV T
SHEET A3

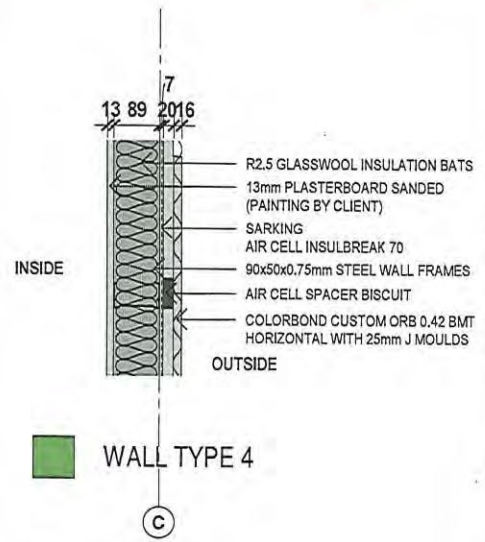
PRELIMINARY DRAWING

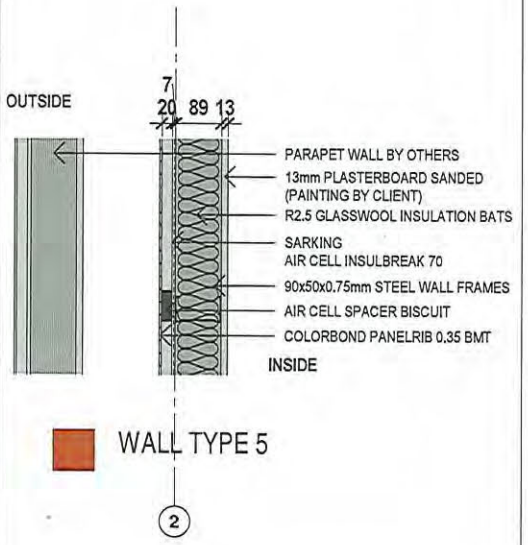
ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020



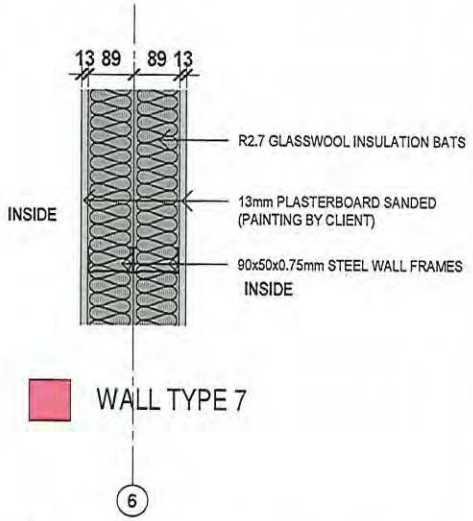








WALL TYPE REMOVED



NOTE: REFER TO FIRERA Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)

Brindabella College

DATE 24.09.20

DRAWN BY KM

CHECKED BY ML

SCALEAs indicated

TITLE

WALL TYPE DETAILS

DRAWING NUMBER MS-200677- 129

BUILDING NUMBER

QUOTATION NUMBER 200677

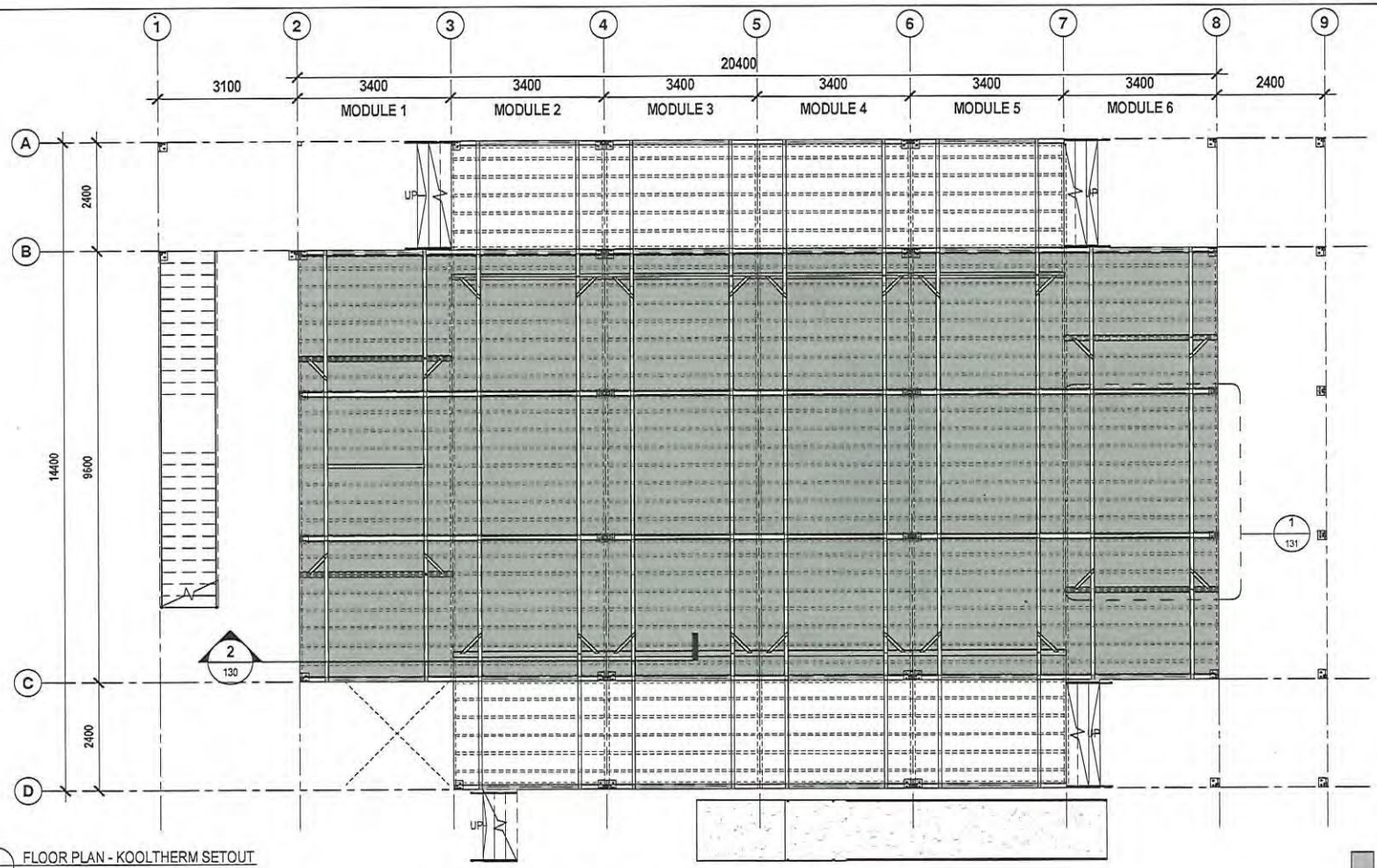
REV T

SHEET A3

9/11/2020 11:09:12 AM

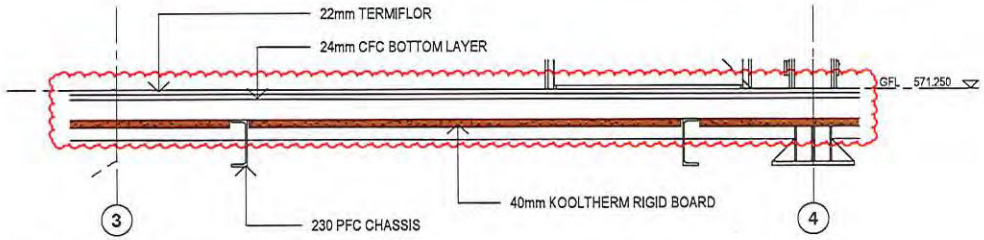
PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020



1/120 FLOOR PLAN - KOOLTHERM SETOUT
1 : 100

40mm KOOLTHERM RIGID BOARD



2 SECT. DETAIL - KOOLTHERM
1 : 25

Sch 2.2(a)(ii)

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020
Q	UPDATED DOOR/WINDOW LOCATIONS;UPDATED TYPICAL DETAILS	KM	13.10.2020
P	UPDATED RLs	KM	08.10.2020
N	ADDED/AMENDED DETAILS	KM	24.09.2020
J	ADDED NOTES	TT	30.07.2020
G	REMOVED AMINITIES & OFFICE	TT	29.05.2020

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

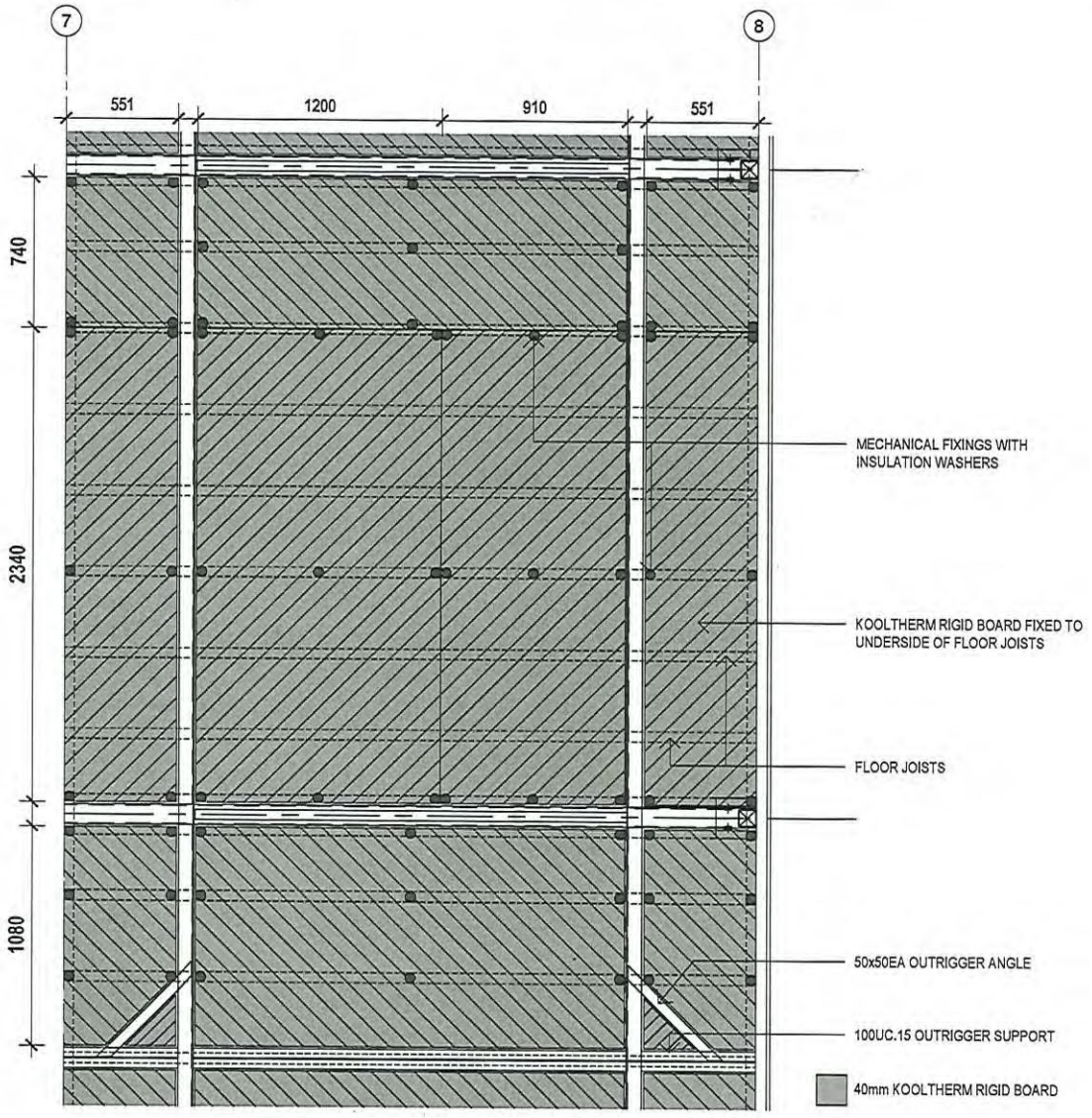
DATE .....

PROJECT
Sch 2.2(a)(ii)
Brindabella College

DATE 24.09.20
DRAWN BY KM
CHECKED BY ML
SCALEAs indicated

TITLE
KOOLTHERM DETAIL

DRAWING NUMBER MS-200677- 130
QUOTATION NUMBER 200677
BUILDING NUMBER
REV T
SHEET A3
9/11/2020 11:09:13 AM



1/130 PLAN DETAIL - KOOLTHERM TYPICAL FIXING
1 : 25

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

CLIENT APPROVAL

SIGNATURE

NAME .....

DATE .....

PROJECT

Sch 2.2(a)(xi)
Brindabella College

DATE 24.09.20
DRAWN BY KM
CHECKED BY MBS
SCALE: 1 : 25

TITLE
KOOLTHERM FIXING DETAIL

DRAWING NUMBER MS-200677- 131
BUILDING NUMBER
QUOTATION NUMBER 200677
REV T
SHEET A3

PRELIMINARY DRAWING

ISSUE	AMENDMENT	BY	DATE
T	AS CLOUDED	KM	09.11.2020
S	AMENDED DETAILS	KM	26.10.2020
R	AMENDED DETAILS/DOOR SCHEDULE	KM	19.10.2020

LOCATION PLAN

Brindabella Christian College
Block 04 Section 41 Lyneham ACT
FIRE ENGINEERING REPORT
8158 Issue 02 Revision 00 17-Nov-20

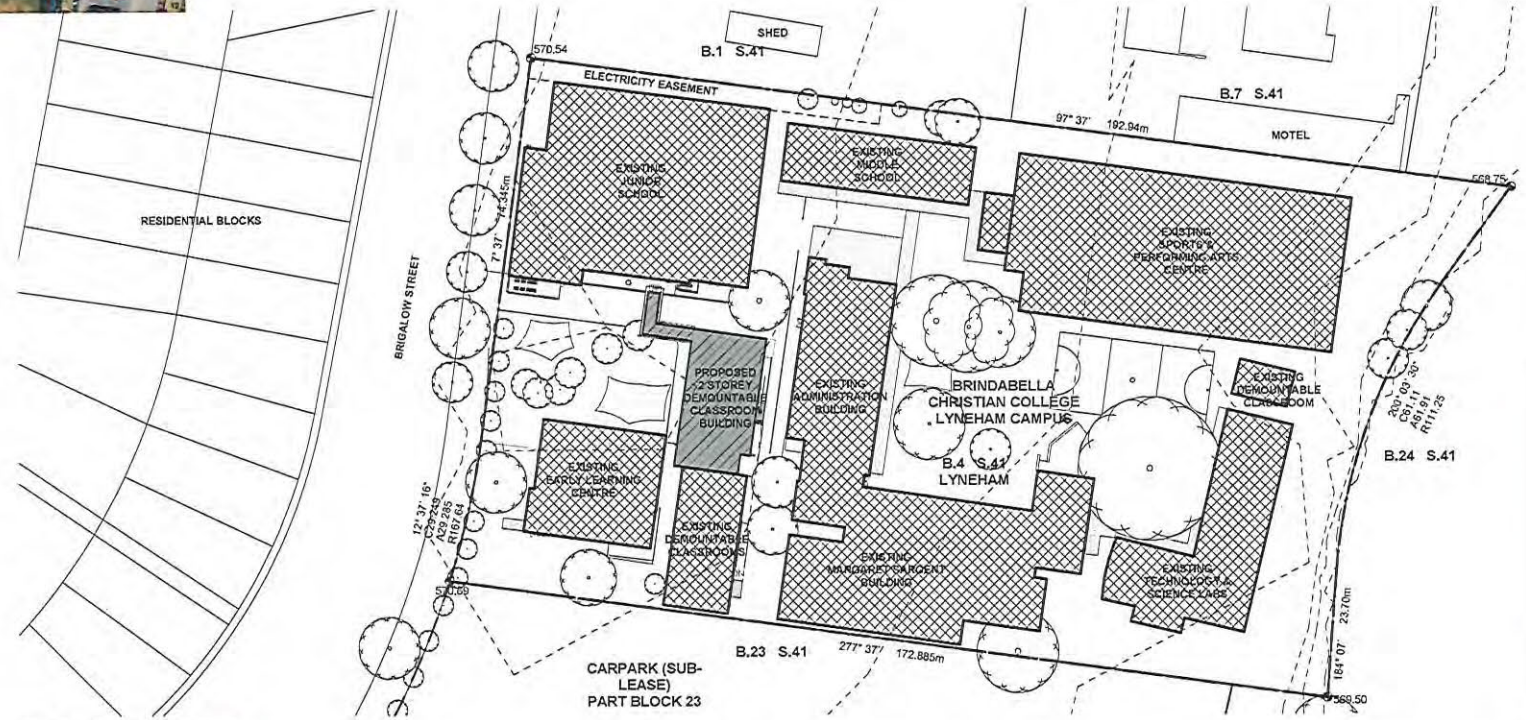
TABLE 1:
PERFORMANCE SOLUTION SUMMARY

Assessment	Relevant BCA Provisions and Performance Requirements	Method for meeting performance requirements	EEQ Sub-system[s] Evaluated	BCA Assessment method
Rationalisation of FRLs – External Walls	C1.1 CP1 CP2	A2.1 (c)	C	A2.2 (2)(b)(ii)
Automatic Fire Detection and Alarm System	AS 1670.1:2015 Clause 2.3 CP4.3	A2.1 (c)	D	A2.2 (2)(b)(ii)
Protection of Openings	C3.2 CP2 CP8	A2.1 (3)	C	A2.2 (2)(b)(ii)
Distance of Travel	D1.4 D1.5 DP4	A2.1 (3)	E	A2.2(2) (b)(ii)

Source: Igns Solutions

Waterproofing design & External wall system disclosure statement

Project number. 1506.16
Project name. Brindabella Christian College – 2 Storey Demountable building
Address. 136 Brigalow Street, Lyneham ACT 2602



THIS SET OF DRAWINGS ARE MEANT TO BE READ IN CONJUNCTION WITH MBS CONSTRUCTION DRAWINGS & DETAILS

1 / A230 PROPOSED PLAN - SITE GENERAL
1 : 500

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

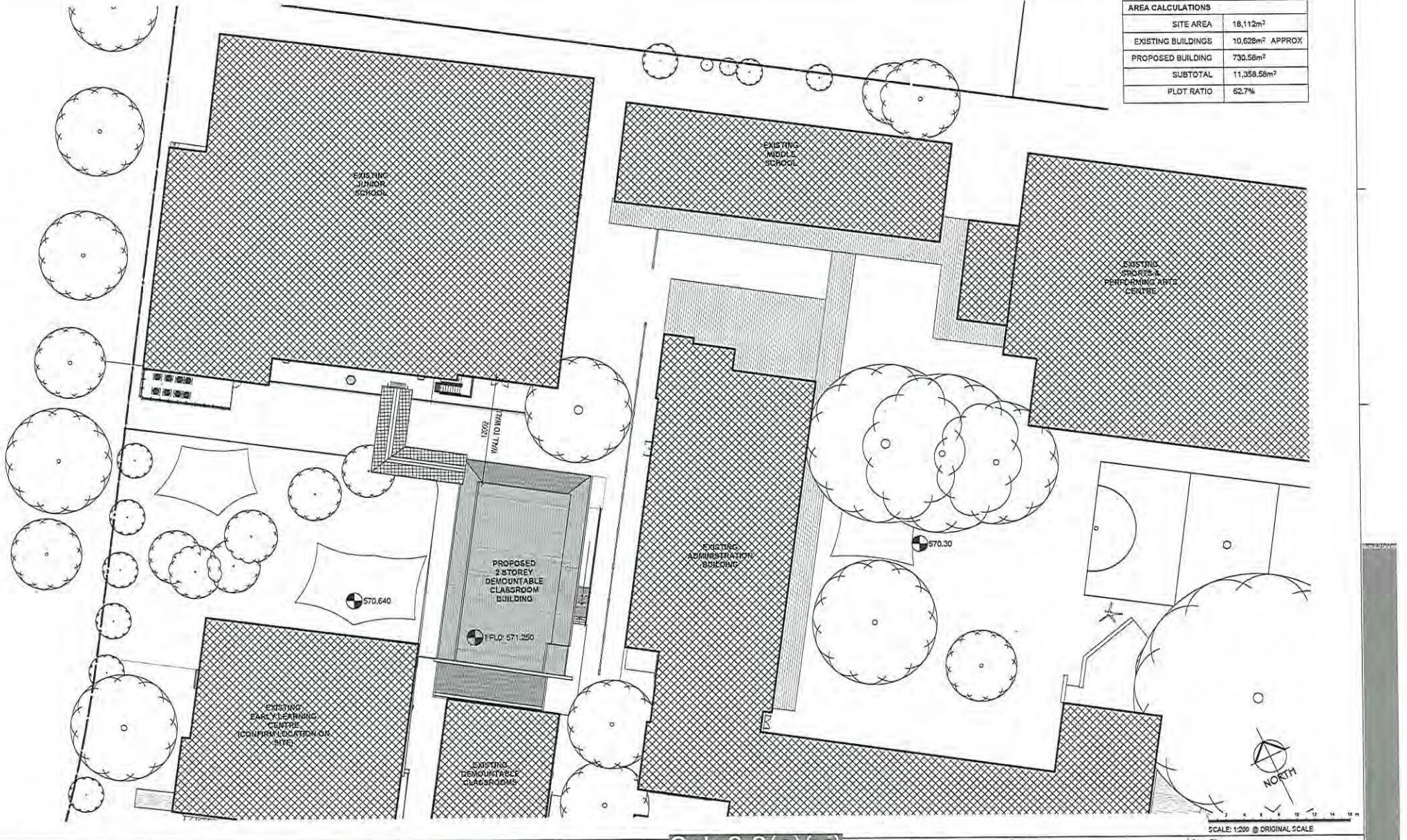
Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE
Project Title: DEMOUNTABLE V2
All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602
Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: LOCATION & GENERAL SITE PLAN
Design Project Manager: SV | Project Architect: NI | Design Verifier: SV
Scale: 1 : 500 | Sheet Size: A1 | Drawn: DT
Project No: 1506.16 | Sheet No: A001 | Amendment: A

Sch 2.2(a)(xi)



AREA CALCULATIONS	
SITE AREA	18,112m²
EXISTING BUILDINGS	10,628m² APPROX
PROPOSED BUILDING	730.58m²
SUBTOTAL	11,358.58m²
PLOT RATIO	62.7%

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: RINDABELLA CHRISTIAN COLLEGE

Project Title: EMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

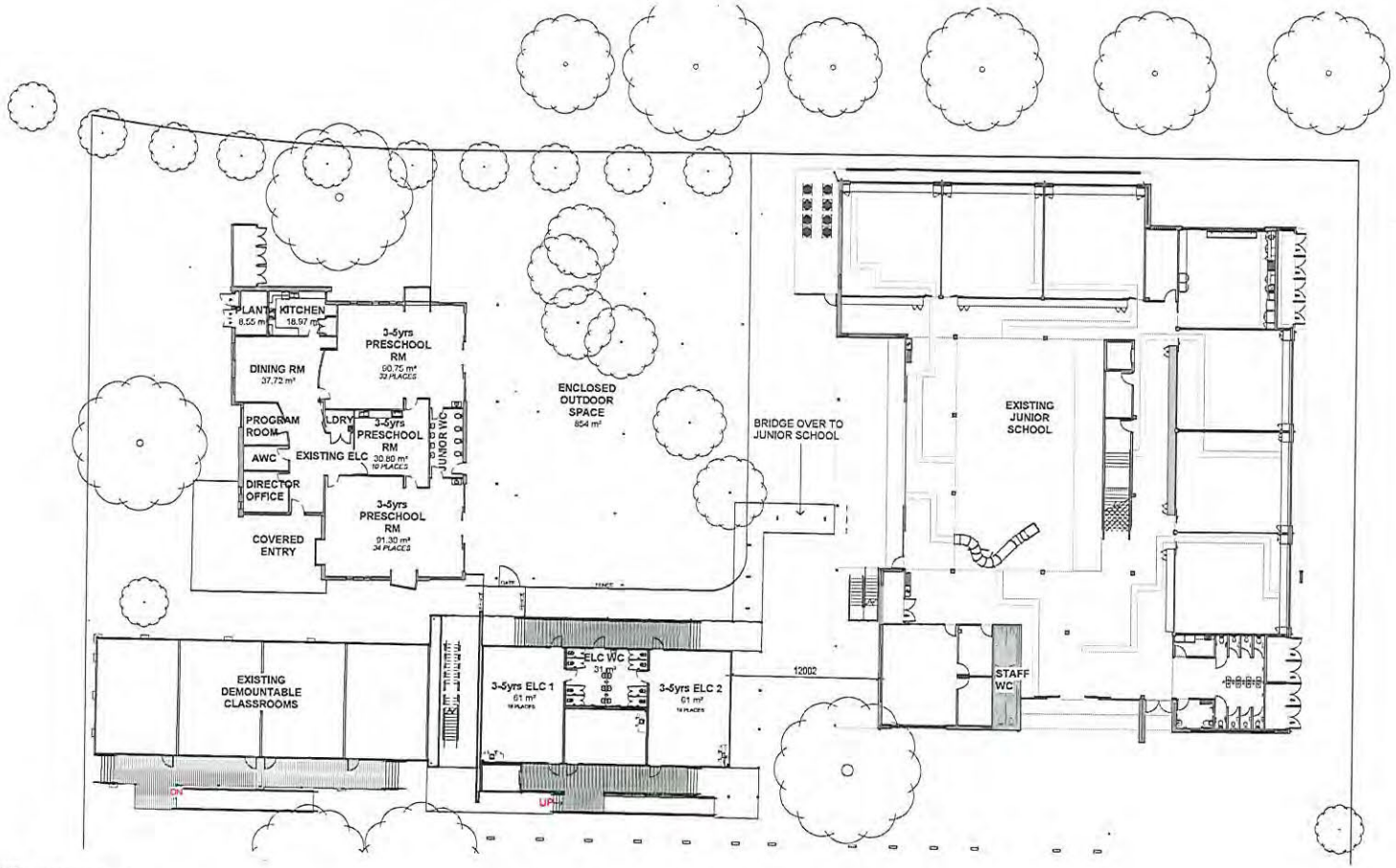
Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 | Section: 41 | Division: LYNEHAM

Drawing Title: SITE PLAN

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn: SE
Project No: 1506.16	Sheet No: A003	Amendment: A



1 / A200 PROPOSED PLAN - ELC
1 : 200

NORTH

SCALE: 1:200 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

Project Status: BUILDING APPROVAL

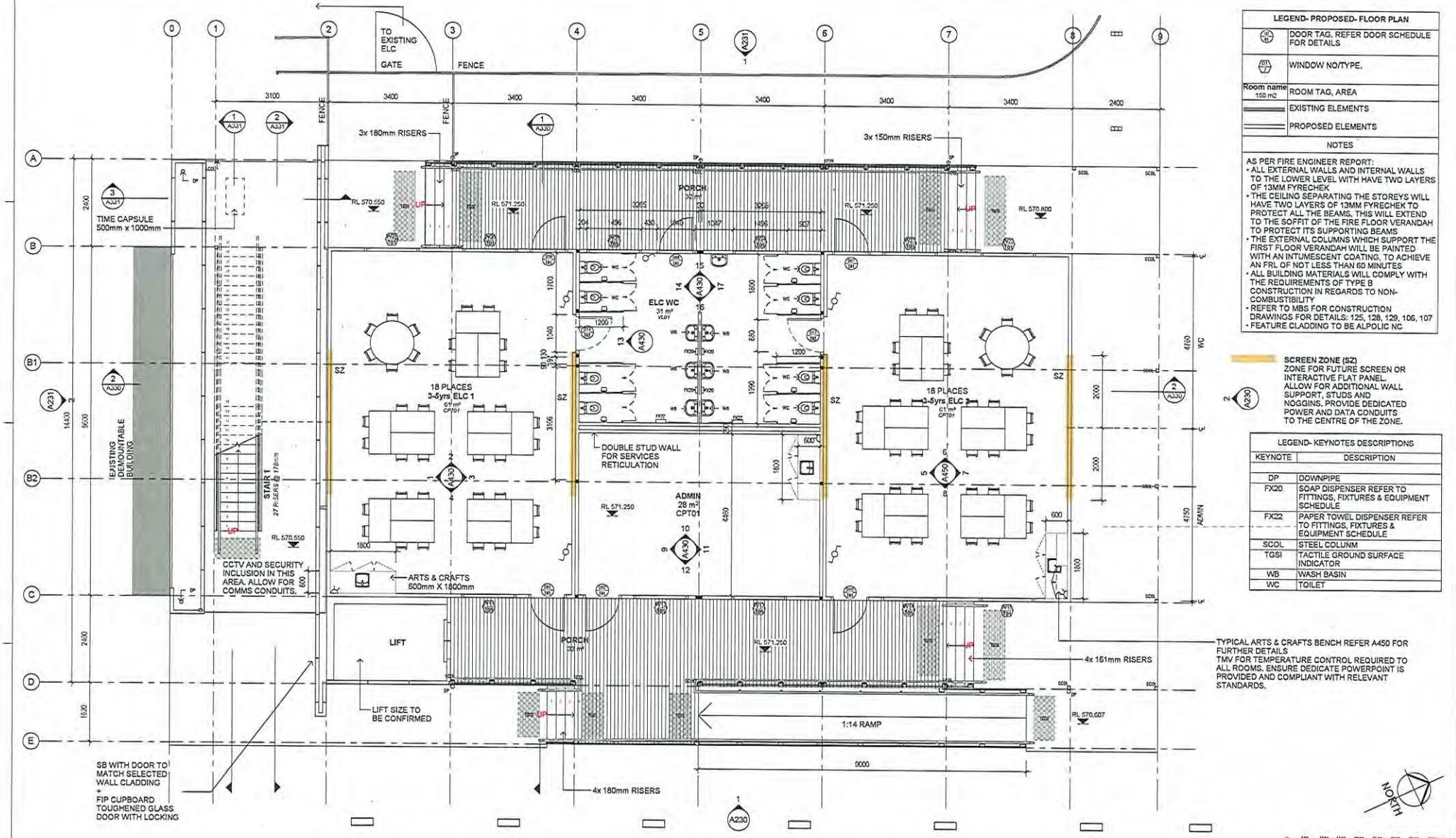
Project Address: 13G BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: GENERAL FLOOR PLAN

Design Project Manager	Project Architect:	Design Verifier
SV	NI	SV
Scale: 1 : 200	Sheet Size: A1	Drawn: NI
Project No: 1506.16	Sheet No. A130	Amendment: A

Sch 2.2(a)(ii)



LEGEND- PROPOSED- FLOOR PLAN	
DOOR TAG, REFER DOOR SCHEDULE FOR DETAILS	
WINDOW NO/TYPE.	
Room name 150 m2	ROOM TAG, AREA
	EXISTING ELEMENTS
	PROPOSED ELEMENTS

NOTES

AS PER FIRE ENGINEER REPORT:
- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS: 125, 128, 129, 106, 107
- FEATURE CLADDING TO BE ALPOLIC NC

SCREEN ZONE (SZ)
ZONE FOR FUTURE SCREEN OR INTERACTIVE FLAT PANEL. ALLOW FOR ADDITIONAL WALL SUPPORT, STUDS AND NOGGINS. PROVIDE DEDICATED POWER AND DATA CONDUITS TO THE CENTRE OF THE ZONE.

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
DP	DOWNPIPE
FX20	SOAP DISPENSER REFER TO FITTINGS, FIXTURES & EQUIPMENT SCHEDULE
FX22	PAPER TOWEL DISPENSER REFER TO FITTINGS, FIXTURES & EQUIPMENT SCHEDULE
SCOL	STEEL COLUMN
TGSI	TACTILE GROUND SURFACE INDICATOR
WB	WASH BASIN
WC	TOILET

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 29 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

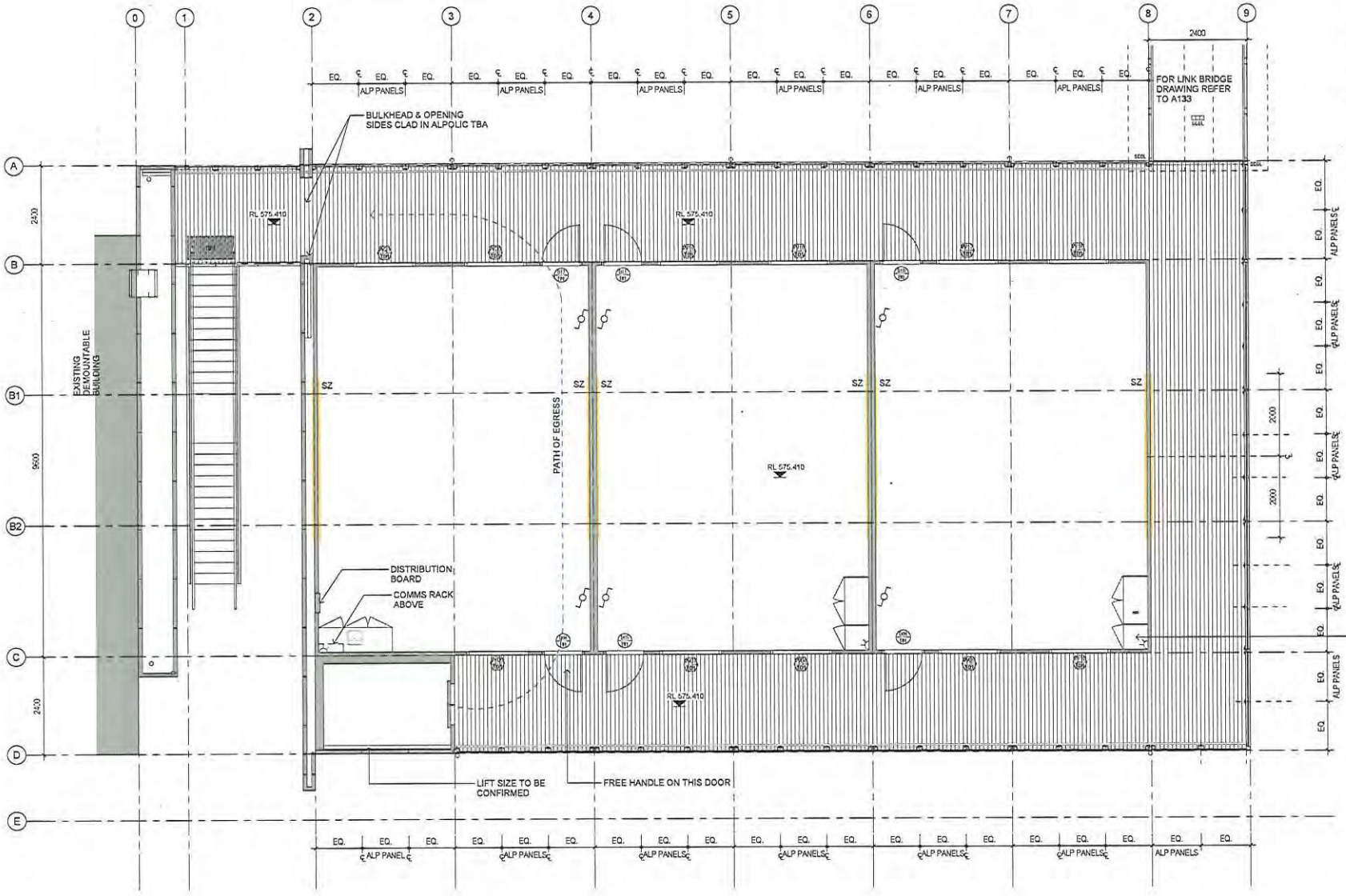
Block: 4 Section: 41 Divison: LYNEHAM

Drawing Title: GROUND FLOOR PLAN

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn: SE
Project No: 1506.16	Sheet No: A131	Amendment: A

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Sch 2.2(a)(ii)



LEGEND- PROPOSED- FLOOR PLAN	
(W1)	DOOR TAG. REFER DOOR SCHEDULE FOR DETAILS
(W1)	WINDOW NO/TYPE.
Room name 150 m2	ROOM TAG, AREA
	EXISTING ELEMENTS
	PROPOSED ELEMENTS

NOTES

AS PER FIRE ENGINEER REPORT:
- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS: 125, 128, 129, 106, 107
- FEATURE CLADDING TO BE ALPOLIC NC

SCREEN ZONE (SZ)
ZONE FOR FUTURE SCREEN OR INTERACTIVE FLAT PANEL. ALLOW FOR ADDITIONAL WALL SUPPORT, STUDS AND NOGGINS. PROVIDE DEDICATED POWER AND DATA CONDUITS TO THE CENTRE OF THE ZONE.

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
SCOL	STEEL COLUMN
TGSI	TACTILE GROUND SURFACE INDICATOR

INTERIOR FINISHES
FLOOR VINYL AND CARPET SELECTION TO MATCH JUNIOR SCHOOL BUILDING.

TYPICAL ARTS & CRAFTS BENCH REFER A450 FOR FURTHER DETAILS TMV FOR TEMPERATURE CONTROL REQUIRED TO ALL ROOMS. ENSURE DEDICATE POWERPOINT IS PROVIDED AND COMPLIANT WITH RELEVANT STANDARDS.

NORTH

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: RINDABELLA CHRISTIAN COLLEGE

Project Status: BUILDING APPROVAL

Drawing Title: LEVEL ONE FLOOR PLAN

Project Title: EMOUNTABLE V2

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

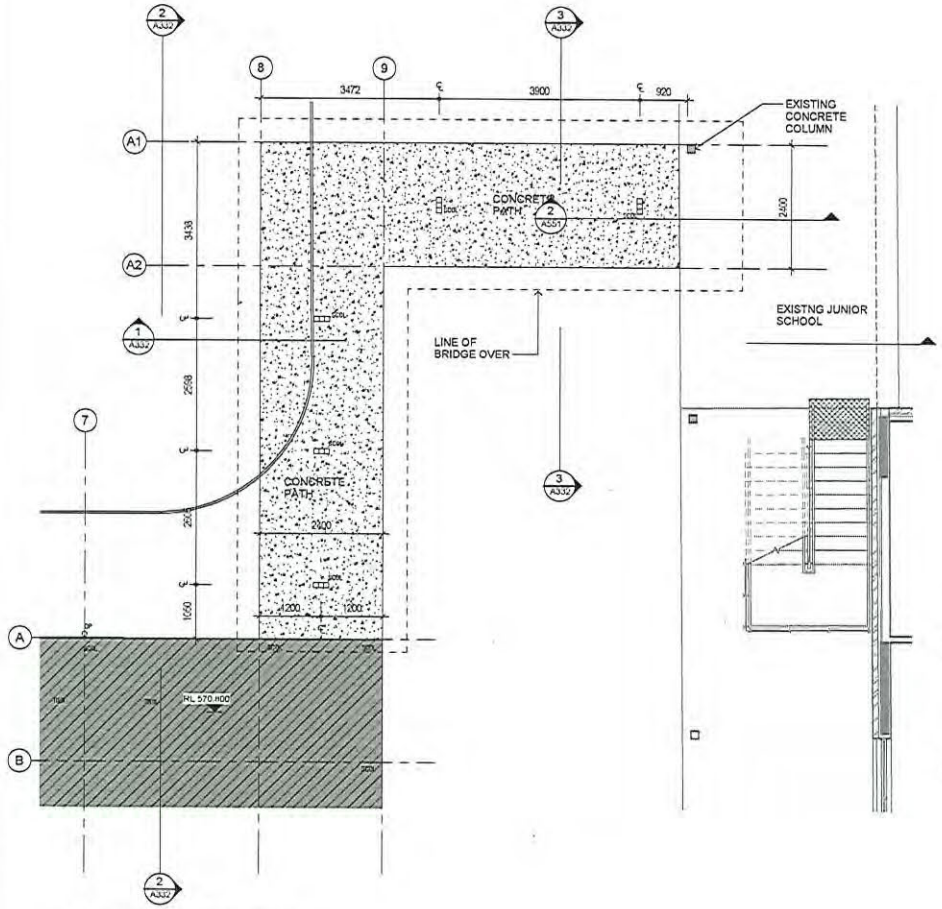
Design Project Manager: SV | Project Architect: NI | Design Verifier: SV

Scale: As indicated | Sheet Size: A1 | Drawn:

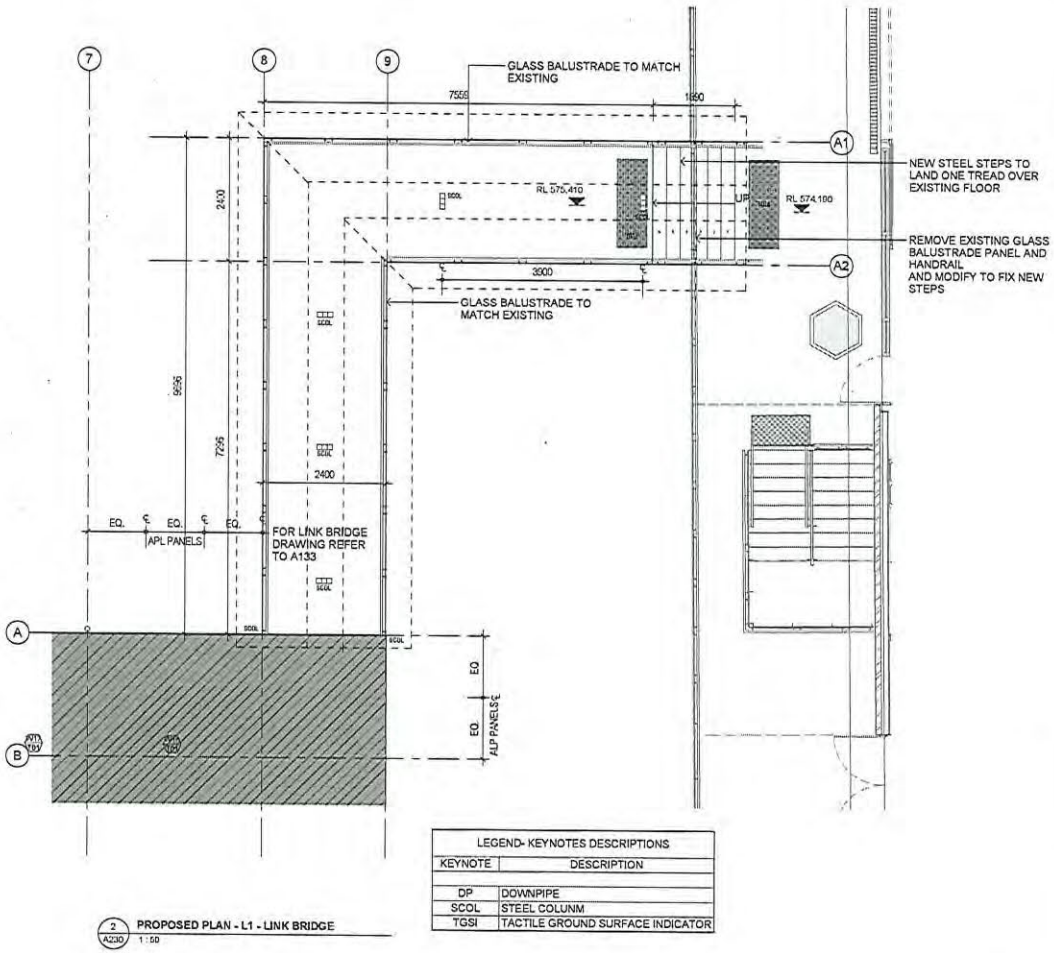
Block: 4 | Section: 41 | Division: LYNEHAM

Project No: 1506.16 | Sheet No: A133 | Amendment: A

Sch 2.2(a)(xi)



1 / A230 PROPOSED PLAN - L0 - LINK BRIDGE
1 : 50



2 / A230 PROPOSED PLAN - L1 - LINK BRIDGE
1 : 50

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
DP	DOWNPIPE
SCOL	STEEL COLUNM
TGSI	TACTILE GROUND SURFACE INDICATOR

NORTH

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

NDABELLA CHRISTIAN COLLEGE

Project Status: BUILDING APPROVAL

Drawing Title: LINK BRIDGE PLAN

l Title: MOUNTABLE V2

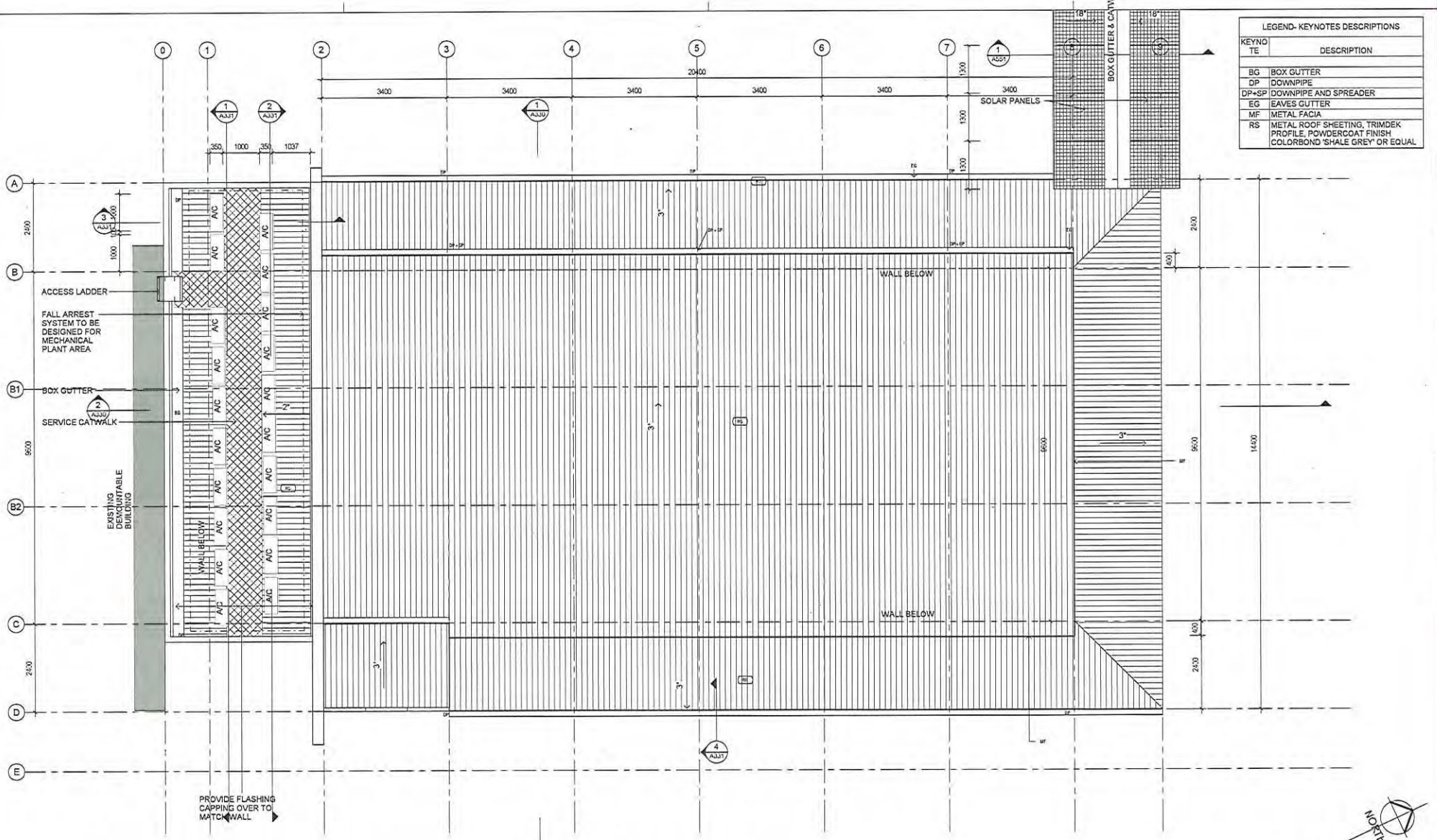
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Block:	Section:	Division:
4	41	LYNEHAM

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A134	Amendment: A

Sch 2.2(a)(i)



REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

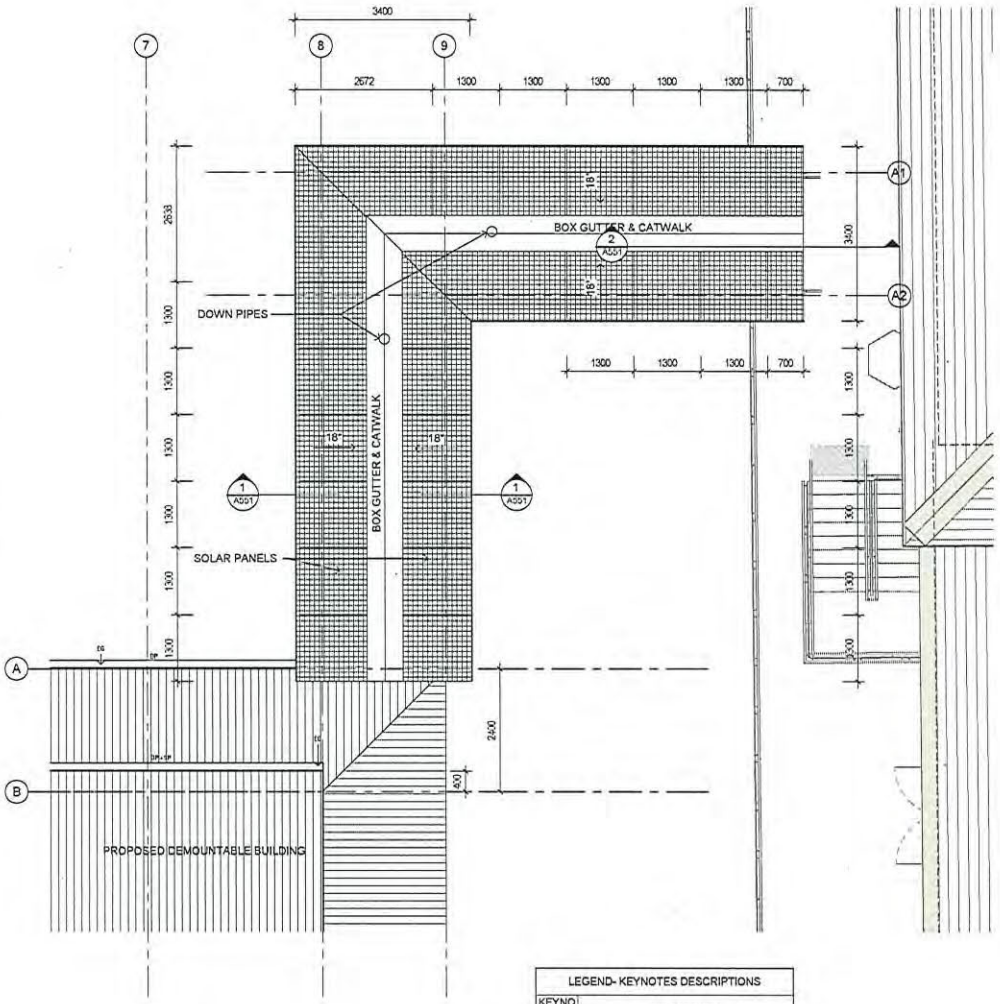
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 | Section: 41 | Division: LYNEHAM

Drawing Title: ROOF PLAN

Design Project Manager	Project Architect	Design Verifier
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn: DT, SE
Project No: 1506.16	Sheet No: A135	Amendment: A

Sch 2.2(a)(i)



1 A230 PROPOSED PLAN - ROOF - LINK BRIDGE
1 : 50

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
DP	DOWNPIPE
DP+SP	DOWNPIPE AND SPREADER
EG	EAVES GUTTER

NORTH

0 500 1000 1500 2000 2500 3000 3500 4000 mm
SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

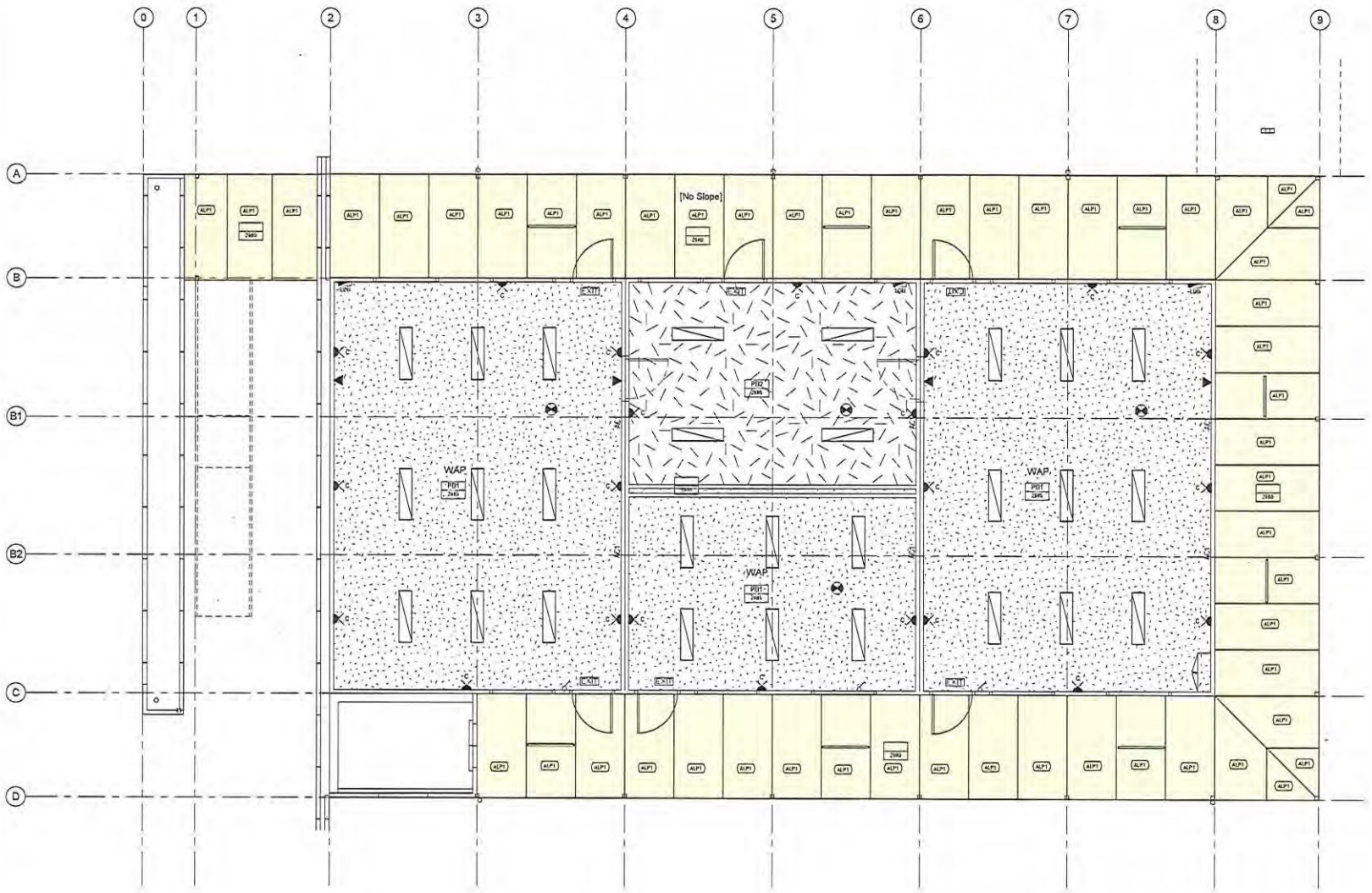
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: ROOF PLAN_LINK BRIDGE

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A136	Amendment: A

Sch 2.2(a)(ii)



LEGEND- PROPOSED- CEILING PLAN	
TYPE / HEIGHT	CEILING TAG, REFER CEILING DESCRIPTION BELOW FOR DETAILS. CEILING TAG HEIGHTS SHOWN ARE RELATIVE TO THE ASSOCIATED FFL
Room name 150 m2	ROOM TAG, NUMBER
	CEILING ACCESS PANEL. FINAL LOCATION ON CEILING TO BE CONFIRMED
	LIGHTING INTERIOR
	LIGHTING INTERIOR (WET AREA)
	EXTERNAL LIGHTING
	LIGHT SWITCH
	DOUBLE GENERAL POWER OUTLET
	DATA // PHONE
AC1	REVERSE CYCLE AIRCONDITIONER
WAP	WIRELESS ACCESS POINT
EXIT	EXIT SIGNAGE
	SMOKE ALARM & SPEAKER

NOTES

1. PLASTERBOARD CEILING SETOUT BASED ON 100% FULL SHEETS WITH EQUAL MARGINS TO OPPOSITE SIDES OF EACH ROOM OR AREA
2. SET OUT SURFACE MOUNTED LIGHT FIXTURES OVER CEILING TILES JOINTS OR NEATLY BETWEEN PERFORATED SQUARES
3. SET OUT AC GRILLES CENTERED ON CEILING TILES
4. SQUARESET CORNICE
5. REFER FINISHES SCHEDULE FOR FINISHES

AS PER FIRE ENGINEERING REPORT:
- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS
- FEATURE CLADDING TO BE ALPOLIC NC

CEILING TYPES	
PB1	2x16mm FYRCHECK PLASTERBOARD CEILING
PB2	MOISTURE RESISTANT PLASTERBOARD CEILING
PB3	10mm PLASTERBOARD, RAKED
PR01	COLORBOND PANEL RIB 0.35mm LINING - REFER SCHEDULE FOR COLOUR
MO	MINIORB CEILING, TBC
ALP	ALPOLIC - FIRE RATE ALUMINIUM COMPOSITE - WHITE

NORTH

0 500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

Project Status: BUILDING APPROVAL

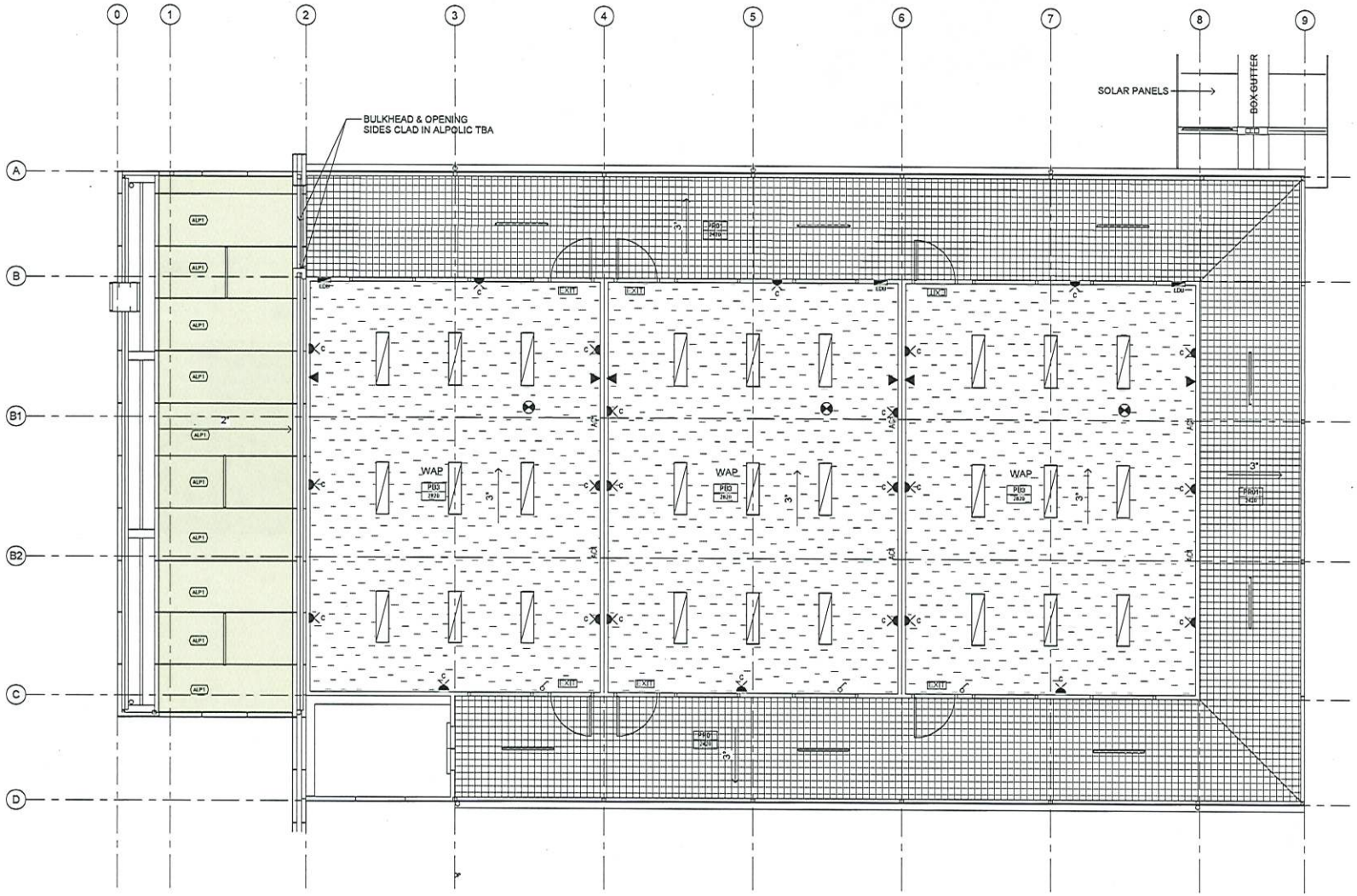
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: REFLECTED CEILING PLAN - GROUND FLOOR

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	
Project No:	Sheet No:	Amendment:
1506.16	A140	A

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.



LEGEND- PROPOSED- CEILING PLAN	
TYP. HEIGHT	CEILING TAG. REFER CEILING DESCRIPTION BELOW FOR DETAILS. CEILING TAG HEIGHTS SHOWN ARE RELATIVE TO THE ASSOCIATED FFL
Room name 150 m2	ROOM TAG, NUMBER
	CEILING ACCESS PANEL. FINAL LOCATION ON CEILING TO BE CONFIRMED
	LIGHTING INTERIOR
	LIGHTING INTERIOR (WET AREA)
	EXTERNAL LIGHTING
	LIGHT SWITCH
	DOUBLE GENERAL POWER OUTLET
	DATA // PHONE
AC1	REVERSE CYCLE AIRCONDITIONER
WAP	WIRELESS ACCESS POINT
EXIT	EXIT SIGNAGE
	SMOKE ALARM & SPEAKER

NOTES

1. PLASTERBOARD CEILING SETOUT BASED ON 100% FULL SHEETS WITH EQUAL MARGINS TO OPPOSITE SIDES OF EACH ROOM OR AREA
2. SET OUT SURFACE MOUNTED LIGHT FIXTURES OVER CEILING TILES JOINTS OR NEATLY BETWEEN PERFORATED SQUARES
3. SET OUT AC GRILLES CENTERED ON CEILING TILES
4. SQUARESET CORNICE
5. REFER FINISHES SCHEDULE FOR FINISHES

AS PER FIRE ENGINEERING REPORT:

- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS
- FEATURE CLADDING TO BE ALPOLIC NC

CEILING TYPES	
PB1	2x16mm FYRCHECK PLASTERBOARD CEILING
PB2	MOISTURE RESISTANT PLASTERBOARD CEILING
PB3	10mm PLASTERBOARD, RAKED
PR01	COLORBOND PANEL RIB 0.35mm LINING - REFER SCHEDULE FOR COLOUR
MO	MINIORB CEILING, TBC
ALP	ALPOLIC - FIRE RATE ALUMINIUM COMPOSITE - WHITE

NORTH

0 500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

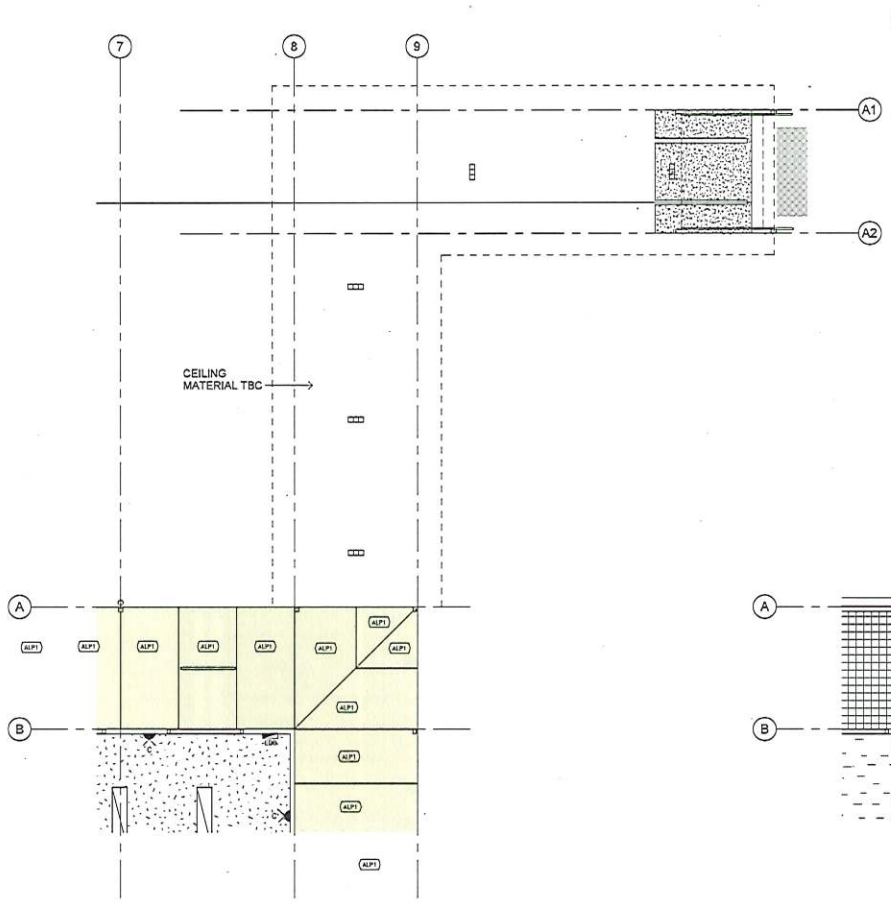
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Divison: LYNEHAM

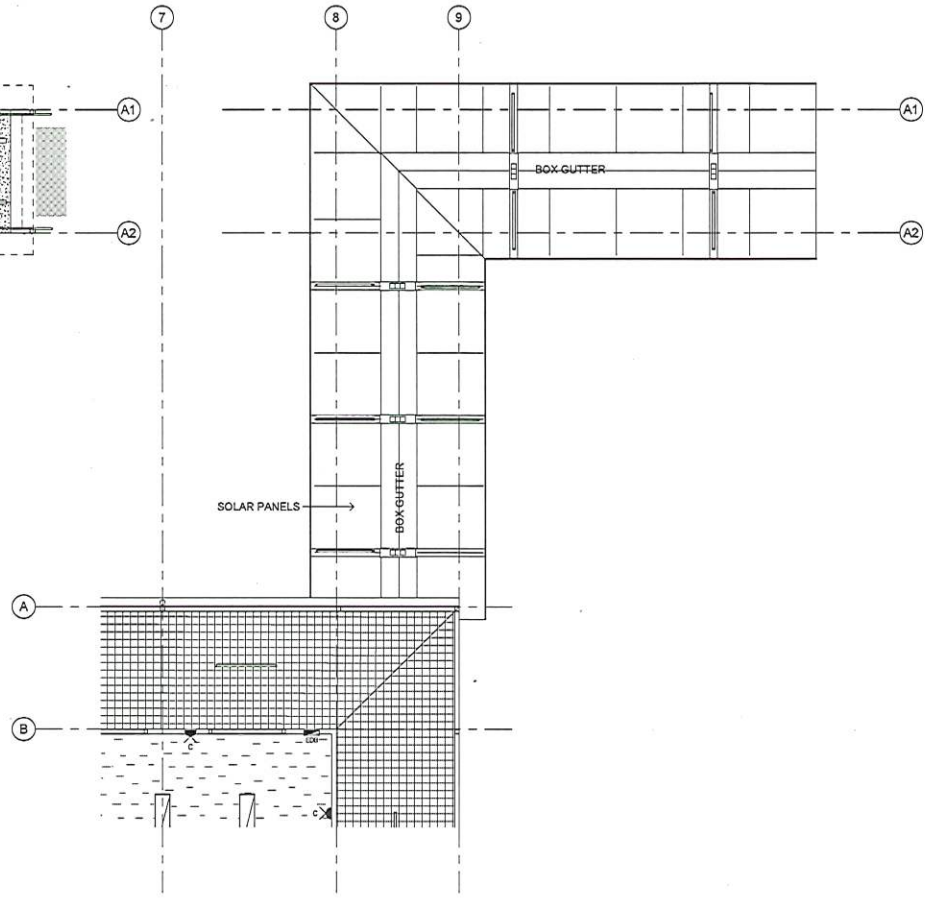
Drawing Title: REFLECTED CEILING PLAN - LEVEL 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A141	Amendment: A

Sch 2.2(a)(xi)



1 A230 PROPOSED CEILING PLAN - L0 - LINK BRIDGE
1 : 50



2 A230 PROPOSED CEILING PLAN - L1
1 : 50

LEGEND- PROPOSED- CEILING PLAN	
TYPE HEIGHT	CEILING TAG. REFER CEILING DESCRIPTION BELOW FOR DETAILS. CEILING TAG HEIGHTS SHOWN ARE RELATIVE TO THE ASSOCIATED FFL
Room name 150 m2	ROOM TAG, NUMBER
	CEILING ACCESS PANEL. FINAL LOCATION ON CEILING TO BE CONFIRMED
	LIGHTING INTERIOR
	LIGHTING INTERIOR (WET AREA)
	EXTERNAL LIGHTING
	LIGHT SWITCH
	DOUBLE GENERAL POWER OUTLET
	DATA // PHONE
AC1	REVERSE CYCLE AIRCONDITIONER
WAP	WIRELESS ACCESS POINT
EXIT	EXIT SIGNAGE
	SMOKE ALARM & SPEAKER

NOTES

1. PLASTERBOARD CEILING SETOUT BASED ON 100% FULL SHEETS WITH EQUAL MARGINS TO OPPOSITE SIDES OF EACH ROOM OR AREA
2. SET OUT SURFACE MOUNTED LIGHT FIXTURES OVER CEILING TILES JOINTS OR NEATLY BETWEEN PERFORATED SQUARES
3. SET OUT AC GRILLES CENTERED ON CEILING TILES
4. SQUARESET CORNICE
5. REFER FINISHES SCHEDULE FOR FINISHES

AS PER FIRE ENGINEERING REPORT:
- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS
- FEATURE CLADDING TO BE ALPOLIC NC

CEILING TYPES	
PB1	2x16mm FYRCHECK PLASTERBOARD CEILING
PB2	MOISTURE RESISTANT PLASTERBOARD CEILING
PB3	10mm PLASTERBOARD. RAKED
PR01	COLORBOND PANEL RIB 0.35mm LINING - REFER SCHEDULE FOR COLOUR
MO	MINIORB CEILING. TBC
ALP	ALPOLIC - FIRE RATE ALUMINIUM COMPOSITE - WHITE

NORTH

0 500 1000 1500 2000 2500 3000 3500 4000 mm

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

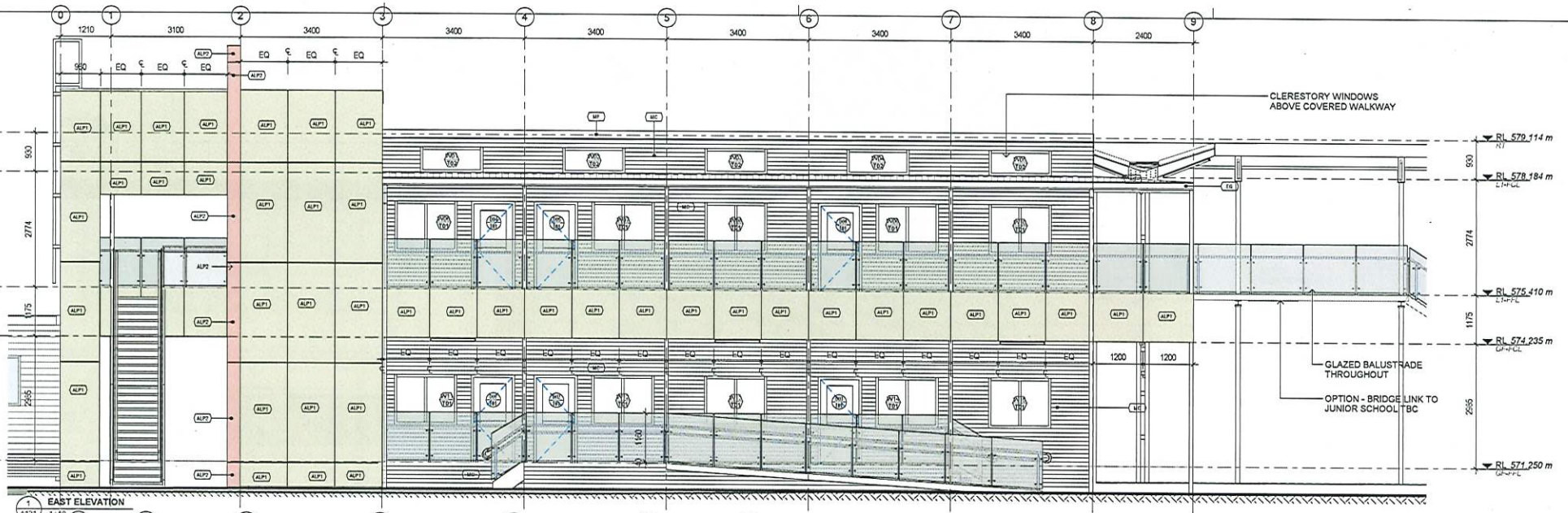
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

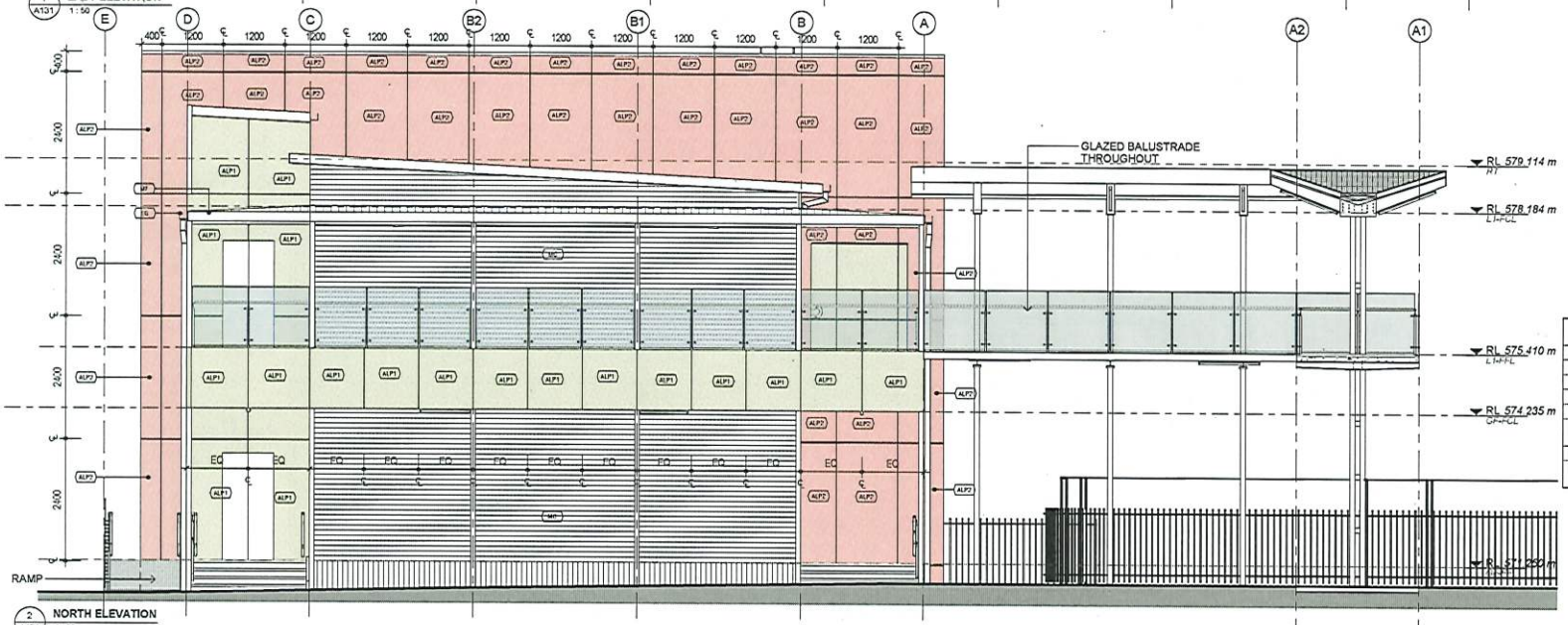
Drawing Title: REFLECTED CEILING PLAN_LINK BRIDGE

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A142	Amendment: A

Sch 2.2(a)(ii)



1 A131 EAST ELEVATION 1:50



2 A131 NORTH ELEVATION 1:50

LEGEND- PROPOSED- BUILDING ELEVATIONS	
	MATERIAL ABBREVIATION, REFER KEYNOTES FOR DESCRIPTION
	DOOR TAG, REFER DOOR SCHEDULE FOR MORE DETAILS
	WINDOW NO/TYPE, REFER A700 TYPE DESCRIPTION & A710 FOR WINDOW SCHEDULE
	EXISTING ELEMENTS SURFACE RETAINED

NOTES:
CLADDING JUNCTIONS, EXPANSION JOINTS & METHODS OF ATTACHMENT TO BE ESTABLISHED BY BUILDER

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
ALP1	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - WHITE
ALP2	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - RED
EG	EAVES GUTTER
MC	CORRUGATED METAL CLADDING, CUSTOM ORB, POWDERCOAT FINISH COLORBOND 'WOODLAND GREY'OR EQUAL
MF	METAL FACIA
RS	METAL ROOF SHEETING, TRIMDEK PROFILE, POWDERCOAT FINISH COLORBOND 'SHALE GREY' OR EQUAL

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

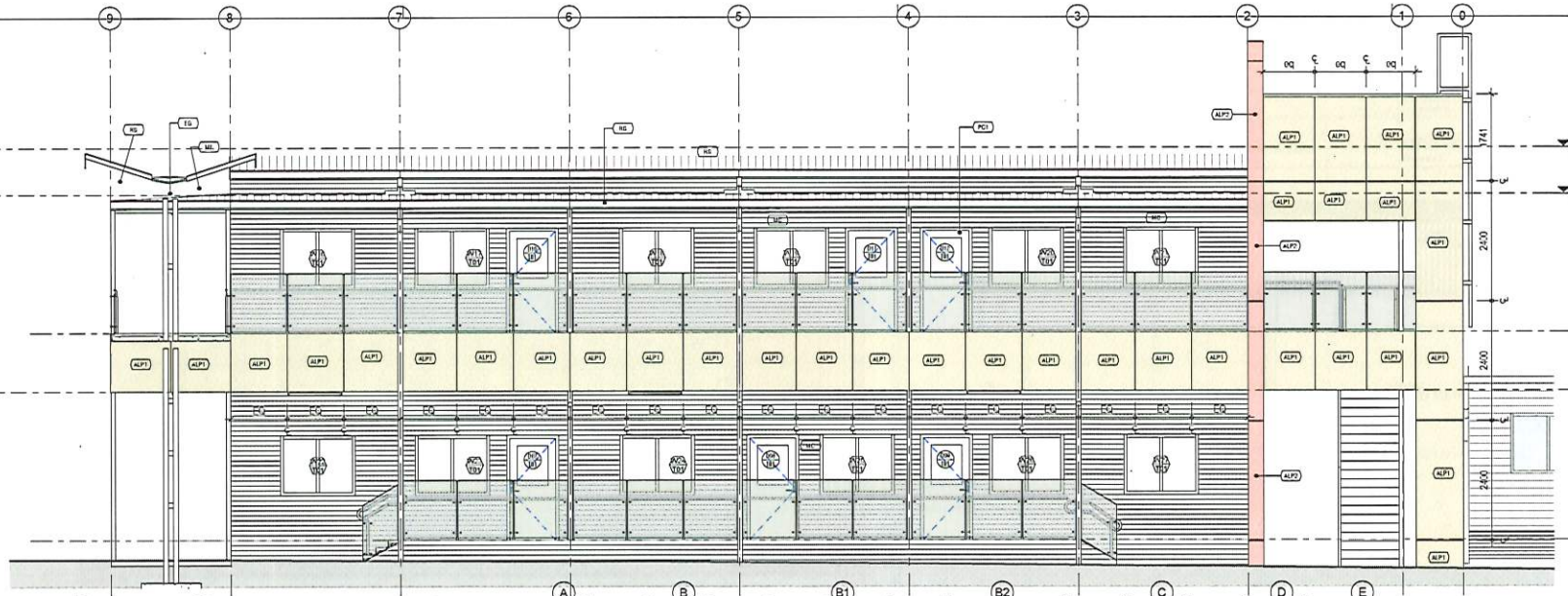
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Divison: LYNEHAM

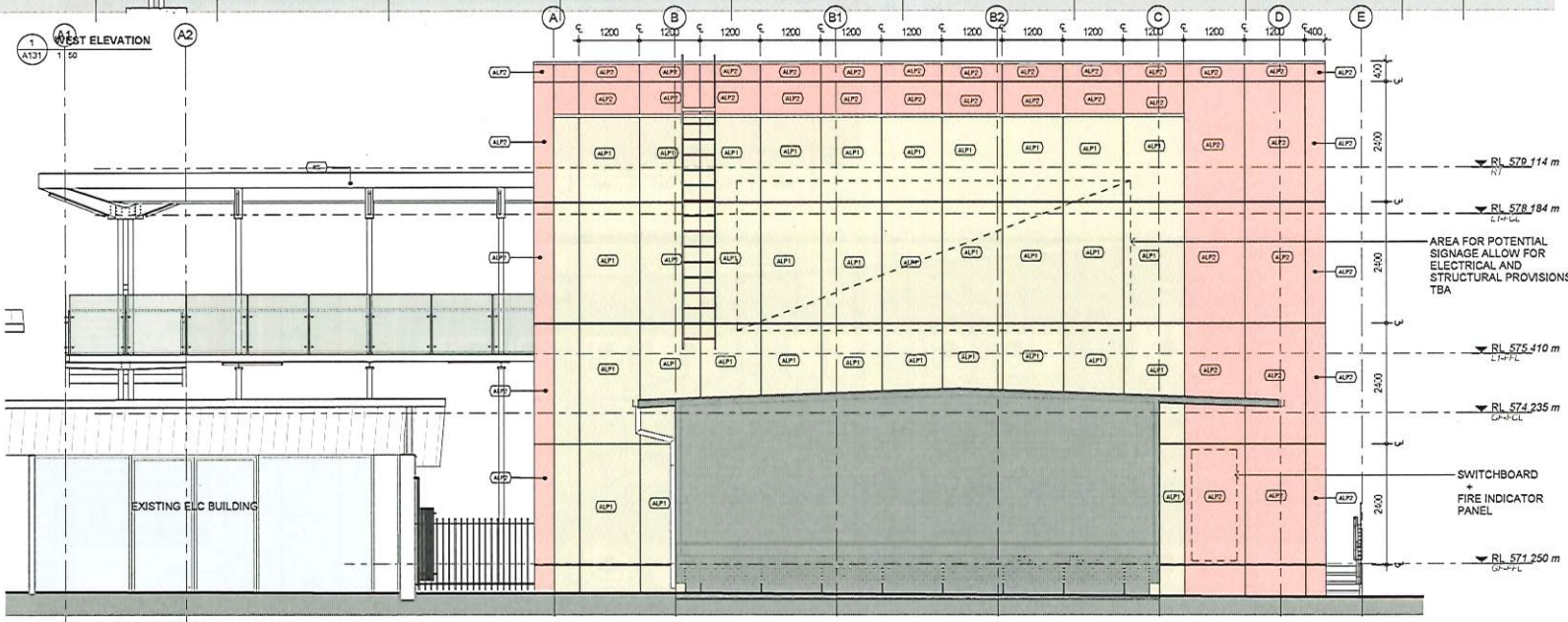
Drawing Title: ELEVATIONS - SHEET 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No. 1506.16	Sheet No. A230	Amendment: A

Sch 2.2(a)(i)



1 WEST ELEVATION
A131 1 : 50



2 SOUTH ELEVATION
A131 1 : 50

LEGEND- PROPOSED- BUILDING ELEVATIONS	
	MATERIAL ABBREVIATION, REFER KEYNOTES FOR DESCRIPTION
	DOOR TAG, REFER DOOR SCHEDULE FOR MORE DETAILS
	WINDOW NO/TYPE, REFER A700 TYPE DESCRIPTION & A710 FOR WINDOW SCHEDULE
	EXISTING ELEMENTS SURFACE RETAINED

NOTES:
CLADDING JUNCTIONS, EXPANSION JOINTS & METHODS OF ATTACHMENT TO BE ESTABLISHED BY BUILDER

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
ALP1	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - WHITE
ALP2	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - RED
EG	EAVES GUTTER
MC	CORRUGATED METAL CLADDING, CUSTOM ORB, POWDERCOAT FINISH COLORBOND 'WOODLAND GREY'OR EQUAL
MF	METAL FACIA
PC1	POWDERCOAT FINISH TO ALUMINIUM SURFACE EQUAL TO DULUX DURATEC ETERNITY CHAIN PEARL
RS	METAL ROOF SHEETING, TRIMDEK PROFILE, POWDERCOAT FINISH COLORBOND 'SHALE GREY' OR EQUAL

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(ii)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

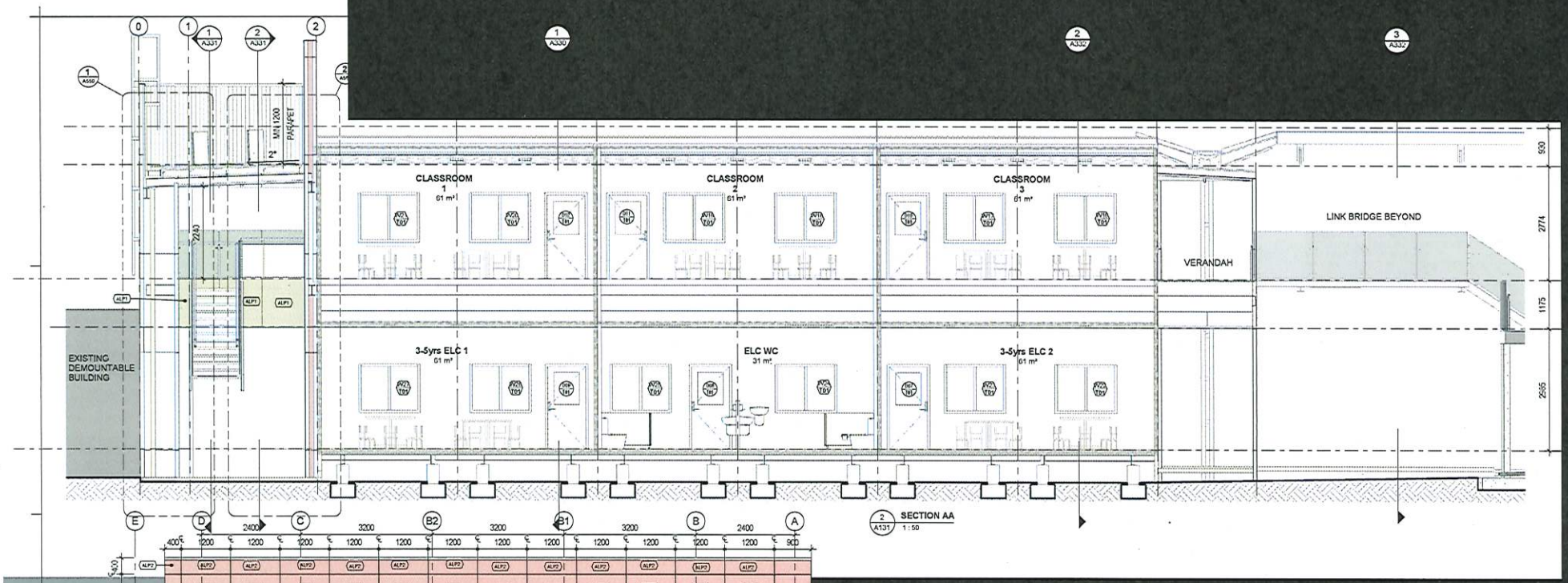
Block: 4 Section: 41 Divison: LYNEHAM

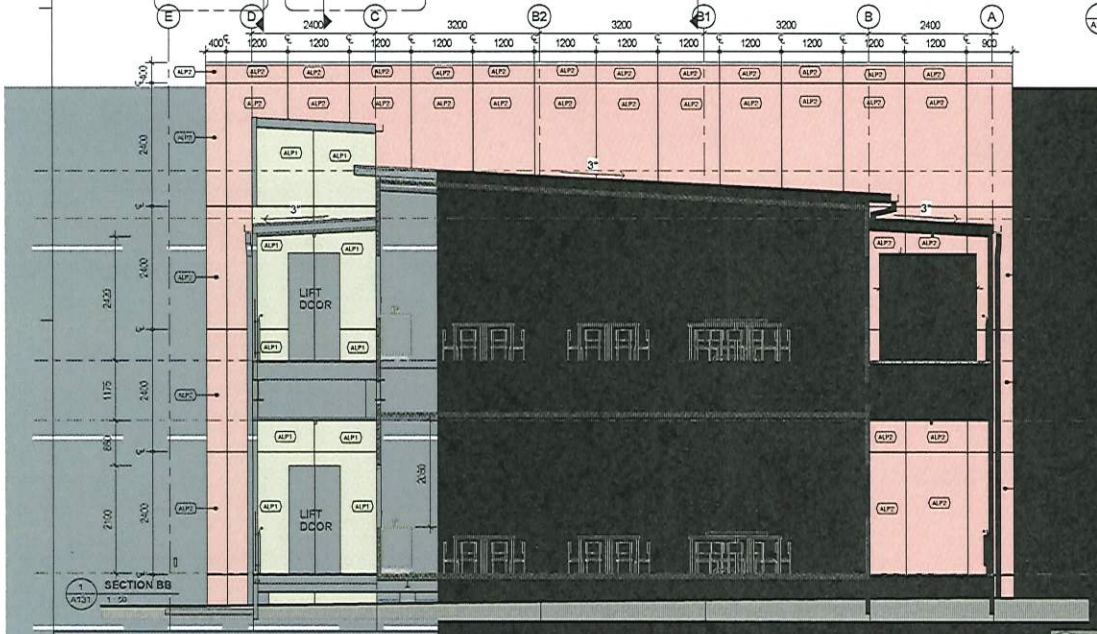
Drawing Title: ELEVATIONS - SHEET 2

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A231	Amendment: A

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Sch 2.2(a)(ii)





REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 26 of the Building Act 2004

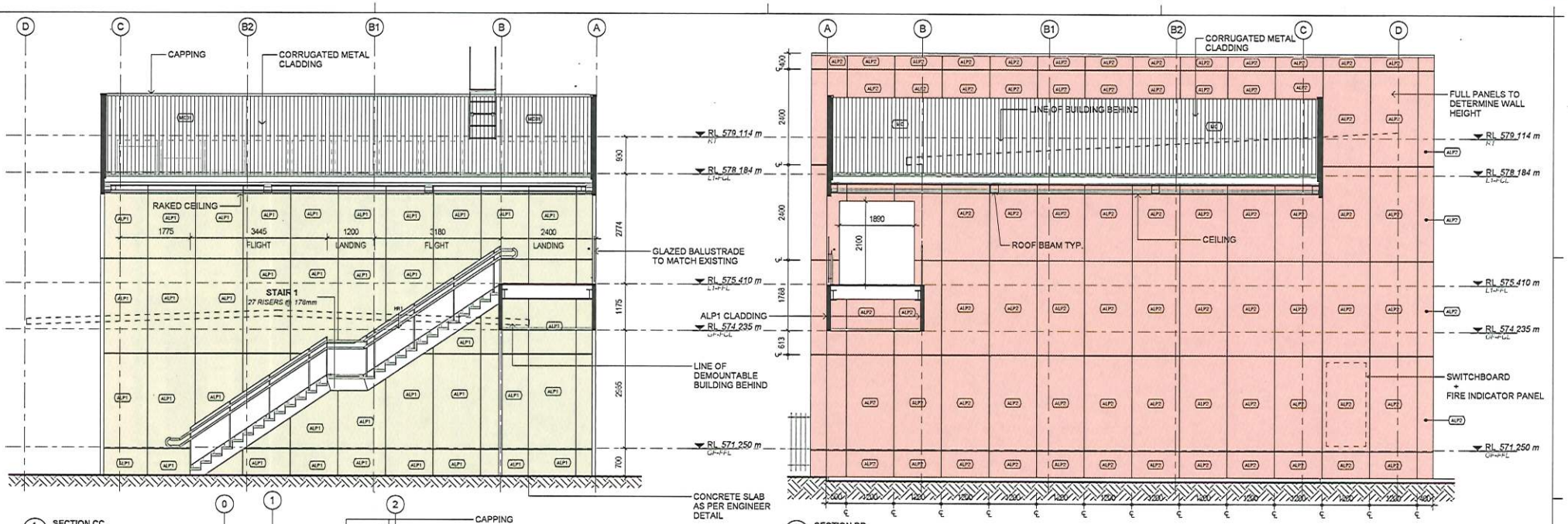
Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client
Project Status
Drawing Title
Project Title
Project Address
Design Project Manager
Project Architect
Design Verifier
Scale
Sheet Size
A1
Drawn
Block
Section
Division
Project No
Sheet No
Amendment

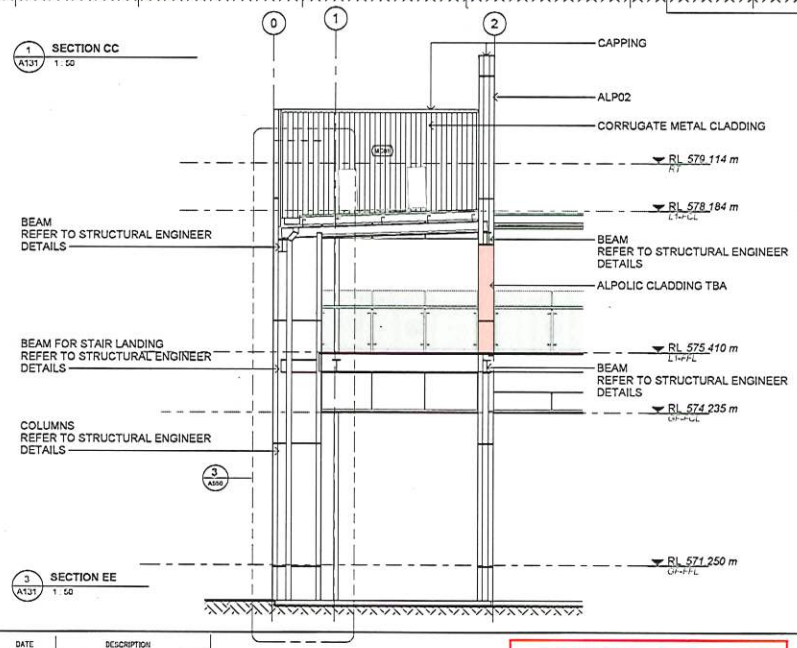
All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Sch 2.2(a)(i)

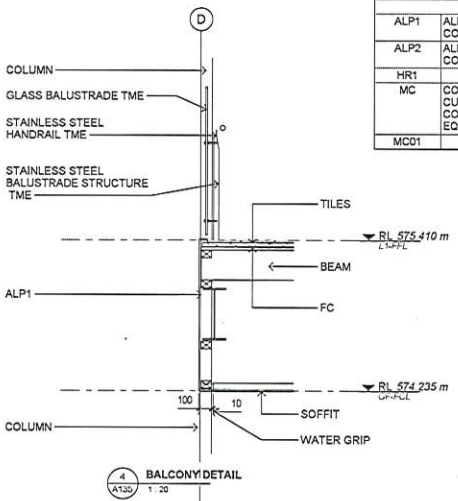


1 A131 SECTION CC 1 : 50

2 A131 SECTION DD 1 : 50



3 A131 SECTION EE 1 : 50



4 A135 BALCONY DETAIL 1 : 20

LEGEND- KEYNOTES DESCRIPTIONS	
KEYNOTE	DESCRIPTION
ALP1	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - WHITE
ALP2	ALPOLIC NC - FIRE RATED ALUMINIUM COMPOSITE - RED
HR1	
MC	CORRUGATED METAL CLADDING, CUSTOM ORB, POWDERCOAT FINISH COLORBOND 'WOODLAND GREY'OR EQUAL
MC01	

INSULATION:

- GROUND LEVEL UNDERFLOOR - R2.5 KOOLTHERM RIGID BOARD 40mm
- FIRST FLOOR UNDERFLOOR - NIL
- INTERNAL WALLS - R2.7 GLASSWOOL BATTS
- EXTERNAL WALLS - R2.5 GLASSWOOL BATTS & THERMAL BREAK SARKING (AIR CELL INSULBREAK 65)
- CEILING (GROUND AND FIRST FLOOR) - R2.5 GLASSWOOL BATTS SUPPORTED BY ZINCALUME PANELRIB 0.35
- ROOF - R1.3 ANTICON BLANKE

REFER TO MBS DRAWINGS: 125, 126, 127, 128, 129, 130, 131

INDICATIVE STRUCTURAL PROPOSAL ONLY
REFER TO STRUCTURAL ENGINEER FOR SPECIFICATIONS AND DETAILS

AS PER FIRE ENGINEER REPORT:

- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS: 125, 128, 129, 106, 107
- FEATURE CLADDING TO BE ALPOLIC NC

SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

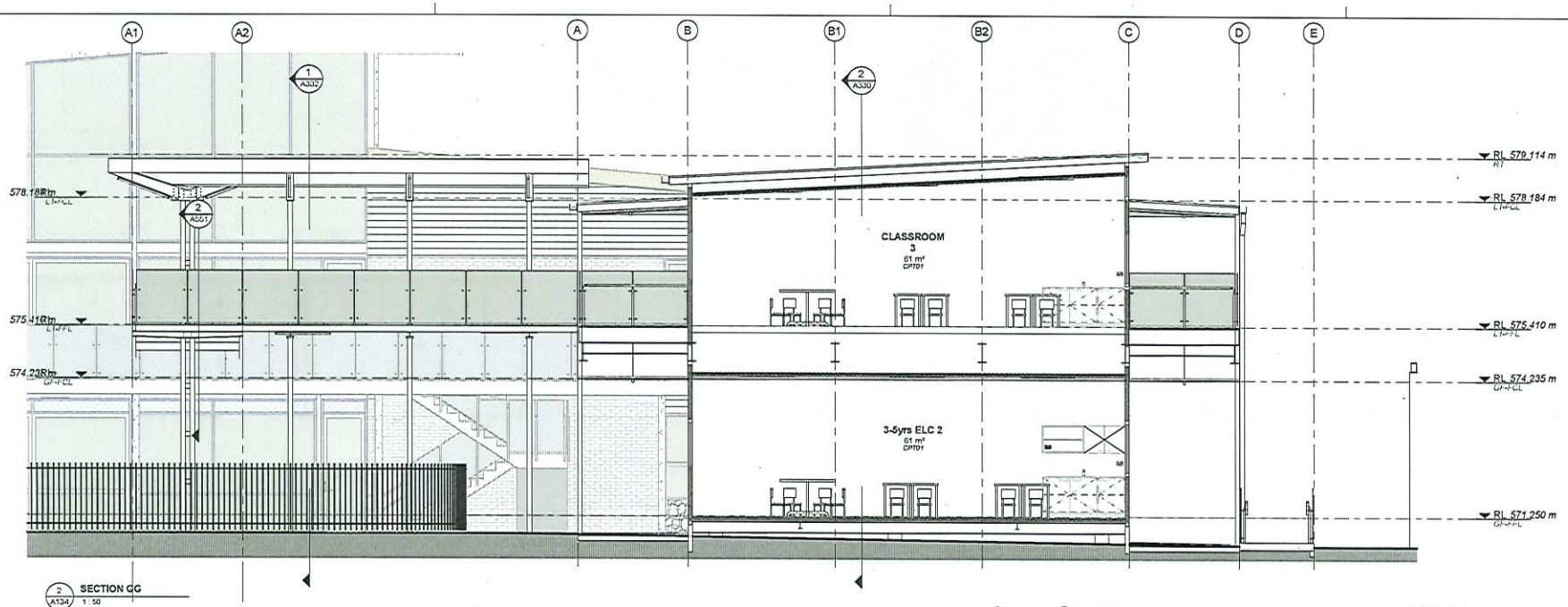
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

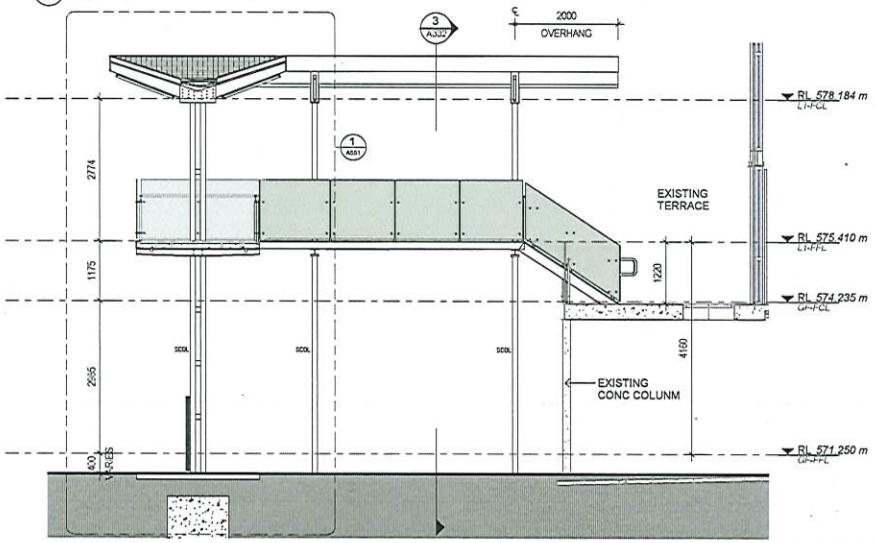
Drawing Title: SECTIONS SHEET 2

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As indicated	A1	
Project No:	Sheet No:	Amendment:
1506.16	A331	A

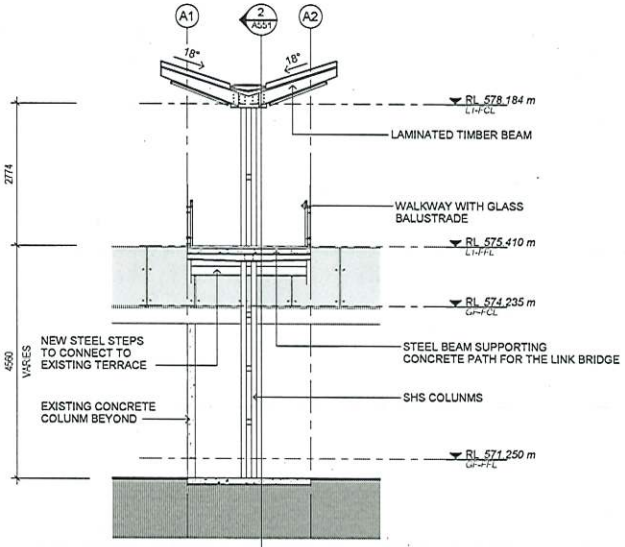
Sch 2.2(a)(ii)



2 A134 SECTION GG 1 : 50



1 A134 SECTION FF 1 : 50



3 A134 SECTION HH 1 : 50

INSULATION:

- GROUND LEVEL UNDERFLOOR - R2.5 KOOLTHERM RIGID BOARD 40mm
- FIRST FLOOR UNDERFLOOR - NIL
- INTERNAL WALLS - R2.7 GLASSWOOL BATTS
- EXTERNAL WALLS - R2.5 GLASSWOOL BATTS & THERMAL BREAK SARKING (AIR CELL INSULBREAK 65)
- CEILING (GROUND AND FIRST FLOOR) - R2.5 GLASSWOOL BATTS SUPPORTED BY ZINCALUME PANELRIB 0.35
- ROOF - R1.3 ANTICON BLANKE

REFER TO MBS DRAWINGS: 125, 126, 127, 128, 129, 130, 131

INDICATIVE STRUCTURAL PROPOSAL ONLY
REFER TO STRUCTURAL ENGINEER FOR
SPECIFICATIONS AND DETAILS

AS PER FIRE ENGINEER REPORT:

- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS: 125, 128, 129, 106, 107
- FEATURE CLADDING TO BE ALPOLIC NC

0 500 1000 1500 2000 2500 3000 3500 4000 mm
SCALE: 1:50 @ ORIGINAL SCALE

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

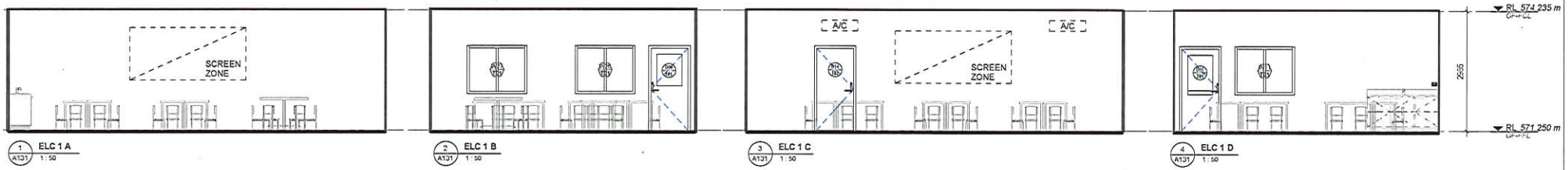
Project Address: 13G BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

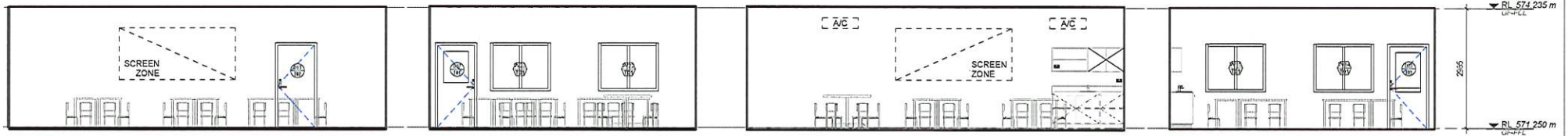
Drawing Title: SECTIONS SHEET 3

Design Project Manager:	Project Architect:	Design Vendor:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A332	Amendment: A

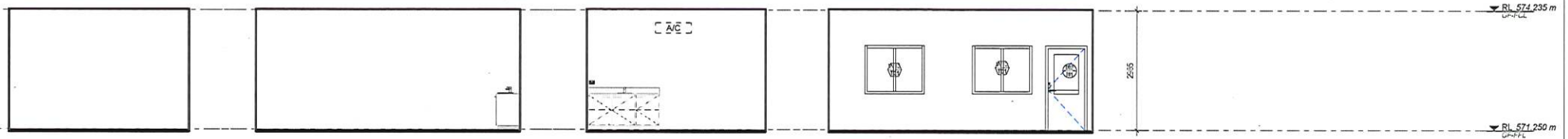
Sch 2.2(a)(i)



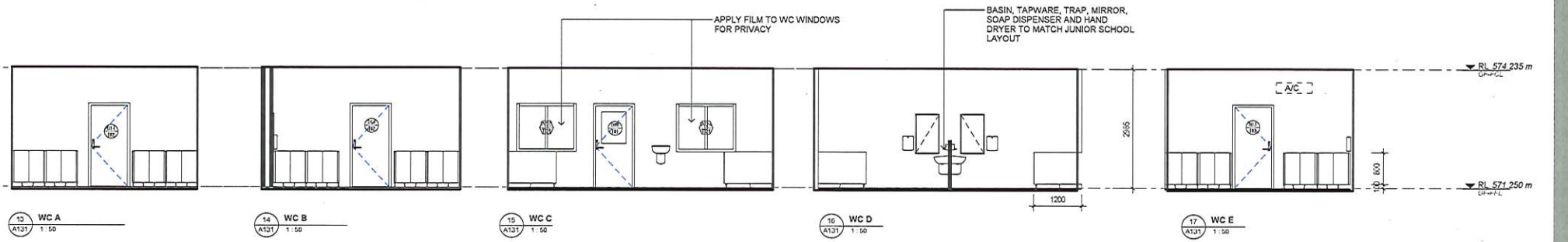
1 A131 ELC 1 A 1 : 50
2 A131 ELC 1 B 1 : 50
3 A131 ELC 1 C 1 : 50
4 A131 ELC 1 D 1 : 50



5 A131 ELC 2 A 1 : 50
6 A131 ELC 2 B 1 : 50
7 A131 ELC 2 C 1 : 50
8 A131 ELC 2 D 1 : 50



9 A131 ADMIN A 1 : 50
10 A131 ADMIN B 1 : 50
11 A131 ADMIN C 1 : 50
12 A131 ADMIN D 1 : 50



13 A131 WC A 1 : 50
14 A131 WC B 1 : 50
15 A131 WC C 1 : 50
16 A131 WC D 1 : 50
17 A131 WC E 1 : 50

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE

Project Title: DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: INTERNAL ELEVATIONS - SHEET 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 50	Sheet Size: A1	Drawn:
Project No: 1506.16	Sheet No: A430	Amendment: A

Sch 2.2(a)(xi)

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004
Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: RINDABELLA CHRISTIAN COLLEGE

Project Title: EMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Block: 4 Section: 41 Division: LYNEHAM

Drawing Title: INTERNAL ELEVATIONS - SHEET 3

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
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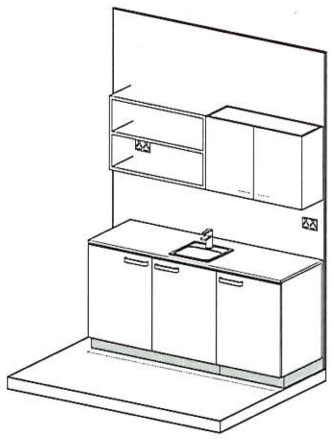
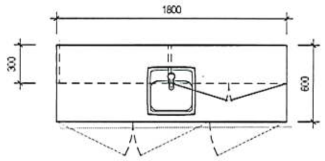
Project No: 1506.16	Sheet No: A432	Amendment: A

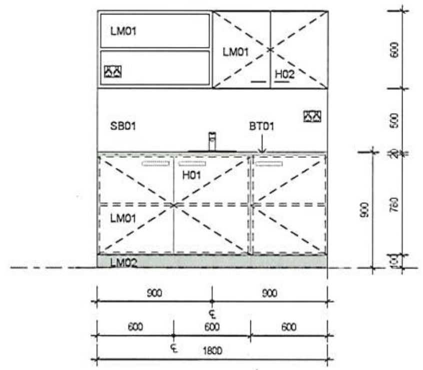
Sch 2.2(1)(b)



① JOINERY ARTS & CRAFTS BENCH - TYPICAL



② JOINERY ARTS & CRAFTS BENCH - FLOOR PLAN
1 : 20



③ JOINERY ARTS & CRAFTS BENCH - ELEVATION
1 : 20

TMV FOR TEMPERATURE CONTROL REQUIRED TO ALL ROOMS. ENSURE DEDICATE POWERPOINT IS PROVIDED AND COMPLIANT WITH RELEVANT STANDARDS.

ALL JOINERY FINISHING MATERIALS TO MATCH EXISTING (JUNIOR SCHOOL)

ALL LOOSE FURNITURE TO BE PROVIDED BY OWNER.

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

...ent: ...RINDABELLA CHRISTIAN COLLEGE

...ject Title: ...EMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

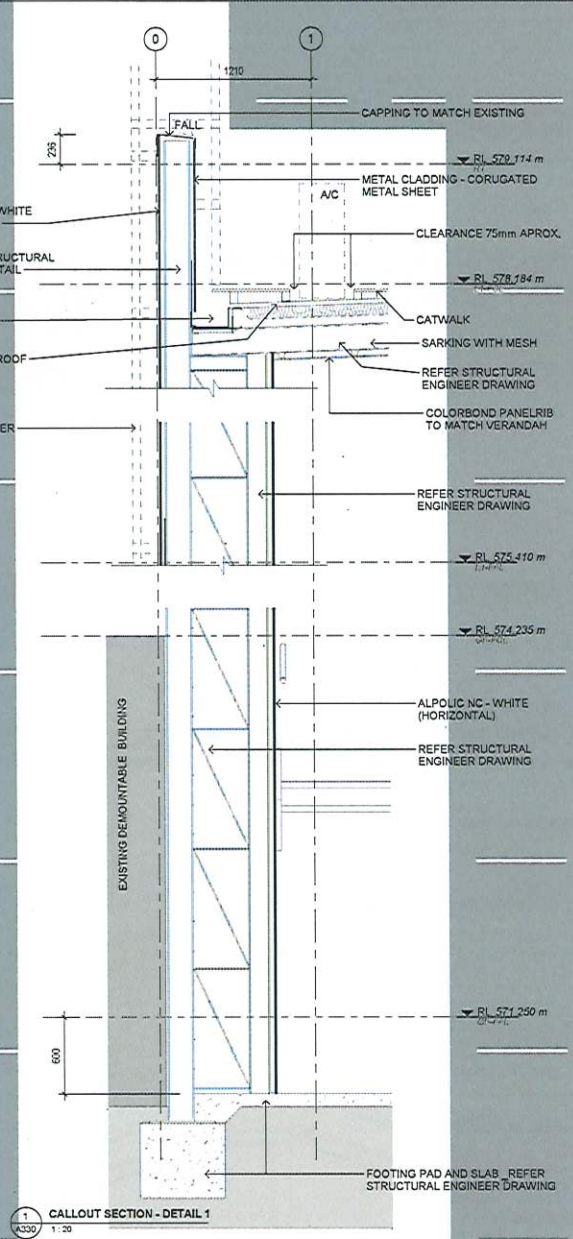
Project Status: BUILDING APPROVAL

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

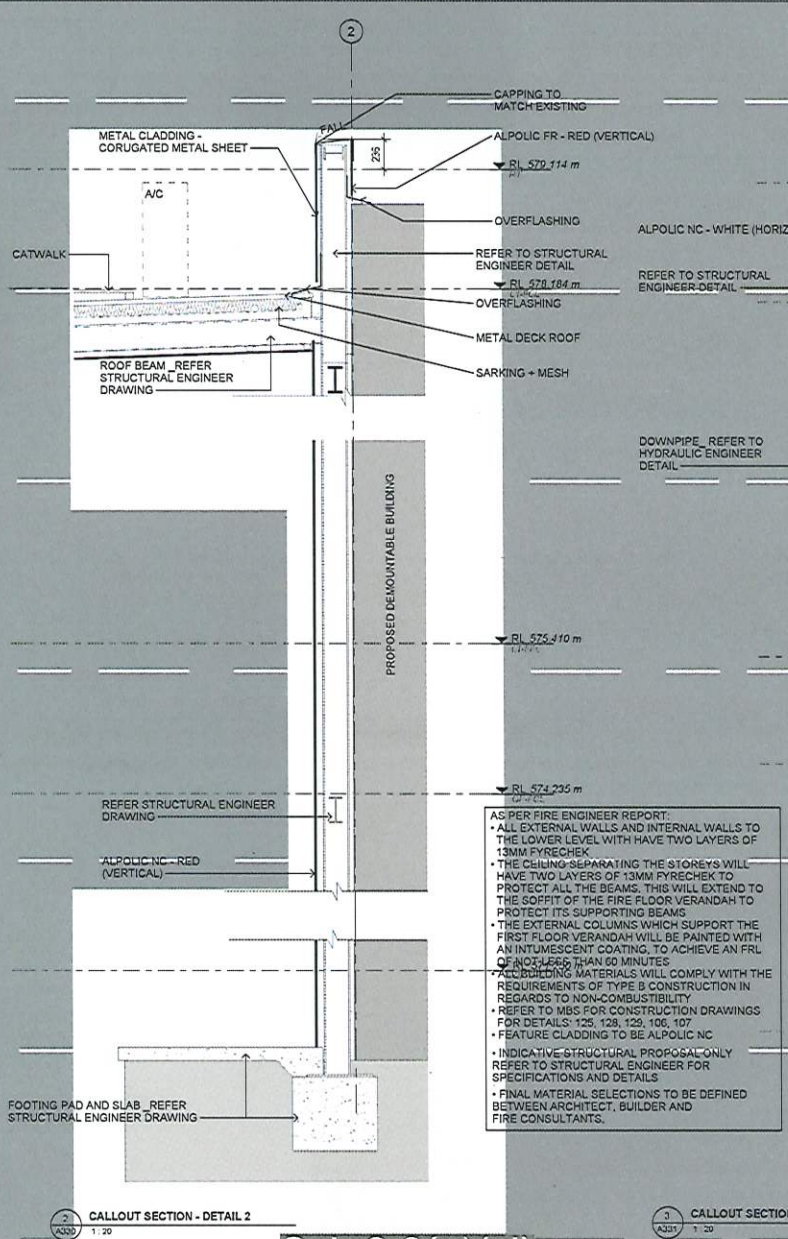
Block: 4 | Section: 41 | Division: LYNEHAM

Drawing Title: JOINERY PLAN

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: 1 : 20	Sheet Size: A1	Drawn: DT
Project No: 1506.16	Sheet No: A450	Amendment: A

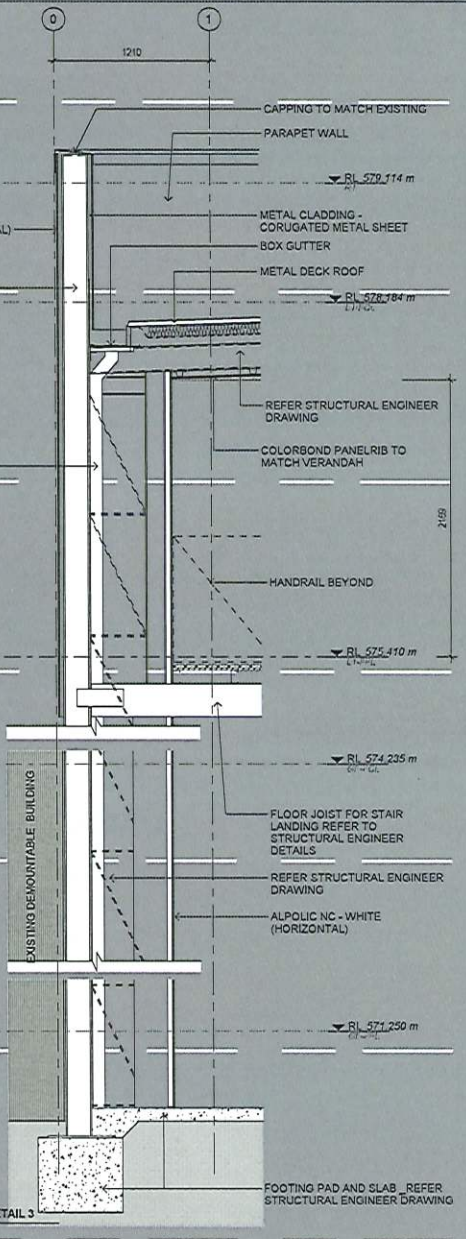


1 A330 CALLOUT SECTION - DETAIL 1
1 : 20



2 A330 CALLOUT SECTION - DETAIL 2
1 : 20

AS PER FIRE ENGINEER REPORT:
- ALL EXTERNAL WALLS AND INTERNAL WALLS TO THE LOWER LEVEL WITH HAVE TWO LAYERS OF 13MM FYRECHEK
- THE CEILING SEPARATING THE STOREYS WILL HAVE TWO LAYERS OF 13MM FYRECHEK TO PROTECT ALL THE BEAMS. THIS WILL EXTEND TO THE SOFFIT OF THE FIRE FLOOR VERANDAH TO PROTECT ITS SUPPORTING BEAMS
- THE EXTERNAL COLUMNS WHICH SUPPORT THE FIRST FLOOR VERANDAH WILL BE PAINTED WITH AN INTUMESCENT COATING, TO ACHIEVE AN FRL OF NOT LESS THAN 60 MINUTES
- ALL BUILDING MATERIALS WILL COMPLY WITH THE REQUIREMENTS OF TYPE B CONSTRUCTION IN REGARDS TO NON-COMBUSTIBILITY
- REFER TO MBS FOR CONSTRUCTION DRAWINGS FOR DETAILS: 125, 128, 129, 106, 107
- FEATURE CLADDING TO BE ALPOLIC NC
- INDICATIVE STRUCTURAL PROPOSAL ONLY REFER TO STRUCTURAL ENGINEER FOR SPECIFICATIONS AND DETAILS
- FINAL MATERIAL SELECTIONS TO BE DEFINED BETWEEN ARCHITECT, BUILDER AND FIRE CONSULTANTS.



3 A331 CALLOUT SECTION - DETAIL 3
1 : 20

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(xi)

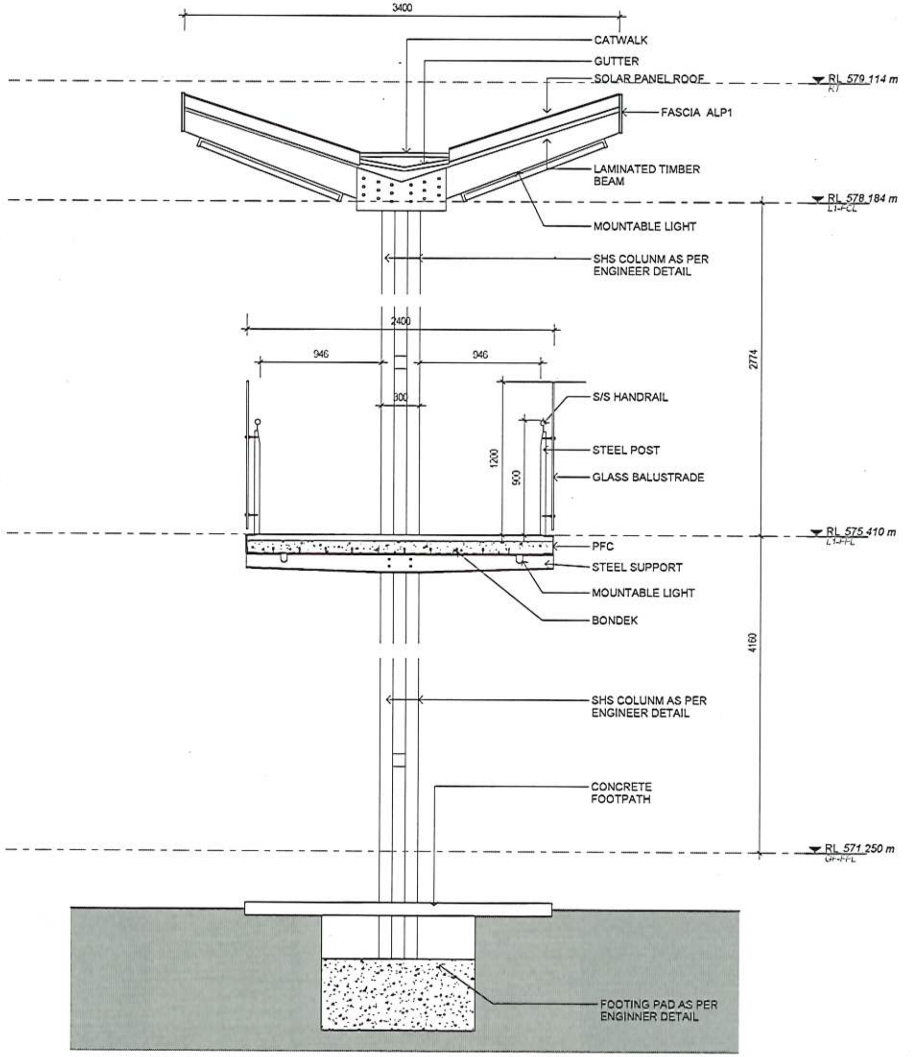
Client: BRINDABELLA CHRISTIAN COLLEGE
Project Title: DEMOUNTABLE V2
Project Status: BUILDING APPROVAL
Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602
Block: 4 | Section: 41 | Division: LYNEHAM

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

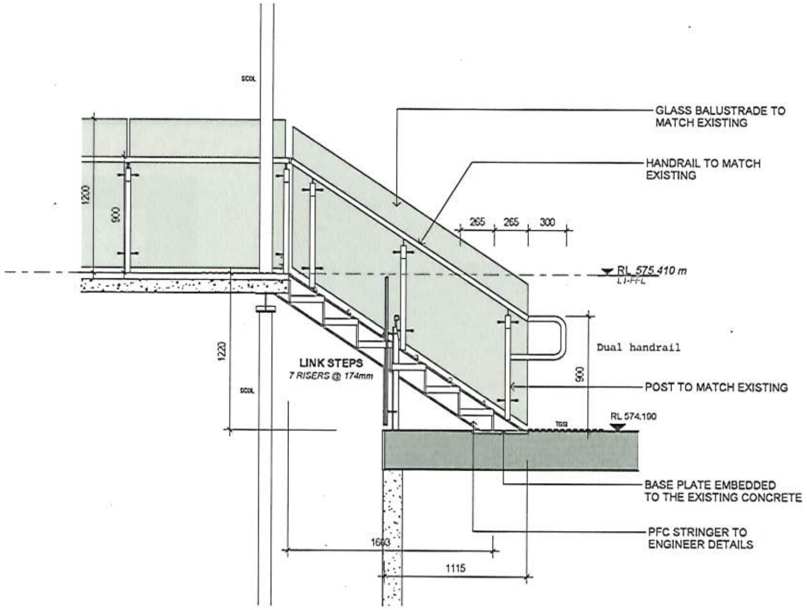
Drawing Title: CONSTRUCTION DETAILS

Design Project Manager	Project Architect	Design Verifier
SV	NI	SV
Scale: 1 : 20	Sheet Size: A1	Drawn
Project No: 1506.16	Sheet No: A550	Amendment: A

Sch 2.2(a)(xi)



1 A135 LINK BRIDGE SECTION DETAIL
1 : 20



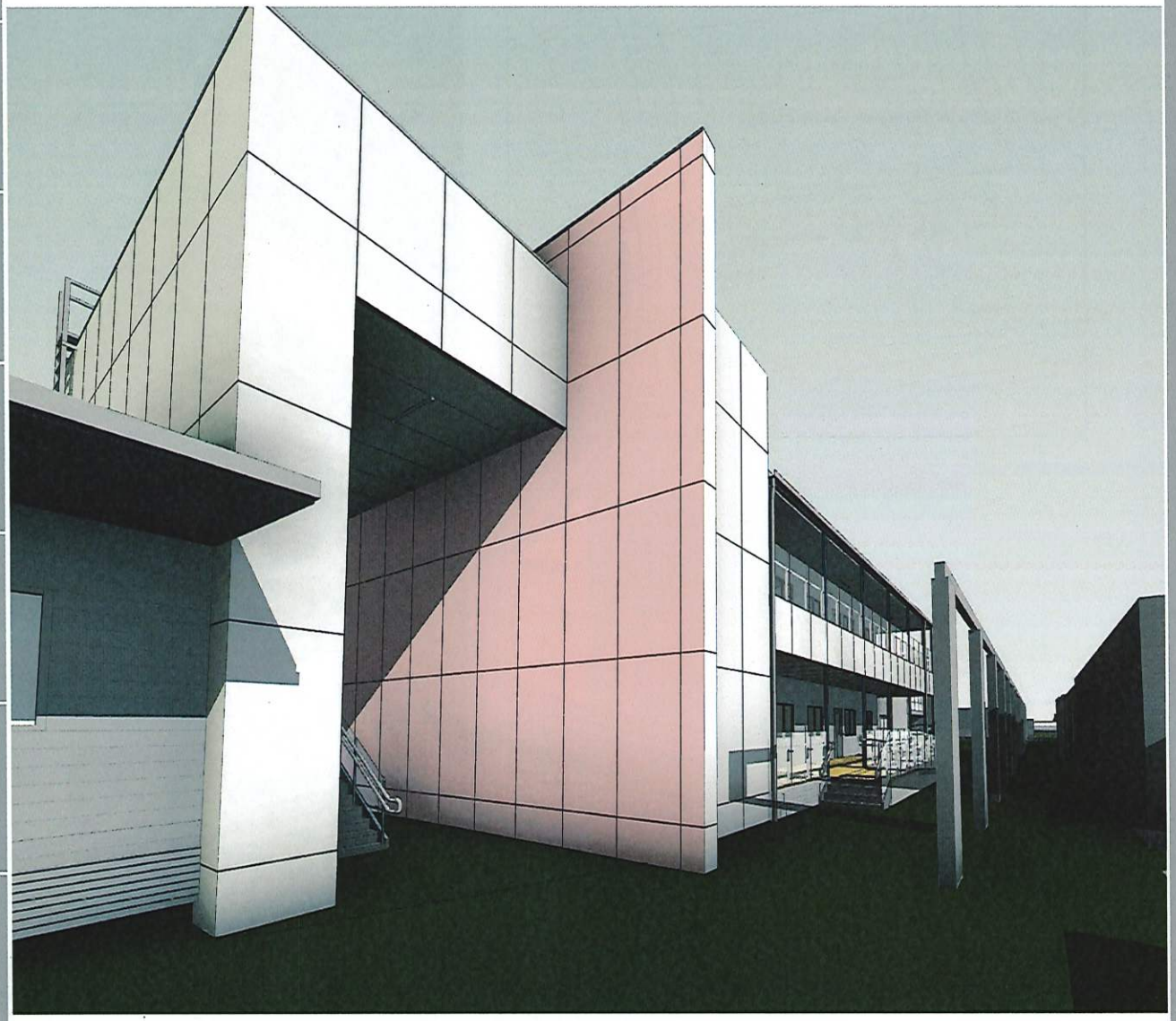
2 A134 LINK BRIDGE_STEPS DETAIL
1 : 20

REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 28 of the Building Act 2004

Sch 2.2(a)(xi)

Client: BRINDABELLA CHRISTIAN COLLEGE	Project Status: BUILDING APPROVAL	Drawing Title: CONSTRUCTION DETAILS	
Project Title: DEMOUNTABLE V2	Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602	Design Project Manager: SV; Project Architect: NI; Design Verifier: SV	
All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.	Block: 4; Section: 41; Division: LYNEHAM	Scale: 1 : 20; Sheet Size: A1; Drawn:	
		Project No: 1506.16; Sheet No: A551; Amendment: A	© Copyright



REV	DATE	DESCRIPTION
A	04.02.21	FOR CONSTRUCTION

Building Approval
Is issued under section 25 of the Building Act 2004

Sch 2.2(a)(ii)

Sch 2.2(a)(xi)

Client: RINDABELLA CHRISTIAN COLLEGE

Project Status: BUILDING APPROVAL

Drawing Title: 3D VISUALISATION

Project Title: EMOUNTABLE V2

Project Address: 136 BRIGALOW STREET, LYNEHAM ACT 2602

Design Project Manager: SV | Project Architect: NI | Design Verifier: SV

Scale | Sheet Size: A1 | Drawn

Block: 4 | Section: 41 | Division: LYNEHAM

Project No: 1506.16 | Sheet No: A630 | Amendment: A

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Sch 2.2(a)(i)

Sch 2.2(a)(xi)

CONSTRUCTION NOTES:

Sch 2.2(a)(xi)

GENERAL NOTES:

Sch 2.2(a)(xi)

NOTES

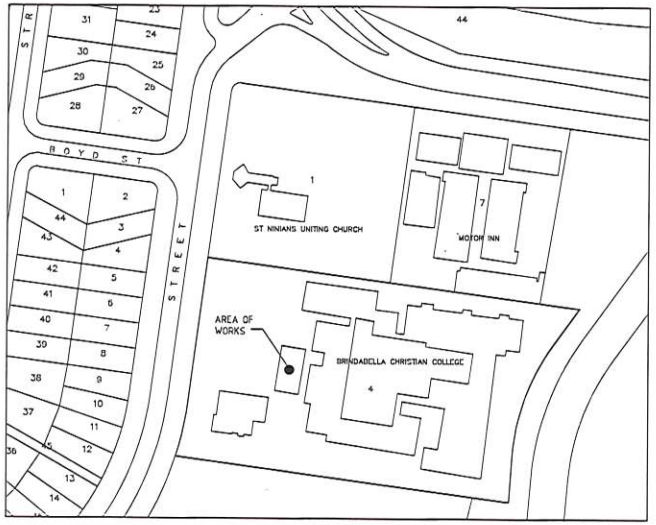
1. ALL WORK TO BE IN ACCORDANCE WITH AS 3500, A.C.T. WATER & SEWERAGE ACT 2000 AND A.C.T WATER & SEWERAGE REGULATIONS 1963.

Sch 2.2(a)(xi)

3. U.P.V.C DRAINAGE SHALL BE LAID IN ACCORDANCE WITH AUSTRALIAN STANDARD A.S 2032-1977.
4. THIS PLAN SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL PLANS AND SPECIFICATIONS.

Sch 2.2(a)(xi)

10. DO NOT SCALE FROM DRAWINGS.



LOCATION PLAN
N.T.S

ADDITIONAL WORK

PLUMBING PLAN APPROVED

DRAINAGE PLAN No .....

NORTH

No.	Date	Description
A	21.01.21	FOR REVIEW
B	25.01.21	FOR CERTIFICATION

CERTIFICATION

Hydraulic Contractor:

Custom Plumbing

Unit 2, 112 Gladstone Street Fyshwick A.C.T
Phone: (02) 6280 6560 Fax: (02) 6239 1931

Project Title:
BRINDABELLA CHRISTIAN COLLEGE
DEMOUNTABLE V2

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Address:
136 BRIGALOW STREET
LYNEHAM ACT

Block:	Section:	Division:
4	41	LYNEHAM

Drawing Title:
HYDRAULIC SERVICES
SANITARY & STORMWATER DRAINAGE
DRAINAGE PLAN

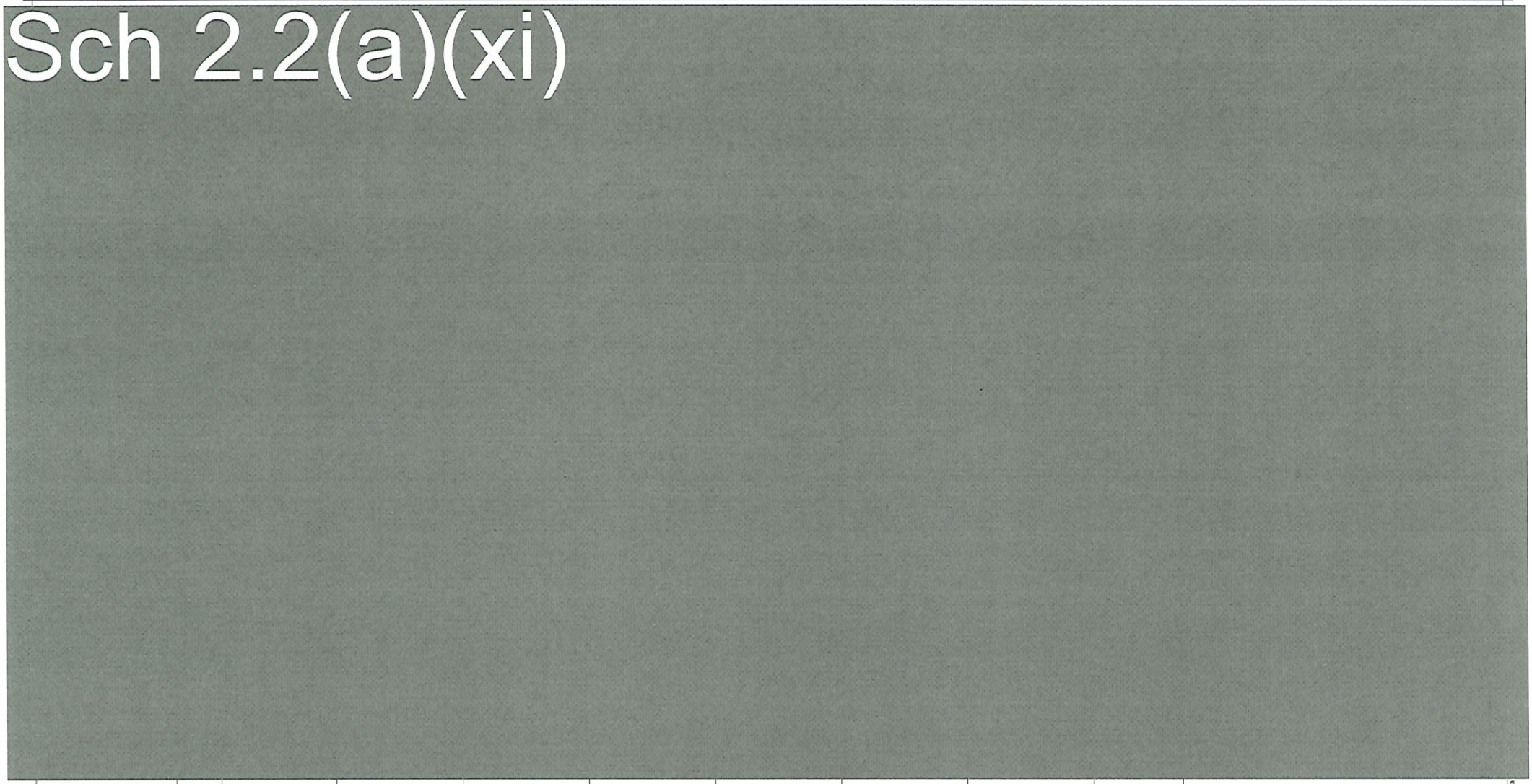
Drawn:	Designer:	Reviewer:	Verifier:
PW	WP	WP	WP

Scale:
1 : 100 @A1

Project No:	Sheet No:	Amendment:
21/02	H01	B

0 100 200 300 for pdf scaling

Sch 2.2(a)(xi)



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REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

Block:	Section:	Divison:
4	41	LYNEHAM

Drawing Title:
Fire Services - Detection and OWS Ground Floor

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale:	Sheet Size:	Drawn:
As Indicated	A1	
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)

[redacted]

NORTH

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REV	DATE	DESCRIPTION
A	04.02.21	Building Approval

Client:
BRINDABELLA CHRISTIAN COLLEGE

Project Title:
DEMOUNTABLE V2

All dimensions in millimetres. Do not scale drawing. All dimensions and levels to be verified on site by contractor before commencing work or preparation of shop drawings. Where provided, drawings must be read in conjunction with schedule of work or specification.

Project Status:
For Building Approval

Project Address:
136 BRIGALOW STREET, LYNEHAM ACT 2602

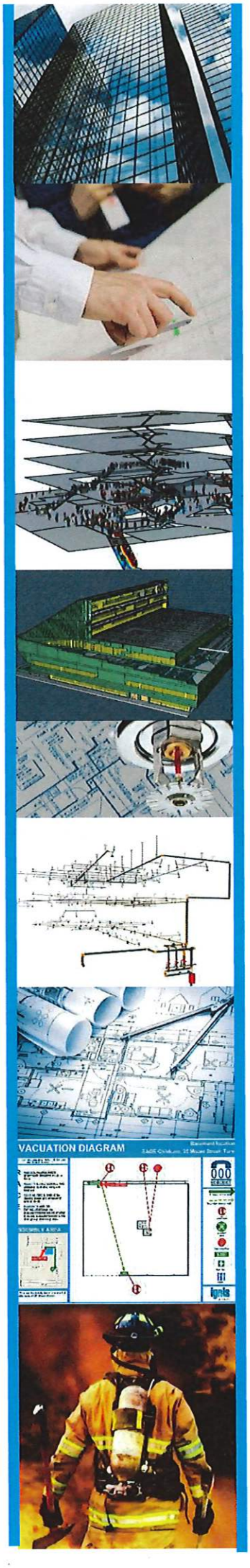
Block:	Section:	Divison:
4	41	LYNEHAM

Drawing Title:
Fire Services - Detection and OWS
Level 1

Design Project Manager:	Project Architect:	Design Verifier:
SV	NI	SV
Scale: As indicated	Sheet Size: A1	Drawn:
Project No:	Sheet No:	Amendment:

Sch 2.2(a)(xi)

Sch 2.2(a)(xi)



ignis solutions

PROFESSIONAL FIRE SAFETY ENGINEERS

t: (02) 6100 3900 | ABN: 24 160 047 325
mail@ignissolutions.com.au | www.ignissolutions.com.au
Unit 13/14 Lonsdale Street Braddon ACT 2612
PO Box 5174 Braddon ACT 2612

Brindabella Christian College
Block 04 Section 41 Lyneham ACT
FIRE ENGINEERING REPORT

8158 Issue 02 Revision 00 17-Nov-20

DOCUMENT REVISION HISTORY

Issue	Revision	Date	Purpose of Issue	Prepared by	Reviewed by
01	00	12-Nov-2020	Issued for internal review	NC	BR
02	00	17-Nov-2020	Additional Performance Solution for travel, inclusion of hydrant comments	NC	BR

SQC
Unit 3, Level 1
22 Thyne Street
Bruce, ACT 2617

Written by
Nicole Cocks
MIEAust MSFS
Fire Safety Engineer
BEng (ANU)

Reviewed by
Brad Robson
GIEAust MSFS
Senior Project Engineer
BEng (ANU)

Authorised by
Benjamin Hughes-Brown
FIEAust CPEng NER
Chartered Professional Engineer
CPEng, NER (Fire Safety / Mech) 2590091, RPEQ 11498, BPB-C10-1875, EF-39394
MFireSafety (UWS), BEng (UTS), GradDipBushFire (UWS), DipEngPrac (UTS), DipEng (CIT)

CONDITIONS AND LIMITATIONS

The report does not provide guidance in respect of areas, which are used for bulk storage, processing of flammable liquids, explosive materials, multiple fire ignitions or sabotage of existing fire safety systems.

Apart from where noted in the specific sections of this report, we have not verified information provided by external parties and assume that the remainder of the building will comply with the DtS provisions of the NCC Volume 1 – BCA.

Any application of the content of this report should be made taking into full account the following items:

1. observations of the building fire safety systems and fire hazards listed in this report have been based on examination of documentation made available by the design team.
2. any change in the information referenced including building design as detailed in this report to suit future re-organisation or planning will require further evaluation to confirm compliance with the intent of the design objectives.
3. the data, methodologies, calculations and conclusions documented within this report specifically relate to the building and must not be used for any other purpose.
4. specifically, the report does not consider property damage; e.g. building and contents damage caused by fire, potential increased insurance liability and loss of business continuity.
5. this report considers a single point of fire as a source of ignition.
6. the design complies with the current DtS provisions of the BCA except for the specific performance solutions identified within this report.
7. figures provided within the report are indicative only. Full and appropriate detail is expected to be provided within discipline specific engineering specifications and associated detail design drawings by others.
8. all of the fire safety systems are assumed to be designed, installed and operate in accordance with the appropriate Australian Standards, other design codes, legislation and regulations relevant to the project unless specifically stated otherwise.
9. for a satisfactory level of fire safety to be achieved, regular testing and maintenance of all fire safety systems and measures, including management-in-use systems, is essential and is assumed in the conclusion of this evaluation.

Potential risks of incendiary are limited in the scope of engineering design. Conventional building design can only provide limited protection against malicious attack; for example, large scale incendiary and multiple ignition sources can potentially overwhelm some fire safety systems.

Strategies such as security, housekeeping and other management procedures may be more effective than additional fire protection in addressing arson events.

This report is applicable to the Project only. It does not consider property damage to the building as a result of the performance solutions addressed in the evaluations.

A number of issues within the NCC Volume 1 – BCA are interpretive in nature. Where these issues are encountered, interpretations are made that are consistent with standard industry practice.

This report is prepared in good faith and with due care for information purposes only, and should not be relied upon as providing any warranty or guarantee. In particular, attention is drawn to the nature of the inspection and investigations undertaken and the limitations these impose in determining with accuracy the state of the building, its services or equipment and life safety.

Ignis Solutions' involvement in the Project is limited to the role outlined in section 2 'Scope of Service' of the Letter. This report reflects that role. Any reliance on, or use of, this report for purposes outside the scope of service is at the user's own risk.

Ignis Solutions shall not be held liable for any loss or damage resulting from any defect of the building or its services or equipment or for any non compliance of the building or its services or equipment with any legislative or operational requirement, whether or not such defect or non-compliance is referred to or reported upon in this report, unless such defect or non-compliance should have been apparent to a competent engineer undertaking the evaluation of the type undertaken for the purpose of preparation of this report.

Ignis Solutions has carefully reviewed and applied to the best of our ability the requirements of local Legislation, the NCC and the International Fire Engineering Guidelines.

TABLE OF CONTENTS

Part

A

executive summary

1 EXECUTIVE SUMMARY

1.1 General

Ignis Solutions has been engaged by SQC regarding the development at Block 04 Section 41 Lyneham ACT.

The development is consists of a two storey school building (Class 9B) located on the existing school site of Brindabella Christian College at Block 04 Section 41, Lyneham. Vehicle access, pedestrian access as well as fire brigade access to the development is from Brigalow Street.

Provision A2.0 details that a Building Solution will comply with the BCA if it satisfies the Governing Requirements of the NCC and the Performance Requirements. A building solution as defined by the BCA means a solution, which complies with the Performance Requirements and is an Alternative Solution or a solution, which complies with the Deemed-to Satisfy provisions or a combination of both.

1.2 Scope and Purpose

The purpose of this assessment is to evaluate the nominated performance requirements to demonstrate that the relevant performance requirements of the National Construction Code Volume One – Building Code of Australia 2019 Amendment One are maintained.

TABLE 1:

PERFORMANCE SOLUTION SUMMARY

Assessment	Relevant BCA Provisions and Performance Requirements	Method for meeting performance requirements	IFEG Sub-system[s] Evaluated	BCA Assessment method
Rationalisation of FRLs – External Walls	C1.1 CP1 CP2	A2.1 (c)	C	A2.2 (2)(b)(ii)
Automatic Fire Detection and Alarm System	AS 1670.1:2015 Clause 2.3 EP4.3	A2.1 (c)	D	A2.2 (2)(b)(ii)
Protection of Openings	C3.2 CP2 CP8	A2.1 (3)	C	A2.2 (2)(b)(ii)
Distance of Travel	D1.4 D1.5 DP4	A2.1 (3)	E	A2.2(2) (b)(ii)

Source: Ignis Solutions

1.3 Relevant Stakeholders

Consultation with project stakeholders is undertaken based on the International Fire Engineering Guidelines Clause 1.2.2. The following stakeholders were involved in this fire engineering analysis.

The relevant stakeholders consulted in developing this fire strategy are outlined in the table below.

TABLE 2:

PROJECT STAKEHOLDERS

Name	Role	Organisation
Phil Ma	Client / builder	Vamos Group
Sander de Vries	Architect	SQC Architecture
David Delchau	Certifier	CBS Building Surveyors
	Building owner	Brindabella Christian College
ACT F&R Fire Engineering Review officer	Referral Entity	ACT Fire & Rescue
Nicole Cocks	Fire Safety Engineer	Ignis Solutions
Brad Robson	Senior Project Engineer	Ignis Solutions
Benjamin Hughes-Brown	Charter Professional Fire Safety Engineer	Ignis Solutions

Source: Ignis Solutions

1.4 Sources of Information

The following information sources were used in the evaluation of the buildings:

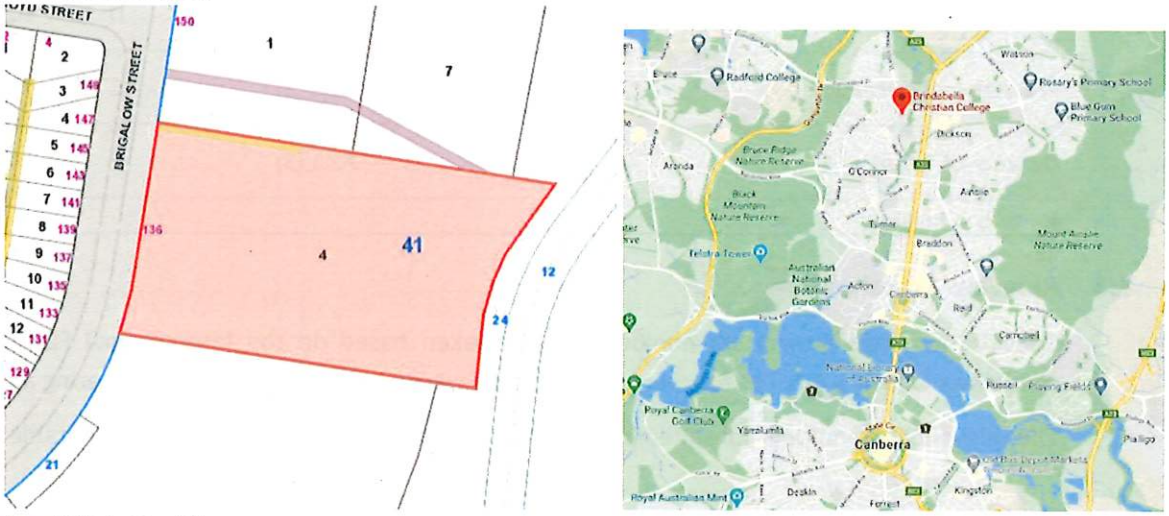
- National Construction Code 2019 Amendment One – Volume One – Building Code of Australia, Class 2 to 9 buildings, Australian Building Codes Board, Canberra, 2020. (BCA)
- Guide to the Building Code of Australia 2019 Amendment One – Volume One – Building Code of Australia, Class 2 to 9 buildings, Australian Building Codes Board, Canberra, 2020 (the Guide).
- International Fire Engineering Guidelines, Australian Building Codes Board, Canberra, 2005
- Drawings are provided by SQC with project number 1506.16, dated 11th September 2020.

1.5 Proposed Development

The location of the building is detailed below.

FIGURE 1:

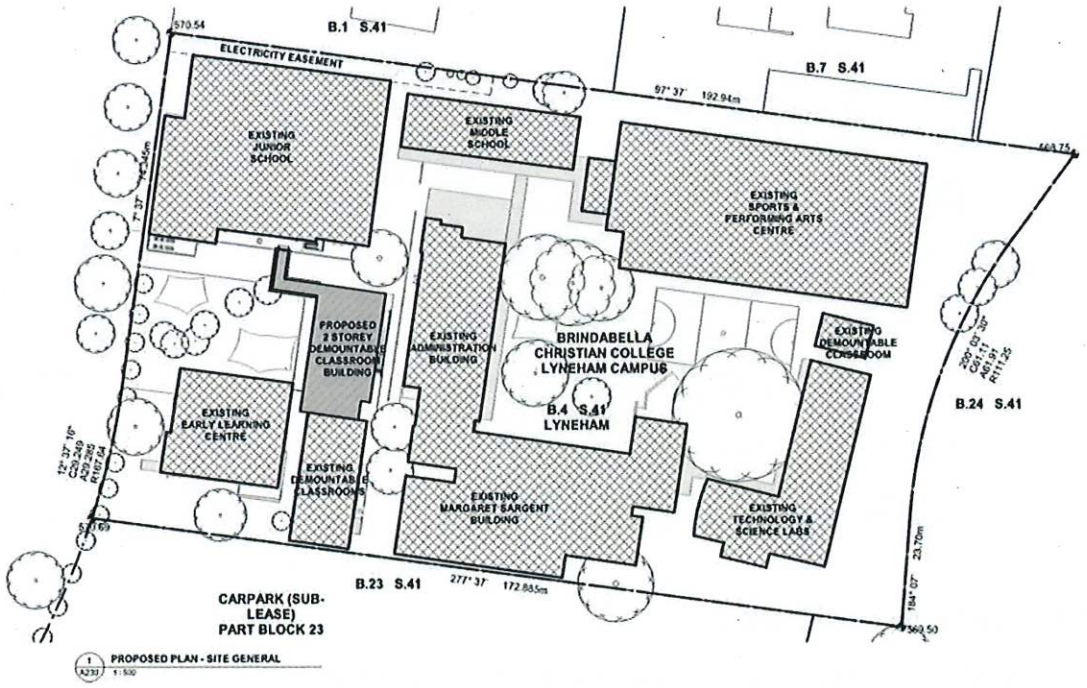
BUILDING LOCATION



Source: ACTMapi and Google Maps

FIGURE 2:

SITE PLAN



Source: Hayball

The minimum fire safety measures required within the building are determined in accordance with several specifics of the building including the various occupancy classifications, effective height, rise in storeys, compartment size and building floor area.

TABLE 3:

BUILDING CLASSIFICATION DETAILS

Project	Block 04 Section 41 Lyneham ACT
Occupancy	School
Classification	9b
Effective Height	<12 m
Rise in Storeys	2
Number of Storeys	2
Type of Construction	Type B

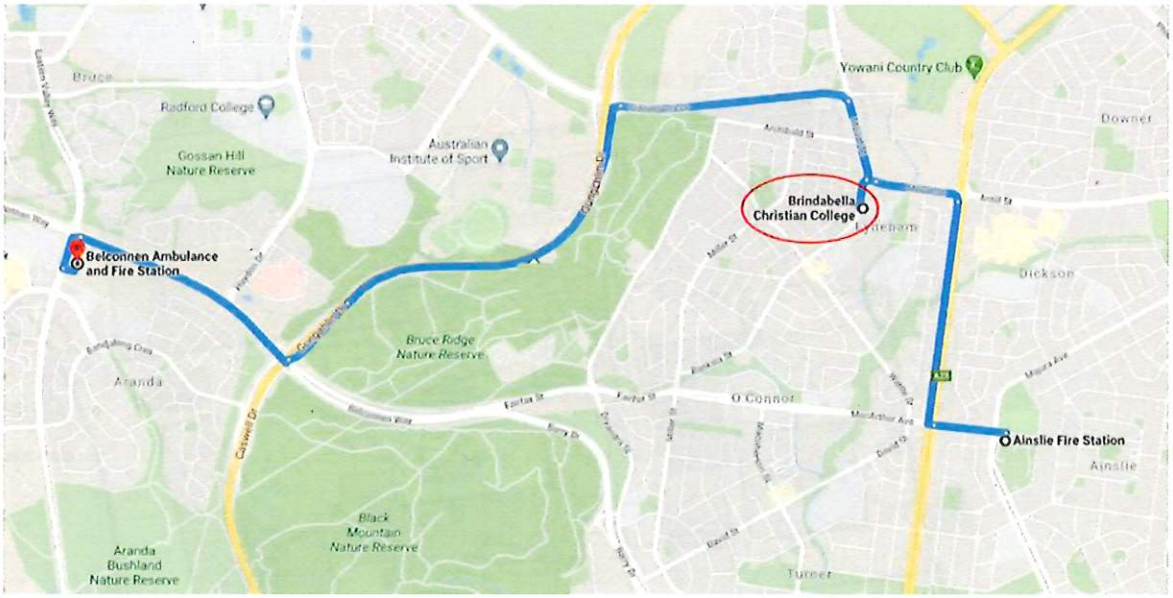
Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

1.6 Fire Brigade Intervention

The site is served by a response from ACT Fire & Rescue. The nearest ACT Fire & Rescue station is Ainslie Station being approximately 2.2 km by direct road from the site taking approximately 5 minutes. The second nearest ACT Fire & Rescue station is Belconnen Station being approximately 6 km by direct road from the site taking approximately 9 minutes. The site location and the two fire stations are outlined below:

FIGURE 3:

BUILDING PROXIMITY TO NEAREST FIRE STATIONS



Source: Google map and Ignis Solutions

1.7 Fire Engineering Briefing

Nicole Cocks from Ignis Solution and ACTF&R Station Office Chris White discussed the proposed Performance Solutions via email and phone from 28 September to 30 September 2020.

It was proposed to rationalise the type of construction from Type B and to rationalise the protection of openings. Following further discussions, in principle support was given.

Part

B

fire safety measures

The fire safety measures listed in this section are essential measures forming part of the performance solution that must be designed, installed and identified on the essential services maintenance schedule for the building. These essential measures must be maintained and certified in accordance with the provisions of the National Construction Code, this report and ABCB Maintenance of Safety Measures, Equipment and Energy Efficiency Installations Handbook 2014 and any applicable Australian Standards. Other measures may be required by the National Construction Code. These measures are likely to be detailed by specific design disciplines or the BCA consultant. Ignis Solutions scope relates to performance based design as detailed in this report only.

Current legislation for the maintenance of buildings is managed initially through Section 92 of the Emergencies Act where the chief officer may, in writing, direct the occupier of the premises for the provision or installation of a fire appliance at the premises.

In accordance with Section 95(2) of the Emergencies Act, it is an offence if a fire appliance is provided or installed at the premises under a direction under Section 92 and the occupier fails to maintain the fire appliance to a reasonable standard.

It is expected that through the ACT F&R Plan Review and Performance Review process under the Building (General) Regulations that direction under Section 92 will be provided.

It is assumed that the following fire safety measures, limitations and assumptions of this report are read, understood and implemented. Ignis Solutions should be contacted if there are queries in regards to the content. Ignis Solutions takes no responsibility for the misinterpretation by others.

2 FIRE SAFETY MEASURES

2.1 General

a. The following fire safety measures relate to elements that are associated with the performance analysis. All other elements of the buildings fire safety measures not specifically documented in the following section is to comply with the requirements of the BCA and documented by others. Ignis Solutions takes no responsibility for compliance matters relating to fire safety that have not been discussed or brought to our attention.

2.2 Structural Fire Safety Measures

2.2.1 Rationalisation of FRLs

a. It is proposed to rationalise the construction of the two storey portable style classroom building from Type B construction. The rationalisations include the following specific items:

b. It is proposed for the external wall of the upper storey which is located within 18m of another building on the site to not have an FRL.

c. It is also proposed for the supporting elements of the upper floor be required to have an FRL of at least 60/60/60 in lieu of 120/120/120.

d. It is proposed for the fire separation of the floor to be with two layers of 13mm Fyrechek.

e. Future school expansion is to maintain the 6m separation of this building.

2.3 Architectural Measures

2.3.1 Openings within 6m of an adjacent building on the same allotment

a. It is proposed for the openings in the external walls that are within 6m of the adjacent Early Learning Centre to remain unprotected.

2.3.2 Travel distance

b. It is proposed for the travel from the balcony to be up to approximately 29m to a point of choice in lieu of 20m and up to 49m to an exit in lieu of 40m.

a. ## 2.4 Hydraulic System Measures

b. ### 2.4.1 Fire Hydrant System

c. It is proposed for the coverage of the fire hydrant system within the site from the external attack hydrants to be via three lengths of fire hose.

d. A hydrant block plan is to be provided at the building entrance/FIP and FBBV in accordance with Clause 7.11 of AS 2418.1:2005. The hydrant block plan is to detail the location of the hydrants, the hydrant booster, access points around the site, buildings and the signage as detailed below.

e. Signage is required indicating that three lengths of fire fighting hose is required to provide coverage for the building. This signage shall be located at the buildings entrances and adjacent to each building entrance and shall read "THREE LENGTHS OF FIRE FIGHTING HOSE IS REQUIRED TO REACH ALL AREAS FROM THE EXTERNAL HYDRANTS".

The signage is to be in capital lettering, not less than 20mm high in a colour contrasting the background. Signage must be permanent, fade resistant and weatherproof – i.e. must be screw fixed or other and not laminated paper.

Blue cats eye markers as well as blue poles are to be located at each attack hydrant point.

2.5 Active Fire Safety Measures

2.5.1 Fire Detection and Alarm System

a. It is proposed that the new portable building be monitored by the existing FIP located in the administration building with the building separated into detection zones as appropriate.

2.6 Fire Safety Measures Maintenance

2.6.1 Maintenance Requirements

a. Current legislation for the maintenance of buildings is managed initially through Section 92 of the Emergencies Act where the chief officer may, in writing, direct the occupier of the premises for the provision or installation of a fire appliance at the premises.

   In accordance with Section 95(2) of the Emergencies Act, it is an offence if a fire appliance is provided or installed at the premises under a direction under Section 92 and the occupier fails to maintain the fire appliance to a reasonable standard.

   It is expected that through the ACT F&R Plan Review and Performance Review process under the Building (General) Regulations that direction under Section 92 will be provided.

b. A fire safety schedule of essential measures is to be generated and kept on the building file as well as provided at the Fire Indicator Panel.

2.7 Essential Fire Safety Measures

2.7.1 Essential Fire Safety Measures

a. All Fire safety systems listed in this performance report are considered to be essential measures and to be maintained in accordance with AS 1851:2012.

Part

C

performance solutions

3 RATIONALISATION OF FRLS

3.1 Brief of Proposed Performance Solution

Clause C2.2 of the BCA details that a school building (Class 9b) with rise in storeys of two is to be of Type B construction. Table 4 of Specification C1.1 details the FRL of loadbearing elements for Type B construction. Clause 4.1(b) of Specification C1.1 requires that each building element in a building of Type B construction comply with Table 4 of Specification C1.1, with a typical FRL rating of 120/120/120.

The construction of the building is predominantly offsite, which results in some challenges for fire rating.

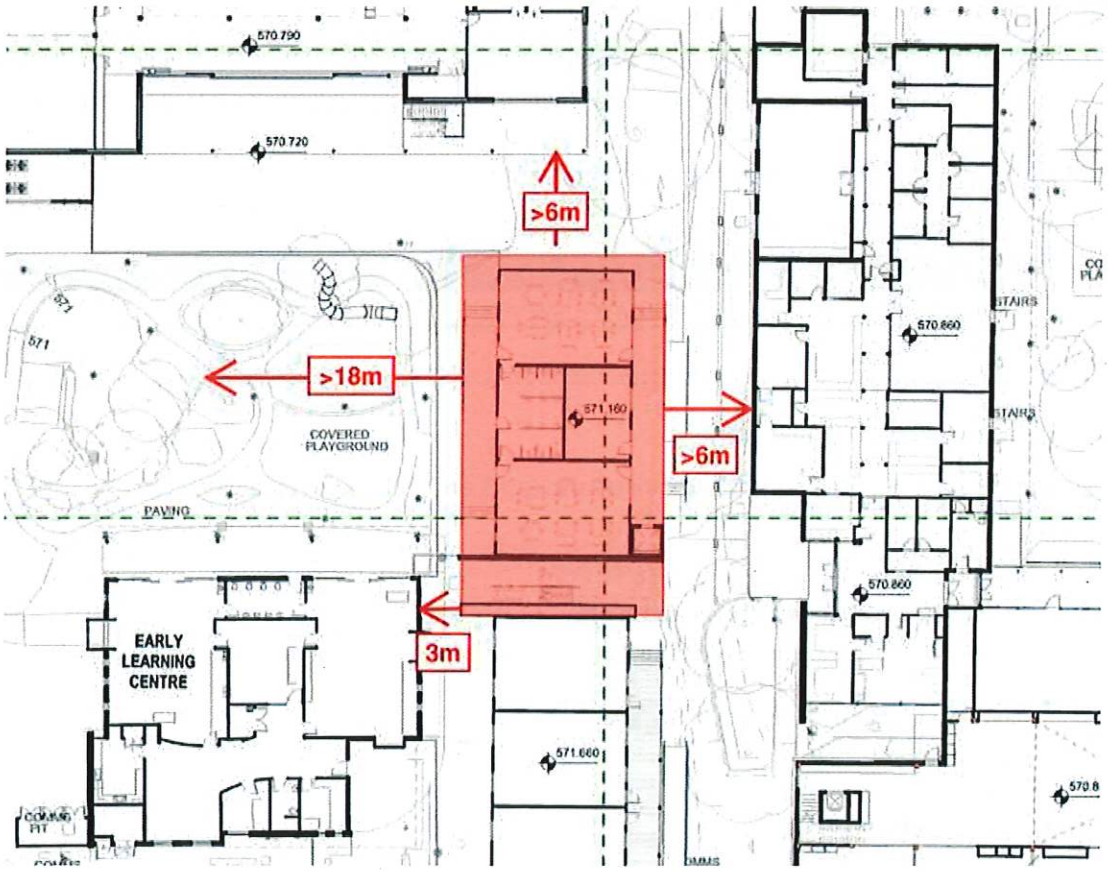
It is proposed for the external wall of the upper storey which is located within 18m of another building on the site to not have an FRL.

It is also proposed for the supporting elements of the upper floor be required to have an FRL of at least 60/60/60 in lieu of 120/120/120.

It is proposed for the fire separation of the floor to be with two layers of 13mm Fyrechek.

FIGURE 4:

DISTANCE TO FIRE SOURCE FEATURES



Source: SQC and Ignis Solutions

3.1.1 BCA Deemed-to-Satisfy

BCA Clause C1.1 details the type of construction required based on the rise in storeys and classification of building. See below:

FIGURE 5:

NCC – VOL 1 – CLAUSE C1.1

C1.1 Type of construction required

(a) The minimum Type of *fire-resisting construction* of a building must be determined in accordance with Table C1.1, except as allowed for—

(i) certain Class 2, 3 or 9c buildings in C1.5; and

(ii) a Class 4 part of a building located on the top *storey* in C1.3(b); and

(iii) *open spectator stands* and indoor sports stadiums in C1.7.

SA C1.1(a)(iv) and *(v)*

(b) Each building element must comply with Specification C1.1 as applicable.

Table C1.1 Type of construction required

Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8
4 or more	A	A
3	A	B
2	B	C
1	C	C

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

3.1.2 Intent of BCA Deemed-to-Satisfy Clause

The Guide to the BCA is indented as a reference manual to provide clarification to the BCA and should be read in conjunction with the BCA. The Guide to the BCA describes the intent of Clause C1.1 as:

FIGURE 6:

NCC – GUIDE TO VOL 1 – CLAUSE C1.1

C1.1 Type of construction required

Intent
To establish the minimum fire-resisting construction required for Class 2–9 buildings.

Source: ABCB NCC Volume One, Guide – Building Code of Australia 2019 Amendment One

3.1.3 BCA Performance Requirement

The relevant BCA Performance Requirement is CP1 and CP2 as detailed below:

FIGURE 7:

NCC – VOL 1 – PERFORMANCE REQUIREMENT CP1

CP1 Structural stability during a fire

A building must have elements which will, to the degree necessary, maintain structural stability during a fire appropriate to—

(a) the function or use of the building; and

(b) the *fire load*; and

(c) the potential *fire intensity*; and

(d) the *fire hazard*; and

(e) the height of the building; and

(f) its proximity to *other property*; and

(g) any active *fire safety systems* installed in the building; and

(h) the size of any *fire compartment*; and

(i) *fire brigade* intervention; and

(j) other elements they support; and

(k) the *evacuation time*.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

FIGURE 8:

NCC – VOL 1 – PERFORMANCE REQUIREMENT CP2

CP2 Spread of fire

(a) A building must have elements which will, to the degree necessary, avoid the spread of fire—

(i) to *exits*; and

(ii) to *sole-occupancy units* and *public corridors*; and

Application:
CP2(a)(ii) only applies to a Class 2 or 3 building or Class 4 part of a building.

(iii) between buildings; and

(iv) in a building.

(b) Avoidance of the spread of fire referred to in (a) must be appropriate to—

(i) the function or use of the building; and

(ii) the *fire load*; and

(iii) the potential *fire intensity*; and

(iv) the *fire hazard*; and

(v) the number of *storeys* in the building; and

(vi) its proximity to *other property*; and

(vii) any active *fire safety systems* installed in the building; and

(viii) the size of any *fire compartment*; and

(ix) *fire brigade* intervention; and

(x) other elements they support; and

(xi) the *evacuation time*.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

3.1.4 Relevant Element of Performance Requirement

The entirety of the Performance Requirements CP1 and CP2 detailed above are relevant.

3.1.5 Meeting the Performance Requirement

The Performance Requirement will be satisfied by A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.

3.1.6 Assessment Method

BCA Clause A2.2 (2)(b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.

3.1.7 Methodology

The following methodologies will be applied to the evaluation:

☑ Absolute	☐ Quantitative	☑ Deterministic
☐ Comparative	☑ Qualitative	☐ Probabilistic

Absolute approach

As outlined in the International Fire Engineering Guideline an absolute approach is typically when an evaluation is carried out on an absolute basis, the results of the analysis of the trial design are matched, using the agreed acceptance criteria against the objectives or performance requirements without comparison to deemed-to-satisfy or prescriptive or "benchmark" designs.

Qualitative approach

A qualitative approach refers to descriptions or distinctions based on a quality or characteristic rather than on a quantity or measures value. The qualitative approach includes structured arguments to demonstrate compliance.

Deterministic approach

A deterministic approach is a methodology based on physical relationships derived from scientific theories and empirical results that for a given set of conditions will always produce the same outcome.

3.1.8 Acceptance Criteria

The acceptance criteria for this performance solution is that the proposed elements of the building have sufficient measures to limit fire spread and structural damage such that the BCA Performance Requirements CP1 and CP2 are satisfied to the degree necessary.

3.1.9 Identified Hazard

The potential hazard is that a fire incident may occur and the fire may spread and/or cause structural collapse.

3.1.10 IFEG Sub-system

The performance solution falls within Sub-System C: Fire Spread and Impact and Control. Sub-system is used to analyse the spread of fired beyond an enclosure, the impact fire might have on the structure and how the spread and impact might be controlled.

3.2 Performance Evaluation

Clause C2.2 of the BCA details that a school building (Class 9b) with rise in storeys of two is to be of Type B construction. Table 4 of Specification C1.1 details the FRL of loadbearing elements for Type B construction. Clause 4.1(b) of Specification C1.1 requires that each building element in a building of Type B construction comply with Table 4 of Specification C1.1, with a typical FRL rating of 120/120/120.

The construction of the building is predominantly offsite, which results in some challenges for fire rating.

It is proposed for the external wall of the upper storey which is located within 18m of another building on the site to not have an FRL.

It is also proposed for the supporting elements of the upper floor be required to have an FRL of at least 60/60/60 in lieu of 120/120/120.

It is proposed for the fire separation of the floor to be with two layers of 13mm Fyrechek.

In lieu of Type B construction, the following fire protections are proposed:

- The upper level does not require an FRL for the roof or the elements which support it. The external wall of this upper level, where greater than 6m from a fire source feature is proposed to not have an FRL. The external wall within 6m will achieve the FRL
- The ceiling separating the storeys will have two layers of 13mm Fyrechek to protect all the beams. This will extend to the soffit of the fire floor verandah to protect its supporting beams, achieving the required resistance to the incipient spread of fire.
- All external walls and internal walls to the lower level with have two layers of 13mm Fyrechek inside and outside (protecting the columns within), achieving an FRL of no less than 60/60/60.
- The external columns which support the first floor verandah will be painted with an intumescent coating, to achieve an FRL of not less than 60 minutes
- All building materials will comply with the requirements of Type B construction in regards to non-combustibility

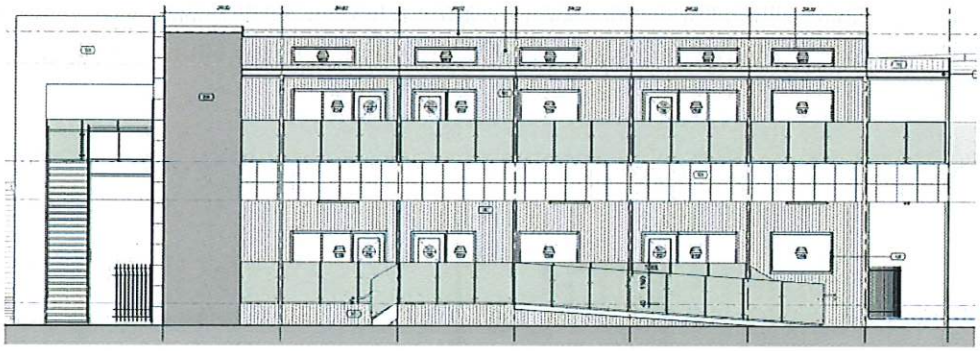
Building Description

The proposed building is a two storey multi-use school building that is to be prefabricated off site. For this reason, there are inherent difficulties of fire rating a product off site. It consists of five classrooms and an administration room spread across the two levels and as such is to be of Type B construction. It has an area of approximately 390m^2. The building is fitted with a smoke detection and alarm system in accordance with AS 1670.1.

Whilst the building is of a portable construction, the school is undergoing a ten year expansions/renovation plan and it is anticipated that this portable unit will be required for (at least) this time period.

FIGURE 9:

BUILDING ELEVATION



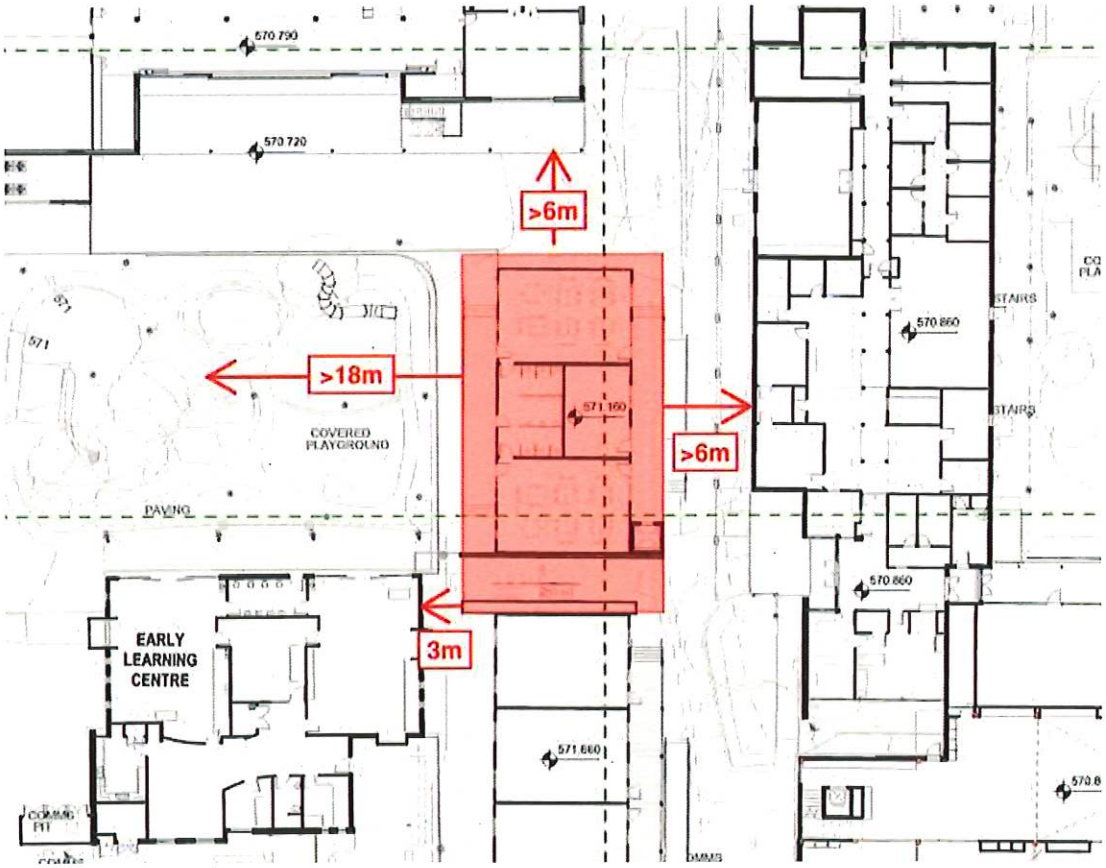
Source: SQC

Separation of building and fire spread

The building is surrounded on all sides by separate Class 9b school buildings. It is proposed for the external walls on the upper storey within 18m of a fire source feature to not have an FRL. All external walls of the lower storey will have an FRL. The external wall on the upper level within 6m of a fire source feature will have an FRL or will be addressed in the protection of openings Performance Solution.

FIGURE 10:

DISTANCE TO FIRE SOURCE FEATURES

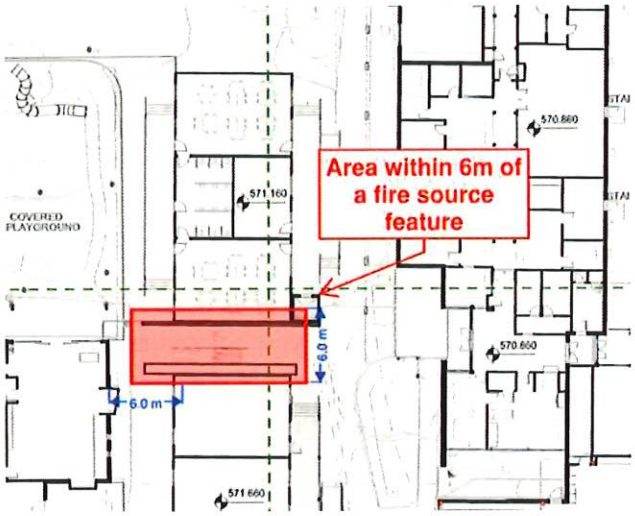


Source: SQC and Ignis Solutions

The section of building within 6m of a fire source feature is limited to the walkway from the upper level and a small section of the classrooms as shown below. By maintaining the FRL of the external wall within 6m of a fire source feature, the risk of fire spread is minimised.

FIGURE 11:

AREA WITHIN 6M OF A FIRE SOURCE FEATURE



Source: SQC and Ignis Solutions

Future school expansion is to consider and maintain the 6m separation of this building.

Internal separation and structural stability

Clause 4.1 (i) of Specification C1.1 details the requirements for floors separating storeys in buildings of Type B construction.

FIGURE 12:

NCC – VOL 1 – SPECIFICATION C1.1 CLAUSE 4.1 (PART)

4. Type B Fire-Resisting Construction

4.1 Fire-resistance of building elements

In a building *required* to be of Type B construction—

(i) in a Class 2 or 3 building, except where within the one *sole-occupancy units*, or a Class 9a *health-care building* or a Class 9b building, a floor separating *storeys* or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, must—

(i) be constructed so that it is at least of the standard achieved by a floor/ceiling system incorporating a ceiling which has a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or

(ii) have an FRL of at least 30/30/30; or

(iii) have a *fire-protective covering* on the underside of the floor, including beams incorporated in it, if the floor is *combustible* or of metal; and

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

It is proposed for the fire separation of the floor to be with two layers of 13mm Fyrechek to protect all the beams within the floor structure. This fire protection will extend to the soffit of the first floor veranda to protect its supporting beams.

The external walls and internal walls in the lower level which support the floor will also have two layers of 13mm Fyrechek on each side to protect the supporting columns within. IN addition, the external columns which support the first floor veranda will be painted with an intumescent coasting. A compliance option for a Class 9b floor is for it to achieve an FRL of at least 30/30/30. It is proposed that all supporting elements will achieve an FRL of not less than 60/60/60, greater than the requirement of the floor they support.

The Class 9b building can be compared to a Class 5 office building. Whilst the occupants classifications vary, the International Fire Engineering Guidelines provides the fire load densities for various occupancies. Table 3.4.1b, shown below, details that the 95 percent fractile for an office classification is 760 MJ/m^2, whereas a school is 450MJ/m^2. According to the BCA (table C1.1) a Class 5 office building is to be Type C construction and as such the floor and any walls greater than 3m from a fire source feature are not required to have an FRL. While the occupant characteristics differ between these classifications, the reduced fuel load improves the building's structural stability when compared to a Class 5 two-storey office building despite requiring to be of Type B construction.

FIGURE 13:

FIRE LOAD DENSITIES IN DIFFERENT OCCUPANCIES

Table 3.4.1b. Fire load density in different occupancies

Densities in mega-joules per square metre				
Occupancy	Mean (MJ/m^2)	Percent fractile *		
		80	90	95
Dwelling	780	870	920	970
Hospital	230	350	440	520
Hospital storage	2000	3000	3700	4400
Hotel bedroom	310	400	460	510
Offices	420	570	670	760
Shops	600	900	1100	1300
Manufacturing	300	470	590	720
Manufacturing and Storage+ <150kg m^{-2}	1180	1800	2240	2690
Libraries	1500	2250	2550	---
Schools	285	360	410	450

Source: International Engineering Guidelines 2005, table 3.4.1b

Occupant Evacuation

The occupants of the building will consist of staff and students who are expected to be aware of their surroundings and the have a level of understanding regarding the location of exits. In the event of an emergency evacuation, the staff main focus will be on the safe evacuation of the students. The building is not a place of residence, thus it is assumed that occupants are awake and alert. With 3 classrooms on the upper level, 100 is the maximum occupancy anticipated on this level. Travel distances within the building are compliant.

Occupants on the lower level are provided with direct egress from the classrooms. Occupants on the upper level are provided with two separate fire stairs which discharge on opposite ends of the building. If a fire were to impact one of the evacuation routes, occupants are provided with an evacuation route away from the building and the alternative exit maintains the egress width for 100 persons.

The interconnected alarm system will also provide for early notification, such that evacuation should not be impeded.

The building has two storeys with long lines of sight from the balcony once occupants have left the classrooms, meaning occupants will be able to observe the hazard and react accordingly. There are multiple paths of egress from all areas within the building.

Detection Time

As the minimum DtS requirement of Provision E2.2b, the building is not required to be installed with an automatic smoke detection, which means that no means is provided to alert occupants remote of the fire origin to the fire event. However, the building is fitting with a fire detection and occupant warning system.

The proposed occupant warning system provides a means to alert occupants remote of the fire origin to the fire event such that evacuation an occur.

Premovement time

The occupant warning system provides a means to alert occupants remote of the fire origin to the fire event such that evacuation can occur. The pre-movement time typically applies only to areas remote

from the room of fire origin where they may receive only a single cue to the presence of fire and where those cues do not present an immediate threat to their health and safety.

Studies by Sime[1] and accepted by the International Fire Engineering Guidelines (IFEG) suggests pre-movement times as follows. Whilst these detail occupancies other than assembly buildings, it provides characteristics of occupants within buildings that may be unfamiliar with the exits:

TABLE 4:

PRE-MOVEMENT TIME

Occupancy	System	Pre-movement time
Carpark	Alarm Bells	Four minutes
Shopping Centre	Alarm Bells	Six minutes
Shopping Centre	Non-directive public address system	Three minutes
Shopping Centre	Directive public address system	Two minutes

Source: Ignis Solutions

The premovement time is dependent on the type of occupancy, as the occupants of the class 9b level are staff and their students, the staff will assist with the evacuation of the students.

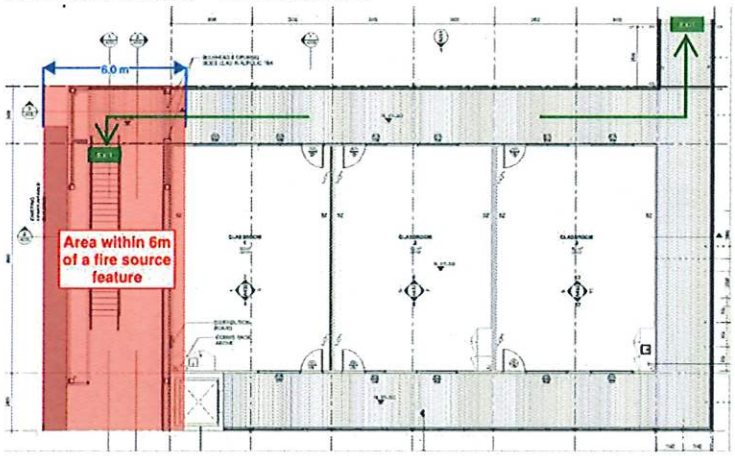
As the minimum DtS requirement of Provision E2.2b, the building is not required to be installed with an automatic smoke, which means that no means is provided to alert occupants remote of the fire origin to the fire event. As such, it is considered that the proposed fire detection and occupant warning system reduces the premovement time by a sufficient amount to offset the travel distance from the upper level. The combined improvement of the detection and occupant warning system presents at least a 5 minute improvement on the warning to occupants to evacuate the building in a fire event.

Exit Locations

There are two exits from the upper floor in opposite directions of egress. Once occupants have exited the classrooms they have clear lines of sight from the balcony to the adjacent building from and the exit that lies within 6m. Should the cause of the fire alarm be a fire in this adjacent building, occupants will be able to observe the location of the fire and move in an alternate direction. The balcony is also open to the air, meaning visibility is not impacted by smoke build-up.

FIGURE 14:

EXIT LOCATIONS – UPPER LEVEL



Source: SQC and Ignis Solutions

[1] Sime, JD,. An occupant response JD escape time (ORET) Model, Jonathan Sime Associates (JSA), Godaliming UK, 1995.

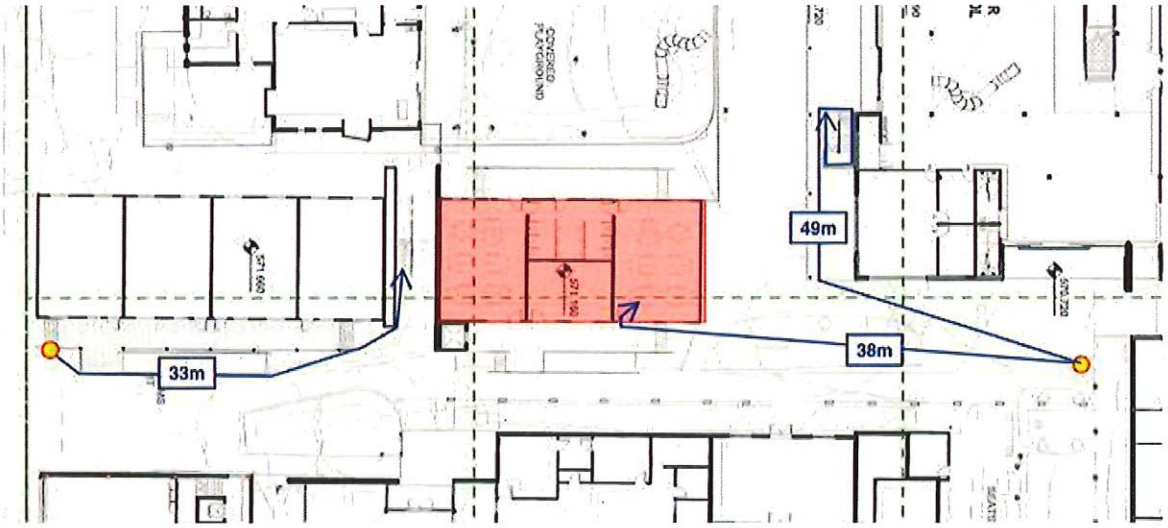
Based on the fuel load of the building, the increased detection time, as well as occupant evacuation routes, the reduced FRLs are determined to maintain compliance with the intent of the BCA in preventing the spread of fire.

Fire Brigade Intervention

The site is served by a boosted attack hydrant system with the hydrants used to provide coverage to the proposed building outlined below.

FIGURE 15:

HYDRANT COVERAGE – SITE HYDRANTS

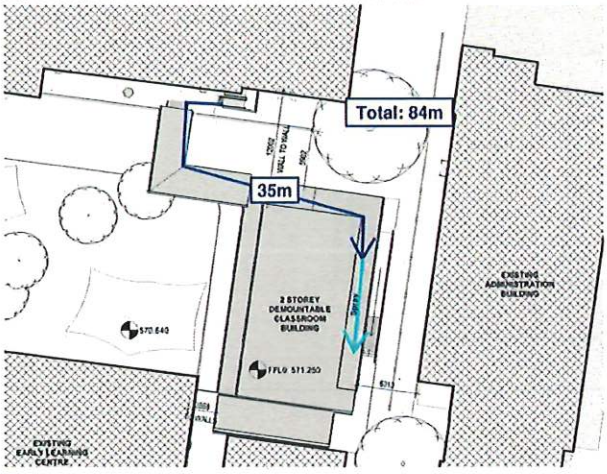


Source: SQC and Ignis Solutions

While coverage to the proposed building requires three lengths of fire hose, the area requiring extended coverage is limited to balcony. An existing Performance Solution for this site has been implemented as part of Ignis Solutions Fire engineering Report 4074 dated 09 September 2016 for the use of three lengths of fire hose to provide coverage to the primary school buildings. Using the walkway from the primary school, 84m of hose is required to reach the most disadvantageous point of the proposed building and thus is covered by the scope of the existing Performance Solution. Furthermore, only 65m of coverage is required from an alternate hydrant when not going through the primary school.

FIGURE 16:

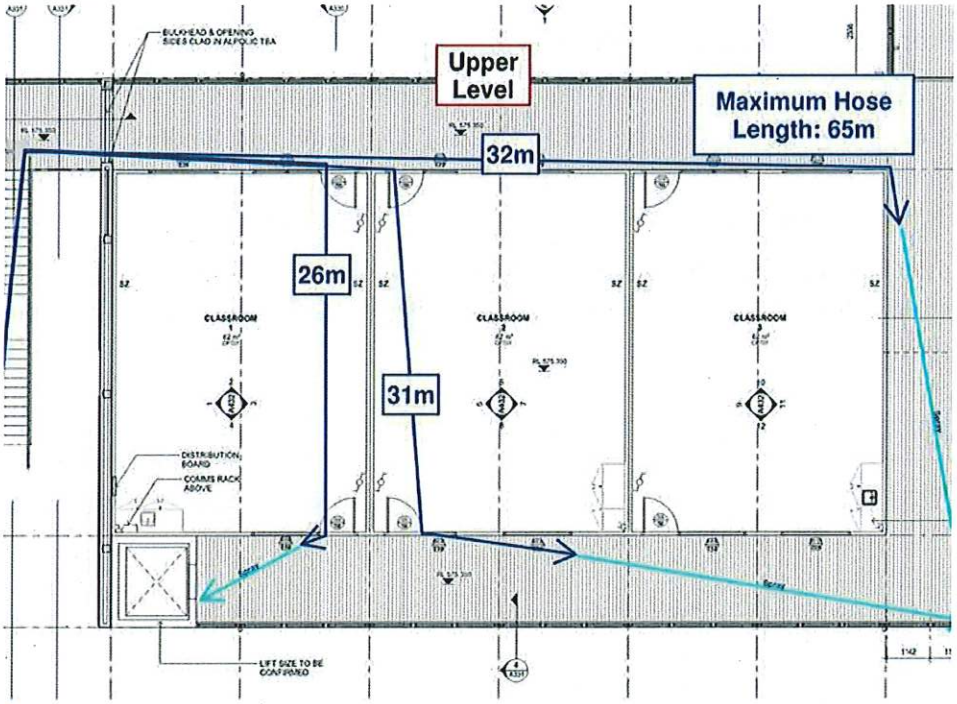
HYDRANT COVERAGE – VIA PRIMARY SCHOOL BUILDING



Source: SQC and Ignis Solutions

FIGURE 17:

HYDRANT COVERAGE – NEAREST HYDRANT



Source: SQC and Ignis Solutions

3.3 Required Fire Safety Measures

In addition to any requirement under the Deemed-to-Satisfy provisions the performance solution fire safety measures required are:

- Automatic fire detection and alarm system in accordance with AS 1670.1.
- Future school expansion is to maintain the 6m separation of this building.

3.4 Evaluation Summary

In the opinion of Ignis Solutions, the assessment has demonstrated that the proposed Performance Solution for the rationalisation of the external wall FRLs is suitable and as such satisfies BCA Performance Requirement CP1 and CP2.

4 FIRE DETECTION AND ALARM SYSTEM

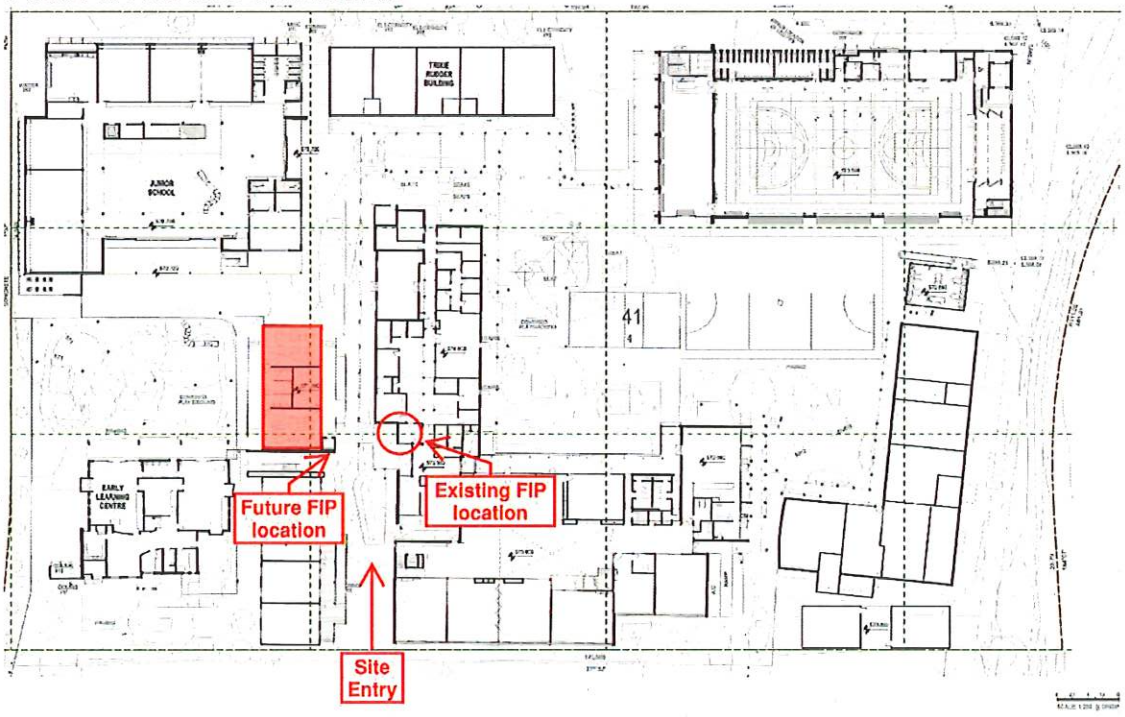
4.1 Brief of Proposed Performance Solution

The proposed building is to comply with the Building Code of Australia 2019 Amendment One, which references to AS 1670.1:2018. Clause 2.3 of AS 1670.1:2018 permits non-continuous floor areas being a single additional zone provided the building is less than 2,000m^2 of contiguous floor, less than 10m away, the longest dimension not exceed 100m and is to be confined to a single storey.

The proposed building is two storey and as such in non-compliant with Clause 2.3 of AS1670.1:2018. It is proposed that the building be monitored by the existing FIP located in the administration building as marked below.

FIGURE 18:

LAYOUT OF PROPOSED DEVELOPMENT



Source: SQC and Ignis Solutions

4.1.1 BCA Deemed-to-Satisfy

BCA Specification E2.2a Clause 4 requires a smoke detection system to be installed in accordance with AS 1670.1. Specification A1.3 of the BCA references AS 1670.1:2018. See below:

FIGURE 19:

NCC – VOL 1 – SPECIFICATION E2.2A CLAUSE 4

4. Smoke detection system

(a) **All Class 2 - 9 buildings—**

(i) A smoke detection system must—

(A) subject to (b) and (c), comply with AS 1670.1; and

(B) activate a building occupant warning system in accordance with Clause 7.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

FIGURE 20:

NCC – VOL 1 – Schedule 4 Referenced documents Table 1

AS 1670 Part 1	2018	Fire detection, warning, control and intercom systems — System design, installation and commissioning — Fire See Note 4

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

4.1.2 Intent of BCA Deemed-to-Satisfy Clause

The Guide to the BCA is indented as a reference manual to provide clarification to the BCA and should be read in conjunction with the BCA. The Guide to the BCA describes the intent of Clause E1.4 as:

FIGURE 21:

NCC – GUIDE TO VOL 1 – SPECIFICATION E2.2A

2 Type of system

Intent
To specify compliance requirements for required automatic smoke detection and alarm systems.

Source: ABCB NCC Volume One, Guide – Building Code of Australia 2019 Amendment One

4.1.3 BCA Performance Requirement

The relevant BCA Performance Requirement is EP4.3 as detailed below:

FIGURE 22:

NCC – VOL 1 – PERFORMANCE REQUIREMENT EP4.3

EP4.3 Emergency warning and intercom systems

To warn occupants of an emergency and assist evacuation of a building, an emergency warning and intercom system must be provided, to the degree necessary, appropriate to—

(a) the *floor area* of the building; and

(b) the function or use of the building; and

(c) the height of the building.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

4.1.4 Relevant Element of Performance Requirement

The entirety of the Performance Requirement EP4.3 is relevant.

4.1.5 Meeting the Performance Requirement

The Performance Requirement will be satisfied by A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.

4.1.6 Assessment Method

BCA Clause A2.2 (2)(b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.

4.1.7 Methodology

The following methodologies will be applied to the evaluation:

☑ Absolute	☐ Quantitative	☑ Deterministic
☐ Comparative	☑ Qualitative	☐ Probabilistic

Absolute approach

As outlined in the International Fire Engineering Guideline an absolute approach is typically when an evaluation is carried out on an absolute basis, the results of the analysis of the trial design are matched, using the agreed acceptance criteria against the objectives or performance requirements without comparison to deemed-to-satisfy or prescriptive or "benchmark" designs.

Qualitative approach

A qualitative approach refers to descriptions or distinctions based on a quality or characteristic rather than on a quantity or measures value. The qualitative approach includes structured arguments to demonstrate compliance.

Deterministic approach

A deterministic approach is a methodology based on physical relationships derived from scientific theories and empirical results that for a given set of conditions will always produce the same outcome.

4.1.8 Acceptance Criteria

The acceptance criteria for this performance solution is that the proposed fire detection and alarm system for the building remains conducive for the buildings ECO as well as ACT F&R.

4.1.9 Identified Hazard

The potential hazard is that a fire may occur in an area, occupants and ACTF&R are not able to locate or become aware based on the coordination and remote aspect of the building.

4.1.10 IFEG Sub-system

The performance solution falls within Sub-system D: Fire Detection, Warning and Suppression. Sub-system D is used to analyse detection, warning and suppression for fires. This process enables estimates to be made of the effectiveness of suppression.

4.2 Performance Evaluation

The BCA DtS provisions do not require a single storey school building (Class 9b) with a total floor area of less than 1,000m^2 to be provided with a fire detection and alarm system.

Performance Requirement EP4.3 requires that to warn occupants of an emergency and assist evacuation of a building, an emergency warning and intercom system must be provided, to the degree necessary, appropriate to – the floor area, the function or use and the height of the building.

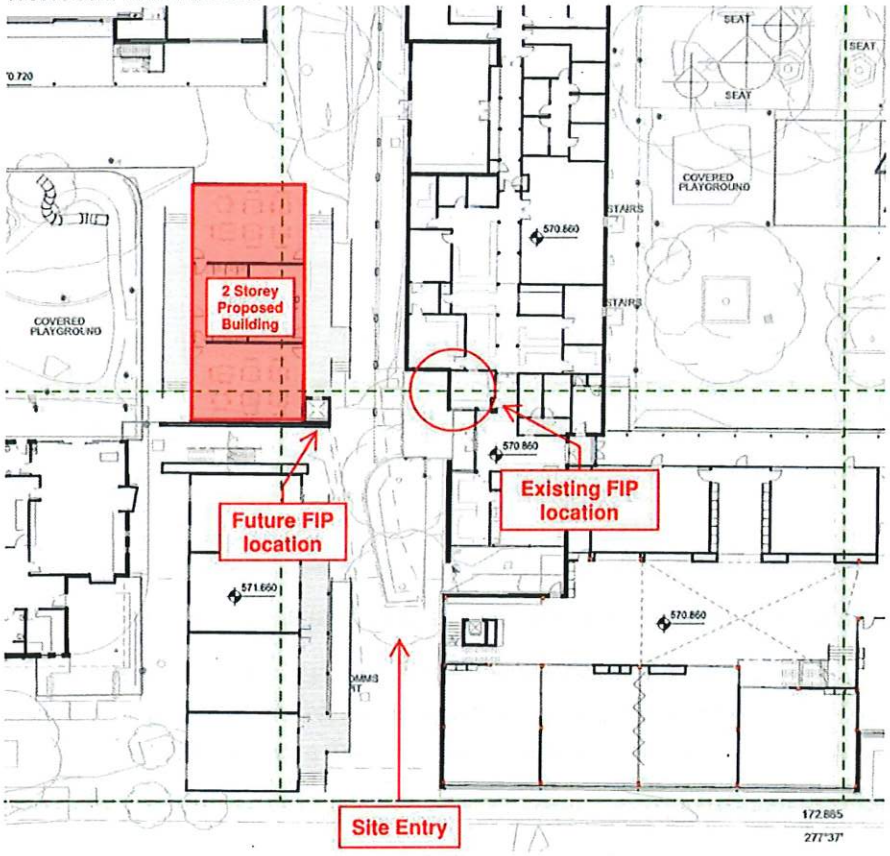
The proposed building is to comply with the Building Code of Australia 2019 Amendment One, which references to AS 1670.1:2018. Clause 2.3 of AS 1670.1:2018 permits non-continuous floor areas being a single additional zone provided the building is less than 2,000m^2 of contiguous floor, less than 10m away, the longest dimension not exceed 100m and is to be confined to a single storey.

The proposed building is two storey and as such in non-compliant with Clause 2.3 of AS1670.1:2018. The FIP is located at in the administration building as marked below.

It is proposed that the building be monitored by the existing FIP located in the administration building as marked below.

FIGURE 23:

NONCOMPLIANT ISSUES

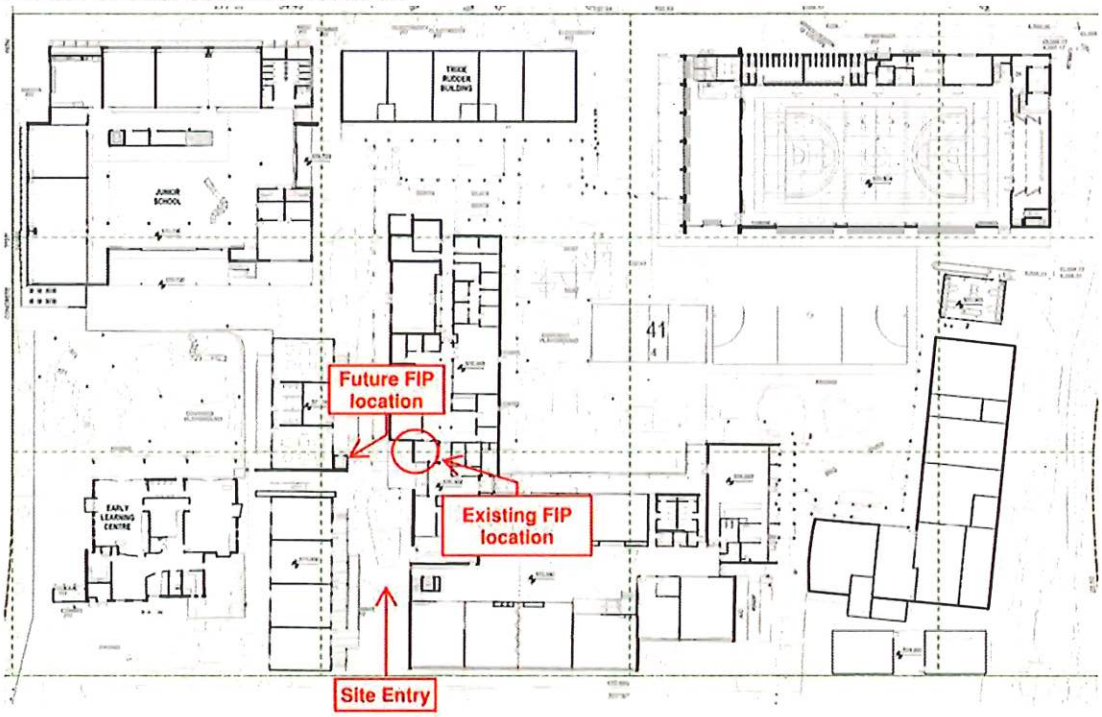


Source: SQC and Ignis Solutions

As the new building consists of more than one storey, it cannot be considered as a single system and under the DtS requirements, each building is required to have a separate system with its own FIP and monitoring system. This requirement is not conducive to the buildings ECO or ACT F&R operational needs.

FIGURE 24:

LAYOUT OF PROPOSED DEVELOPMENT



Source: SQC and Ignis Solutions

The function of the building remains within the parameters of the BCA DtS provisions.

Based on the nature of the site, the diverse array of the buildings and the consistency of the schools established fire safety measures, the capacity for the proposed system to maintain compliance with the BCA Performance Requirement is considered to occur under the proposed design.

4.3 Required Fire Safety Measures

Independent of the BCA DtS provisions, which remain required, the following fire safety measures are required in relation to this performance solution:

- It is proposed that the new portable building be monitored by the existing FIP located in the administration building with the building separated into detection zones as appropriate.

4.4 Evaluation Summary

In the opinion of Ignis Solutions, the assessment has demonstrated that the proposed Performance Solution for the fire detection and alarm system is suitable as such satisfies BCA Performance Requirement EP4.3.

5 PROTECTION OF OPENINGS

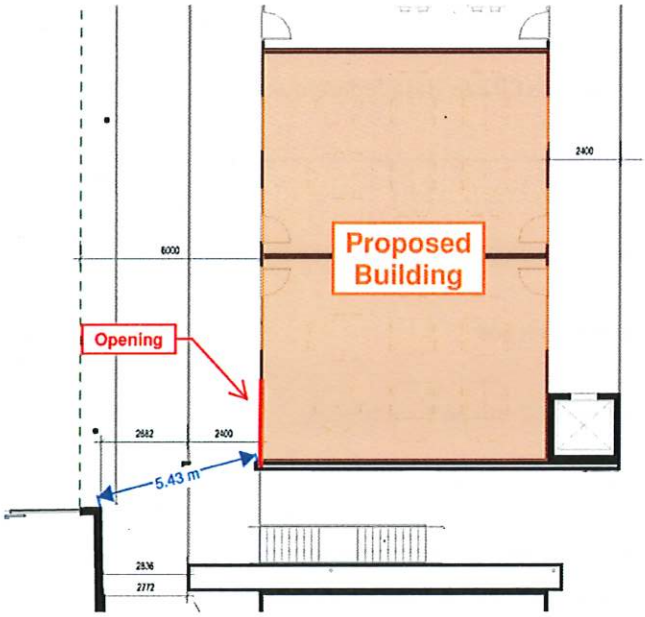
5.1 Brief of Proposed Performance Solution

Clause C3.2 (a)(iii) of the BCA requires that openings in external walls must be protected if the distance from the opening to another building on the allotment is less than 6m.

The building has openings that are within 6m of another building on the allotment, including windows. It is proposed to allow these openings to remain unprotected. The openings are on both storeys of the proposed structure and are parallel to the adjacent building with an offset of approximately 1.2m.

FIGURE 25:

OPENING WITHIN 6M OF ADJACENT BUILDING



Source: SQC Architecture and Ignis Solutions

5.1.1 BCA Deemed-to-Satisfy

BCA Clause C3.2 details the protection of openings in external walls. See below:

FIGURE 26:

NCC – VOL 1 – CLAUSE C3.2

C3.2 Protection of openings in external walls

Openings in an *external wall* that is *required* to have an FRL must—

(a) if the distance between the opening and the *fire-source feature* to which it is exposed is less than—

(i) 3 m from a side or rear boundary of the allotment; or

(ii) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a *storey* at or near ground level; or

(iii) 6 m from another building on the allotment that is not Class 10,

be protected in accordance with C3.4 and if wall-wetting sprinklers are used, they are located externally; and

(b) if *required* to be protected under (a), not occupy more than 1/3 of the area of the *external wall* of the *storey* in which it is located unless they are in a Class 9b building used as an *open spectator stand*.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

5.1.2 Intent of BCA Deemed-to-Satisfy Clause

The Guide to the BCA is indented as a reference manual to provide clarification to the BCA and should be read in conjunction with the BCA. The Guide to the BCA describes the intent of Clause C3.2 as:

FIGURE 27:

NCC – GUIDE TO VOL 1 – CLAUSE C3.2

C3.2 Protection of openings in external walls

Intent

To require any opening in external walls to be protected, only where the wall is required to have an FRL, to prevent the spread of fire from the boundary of an adjoining allotment, or one building to another building on the same allotment.

Source: ABCB NCC Volume One, Guide – Building Code of Australia 2019 Amendment One

5.1.3 BCA Performance Requirement

The relevant BCA Performance Requirement is CP2 as detailed below:

FIGURE 28:

NCC – VOL 1 – PERFORMANCE REQUIREMENT CP2

CP2 Spread of fire

(a) A building must have elements which will, to the degree necessary, avoid the spread of fire—

(i) to *exits*; and

(ii) to *sole-occupancy units* and *public corridors*; and

Application:
CP2(a)(ii) only applies to a Class 2 or 3 building or Class 4 part of a building.

(iii) between buildings; and

(iv) in a building.

(b) Avoidance of the spread of fire referred to in (a) must be appropriate to—

(i) the function or use of the building; and

(ii) the *fire load*; and

(iii) the potential *fire intensity*; and

(iv) the *fire hazard*; and

(v) the number of *storeys* in the building; and

(vi) its proximity to *other property*; and

(vii) any active *fire safety systems* installed in the building; and

(viii) the size of any *fire compartment*; and

(ix) *fire brigade* intervention; and

(x) other elements they support; and

(xi) the *evacuation time*.

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

5.1.4 Relevant Element of Performance Requirement

The entirety of the Performance Requirement CP2 detailed above is relevant.

5.1.5 Meeting the Performance Requirement

The Performance Requirement will be satisfied by A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.

5.1.6 Assessment Method

BCA Clause A2.2 (2)(b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.

5.1.7 Methodology

The following methodologies will be applied to the evaluation:

☑ Absolute	☑ Quantitative	☑ Deterministic
☐ Comparative	☑ Qualitative	☐ Probabilistic

Absolute approach

As outlined in the International Fire Engineering Guideline an absolute approach is typically when an evaluation is carried out on an absolute basis, the results of the analysis of the trial design are matched, using the agreed acceptance criteria against the objectives or performance requirements without comparison to deemed-to-satisfy or prescriptive or "benchmark" designs.

Quantitative approach

A quantitative approach refers to an analysis that involves numerical evaluation of an identified process.

The quantitative approach includes detailed mathematical and engineering calculations.

Qualitative approach

A qualitative approach refers to descriptions or distinctions based on a quality or characteristic rather than on a quantity or measures value. The qualitative approach includes structured arguments to demonstrate compliance.

Deterministic approach

A deterministic approach is a methodology based on physical relationships derived from scientific theories and empirical results that for a given set of conditions will always produce the same outcome.

5.1.8 Acceptance Criteria

The acceptance criteria for this performance solution is that the radiation received and emitted satisfies verification method CV1 and therefore BCA Performance Requirement CP2 where the fire source feature is not the adjacent block.

5.1.9 Identified Hazard

The potential hazard is that a fire may spread from one allotment to the next without appropriate separation.

5.1.10 IFEG Sub-system

The performance solution falls within Sub-System C: Fire Spread and Impact and Control. Sub-system is used to analyse the spread of fired beyond an enclosure, the impact fire might have on the structure and how the spread and impact might be controlled.

5.2 Performance Evaluation

Clause C3.2 (a)(iii) of the BCA requires that openings in external walls must be protected if the distance from the opening to another building on the allotment is less than 6m.

The building has openings that are within 6m of another building on the allotment, including windows. It is proposed to allow these openings to remain unprotected. The openings are on both storeys of the proposed structure and are parallel to the adjacent building with an offset of approximately 1.2m.

Mechanism of Fire Spread

There are essentially three main modes of heat transfer in relation to fire spread via openings:

a. Conduction related to the transfer of heat associated with solids and the thermal conductivity of the materials;
b. Convection related to the movement of hot air; and
c. Radiation related to openings acting as radiating bodies and emitting thermal radiation at elevated temperatures.

The Guide to the BCA[1] states that 'radiation is the main mechanism for heat and fire spread between buildings'. Other forms for heat transfer such as conduction and convection is unlikely due to the buildings being open to the atmosphere and the physical separation between buildings (including the masonry wall as the barrier). In terms of fire spread via radiation, there are many factors that contribute to the severity of thermal radiation emitted from an unprotected opening such as:

- Distance between the building and the boundary.
- Provision of active fire protection systems within the building
- Size and shape of the openings.
- The Temperature of a fire, which is determined by the type of materials involved in the fire and fire size.
- Emissivity of a source, which depends whether the window is drencher protected, has fire resistant properties or features unprotected glazing.

The following assessment considers the potential for fire spread between the subject building and the adjoining property based on the orientation and construction of the existing building and radiant heat exposure from unprotected openings.

The Guide to the BCA[2] discusses a range of radiant heat values necessary to ignite common building materials. For openable windows, there is a potential for sparks or embers to pass through opening and ignite the curtain materials. Piloted ignition takes place when the pyrolysis vapours and gases are ignited by a localised hot object or energy source such as a flame or spark, whereas non-piloted ignition takes place when the temperature of the pyrolysis vapours and gases is sufficient to ignite the mixture of oxygen and pyrolysis products[3].

In a timber or aluminium frame with 3 mm float glass, cracking of the glass[4] occurs at 4 to 8 kW/m^2, glass fall out[5] at 9 – 50 kW/m^2 and non-piloted ignition of timber[6] at 25 kW/m^2. Ignition of curtain materials through an open, or cracked window, is taken as occurring at 10 kW/m^2 in the presence of a spark and 20 kW/m^2 otherwise[7].

Based on the above, piloted ignition is considered to occur at 10 kW/m^2 and non-piloted ignition at 20 kW/m^2. This is consistent with the BCA DtS provisions which allows an unprotected opening at 3 m from a boundary and BCA Verification Method CV1, which requires a building to be able to withstand 20 kW/m^2 at a boundary setback of 3 m. Therefore, a radiant heat flux of 20 kW/m^2 was utilised as the acceptance criteria for the ignition of building contents within the building envelope.

Fire Spread from Subject Building to Adjoining Building

The proposed fire scenario relevant to this assessment involves a fire occurring within the subject building impacting on the neighbouring allotment. Based on the nominated fire scenario, the following evaluation investigates the conditions expected in the subject building and its impact on the adjoining properties.

For the subject building, fire growth will be governed by the type of fire protection system installed and the ability for either occupants or fire fighters to intervene to control the fire and limit further fire spread. The most probable fire scenario for the subject building involves a flaming fire.

A fully developed or flashover fire represents a severe scenario, based on the building being without an automatic sprinkler system. Flashover conditions are possible within the enclosure of fire origin, given the size of the rooms, combustible furnishings contained therein and the available ventilation through the external openings. Such conditions, resulting from flashover, could include in the room temperature reaching 900-1,000°C[8] within the enclosure of fire origin and glass breakage to the external openings.

Depending on the temperature profile experienced in the material, standard float plate glass without the protection of a drencher system can be prone to failure. This includes failure from direct exposure in a localised manner. Small-scale tests have estimated the temperature of plain float glass at which glass breakage occurs to vary from 150-175°C (based on uneven heating resulting in temperature gradients in the glass) with radiation exposure between 10-40 kW/m^2 from the fire exposed side[9]. In terms of non-localised exposure via convective heat transfer, experiments have demonstrated that float glass can withstand up to 300-500°C gas temperature in the room of fire origin. The temperature at which glass fails is also associated with the onset of a flashover condition and studies have approximated this phenomenon when the ceiling temperatures of 600°C[10] or having a floor irradiance of 20kW/m^2. Adopting a conservative approach, in this case consideration is given to a fully-developed compartment fire that could result in a temperature well in excess of that capable of causing glass breakage in the subject openings.

Radiant heat calculations were undertaken to determine the radiant heat flux that could be received at the neighbouring building when exposed to a fire within the subject building.

Approved Document B – Fire Safety, part of British Building Regulations 2002[11] provides a methodology for calculating an appropriate set back from openings in external walls from unprotected areas. This is based on research documented in BRE Fire Research Technical Paper No. 5, performed by Margaret Law. As specified in Approved Document B, a radiant heat intensity of 84 kW/m^2 could be assumed for residential, office, assembly and recreation areas and 168 kW/m^2 for commercial, industrial, storage and other non-residential areas. The concerned opening being on the Class 2 part of the building (residential), a radiant heat intensity of 84 kW/m^2 was utilized for the radiant heat assessment. This corresponds to a panel temperature of ~830°C assuming an emissivity of 1.

In accordance with CV1, a fire event from the building is not to cause heat flux in excess of those set out in column 2 of table CV1 at the distances set out in column 1. Equally, in accordance with CV1(b), when located at the distances from the allotment boundary set out in column 1, the building is to be capable of withstanding the heat flux set out in column 2.

FIGURE 29:

CALCULATION OF RADIATION TO ADJACENT BOUNDARY FROM SUBJECT BUILDING

Table CV1

Column 1 Location	Column 2 Heat flux (kW/m^2)
On boundary	80
1 m from boundary	40
3 m from boundary	20
6 m from boundary	10

Source: ABCB NCC Volume One – Building Code of Australia 2019 Amendment One

It is significant to note that the BCA DtS provision C3.2 considers that openings are at least 3m from the boundary or 6m from adjacent buildings do not require any protection. Based on table CV1, this equates to a radiant heat flux level received of 20 kW/m^2 and is the maximum radiant heat flux level at which the BCA DtS provisions considers as acceptable without protection for both openings and walls.

AS 3959 – 2018 outlines fire safety measures for unprotected windows to withstand a received radiation and associated BAL requirement. These measures relate to the grade of glass, protection for any openings and frame construction as detailed below. Applying these fire safety measures to the glazing within 3m of the site boundary will have the capacity to withstand the calculated radiation.

TABLE 5:

FIRE SAFETY MEASURES FOR WINDOWS SUBJECTED TO VARIOUS RADIATION

Radiation received – upper limit (kW/m^2)	Glazing	Openings	Frame
12.5	Grade A safety, 4mm thick	Non-openable or radiation mesh	Metal
19	Grade A safety, 5mm thick	Non-openable or radiation mesh	Metal
29	Grade A safety, 5mm thick	Non-openable or radiation mesh	Metal
40	Grade A safety, 6mm thick	Non-openable or radiation mesh	Metal

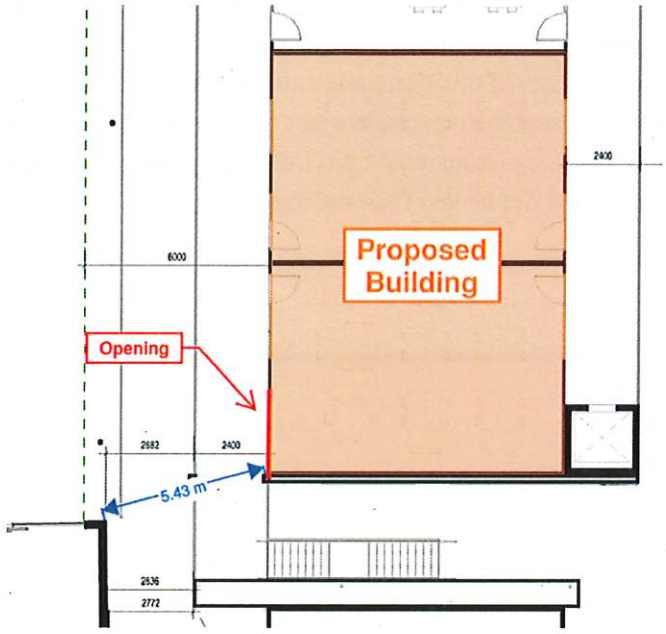
Source: AS 3959 -2018: Construction of buildings in bushfire-prone areas

Openings on the Subject Building

There are two openings that will be examined within this Performance Solution, one on each storey of the proposed building. The lower level has a window facing the adjacent Early Learning Centre. Despite being offset by approximately 2.5m, it is still within 6m and as such requires protection. The upper storey of the proposed building is not required to have an FRL and as such the entire section of the wall surrounding the window is to be treated as an opening. Although the adjacent Early Learning Centre is only single storey, the openings on both floors of the proposed building will be considered.

FIGURE 30:

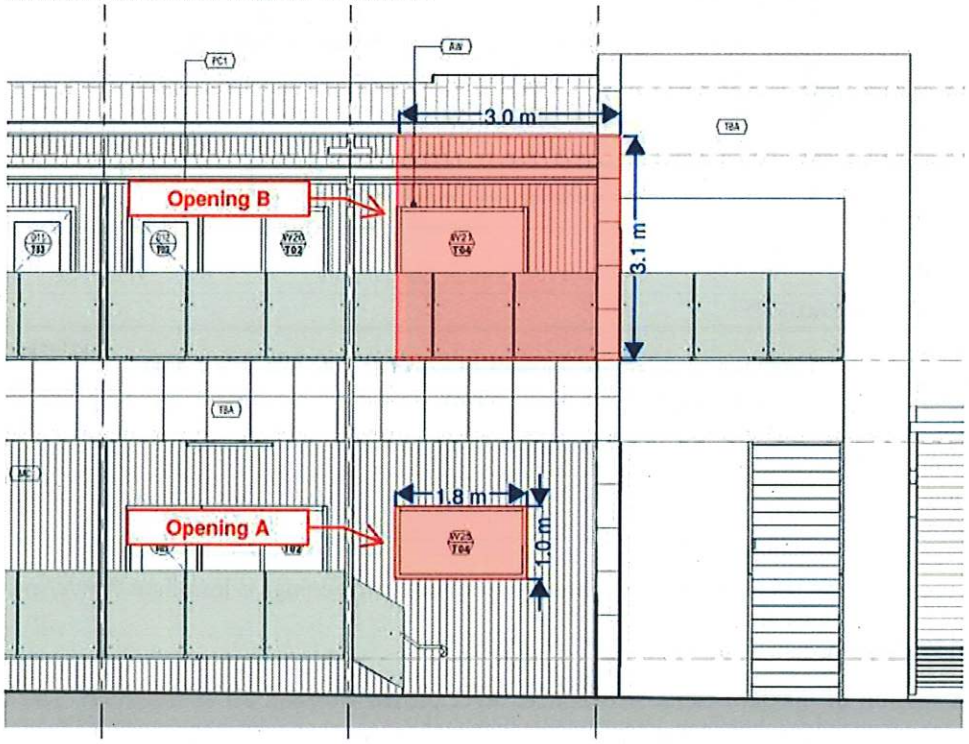
OPENING WITHIN 6M OF THE ADJACENT BUILDING



Source: SQC Architecture and Ignis Solutions

FIGURE 31:

MEASUREMENTS OF SUBJECT OPENINGS



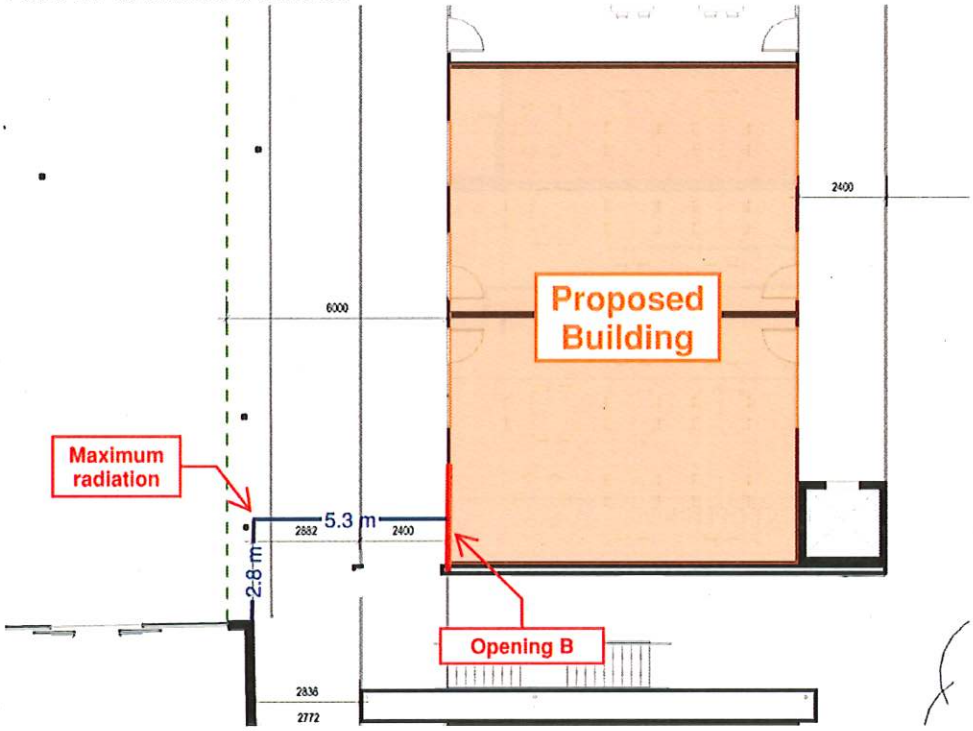
Source: SQC Architecture and Ignis Solutions

Radiation to boundary

Based on the radiation calculations provided in Appendix B, the radiant heat flux emitted to the adjoining building has been calculated and is detailed in the table below. The calculations were based on a panel temperature of ~1000°C assuming an emissivity of 0.9. Complete calculations can be found in Appendix C. The radiation received has been calculated at the maximum point directly parallel with the openings. As the corner of the Early Learning Centre is approximately 2.8m from the maximum point of radiation along the parallel axis, the radiation received will be less than the figures below.

FIGURE 32:

POINT OF MAXIMUM RADIATION



Source: SQC Architecture and Ignis Solutions

TABLE 6:

RADIANT HEAT FLUX EMITTED

Opening	Distance to adjacent building (m)	Height of Emitter (m)	Width of emitter (m)	Radiation received at adjacent building (kW/m²)
Opening A (0°)	5.3	1.0	1.8	2.67
Opening B (0°)	5.3	3.1	3.0	12.72

Source: Ignis Solutions

As seen, the radiation received on the boundary from all the openings is less than 80kW/m².

Radiation to openings

The transmission of incident radiation reduces as it passes through an air medium. The verification methods within the BCA reflect this. The building structure must have sufficient resistance to prevent fire spread at the rates detailed in column 2 of table CV1 of the BCA. Column 2 sets specific radiation values at given distances based on a direct parallel relationship. The table details a reduced radiation level the further away the distance is from the boundary.

The following table details the radiation the subject opening is exposed to, from the site boundary.

TABLE 7:

RADIANT HEAT FLUX RECEIVED

Opening	Distance to adjacent building (m)	Height of Emitter (m)	Width of emitter (m)	Radiation received at subject opening (kW/m^2)
Opening A (0°)	5.3	1.0	1.8	2.45
Opening B (0°)	5.3	3.1	3.0	11.25

Source: Ignis Solutions

As seen, the radiation received on the perpendicular subject openings from the boundary are less than $13kW/m^2$. These openings will require no protection.

5.3 Required Fire Safety Measures

Independent of the BCA DtS provisions, which remain required, the following fire safety measures are required in relation to this performance solution:

- It is proposed for the openings in the external walls that are within 6m of the adjacent Early Learning Centre to remain unprotected.

5.4 Evaluation Summary

In the opinion of Ignis Solutions, the evaluation has demonstrated that the proposed Performance Solution for the protection of openings does not increase the risk of fire spread and as such satisfies BCA Performance Requirement CP2.

6 DISTANCE OF TRAVEL

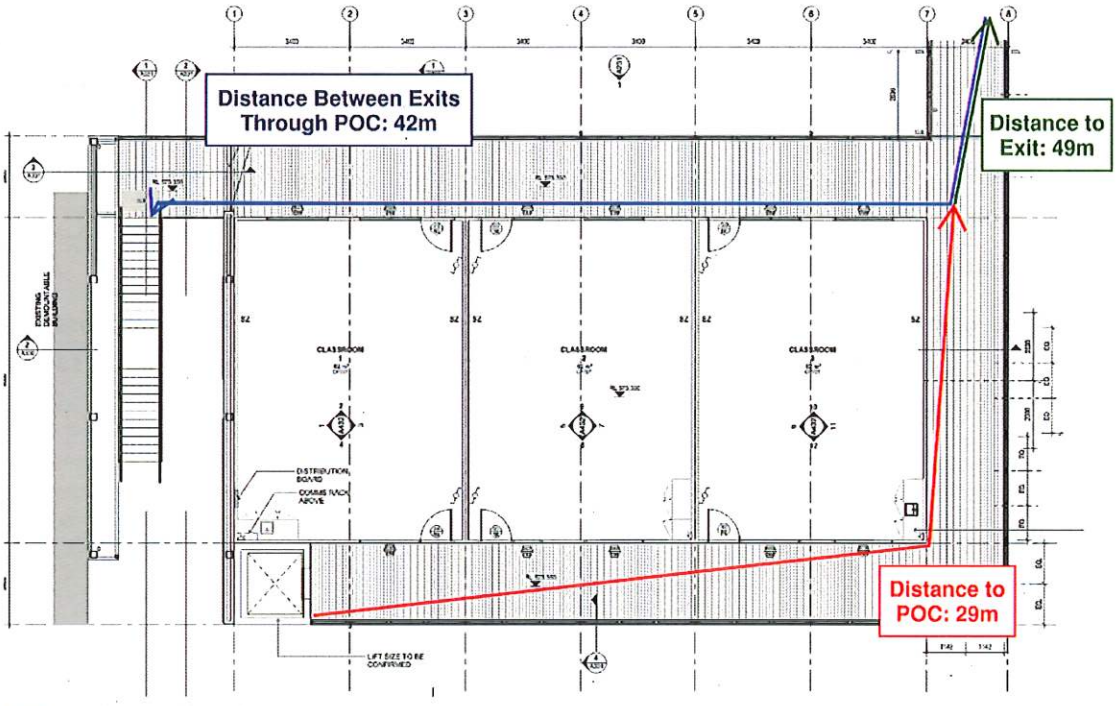
6.1 Brief of Proposed Performance Solution

Clause D1.4 of the BCA requires that the travel distance in a Class 5, 6, 7, 8 or 9 building be no more than 20m from an exit or to a point of choice of two exits, in which case the maximum distance to one of those exits must not exceed 40m.

It is proposed for the travel from the balcony to be up to approximately 29m to a point of choice in lieu of 20m and up to 49m to an exit in lieu of 40m.

FIGURE 33:

TRAVEL DISTANCE FROM THE BALCONY



Source: SQC Architecture and Ignis Solutions

6.1.1 BCA Deemed-to-Satisfy Basis

BCA Clause D1.4(c)(i) requires that the travel distance in a Class 5, 6, 7, 8 or 9 building be no more than 20m from an exit or a point from which travel in different directions to two exits is available, in which case the maximum distance to one of those exits must not exceed 40m.

FIGURE 34:

NCC – VOL 1 – CLAUSE D1.4 (PART)

D1.4 Exit travel distances

(c) **Class 5, 6, 7, 8 or 9 buildings** — Subject to (d), (e) and (f)—

(i) no point on a floor must be more than 20 m from an *exit*, or a point from which travel in different directions to 2 *exits* is available, in which case the maximum distance to one of those *exits* must not exceed 40 m; and

(ii) in a Class 5 or 6 building, the distance to a single *exit* serving a *storey* at the level of access to a road or *open space* may be increased to 30 m.

Source: ABCB NCC Amendment One Volume One – Building Code of Australia 2019

6.1.2 Intent of BCA Deemed-to-Satisfy Clause

The Guide to the BCA is indented as a reference manual to provide clarification to the BCA and should be read in conjunction with the BCA. The Guide to the BCA describes the intent of Clause D1.4 as:

FIGURE 35:

NCC – GUIDE TO VOL 1 – CLAUSE D1.4

Intent

To maximise the safety of occupants by enabling them to be close enough to an exit to safely evacuate.

Source: ABCB NCC Amendment One Volume One, Guide – Building Code of Australia 2019

6.1.3 BCA Performance Requirement

The relevant BCA Performance Requirement is DP4 as detailed below:

FIGURE 36:

NCC – VOL 1 – PERFORMANCE REQUIREMENT DP4

DP4 Exits

Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to—

(a) the travel distance; and

(b) the number, mobility and other characteristics of occupants; and

(c) the function or use of the building; and

(d) the height of the building; and

(e) whether the *exit* is from above or below ground level.

Source: ABCB NCC Amendment One Volume One – Building Code of Australia 2019

6.1.4 Relevant Element of Performance Requirement

The relevant element of performance requirement DP4 is (a):

Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to (a) the travel distance.

6.1.5 Meeting the Performance Requirement

The Performance Requirement will be satisfied by A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.

6.1.6 Assessment Method

BCA Clause A2.2 (b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.

6.1.7 Methodology

The following methodologies will be applied to the evaluation:

☑ Absolute	☐ Quantitative	☑ Deterministic
☐ Comparative	☑ Qualitative	☐ Probabilistic

Absolute approach

As outlined in the International Fire Engineering Guideline an absolute approach is typically when an evaluation is carried out on an absolute basis, the results of the analysis of the trial design are matched, using the agreed acceptance criteria against the objectives or performance requirements without comparison to deemed-to-satisfy or prescriptive or "benchmark" designs.

Qualitative approach

A qualitative approach refers to descriptions or distinctions based on a quality or characteristic rather than on a quantity or measures value. The qualitative approach includes structured arguments to demonstrate compliance.

Deterministic approach

A deterministic approach is a methodology based on physical relationships derived from scientific theories and empirical results that for a given set of conditions will always produce the same outcome.

6.1.8 Acceptance Criteria

The acceptance criteria for this performance solution is that the occupants are provided with sufficient warning and means to safely reach an exit such that the BCA Performance Requirement DP4 is satisfied to the degree necessary.

6.1.9 Identified Hazard

The potential hazards include the exit travel distance being too excessive and the risk of the fire safety systems not being sufficient for all the occupants who might be using the area to evacuate.

6.1.10IFEG Sub-system

The performance solution falls within Sub-System E: Occupant Evacuation and Control. Sub-system E is used to analyse the evacuation of the occupants of a building. This process enables estimates to be made of the time required for occupants to reach a place of safety.

6.2 Performance Evaluation

Clause D1.4 of the BCA requires that the travel distance in a Class 5, 6, 7, 8 or 9 building be no more than 20m from an exit or to a point of choice of two exits, in which case the maximum distance to one of those exits must not exceed 40m.

It is proposed for the travel from the balcony to be up to approximately 29m to a point of choice in lieu of 20m and up to 49m to an exit in lieu of 40m. The travel distances from the classrooms are compliant.

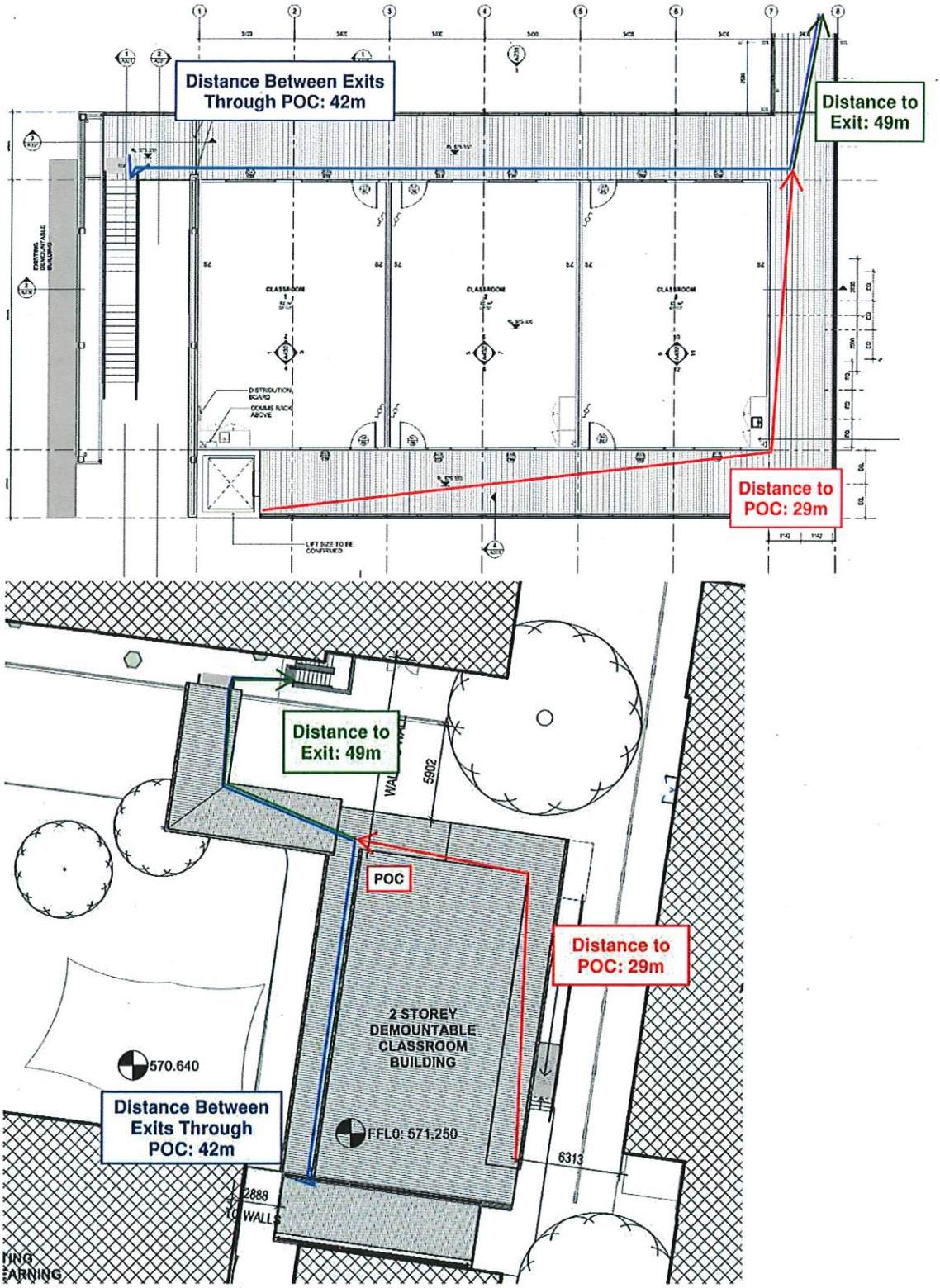
The Guide to the BCA is intended as a reference manual to provide clarification to the BCA and should be read in conjunction with the BCA. The Guide describes the intent of D1.4 as 'to maximise the safety of occupants by enabling them to be close enough to an exit to safely evacuate'.

The Guide further details that 'D1.4(c)(i) sets out the maximum travel distance in Class 5-9 buildings. The distances specified allow people to evacuate in a reasonable time, assuming that they are not asleep.'

The maximum travel distances stipulated in the BCA are notional figures. These provisions are conservative in nature as they attempt to take into account all possible design scenarios. The layout or fire safety measures within the building are not taken into account in the distance of travel nominated within the BCA as they are static for all scenarios of size, number of storeys and effective height.

FIGURE 37:

TRAVEL DISTANCE FROM THE BALCONY



Source: SQC Architecture and Ignis Solutions

Building layout

The building has two storeys with the point of maximum travel being from the upper level balcony with two exits available. The balcony is open to the air and as such visibility would not be impeded due to smoke build up in the event of a fire. The balcony also provides clear lines of sight from the point of choice to both exits.

Distance and travel time to nearest exit

Given an estimated occupant movement speed of 0.8m/s, the 9m of travel additional to the BCA limits adds 12 seconds to the travel time. Given the entire path of travel is outside, this increase of time is not expected to pose a hazard to occupants.

During the school day, the doors to the classroom are expected to be kept unlocked and as such the travel distances during these times will be within BCA limits. Should an evacuation take place when the classroom doors are locked, the occupancy of the balcony is expected to be minimal and as such the queue time will not factor into the total evacuation time. The BCA figures are determined with a queue time of up to 100 seconds for each 1m wide exit.

While the travel distance to a point of choice and distance to an exit are greater than is allowed for in Clause D1.4 of the BCA, the distances between exits remains compliant. This factor combined with the existence of alternative compliant paths during school opening hours and low occupancy numbers mean that the increased travel distance will not pose an increased risk to inhabitants in the event of an evacuation.

6.3 Required Fire Safety Measures

Independent of the BCA DtS provisions, which remain required, no additional fire safety measures are required in relation to this performance solution.

6.4 Evaluation Summary

In the opinion of Ignis Solutions, the assessment has demonstrated that the proposed Performance Solution for travel distance from the balcony of the proposed building is suitable and does not limit the capacity for occupant evacuation and as such satisfies BCA Performance Requirement DP4.

Appendix

A

fire engineering brief detail

A FIRE ENGINEERING BRIEF

A.1 Rationalisation of FRLs

Brief	• Clause C2.2 of the BCA details that a Class 9 building with a rise in storeys of 2 is to be of Type B construction. • Table 4 of Specification C1.1 details the FRL of external wall elements for Type B construction. • The subject building has a rise in storeys of 2 and external walls located approximately 3m from the nearest building/fire source feature. • It is proposed for the external wall of the upper storey which is located within 18m of another building on the site to not have an FRL. • It is also proposed for the supporting elements of the upper floor be required to have an FRL of at least 60/60/60 in lieu of 120/120/120. • It is proposed for the fire separation of the floor to be with two layers of 13mm Fyrechek.
BCA DtS Basis	C2.2 – General Floor Area and Volume Limitations The minimum type of fire-resisting construction of a building is based upon the class of building and its rise in storeys. Specification C1.1 details the requirements for individual building elements for each type of construction.
Intent	The intent of the related Deemed-to-Satisfy provision is to establish the minimum fire-resisting construction required for Class 2-9 buildings
Performance Requirement	CP1 – Structural capacity and CP2 – Fire spread
Meeting the Performance Requirement	BCA Provision A0.2 (c) A combination of (a) and (b) where (a) complies with the DtS and (b) formulating a performance solution.
Assessment Method	BCA Provision A0.5 (b)(ii) Verification Methods as the appropriate authority accepts for determining compliance with the Performance Requirements.
Methodology	☑ Absolute ☐ Quantitative ☑ Deterministic ☐ Comparative ☑ Qualitative ☐ Probabilistic
IFEG	C – Fire Spread & Impact & Control
Acceptance Criteria	The acceptance criteria for this performance solution is that the proposed elements of the building have sufficient measures to limit fire spread such that the BCA Performance Requirements CP1 and CP2 are satisfied to the degree necessary.
Hazard	The potential hazard is that a fire incident may occur and the fire may spread beyond the compartment or building.
Strategy	• Number of exits • Occupant awareness and detection time • Separation to other buildings on site • structural stability and comparison to Class 5 • Hydrant coverage
Fire Safety Measures	The following fire safety measure is required as part of this performance based design • Automatic fire detection and alarm system in accordance with AS 1670.1.

A.2 Fire Detection and Alarm System

Brief	• The proposed building is to comply with the Building Code of Australia 2019 Amendment One, which references to AS 1670.1:2018. Clause 2.3 of AS 1670.1:2018 permits non-continuous floor areas being a single additional zone provided the building is less than 2,000m^2 of contiguous floor, less than 10m away, the longest dimension not exceed 100m and is to be confined to a single storey. • It is proposed that all buildings are to be monitored by a single FIP located in the administration building.
BCA DtS Basis	AS 1670.1:2015 Clause 2.3 Non-continuous floor areas are permitted to be a single additional zone provided the building is less than 2,000m^2, less than 10m away, the longest dimension not exceed 100m and is to be confined to a single storey
Intent	The intent of the related Deemed-to-Satisfy provision is to specify requirements for required automatic smoke detection systems.
Performance Requirement	EP4.3 – Early warning and communication
Meeting the performance requirement	BCA Provision A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.
Assessment method	BCA Provision A2.2 (2)(b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.
Methodology	☑ Absolute ☐ Quantitative ☑ Deterministic ☐ Comparative ☑ Qualitative ☐ Probabilistic
IFEG	D – Fire Detection, Warning and Suppression
Acceptance Criteria	The acceptance criteria for this performance solution is that the proposed fire detection and alarm system for the building remains conducive for the buildings ECO as well as ACT F&R.
Hazard	The potential hazard is that a fire may occur in an area, occupants and ACTF&R are not able to locate or become aware based on the coordination and remote aspect of the building.
Strategy	• Proposed buildings and location of FIP is addressed. • Separated systems are not conducive for the buildings ECO or ACT F&R operational needs.
Calculation tools	The evaluation is qualitative
Fire Safety measures	The following fire safety measure is required as part of this performance based design • All buildings within the school are proposed to be served by a single FIP located in the administration.

A.3 Protection of Openings

Brief	• Provision C3.2 of the BCA requires that openings in external walls must be protected if the distance from the opening to an adjacent building within the same allotment is less than 6m. • The building has openings parallel to and within 6m of the Early Learning Centre on the lower and upper floors. It is proposed not to protect these openings.
BCA DtS Basis	C3.2 – Protection of openings in external walls Openings in an external wall that is required to have an FRL must be protected in accordance with C3.4 if the distance from the opening to an adjacent building on the same allotment is less than 3m.
Intent	The intent of the related Deemed-to-Satisfy provision is to require any openings in external walls to be protected, only where the wall is required to have an FRL, to prevent the spread of fire from the boundary of an adjoining allotment, or one building to another on the same allotment.
Performance Requirement	CP2 – Fire spread and CP8 – Protection of openings and penetrations
Meeting the Performance Requirement	BCA Provision A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.
Assessment Method	BCA Provision A2.2 (1)(b) the performance solution is achieved by demonstrating the solution is at least equivalent to the Deemed to-Satisfy Provisions. BCA Provision A2.2 (2)(d) Comparison with the Deemed-to-Satisfy provisions.
Methodology	☑ Absolute ☑ Quantitative ☑ Deterministic ☐ Comparative ☑ Qualitative ☐ Probabilistic
IFEG	C – Fire Spread and Impact and Control
Acceptance Criteria	The acceptance criteria for this performance solution is that the radiation received and emitted satisfies verification method CV1 and therefore BCA performance requirement CP2 where the fire source feature is the adjacent block.
Hazard	The potential hazard is that fire may spread from one allotment to the next without appropriate separation or protection of the openings.
Strategy	• Design of the building and block • Evaluation of radiation levels to/from the adjacent buildings
Calculation Tools	The evaluation will be qualitative and quantitative with the quantitative being provided via graphic detail of distances and radiation in line with CV1.
Fire Safety Measures	Independent of the BCA DtS provisions, which remain required, the following fire safety measures are required in relation to this performance solution: • It is proposed for the openings in the external walls that are within 6m of the adjacent Early Learning Centre to remain unprotected.

A.4 Distance of Travel

Brief	• Clause D1.4 of the BCA requires that the travel distance in a Class 5, 6, 7, 8 or 9 building be no more than 20m from an exit or to a point of choice of two exits, in which case the maximum distance to one of those exits must not exceed 40m. • It is proposed for the travel distance from the balcony of the proposed building to be up to approximately 29m to a point of choice in lieu of 20m and 49m to an exit in lieu of 40m.
BCA DtS Basis	D1.4 – Exit travel distances The requirements for exits are based on the Class of building. Within a Class 9b building the maximum distance to a single exit or point of choice must not be more than 20m and the maximum distance to the nearest exit is 40m.
Intent	The intent of the related Deemed-to-Satisfy provision D1.4 is to maximize the safety of occupants by enabling them to be close enough to an exit to safely evacuate.
Performance Requirement	DP4 – Exits The relevant element is (a) Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to (a) the travel distance.
Meeting the Performance Requirement	The Performance Requirement will be satisfied by A2.1 (3): a combination of (1) and (2) where (1) is a Performance Solution and (2) is a Deemed-to-Satisfy Solution.
Assessment Method	BCA Clause A2.2 (b)(ii) Other Verification Methods accepted by appropriate authority that show compliance with the relevant Performance Requirements.
Methodology	☑ Absolute ☐ Quantitative ☑ Deterministic ☐ Comparative ☑ Qualitative ☐ Probabilistic
IFEG	E – Occupant Evacuation and Control
Acceptance Criteria	The acceptance criteria for this performance solution is that the occupants are provided with sufficient warning and means to safely reach an exit such that the BCA Performance Requirement DP4(a) is satisfied to the degree necessary.
Hazard	The potential hazard includes the exit travel distance being too excessive and the risk of the fire safety systems not being sufficient for all the occupants who might be using the area to evacuate.
Strategy	• Description of building • Low occupancy of balcony • Complaint paths of travel during school hours • Path of travel between exits through a point of choice is less than 60m
Calculation Tools	The evaluation is qualitative
Fire Safety Measures	No fire safety measures are proposed as part of this evaluation.

A.5 Overview

This project proposes evaluation of the nominated Performance Requirements of the National Construction Code Volume 1 - Building Code of Australia (BCA) in accordance with the methodologies defined in the International Fire Engineering Guidelines (IFEG). The intent is to provide a workable and safe fire safety strategy through a trial design. In order to develop and assess the nominated non-compliances the following process is adopted as structured by chapter 1.2 of the IFEG.

Project Scope	• Provides details of the project scope • Provides details of the regulatory framework
⇓	
Relevant Stakeholders	• Provides details of the project team
⇓	
Principle Building Characteristics	• Provides details of the building including: – Occupancy – Location – Size and Shape – Structure
⇓	
Dominant Occupant Characteristics	• Provides details of the expected building occupants including: – Distribution - population – Physical and mental attributes – Familiarity with the building – Emergency training – Travel speed
⇓	
General Objectives	• Provides details of the general objectives including: – Building regulatory objectives – Other regulatory objectives – Non-regulatory objectives
⇓	
Fire Hazards and Protective Measures	• Provides details of the fire hazards and protective measures including: – Fire statistics – Fire load – Fire growth rate and intensity
⇓	
Fire Scenarios	• Provides details of the proposed fire scenarios

A.6 Scope of Project

The purpose of this evaluation is to satisfy the performance requirements of the National Construction Code Volume 1 - Building Code of Australia (BCA). This appendix sets down the basis on which the analysis will be undertaken (to be agreed by the stakeholders), necessary acceptance criteria, fire engineering evaluation and the recommended fire engineering requirements. The project is to evaluate the proposed building utilising both DtS and Performance Solutions across the development.

A.6.1 Contractual Content

The projects design team operate on a design and construct basis where a significant portion of the design will be undertaken by design and installation contractors. Appropriately qualified engineers will provide oversight on general areas of design and specifically qualified engineers will provide detailed design and assessment reports including structural and fire safety provisions.

A.6.2 Regulatory Framework

The regulatory framework in Australia is spread over three levels of government. These levels are:

- Federal Government; and
- State Government; and
- Local Government.

The Federal Government is responsible for the six states and two territories within the Commonwealth of Australia and coordinates the development of the BCA. The BCA contains the technical provisions for building design and is maintained by the Australian Building Codes Board.

The legislations and regulations required for the implementation of the BCA occurs at the State and Local Government level. Building approvals and occupancy permits are given by local council building surveyors and inspectors and in some cases by private building surveyors.

The administrative requirements still differ between each state and territories. In the ACT, the Building Act 2004 and Building Regulations 2008 detail the Territory legislative and regulatory requirements.

The technical requirements for building in respect to health, safety and amenity of people occupying or near buildings is contained with the National Construction Code - Volume 1 - Building Code of Australia (BCA). This document is applied nationally with various State and Territory variations.

The objectives and functional requirements are provided for guidance purposes only. The only part of the BCA that Building Solutions must comply are the Performance Requirements. A Building Solution may comply with the Deemed-to-Satisfy (DtS) provisions, which are deemed to comply with the Performance Requirements. In most Performance Solutions, the Building Solution is partly based on a DtS building design and partly a Performance Building Solution.

The BCA is not specifically referred to in the Building Act but is prescribed by the Building Regulation. The Building Regulation specifies that a proposed building must comply with the requirements of the BCA.

The IFEG document has been developed for use in the fire safety design and assessment of buildings and reflects world's best practice. The document is intended to provide guidance for fire safety engineers as they work to develop and access strategies that provide acceptable levels of safety.

The document is particularly useful in providing guidance in the design and assessment of Performance Solutions against the Performance Requirements of the BCA. The prescribed methodology set out in the IFEG is to be adopted in the fire engineering analysis.

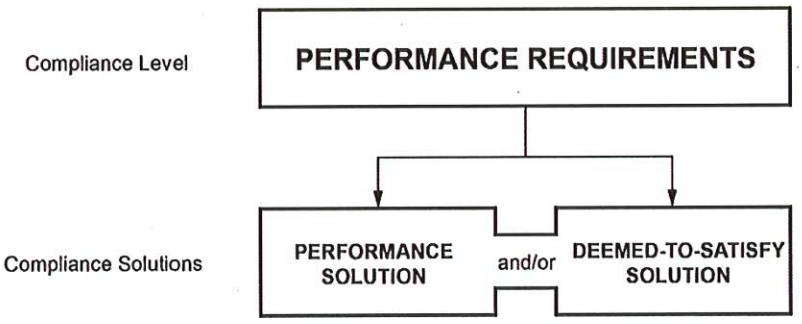
The Building Regulations requires building planning to follow the following three step process:

- Development Application
- Building Approval
- Occupancy

In order to obtain building approval, any proposed building or tenancy project with a floor area greater than 500m^2 is required to be reviewed by ACT Fire & Rescue for both plan review as well as any performance solution review. Likewise, in order to obtain the Certificate of Occupancy for a building or tenancy project, occupancy clearance is required from ACT Fire & Rescue.

The role of ACT Fire & Rescue is governed by the Emergencies Act 1989. This Act sets out the Fire Brigade's structure, operations, responsibilities, etc.

FIGURE 38:
BCA STRUCTURE



Source: BCA 2019

A.6.3 Standards of Construction, Commissioning, Management, Use and Maintenance

The following base information sources were used in the evaluation of the building:

- National Construction Code 2019 Amendment One – Volume One – Building Code of Australia, Class 2 to 9 buildings, Australian Building Codes Board, Canberra, 2020. (BCA)
- Guide to the Building Code of Australia 2019 Amendment One – Volume One – Building Code of Australia, Class 2 to 9 buildings, Australian Building Codes Board, Canberra, 2020 (the Guide).

A fire safety management-in-use plan is recommended to be developed and implemented by the buildings management incorporating as minimum the maintenance of the buildings fire safety measures in accordance with the ABCB Maintenance of Safety Measures, Equipment and Energy Efficiency Installations Handbook 2015 and any applicable Australian Standards.

Current legislation for the maintenance of buildings is managed initially through Section 92 of the Emergencies Act where the Chief Officer may, in writing, direct the occupier of the premises for the provision or installation of a fire appliance at the premises. In accordance with Section 95(2) of the Emergencies Act, it is an offence if a fire appliance is provided or installed at the premises under a direction via Section 92 and the occupier fails to maintain the fire appliance to a reasonable standard.

Prior to the Emergencies Act 2004 the Fire Brigades Ordinance of 1957 as amended until 2004 owners of a building are required to maintain to the satisfaction of the Chief Officer of a fire brigade a fire appliance provided or installed in the building in pursuance of a direction given under the regulations. Whilst no evidence has been identified that the ACT Fire Service Chief Officer has provided direction under Section 92 of the Emergencies Act 2004 or Section 13 of the Fire Brigades Ordinance 1957. ACT Building Regulations since 1972 have required the ACT Fire Service Chief Officer to review and comment on the installed fire appliances. Given the process of building approval, it is assumed that the ACT Fire Service Chief Officer has issued or will issue support for the installed fire safety appliances.

It is noted that the building maintenance process and documentation is not a legislated element within the ACT.

A.7 Dominant Occupant Characteristics

The characteristics of occupants in a building can have a significant impact on the evacuation behaviour and the total evacuation time for a building. The occupancy characteristics for the varying portions of the building are presented below.

The characteristics of various occupancies are listed below. Not all the following occupancies may be relevant to the subject project.

A.7.1 Distribution

The characteristics of occupants in a building can have a significant impact on the evacuation behaviour and the total evacuation time for a building.

Occupants within the building will be made up of staff, teachers and children. In the event of fire, all occupants are assumed to perceive the fire alarm. There is however usually scepticism as to whether the alarm is genuine or not, and occupant behaviour following the alarm depends on many different factors such as social influence, experience, commitment and training.

The occupancy of the building is sufficiently large and uncensored to assume that there will be a mix of abilities amongst the individuals. People with disabilities may also be present to the same proportion as expected within the general population. It will however be assumed that nobody in the building needs to be transported in a bed or via a stretcher to evacuate the building in a fire incident.

A.7.2 Familiarity and recognition

Occupants are expected to be familiar with the primary access and egress routes from the building. It is unlikely that occupants will be familiar with all the evacuation routes without the implementation of fire emergency training drills. The students will undertake evacuation under the direction of staff. The staff are expected to have the ability to take and implement decisions independently and the potential emergency behaviour is to be rational and conducive to the emergency situation.

A.7.3 Physical attributes

Occupants are assumed to have the same level of mobility as the general population. This may include a limited proportion of mobility impaired occupants. These occupants may require crutches, a wheelchair or similar in order to evacuate on their own or need assistance from other occupants.

A.7.4 State

The building is not a place of residence therefore occupants are assumed to be awake and alert such that they are aware of the emergency situation.

A.7.5 Emergency training

Emergency training is unlikely to occur. The occupants are expected to have a level of understanding where they can recognise an emergency situation.

A.8 General Objectives

This fire engineering assessment has been undertaken to show the suitability of the proposed fire safety systems within the building and compliance with the nominated performance criteria of the Building Code of Australia (BCA).

The level of building fire safety has been determined by a systematic performance-based evaluation generally complying with the Australian Building Codes Board, "International Fire Engineering Guidelines".

Where the results of the analysis indicate that the level of life safety does not meet the current prescriptive building regulations, alternative fire safety systems have been recommended.

The objectives of the performance assessment are to:

- Assess the compliance of nominated design aspects with the performance requirements of the BCA
- Consider alternate design solutions, to satisfy the relevant performance requirements.

The goals of the BCA are to enable the achievement and maintenance of acceptable minimum standards of structural sufficiency, safety (including safety from fire), health and amenity for the benefit of the community now and in the future. These goals are applied so that the BCA extends no further than is necessary in the public interest, is cost effective, easily understood, and is not needlessly onerous in its application.

The client must make themselves familiar and endorse the proposed performance solutions which complies with the Performance Requirements rather than complying with the Deemed-to-Satisfy Provisions of the BCA.

The fire safety objectives of the client are to:

- Enhance public image and satisfy moral obligations
- Protect assets
- Maintain services to the local community
- Continue operations
- The fire safety objectives of the fire and rescue service include:
- General authority to protect persons and property.
- Duty to deal with fires and hazardous material incidents.
- To take all practicable measures for preventing and extinguishing fires and protecting and saving life and property in case of fire.
- To have regard to the principles of ecologically sustainable development

A.9 Fire Hazards and Preventative and Protective Measures

The building will be provided with the major fire safety measures required by the DtS provisions of the BCA listed as follows. A comprehensive list of fire safety measures is to be provided by the certifier as part of the building approval process. Additional fire safety measures if required as part of the performance solution are listed within the fire safety measures within Part B.

TABLE 8:

HAZARDS AND PREVENTATIVE AND PROTECTIVE MEASURES

Area	Hazards Ignition Source	Fuel Loads	Preventative Measures	Protections Measures
School	Electrical faults Food stuffs Cooking equipment Heating Equipment faults	Fixtures/Fittings Rubbish bins Sofa/couches	Staff presence Surveillance Alarm system Security	Risk specific portable fire extinguishers

Source: Ignis Solutions

A.10 Fire Scenarios

A single fire will be assumed to occur in one location at one time only. Multiple fires are not considered. Fires are anticipated to initially be smouldering, developing to a flaming fire. Should occupant intervention not extinguish the fire. Additionally, it is assumed that the setbacks from other buildings and the fire load will mitigate fire spread from the subject building to other buildings.

Statistics indicate that a significant cause of fires is arson. Therefore, it is important for some level of arson to be considered. It is considered that the design fires listed above will adequately include an arson scenario. An arson fire would either be based on introduced fuels, fuel already within the building or a combination. Any introduced fuels are likely to be less than the fuels within the building due to limitation of what a person can carry. Combining introduced fuels with existing fuels is unlikely to substantially increase the fire size. Arson has not been specifically addressed further due to the Performance Solutions being independent of whether the design fire is a result of arson or not.

Appendix

B

Radiation formula

B RADIATION FORMULA

B.1 Brief Summary

Fire spread can occur between one body (emitter) to another remote body (receiver) through the means of Thermal Radiation, which is the transfer of heat via electromagnetic waves. This means that one body can ignite without being in contact with another "burning" object.

The following formula determines the amount of Thermal Radiation required to ignite an object that is remote from a burning object. This can be determined when the radiator is parallel or perpendicular to the receiver at a particular distance.

B.2 Limitations Associated with use of Spreadsheet

The methodology detailed within this design guide is limited to two surfaces that are located perpendicular to each other.

The calculations determined the highest levels of thermal radiation received from the centre of the emitting surface.

B.3 Calculation Methodologies

B.3.1 Assumptions

- emissivity of the body is 0.75, this is supported by information published within An introduction to fire Dynamics, Drysdale D, which states that a fire brick at 1000°C has an emissivity of 0.75
- Drysdale also indicates an emissive power of 0.75 for grey bodies, which compares favourably with that of a real surface
- The value of 0.9 for the emissive power will be used following discussions with the fire service to account for a conservative value.
- temperature of the emitting body is 1273 K (1000°C), having a cherry red/orange visual colour

According to Law[12] and Drysdale[13], the incident radiation capable of piloted ignition of volatiles from wood after about 20 minutes exposure is 12.5 kW/m^2. Also the spontaneous ignition of wood is 29 kW/m^2. It is reasonable to suggest that the local fire service is expected to have arrived and would apply water to cool the adjacent area or building prior to this 20 minute exposure.

Data published by the department of Housing and Construction[14] also indicates that where wall wetting sprinklers are activated the incident radiation through the glass will be reduced to approximately 10%. This is also supported by testing conducted by Richardson, J.K. and Oles Zkiewicz.

B.3.2 Methodology

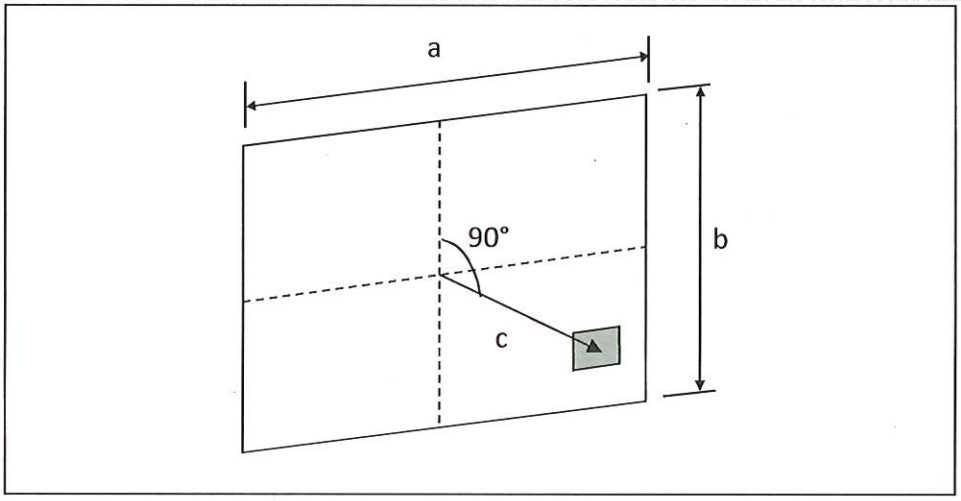
Prior to calculating the radiation received from the emitting body, the configuration factor needs to be determined.

The configuration factor is used within the calculations to account for the geometrical relationship between the emitter and the receiver.

Configuration Factor For A Body Located Parallel To The Emitting Body

FIGURE 39:

LAYOUT OF EMITTER AND RECEIVER TO DETERMINE THE CONFIGURATION FACTOR WHEN PARALLEL TO EACH OTHER



With the height and width of the emitter known, the configuration factor (ϕ) for two parallel surfaces can be determined as follows.

Firstly, determine the values of X and Y using the following modified formula from "The SFPE Handbook of Fire Protection Engineering" (refer to Figure 1 for a, b and c):

$$X = {}^{a}/_{2c} \qquad \text{-(1)}$$

$$Y = {}^{b}/_{2c} \qquad \text{-(2)}$$

Once X and Y are known, these values can be substituted into the following equation to determine the configuration factor.

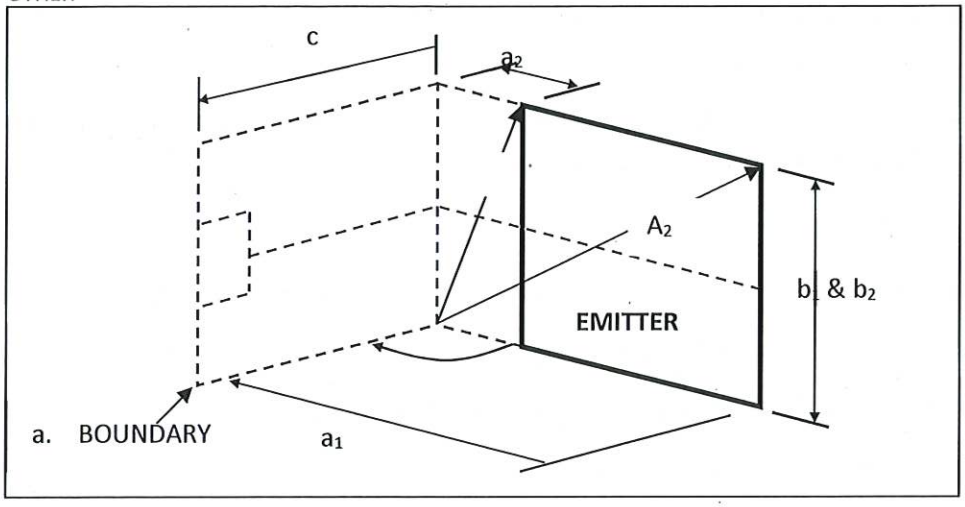
$$\phi = \frac{2}{\pi}\left[\frac{X}{\sqrt{1+X^2}}\tan^{-1}\left(\frac{Y}{1+X^2}\right)+\frac{Y}{\sqrt{1+Y^2}}\tan^{-1}\left(\frac{X}{1+Y^2}\right)\right] \qquad \text{-(3)}$$

The value of the Configuration Factor determined from Equation 3 can now be substituted into Equation 8 to find the radiation received from an emitting body located at a distance 'c' parallel to the receiving body.

Configuration Factor For A Body Located Perpendicular To The Emitting Body

FIGURE 40:

LAYOUT OF EMITTER AND RECEIVER TO DETERMINE THE CONFIGURATION FACTOR WHEN PERPENDICULAR TO EACH OTHER



With the height and width of the emitter known, the configuration factor for two perpendicular surfaces can be determined as follows.

Before starting, the dimensions and the position of the emitting surface needs to be known. As indicated within Figure 2, the emitter can be located at some distance from the point of interest 'c' and also a distance from the boundary (a_2). Therefore, to determine the Configuration Factor for the emitter only, the Configuration Factor for the gap between the emitter and the boundary (Area 2, denoted by A_2 in Figure 2) and also the emitter including the gap (Area 1, denoted by A_1 in Figure 2) needs to be determined (i.e. Area 1 is the area of the emitter and the gap between the emitter and the boundary the receiver lies on, Area 2 is the area of the gap between the emitter and the receiver boundary).

Firstly, determine the values of X and Y (for Areas 1 and 2) using the following modified formula from "The SFPE Handbook of Fire Protection Engineering" (refer to Figure 2 for a, b and c and Areas 1 and 2):

$$Y = c/2b \qquad \text{-(4)}$$

$$X = a/2b \qquad \text{-(5)}$$

By substituting the values of X and Y into Equation 6, the value of A can be determined for both Areas 1 and 2 (to be used later).

$$A = 1/\sqrt{X^2 + Y^2} \qquad \text{-(6)}$$

The configuration factor for Areas 1 and 2 can now be determined using Equation 7 below.

$$\phi = \frac{1}{\pi}\left[\tan^{-1}(1/Y) - AY\tan^{-1}A\right] \qquad \text{-(7)}$$

Once the Configuration Factors for Areas 1 and 2 have been found, the overall Configuration Factor can be determined by subtracting the Configuration Factor for Area 2 from the Configuration Factor for Area 1. The resulting value can now be substituted into Equation 8 to find the radiation received from an emitting body located at a distance 'c' perpendicular to the receiving body.

B.3.3 Determining the radiation received

Once the configuration factor has been determined, the amount of thermal radiation received from the emitter can be found using the following formula.

$$q_r = \phi\sigma\varepsilon T^4 \qquad \text{-(8)}$$

where q_r is the amount of thermal radiation received from the emitter (kW/m²)

ϕ is the configuration factor

σ is the Stefan-Boltzmann constant (5.67×10^{-8} W/m².K⁴)

ε is the emissivity of the body (must be less than or equal to 1)

T is the temperature of the emitting body (K)

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Appendix

C

radiation calculations

C RADIATION CALCULATIONS

Opening A

Version:	1.0-5/2005		
		Job No.	8158
B04 S41 Brindabella Christian College		Date	2/11/2020
Scenario -	Opening A	Designer	TL/NC

Thermal Radiation Calculation - Emitting Body Located Parallel to Receiving Body

References:

1. Drysdale, D., "An Introduction To Fire Dynamic", Second Edition, John Wiley & Sons, Chichester 1998
2. Fire Engineering Guidelines 2001, Appendix 10A
3. Kandola, B.S. et al., "The SFPE Handbook of Fire Protection Engineering", Third Edition, SFPE, Massachusetts 2002

Input Data (change values highlighted in blue)

From opening to adjacent lot

Input Variable	Description	Value		1m	3m	6m
T	Absolute Temperature of radiator	1000	°C			
ε	Emissivity of radiator	0.90				
a	Width of radiator body	1.8	m			
b	Height of radiator body	1	m			
c	Distance between radiator and receiver	5.3	m			
σ	Sigma	5.67E-11	kW/m²-K⁴			
ϕ	Configuration factor	0.02		0.01	0.01	0.00

Output Results

$q_{emitted}$	Radiation Emitted from radiator	134.01	134.01	134.01	134.01	kW/m²
q_{r}	Radiation Received by receiving body	2.67	1.90	1.10	0.60	kW/m²
T	Temerpature received by receiving body	205	166	110	56	°c

From opening to adjacent lot

BCA CV1	Radiation received	BCA Limit (kW/m²)	
On boundary	2.67	80	PASS
1m from boundary	1.90	40	PASS
3m from boundary	1.10	20	PASS
6m from boundary	0.60	10	PASS

Output Results

From adjacent lot to opening

Input Variable	Description	Value		1m	3m	6m
T	Absolute Temperature of radiator	1000	°C			
ε	Emissivity of radiator	0.90				
a	Width of radiator body	2.25	m			
b	Height of radiator body	1.25	m			
c	Distance between radiator and receiver	5.3	m			
	Sigma	5.67E-11	kW/m²-K⁴			
ϕ	Configuration factor	0.03		0.02	0.01	0.01

From boundary to subject opening (25% increase in area)

Radiation Emitted (kW/m²)	Radiation Received (kW/m²)		Radiation Limit (kW/m²)	Temperature received (°c)	
80	2.45	5.30	13	195	PASS
80	1.76	6.30	13	158	PASS
80	1.02	8.30	13	103	PASS
80	0.56	11.30	13	50	PASS

Opening B

1.0-5/2005			
B04 S41 Brindabella Christian College		Job No.	8158
Scenario -	Opening B	Date	2/11/2020
		Designer	TL/NC

Thermal Radiation Calculation - Emitting Body Located Parallel to Receiving Body

References:

1. Drysdale, D., "An Introduction To Fire Dynamic", Second Edition, John Wiley & Sons, Chichester 1998
2. Fire Engineering Guidleines 2001, Appendix 10A
3. Kandola, B.S. et al., "The SFPE Handbook of Fire Protection Engineering", Third Edition, SFPE, Massachusetts 2002

Input Data (change values highlighted in blue)

From opening to adjacent lot

Input Variable	Description	Value				
T	Absolute Temperature of radiator	1000	°C			
ε	Emissivity of radiator	0.90				
a	Width of radiator body	3	m			
b	Height of radiator body	3.1	m			
c	Distance between radiator and receiver	5.3	m			
σ	Sigma	5.67E-11	kW/m²-K⁴			
ϕ	Configuration factor	0.09		0.07	0.04	0.02

Output Results

$q_{emitted}$	Radiation Emitted from radiator	134.01	134.01	134.01	134.01 kW/m²
q_{r}	Radiation Received by receiving body	12.72	9.27	5.51	3.03 kW/m²
T	Temerpature received by receiving body	434	380	300	221 °c

From opening to adjacent lot

BCA CV1	Radiation received	BCA Limit (kW/m²)	
On boundary	12.72	80	PASS
1m from boundary	9.27	40	PASS
3m from boundary	5.51	20	PASS
6m from boundary	3.03	10	PASS

Output Results

From adjacent lot to opening

Input Variable	Description	Value				
T	Absolute Temperature of radiator	1000	°C			
ε	Emissivity of radiator	0.90				
a	Width of radiator body	3.75	m			
b	Height of radiator body	3.88	m			
c	Distance between radiator and receiver	5.3	m			
	Sigma	5.67E-11	kW/m²-K⁴			
ϕ	Configuration factor	0.14		0.10	0.06	0.03

From boundary to subject opening (25% increase in area)

Radiation Emitted (kW/m²)	Radiation Received (kW/m²)		Radiation Limit (kW/m²)	Temperature received (°c)	
80	11.25	5.30	13	412	PASS
80	8.31	6.30	13	362	PASS
80	5.02	8.30	13	287	PASS
80	2.79	11.30	13	211	PASS

Appendix

D

fire engineering notices

A member of LIVE Group International

ABN: 24 160 047 325
Suite 13 / 14 Lonsdale Street
Braddon, ACT 2612
PO Box 674
Civic Square ACT 2608
t: (02) 6100 3900
mail@ignissolutions.com.au
www.ignissolutions.com.au

17-Nov-20
Date of Issue

IGNIS FIRE SAFETY COMPLIANCE SCHEDULE

Evaluation No.8158
Issue 02 Revision 00 [2020]

Brindabella Christian College
Block 04 Section 41 Lyneham ACT

Fire Safety Measure	Reference Standard
Access and Egress	• BCA 2019 A1 Part D • Exit paths to be kept 1m wide and clear of obstruction
Automatic fire detection and alarm systems	• Ignis Solutions Performance Report 8158 I01R01 dated 17-Nov-20 • BCA 2019 A1 Part E • AS 1670.1:2018 Fire detection, warning, control, and intercom systems
Emergency lighting	• BCA 2019 A1 Clause E4.2, E4.4 • AS/NZS 2293.1:2018 Emergency evacuation lighting in buildings
Exit signs	• BCA 2019 A1 Clause E4.5 and E4.6 • AS/NZS 2293.1:2018 Emergency evacuation lighting in buildings
Fire hydrant systems	• BCA 2019 A1 Clause E1.3 • AS 2419.1:2005
Hose reel system	• BCA 2019 A1 Clause E1.1 • AS 2441:2005 amdt 1 installation of fire hose reels
Portable fire extinguishers	• BCA 2019 A1 Clause E1.6 • AS 2444:2001 Portable fire extinguishers

Performance Solution	• Ignis Solutions Performance Report 8158 I01R01 dated 17-Nov-20
	  • Rationalisation of FRLs – External Walls
	  • Automatic Fire Detection and Alarm Systems
	  • Protection of Openings
	  • Distance of Travel

ABN: 24 160 047 325
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A member of LIVE Group International

17-Nov-20
Date of Issue

IGNIS PERFORMANCE SOLUTION NOTICE

Evaluation No.8158
Issue 02 Revision 00 [2020]

Brindabella Christian College
Block 04 Section 41 Lyneham ACT

PERFORMANCE SOLUTIONS HAVE BEEN APPLIED TO THIS BUILDING.

These relate to:

- Rationalisation of FRLs – External Walls
- Automatic Fire Detection and Alarm System
- Protection of Openings
- Distance of Travel

Refer to Fire Engineering Report, 8158 I02R00, dated 17-Nov-20, by Ignis Solutions.

This report specifies building works and services which are required to be inspected as part of the Annual Fire Safety Certification process.

Where building alterations or a change of occupancy occurs, the validity of this fire safety analysis may be compromised.

Please contact Ignis Solutions prior to undertaking any alterations and to assist with the annual certification process.

REFERENCE

[1] Grantham, R. and Enjily, V., Multi-storey Timber Frame Buildings, A Design Guide. BRE Bookshop, Watford, UK, 2003.

[1] Australian Building Codes Board (2016), Guide to the BCA 2016, Australia.

[2] Australian Building Codes Board, (2015), Guide to the BCA 2015, Australia.

[3] Australian Building Codes Board, (2005) International Fire Engineering Guidelines, Edition 2005, ABCB, p2.4-4.

[4] Mowrer, F. W. (1998) Window breakage induced in external fires, pp 404-415 in proceedings of 2nd International Conference on Fire Research and Engineering, Society of fire Protection Engineers, Bethesda, MD, USA.

[5] Cohen, J.D. and Wilson, P. (1994) Current results from Structure Ignition Assessment Model (SIAM) Research presented in Fire Management in the Wildland/Urban Interface: Sharing Solutions, Kananaskis, Alberta, Canada.

[6] Standards Australia, (1997) AS 1530.4-1997 Table A1.

[7] Australian Building Codes Board, (1996) Guide to the BCA'96, Australia.

[8] Babrauskas, V., Temperatures in Flames and Fires, Fire Science and Technology Inc., Issaquah, WA, 1997.

[9] England, J.P., Young, S.A., Hui, M.C., Kurban, N., Guide for the Design of Fire Resistant Barriers and Structures, Building Control Commission, Melbourne, 2000.

[10] Drysdale, D., An Introduction to Fire Dynamics, 2nd edition, Wiley, 1998, p 296

[11] "Fire Safety Approved Document B", Department of the Environment and the Welsh Office, UK, 2002.

[12] Law, M., Heat Radiation from Fires and Building Separation, Fire research Station Technical Paper No. 5, HMSO, London, 1963.

[13] Drysdale, D. An Introduction to Fire Dynamics, John Wiley & Sons, 1986.

[14] Technical Record TR 44/153/422, Water curtains to, shield glass from radiant heat from building fires, Experimental Building Station Department of Housing & Construction.

ACT Government

Building Approval Fees and Levies Tax Invoice

TO THE PAYEE

c/o Brindabella Christian College

136 Brigalow Street, ,

Lyneham ACT 2602

Access Canberra Land, Planning and Building Services

ABN 16 479 763 216
8 Darling Street Mitchell
GPO Box 158 ACT 2601
Access Canberra Homepage: www.act.gov.au/accesscbr

Invoice Date:17/02/2023 Time:3:38:26 PM

Invoice Number: 3100781438

Block - Section - Division - District	Building Levy	Training Levy	Fees Paid	Total
4 - 41 - LYNEHAM - CANBERRA CENTRAL Ref # - 33381				
Total				Sch 2.2(a)(xi)

No GST applies to these fees and levies.

PAYMENT REQUIRED WITHIN 14 DAYS OF INVOICE ISSUE DATE

Payment Options

BPAY

Biller Code: Sch 2.2(a)(xi)
Ref: Sch 2.2(a)(xi)

Telephone & Internet Banking – BPAY®
Call your bank, credit union or building society to make this payment from your cheque, savings or credit card account. More info: www.bpay.com.au

Internet
To pay online by credit card (MasterCard or Visa), click on the "Building and Construction Fees and Levies" online payment form located at
https://www.accesscanberra.act.gov.au/app/answers/payment

Phone
Telephone (02) 6207 1923 8.30am - 4.30pm Mon - Fri and have your credit card details handy (MasterCard and Visa).

In Person
Access Canberra Land, Planning and Building Services Shopfront Only: 8.30am – 4.30pm Mon – Fri . Cash, Cheque, EFTPOS, Credit card (Mastercard and Visa). CashLink Code – 34 0075

For further information please contact Access Canberra Land, Planning and Building Services - 02 6207 1923.