



# Access Central

# Access Central

## Accessibility Design Review Report

St. Michael's Uniting Church  
120 Collins Street  
Melbourne, Victoria

Dated: 09 December 2024

Reference: EG-241208-AC

## Executive Summary

### Key Findings

Access Central has been engaged to undertake a desktop design review of the proposed works at St. Michael's Uniting Church located at 120 Collins Street, Melbourne, Victoria. The planned building work includes internal alterations within the existing building.

Access Central has reviewed the current documentation detailed in Section 2 of this report with respect to the BCA and Premises Standards.

The proposed works must achieve compliant access for people with disabilities, but this will require clarification of some access issues, detailing all required accessible features and rectifying some non-compliances.

These access issues have been identified throughout this report and identified in Appendix 4 (marked-up drawings). The following are the key issues:

- The design of the existing external stairway and handrails.
- The external entry ramp handrails and kerbrails.
- The design and layout of TGSIs on each stair and ramp landing.
- The threshold ramp design in the entry door.
- The entry door design and clearance.
- Visual indicator (glazing) bands on fully glazed doors.
- The two internal step ramp designs.
- Confirmation of the requirement for a suitable hearing augmentation system in the auditorium.
- The provision and distribution of wheelchair seating spaces in the auditorium.
- Door compliance (door force, controls, sizes).
- The location of all light switches and the size of the switch in the accessible sanitary facilities.
- The luminance contrast of each accessible toilet seat, braille and tactile signage, TGSIs, stair tread nosing strips, visual indicator (glazing) bands, and doorways.
- The slip-resistance of each stair and ramp landing, TGSIs and stair tread nosing strips.
- Braille and tactile signage for each exit door, areas with hearing augmentation and each sanitary facility.
- Acceptance of the unisex toilets instead of separate male and female toilets).
- Detailing the unisex accessible toilet and unisex ambulant toilet.
- Provision of an ambulant toilet for use by both males and females.
- An internal accessway to the Choir Vestry (within the New Part).
- Please refer to Section 6 and Appendix 4 for all identified accessibility issues.
- Additionally, several best-practice recommendations are provided in Appendix 3.

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The Group includes:

- Access Central
- MAA Access Consultants
- LumiLab – Luminance Contrast Testing



## About Access Central

Access Central is a consultancy specialising in access for people with disabilities. As part of Egress Group Pty Ltd, we apply industry best practices, risk management principles and advanced project management skills to deliver successful outcomes for clients.

## Statement of Limitations

This report has been prepared in accordance with the agreement between the Client nominated below and Egress Group Pty Ltd. Within the limitations of the agreed-upon scope of services. This engagement has been undertaken and performed professionally, by generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

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## Report Details

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 Project Address: 120 Collins St, Melbourne, Victoria  
 Date Prepared: 09 December 2024  
 Project Reference: EG-241208-AC  
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## Report Revision Table

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# 1. Introduction

Access Central has been engaged to undertake a desktop design review of the proposed works at St. Michael's Uniting Church located at 120 Collins Street, Melbourne, Victoria.

The planned building work includes internal alterations within the existing building.

This report documents our comprehensive review of the project documentation and considers all applicable disability access requirements.

# 2. Reviewed Documentation

This report is prepared with reference to the architectural design package prepared by Trethowan, received by email on 02 December 2024:

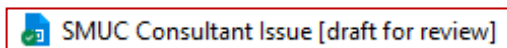


Figure 1: Screen Image of Project Folder

Marked-up copies of the drawings are provided in Appendix 4 of this report.

# 3. Applicable Legislation

## Legislative References

This report considers the following applicable legislation:

- Disability Discrimination Act 1992 (Cth) (**DDA**)
- Disability (Access to Premises – Buildings) Standards 2010 (**Premises Standards**)
- VIC Building Act 1993
- VIC Building Regulations 2018
- National Construction Code 2022, Building Code of Australia, Volume One (**BCA**)
- AS 1428.1 (2009) Design for access and mobility, Part 1: General requirements for access – New building work (**AS 1428.1**)
- AS/NZS 1428.4.1 (2009) Design for access and mobility, Part 4.1: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators (**AS/NZS 1428.4.1**)

## Other References

The following references have also been considered during our assessment:

- Guideline on the Application of the Premises Standards, Version 2, February 2013
- NCC 2019 Guide to the BCA Volume One
- Victorian Building Authority, Building Practice Note AC-01: Access to buildings for people with a disability
- Victorian Building Authority, Practice Note PS-01: Documentation and Assessment
- AS 1428.2 (1992) Design for Access and mobility, Part 2: Enhanced and additional requirements – Buildings and facilities (**AS 1428.2**)
- AS1428.5 (2021) Design for access and mobility, Part 5: Communication for people who are deaf or hearing impaired (**AS 1428.5**)

- AS 3745 (2010) Planning for emergencies in facilities (**AS 3745**)
- Standards Australia Handbook (HB) 198 (2014) Guide to the specification and testing of slip resistance of pedestrian surfaces

## 4. Methodology

### Compliance Approach

Access Central aims to provide achievable recommendations related to access to premises, and is based on current legislation and best practice options, enabling independent, equitable and functional access for all. Accessibility is paramount in providing an inclusive environment for all users and is a legislative requirement under Section 23 of the DDA.

Recommendations have referenced current accessibility standards and legislative requirements (listed in Section 3 above), but it must be acknowledged that in the future, these might be updated or replaced, and any future works consider the current requirements at that time.

The use of the word *required* and *must* indicate a mandatory requirement.  
The use of the word *consider* or *should* indicate a non-mandatory requirement.

### Mandatory Requirements

The design has been assessed against the minimum requirements of the BCA and applicable referenced technical Standards. The findings of this review are presented in the sections of this report. This report should be read in conjunction with the attached marked plans, included as Appendix 4 to this report and in conjunction with Appendix 2 (Mandatory Accessibility Requirements).

### Universal Design/Best-Practice Recommendations

Accessibility and inclusion are not necessarily about compliance. We, therefore, take a Universal Design approach when assessing building elements. Universal Design aims to provide a usable environment to the greatest extent possible for people of all abilities, sizes, and ages. These recommendations are outlined in Appendix 3 of this report.

### Performance-Based Approach

Since the 1996 edition of the Building Code of Australia (**BCA**), Australia has had a performance-based building code. A performance-based building code aims to create an environment with more flexibility to develop innovative and cost-effective solutions by focusing on the outcomes the building must deliver rather than the prescriptive requirements.

The current BCA is a performance-based document, and the legal compliance requirement is the applicable Performance Requirement. A Building Solution will only comply with the BCA if it satisfies the Performance Requirements, either through following the prescriptive Deemed-to-Satisfy provisions, developing Performance Solutions, or through a blended approach considering both.

These compliance options are represented below:

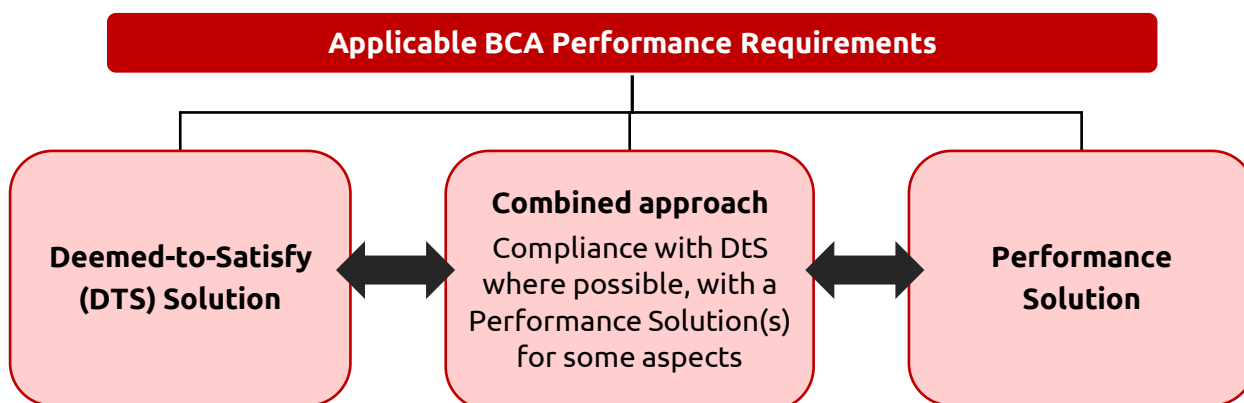


Figure 2: BCA Compliance Options

Potential Performance Solutions offering efficiencies in the design are identified on the marked-up drawings provided in Appendix 4 and discussed in Section 6 of this report.

## Dimensions

All dimensions noted in marked-up drawings are:

- In millimetres (mm) unless otherwise stated; and
- Are minimum dimensions only; and
- Must be measured from the internal face of all internal wall linings, skirting boards, architraves etc., and not rely on the stud-to-stud framing measurements.

## 5. Legislation

### Disability Discrimination Act 1992

This Accessibility Review assesses the design against all applicable legislative requirements, including the Commonwealth Disability Discrimination Act 1992 (**DDA**). Our review covers all aspects of the premises to confirm the objectives of the DDA have been met and includes Section 23 of the DDA. Section 23 relates to access to premises and facilities that members of the public enter or use.

The DDA is enforced primarily through a complaints mechanism. This allows individuals who have directly or indirectly experienced unlawful discrimination to seek a conciliated outcome through the Australian Human Rights Commission and, in the instance of unsuccessful conciliation, to bring an action in the Federal Magistrates Court or the Federal Court of Australia.

### Disability Access to Premises Standards

The Disability (Access to Premises – Buildings) Standards 2010 (the Premises Standards) are adopted under the DDA. In contrast to building legislation, the DDA is not prescriptive. Implementing the Premises Standards in 2010 and corresponding changes to the BCA in 2011 was a significant step towards achieving equal access to premises and is crucial to justice and social inclusion for people with disabilities.



The Premises Standards aim to ensure dignified, equitable, cost-effective, and reasonably achievable access to buildings, facilities, and services within buildings is provided for people with a disability. The trigger for consideration of the Premises Standards is when a building approval is required by State or Territory legislation. The Premises Standards also provide a level of certainty to property developers, building owners and building practitioners that if access is provided in accordance with the Premises Standards during building works under a building approval, it will not be unlawful under the DDA.

The Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA. The Premises Standards could address a broader range of accessibility issues, including the accessibility of parkland, playgrounds, transport vehicles, interior fit-out of buildings, and fixtures and fittings. As such, some features fall beyond the scope of the Standards, which may be subject to the general complaints provisions of the DDA.

### Access to Premises Standards – ‘New Part’

Any new works in an existing building constitute a New Part defined under Subsection 2.1(4) of the Premises Standards. Consequently, the New Part must comply with the BCA and Premises Standards Access Code. For this project, the New Part to be considered incorporates all internal alterations shaded pink below:

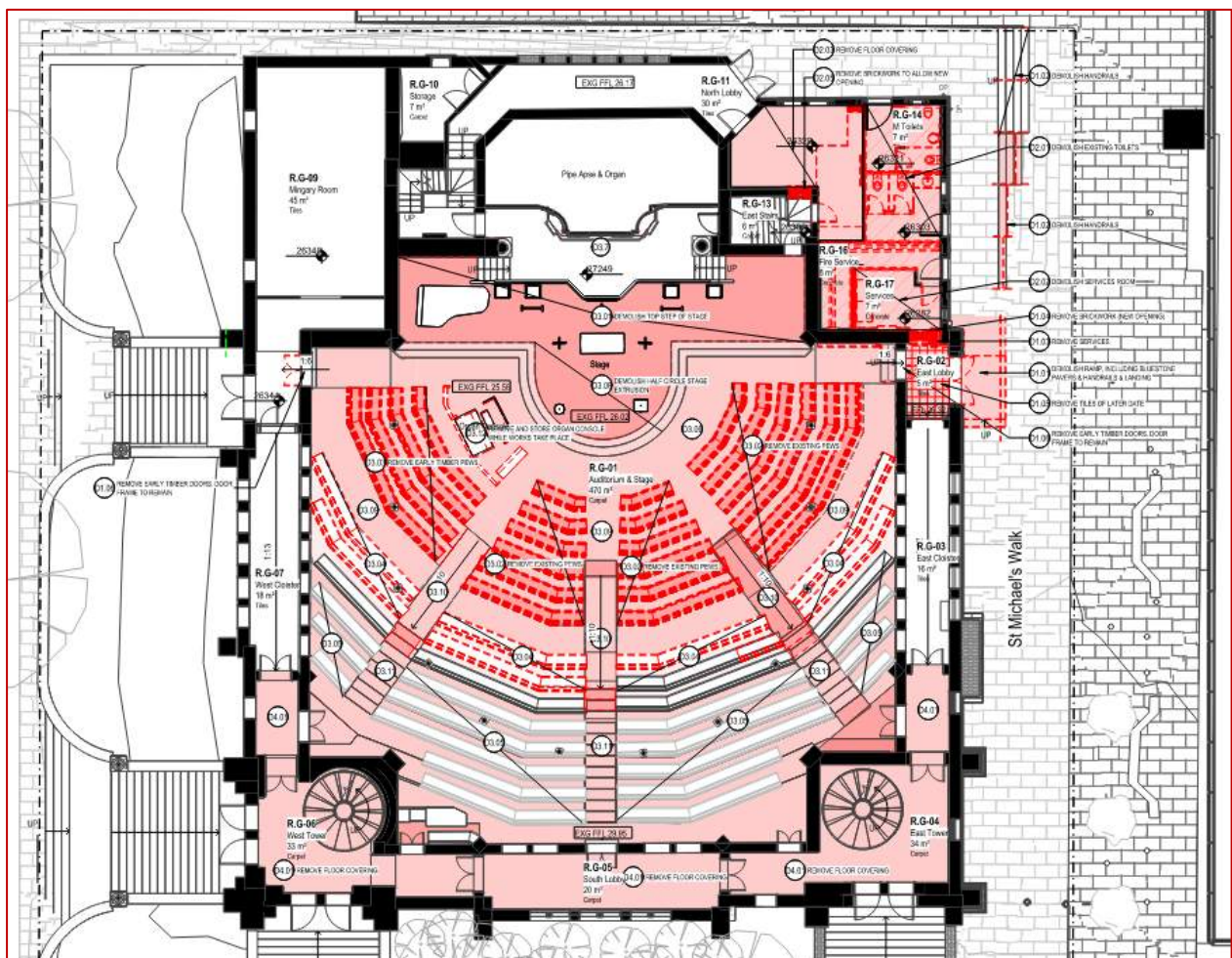


Figure 3: Extract of Demolition Ground Floor Plan

## Access to Premises Standards – ‘Affected Part’

In addition to the new work requirement, there is a requirement to provide an accessible path of travel from the new or modified part of an existing building to and within the principal public entrance (subject to any exceptions or concessions discussed below). This is referred to as the Affected Part of a building (Subsection 2.1(5) of the Premises Standards) and includes:

- The principal pedestrian entrance of the building; and
- Any part of an existing building that is necessary to provide a continuous accessible path of travel from the entrance to the proposed New Part.

For this project, the Affected Part to be considered incorporates the side entrance door and external ramp.

## Areas outside the New Part and Affected Part

Areas outside of the New Part and the Affected Part work do not have any access requirements imposed by the Premises Standards, but these areas will continue to be subject to the general complaints’ framework of the DDA.

## Victorian Building Regulations 2018

In accordance with the Building Regulations 2018, the Relevant Building Surveyor may consider several Regulations applicable to the new building, including Regulation 236, ‘Application of requirements in the BCA Volume One relating to access to buildings for persons with disabilities.’

Regulation 236 requires compliance with the access provisions of the BCA for the new building.

## Building Code of Australia

### Building Classifications

We assume the following building classifications apply to the building:

Level	Proposed Use	Building Classification
Ground floor	Church (public assembly)	Class 9b
Upper viewing level	Church (public assembly)	Class 9b

## BCA Accessibility Requirements

BCA Part D4 and Premises Standards Part D3 prescribe the minimum requirement for access to a building. Access for people with disabilities is required through the principal pedestrian entrance and throughout the building in accordance with BCA Clause D4D2.

The following table outlines the general building access requirements for 'New Parts' of existing buildings:

Classification	Access Requirements
Class 9b Public assembly	To wheelchair seating spaces provided in accordance with Clause D4D10. To and within all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.

## Exemptions

Notwithstanding the above, there is an exemption in BCA Clause D4D5 for areas that could be considered exempt due to the nature of work undertaken in each area and any occupational health and safety requirements.

## Accessible Sanitary Facility Requirements

In a 'New Part' of an existing building, unisex accessible toilets are required to be provided in accessible parts of the building in accordance with BCA Clause F4D6:

Classification	Minimum Accessible Unisex Toilet Requirements
Class 9b	Where Clause F4D4 of the BCA requires closet pans: <ul style="list-style-type: none"> <li>(a) One on every storey containing sanitary compartments; and</li> <li>(b) Where a storey has more than one bank of sanitary compartments containing male and female sanitary compartments at not less than 50% of those banks</li> </ul>

In a 'New Part' of an existing building, unisex accessible showers are required to be provided in accessible parts of the building in accordance with BCA Clause F4D7:

Classification	Minimum Accessible Unisex Showers to be Provided
Class 9b	Where F4D4 requires one or more showers, not less than one for every ten showers or part thereof.

In a 'New Part' of an existing building, ambulant toilets are required to be provided in accessible parts of the building in accordance with BCA Clause F4D5(c):

Classification	Minimum Ambulant Toilet Requirements
Class 9b	A separate male and female ambulant toilet must be provided at each bank of toilets with an accessible toilet (AS 1428.1 (2009) Clause 16).

These requirements are assessed in Section 6 below.

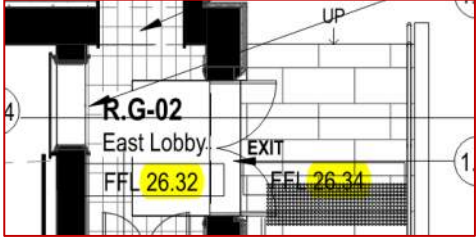
## 6. BCA Compliance Assessment

### BCA General Access Provisions

The design has been assessed against all applicable BCA access provisions. The findings of this assessment are detailed in the table below and should be read in conjunction with the technical guidance provided in Appendix 2 of this report. Please also refer to the marked-up drawings in Appendix 4.

The references used in this table are from **BCA 2022**. However, the equivalent **BCA 2019** reference is added in **[brackets]** for ease of cross-referencing.

Clause	Requirement	Comment
<b>D3D14 [D2.13]</b> <b>Stairway Goings &amp; Risers</b>	<p>The geometry of any stairway in a commercial building must have suitable depths (goings) and heights (risers) for each step in a stairway.</p> <p>The following are the essential requirements:</p> <ul style="list-style-type: none"> <li>• Tread/goings (G) must be between 250mm to 355mm deep.</li> <li>• Risers (R) must be between 115mm to 190mm high.</li> <li>• The value of '2R + G' is to be within the range of 550mm to 700mm.</li> </ul>	<p>Compliance must be achieved for any new stair sections.</p> <p>We recommend preparing a construction section and/or handrail detail.</p> <p>Refer to the technical guidance in Appendix 2.</p>
<b>D3D15 [D2.14]</b> <b>Landings (Slip-resistance)</b>	<p>Landings in a stairway or ramp must have the following:</p> <ul style="list-style-type: none"> <li>• A surface with a slip-resistance classification not less than that listed in D3D15 when tested in accordance with AS 4586; or</li> <li>• A strip at the edge of the landing with a slip-resistance classification not less than that listed in BCA Table D3D15 when tested in accordance with AS 4586.</li> </ul>	<p>Compliance must be achieved.</p> <p>To be confirmed in subsequent design stages.</p> <p>We recommend requesting product certification from manufacturers for proprietary products to confirm compliance (i.e. tactile indicators, stair nosing strips, and the like).</p> <p>Refer to Appendix 2 for technical guidance and the required slip-resistance ratings.</p>


Clause	Requirement	Comment
<p><b>D3D16 [D2.15]</b> <b>Thresholds</b></p>	<p>Thresholds must be step-free.</p> <p>No step or ramp is to be located closer than the width of the door to the door opening.</p> <p>A threshold ramp can be provided for up to a 35mm change in level in a door threshold.</p>	<p>Compliance must be achieved.</p> <p>The accessible entrance must be step-free.</p> <p>Confirm the proposed threshold arrangements, as there is a 20mm level difference on each side of the entrance doors.</p>  <p>Refer to the technical guidance on threshold ramps in Appendix 2.</p>
<p><b>D3D22(1)(c) [D2.17(a)(iii)]</b> <b>Handrails – Primary School Stairs &amp; Ramps</b></p>	<p>A second lower handrail is required in all Primary Schools, fixed at a height between 665mm and 750mm.</p>	<p>While this is not applicable to this use of the building, consider this as a best-practice recommendation.</p>
<p><b>D3D22(1)(f) [D2.17(a)(vi)]</b> <b>Exit Handrails</b></p>	<p>All exit stairways servicing accessible levels of a building, including fire-isolated stairways, must be provided with one handrail (usually the internal handrail) that complies with the profile requirements of Clause 12 of AS 1428.1 (2009).</p>	<p>Compliance will be achieved as all stairways are general use stairways required to comply with AS 1428.1 (2009) Clause 11 (see D4D4(a)(ii) below).</p> <p>Refer to the technical guidance in Appendix 2.</p>
<p><b>D4D2 [D3.1]</b> <b>General Building Access Requirements</b></p>	<p>Access for people with disabilities is required to and within all areas, as per Clause D4D2.</p> <p>Refer to Section 5 of this report to determine the extent of access required within the development.</p>	<p>Compliance must be achieved.</p> <p>If the Choir Vestry is upgraded during the planned work, this area will be in the New Part.</p> <ul style="list-style-type: none"> <li>• If this is the case, the doorway into the room must be brought up to compliance with AS 1428.1 (2009) Clause 10.3.</li> <li>• Furthermore, the Affected Part triggers an internal accessway from this area to the principal pedestrian entrance of the building.</li> <li>• An accessway is not, however, provided as this area only has an internal pathway with a stairway and a non-compliant doorway.</li> </ul>

Clause	Requirement	Comment
<p><b>D4D2 [D3.1]</b>  <b>Doors – Luminance Contrast</b></p>	<p>Doorways must have a minimum luminance contrast of 30%, as described in AS 1428.1 (2009) Clause 13.1.</p>	<p>Compliance must be achieved.  Applicable to new doors In the New Part and existing doors in the Affected Part.  To be confirmed in subsequent design stages.  Refer to Appendix 2 for compliance options.  Refer to the comments on the marked-up drawings in Appendix 4. An example is drawing SK-455, which shows a non-compliant colour combination.</p>
<p><b>D4D2 [D3.1]</b>  <b>Doors – Circulation Spaces</b></p>	<p>Access for people with disabilities is required to and within all areas, per Clause D4D2, including through all doorways.  Refer to Appendix 2 for a table outlining these minimum circulation spaces.</p>	<p>Compliance must be achieved.  Applicable to new doors In the New Part and existing doors in the Affected Part.  The entry door must have a minimum clear opening width of 850mm (i.e. 920mm door leaf). An 850mm clear opening applies to the active leaf in the double doors.  To be confirmed in subsequent design stages.</p>
<p><b>D4D2 [D3.1]</b>  <b>Doors – Controls</b></p>	<p>Doors in all accessible areas must comply with AS 1428.1 (2009) Clause 13.5.  Where doors are manually operated, door forces are to be not more than 20N (or Newtons) (per AS 1428.1 (2009) Clause 13.5.2(e) requirements.</p>	<p>Compliance must be achieved.  All door controls, including any locking snibs/privacy snibs, must be within 900mm to 1100mm AFFL.  Refer to the technical guidance on door controls in Appendix 2.</p>
<p><b>D4D2 [D3.1]</b>  <b>Electrical (All Accessible Areas)</b></p>	<p>All switches and controls on an accessible path of travel, other than GPOs, must be between 900mm and 1100mm AFFL and not closer than 500mm from internal corners.  This requirement includes security panels, alarm panels, AV equipment controls, etc.</p>	<p>Compliance must be achieved.  Notate this requirement on the drawings.  Applicable to the New Part areas only.  To be confirmed in subsequent design stages.  Refer to the technical guidance in Appendix 2.</p>

Clause	Requirement	Comment
<b>D4D2 [D3.1]</b> <b>Electrical</b> <b>(Accessible</b> <b>Sanitary</b> <b>Facilities)</b>	<p>A rocker action switch or a toggle switch must be at least 30mm x 30mm.</p> <p>Push-pad switches must be at least 25mm in diameter.</p> <p>Power points (GPOs) must be between 900mm and 1100mm AFFL and not closer than 500mm from an internal corner.</p>	<p>Compliance must be achieved. Notate this requirement on the drawings.</p> <p>Applicable to the New Part areas only.</p> <p>To be confirmed in subsequent design stages.</p> <p>Refer to the technical guidance in Appendix 2.</p>
<b>D4D3(1)</b> <b>[D3.2(a)]</b> <b>Access and</b> <b>Approach</b>	<p>An accessway must be provided from the allotment boundary to:</p> <ul style="list-style-type: none"> <li>• The main entrance.</li> <li>• Provided from the accessible car parking areas to the main entrance.</li> <li>• Between associated accessible buildings on the site.</li> </ul> <p>An accessway is also called a continuous accessible path of travel.</p>	<p>The design complies.</p> <p>The accessways outside the tenancy are not within the Affected Part (or New Part).</p>
<b>D4D3(2)</b> <b>[D3.2(b)]</b> <b>Entrances</b>	<p>An accessway must be provided through the principal pedestrian entrance and not less than 50% of all pedestrian entrances.</p>	<p>Compliance can be achieved.</p> <p>Other existing entrances are outside the planned New Part and Affected Part of the building.</p>
<b>D4D4(a)(i)</b> <b>[D3.3(a)(i)]</b> <b>Ramps</b>	<p>Ramps, walkways, step ramps and threshold ramps must comply with Clause 10 of AS 1428.1 (2009).</p> <ul style="list-style-type: none"> <li>• Walkways not steeper than 1:20 must comply with Clause 10.2.</li> <li>• 1:14 to 1:20 ramps must comply with Clause 10.3.</li> <li>• 1:8 threshold ramps must comply with Clause 10.5.</li> <li>• 1:10 to 1:14 step ramps must comply with Clause 10.6.</li> <li>• 1:8 kerb ramps must comply with Clause 10.7.</li> </ul>	<p>Compliance can be achieved.</p> <p>If the shorter internal ramp in the western cloister area is upgraded with new floor coverings, it will be a New Part and technically trigger an upgrade of the ramp (included in SK-001 entry finishes upgrades).</p> <p>If the external ramp has vertical stanchions/posts as the handrail is not fixed to the side wall, then the ramp must have 150mm high kerb rails. We recommend you continue these to the last vertical stanchion/post to remove any chance of wheelchair entanglement.</p> <p>As noted above, a 20mm level difference on each side of the entrance door will require a threshold ramp.</p>

Clause	Requirement	Comment
		<p>The two new internal step ramps can comply.</p> <p>We recommend preparing a construction section and/or handrail/kerbrail detail for all ramps.</p> <p>Refer to the technical guidance in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<p><b>D4D4(a)(ii)</b>  <b>[D3.3(a)(ii)]</b>  <b>Stairways</b>  <b>(General-use)</b></p>	<p>General-use stairways must comply with Clause 11 of AS 1428.1 unless they are in areas exempted by BCA Clause D4D5 or are fire-isolated stairways.</p>	<p>Compliance must be achieved.</p> <p>We recommend preparing a construction section and/or handrail detail.</p> <p>The following non-compliances have been identified in the external stairway:</p> <ul style="list-style-type: none"> <li>• TGSIs have not been shown on each flight's upper and lower landings.</li> <li>• The stairway flight needs to be set back from a traverse path on each level (to allow space for the next two items).</li> <li>• Handrails have not been extended a full 300mm horizontally on each upper landing.</li> <li>• Handrails have not been extended one going plus a full 300mm horizontally on each lower landing.</li> <li>• Each stair tread needs a contrasting nosing strip.</li> </ul> <p>Refer to the technical guidance on stairways in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<p><b>D4D4(a)(iii)</b>  <b>[D3.3(a)(iii)]</b>  <b>Fire-Isolated</b>  <b>Stairways</b></p>	<p>Fire-isolated stairways (<b>FIS</b>) must comply with AS 1428.1 (2009) Clause 11.1(f)(g) stair nosing strip requirements.</p>	<p>Not applicable to the design. All stairways are general use stairways required to comply with AS 1428.1 Clause 11 (see D3.3(a)(ii) above).</p>



Clause	Requirement	Comment
<p>D4D4(a)(ii)(iii) [D3.3(a)(ii)(iii)] Stairway Tread Nosing Requirements</p>	<p>Stairway nosing strips on each tread in a general-use stairway or fire-isolated stairway must comply with Clause 11(f)(g) of AS 1428.1 (2009).</p> <p>Each strip must be 50mm to 75mm wide, have a setback not more than 15mm from the front edge, and not extend down the face of the riser more than 10mm.</p> <p>Each strip must achieve a minimum 30% luminance contrast to the tread surfaces (including the top riser).</p> 	<p>Compliance must be achieved.</p> <p>We recommend that product certification be sought from the nosing strip manufacturers to confirm compliance.</p> <p>This certification must confirm compliance with AS 1428.1 (2009) Clause 11.1(f)(g).</p> <p>This should include the luminance reflective value (LRV) of the nosing strip and stair tread surface.</p> <p>We recommend preparing a construction section detailing the tread and nosing profile.</p>
<p>D4D4(c)(d)(e) [D3.3(c)(d)(e)] Paths of Travel</p>	<p>Accessways complying with AS 1428.1 must be provided to and throughout areas of buildings required to be made accessible, including turning spaces, passing spaces, doorways, and floor finishes.</p>	<p>The design complies.</p> <p>Please note that all locations designed to the minimum spatial requirements of AS 1428.1 must consider internal wall linings, including architraves and skirting boards, and not be the frame-to-frame (stud) dimensions.</p> <p>The end of the accessway outside the accessible toilet can provide a 180-degree turning space with an area of 1540mm wide x 2070mm long (in the direction of travel). Please dimension the width.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<p>D4D4(g)(h) [D3.3(g)(h)] Carpet</p>	<p>Carpets must comply with the following:</p> <ul style="list-style-type: none"> <li>• 11mm maximum pile height/thickness.</li> <li>• 4mm maximum backing.</li> <li>• A total maximum of 15mm.</li> <li>• Edging strips in an acceptable profile in AS 1428.1 Figure 8.</li> </ul>	<p>Compliance must be achieved.</p> <p>Recessed matting at entry doors must comply with AS 1428.1 Clause 7.4.2.</p> <p>To be confirmed in subsequent design stages.</p>

Clause	Requirement	Comment
<p><b>D4D5 [D3.4] Exemptions</b></p>	<p>There may be an opportunity to exempt access where it is unachievable, undesirable or unsafe.</p> <p>These areas are generally limited to workplaces (and not public spaces).</p>	<p>The services areas could be considered exempt, given the use of the building and the function of each space.</p> <p>Ultimately, the Relevant Building Surveyor must be satisfied using Clause D4D5 exemptions.</p>
<p><b>D4D7 [D3.6] Braille &amp; Tactile Signage</b></p>	<p>Braille and tactile signs are required to be provided throughout any building required to be made accessible in accordance with BCA 2022 Specification 15 [BCA 2019 Specification D3.6] and AS 1428.1 (2009).</p> <p>Braille and tactile signs must identify:</p> <ul style="list-style-type: none"> <li>• Any space with a hearing augmentation system</li> <li>• Accessible sanitary facilities</li> <li>• At non-accessible pedestrian entrances into a site</li> <li>• At a toilet block without an accessible toilet (to direct people to the closest accessible toilet).</li> <li>• Each door required by Part E4D5 to be provided with an exit sign.</li> </ul>	<p>Compliance must be achieved.</p> <p>To be detailed in subsequent design stages, ideally in a sign schedule.</p> <p>Refer to the technical guidance on braille and tactile signs in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p> <p>Examples of suitable signs are provided on drawing SK-455.</p>
<p><b>D4D8(a) [D3.7(a)] Hearing Augmentation (Assistive listening systems)</b></p>	<p>A hearing augmentation system must be provided where an inbuilt amplification system is provided other than the one used for emergency purposes is installed:</p> <ul style="list-style-type: none"> <li>• In a Class 9b building; or</li> <li>• In an auditorium, conference room, meeting room or room for judicatory purposes; or</li> <li>• Any ticket office, teller’s booth, reception area or the like, where the public is screened from the service provider.</li> </ul>	<p>If amplified sound forms part of the New Part works, then compliance must be achieved.</p> <p>If hearing augmentation is required, we recommend you engage an experienced hearing augmentation system consultant to ensure a suitable and effective system is specified and installed.</p> <p>Refer to the technical guidance on hearing augmentation systems in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>

Clause	Requirement	Comment
<b>D4D9 [D3.8]</b> <b>Tactile Ground Surface Indicators</b>	<p>Tactile Ground Surface Indicators (<b>TGSIs</b>) must be provided to stairways, ramps, overhead obstructions and where an accessway meets a vehicular way without a kerb ramp.</p> <p>TGSIs are not required on the landings of step ramps, walkways or threshold ramps.</p> <p>TGSIs are not required in front of a doorway (unless there is a vehicle hazard).</p>	<p>Compliance must be achieved.</p> <p>TGSIs have not been detailed on each stair flight's upper and lower landings.</p> <p>We recommend that product certification is sought from the tactile indicator manufacturers to confirm compliance with the following:</p> <ul style="list-style-type: none"> <li>• Slip-resistance ratings as per BCA Table D3D15; and</li> <li>• Luminance contrast as per AS 1428.4.1. This should include the luminance reflective value (LRV) of the TGSIs and the floor surface.</li> </ul> <p>Refer to the technical guidance on TGSIs in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<b>D4D10 [D3.9]</b> <b>Wheelchair Seating Spaces</b>	<p>Wheelchair seating areas must be within Class 9b assembly buildings in the ratios detailed in Table D4D10.</p>	<p>Compliance must be achieved.</p> <p>Refer to the technical guidance on TGSIs in Appendix 2.</p> <p>Refer to the comments and copy of Table D4D10 on the marked-up drawings in Appendix 4.</p> <p>Removable/loose seating is an acceptable alternative.</p>
<b>DI1D4 [H1.4]</b> <b>Seating Area</b>	<p>In a seating area, the following is required (BCA Clause I1D4):</p> <p>A. The gradient of the floor surface must not be steeper than 1:8, or the floor must be stepped as per Clause I1D4.</p> <p>B. If an aisle divides the stepped floor, the geometry must meet Clause I1D4 requirements.</p> <p>C. The clearance between rows of fixed seats must meet Clause I1D4 requirements.</p>	<p>Refer to the comments on drawings SK-001 and SK-402 relating to the existing stepped aisles and the riser heights.</p> <p>BCA Clause I1D4 has requirements for safe aisle step heights. The Relevant Building Surveyor must accept riser heights outside the acceptable range, with a minimum height of 115mm.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<b>D4D12(b) [D3.11(b)]</b> <b>Step Ramp Landings</b>	<p>A landing for a step ramp must not overlap a landing for another step ramp or ramp.</p>	<p>Not applicable to the design.</p>

Clause	Requirement	Comment
<p><b>D4D13 [D3.12]</b>  <b>Glazing Visual Indicators</b></p>	<p>Full-height glazing without a horizontal transom member can be mistaken for an opening.</p> <p>When this is the case along an accessway, the glazing must have visual indicator bands as per AS 1428.1 (2009) Clause 6.6.</p> <p>AS 1288 can be referred to when determining what glazing can be mistaken for an opening.</p>	<p>Compliance must be achieved.</p> <p>To be confirmed in subsequent design stages.</p> <p>Ideally, provide a fixing detail showing a compliant design in the Door / Window Schedule or on each relevant door/window.</p> <p>The luminance reflective value (<b>LRV</b>) of the glazing film type and the floor surfaces (on each side of the glass) should be reviewed in subsequent design stages.</p> <p>Refer to the technical guidance in Appendix 2.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<p><b>E3D6 [E3.5]</b>  <b>Passenger Lift Landings</b></p>	<p>Every passenger lift landing must have circulation spaces meeting BCA Part D4 requirements (which reference AS 1428.1).</p>	<p>Not applicable to the design.</p> <p>Refer to the comments on the marked-up drawings in Appendix 4.</p>
<p><b>F4D5(a) [F2.4(a)]</b>  <b>Unisex Accessible Toilets</b></p>	<p>A unisex accessible sanitary compartment must contain a closet pan, washbasin, shelf or benchtop and adequate means of disposal of sanitary towels.</p> <p>The circulation spaces, fixtures, and fittings of all accessible sanitary facilities must comply with AS 1428.1 (2009).</p> <p>Where two or more of each type of accessible unisex sanitary facility are provided, the number of left-hand (<b>LH</b>) and right-hand (<b>RH</b>) facilities must be provided as evenly as possible.</p> <p>Please note, ultimately, the Relevant Building Surveyor must be satisfied with the number of toilets, type, distribution, and location when assessing the proposed works.</p>	<p>Compliance can be achieved.</p> <p>Refer to Appendix 2 for technical guidance.</p> <p>Refer to Appendix 4 for comments on the design.</p> <p>The tapware and centre of the washbasin outlet must be at least 425mm from the side wall.</p> <p>A minimum 300mm latch-side clearance is required between the edge of the washbasin and the door opening. Please update/dimension (see AS 1428.1 (2009) Figure 43 and Figure 52).</p> <p>The baby change table must not project into the minimum 1900mm width of the accessible toilet pan circulation space.</p> <p>The accessible toilet room can comply with AS 1428.1 (2009) Clause 15.</p> <p>The minimum toilet pan circulation space is 1900mm wide x 2300mm deep.</p>

Clause	Requirement	Comment
		<p>But the room width has little room for construction set-out issues as the following are required:</p> <ul style="list-style-type: none"> <li>• 425mm centre of the basin and waste outlet to the side wall.</li> <li>• 190mm centre of Caroma Cube Extension basin to left side edge.</li> <li>• 300mm latch-side clearance.</li> <li>• 920mm door leaf.</li> <li>• Total width = 1835mm.</li> </ul> <p>Therefore, please consider these measurements, particularly the washbasin location, when detailing the facility.</p> <p>We recommend that all internal elevations be prepared or at least typical elevations.</p> <p>Please note that all locations designed to the minimum spatial requirements of AS 1428.1 (2009) must consider internal wall linings, including architraves and skirting boards, and not be the frame-to-frame (stud) dimensions.</p>
<p><b>F4D5(b) [F2.4(b)]</b>  <b>Unisex Accessible Showers</b></p>	<p>Where Part F2.3 of the BCA requires one or more showers, not less than one for every ten showers (or part thereof).</p> <p>The facility must comply with AS 1428.1 (2009) Clause 15.5 as per Table F2.4(b).</p>	<p>This is not applicable due to the use of the building.</p>

Clause	Requirement	Comment
<p><b>F4D5(c) [F2.4(c)]</b> <b>Ambulant Toilets</b></p>	<p>Ambulant toilets are required at each bank of toilets where there are extra toilets in addition to the unisex accessible toilet.</p> <p>The must be provided as follows:</p> <ul style="list-style-type: none"> <li>• not less than one ambulant toilet for use by males; and</li> <li>• not less than one ambulant toilet for use by females.</li> </ul> <p>All ambulant toilets must comply with AS 1428.1 (2009) Clause 16.</p>	<p>The design complies.</p> <p>The design shows only a unisex ambulant toilet instead of a male and a female one. The Relevant Building Surveyor may require a Performance Solution to accept a unisex facility.</p> <p>Refer to Appendix 2 for technical guidance.</p> <p>Refer to Appendix 4 for comments on the design.</p> <p>We recommend that all internal elevations be prepared or at least typical elevations.</p> <p>Please note that all locations designed to the minimum spatial requirements of AS 1428.1 (2009) must consider internal wall linings, including architraves and skirting boards, and not be the frame-to-frame (stud) dimensions.</p>
<p><b>F4D4(1) [F2.3(a)]</b> <b>Toilets</b></p>	<p>Separate toilets must be provided for male and female use.</p>	<p>Compliance can be achieved.</p> <p>The design includes unisex toilets only.</p> <p>Given the use of the building, this is an acceptable approach.</p> <p>However, the Relevant Building Surveyor may require a Performance Solution to accept unisex toilets.</p>

## 7. Conclusions

Access Central has reviewed the current documentation detailed in Section 2 of this report with respect to the BCA and Premises Standards.

### BCA Compliance

The proposed works must achieve compliant access for people with disabilities, but this will require clarification of some access issues, detailing all required accessible features and rectifying some non-compliances.

These access issues have been identified throughout this report and identified in Appendix 4 (marked-up drawings). The following are the key issues:

- The design of the existing external stairway and handrails.
- The external entry ramp handrails and kerbrails.
- The design and layout of TGSIs on each stair and ramp landing.
- The threshold ramp design in the entry door.
- The entry door design and clearance.
- Visual indicator (glazing) bands on fully glazed doors.
- The two internal step ramp designs.
- Confirmation of the requirement for a suitable hearing augmentation system in the auditorium.
- The provision and distribution of wheelchair seating spaces in the auditorium.
- Door compliance (door force, controls, sizes).
- The location of all light switches and the size of the switch in the accessible sanitary facilities.
- The luminance contrast of each accessible toilet seat, braille and tactile signage, TGSIs, stair tread nosing strips, visual indicator (glazing) bands, and doorways.
- The slip-resistance of each stair and ramp landing, TGSIs and stair tread nosing strips.
- Braille and tactile signage for each exit door, areas with hearing augmentation and each sanitary facility.
- Acceptance of the unisex toilets instead of separate male and female toilets).
- Detailing the unisex accessible toilet and unisex ambulant toilet.
- Provision of an ambulant toilet for use by both males and females.
- An internal accessway to the Choir Vestry (within the New Part).
- Please refer to Section 6 and Appendix 4 for all identified accessibility issues.
- Additionally, several best-practice recommendations are provided in Appendix 3.

## Appendix 1: Consultant's Resume

### Contact

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### Experience

Lee Wilson is an accessibility and universal design specialist with an extensive background in access for people with disabilities, building compliance, risk management and project management. Lee is an Accredited Member of the Access Consultants Association (ACA). Additionally, he has several undergraduate and postgraduate qualifications in building surveying, construction management, project management and performance-based building and fire codes.

Key achievements include:

- Subject Matter Expert (Disability Access) with the Australian Building Codes Board (between 2018 and 2021).
- Auditing and consulting with the Australian Embassy in Tokyo, Japan.
- Presenting at national conferences and internationally in Shanghai, China.
- Advising Australian airports and underground rail networks.
- Over thirty-five years in the construction industry.
- Australian Regular Army veteran (Royal Australian Engineers).

### Qualifications

- Master of Project Management
- Graduate Certificate in Performance-Based Building and Fire Codes
- Bachelor of Technology (Building Surveying)
- Advanced Diploma of Building Surveying
- Diploma of Building and Construction (Management)
- Diploma of Building Surveying
- Certificate IV in Security and Risk Management
- Certificate IV in Access Consulting
- Certificate in Access Appraisals – Buildings
- Certificate in Field Engineering
- Certificate of Proficiency – Plumbing

### Accreditations

- Accredited Member of the Access Consultants Association (ACA)
- Livable Housing Australia Assessor No. LHA20012
- Changing Places Assessor No. CP0020
- Specialist Disability Accommodation Assessor No. SDA00040
- Working with Children Check
- Victorian Building Authority Plumbing Registration No. 28618



## Appendix 2: Mandatory Accessibility Design Guidance

The following design guidance is provided for the project:

### External Paths of Travel

#### Accessible Paths of Travel

BCA Clause D4D3 requires the following continuous accessible paths of travel during any planned works:

- From the allotment boundary at the main points of pedestrian entry to the main entrance;
- From any accessible car parking space to the main entrance of the accessible building; and
- Between any associated buildings (required to be accessible) on the site.

All surfaces of continuous accessible paths of travel must comply with AS 1428.1 (2009) Clause 7 (this is discussed in this report).

To meet the spatial requirements of AS 1428.1 (2009), the following are required in all continuous accessible paths of travel:

- Minimum widths of not less than 1000mm (increased to 1240mm for side approaches into doorways off any corridor). A width of 1200mm is preferred for compliance with AS 1428.2 (1992).
- Passing spaces with a minimum width of 1800mm and a minimum length of 2000mm must be provided in corridors at a maximum 20-metre interval where a direct line of sight is not available.
- Turning spaces of a minimum 1540mm width and 2070mm length must be provided within 2 metres of the end of pathways or where a 180-degree turn is required.
- A turning space of not less than 1500mm x 1500mm where a 90-degree turn is required.
- The maximum allowable cross-fall of pathways and walkways is 1:40. The surfaces of an accessible path of travel must be slip-resistant.
- The ground abutting the sides of the pathways and walkways must follow the grade of the path and extend horizontally for 600mm. This is not required when a kerb or handrail is provided to the side of the pathway (refer to AS 1428.1 (2009) Clause 10.2).
- The maximum allowable gradient of the walkway is 1:20, and the maximum length between landings is 15m (for a 1:20 gradient). Landings must be a minimum of 1200mm in length (where there is no change in direction).
- For changes in the direction of 90-degree to 180-degree, landings must be 1540mm deep – refer to AS 1428.1 (2009) Clause 10.8.
- Any graded walkway or ramp is to comply with AS 1428.1 (2009) Clause 10.

#### Pathway Surfaces

Ground surfaces must be traversable by people with a broad range of abilities and selected to assist the mobility of people with low vision or those with a mobility disability. Any surface in an accessible path of travel must comply with AS 1428.1 (2009) Clause 7.

The following applies to finishes and surface materials:

- Floor finishes are required to meet slip-resistance ratings (Clause 7.1).
- Longitudinal grades in a form, such as an accessible ramp (between 1:14 to 1:20 grade) or a walkway (not steeper than 1:20).
- A smooth transition is required between abutting floor surfaces (maximum height difference of 3mm for vertical surfaces or 5mm where the edges are rounded or bevelled) (Clause 7.2).
- Cross-falls are not to exceed 1:40.
- Stormwater grates installed within accessible paths or external courtyards must have slotted openings not exceeding 13mm in width and be orientated so that the long dimension is transverse to (across) the dominant direction of travel. Alternatively, circular openings can be used, provided that openings do not exceed 13mm in diameter (Clause 7.5).

## External Stairs and Handrails

All stairways (other than fire-isolated stairways or those in areas considered exempt under Clause D4D5) are required to be provided with accessible features. To meet the requirements of BCA Clause D4D4(a)(ii), stairways in all accessible areas are required to fully comply with AS 1428.1 (2009) Clause 11 and 12, including:

- Each stairway must not have open or translucent risers (Clause 11.1(c)).
- Tread/goings (**G**) must be 250mm to 355mm deep.
- Risers (**R**) must be between 115mm to 190mm high.
- The value of  $2R + G$  must be 550mm to 700mm.
- Treads are to provide constant, consistent risers:
  - Adjacent risers with no greater than a 5mm difference
  - The difference between the largest and smallest riser must not exceed 10mm
- Treads are to provide constant, consistent goings:
  - Adjacent goings with no greater than a 5mm difference
  - The difference between the largest and smallest going within a flight does not exceed 10mm
- Contrasting strips must be provided at each stair nosing (Clause 11.1(f) and (g)).
- TGSIs must be provided at the bottom and top of each stairway in accordance with AS/NZS 1428.4.1 (2009) (Clause 11.1(h)).
- Compliant handrails must be provided on both sides of each stairway (Clause 11.2(b)).
- The ends of handrails are required to have appropriate extensions and terminations (Clause 11.2(d) (e)).
- A stairway intersecting at a property boundary must be set back 900mm from the boundary (Clause 11.1(a)).
- A stairway needs to be set back from an internal corridor to prevent the required handrail extensions and terminations from projecting into a transverse path (Clause 11.1(b)).
- Landings with a maximum gradient of 1:50 may limit the number of risers in each flight, but each landing must be at least 750mm long.
- The first riser on each intermediate/switch-back landing must be offset (or set forward the distance of one stair tread), which allows the internal handrail to transition at a consistent height (Figure 28).
- Stair nosings must not have any projections or overhangs, and nosing profiles must be appropriately designed (Clause 11.1(d)(e)).
- The cross-section of handrails (circular or elliptical) to be in the range between 30mm to 50mm (Clause 12(b))

- Exposed edges at ends and corners of handrails are to have a radius of 5mm minimum (Clause 12(c))
- The height of a handrail must be 865mm to 1000mm above the nosing of a stairway or finished floor (Clause 12(d)).
- Handrails must be at a consistent height throughout the stairway.
- The clearance between a handrail and any adjacent wall surface of other building elements must be at least 50mm (Clause 12(h)).
- The clearance above the top of a handrail must be a minimum of 600mm (Clause 12(h))
- BCA Clause D3D22(1)(c)(ii)(A) requires a second handrail in all Primary Schools fixed at a lower height between 665mm and 750mm.

## External Ramps

BCA Clause D4D4(a)(i) and Clause D4D12(b) require all ramps (other than fire-isolated or those in areas considered exempt under Clause D4D5) to comply with AS 1428.1 (2009) Clause 10, including:

- A minimum clear, unobstructed width of 1000mm for a straight ramp or 1500mm for a curved ramp.
- Minimum vertical height clearance of 2000mm (1980mm at doorways)
- Sharp transitions are provided between the planes of landings and ramp.
- A maximum gradient of a ramp exceeding 1900mm in length is 1:14.
- The gradient of a ramp must be constant throughout its length with a maximum allowable tolerance of 3%.
- Landings must be provided at the top and bottom of each ramp and at the following intervals:
  - 1:14, maximum 9m
  - 1:20, maximum 15m
  - gradients between 1:14 to 1:20, at intervals by linear interpolation
- A handrail must be provided on both sides of the ramp, with a minimum of 300mm horizontal section.
- A compliant kerbrail must be provided on both sides of the ramp and intermediate landings.
- TGSIs must be installed in accordance with AS/NZS 1428.4.1.
- A 900mm setback from the property boundary so that the handrail extensions and TGSIs remain inside the property.
- A 400mm setback from the intersection of an internal corridor so that the handrail extensions do not protrude into the transverse path of travel.
- For straight ramps, no camber or cross-fall to the ramp (i.e. to be level).
- Camber or cross-fall to landings not steeper than 1:40 (or 1:33 if a bituminous surface).
- A landing for a ramp must not overlap a landing for a step ramp.
- Ramp landings (minimum lengths):
  - 1200mm for straight sections
  - 1500mm where there is a change in the direction of 90-degrees
  - 1540mm, where there is a change of direction of 180-degrees
  - 1450mm in front of a doorway of not less than that required in Clause 13.3

## External Step Ramps

The configuration of the step ramps must comply with AS 1428.1 (2009) Clause 10.6 requirements. The maximum gradient of the step ramp must be 1:10, and the maximum length to be 1900mm (providing a maximum height of 190mm). Provide landings at the top and bottom of the step ramp to comply with AS 1428.1 (2009) Clause 10.8.2.

A step ramp must be enclosed on both sides by a wall with a minimum height of 450mm or a kerb rail and handrail need to be installed. Where a kerb rail must be installed, the height must be not less than 65mm or greater than 150mm above the finished surface level of the ramp. This is to ensure that the footplate of a wheelchair cannot become lodged on the kerb rail.

## External Slip-Resistance

BCA Clause D3D14(1)(e) requires a slip-resistant surface for each stairway, ramp, and associated landings. The surfaces must comply with BCA Table D3D15, and this includes consideration for TGSIs on landings:

Application	Wet Surface Rating
Ramp steeper than 1:14	P5 or R12
Ramp not steeper than 1:14	P4 or R11
Tread or landing surface	P4 or R11
Nosing or landing edge strip	P4

## Building Entrances

BCA Clause D4D3 requires buildings to be accessible to people with disabilities with the following accessible building entrances:

- An accessway through the principal pedestrian entrance.
- An accessway through at least 50% of all pedestrian entrances.
- Where the total floor area of the building exceeds 500m<sup>2</sup>, the distance of travel between accessible and inaccessible entrances must not exceed 50 metres.
- Where a door required to be accessible has more than one door leaf, one of the leaves must have a clear opening of 850mm.

Entrances are to comply with AS 1428.1 (2009) Clause 13 as part of the accessible path of travel. Doors or gates must have a minimum clear opening width of 850mm to comply AS 1428.1 (2009) Clause 13.2.

## Tactile Ground Surface Indicators at a Building Entrance

BCA Clause D4D9(1)(e) states that for a building that is required to be accessible, Tactile Ground Surface Indicators (TGSIs) must be provided to warn people who are blind or have low vision that they are approaching – in the absence of a suitable barrier – an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building if there is no kerb or kerb ramp at that point, except for areas exempted by BCA Clause D4D5.

Tactile indicators must be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. Tactile indicators must be 600mm to 800mm deep across the width of the path of travel.

## Doorways

Doors are to comply with AS 1428.1 (2009) Clause 13 in terms of threshold ramps, door circulations spaces, controls and handles, the force required to open each door and the ease of identification of each door. The same requirements apply to any gates on accessible paths of travel.

### Door Threshold Ramps

Door thresholds must be level to provide seamless entry to the building. The maximum allowable construction tolerance is 3mm for compliance with AS 1428.1 (2009), 5mm, where bevelled edges are provided between surfaces – refer to Figure 6.

Threshold ramps are to comply with AS 1428.1 (2009) Clause 10.5. Threshold ramps are to have a maximum rise of 35mm, a maximum length of 280mm and a maximum gradient of 1:8. Threshold ramps must be within 20mm of the door leaf it services. Edges of a ramp must be protected/bound by a wall or have the edges splayed at 45 degrees to remove the trip hazard.

### Door Threshold Ramp Slip-Resistance

BCA Clause D3D14(1)(e) requires a slip-resistant surface provided to each threshold ramp and associated landings. The surfaces must comply with BCA Table D3D15:

Application	Dry Surface Rating	Wet Surface Rating
Ramp steeper than 1:14	P4 or R11	P5 or R12
Tread or landing surface	P3 or R10	P4 or R11

### Door Luminance Contrast

BCA Clause D4D2 and Clause D4D3 require doors in all accessible areas are required to comply with AS 1428.1 (2009) Clause 13.1, including:

- All accessible doorways require a minimum luminance contrast band of 30% provided between at least one of the following:
  - door leaf and door jamb; or
  - door leaf and adjacent wall; or
  - architrave and wall; or
  - door leaf and architrave; or
  - door jamb and an adjacent wall.
- Each luminance contrast band must be at least 50mm wide.

### Door Circulation Spaces

BCA Clause D4D2 and Clause D4D3 require doors in all accessible areas to comply with AS 1428.1 (2009), including:

- Doors are to have a minimum clear opening width of 850mm (where double doors are provided, the active leaf is required to be not less than 850mm).

- The clear opening of ambulant toilet doorways may be reduced to a minimum clear opening of 700mm (AS 1428.1 (2009) Clause 16.3).
- Door circulation spaces are required to meet AS 1428.1 (2009) Clause 13.3 requirements, including latch-side clearances (i.e. 530mm when approaching an inward swinging door as shown below).
- A distance of 1450mm is required between any part of a doorway or door swing and another doorway on an accessible path of travel to meet AS 1428.1 (2009) Clause 13.4 requirements.
- Sliding door leaves must be increased in width to ensure a 60mm clearance is always maintained around the door handle (in the open and closed states).

The door circulation spaces from AS 1428.1 (2009) Figures 31 and 32 are summarised in the tables below.

**Note:** the circulation spaces detailed in the tables are based on an unobstructed door opening of 850mm. This is the minimum required clearance to provide for the users of the 90<sup>th</sup> percentile of wheelchair sizes that AS 1428.1 provides for. Unobstructed door openings greater than 850mm will have different requirements.

#### Hinged/Swing Door Requirements (based on an 850mm clear, unobstructed opening)

Door Approach	Door swinging direction	Clearances (mm)		
		Latch side	Hinge side	Depth in front of the door
Front on	Towards occupant	530	110	1450
	Away from occupant	510	-	1450
Side on, from the latch side of the door	Towards occupant	900	110	1670
	Away from occupant	660	240	1240
Side on, from the hinge side of the door	Towards occupant	900	660	1670
	Away from occupant	340	560	1220
Side on, from both directions	Towards occupant	900	660	1670
	Away from occupant	660	560	1240

#### Sliding Door Requirements (based on an 850mm clear, unobstructed opening)

Door Approach	Clearances (mm)		
	Latch side	Hinge/Slide side	Depth in front of the door
Front on	530	-	1450
Side on, from the latch side of the door	660	185	1230
Side on, from the hinge side of the door	395	660	1280
Side on, from both directions	660	660	1280

**Note:** A sliding door leaf must be increased to 1070mm to ensure a 60mm clearance around the D-Pull handle when the door is opened or closed.

## Door Controls and Hardware

BCA Clause D4D2 and Clause D4D3 require doors in all accessible areas to comply with AS 1428.1 (2009) Clause 13.5, including:

- Door hardware must be located at 900mm to 1100mm AFFL and be either a lever-type or D-pull handle (doorknobs are not compliant).
- A vertical grip section of 100mm is considered acceptable on a D pull-type handle, which needs to be within this accessible height range.
- Controls that must be pushed must be 900mm to 1250mm AFFL, not within 500mm of a corner.
- All snib locking/privacy devices (not just toilets) must have a minimum length of 45mm from the centre of the spindle (AS 1428.1 (2009) Clause 15.2.9(b)).
- Manual door controls must have buttons with a minimum 25mm diameter (AS 1428.1 (2009) Clause 13.5.4).
- All sliding doors require a minimum clearance of 60mm between the door jamb or doorstep when in the open or closed position (AS 1428.1 (2009) Figure 30). Generally, sliding doors need a 1070mm door leaf to meet this requirement and achieve a minimum 850mm clear opening.

## Door Force

Where doors are manually operated, door forces must be no more than 20N (or Newtons) (per AS 1428.1 (2009) Clause 13.5.2(e) requirements.

## Visual Indicators (Glazing Bands) on Glazing

BCA Clause D4D13 requires that where full-height glazing can be mistaken for an unobstructed opening along an accessway, the glazing must be provided with a visual identification or glazing band as per AS 1428.1 (2009) Clause 6.6.

Visual indicators are required to assist persons with vision impairment and help prevent people from walking into glass panels when mistaking them for an opening or doorway.

They must have a minimum 30% luminance contrast to the background colour. The band must be not less than 75mm high, located within the height range of 900mm to 1100mm above the finished floor level.

Visual indicators must be a solid and non-transparent film to meet AS 1428.1 (2009) Clause 6.6. Any patterned designs, logos, or decorative aspects to the design of any glazing film must be above or below this minimum 75mm wide band.

Visual indicators apply to all frameless glazing or glazing that can be mistaken for openings. When considering what glazing can be mistaken for an opening, AS 1288 can be referred to, which states the following would not be mistaken for an opening:

- A sidelight panel of less than 500mm
- A section less than 1000mm in height
- Where the glass commences 500mm AFFL
- Where a crash/chair rail, handrail or transom is provided and located with its upper edges not less than 700mm or its bottom edge not more than 1000mm above the floor level.

## Vertical Movement

### Internal Stairs and Handrails

All stairways (other than fire-isolated stairways or those in areas considered exempt under Clause D4D5) are required to be provided with accessible features. To meet the requirements of BCA Clause D4D4(a)(ii), stairways in all accessible areas are required to fully comply with AS 1428.1 (2009) Clause 11 and 12, which are listed above in the External Stairs and Handrails section.

### Exit Stairs

Technically, all stairways (other than fire-isolated or those in areas considered exempt under Clause D4D5) must have accessible features. This includes any external designated exit stairway that is not fire-isolated. If these stairways are used for general use, then they must also comply with AS 1428.1 (2009) and Clause D4D4(a)(ii). These requirements are listed and discussed above.

However, if they are just used for emergency egress only, it is a common approach to apply the following provisions to new exit stairways:

- One AS 1428.1 (2009) Clause 12 handrail, as per BCA Clause D3D22(1)(f); and
- Contrasting strips at each stair tread (BCA Clause D4D4(a)(iii) and AS 1428.1 (2009) Clause 11.1(f)(g)).
- Slip-resistance on each tread/nosing strip as discussed below.

### Internal Step Ramps and Ramps

BCA Clause D4D4(a)(i) and Clause D4D12(b) require all ramps (other than fire-isolated or those in areas considered exempt under Clause D4D5) to comply with AS 1428.1 (2009) Clause 10, which are listed above in the External Ramps section.

### Slip-Resistance

BCA Clause D3D14(1)(e) requires a slip-resistant surface provided to each stairway (including exit and fire-isolated stairways), ramps and associated landings. The surfaces must comply with BCA Table D3D15, and this includes consideration for TGSIs on landings:

Application	Dry Surface Rating	Wet Surface Rating
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4



## Braille and Tactile Signage

BCA Clause D4D7 has requirements for braille and tactile signage within Specification 15. This provides information for the provision of statutory signage.

Braille and tactile signage are required to be provided throughout any building required to be made accessible in accordance with BCA Specification 15 and AS 1428.1 (2009) and must identify:

- Each sanitary facility includes Accessible Adult Change Facilities (also referred to as Changing Places), ambulant toilets, and accessible toilets.
- Any space with a hearing augmentation system.
- Accessible unisex facilities and indicate whether the facility is suitable for left or right-handed use.
- Ambulant accessible sanitary facilities on the door of the cubicle.
- Where an entry is not accessible, directional signage to identify the nearest accessible entrance.
- Where a bank of sanitary facilities is not provided with an accessible toilet, directional signage to identify the nearest accessible toilet.
- Where a bank of sanitary facilities is not provided with an Accessible Adult Change Facilities, directional signage to identify the nearest Accessible Adult Change Facilities.
- Each door required by BCA Clause E4D5 must be provided with an exit sign and state "Exit" and "Level" followed by either the floor level number, the floor descriptor or combination of these (i.e. "Exit Ground Floor")

Signs, including symbols, numbering, and lettering, must be designed and installed as follows:

- Braille and tactile components of a sign must be located not less than 1200mm and not higher than 1600mm above the floor or ground surface.
- Signs with single lines of characters must have a line of tactile characters not less than 1250mm and not higher than 1350mm above the floor or ground surface.

## Hearing Augmentation

The provision of an effective hearing augmentation system is aimed at assisting people with a hearing impairment to access communications associated with a building's use.

A hearing augmentation system installed under the 'Deemed-to-Satisfy' provisions of the BCA will cater to people with moderate to severe hearing loss but will not cater for all people who are deaf or hearing impaired. For example, a prescribed hearing loop system under the BCA would be of no benefit to people with profound hearing loss or people who are deaf. Other communication strategies should be considered for these people.

The system's design for any room or space needs to ensure that people who are hearing impaired, with moderate to severe hearing loss, can have any communications transmitted through any inbuilt amplification system relayed and amplified to them through the proposed hearing augmentation system. Typical spaces include community rooms, libraries, reception counters screened by glass/Perspex and meeting rooms.

Hearing augmentation systems must be provided where an inbuilt amplification system is provided (other than one only used for emergency warnings).

They are required in the following locations (BCA Clause D4D8(1) and Premises Standards Part D3.7(1)):

- in a room in a Class 9b building (an assembly building such as a school, university, or trade workshop)
- in an auditorium, conference room, meeting room, or room for judicial purposes, and
- at any ticket office, teller's booth, reception areas and similar areas where the public is screened from the service provider.

It is important to note that if there is no inbuilt amplification system in a room, then the BCA or Premises Standards does not require a hearing augmentation system. BCA Clause D4D8(2) and Premises Standards Clause D3.7 considers using portable systems and fixed/installed hearing induction loops. Where an induction loop is provided, it must cover at least 80% of the floor area of the room or space that is served by the inbuilt amplification system (BCA Clause D4D8(2)(a) and Premises Standards Part D3.7(2)(a)).

Hearing augmentation system options include:

- Audio frequency induction loop systems (hearing aid T switches can be used, or receivers provided to those without a T switch on their hearing aids).
- Frequency modulation (individual receivers worn by users to receive radio waves (i.e., FM)).
- Infra-red (individual receivers worn by users to receive infra-red beam by a direct line of sight).

For hearing augmentation systems using portable audio receivers, such as Infra-Red (**IR**) or Frequency modulation (**FM**) transmitter/receiver systems, the system must cover at least 95% of the room's floor area or space served by the inbuilt system.

BCA Clause D4D7 and Clause D3.6 of the Premises Standards require braille and tactile signage to identify a room or space with a hearing augmentation system, identifying the type of system, the area covered and if receivers are being used, where the receivers can be obtained (BCA Clause D4D7(1)(b)).

The signage must also include the International Symbol of Deafness in accordance with AS 1428.1 (2009). Signage must identify the following:

- The type of hearing augmentation system; and
- The area covered within the room; and
- If receivers are being used and where the receivers can be obtained.

## **Tactile Ground Surface Indicators (TGSIs)**

Warning-type Tactile Ground Surface Indicators (TGSIs) must be provided to stairways, ramps, escalators, moving walks, overhead obstructions and where an accessway meets a vehicular way in the absence of a kerb ramp, in accordance with BCA Clause D4D9 and AS/NZS 1428.4.1.

Warning TGSIs require a luminance contrast against their ground background surface to help identify the hazard:

- 30% for integrated type (i.e. TGSIs tiles in one colour).
- 45% for discrete type (i.e. those cones that are individually installed and a different colour to the floor surface but are in one colour throughout each cone); and
- 60% for composite-discrete type (i.e. cones that are individually installed and a different colour to the floor surface, but the uppermost surface of each cone is a differing colour to the sides).

TGSIs are not required on landings of walkways, doorways, step ramps, threshold ramps or swimming pool ramps.

## Electrical, Alarms and other Controls

All light switches, and other controls (e.g. card readers, security swipe card readers, push-to-exit buttons, automatic door controls, etc.) along accessible paths of travel must be located in accordance with AS 1428.1 (2009) Clauses 14.

All accessible parts of the building:

- Controls within all accessible parts of buildings on an accessible path of travel, such as light switches, must be in the accessible height range of 900mm to 1100mm AFFL to comply with Clause 14.1.
- Controls must be located not less than 500mm from a corner.
- This includes heating and cooling thermostats, alarm panels, intercom systems and ceiling fan controls (or the like).

Accessible sanitary facilities:

- Controls within the unisex accessible sanitary facilities, such as light switches, must be in the accessible height range of 900mm to 1100mm AFFL.
- Controls must be located not less than 500mm from a corner.
- Rocker action and toggle switches are not at least 30mm x 30mm (Clause 14.2)
- Power points (GPOs) must be located between 600mm and 1100mm AFFL and not less than 500mm from an internal corner (Clause 14.2).

## Wheelchair Seating Spaces

BCA Clause D4D10 requires wheelchair seating areas to be provided within Class 9b assembly buildings (or parts of buildings) with fixed seating. The size required is 2450mm long and 800mm wide for one space or 1700mm wide for two spaces as per AS 1428.1 (2009) Clause 18.3.

Wheelchair seating spaces are required to be:

- Adjacent to, and on the same level as, other seating in the row and accessed by a continuous accessible path of travel.
- Located to allow lines of sight comparable to those for general viewing areas and not be obstructed by opaque handrails or balustrades.

They must be provided in the following ratios and distributed as per the table below:

No of fixed seats	No of wheelchair seating spaces	Grouping and allocation
Up to 150 spaces	<ul style="list-style-type: none"> <li>• Three spaces</li> </ul>	<ul style="list-style-type: none"> <li>• One single space and one group of two spaces are required</li> </ul>
151 to 800 spaces	<ul style="list-style-type: none"> <li>• Three spaces, plus</li> <li>• One additional space for each additional 50 seats or part thereof in excess of 150 seats</li> </ul>	<ul style="list-style-type: none"> <li>• Not less than one single space; and</li> <li>• Not less than one group of two spaces; and</li> <li>• Not more than five spaces in any other group.</li> </ul>

## Sanitary Facilities

### Unisex Accessible Toilets – General Requirements

A unisex accessible toilet sanitary compartment must contain a closet pan, washbasin, shelf or benchtop and adequate means of disposal of sanitary towels. The circulation spaces, fixtures, and fittings of all accessible sanitary facilities must comply with the requirements of AS 1428.1 (2009).

Where two or more of each type of accessible unisex toilets are provided, the number of left and right-handed mirror image facilities must be provided as evenly as possible.

Set-out of fixtures and fittings within the accessible sanitary facilities to offer compliance with AS 1428.1 (2009) Clause 15 are as follows:

- Crucial dimensions for the toilet are 450mm from the centreline of the pan to the sidewall, 800mm from the front of the pan to the rear wall and a seat height of 470mm.
- A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see Figure 43).
- For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the sidewall, and the height of the basin is between 800mm and 830mm.
- Grabrails must be provided at the side and rear of the toilet in compliance with AS 1428.1 at a height of 800mm.
- Taps are to have lever handles, sensor plates or similar controls. A minimum of 50mm clearance must be provided to adjacent surfaces for lever taps.
- The toilet seat must be of the full round type, be securely fixed in position when in use, and have fixings that create lateral stability. They must be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (e.g. pan, wall or floor), and remain upright when fully raised.
- Provide a backrest to accessible toilets to comply with Clause 15.2.4.
- Accessible toilets must be identified using the International Symbol of Access. Pictograms and lettering must have a minimum of 30% luminance contrast to the background colour. Signage must comply with AS 1428.1 (2009) Clause 8 and include information in tactile and braille formats (as required by the BCA).
- Doorways are to have a minimum clear opening width of 850mm to comply with AS 1428.1 (2009) Clause 13.2 as part of the accessible path of travel. An adequate circulation area at the latch side of the doorway is required to allow independent access to the facility. For details, refer to AS 1428.1 (2009) Figure 31.
- Door hardware must be located within the accessible height range of 900mm to 1100mm above the finished floor level.
- Controls within the accessible toilet facilities, such as light switches, must be in the accessible height range of 900mm to 1100mm above the finished floor level to comply with AS 1428.1 (2009) Clause 14.
- Controls must be located not less than 500mm from a corner.



Example Compliant Accessible Toilet



Example Compliant Accessible Washbasin

## Ambulant Toilets – General Requirements

BCA Clause F4D5(c) requires the following:

- At each bank of sanitary facilities with one or more toilets and an accessible unisex sanitary compartment, there must be an ambulant toilet available for use by males and females with ambulant disabilities.
- Sanitary facilities for use by people with ambulant disabilities must be designed in accordance with AS 1428.1 (2009) Clause 16 and incorporate features including:
  - The ambulant cubicles' width is between 900mm to 920mm.
  - The door opening must be a minimum of 700mm.
  - Braille and tactile signage is required on the face of the door (approach side).
  - The locking privacy snib must be at least 45mm long (measured from the centre of the spindle).
  - The toilet roll holder must be correctly located.
  - Grabrails are required on each side of the ambulant cubicle.
  - The toilet pan must be ambulant, with a seat height of 460mm to 480mm and a depth of between 610mm and 660mm.
  - The grabrails must be able to withstand 1100N applied in any direction.
  - A coat hook must be located between 1350mm to 1500mm AFFL.
  - A 900mm x 900mm circulation space is required in front of the pan and on each side of the doors on the path to the toilet. Circulation spaces must be clear of the door swing and any washbasin on the cubicle.
  - A 900mm x 900mm circulation space is required between each successive door swing on the path to an ambulant toilet cubicle.

## Appendix 3: Universal Design & Best-Practice Guidance

The following best-practice universal design guidance is provided and could be considered for any new work. These are not mandatory.

### The Seven Principles of Universal Design

Universal design intends to simplify life for everyone, making products, communications, and the built environment more usable by as many people as possible at little or no extra cost. There are no set design solutions for applying universal design to the built environment. In this regard, we note that there are seven principles of universal design being:

- **Equitable Use** - The design is useful and marketable to people with diverse abilities.
- **Flexibility in Use** - The design accommodates various individual preferences and abilities.
- **Simple and Intuitive Use** - The design is easy to understand, regardless of user experience, knowledge, language skills, or concentration level.
- **Perceptible Information** - The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- **Tolerance for Error** - The design minimises hazards and the adverse consequences of accidental or unintended actions.
- **Low Physical Effort** - The design can be used efficiently, comfortably, and with minimal fatigue.
- **Size and Space for Approach and Use** - Appropriate size and space are provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility.

When determining how these principles are measured in the design of the built environment, Access Central has developed the following approach. While not all these features are listed for this assessment, this table provides a basis for design development to provide an inclusive environment, and each universal design (**UD**) principle should be considered before any work or purchase:

UD Principle	Measurable Examples
Equitable Use	Where stairs and a ramp are provided, ensure they start and arrive at a similar location. Provide accessible outdoor dining and seating areas. Accessible spaces are provided, including parking space(s). Provide hearing augmentation in all service counter and meeting areas. Accessible toilets are provided when other toilets are available.
Flexibility in Use	Provide a range of seating designs and options. Provide large print signage. Provide additional lower handrails for children/people of short stature.
Simple and Intuitive Use	Signage must include the use of pictograms. Paths of travel must be identified through the use of luminance contrast. Pedestrian and vehicle entrances must be clearly identified.

UD Principle	Measurable Examples
<b>Perceptible Information</b>	All signage/information is provided in simple layouts, in sans serif font, tactile/braille and audio formats. A minimum of 30% luminance contrast between operable components and the background colour, such as seating, bollards, shade sail poles, toilet fixtures, handrails and the like. Provide a direct line of sight between the car parking and the entrance.
<b>Tolerance for Error</b>	Provide non-slip floor/surface finishes. Pathways must be kept clear of obstructions. Provide sensor lights for safe travel in darker areas.
<b>Low Physical Effort</b>	Provide accessible car parking as close to the entrance as possible. Provide resting places and seating at regular intervals. Provide automatic doors to toilet buildings.
<b>Size and Space for Approach and Use</b>	All pathways and ramps are to be a minimum of 1800mm wide to allow people to pass each other, provide space for an assistance animal, and let people walk together side by side. Provide designated pathways to and through table/seating areas. Provide accessible toilets and Changing Places facilities. Provide seating with backrests and armrests.

## Accessibility Guides/Mobility Maps

When members of the public visit a building for the first time, it is beneficial to have a Mobility Map available or customised accessibility guides.

An Accessibility Guide should include details about a venue's layout, parking, customer service/ticketing, amenities, entry and exit points, and safety and accessibility features.

They can feature professional photographs or 3-D videos to help understand what to expect from a specific experience before attending.

A Mobility Map is a site plan showing the location of all buildings and pedestrian entrances, footpaths, car parking, accessible car parking spaces, accessible toilets, and the like. The Mobility Map can also help identify architectural barriers or site limitations that might be difficult for some people to negotiate, such as stairways, steep grades, or unsealed pathways.

## Baby Change Facilities

As per AS 1428.1 (2009) Clause 15.2.8.2, a baby change table must have a maximum height of 820mm and a minimum clearance underneath the table when folded down of 720mm (AS 1428.1 (2009) Clause 15.2.8.2(b)).

The area must also have sufficient circulation space in accordance with AS 1428.1 (2009) Clause 6.5 and be provided in an area designated as non-gender specific.

## Electrical

The BCA and Premises Standards only require accessible features to electrical components in accessible bathrooms and accessible hotel rooms, but the following could be adopted through all areas for ease of use:

- Push-button controls or push-pad switches with a minimum diameter of 25mm.
- Rocker action and toggle action switches with a minimum dimension of 30mm x 30mm.
- Power points (GPOs) in public spaces should be located 600mm and 1100mm AFFL and no closer than 500mm from an internal corner (AS 1428.1 (2009) Clause 14.2).

Consider providing all controls with larger switches and power points in accessible locations at an accessible height.

## Evacuation Provisions for People with Disabilities

The Human Rights and Equal Opportunity Commission (HREOC) Advisory Notes on Access to Premises, Item 5.21 states that, in an emergency, all users should be provided with a means of egress from a premise to a place of comparative safety. This ensures people with disabilities are provided with the same level of protection as other premises users or building occupants.

It is recommended to adopt strategies that provide an inclusive approach to evacuating all occupants in the building, including those with a sensory or mobility disability. This also benefits older people and the very young.

Simple strategies include:

- Where areas are provided hearing augmentation, they should be interfaced into the emergency warning system as per AS 1428.5 (2021).
- Identifying accessible exit paths and exit doors on evacuation diagrams
- If considered acceptable, consider providing evacuation devices, such as an evacuation chair, with training for all operators.
- Developing inclusive evacuation plans and procedures for all areas of the building, with different uses, at different times.
- Implementing an individual Personal Emergency Evacuation Plan (PEEP) for any regular visitors/members or staff working in the building, tailored to their own specific needs. The reference to a PEEP is made on existing signage, as shown below.
- Providing visual alarms in accessible toilets and bathrooms.

## Hand Sanitisers

Wall-mounted hand sanitiser units throughout a building should be mounted at 900mm to 1100mm AFFL and no closer than 500mm to an internal corner. A 1500mm deep circulation space should be provided in front of the dispenser.

## Kitchen / Kitchenette Facilities

Accessible counters, kitchen benches and other work surfaces should be provided with an accessible option for wheelchair users.

AS 1428.2 (1992) Clause 24 outlines these requirements and states that:

- The height to the top of the surface should be 850mm  $\pm$ 20mm AFFL.
- The clearance underneath the counter should be 850mm  $\pm$ 20mm AFFL.



- If a second counter is provided, it should be lower
  - The top of the work surface should be 750mm  $\pm$ 20mm AFFL
  - Clearance underneath of 730mm  $\pm$ 20mm AFFL
- The width of any accessible section must be at least 900mm.
- All accessible sections must have foot and knee clearance under the counter, as outlined in Figure 25.

Consideration should be given to the provision of accessible kitchen facilities and appliances, which are designed and constructed in accordance with AS 4299 (1995) Clause 4 and AS 1428.2 (1992) Clause 24.

## Lighting and Glare

Minimum interior lighting levels of maintenance illumination must be in accordance with AS1680.1 (1990) and with consideration to AS 1428.2 (1992) Clause 19. Consistent lighting levels should be provided throughout, without pools of light or dark areas.

Glare and excessively reflective surfaces should be avoided. This includes glare from windows.

The following minimum levels of maintenance illumination are recommended:

- Entrances
- Passageways and walkways 150 lux
- Stairs and ramps 150 lux
- Toilet and locker rooms 200 lux
- Countertops 250 lux

## Luminance Contrast

Luminance contrast is the light reflected from one surface or component compared to the light reflected from another surface or component.

A luminance contrast of 30% between two surfaces is generally accepted as a minimum when considering it as a navigational / wayfinding tool for people with a vision impairment.

In this regard, we recommend that the provision of a minimum 30% luminance contrast between surfaces be adopted in the following instances to assist people with vision impairment in negotiating the built environment:

- Provide a minimum 30% luminance contrast between swipe card/fob card readers and walls/door frames.
- Provide a minimum 30% luminance contrast between light switches and walls/door frames.
- Generally, contrasting wall and floor surfaces should be provided. At a minimum, skirting boards that provide suitable contrast to the floor surface assist people with low vision identify perimeters of corridors and accessible spaces.
- For joinery, counters, or benches to achieve a minimum 30% luminance contrast with the counter/bench face to which it is viewed.
- Additionally, Counter/bench surfaces should have a matt or low-sheen finish.
- For handrails and grabrails, provide a luminance contrast between the rail and the wall colour.
- Provide a minimum 30% luminance contrast between seating, display stands, information boards, bollards, bike hoops and all floor surfaces.

## Pathways, Floor Surfaces and Coverings

Avoid confusing, disrupted patterns and overly colourful floor coverings that cross pathways. Use floor coverings or floor surfaces to help aid in wayfinding (i.e. coloured paths leading to entrances, reception counters and the like).

Set all fixtures and fittings back from travel paths to avoid impact hazards or confusion (visually and in wayfinding).

Consider using wheel stops on car parking spaces next to paths of travel to ensure vehicle overhangs do not obstruct the available clear width of each footpath.

## Recharge Points

Electric scooter users often need to recharge the battery on their scooters. Consider providing a power-point (GPO) in an accessible location for a person to recharge their mobility scooter. The designated GPO for each Recharge point should:

- Preferably be a double GPO
- Where possible, set each GPO at 1000mm (centre-line) AFFL.
- Each GPO must be provided with a safety switch.

## Seating

Where seating is located within the public and staff areas, a proportion of accessible seating should be provided, offering compliance with AS 1428.2 (1992) Clause 24.1.7 and Clause 27, including:

- Armrests assist users in lowering themselves into their seats and in helping them stand when leaving the area.
- Seating should have armrests provided to some seats, with the top surface of the armrests at the height of 260 ±40mm above the seat and edges or projections from the seating sections with a radius of less than 5mm (AS 1428.2 (1992) Figure 32).
- Any bench-type seating should have a range of designs to allow a wheelchair user to enter a 900mm wide section of the bench and table arrangement and be in a group with family and friends.
- The distance between groups of tables and chairs/accessible wheelchair spaces should maintain a minimum of 820mm in clearance.

## Signage and Wayfinding

An equitable approach to signage in a building that includes signs on all doors will help people with vision impairment. Consider installation of signage with room names or room numbers on the latch side of doors incorporating large print (Arial font), and braille raised tactile elements, in a consistent colour and luminance contrast to the door, at a height suitable for use by a person when seated in accordance with BCA Specification 15 and AS 1428.1 (2009).

Braille and tactile signs should be provided to all rooms to identify the room numbers or room names in all locations, not just those prescribed in the BCA.

Developing a wayfinding strategy considering landmarks and visual features of the development is recommended. This would include using varied finished surfaces to differentiate areas of each building.

Signs, including symbols, numbering, and lettering, must be located where they are clearly visible to people seated and standing. They should be placed within a zone at a height not less than 1400mm and not more than 1600mm above the plane of the finished floor. Where space in this zone is used up, the zone for placement of signs may be extended downward to not less than 1000mm from the plane of the finished floor. This height assists people in reading from a seated or a standing position and helps people with low vision to read the information on the sign. Letters and symbols in relief assist people with severe visual disabilities.

Where a sign can be temporarily obscured, e.g. in a crowd, the sign should be placed at a height of not less than 2000mm above the plane of the finished floor.

Signs to assist wayfinding should be provided at direction changes and at sites where directional decisions are made to enable the appropriate decisions to be made before a change of direction occurs.

Low-level signage or floor-level signage can help supplement overhead signage.

Where the surface of the wall surrounding the sign provides insufficient contrast (e.g. patterned wallpapers), the background area of the sign may need to be increased in size.

The message that the sign carries should be unambiguous.

Tactile floor plans or maps and pre-recorded auditory instructions at the main entrance and other useful locations can assist people who are blind or have low vision.

## Single Steps

Consider providing a contrasting 50mm to 75mm deep strip that achieves a 30% luminance contrast for the entire clearance (between handrails) on every single step (AS 1428.1 (2009) Clause 11.1(f) (g)).

## Slip-Resistance

Floor surfaces with a suitable slip-resistant surface help reduce the chance of slips, trips, and falls.

Consider adopting a best practice for providing slip-resistance ratings to all floor surfaces by using Table 3B of HB 198-2014, which recommends:

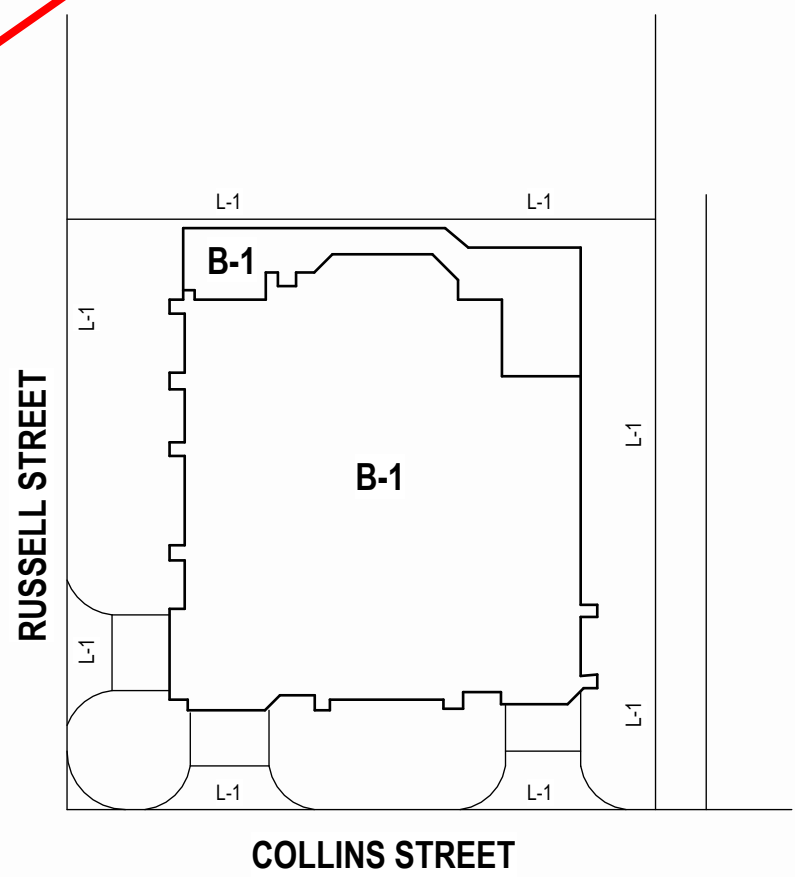
- Bathrooms with a slip-resistance classification of 'P2' (wet pendulum test) or 'A' (oil-wet inclined platform test).
- All toilets, including ambulant toilets and unisex accessible toilets, with a slip-resistance classification of P3 (wet pendulum test) or R10 (oil-wet inclined platform test).
- A P4 or R11 classification on all external paths, walkways, external car park areas and courtyards (and the like).

## Appendix 4: Marked-up Drawings

RUSSELL STREET

St Michaels Uniting Church  
(Brick Building)  
No.'s 122-136 Collins Street  
Title Area = 1693m<sup>2</sup>

REFER TO SHEET AX-002  
FOR UPDATED ST  
MICHAEL'S WALK  
FEATURE AND LEVEL  
SURVEY



**VICTORIAN HERITAGE REGISTER (VHR)  
REGISTRATION PLAN (NOT TO SCALE)**  
Location: 122 - 136 Collins Street Melbourne, Melbourne City  
Municipality: Melbourne City  
Level of Significance: Registered  
Victorian Heritage Register (VHR) Number: H0004  
Heritage Overlay Numbers: HO576  
Extent of Registration:  
1. All of the buildings marked B-1 on Diagram 600107A held by the Executive Director.  
2. All the land marked L-1 on Diagram 600107A held by the Executive Director being all of the land described in Certificate of Title Volume 9070 Folio 152.

BM 1 (Spike in Kerb)  
RL 24.024

**No Comments from Access Central**

**GENERAL NOTES**  
Builder / Contractors to verify all dimensions on site prior to commencing any works.  
Builder / Contractors to notify the Architect of discrepancies.  
RL's indicated are Finished Levels (FL's) at the Australian Height Datum (AHD).  
Plan dimensions are to be taken horizontally. Elevation dimensions to be taken vertically.  
For dimensional setout of walls, columns etc, refer to Dimensional setout plans.  
Do not scale drawings, use written dimensions only.  
This drawing is to be used in conjunction with schedules and specifications.  
This project is listed on the Victorian Heritage Register (VHR). Any works undertaken must comply with relevant heritage regulations and guidelines.  
Approval from Heritage Victoria is required before commencing any modifications or alterations to the building.

**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW

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ARCHITECTURE  
INTERIORS  
HERITAGE  
25 William Street, Cremorne  
T 03 9421 5448 - trethowan.com.au

**PROJECT**  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne

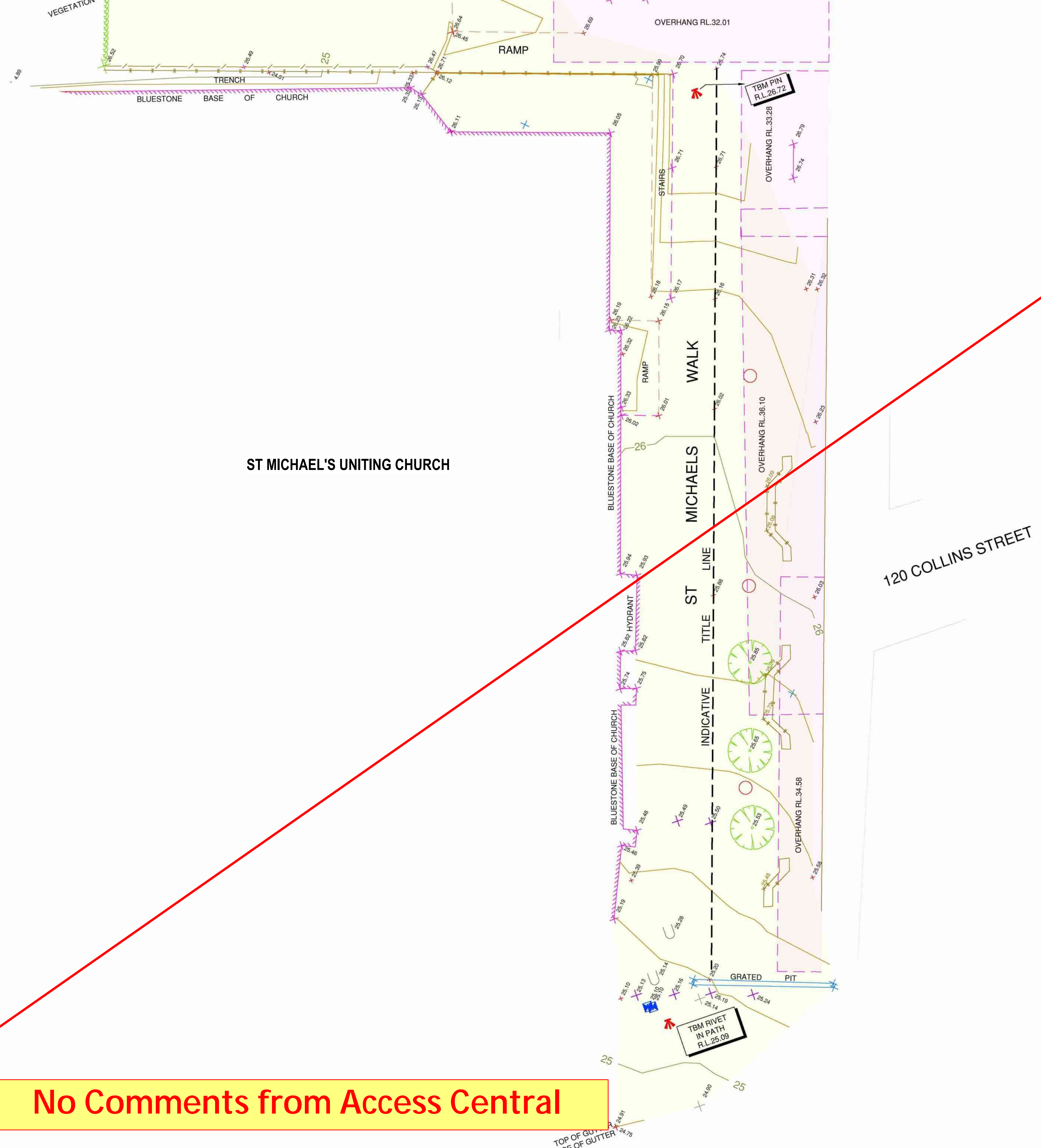
**DRAWING TITLE**  
Existing Site Plan - Sheet 1

**SCALE**  
1 : 200 @ A3  
1 : 100 @ A1

**DRAWING NO.**  
**AX-001**

DATE REV

FILE PATH: C:\Users\stue\TRET\HOWAN\OneDrive - Tretthowan Architecture\Documents\RYT Project\Shorcut\St Michaels Uniting Church\_Land\ENF.rvt  
DATE PRINTED: 21/2/2024 5:38:16 PM



No Comments from Access Central

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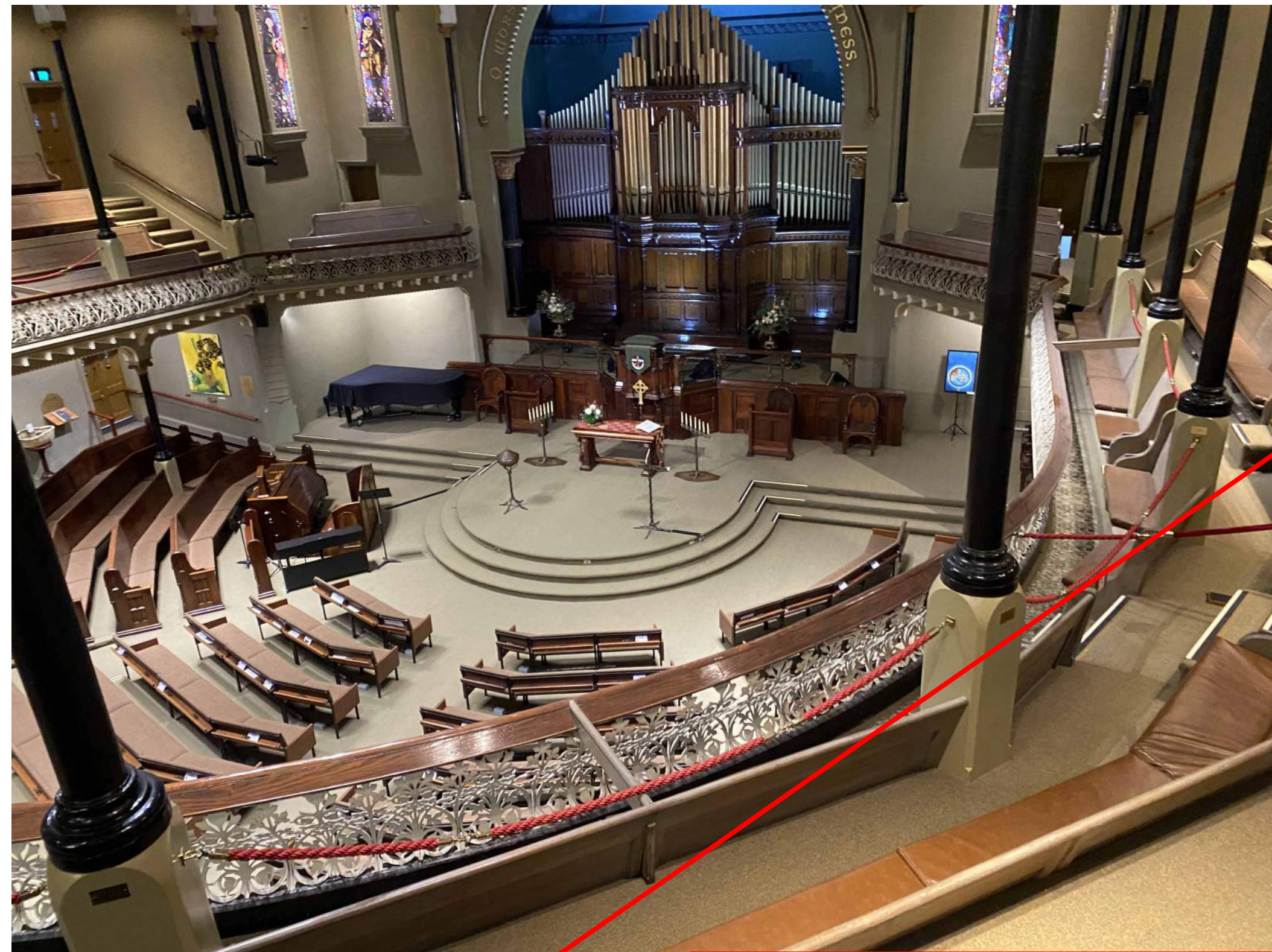
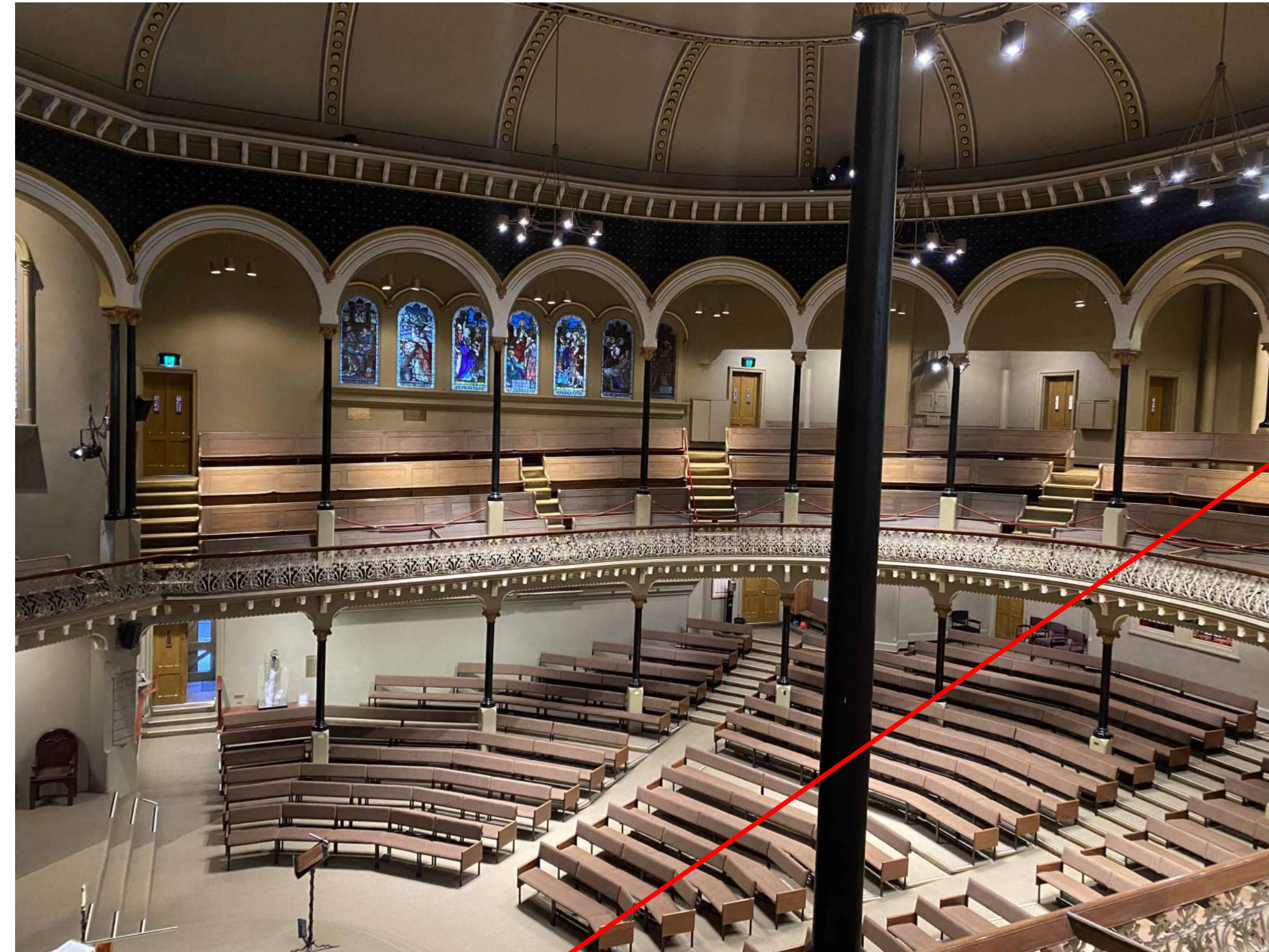
**PROJECT**  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

**DRAWING TITLE**  
 Existing Site Plan - Sheet 2

**SCALE**  
 1 : 200 @ A3  
 @ A1

**DRAWING NO.**  
AX-002

**DATE**      **REV**



No Comments from Access Central

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REV	DESCRIPTION	DATE	ISSUE PURPOSE
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PROJECT  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

DRAWING TITLE  
 Existing Site Photos

SCALE

DRAWING NO.  
**AX-005**

DATE

REV

**The New Part**

Any new works in an existing building constitute a 'New Part' as defined under Subsection 2.1(4) of the Premises Standards. Consequently, the 'New Part' needs to comply with the BCA and Premises Standards Access Code.

This requirement is also adopted at a State level in the Building Regulations 2018, Regulation 236.

**The Affected Part**

In addition to the new work requirement, there is a requirement to provide an accessible path of travel from the new or modified part of an existing building to and within the principal pedestrian entrance (subject to any exceptions or concessions).

This is referred to as the 'Affected Part' of a building (Subsection 2.1(5) of the Premises Standards) and includes:

- the principal pedestrian entrance of the building; and
- any part of an existing building that is necessary to provide a continuous accessible path of travel from the entrance to the proposed New Part.

This requirement is also adopted at a State level in the Building Regulations 2018, Regulation 236.

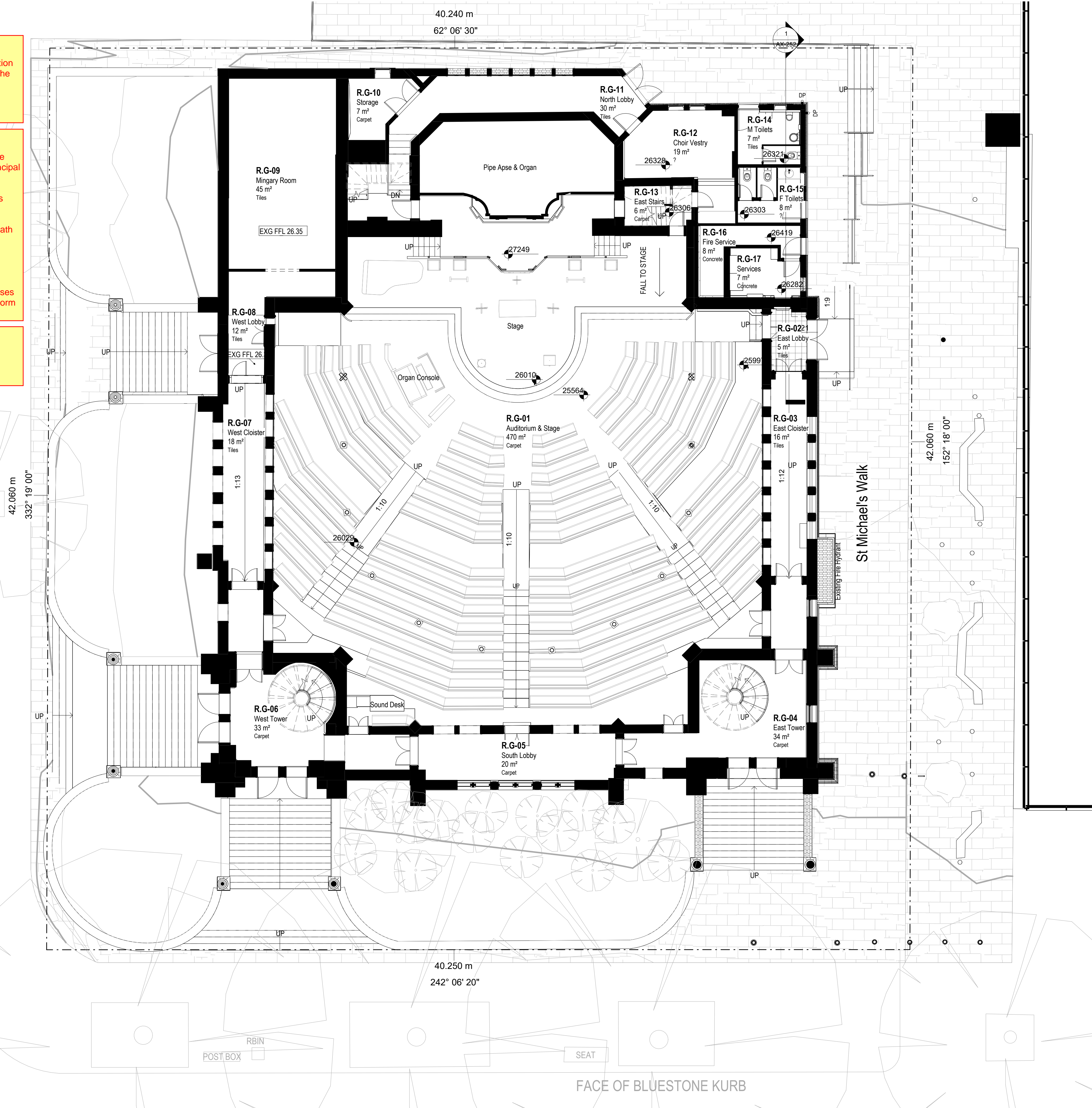
While the principal pedestrian entrance of a building is not defined in the BCA or Premises Standards, we believe it extends to any external stairways and ramps that structurally form part of the entrance arrangements.

**Areas outside the New Part and Affected Part**

Areas outside of the New Part and the Affected Part work do not have any access requirements imposed by the Premises Standards, but these areas will continue to be subject to the general complaints' framework of the DDA.

RUSSELLS

FACE OF BLUESTONE KURB



**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW



PROJECT  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

DRAWING TITLE  
 Existing Ground Floor Plan

SCALE  
 1 : 200 @ A3  
 1 : 100 @ A1

DRAWING NO.  
**AX-100**

DATE  
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REV

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**The New Part**

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In addition to the new work requirement, there is a requirement to provide an accessible path of travel from the new or modified part of an existing building to and within the principal pedestrian entrance (subject to any exceptions or concessions).

This is referred to as the 'Affected Part' of a building (Subsection 2.1(5) of the Premises Standards) and includes:

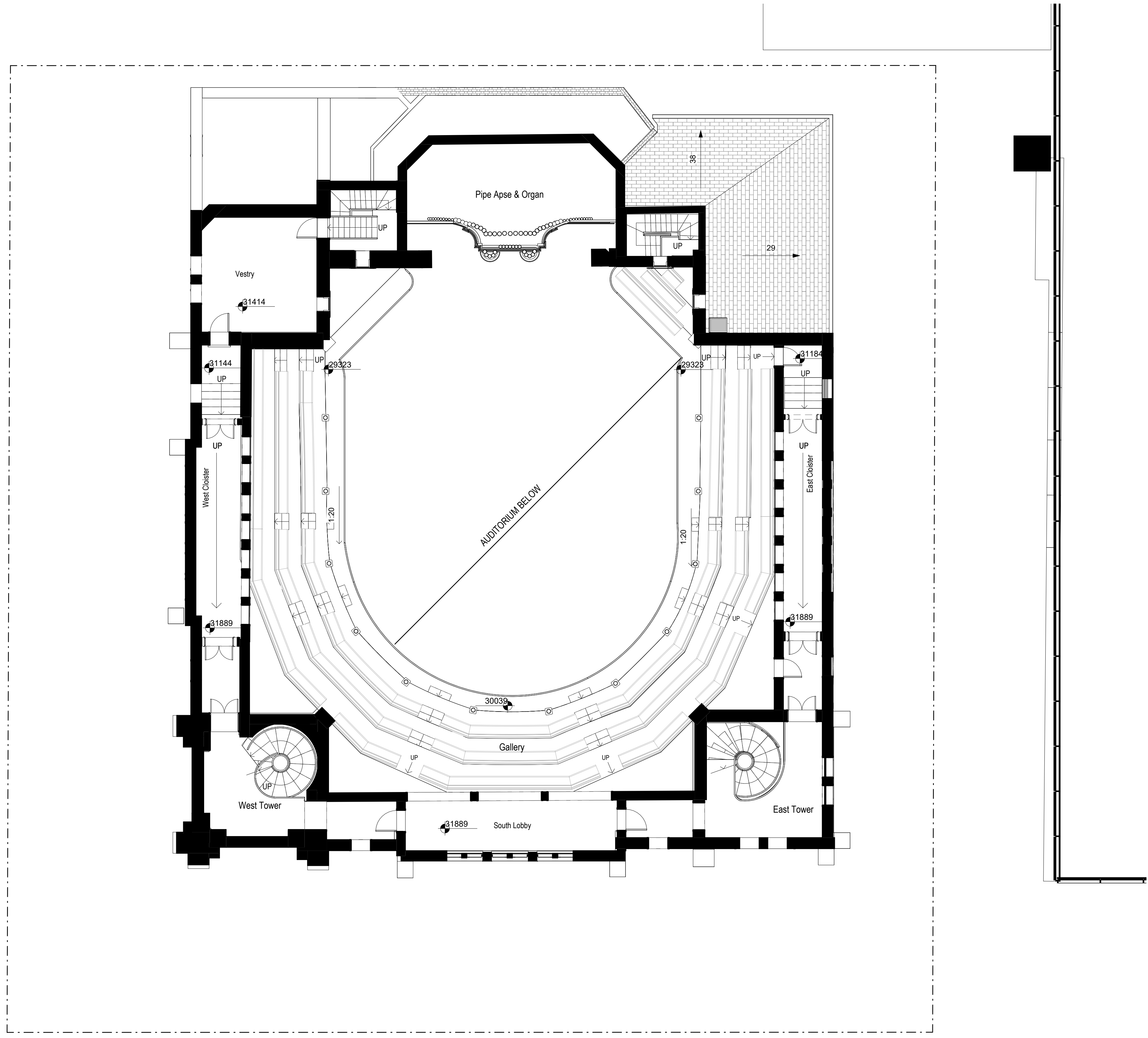
- the principal pedestrian entrance of the building; and
- any part of an existing building that is necessary to provide a continuous accessible path of travel from the entrance to the proposed New Part.

This requirement is also adopted at a State level in the Building Regulations 2018, Regulation 236.

While the principal pedestrian entrance of a building is not defined in the BCA or Premises Standards, we believe it extends to any external stairways and ramps that structurally form part of the entrance arrangements.

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Areas outside of the New Part and the Affected Part work do not have any access requirements imposed by the Premises Standards, but these areas will continue to be subject to the general complaints' framework of the DDA.



**GENERAL NOTES**

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**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW



**PROJECT**  
 St Michael's Uniting Church  
 122-136 Collins Street, Melbourne

**DRAWING TITLE**  
 Existing First Floor Plan

**SCALE**  
 1 : 200 @ A3  
 1 : 100 @ A1

**DRAWING NO.**  
**AX-101**

**DATE**      **REV**

RUSSELL STREET

FACE OF BLUESTONE KURB

St Michael's Walk

FACE OF BLUESTONE KURB

- LEGEND - DEMOLITION WORKS**
- D1.01 DEMOLISH RAMP, LANDING AND HANDRAILS
  - D1.02 DEMOLISH HANDRAILS
  - D1.03 REMOVE SERVICES TO EAST LOBBY. ALLOW TO RELOCATE SERVICES AS REQUIRED
  - D1.04 REMOVE BRICKWORK TO ALLOW NEW OPENING THROUGH WALL
  - D1.05 REMOVE TILES OF LATER DATE TO EAST LOBBY. PREPARE SUBSTRATE FOR NEW TILES OVER.
  - D1.06 REMOVE EARLY TIMBERS DOORS, TIMBER DOOR FRAME & ARCHITRAVE TO REMAIN. TIMBER DOOR PANELS TO BE INTEGRATED INTO NEW PARTITION SCREEN.
  - D1.07 REMOVE BLUESTONE TILES TO THIS AREA TO ALLOW FOR PROPOSED WORKS
  - D2.01 DEMOLISH EXISTING TOILETS. REMOVE ALL FIXTURES, FITTINGS AND FINISHES. REMOVE MASONRY WALLS AND FLOORS
  - D2.02 DEMOLISH SERVICES ROOM (EXC POWER SUPPLY), DISCONNECT SERVICES AS REQUIRED.
  - D2.03 REMOVE FLOOR COVERING TO CHOR VESTRY
  - D2.05 REMOVE BRICKWORK TO ALLOW NEW OPENING
  - D3.01 DEMOLISH TOP STEP OF STAGE TO ALLOW FOR NEW FLOOR STRUCTURE OVER
  - D3.02 REMOVE EXISTING PEWS
  - D3.03 REMOVE EARLY TIMBER PEWS
  - D3.04 REMOVE LATER PEWS AND STORE FOR LATER REINSTATEMENT
  - D3.05 REMOVE AND STORE PEWS WHILE WORKS TAKE PLACE TO ALLOW UPGRADING OF FLOOR FINISH
  - D3.08 DEMOLISH LATER HALF CIRCLE STAGE EXTRUSION
  - D3.09 REMOVE FLOOR COVERING TO LOWER AUDITORIUM
  - D3.10 DEMOLISH LATER RAMPS
  - D3.11 REMOVE FLOOR COVERING AND NOSING STRIPS TO UPPER AUDITORIUM (INC AISLE STEPS)
  - D3.12 REMOVE AND STORE ORGAN CONSOLE WHILE WORKS TAKE PLACE
  - D4.01 REMOVE FLOOR COVERING AND MAKE GOOD SUBSTRATE

The pink shaded areas are the New Part of the building

The side entrance is now considered to be Principal Pedestrian Entrance, within the Affected Part of the building

We recommend that wayfinding signage be used to direct people to the accessible entrance

We recommend that wayfinding signage be used to direct people to the accessible entrance

**GENERAL NOTES**

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DRAFT ISSUE

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW

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ARCHITECTURE  
INTERIORS  
HERITAGE

25 William Street, Cremorne  
T 03 9421 5448 - trethowan.com.au

PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne

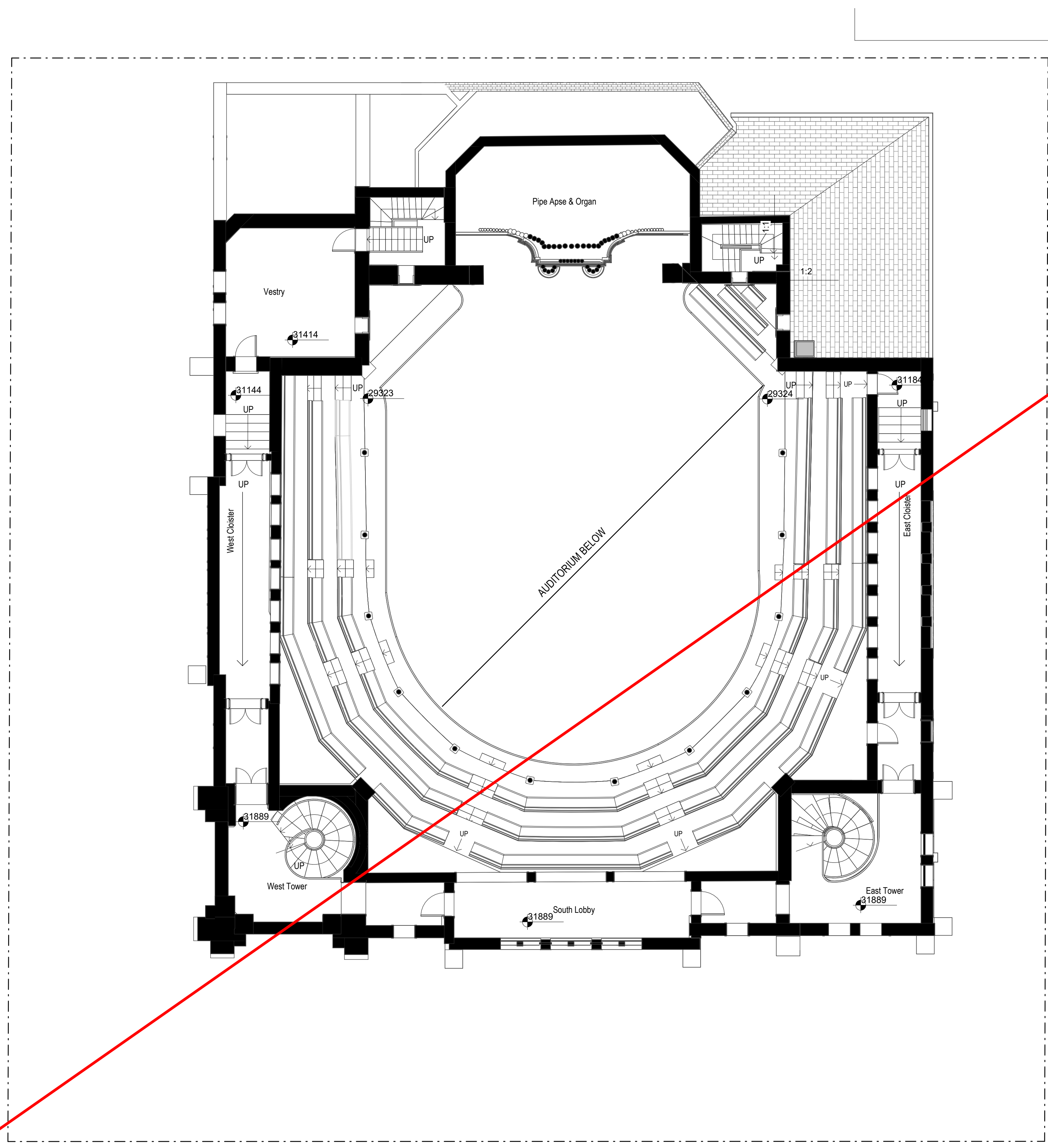
DRAWING TITLE  
Demolition Ground Floor Plan

SCALE  
1 : 200 @ A3  
1 : 100 @ A1

DRAWING NO.  
**AD-100**

DATE  
REV

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DATE PRINTED 21/12/2024 15:39:27 PM



No Comments from Access Central

**GENERAL NOTES**  
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DRAFT ISSUE

REV	DESCRIPTION	DATE
A	Design Development	2024.01.15

ISSUE PURPOSE  
**ISSUED FOR REVIEW**

**trethowan**  
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PROJECT  
**St Michaels Uniting Church**  
 122-136 Collins Street, Melbourne

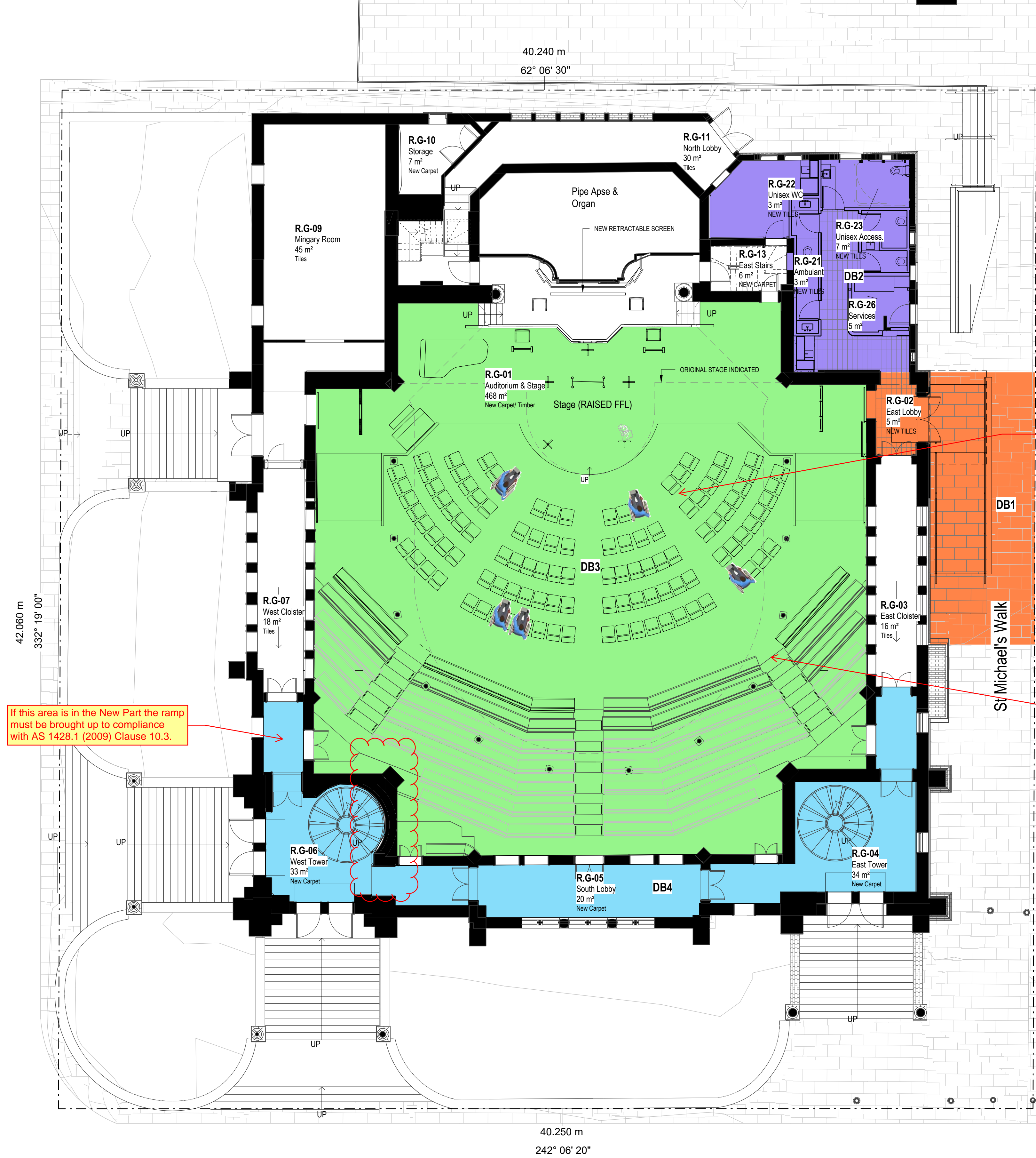
DRAWING TITLE  
**Demolition First Floor Plan**

SCALE  
 1 : 200 @ A3  
 1 : 100 @ A1

DATE  
 2024.01.15

DRAWING NO.  
**AD-101**

REV  
**A**



**KEY PLAN LEGEND:**

- DB1 - ENTRY UPGRADE
- DB2 - TOILET UPGRADE
- DB3 - AUDITORIUM UPGRADE
- DB4 - SOUTH ENTRY FINISHES

Wheelchair seating areas must be within Class 9b assembly buildings in the ratios detailed in Table D4D10.

Fixed seats in a room or space	Wheelchair spaces <sup>Note 1</sup>		Grouping and location			Spaces must represent range of seating provided <sup>Note 3</sup>
	Minimum spaces required	1 additional space required per <sup>Note 2</sup>	Min. single spaces	Min. groups of 2 spaces	Max. spaces in any other group	
Up to 150	3	N/A <sup>Note 4</sup>	1	1	N/A <sup>Note 4</sup>	No
151 to 800	3	50 seats in excess of 150 seats	1	1	5	No
801 to 10 000	16	100 seats in excess of 800 seats	2	2	5	Yes
More than 10 000	108	200 seats in excess of 10 000 seats	5	5	10	Yes

Refer to drawing SK-465 - In a seating area, the following is required (BCA Clause 11D4):

- A.** The gradient of the floor surface must not be steeper than 1:8, or the floor must be stepped so that:
1. A line joining the nosings of consecutive steps does not exceed an angle of 30° to the horizontal; and
  2. The height of each step in the stepped floor is not more than 600mm; and
  3. The height of any opening in such a step is not more than 125mm.
- B.** If an aisle divides the stepped floor and the difference in level between any 2 consecutive steps:
1. Exceeds 230mm but not 400 mm, an intermediate step must be provided in the aisle; and
  2. Exceeds 400mm, 2 equally spaced intermediate steps must be provided in the aisle; and
  3. The going of intermediate steps must be not less than 270mm and such as to provide as nearly as practicable equal treads throughout the length of the aisle.
- C.** The clearance between rows of fixed seats used for viewing performing arts, sport or recreational activities must be not less than:
1. 300 mm if the distance to an aisle is not more than 3.5m; or
  2. 500 mm if the distance to an aisle is more than 3.5m.

Given the expected demographics, and available handrail, it might be reasonable to accept the risers at less than 115mm. The Relevant Building Surveyor must accept this.

Ensure any recessed matting is selected per Clause 7.4.2 of AS 1428.1:2009:

- Where of metal and bristle type construction or similar, its surface shall be no more than 3mm if vertical, or 5mm if rounded or bevelled, above or below the surrounding surface; and
- Where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or bevelled.

Avoid confusing, disrupted patterns and overly colourful floor coverings that cross pathways. Use floor coverings or floor surfaces to help aid in wayfinding (i.e. coloured paths leading to entrances, reception counters and the like).

Where there is an abutment of different floor finishes, the maximum vertical tolerance permitted is 3mm (or 5mm if rounded or bevelled).

Consider providing a contrasting 50mm to 75mm deep strip that achieves a 30% luminance contrast for the entire clearance (between handrails) on every single step (AS 1428.1 (2009) Clause 11.1(f) (g)).

All stormwater grates and floor waste covers must be installed flush with the adjacent surface with perforations of no greater than:

- Circular openings shall be not greater than 13mm in diameter.
- Slotted openings shall be not greater than 13mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.
- 8mm in width with no limited on length. (AS 1428.1 (2009) Clause 7.5)

**Slip-Resistance**  
Floor surfaces with a suitable slip-resistant surface help reduce the chance of slips, trips, and falls. Consider adopting a best practice for providing slip-resistance ratings to all floor surfaces by using Table 3B of HB 198-2014, which recommends:

- Bathrooms to have a slip-resistance classification of 'P2' (wet pendulum test) or 'A' (oil-wet inclined platform test) applied throughout.
- All toilets, including ambulant toilets and unisex accessible toilets, have a slip-resistance classification of P3 (wet pendulum test) or R10 (oil-wet inclined platform test).
- A P4 or R11 classification to all external paths, walkways, external car park areas and courtyards (and the like).

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
**ISSUED FOR REVIEW**

**trethowan**  
ARCHITECTURE  
INTERIORS  
HERITAGE

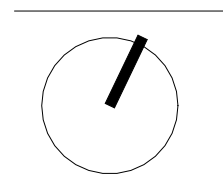
PROJECT  
**St Michaels Uniting Church**  
122-136 Collins Street, Melbourne

DRAWING TITLE  
**Proposed Key Plan**

SCALE  
1 : 200 @ A3  
1 : 100 @ A1

DRAWING NO.  
**SK-001**

DATE  
REV



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RUSSELL STREET

If this area is in the New Part, the doorway into the room must be brought up to compliance with AS 1428.1 (2009) Clause 10.3. Furthermore, the Affected Part triggers an accessway from this area to the principal pedestrian entrance of the building. An accessway is not however provided as this area only has an internal pathway with a stairway and non-compliant doorway

Refer to drawings SK-400, SK-401 and SK-402

We understand these stairways are outside the planned New Part works.

Please clarify whether an upgrade to the AV/ inbuilt amplification equipment is part of the New Part works (other than one used for emergency purposes only).

Where an inbuilt amplification system is installed in any room within a Class 9b building (other than one used for emergency purposes only), a hearing augmentation system per BCA Clause D4D8 must be provided.

A step ramp that complies with Clause 10.6 of AS1428.1 (2009) could be used, including:  
 - Minimum 1000mm unobstructed width.  
 - 190mm maximum height.  
 - 1900mm maximum length.  
 - 1:10 maximum gradient.  
 - Top and bottom landing depth of 1200mm, or 1500mm where there is a change in direction.  
 - A step ramp does not need TGSIs or handrail extensions (or handrails when protected by a min. 450mm high wall on each side).

This area are outside the New Part and Affected Part

Consider a form of visual warning/identification along the edge of the stage (i.e. LED strip lighting or a stair tread contrasting nosing strip).

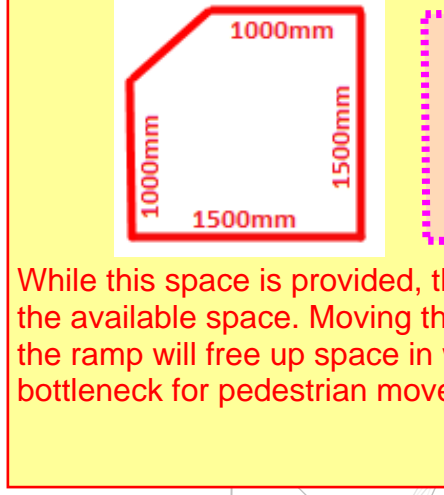
Wayfinding signage should be provided at the bottom of each stairway on Collins Street to direct people to the accessible entrance to St. Michael's Walk.

Additional signage should be provided at the St. Michael's Walk entrance to assist with wayfinding.

The accessible entrance must be step free. Confirm the proposed threshold arrangements, as there is a 20mm level difference on each side of the entrance doors. Threshold ramps are to comply with AS 1428.1 (2009) Clause 10.5. Threshold ramps are to have a maximum rise of 35mm, a maximum length of 280mm and a maximum gradient of 1:8. Threshold ramps must be within 20mm of the door leaf if services. Edges of a ramp must be protected/bound by a wall or have the edges splayed at 45 degrees to remove the trip hazard.

Please see drawings SK-400, SK-401, SK-408 and SK-409

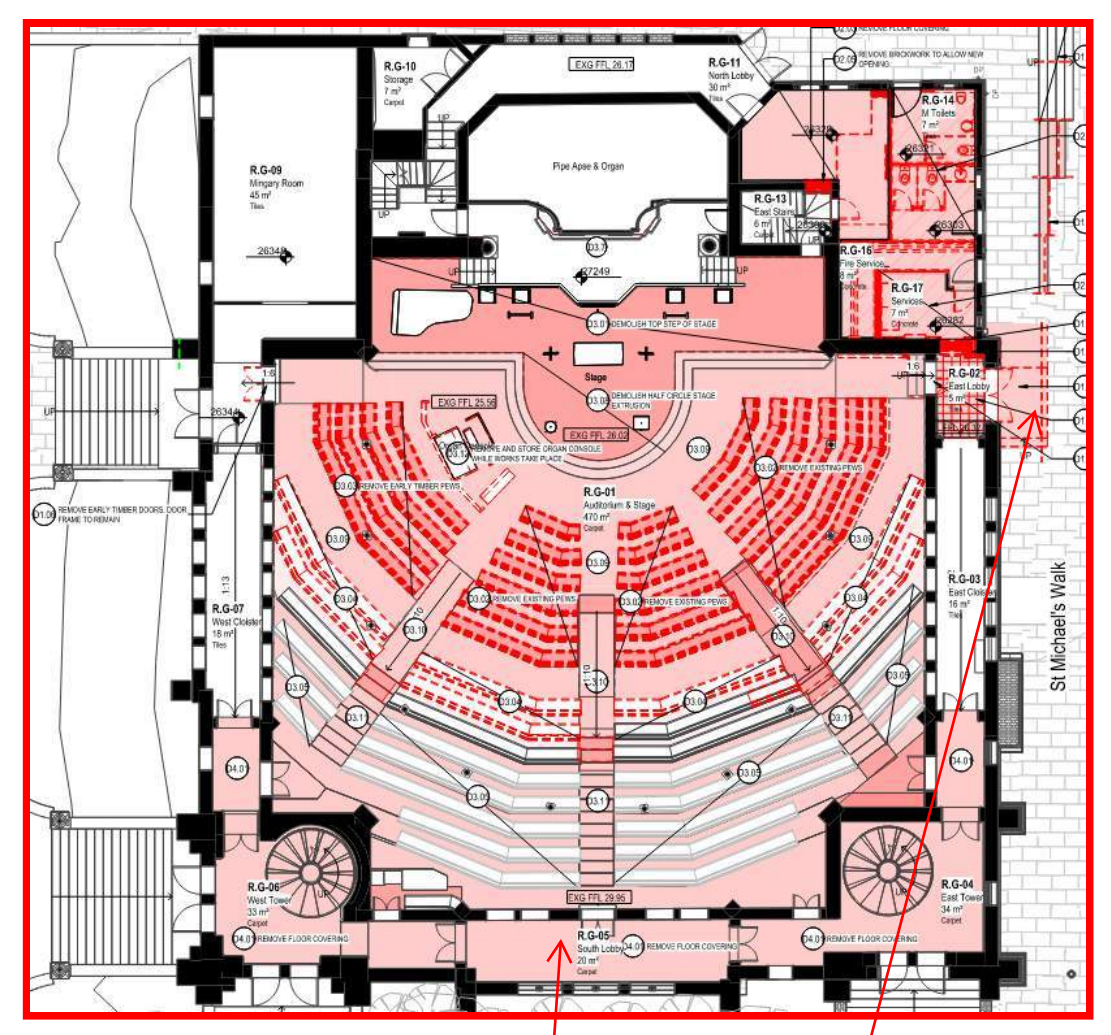
Dimension a 1500mm x 1500mm turning space on the bottom landing to ensure a 90 degree turn in a wheelchair. Note, the internal corner can be played 500mm x 500mm (AS 1428.1 (2009) Clause 6.5.1).



While this space is provided, the monolith reduces the available space. Moving the monolith closer to the ramp will free up space in what could be a bottleneck for pedestrian movement.

LEGEND - PROPOSED WORKS

- 1.01 NEW LANDING, STEP & RAMP WITH NEW HANDRAILS & TGSIs
- 1.02 NEW MONOLITH 'ST MICHAELS UNITING CHURCH' ENTRANCE SIGN
- 1.03 NEW MASONRY LOW WALL
- 1.04 NEW ARCHED OPENING THROUGH MASONRY WALL. NEW METAL SURROUND.
- 1.05 NEW GLAZED AUTOMATIC DOOR. EXISTING TIMBER DOOR FRAME AND ARCHITRAVE TO REMAIN.
- 1.06 NEW WAYFINDING/INTERPRETATION SIGN
- 1.07 EXISTING TIMBER DOORS TO BE REMAIN. REMOVE LATER GLAZING AND INSERT NEW TIMBER CLADDING TO MATCH ORIGINAL DESIGN. UPGRADE DOOR HARDWARE AS REQUIRED
- 1.08 UPGRADE HANDRAILS & RISERS TO LATER BLUESTONE STEPS. NEW NOSING STRIPS AND TGSIs.
- 1.09 ENCLOSE ARCHED OPENINGS TO CLOISTER. DESIGN TBC.
- 1.10 <varies>
- 1.11 NEW HANDRAILS
- 2.01 NEW TOILET AMENITIES REFER TO SHEET SK-420
- 2.03 NEW TEAPPOINT FACILITY INC SINK WITH CABINERY
- 2.04 NEW SERVICES ROOM. FINAL SERVICES DESIGN AND LAYOUT TO BE CONFIRMED.
- 2.05 NEW OPENING AND DOOR THROUGH TO VESTRY
- 2.06 NEW INTERIOR FITOUT TO VESTRY INC NEW CARPETS, PAINT WALLS AND CEILING
- 2.09 NEW CUPBOARD AND SINK
- 2.10 EXISTING EXTERNAL ENTRY TO SERVICES ROOM W/ NEW POWER AUTHORITY KEYPED DOOR LOCK. PREP AND PAINT DOOR TO MATCH ORIGINAL
- EXISTING DOORS TO BE FIXED SHUT. PREP AND PAINT. COLOUR TO MATCH EXISTING
- EXISTING DOOR OPENING TO BE FIXED SHUT. NEW V. JOINTED PANEL EXTERNALLY TO REPLICATE ORIGINAL DOOR). NEW FLAT PANEL INTERNALLY WITH 10MM SHADOW LINE. PREP AND PAINT. COLOUR TO MATCH EXISTING
- NEW RAISED STAGE HEIGHT BUILT OVER EXISTING STAGE STRUCTURE
- NEW RAISED FLOOR TO LOWER AUDITORIUM BUILT OVER EXISTING FLOOR STRUCTURE. REFER TO REPORT PREPARED BY SHEERFORCE ENGINEERING FOR PRELIMINARY SCOPE OF WORK.
- NEW 1:20 WALKWAY W/ HANDRAIL
- NEW SCREEN
- NEW ORGAN CONSOLE LOCATION. ORGAN TO BE REFURBISHED.
- UPGRADE WORKS TO EXISTING AISLE STAIRS INC NEW CARPET & HANDRAILS
- EXISTING TIERED SEATING RETAINED. NEW CARPET UNDER.
- NEW INDIVIDUAL CHAIRS (STACKABLE) TO ALLOW FLEXIBILITY FOR EVENT SETUP
- MODIFY EXISTING TIMBER PEW AS REQUIRED
- <varies>
- NEW CARPET. ALLOW TO MAKE GOOD SUBSTRATE TO ACHIEVE A CONSISTENT FLOOR LEVEL.
- 5.01 SPRINKLER BOOSTER UPGRADE. SERVICES CUPBOARD TO BE ALTERED AS REQUIRED. FINAL DESIGN TO BE CONFIRMED BY SERVICES CONSULTANT.
- 5.02 NEW FIRE INDICATOR PANEL
- 5.03 EXG POWER SUPPLY TO REMAIN (RELOCATION OF POWER SUPPLY IS NOT FEASIBLE)
- 5.04 EXG SWITCHBOARD AND SERVICES RACK. FINAL DESIGN BY SERVICES CONSULTANT
- 5.06 NEW LINEAR DRAIN



The pink shaded areas are the New Part of the building

The side entrance is now considered to be Principal Pedestrian Entrance, within the Affected Part of the building

GENERAL NOTES  
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DRAFT ISSUE

REV	DESCRIPTION	DATE	ISSUE PURPOSE
	ISSUED FOR REVIEW		

trethowan  
 ARCHITECTURE  
 INTERIORS  
 HERITAGE

PROJECT  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

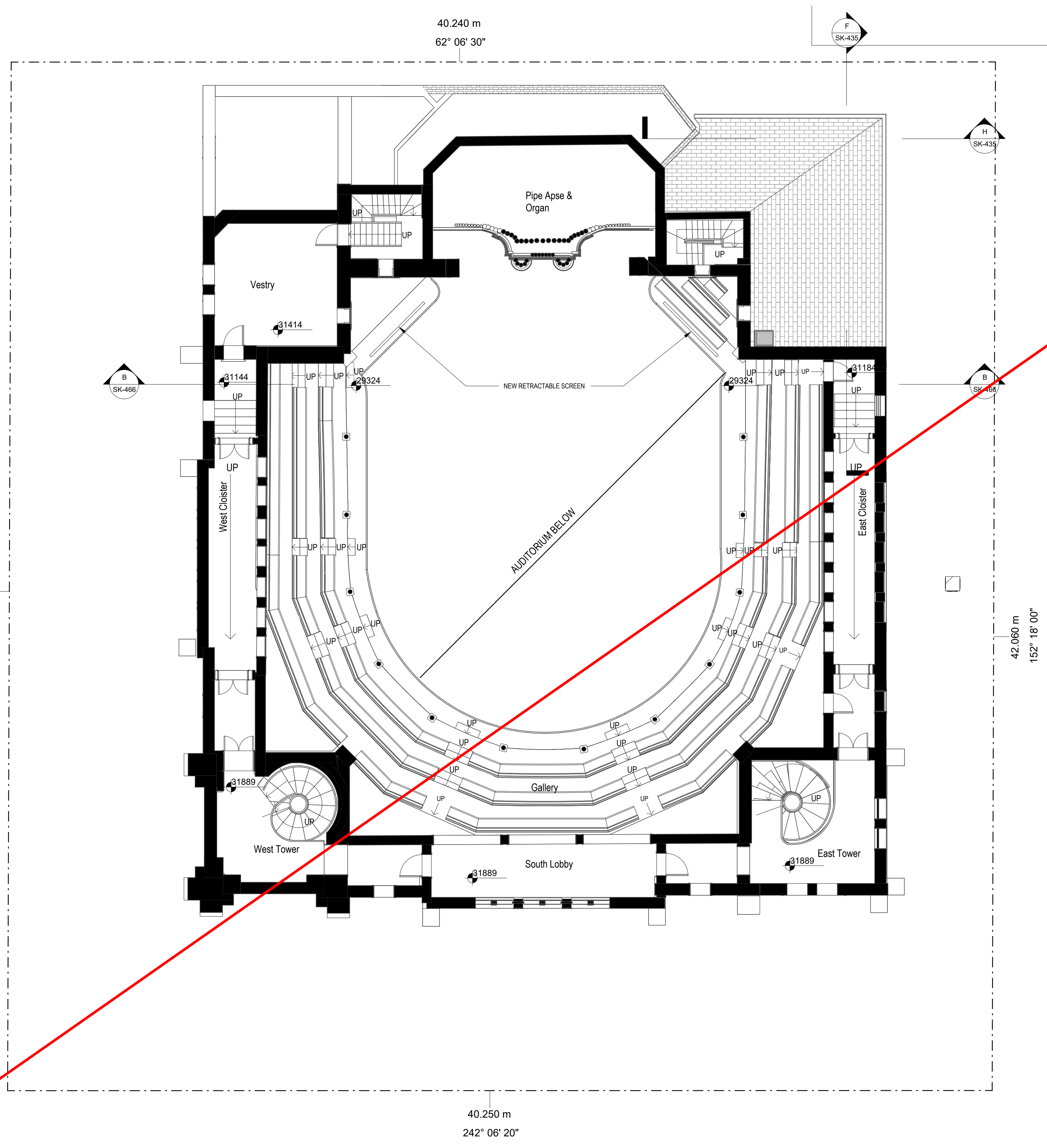
DRAWING TITLE  
 Proposed Ground Floor Plan

SCALE  
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 1 : 100 @ A1

DRAWING NO.  
**SK-100**

DATE  
 REV

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No Comments from Access Central

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DRAFT ISSUE

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW

trethowan

25 William Street, Cremorne  
T 03 9421 5448 - trethowan.com.au

ARCHITECTURE  
INTERIORS  
HERITAGE

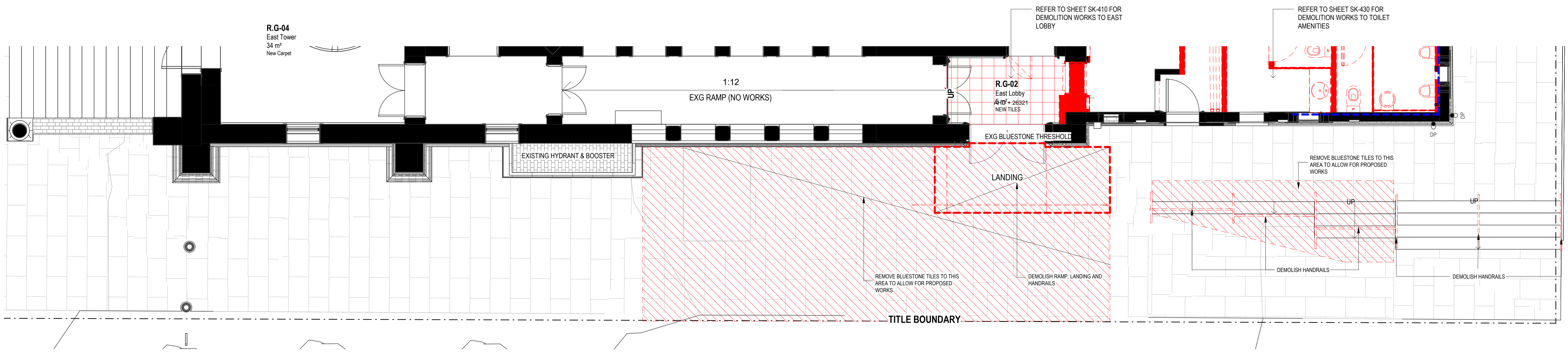
**PROJECT**  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

**DRAWING TITLE**  
 Proposed First Floor Plan

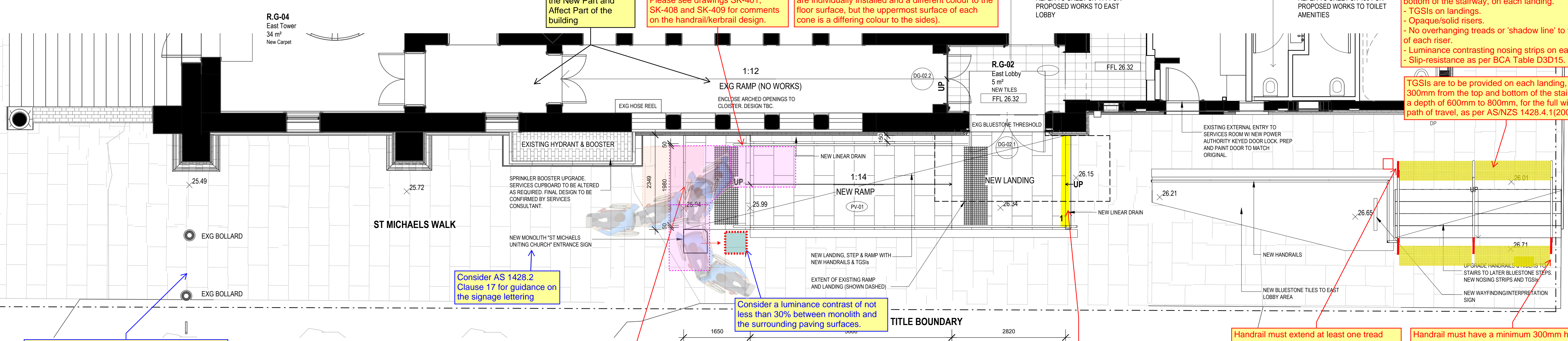
**SCALE**  
 1 : 200 @ A3  
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**DRAWING NO.**  
SK-101

**DATE**      **REV**



1 Demolition Floor Plan  
Demolition Entry Upgrade Plan  
1:50 @ A1



2 Proposed Floor Plans  
DB1 - Demolition Entry Upgrade Plan  
1:50 @ A1

TGSIs require a luminance contrast against their ground background surface to help identify the hazard:

- 30% for integrated type (i.e. TGSIs tiles in one colour);
- 45% for discrete type (i.e. those cones that are individually installed and a different colour to the floor surface but are in one colour throughout each cone); and
- 60% for composite-discrete type (i.e. cones that are individually installed and a different colour to the floor surface, but the uppermost surface of each cone is a differing colour to the sides).

We recommend against using a high gloss stainless steel TGSi, as the surface will behave differently under different lighting conditions. While the luminance contrast can be achieved to be compliant there are known efficacy issues when using gloss tactile indicators. Gloss TGSIs can also create glare causing visual confusion and discomfort to some people with eye conditions.

A non fire-isolated stairway must comply with Clause 11 of AS1428.1 (2009), including:

- A minimum 1000mm unobstructed width between handrails.
- Handrails on both sides.
- Appropriate handrail extensions on the top and bottom of the stairway, on each landing.
- TGSIs on landings.
- Opaque/solid risers.
- No overhanging treads or 'shadow line' to the face of each riser.
- Luminance contrasting nosing strips on each tread.
- Slip-resistance as per BCA Table D3D15.

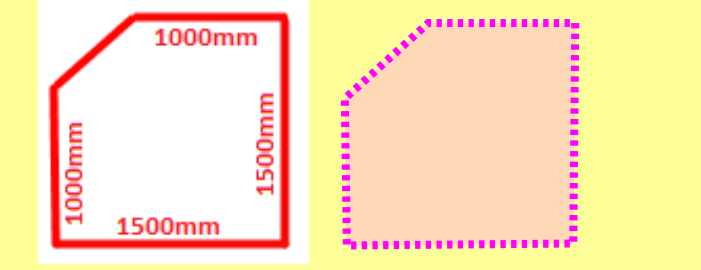
TGSIs are to be provided on each landing, setback 300mm from the top and bottom of the stairway, for a depth of 600mm to 800mm, for the full width of the path of travel, as per AS/NZS 1428.4.1(2009).

Consider a luminance contrast of not less than 30% between bollards and the surrounding floor surfaces.

Consider AS 1428.2 Clause 17 for guidance on the signage lettering

Consider a luminance contrast of not less than 30% between monolith and the surrounding paving surfaces.

Dimension a 1500mm x 1500mm turning space on the bottom landing to ensure a 90 degree turn in a wheelchair. Note, the internal corner can be played 500mm x 500mm (AS 1428.1 (2009) Clause 6.5.1).



While this space is provided, the monolith reduces the available space. Moving the monolith closer to the ramp will free up space in what could be a bottleneck for pedestrian movement.

The gradient is 5000/350 = 1:14.28, being a compliant gradient

Single step must have a strip of 50mm to 75mm deep across the full width of the path of travel. The strip may be set back a maximum of 15mm from the front of the nosing. The strip must have a minimum luminance contrast of 30% to the background (i.e. stair tread surface). Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast must not extend down the riser more than 10mm (AS 1428.1 (2009) Clause 11.1(f)(g)).

Handrail must extend at least one tread depth parallel to the line of the nosing plus 300mm horizontal extension past the bottom riser (AS 1428.1 (2009) Clause 11.2(d)).

Please see drawings SK-402, SK-408 and SK-409 for comments on the handrail/kerb design.

Handrail must have a minimum 300mm horizontal extension past the nosing of the top riser (AS 1428.1 (2009) Clause 11.2(e)).

Technically, all stairways (other than fire-isolated or those in areas considered exempt under Clause D4D5) must have accessible features as per BCA Clause D4D4(a)(ii) and AS 1428.1 (2009) Clause 11. However, we believe a Performance Solution approach could be accepted for this design with reduced handrail extensions on each landing.

GENERAL NOTES  
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DRAFT IS

REV	DESCRIPTION	DATE	ISSUE PURPOSE
	ISSUED FOR REVIEW		

ISSUED FOR REVIEW



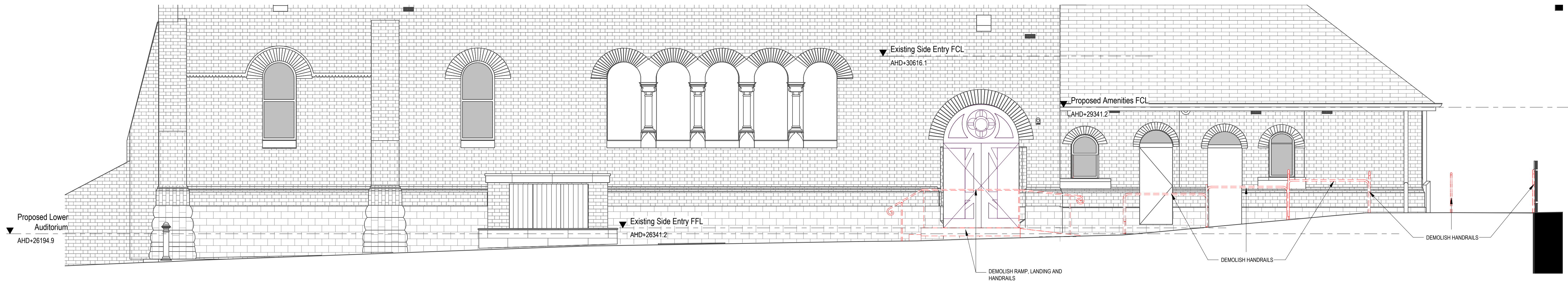
PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne  
DRAWING TITLE  
DB1 - Entry Upgrade Floor Plan

SCALE  
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1:50 @ A1

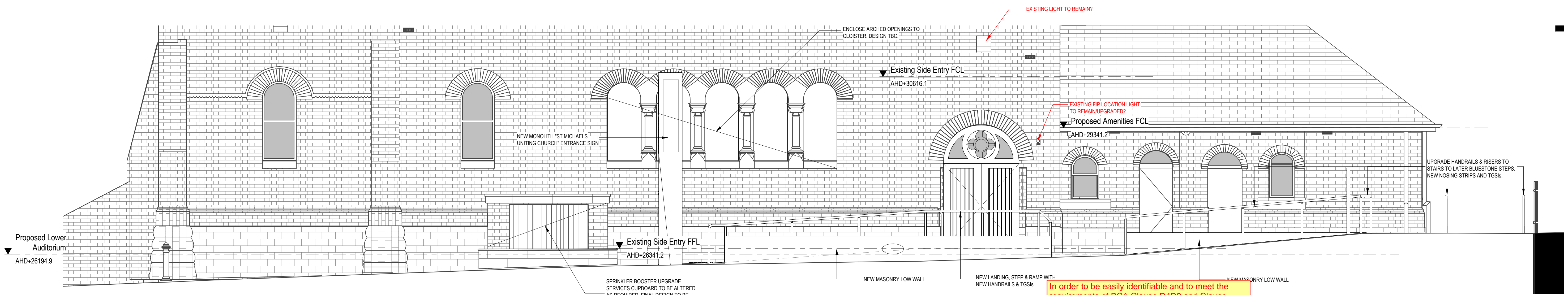
DRAWING NO.  
**SK-400**

DATE  
REV

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1 Existing Building Elevation  
SK-404 Existing East Elevation - Ramp Access  
1:50 @ A1



2 Proposed Building Elevation  
SK-404 Proposed East Elevation - Ramp Access  
1:50 @ A1

TGSIs are to be provided on each landing, setback 300mm from the top and bottom of the ramp, for a depth of 600mm to 800mm, for the full width of the path of travel, as per AS/NZS 1428.4.1(2009).

TGSIs require a luminance contrast against their ground background surface to help identify the hazard:

- 30% for integrated type (i.e. TGSIs tiles in one colour);
- 45% for discrete type (i.e. those cones that are individually installed and a different colour to the floor surface but are in one colour throughout each cone); and
- 60% for composite-discrete type (i.e. cones that are individually installed and a different colour to the floor surface, but the uppermost surface of each cone is a differing colour to the sides).

We recommend against using a high gloss stainless steel TGSi, as the surface will behave differently under different lighting conditions. While the luminance contrast can be achieved to be compliant there are known efficacy issues when using gloss tactile indicators. Gloss TGSIs can also create glare causing visual confusion and discomfort to some people with eye conditions.

Proposed ramp to comply with Clause 10.3 of AS1428.1 (2009), including:

- Maximum gradient of 1:14;
- Minimum 1000mm unobstructed width;
- Handrails to both sides;
- Appropriate handrail extensions top and bottom of the ramp;
- TGSIs to top and bottom of the ramp (to AS 1428.4.1:2009);
- Have a minimum slip resistance rating of R10 when dry, and R11 when wet.

If the ramp has vertical stanchions/post and the handrail is not fixed to the side wall, then the ramp must have 150mm high kerb rails. We recommend you continue these to the last vertical stanchion/post to remove any change of wheelchair entanglement.

The cross-fall/fall in the bottom landing must not exceed 1:40 in any direction.

In order to be easily identifiable and to meet the requirements of BCA Clause D4D2 and Clause D4D3, doors in all accessible areas are required to fully comply with AS 1428.1 Clause 13.1, including:

- All accessible doorways require a minimum luminance contrast band of 30% provided between at least one of the following:
  - door leaf and door jamb; or
  - door leaf and adjacent wall; or
  - architrave and wall; or
  - door leaf and architrave; or
  - door jamb and an adjacent wall.
- Each luminance contrast band must be at least 50mm wide.

Single step must have a strip of 50mm to 75mm deep across the full width of the path of travel. The strip may be set back a maximum of 15mm from the front of the nosing. The strip must have a minimum luminance contrast of 30% to the background (i.e. stair tread surface). Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast must not extend down the riser more than 10mm (AS 1428.1 (2009) Clause 11.1(f)(g)).

Consider a luminance contrast of not less than 30% between handrails and kerbrails and the surrounding wall surfaces.

Entry door to have a minimum clear opening width of 850mm (i.e. 920mm door leaf). Where double doors are used, 850mm clear opening shall apply to the active leaf.

GENERAL NOTES  
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DRAFT ISSUE

REV	DESCRIPTION	DATE	ISSUE PURPOSE

ISSUED FOR REVIEW

trethowan

25 William Street, Cremorne  
T 03 9421 5448 - trethowan.com.au

ARCHITECTURE  
INTERIORS  
HERITAGE

St Michaels Uniting Church  
122-136 Collins Street, Melbourne

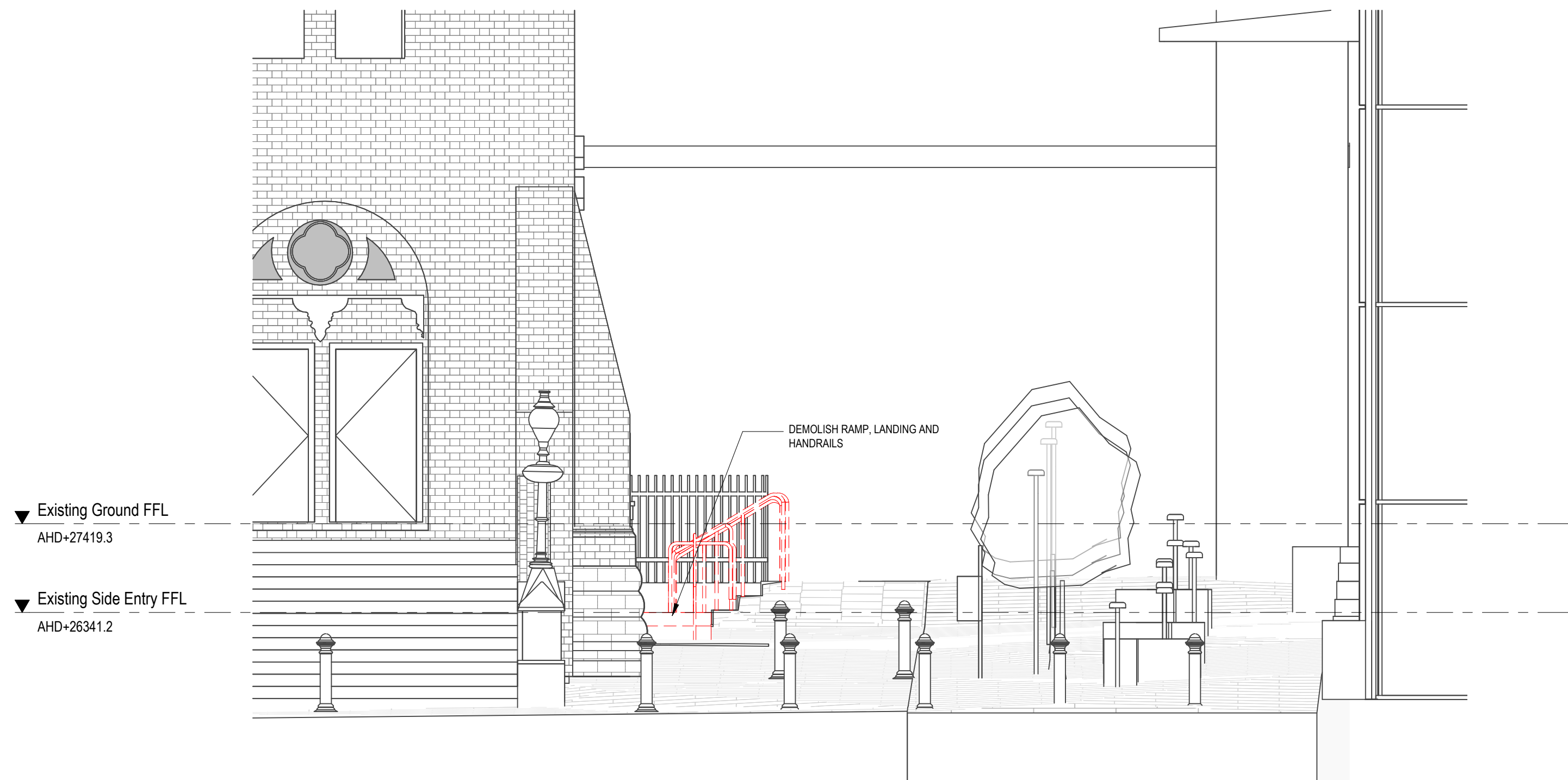
DRAWING TITLE  
DB1 - Entry Upgrade Elevation -  
Sheet 1

SCALE  
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1:50 @ A1

DRAWING NO.  
SK-401

DATE REV

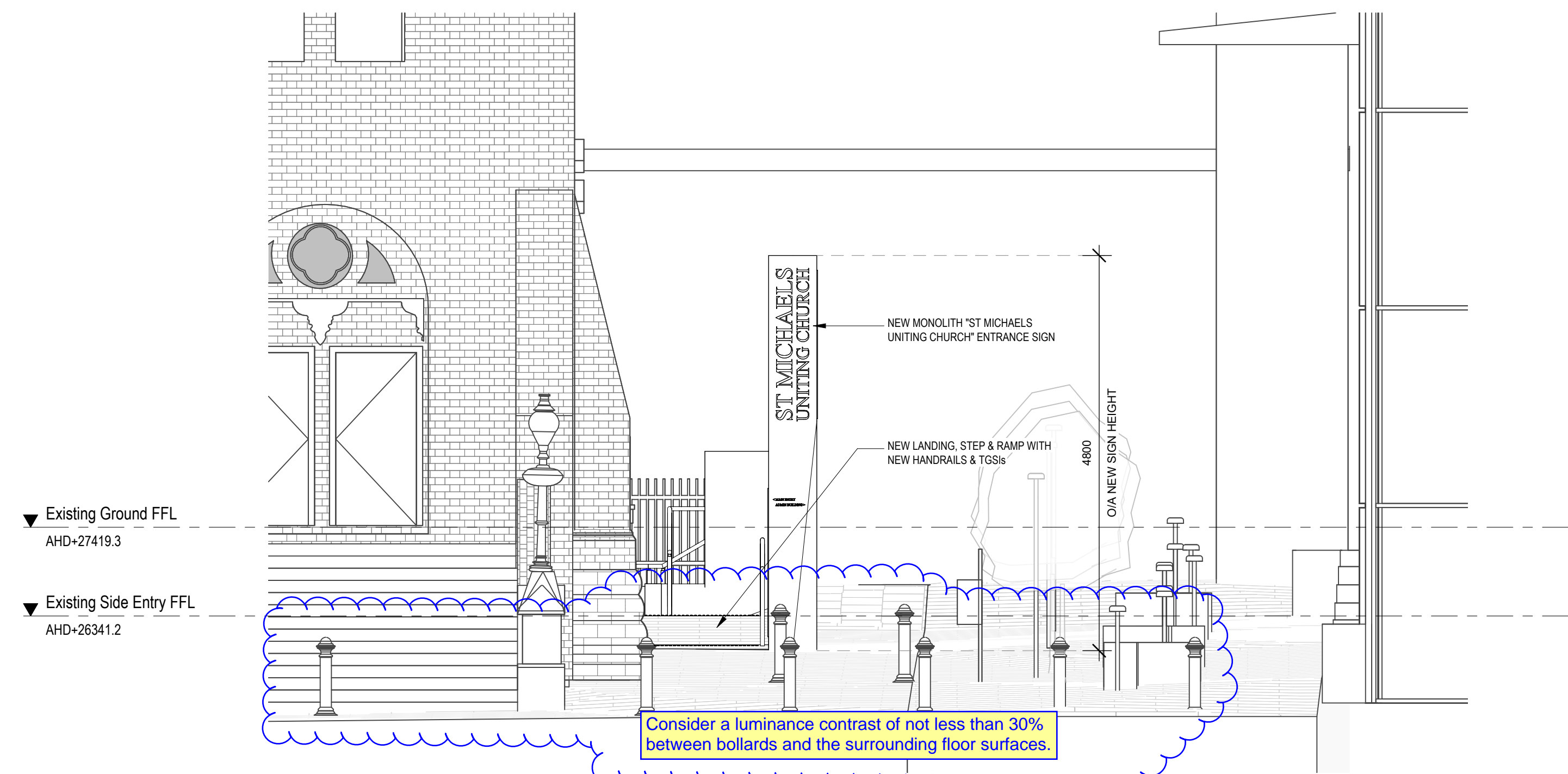




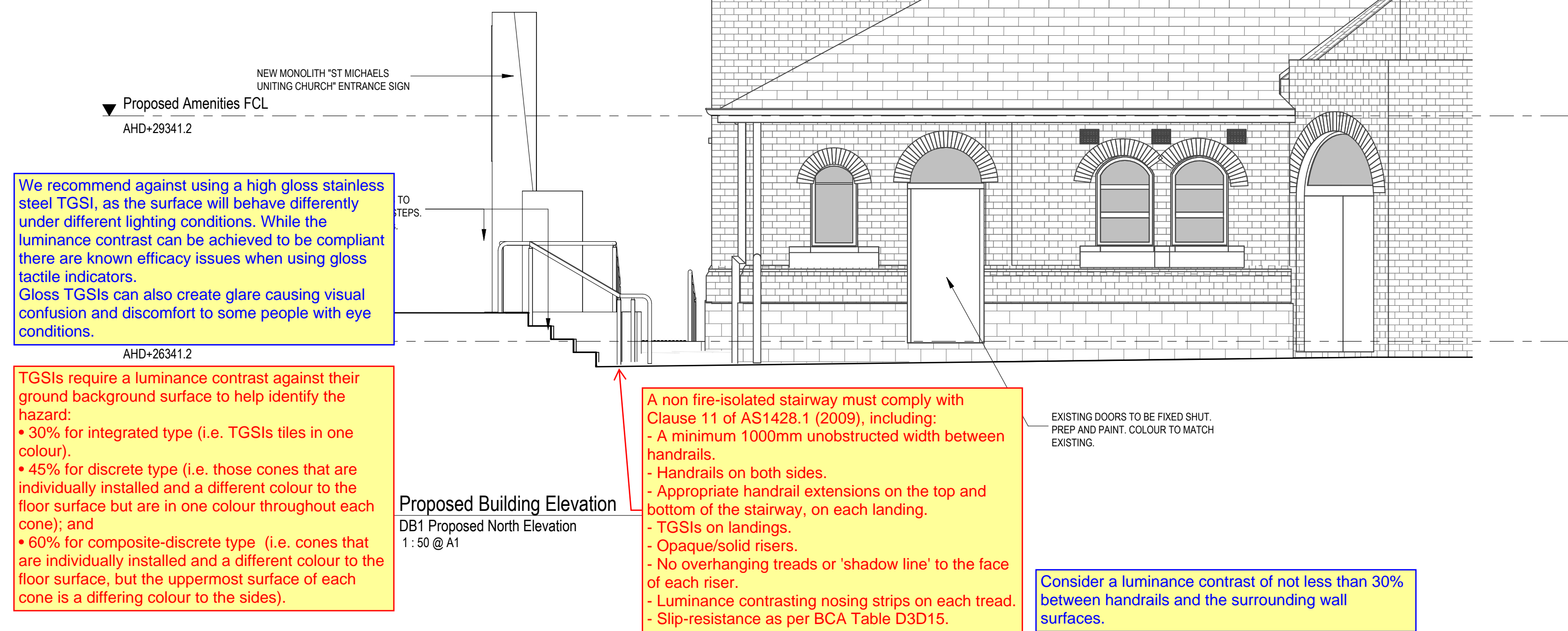
1 Existing Building Elevation  
Existing South Elevation Copy 1  
1:50 @ A1



4 Proposed Building Elevation  
DB1 Demolition North Elevation Copy 1  
1:50 @ A1



2 Proposed Building Elevation  
Existing South Elevation Copy 1 Copy 1  
1:50 @ A1



Proposed Building Elevation  
DB1 Proposed North Elevation  
1:50 @ A1

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DRAFT ISSUE

REV DESCRIPTION DATE

ISSUE PURPOSE  
ISSUED FOR REVIEW

trethowan

25 William Street, Cremorne  
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ARCHITECTURE  
INTERIORS  
HERITAGE

PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne  
DRAWING TITLE  
DB1 - Entry Upgrade Elevation -  
Sheet 2

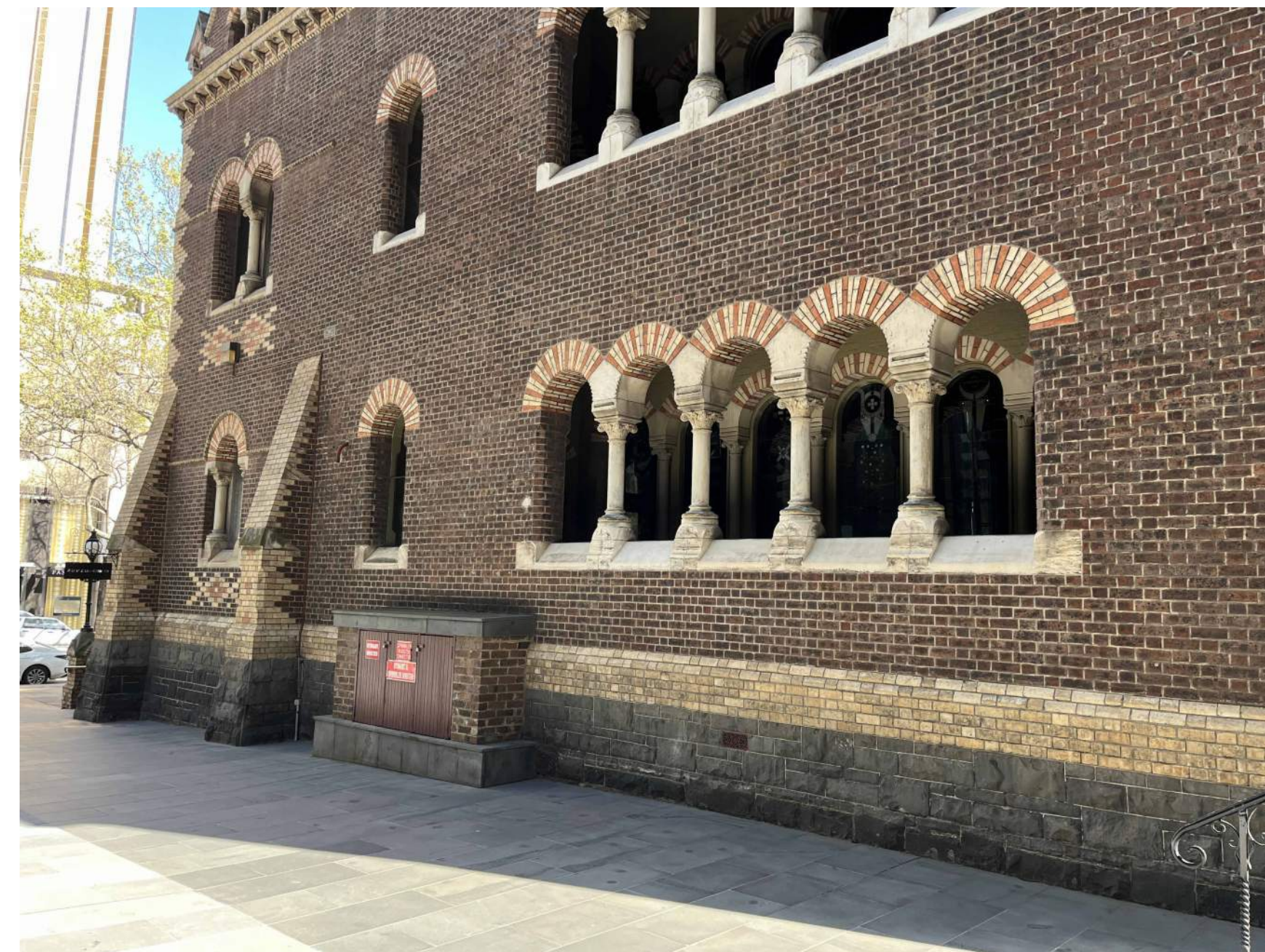
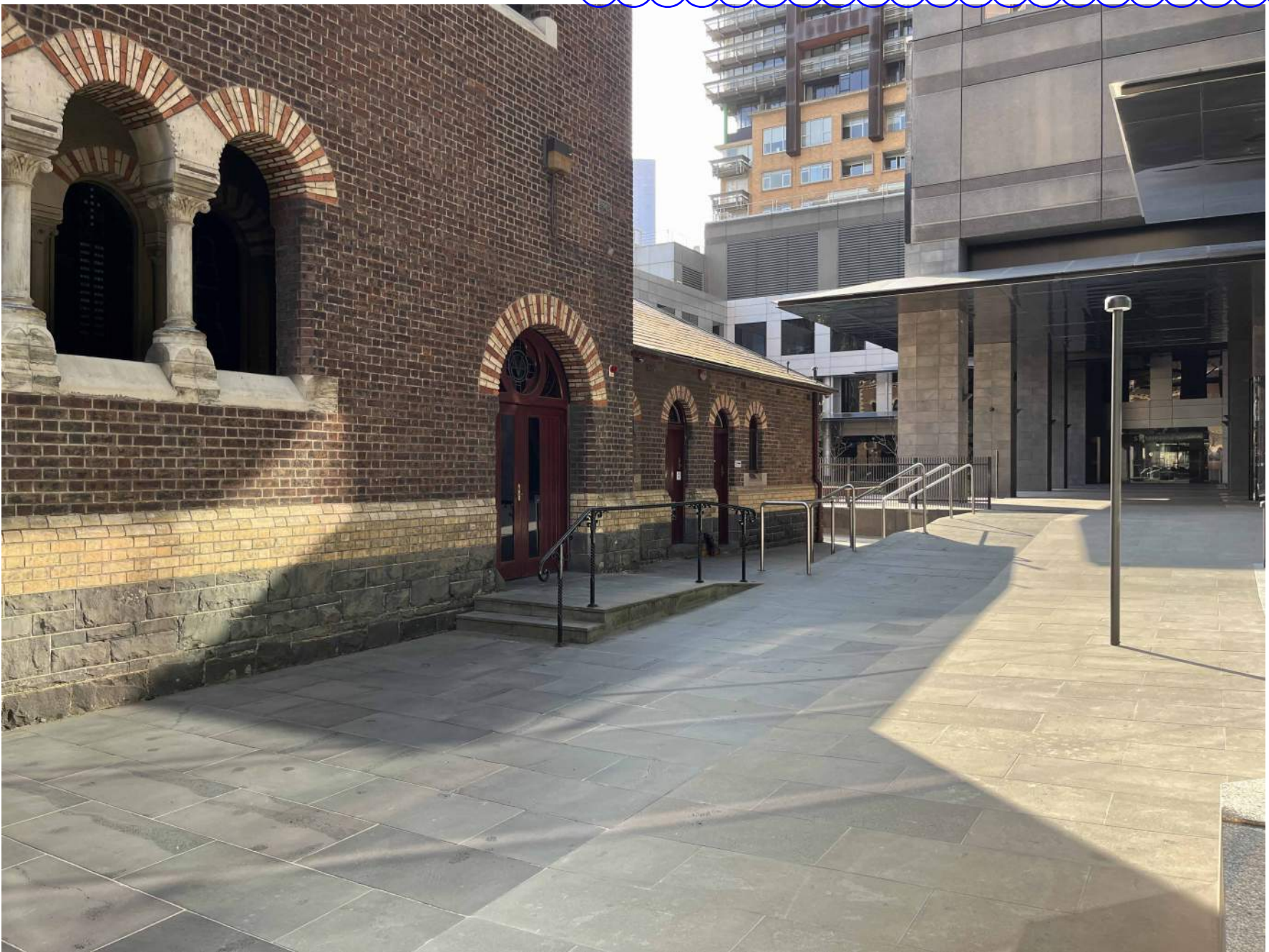
SCALE  
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DRAWING NO.  
SK-402  
DATE REV

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DATE PRINTED 21/12/2024 13:39:39 PM



Consider a luminance contrast of not less than 30% between bollards and the surrounding floor surfaces.



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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
**ISSUED FOR REVIEW**

**trethowan**  
 25 William Street, Cremorne  
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ARCHITECTURE  
 INTERIORS  
 HERITAGE

PROJECT  
**St Michaels Uniting Church**  
 122-136 Collins Street, Melbourne

DRAWING TITLE  
**DB1 - Entry Upgrade Existing Photos**

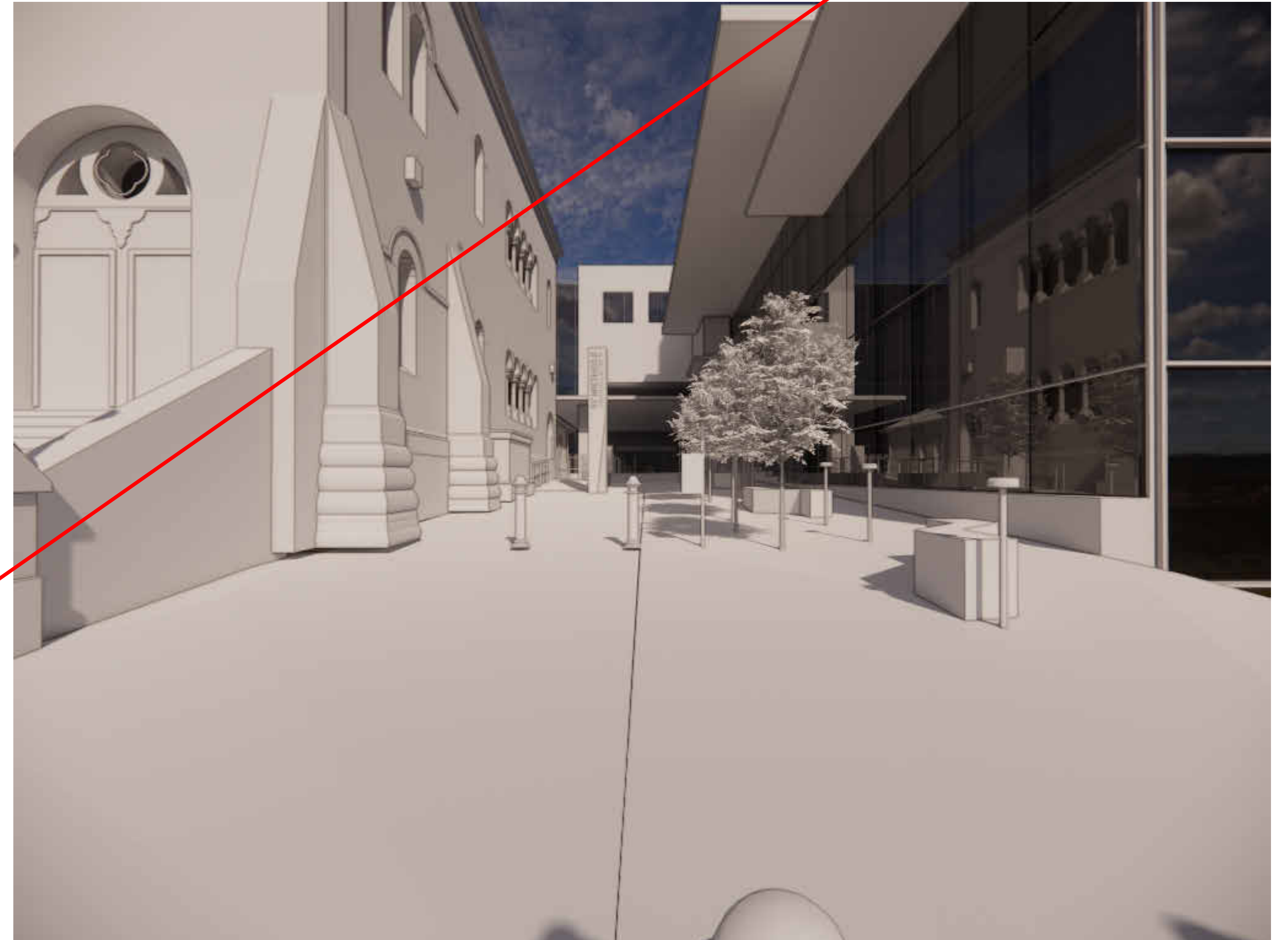
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DRAWING NO.  
**SK-406**

DATE  
 REV



EXISTING - COLLINS STREET APPROACH



PROPOSED - COLLINS STREET APPROACH

**No Comments from Access Central**

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
**ISSUED FOR REVIEW**

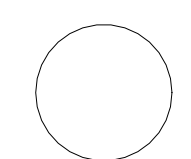
**trethowan**  
 25 William Street, Cremorne  
 T 03 9421 5448 - trethowan.com.au



PROJECT  
**St Michaels Uniting Church**  
 122-136 Collins Street, Melbourne

DRAWING TITLE  
**DB1 - Entry Upgrade Perspective - Sheet 1**

SCALE  
 @ A1



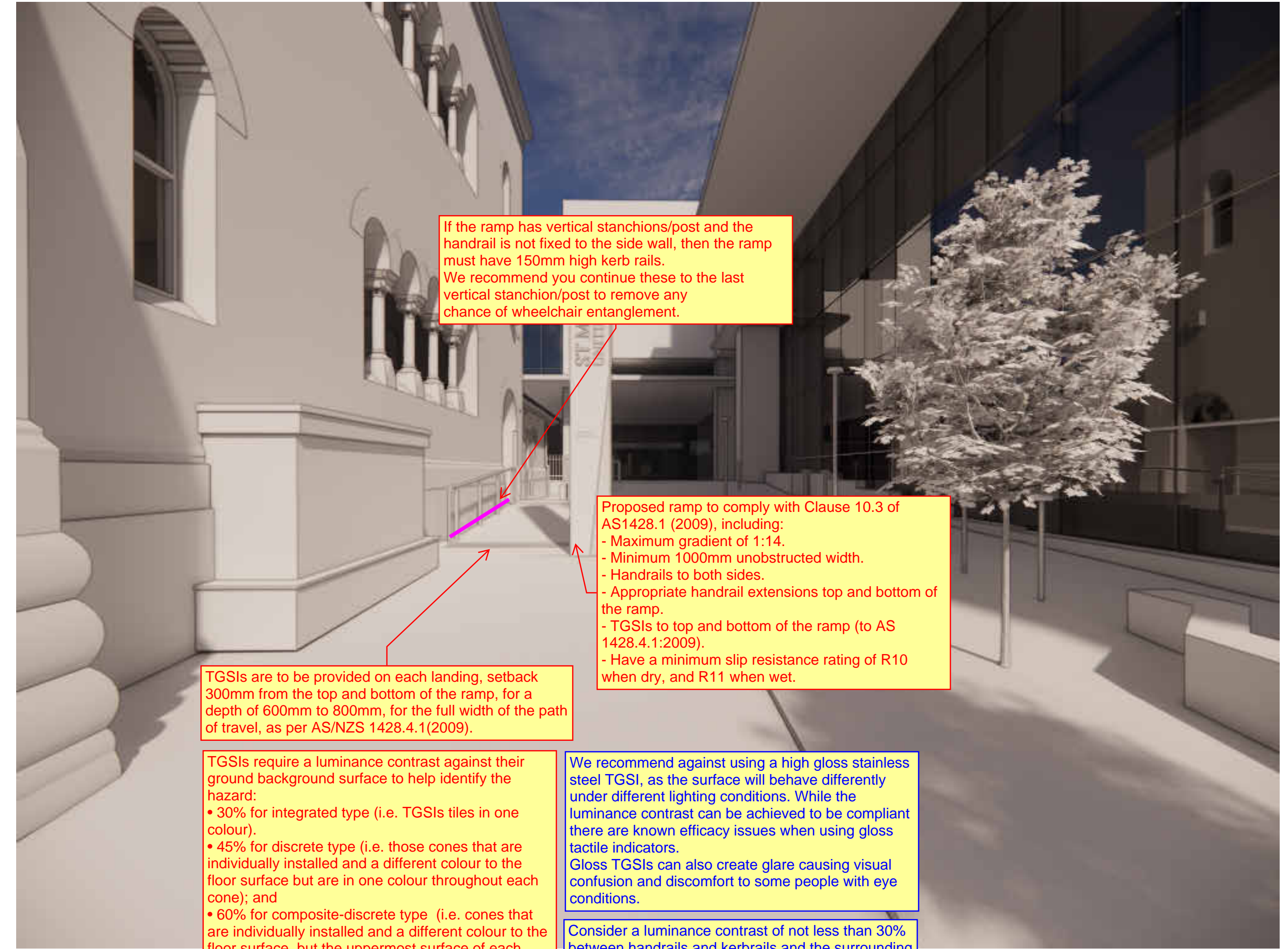
DRAWING NO.  
**SK-407**

DATE  
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REV



EXISTING - ST MICHAELS WALK APPROACH



PROPOSED - ST MICHAELS WALK APPROACH

If the ramp has vertical stanchions/post and the handrail is not fixed to the side wall, then the ramp must have 150mm high kerb rails. We recommend you continue these to the last vertical stanchion/post to remove any chance of wheelchair entanglement.

Proposed ramp to comply with Clause 10.3 of AS1428.1 (2009), including:  
 - Maximum gradient of 1:14.  
 - Minimum 1000mm unobstructed width.  
 - Handrails to both sides.  
 - Appropriate handrail extensions top and bottom of the ramp.  
 - TGSIs to top and bottom of the ramp (to AS 1428.4.1:2009).  
 - Have a minimum slip resistance rating of R10 when dry, and R11 when wet.

TGSIs are to be provided on each landing, setback 300mm from the top and bottom of the ramp, for a depth of 600mm to 800mm, for the full width of the path of travel, as per AS/NZS 1428.4.1(2009).

TGSIs require a luminance contrast against their ground background surface to help identify the hazard:  
 • 30% for integrated type (i.e. TGSIs tiles in one colour);  
 • 45% for discrete type (i.e. those cones that are individually installed and a different colour to the floor surface but are in one colour throughout each cone); and  
 • 60% for composite-discrete type (i.e. cones that are individually installed and a different colour to the floor surface, but the uppermost surface of each cone is a differing colour to the sides).

We recommend against using a high gloss stainless steel TGSIs, as the surface will behave differently under different lighting conditions. While the luminance contrast can be achieved to be compliant there are known efficacy issues when using gloss tactile indicators. Gloss TGSIs can also create glare causing visual confusion and discomfort to some people with eye conditions.

Consider a luminance contrast of not less than 30% between handrails and kerbrails and the surrounding wall surfaces.

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**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE	PROJECT	SCALE	DRAWING NO.
			ISSUED FOR REVIEW	St Michaels Uniting Church 122-136 Collins Street, Melbourne	@ A1	<b>SK-408</b>
			trethowan ARCHITECTURE INTERIORS HERITAGE	DRAWING TITLE DB1 - Entry Upgrade Perspective - Sheet 2		DATE REV
			25 William Street, Cremorne T 03 9421 5448 - trethowan.com.au			

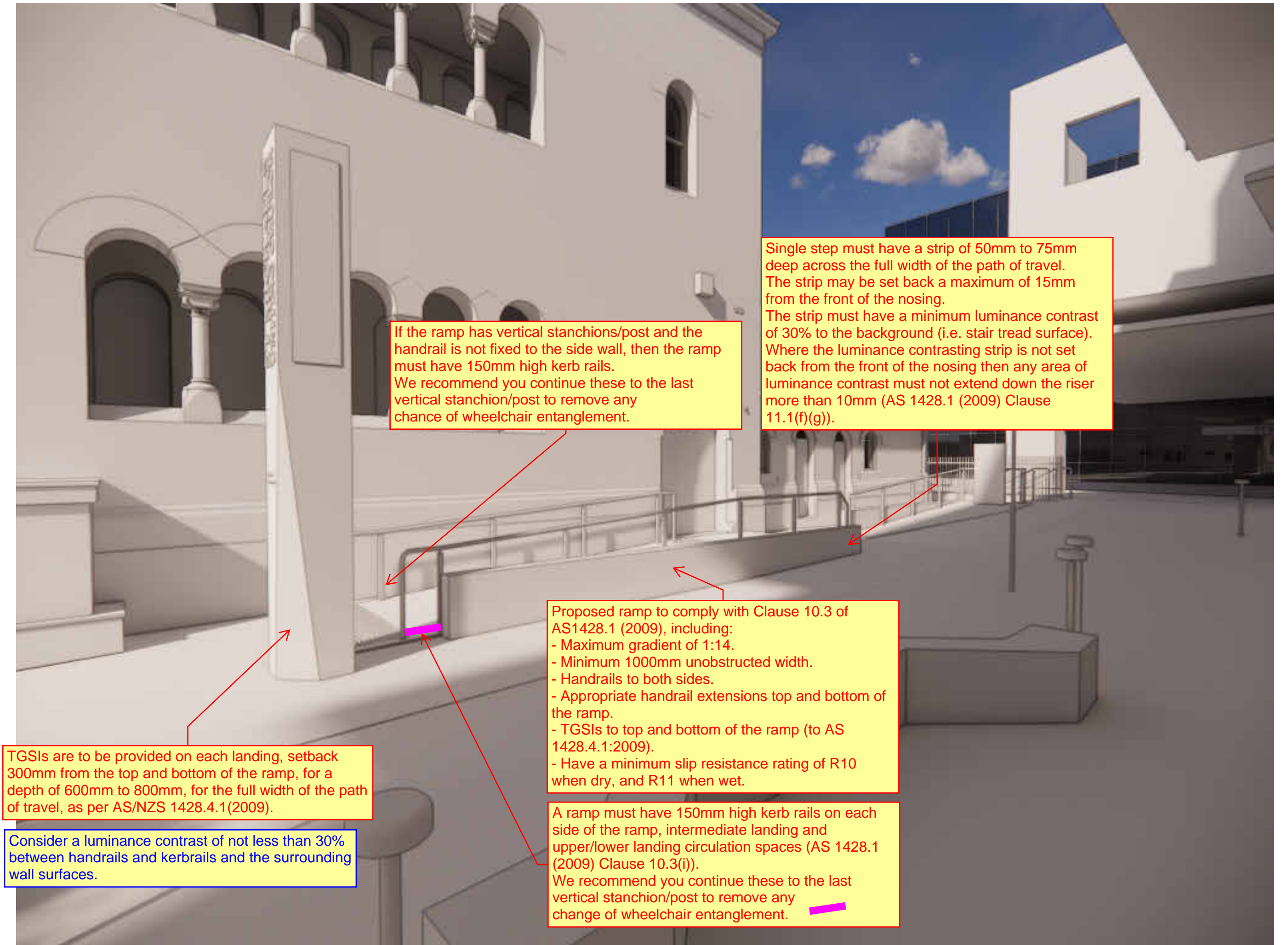


EXISTING - VIEW FROM ADJACENT TITLE

TGSIs require a luminance contrast against their ground background surface to help identify the hazard:

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- 45% for discrete type (i.e. those cones that are individually installed and a different colour to the floor surface but are in one colour throughout each cone); and
- 60% for composite-discrete type (i.e. cones that are individually installed and a different colour to the floor surface, but the uppermost surface of each cone is a differing colour to the sides).

We recommend against using a high gloss stainless steel TGSIs, as the surface will behave differently under different lighting conditions. While the luminance contrast can be achieved to be compliant there are known efficacy issues when using gloss tactile indicators. Gloss TGSIs can also create glare causing visual confusion and discomfort to some people with eye conditions.



PROPOSED - VIEW FROM ADJACENT TITLE

If the ramp has vertical stanchions/post and the handrail is not fixed to the side wall, then the ramp must have 150mm high kerb rails. We recommend you continue these to the last vertical stanchion/post to remove any chance of wheelchair entanglement.

Single step must have a strip of 50mm to 75mm deep across the full width of the path of travel. The strip may be set back a maximum of 15mm from the front of the nosing. The strip must have a minimum luminance contrast of 30% to the background (i.e. stair tread surface). Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast must not extend down the riser more than 10mm (AS 1428.1 (2009) Clause 11.1(f)(g)).

Proposed ramp to comply with Clause 10.3 of AS1428.1 (2009), including:

- Maximum gradient of 1:14.
- Minimum 1000mm unobstructed width.
- Handrails to both sides.
- Appropriate handrail extensions top and bottom of the ramp.
- TGSIs to top and bottom of the ramp (to AS 1428.4.1:2009).
- Have a minimum slip resistance rating of R10 when dry, and R11 when wet.

A ramp must have 150mm high kerb rails on each side of the ramp, intermediate landing and upper/lower landing circulation spaces (AS 1428.1 (2009) Clause 10.3(i)). We recommend you continue these to the last vertical stanchion/post to remove any change of wheelchair entanglement.

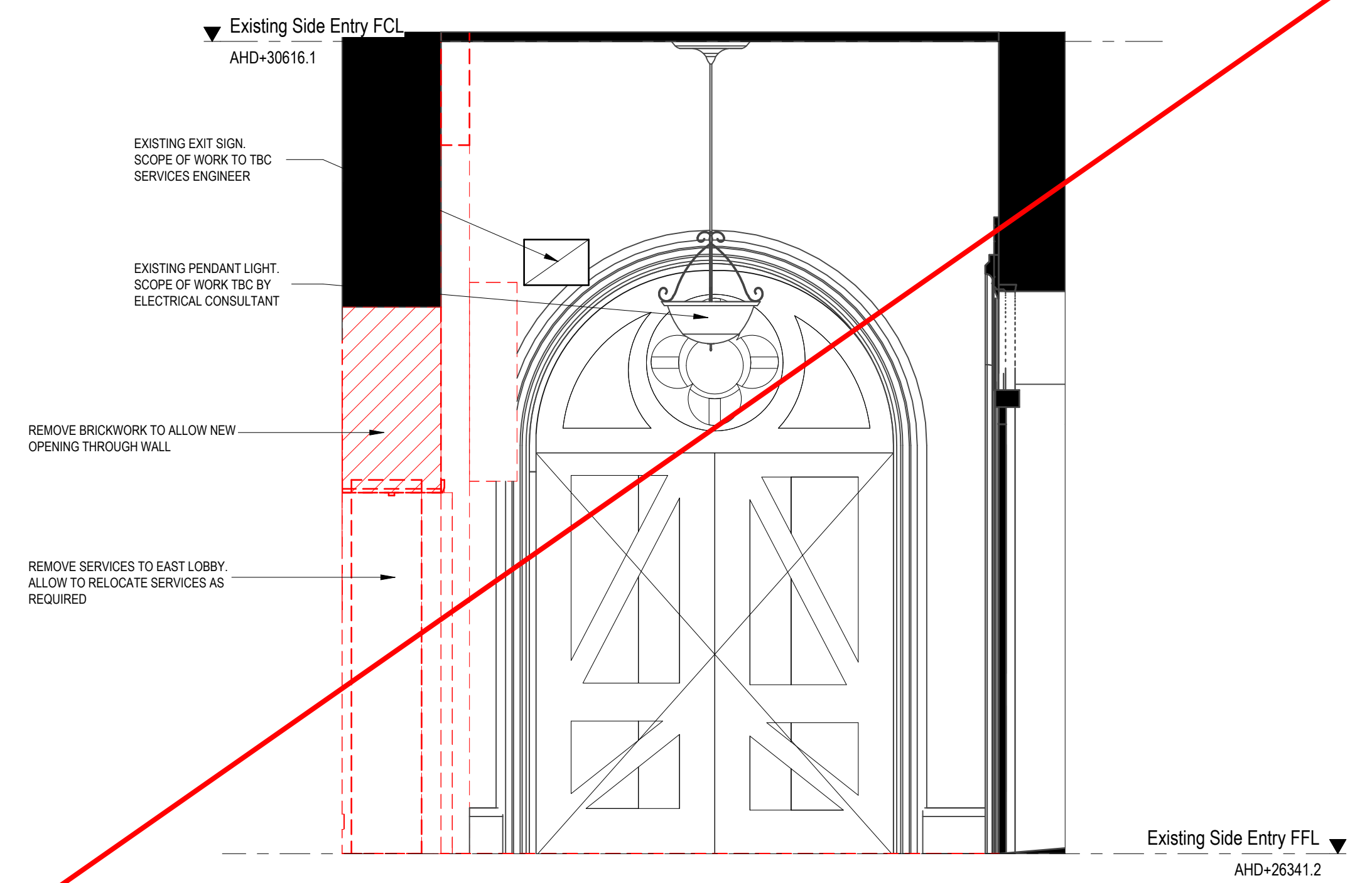
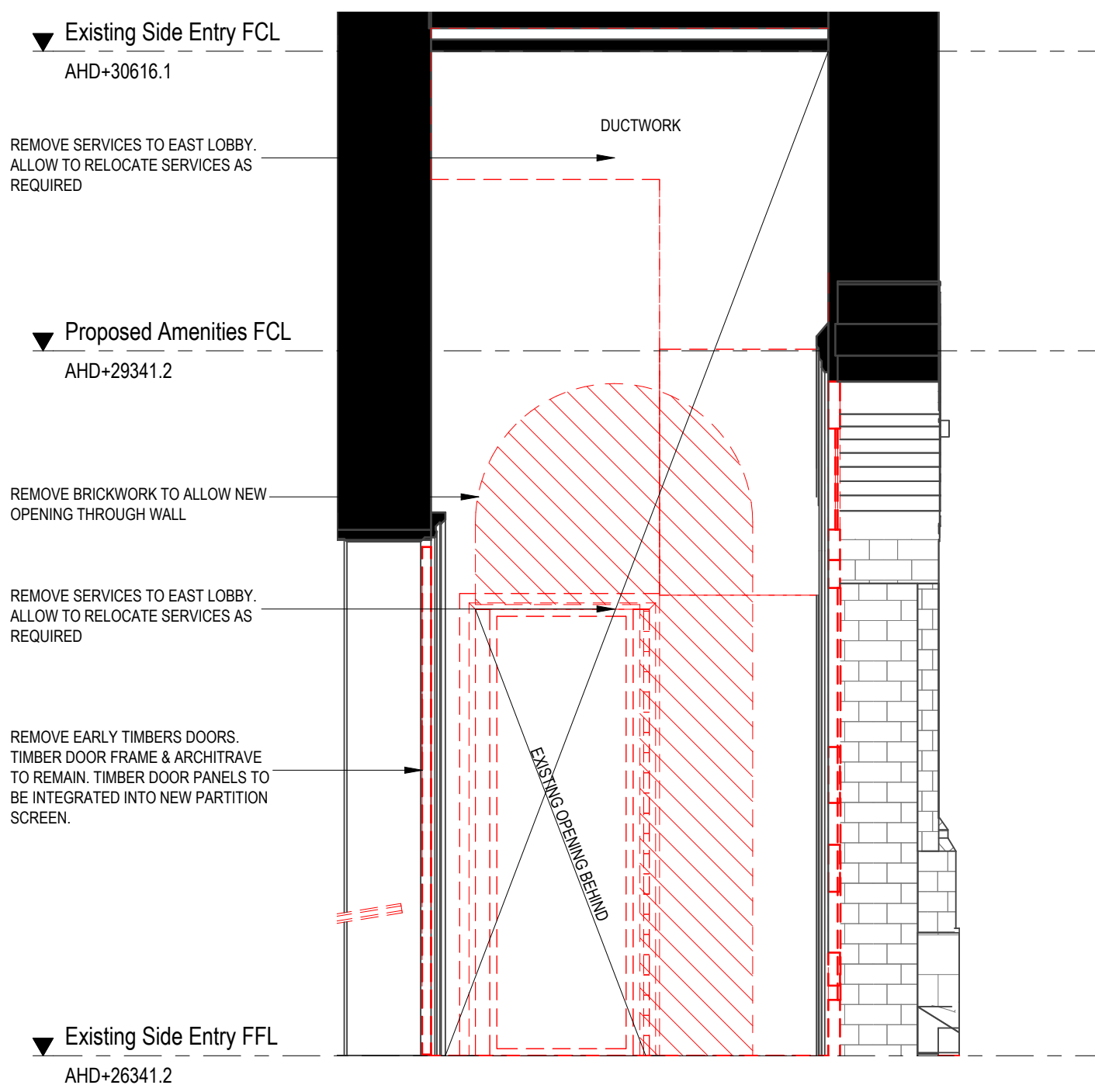
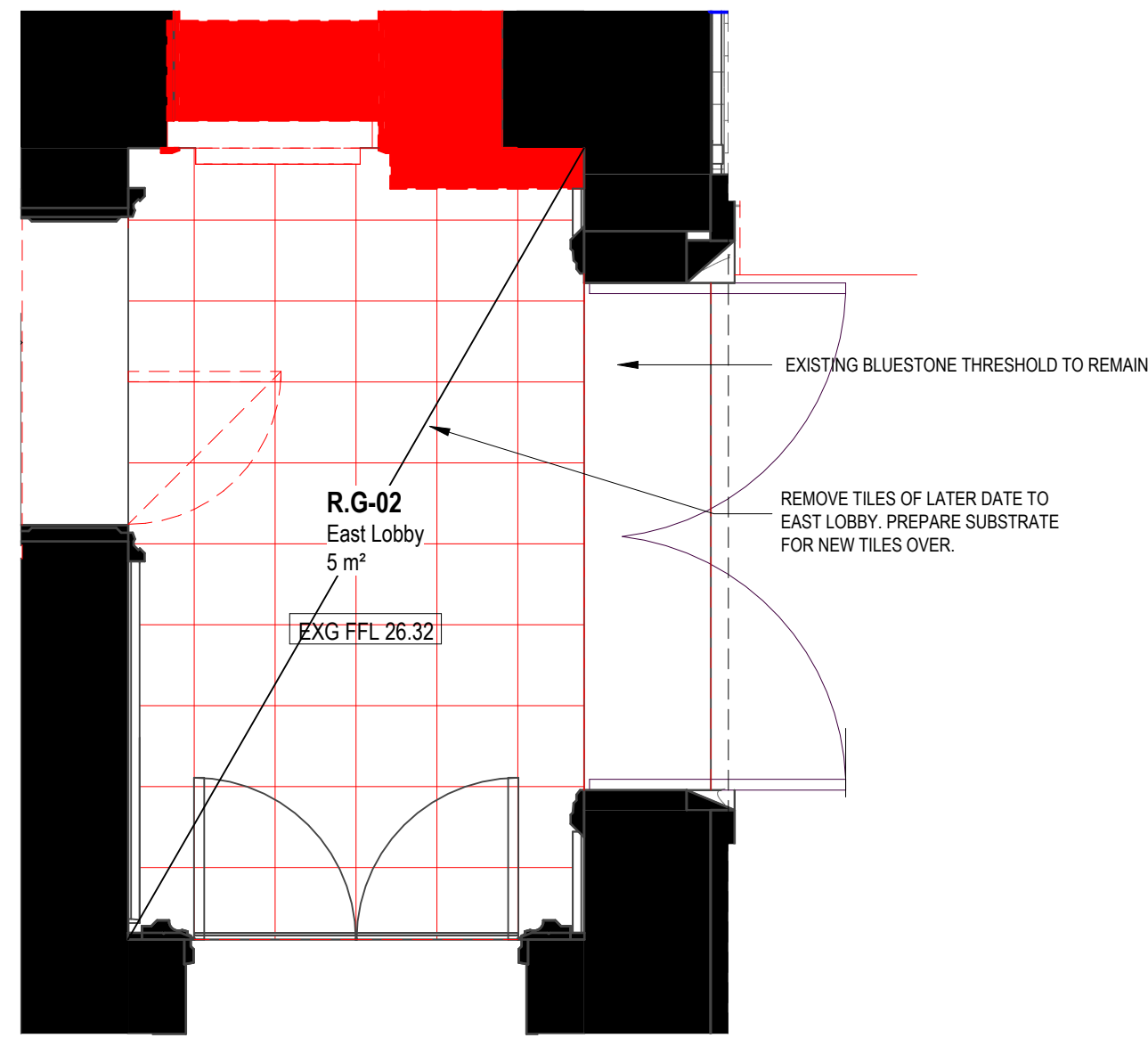
TGSIs are to be provided on each landing, setback 300mm from the top and bottom of the ramp, for a depth of 600mm to 800mm, for the full width of the path of travel, as per AS/NZS 1428.4.1(2009).

Consider a luminance contrast of not less than 30% between handrails and kerbrails and the surrounding wall surfaces.

**GENERAL NOTES**  
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**DRAFT ISSUE**

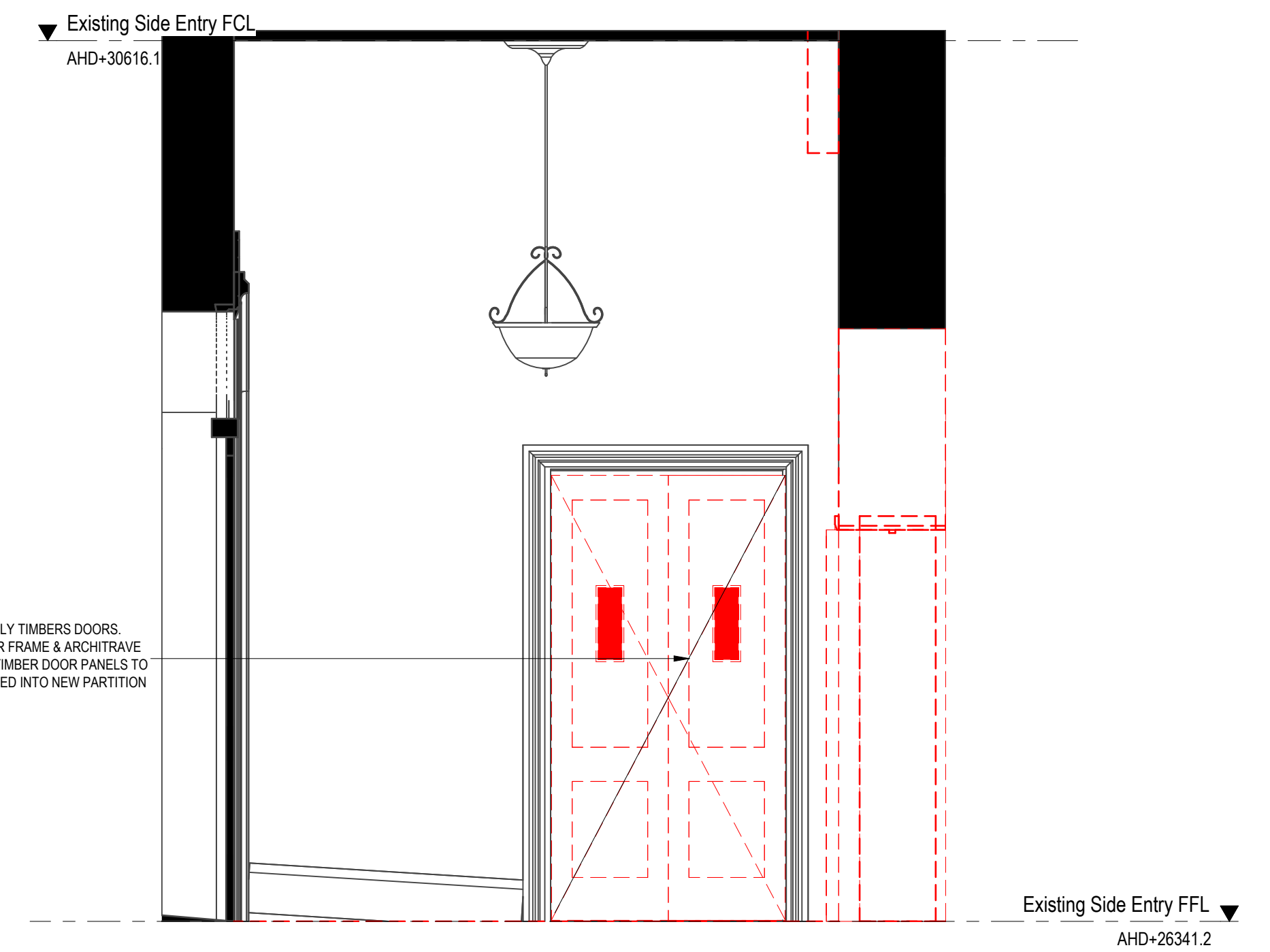
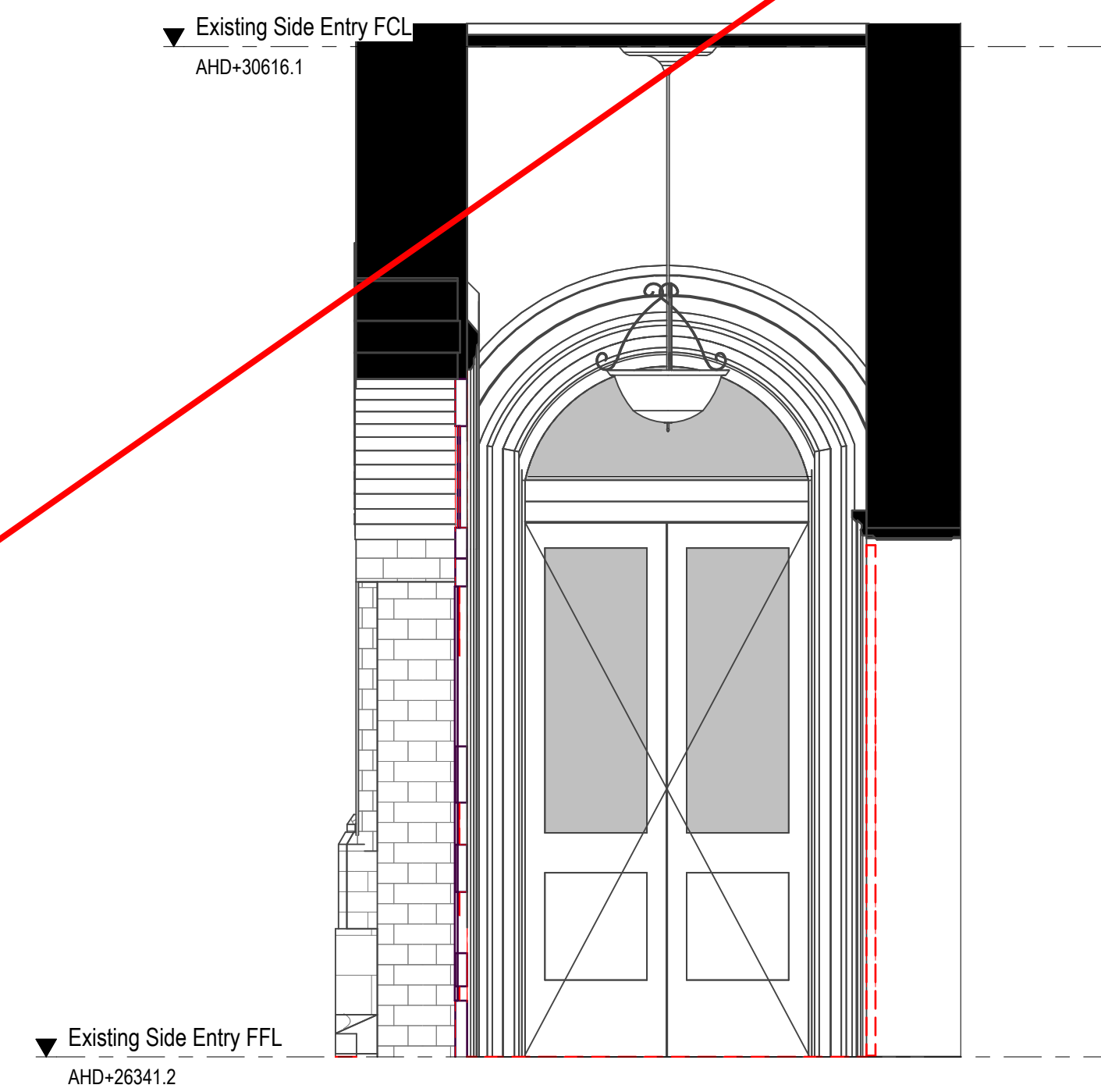
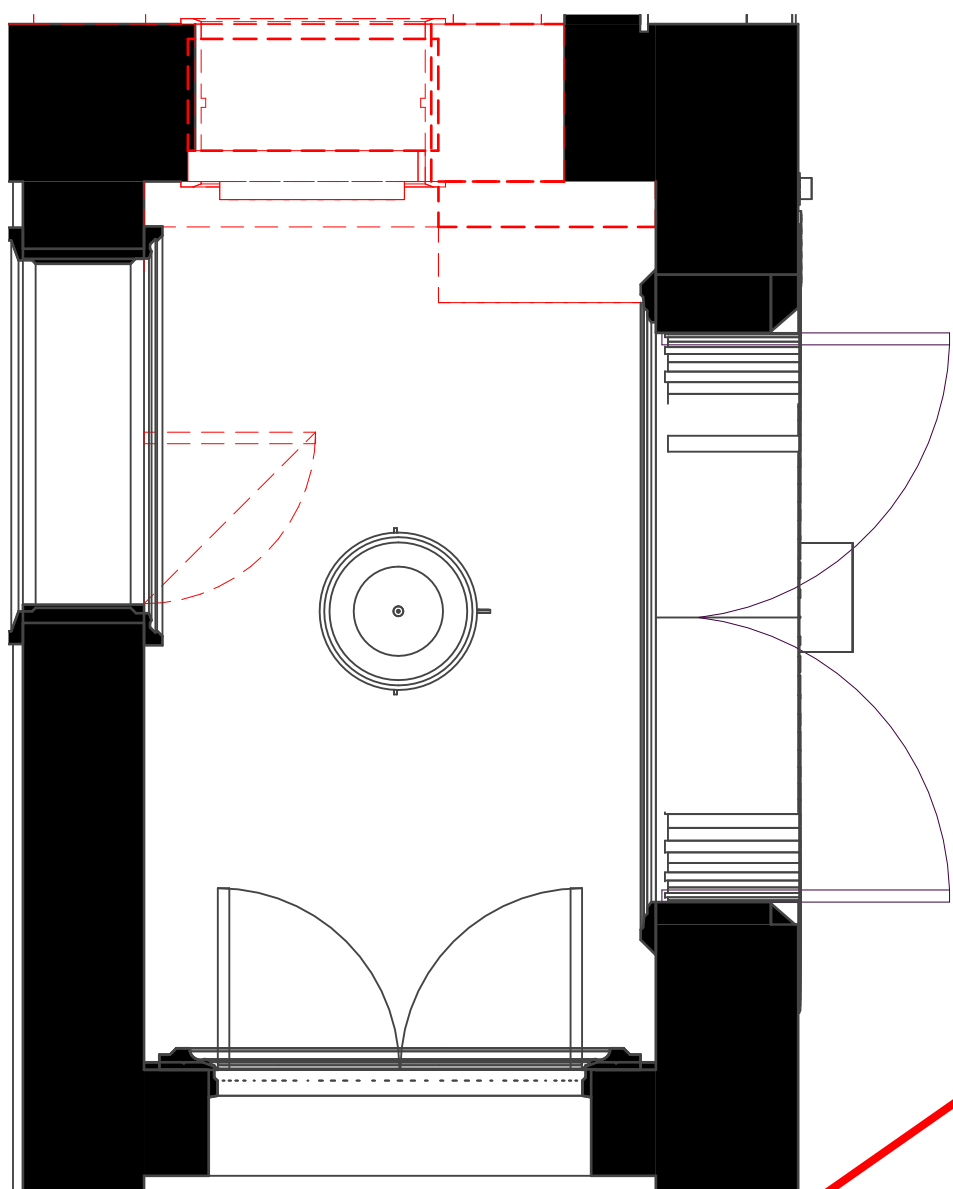
REV	DESCRIPTION	DATE	ISSUE PURPOSE	PROJECT	SCALE	DRAWING NO.
			ISSUED FOR REVIEW	St Michaels Uniting Church 122-136 Collins Street, Melbourne	@ A1	<b>SK-409</b>
			trethowan ARCHITECTURE INTERIORS HERITAGE	DRAWING TITLE DB1 - Entry Upgrade Perspective - Sheet 3		DATE REV



P1 Demolition Floor Plan  
Proposed Ground Floor Plan - R.G-02 East Lobby Copy 2  
1: 25 @ A1

1 Existing Building Elevation  
R.G-02 East Lobby - Elevation 1 Copy 2  
1: 25 @ A1

2 Existing Building Elevation  
R.G-02 East Lobby - Elevation 2 Copy 2  
1: 25 @ A1



5 Demolition Ceiling Plan  
DB1 Demolition East Lobby Ceiling Plan  
1: 25 @ A1

4 Existing Building Elevation  
R.G-02 East Lobby - Elevation 4 Copy 2  
1: 25 @ A1

**No Comments from Access Central**

GENERAL NOTES  
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**DRAFT ISSUE**

REV DESCRIPTION DATE

ISSUE PURPOSE  
 ISSUED FOR REVIEW

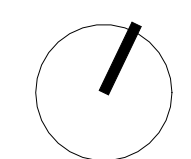
trethowan  
 ARCHITECTURE  
 INTERIORS  
 HERITAGE

25 William Street, Cremorne  
 T 03 9421 5448 - trethowan.com.au

PROJECT  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

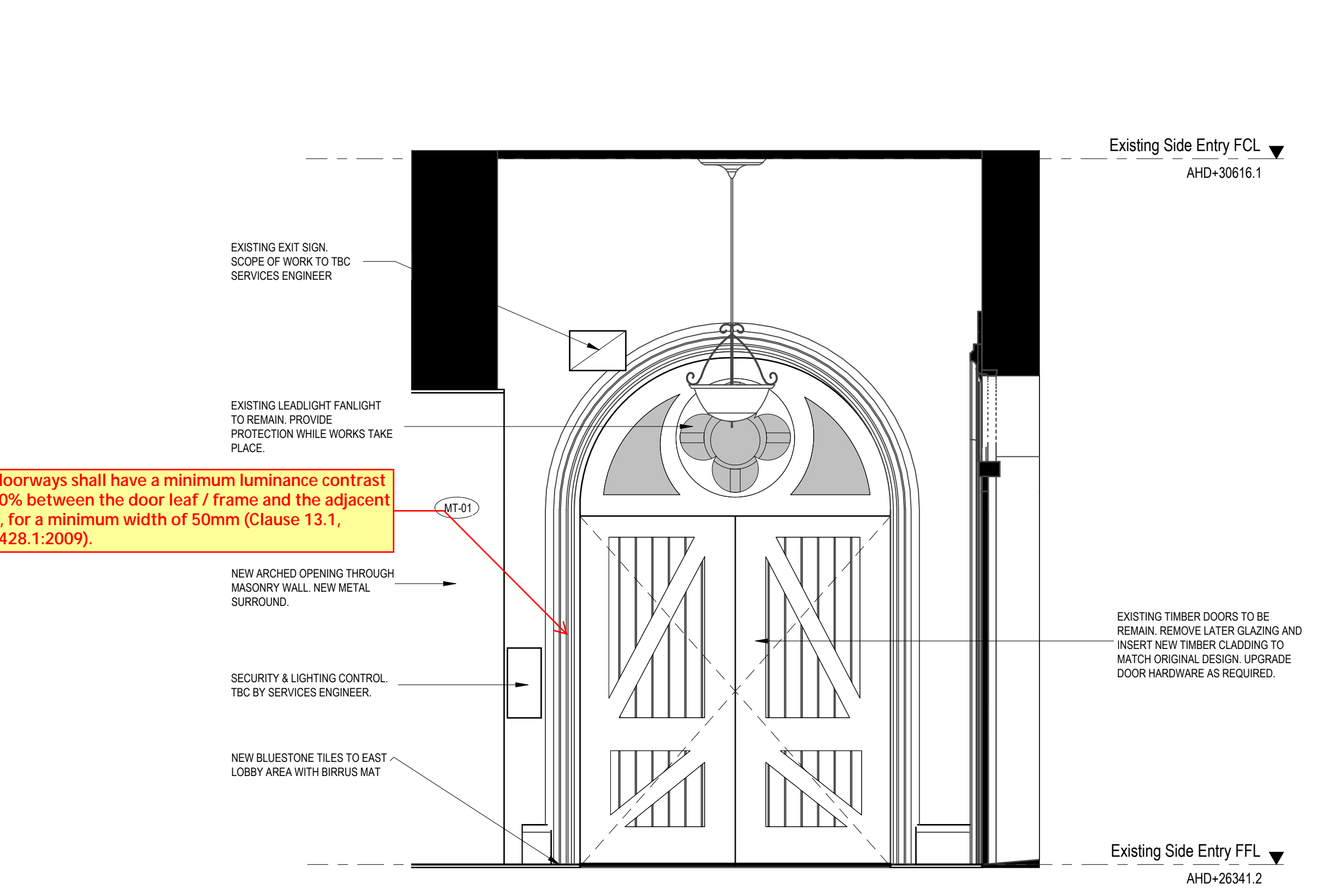
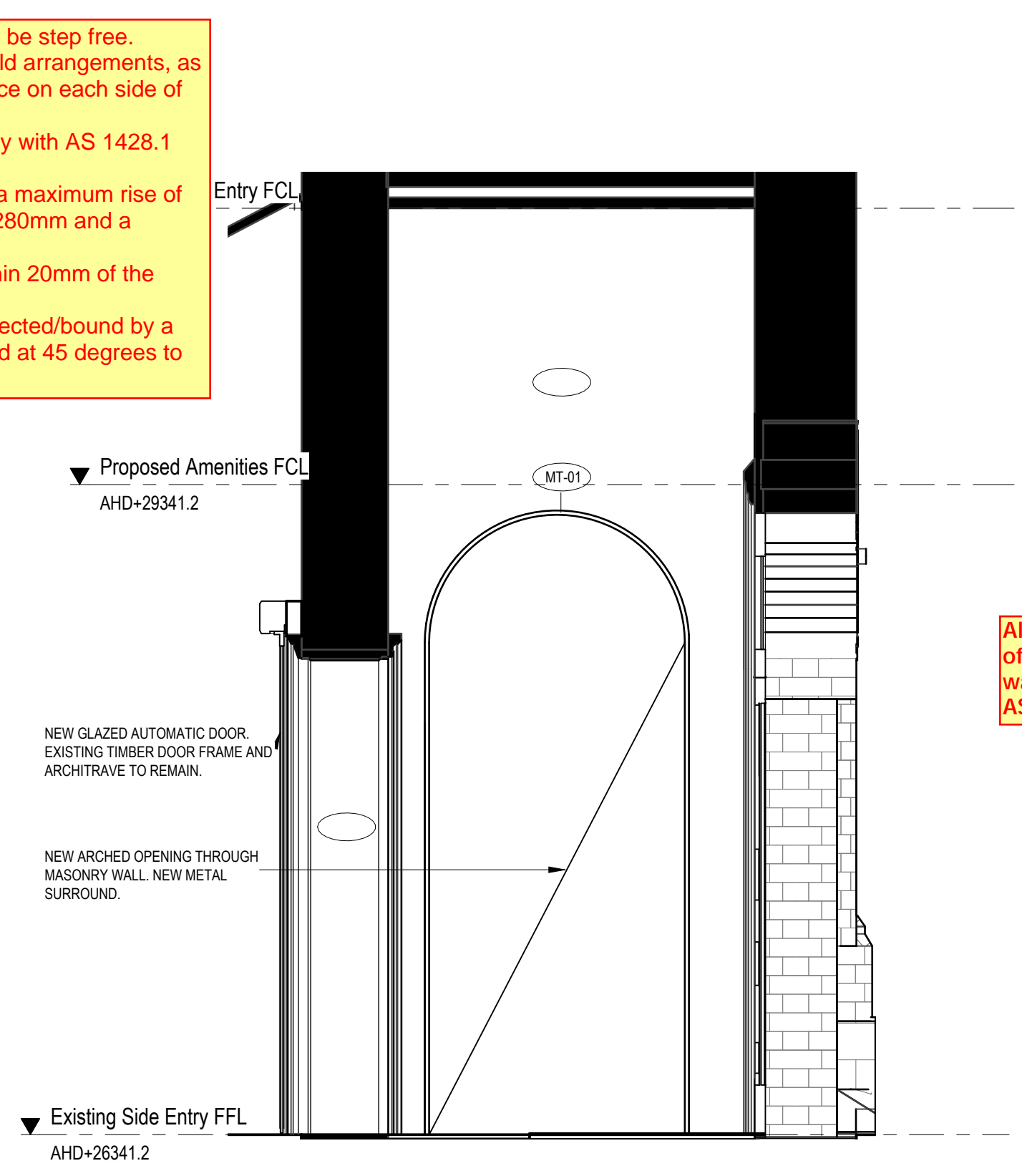
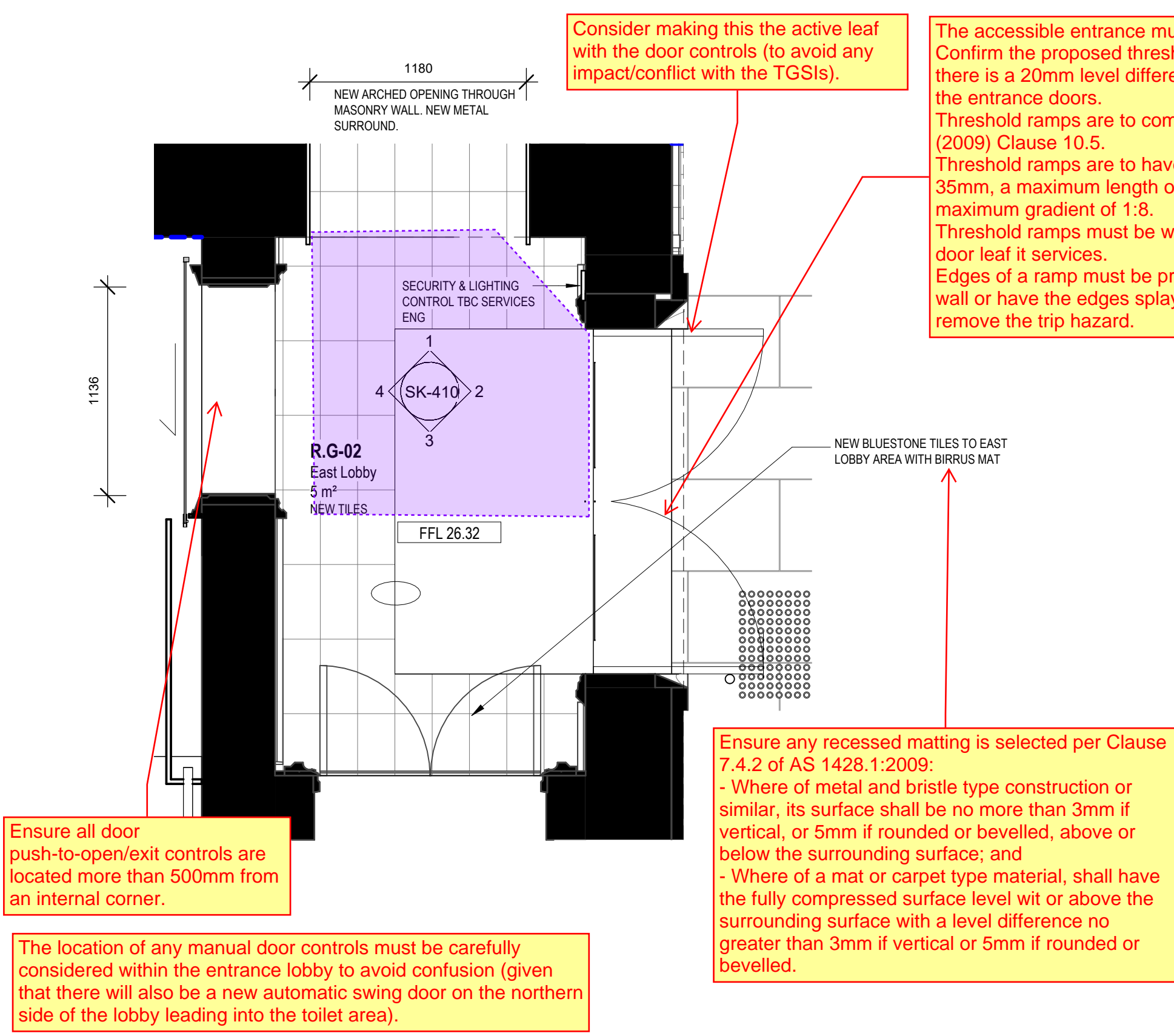
DRAWING TITLE  
 DB1 - Demolition East Lobby Plan & Int Elevations

SCALE  
 1: 50 @ A3  
 1: 25 @ A1



DRAWING NO.  
**SK-410**

DATE REV

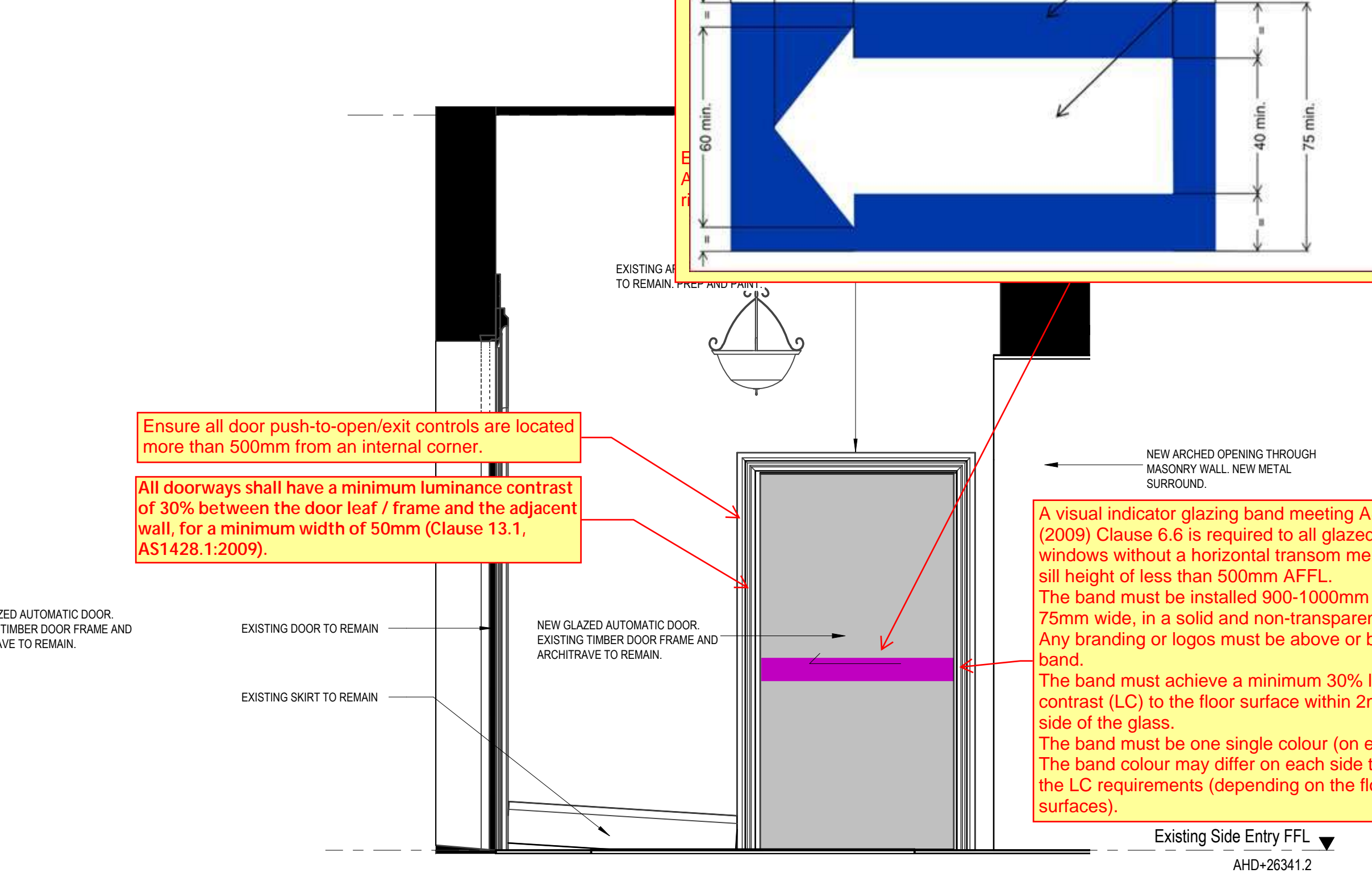
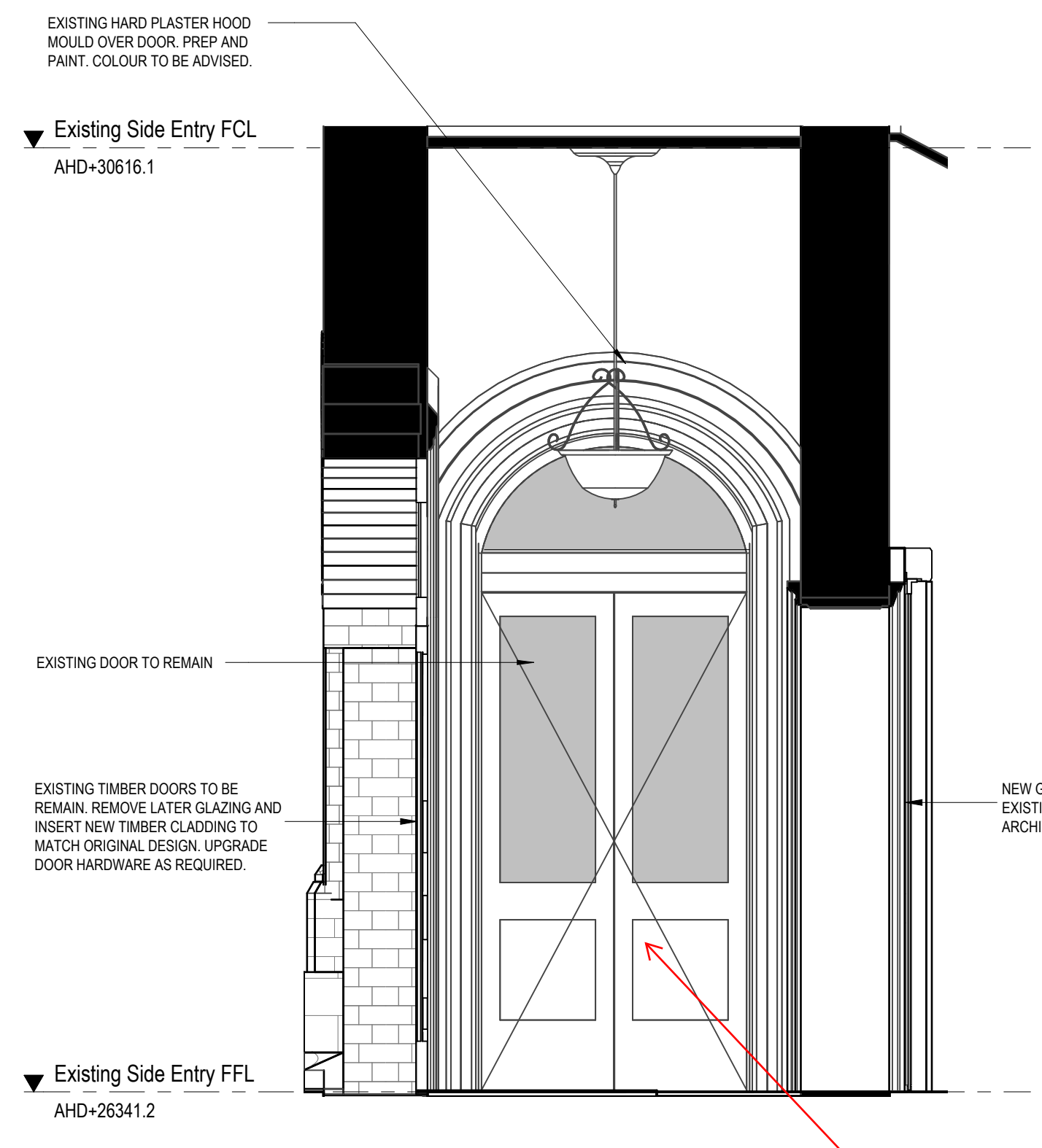
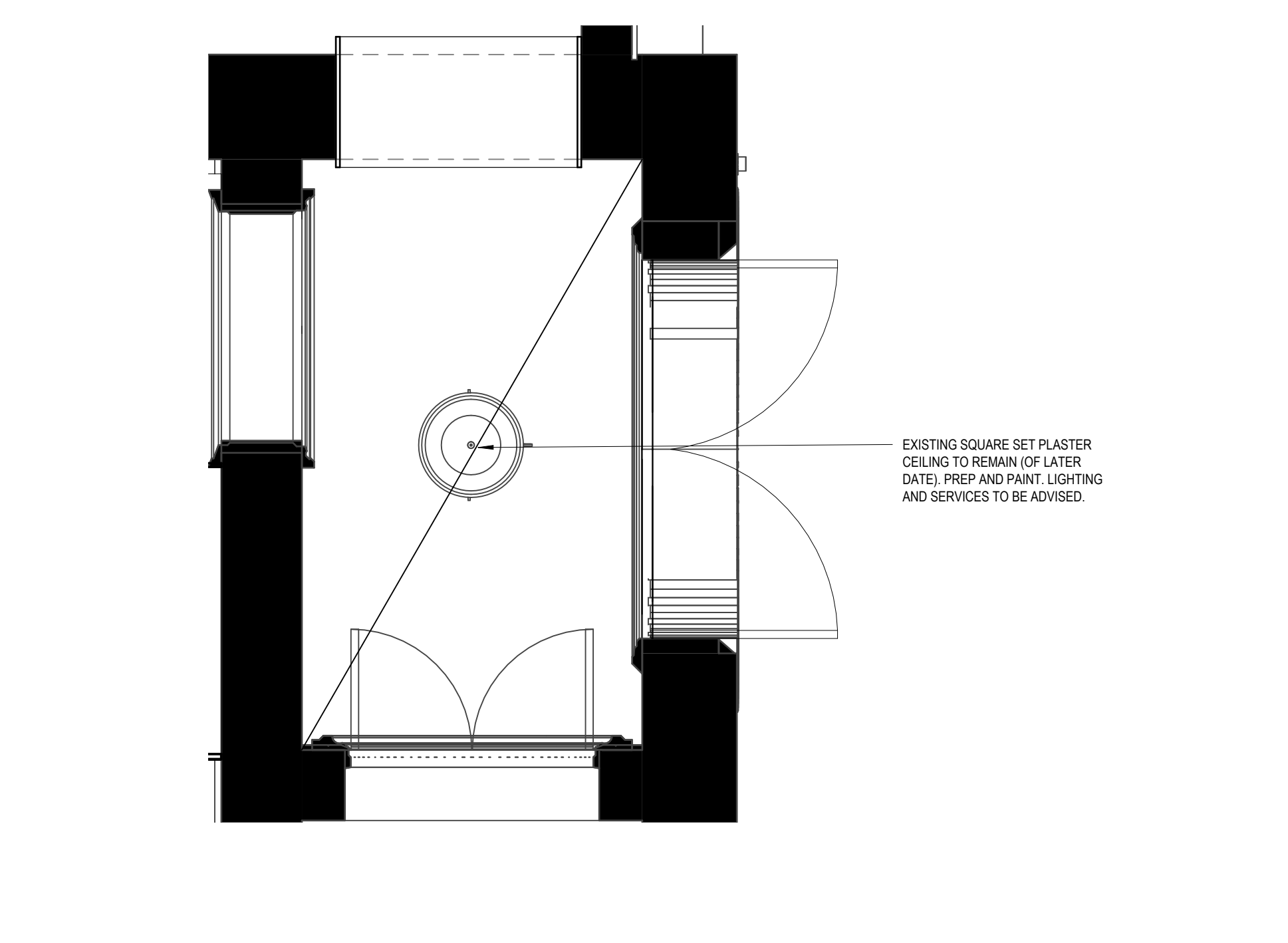
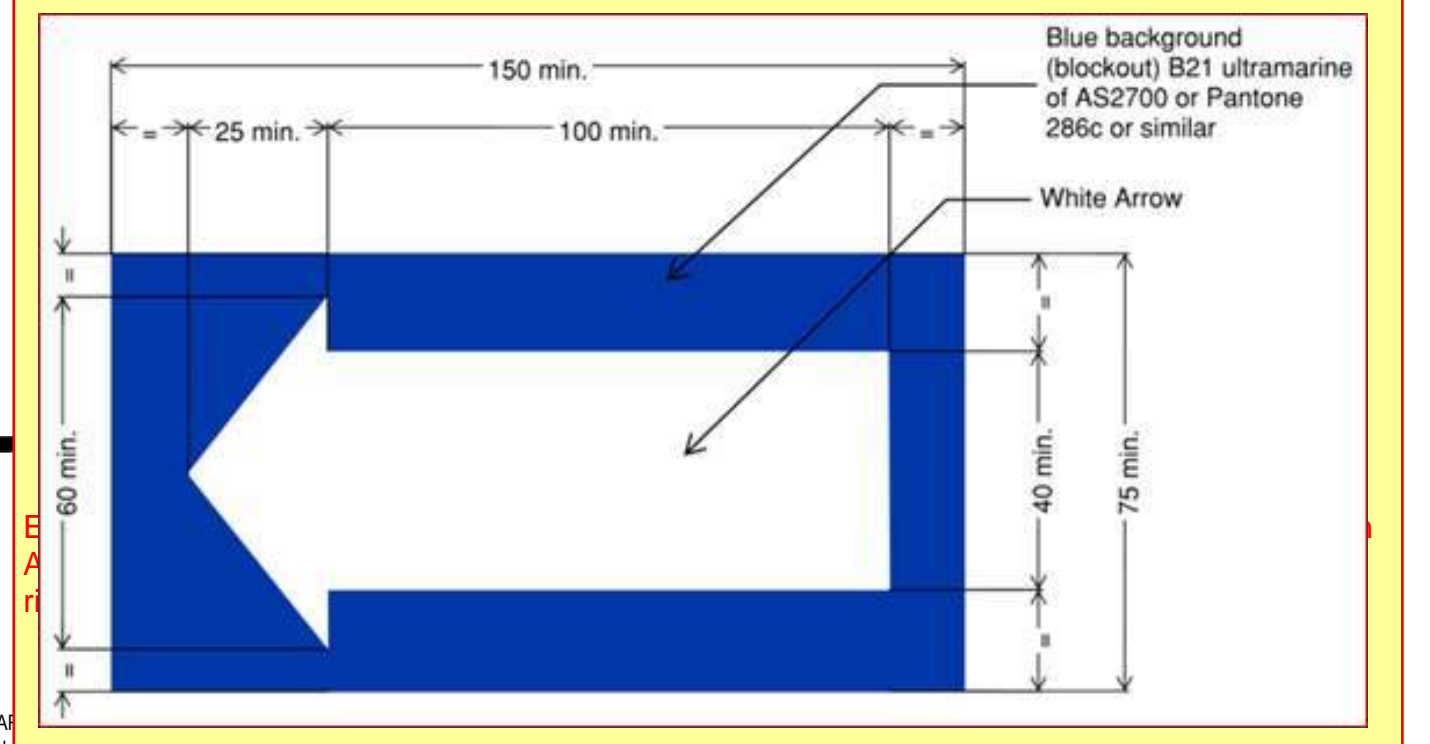


**P1** Proposed Floor Plans  
Proposed Ground Floor Plan - R.G-02 East Lobby  
1: 25 @ A1

**1** Proposed Internal Elevations  
R.G-02 East Lobby - Elevation 1  
1: 25 @ A1

**2** Proposed Internal Elevations  
R.G-02 East Lobby - Elevation 2  
1: 25 @ A1

Signage must be visible on both sides of the automatic sliding door in accordance with AS 5007. The expected signs are shown below (in accordance with AS 5007).



**5** Proposed Ceiling Plan  
DB1 Proposed East Lobby Ceiling Plan  
1: 25 @ A1

**3** Proposed Internal Elevations  
R.G-02 East Lobby - Elevation 3  
1: 25 @ A1

**4** Proposed Internal Elevations  
R.G-02 East Lobby - Elevation 4  
1: 25 @ A1

Entry door to have a minimum clear opening width of 850mm (i.e. 920mm door leaf). Where double doors are used, 850mm clear opening shall apply to the active leaf.

A visual indicator glazing band meeting AS 1428.1 (2009) Clause 6.6 is required to all glazed doors and windows without a horizontal transom member and a sill height of less than 500mm AFFL. The band must be installed 900-1000mm AFFL, 75mm wide, in a solid and non-transparent film. Any branding or logos must be above or below this band. The band must achieve a minimum 30% luminance contrast (LC) to the floor surface within 2m of each side of the glass. The band must be one single colour (on each side). The band colour may differ on each side to achieve the LC requirements (depending on the floor surfaces).

**GENERAL NOTES**  
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Builder / Contractors to notify the Architect of discrepancies.  
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**DRAFT ISSUE**

REV DESCRIPTION DATE

ISSUE PURPOSE  
**ISSUED FOR REVIEW**

trethowan  
25 William Street, Cremorne  
T 03 9421 5448 - trethowan.com.au

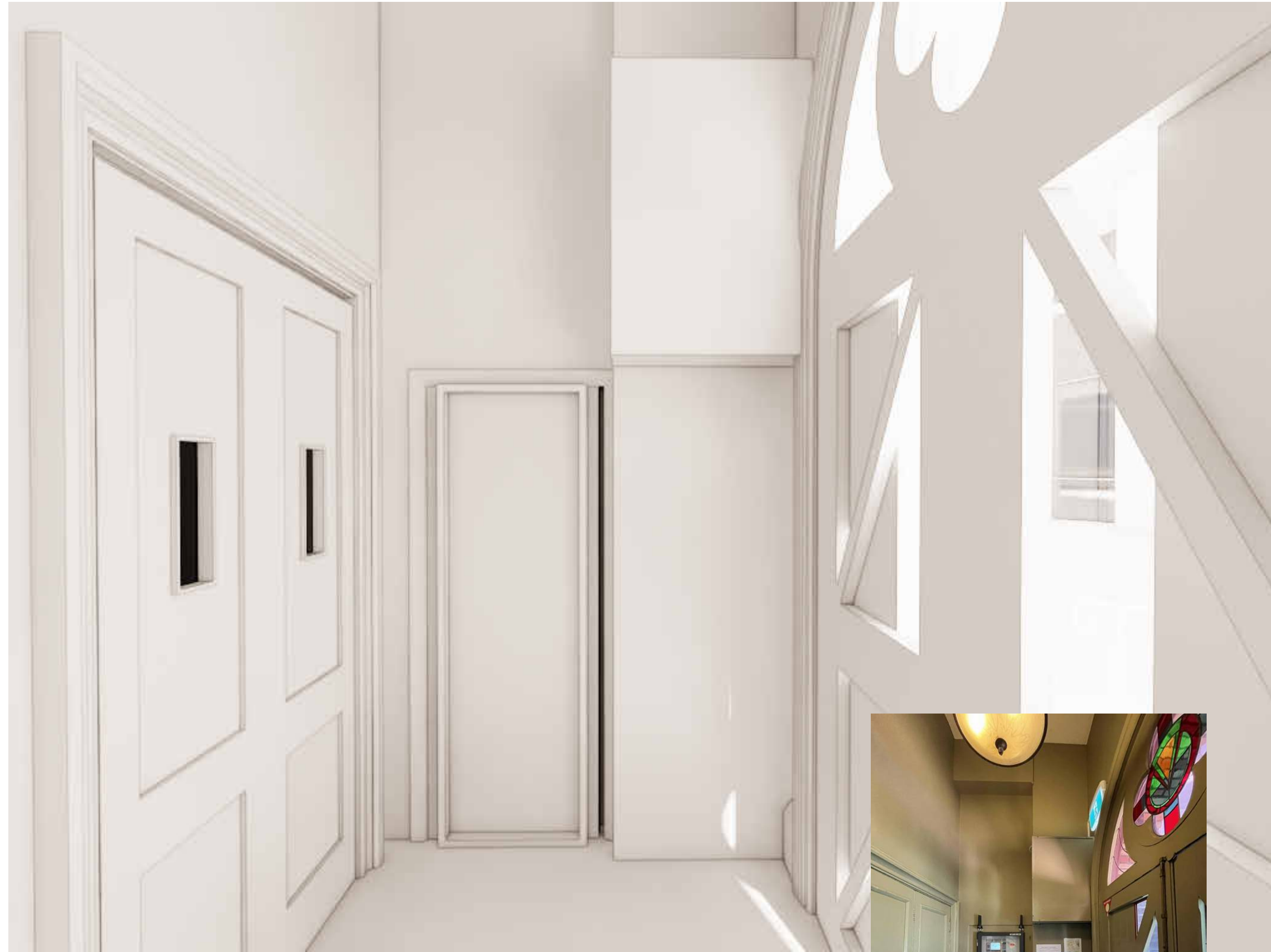
PROJECT  
**St Michaels Uniting Church**  
122-136 Collins Street, Melbourne  
DRAWING TITLE  
**DB1 - Proposed East Lobby Plan & Int Elevations**

SCALE  
1: 50 @ A3  
1: 25 @ A1

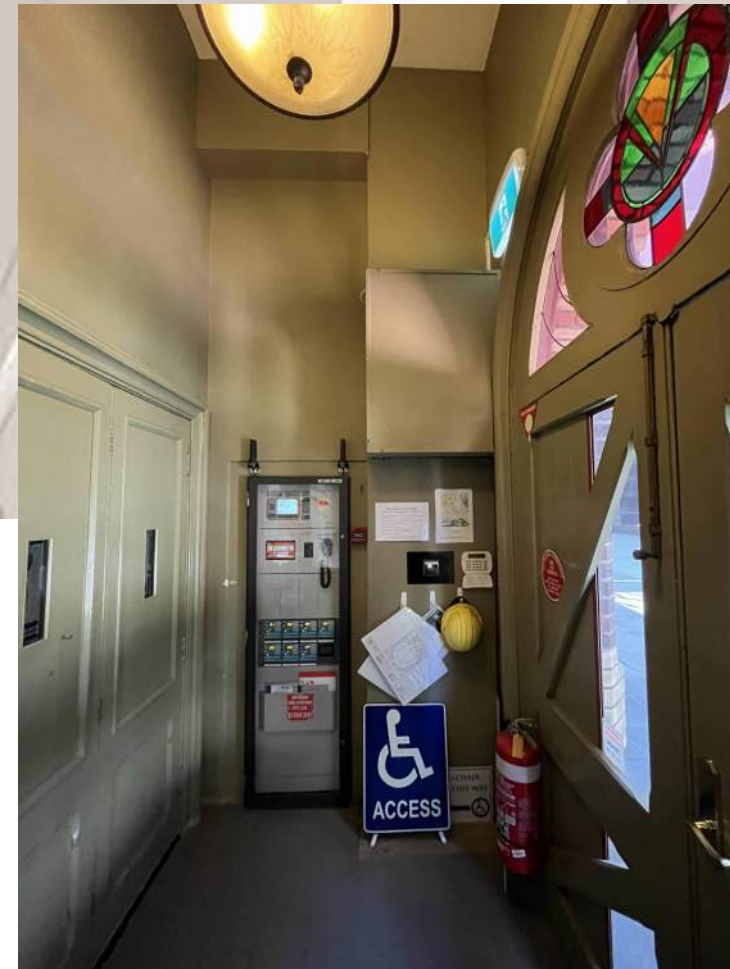
DRAWING NO.  
**SK-411**

DATE REV

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EXISTING - EAST LOBBY



PROPOSED - EAST LOBBY

We recommend a minimum 30% luminance contrast between a 150mm high skirting board at the base of each wall, and the wall surface. High-contrasting skirting boards will assist people with low vision to identify perimeters of corridors and accessible spaces.

The combination of these paint colours does not comply with a minimum 30% luminance contrast.

In order to be easily identifiable and to meet the requirements of BCA Clause D4D2 and Clause D4D3, doors in all accessible areas are required to fully comply with AS 1428.1 Clause 13.1, including:

- All accessible doorways require a minimum luminance contrast band of 30% provided between at least one of the following:
  - door leaf and door jamb; or
  - door leaf and adjacent wall; or
  - architrave and wall; or
  - door leaf and architrave; or
  - door jamb and an adjacent wall.
- Each luminance contrast band must be at least 50mm wide.

Consider providing a minimum 30% luminance contrast between the following surfaces:

- tap-ware and the washbasin.
- coat hook and the wall surface.
- washbasin and the wall surface.
- dispensers and the wall surface.
- door handles to the door surface.
- grabrails and the wall surface.
- toilet seat and the toilet pan.
- toilet roll holder and the wall surface.

**GENERAL NOTES**  
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**DRAFT ISSUE**

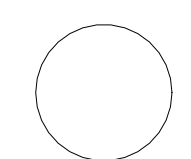
REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
**ISSUED FOR REVIEW**

**trethowan**  
 ARCHITECTURE  
 INTERIORS  
 HERITAGE  
 25 William Street, Cremorne  
 T 03 9421 5448 - trethowan.com.au

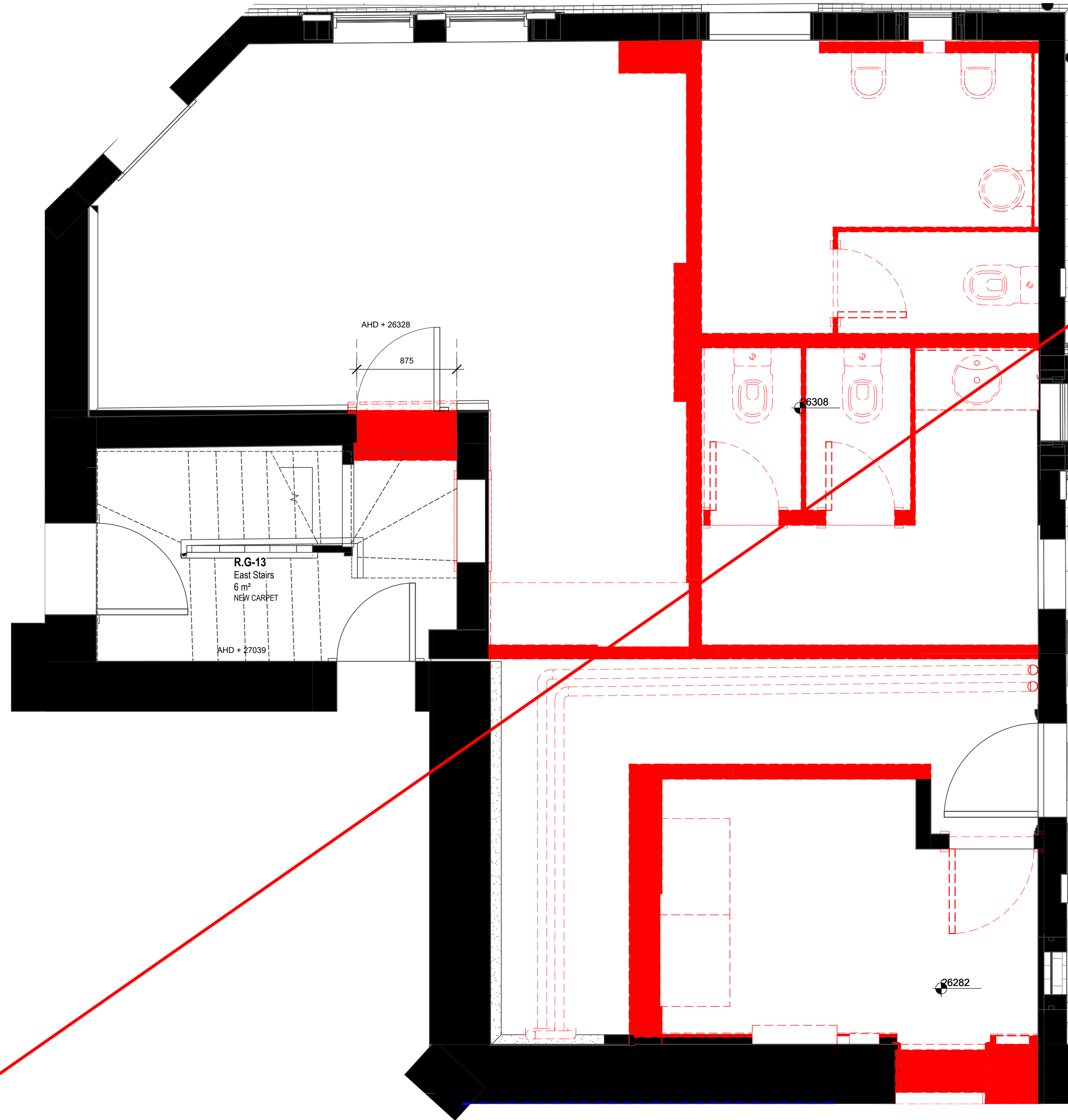
PROJECT  
**St Michaels Uniting Church**  
 122-136 Collins Street, Melbourne  
 DRAWING TITLE  
**DB1 - Proposed East Lobby Plan & Int Perspectives - Sheet 1**

SCALE  
 1 : 50 @ A3  
 @ A1



DRAWING NO.  
**SK-420**  
 DATE  
 REV





P1 Demolition Floor Plan  
B2 Toilet Upgrade Copy 1

**No Comments from Access Central**

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW



**PROJECT**  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

**DRAWING TITLE**  
 DB2 - Demolition Amenities Upgrade Plan

**SCALE**  
 1 : 50 @ A3  
 1 : 25 @ A1

**DRAWING NO.**  
**SK-430**

**DATE**      **REV**

We believe a unisex ambulant toilet could be accepted as a Performance Solution instead of a male ambulant toilet and a female ambulant toilet in this location (BCA Clause F4D5(c)).

The ambulant toilet can comply with AS 1428.1 (2009) Clause 16. Spatially, the layout meet these requirements

We recommend that all internal elevations of the sanitary facilities be prepared, with all fixtures and fitting shown and dimensioned.

Consider providing accessible facilities:

- Bench top height of 850-870mm;
- Counter to achieve a minimum 30% luminance contrast with the counter face to which it is viewed;
- Counter surface to have a matte or low sheen finish;
- Where instant boiling water units are provided, they are to be provided within 300mm from the front edge of the sink and bench;
- Height of sink to be between 850-870mm;
- Depth of main sink to be maximum 150mm;
- Operating handle of tap to be within 300mm from the front edge of sink and bench throughout the arc of the movement;
- Knee clearance of not less than 680mm in height for a minimum depth of 300mm to the sink or one section of bench (900mm wide); and
- Consider providing foot clearance of not less than 290mm in height for a depth of 200mm to the sink or one section of bench (900mm wide).
- Lower microwave oven
- All dispensers in suitable locations
- Tapware and boiling/chilled water in accessible locations
- Clearance under counters (AS 1428.2)

Consider locating the tapware to the side

All doors (other than the non-accessible toilets) to have a minimum clear opening width of 850mm (i.e. 920mm door leaf). Where double doors are used, 850mm clear opening shall apply to the active leaf.

Dimension the door to ambulant toilet with a clear opening of at least 700mm (AS 1428.1 (2009) Clause 16.3).

The tapware and centre of the washbasin outlet must be at least 425mm from the side wall.

A minimum 300mm latch-side clearance is required between the edge of the washbasin and the door opening. Please update/dimension (see AS 1428.1 (2009) Figure 43 and Figure 52).

The accessible toilet room can comply with AS 1428.1 (2009) Clause 15. The minimum toilet pan circulation space is 1900mm wide x 2300mm deep. But the room width has little room for construction setout issues as the following are required:

- 425mm centre of basin and waste outlet to side wall.
- 190mm centre of Caroma Cube Extension basin to left side edge.
- 300mm latch-side clearance.
- 920mm door leaf

Total width = 1835mm. Therefore, please consider these measurements, particularly the washbasin location when detailing the facility.

We recommend that all internal elevations of the sanitary facilities be prepared, with all fixtures and fitting shown and dimensioned.

The baby change table must not project into the minimum 1900mm width of the accessible toilet pan circulation space.

The end of each accessway section requires a 180-degree turning space with an area of 1540mm wide x 2070mm long (in the direction of travel) as per BCA Clause D4D4(c)(ii)(A) and AS 1428.1 (2009) Clause 6.5.3. Please dimension.

P1 Proposed Floor Plans  
B2 Toilet Upgrade  
1:25 @ A1

SK-471 3

GENERAL NOTES  
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DRAFT ISSUE

REV	DESCRIPTION	DATE
1	SK-471	4

ISSUE PURPOSE  
ISSUED FOR REVIEW

trethowan  
ARCHITECTURE  
INTERIORS  
HERITAGE

PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne

DRAWING TITLE  
DB2 - Proposed Amenities Upgrade  
Plan

SCALE  
1:50 @ A3  
1:25 @ A1

DRAWING NO.  
SK-431

DATE  
REV

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EXISTING CEILING TO REMAIN (ASSUME LATER PLASTERBOARD).

NEW PLASTERBOARD CEILING AND SUSPENDED CEILING SYSTEM OVER EXISTING STRUCTURE. SQUARE SET CORNERS. NEW LIGHTING LAYOUT SHOWN INDICATIVELY. FINAL LAYOUT BY ARCHITECT AND SERVICES ENGINEER.

**No Comments from Access Central**

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUED FOR REVIEW

trethowan

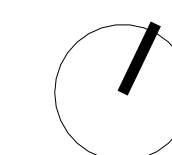
25 William Street, Cremorne  
 T 03 9421 5448 - trethowan.com.au

ARCHITECTURE  
 INTERIORS  
 HERITAGE

PROJECT  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

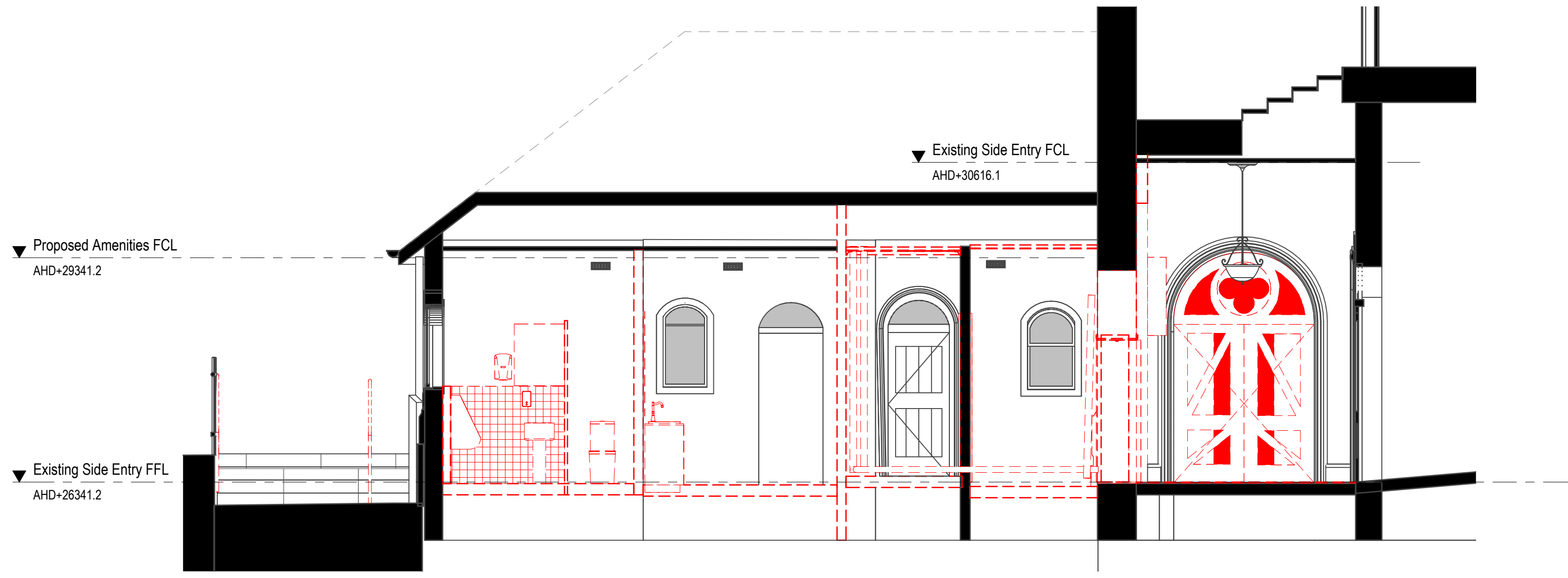
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 DB2 - Proposed Amenities Upgrade  
 Plan RCP

SCALE  
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 1 : 25 @ A1

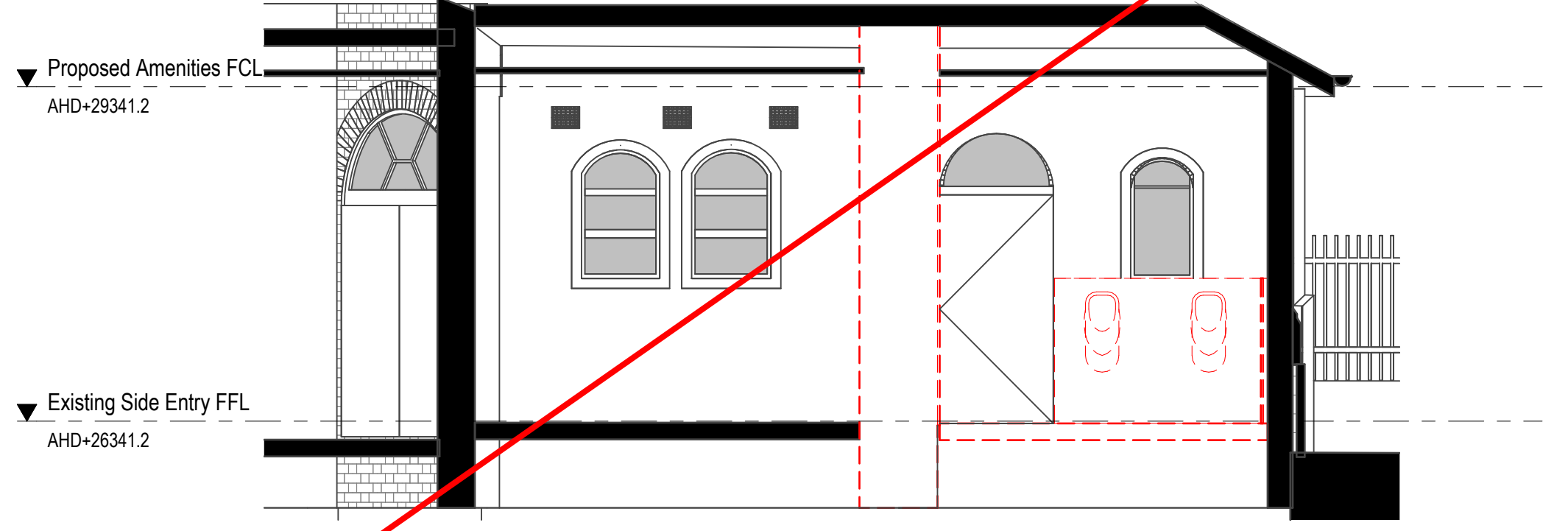


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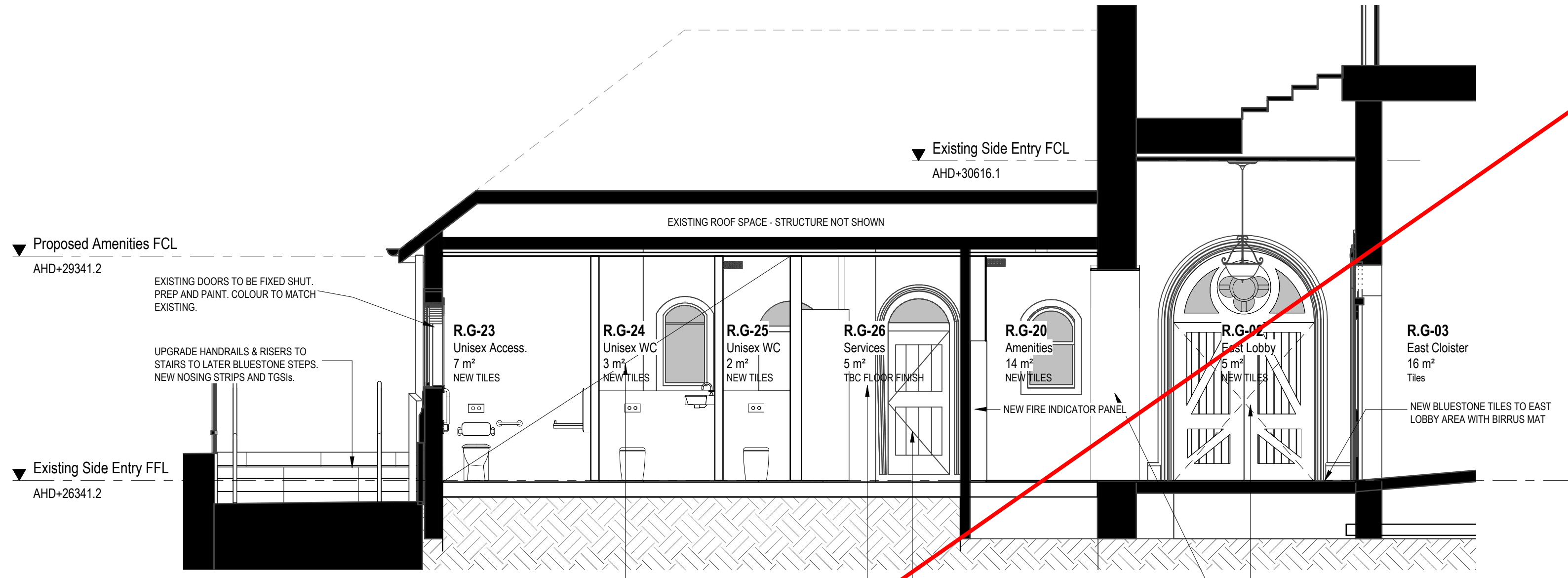
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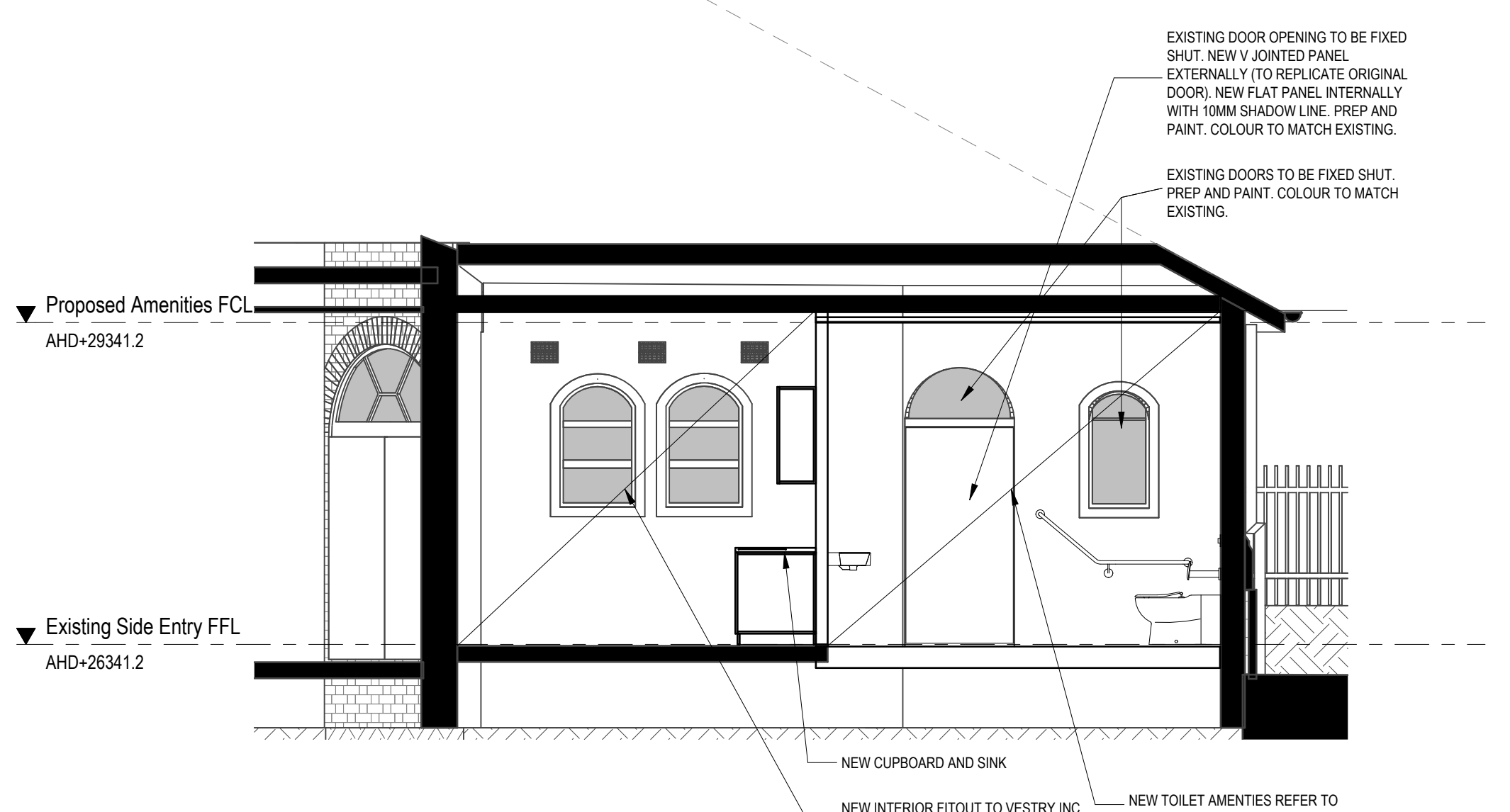
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Demolition Section F-F  
1:50 @ A1



2 Existing Building Section  
Demolition Section H-H  
1:50 @ A1



F Proposed Building Section  
Section F-F  
1:50 @ A1



H Proposed Building Section  
Section H-H  
1:50 @ A1

No Comments from Access Central

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DRAFT ISSUE

REV	DESCRIPTION	DATE	ISSUE PURPOSE
			ISSUED FOR REVIEW



**PROJECT**  
 St Michaels Uniting Church  
 122-136 Collins Street, Melbourne

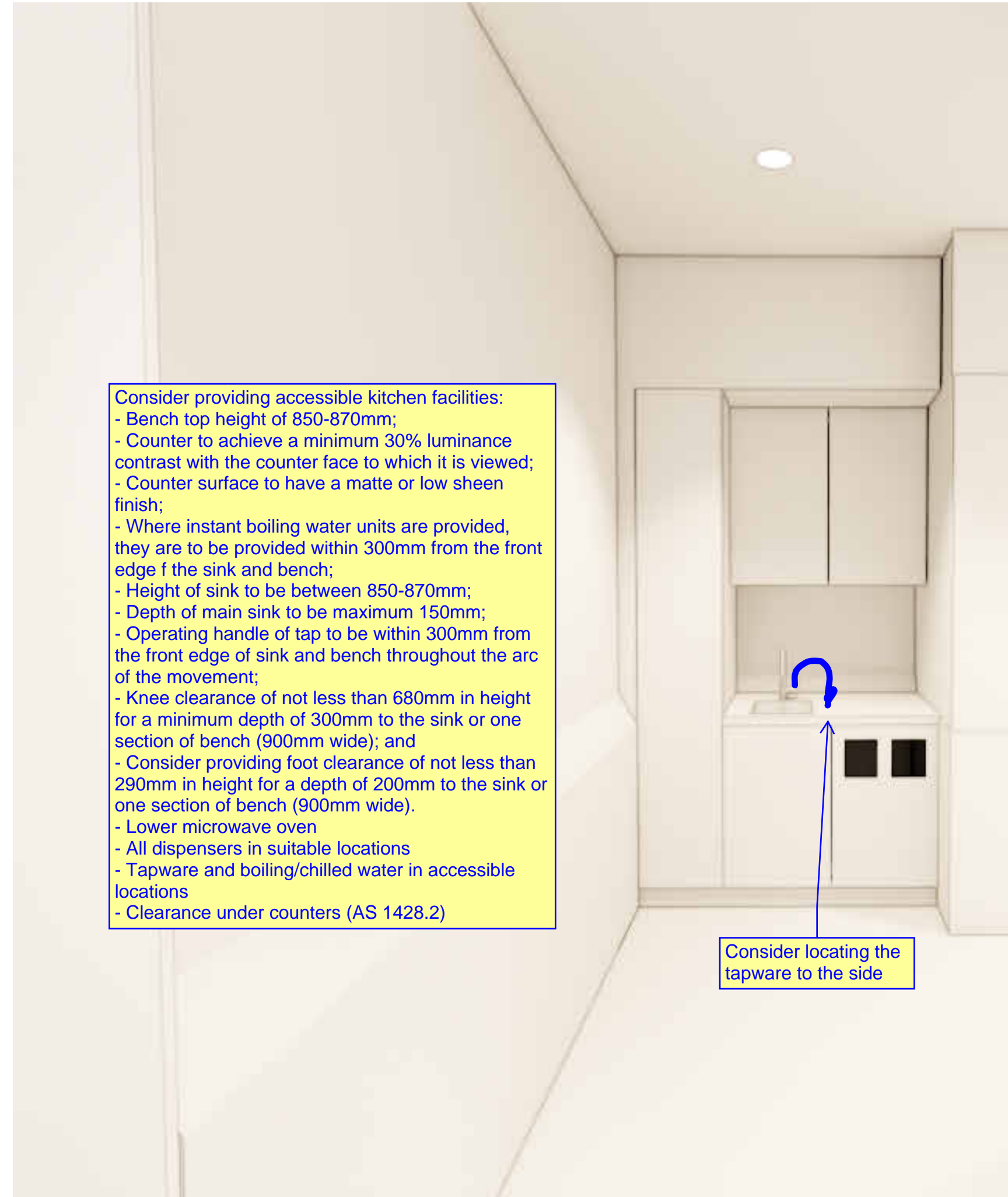
**DRAWING TITLE**  
 DB3 - Existing/Proposed Amenities Section

**SCALE**  
 1:100 @ A3  
 1:50 @ A1

**DRAWING NO.**  
SK-435

**DATE**      **REV**

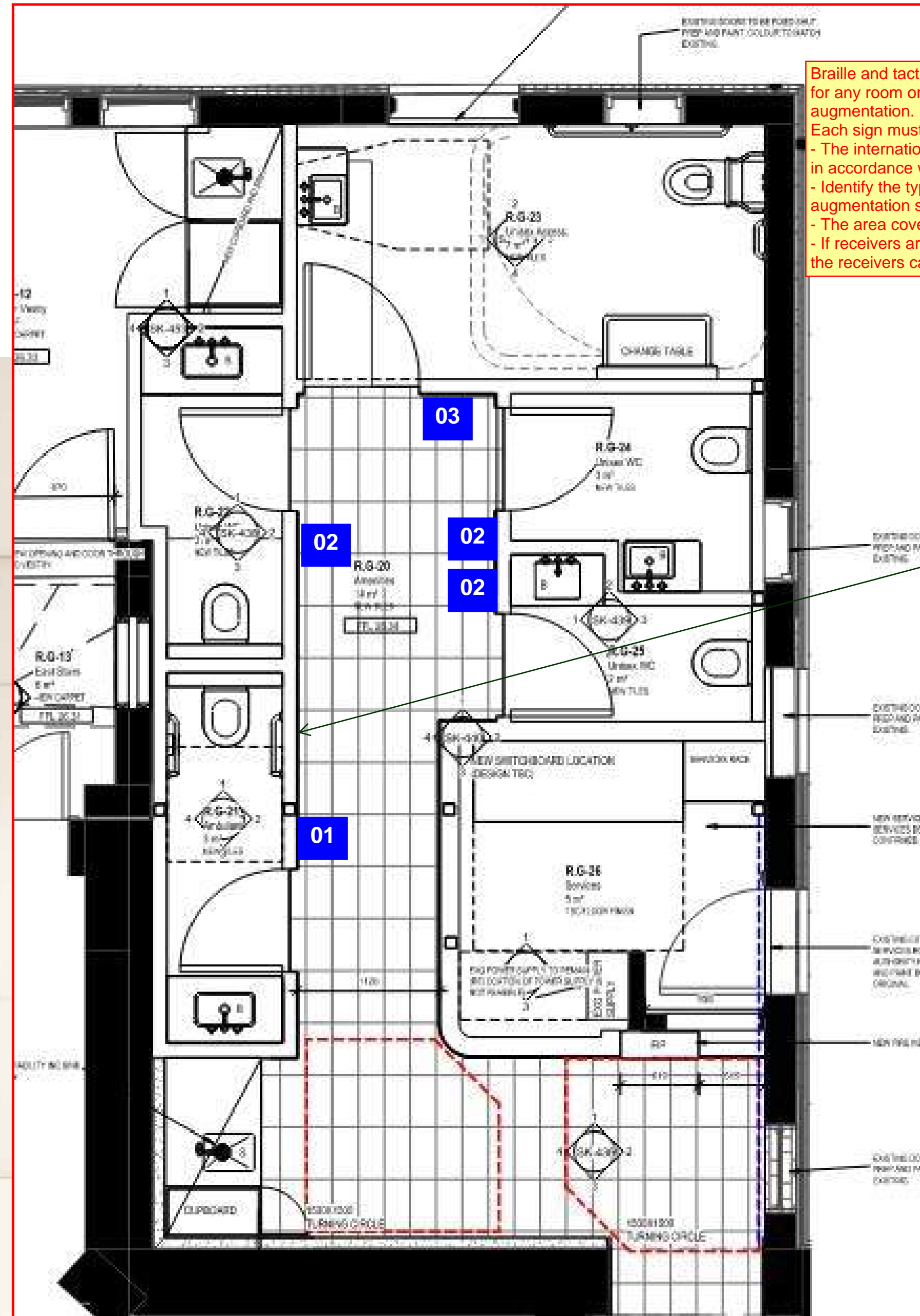
# Braille & Tactile Signage



Consider providing accessible kitchen facilities:

- Bench top height of 850-870mm;
- Counter to achieve a minimum 30% luminance contrast with the counter face to which it is viewed;
- Counter surface to have a matte or low sheen finish;
- Where instant boiling water units are provided, they are to be provided within 300mm from the front edge of the sink and bench;
- Height of sink to be between 850-870mm;
- Depth of main sink to be maximum 150mm;
- Operating handle of tap to be within 300mm from the front edge of sink and bench throughout the arc of the movement;
- Knee clearance of not less than 680mm in height for a minimum depth of 300mm to the sink or one section of bench (900mm wide); and
- Consider providing foot clearance of not less than 290mm in height for a depth of 200mm to the sink or one section of bench (900mm wide).
- Lower microwave oven
- All dispensers in suitable locations
- Tapware and boiling/chilled water in accessible locations
- Clearance under counters (AS 1428.2)

Consider locating the tapware to the side



Braille and tactile signage is required for any room or space with hearing augmentation.

Each sign must incorporate:

- The international symbol for deafness in accordance with AS 1428.1.
- Identify the type of hearing augmentation system.
- The area covered within the room.
- If receivers are being used and where the receivers can be obtained.

Install each sign with the edge of the sign 50mm from the architrave. Where this is not possible, the sign may be installed on the centre of the door. With all text, braille and symbols within the range 1200mm to 1600mm AFFL. A single line of braille and text should be in the range 1250mm to 1350mm AFFL.

01

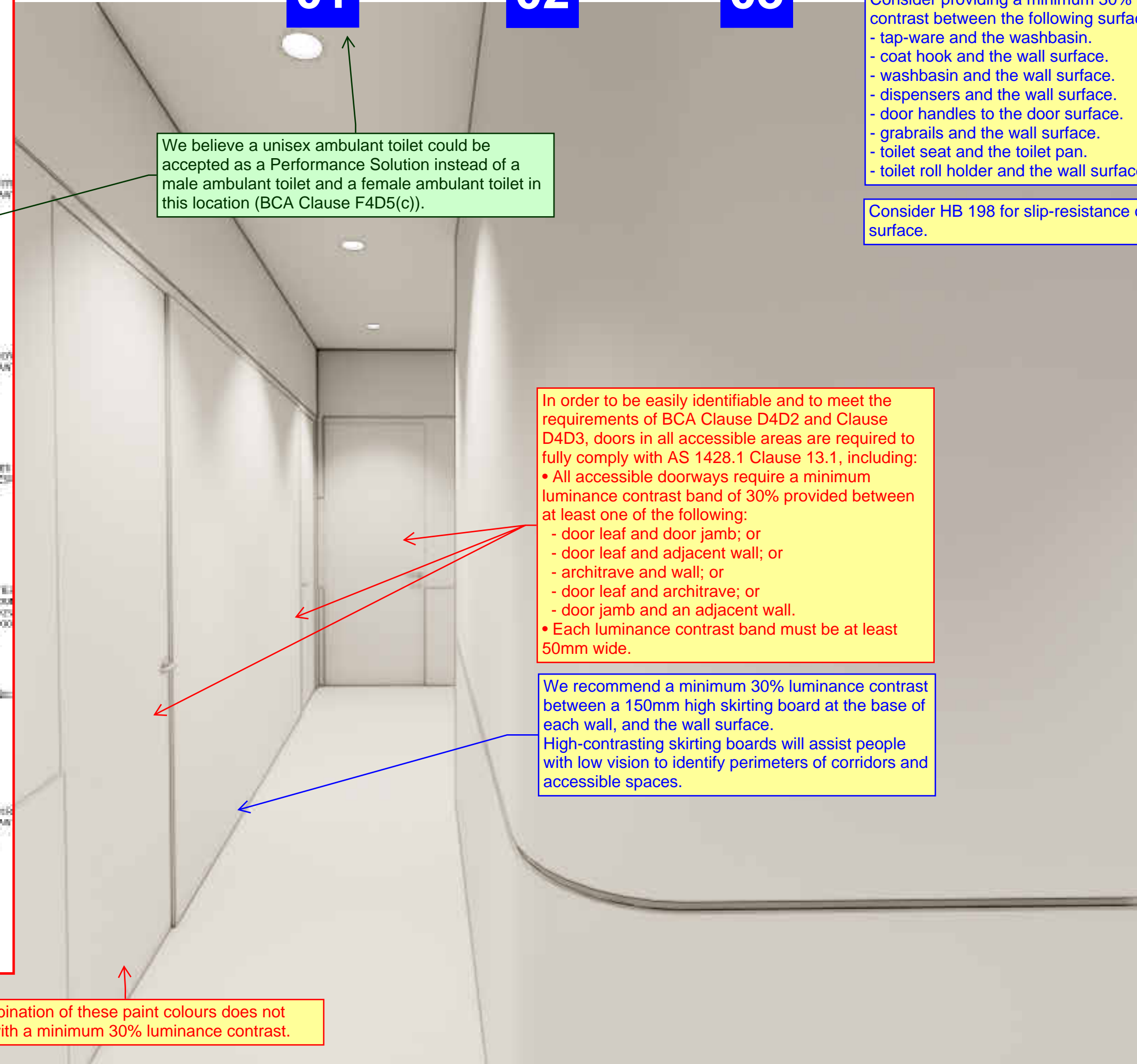
02

03

A braille and tactile sign must be located near each required exit door, or on the side light window, facing a person as they leave the building.

The sign must say "Exit Ground Floor" or similar wording.

The sign must be installed with the bottom edge 1250mm AFFL.



We believe a unisex ambulant toilet could be accepted as a Performance Solution instead of a male ambulant toilet and a female ambulant toilet in this location (BCA Clause F4D5(c)).

In order to be easily identifiable and to meet the requirements of BCA Clause D4D2 and Clause D4D3, doors in all accessible areas are required to fully comply with AS 1428.1 Clause 13.1, including:

- All accessible doorways require a minimum luminance contrast band of 30% provided between at least one of the following:
  - door leaf and door jamb; or
  - door leaf and adjacent wall; or
  - architrave and wall; or
  - door leaf and architrave; or
  - door jamb and an adjacent wall.
- Each luminance contrast band must be at least 50mm wide.

We recommend a minimum 30% luminance contrast between a 150mm high skirting board at the base of each wall, and the wall surface.

High-contrasting skirting boards will assist people with low vision to identify perimeters of corridors and accessible spaces.

Consider providing a minimum 30% luminance contrast between the following surfaces:

- tap-ware and the washbasin.
- coat hook and the wall surface.
- washbasin and the wall surface.
- dispensers and the wall surface.
- door handles to the door surface.
- grabrails and the wall surface.
- toilet seat and the toilet pan.
- toilet roll holder and the wall surface.

Consider HB 198 for slip-resistance of the floor surface.

The combination of these paint colours does not comply with a minimum 30% luminance contrast.

PROPOSED - AMENITIES TEAPPOINT

PROPOSED - AMENITIES HALLWAY

**GENERAL NOTES**

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Builder / Contractors to notify the Architect of discrepancies.

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# DRAFT ISSUE

REV	DESCRIPTION	DATE

ISSUE PURPOSE  
ISSUED FOR REVIEW

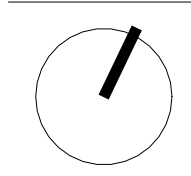
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PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne

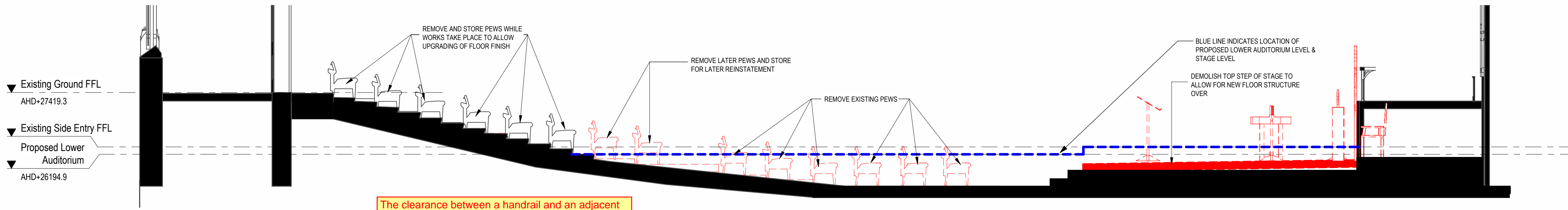
DRAWING TITLE  
DB2 - Proposed Amenities  
Perspective - Sheet 1

SCALE  
1 : 50 @ A3  
@ A1



DRAWING NO.  
**SK-455**

DATE      REV



1 Existing Building Section  
Existing Auditorium Section  
1: 50 @ A1

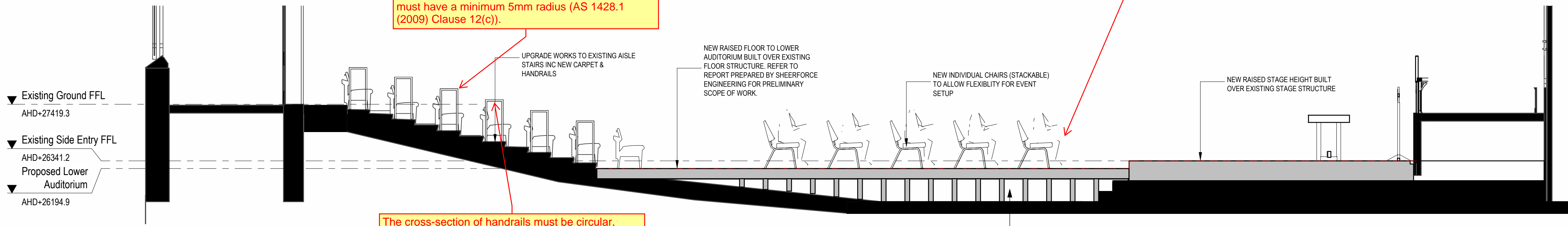
The clearance between a handrail and an adjacent wall surface or other obstruction shall be not less than 50 mm. This clearance shall extend above the top of the handrail by not less than 600 mm (AS 1428.1 (2009) Clause 12(h)).

The top of handrails must be between 865mm and 1000mm above the nosing of stairway tread or the plane of the finished floor of the walkway, ramp or landing (AS 1428.1 (2009) Clause 12(d)).

The height of the top of the handrail must be consistent (AS 1428.1 (2009) Clause 12(e)).

Exposed edges at ends and corners of handrails must have a minimum 5mm radius (AS 1428.1 (2009) Clause 12(c)).

Wheelchair seating areas must be within Class 9b assembly buildings in the ratios detailed in Table D4D10. See the table below.



A Proposed Building Section  
Proposed Auditorium Section  
1: 50 @ A1

The cross-section of handrails must be circular, 30mm to 50mm in diameter for not less than 270 degrees around the uppermost surface (AS 1428.1 (2009) Clause 12(b)).

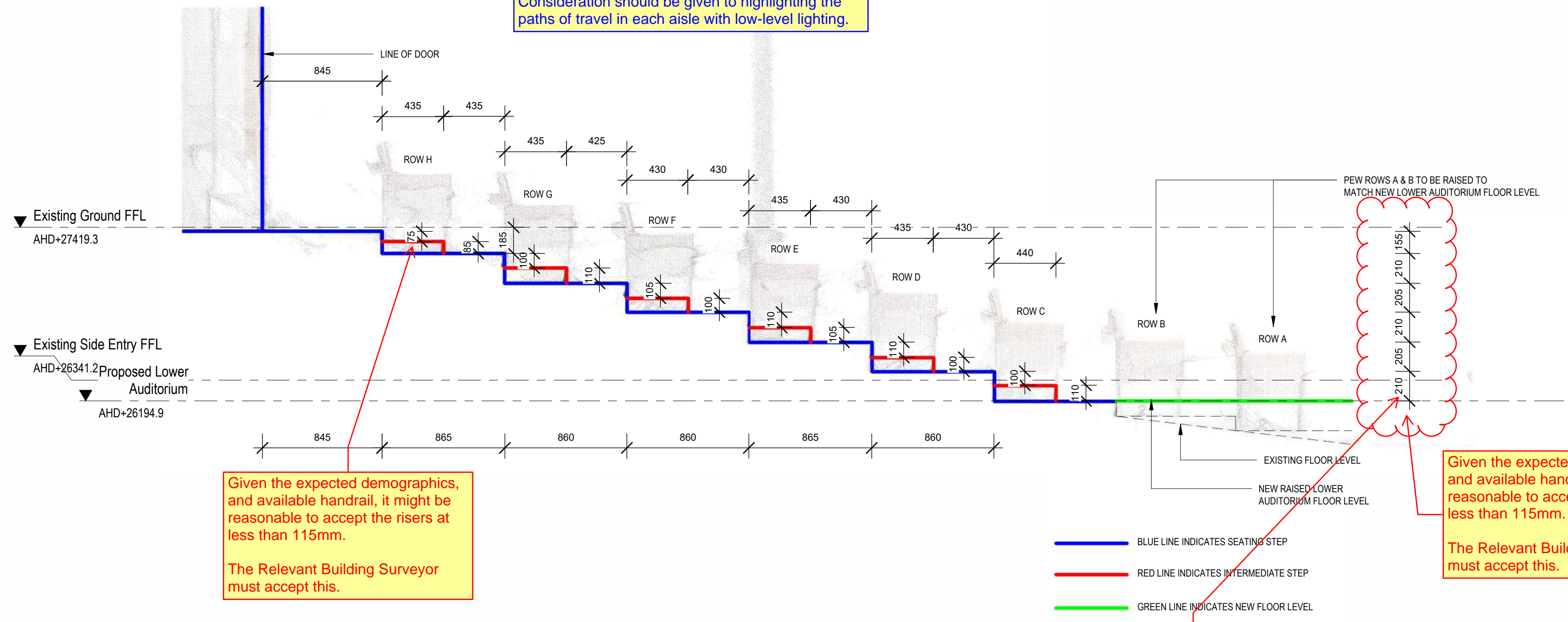
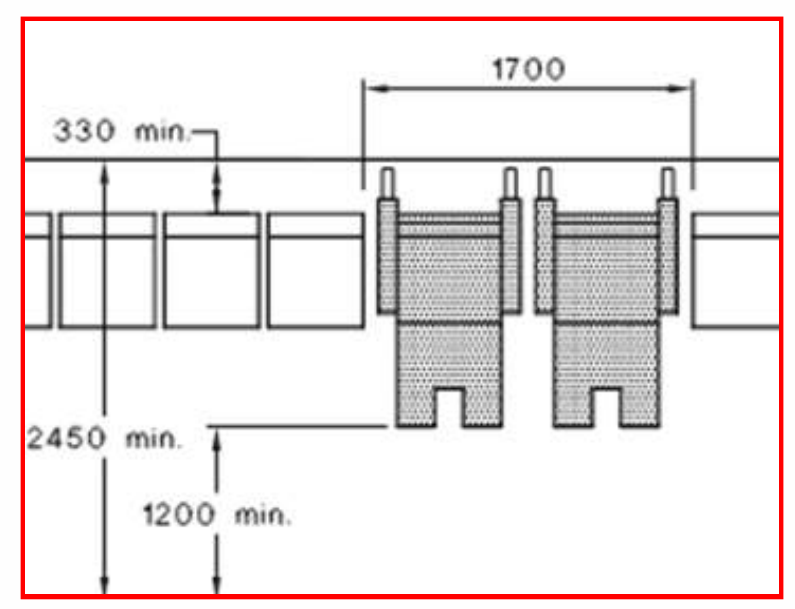
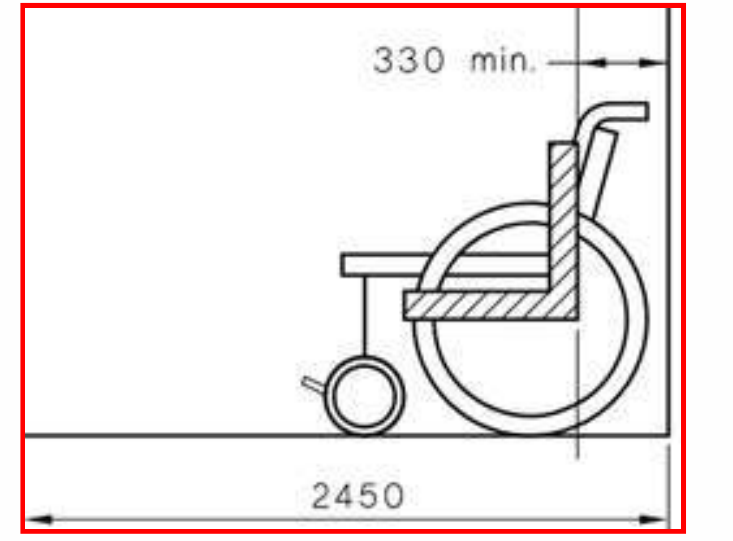
Consider a luminance contrast of not less than 30% between handrails and the surrounding wall surfaces.

Consideration should be given to highlighting the paths of travel in each aisle with low-level lighting.

Wheelchair seating areas must be within Class 9b assembly buildings in the ratios detailed in Table D4D10.

Fixed seats in a room or space	Wheelchair spaces <sup>Note 1</sup>		Grouping and location			Spaces must represent range of seating provided <sup>Note 3</sup>
	Minimum spaces required	1 additional space required per <sup>Note 2</sup>	Min. single spaces	Min. groups of 2 spaces	Max. spaces in any other group	
Up to 150	3	N/A <sup>Note 4</sup>	1	1	N/A <sup>Note 4</sup>	No
151 to 800	3	50 seats in excess of 150 seats	1	1	5	No
801 to 10 000	16	100 seats in excess of 800 seats	2	2	5	Yes
More than 10 000	108	200 seats in excess of 10 000 seats	5	5	10	Yes

Removable/loose seating is an acceptable alternative.



3 Proposed Building Section  
Callout - Upper Auditorium  
1: 25 @ A1

Given the expected demographics, and available handrail, it might be reasonable to accept the risers at less than 115mm.  
The Relevant Building Surveyor must accept this.

Given the expected demographics, and available handrail, it might be reasonable to accept the risers at less than 115mm.  
The Relevant Building Surveyor must accept this.



EXISTING UPPER STEPS

Each tread should have a strip of 50mm to 75mm deep across the full width of the path of travel. Each strip may be set back a maximum of 15mm from the front of the nosing. Each strip must have a minimum luminance contrast of 30% to the background (i.e. stair tread surface). Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast must not extend down the riser more than 10mm (AS 1428.1 (2009) Clause 11.1(f)(g)).

Stair nosings must not project beyond the face of each riser (AS 1428.1 (2009) Clause 11.1(d)).

In a seating area, the following is required (BCA Clause I1D4):

A. The gradient of the floor surface must not be steeper than 1:8, or the floor must be stepped so that:

1. A line joining the nosings of consecutive steps does not exceed an angle of 30° to the horizontal; and
2. The height of each step in the stepped floor is not more than 600mm; and
3. The height of any opening in such a step is not more than 125mm.

B. If an aisle divides the stepped floor and the difference in level between any 2 consecutive steps:

1. Exceeds 230mm but not 400 mm, an intermediate step must be provided in the aisle; and
2. Exceeds 400mm, 2 equally spaced intermediate steps must be provided in the aisle; and
3. The going of intermediate steps must be not less than 270mm and such as to provide as nearly as practicable equal treads throughout the length of the aisle.

C. The clearance between rows of fixed seats used for viewing performing arts, sport or recreational activities must be not less than:

1. 300 mm if the distance to an aisle is not more than 3.5m; or
2. 500 mm if the distance to an aisle is more than 3.5m.

GENERAL NOTES  
Builder / Contractors to verify all dimensions on site prior to commencing any works.  
Builder / Contractors to notify the Architect of discrepancies.  
RL's indicated are Finished Levels (FL's) at the Australian Height Datum (AHD).  
Plan dimensions are to be taken horizontally. Elevation dimensions to be taken vertically.  
For dimensional setout of walls, columns etc, refer to Dimensional setout plans.  
Do not scale drawings, use written dimensions only.  
This drawing is to be read in conjunction with schedules and specifications.  
This project is listed on the Victorian Heritage Register (VHR). Any works undertaken must comply with relevant heritage regulations and guidelines.  
Approval from Heritage Victoria is required before commencing any modifications or alterations to the building.

DRAWING

ISSUE PURPOSE  
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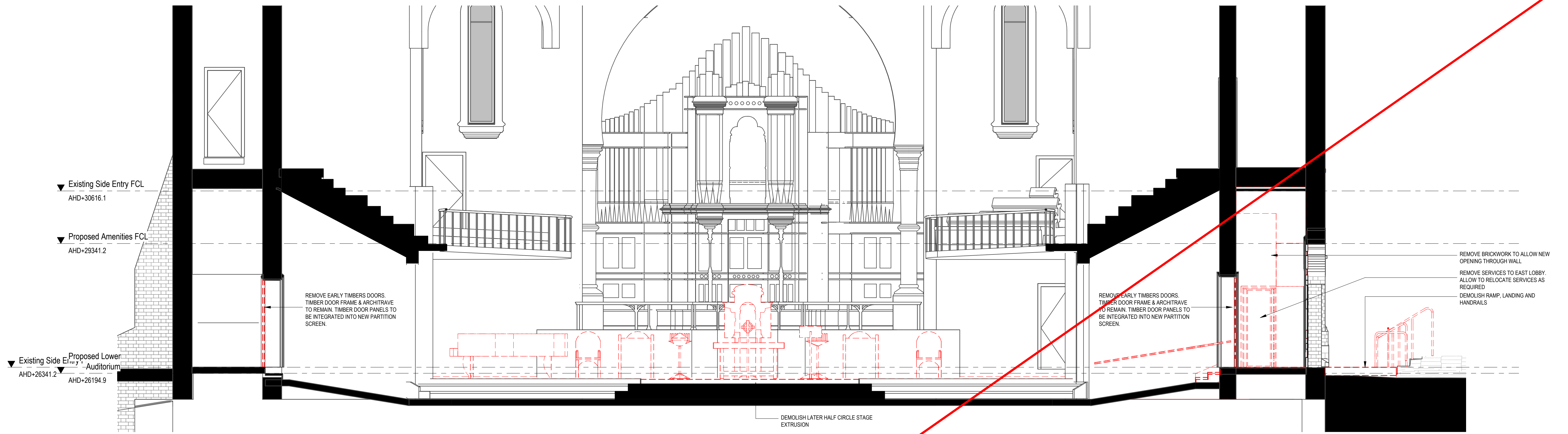
PROJECT  
St Michaels Uniting Church  
122-136 Collins Street, Melbourne

DRAWING TITLE  
DB3 - Existing/ Proposed Section  
A-A

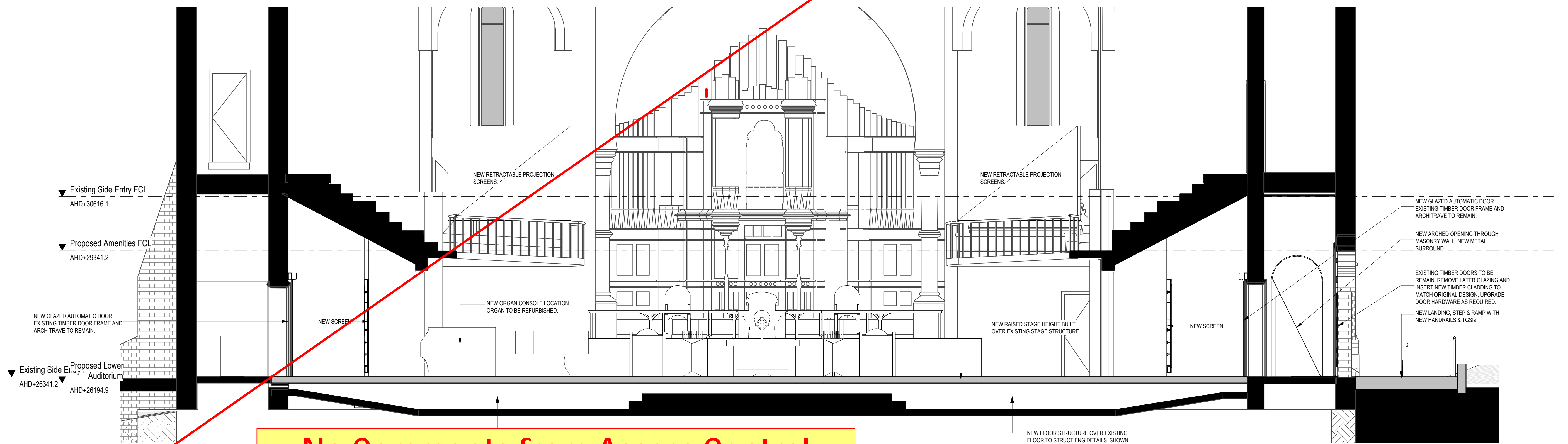
SCALE  
1: 100 @ A3  
As indicated @ A1

DRAWING NO.  
SK-465  
DATE  
REV

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1 Existing Building Section  
Section C-C Copy 1  
1:50 @ A1



B Proposed Building  
SK-100 Proposed Section B-B  
1:50 @ A1

No Comments from Access Central

**GENERAL NOTES**  
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PROJECT  
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122-136 Collins Street, Melbourne

DRAWING TITLE  
DB3 - Existing/ Proposed Auditorium  
Section B-B

SCALE  
1:100 @ A3  
1:50 @ A1

SK-466

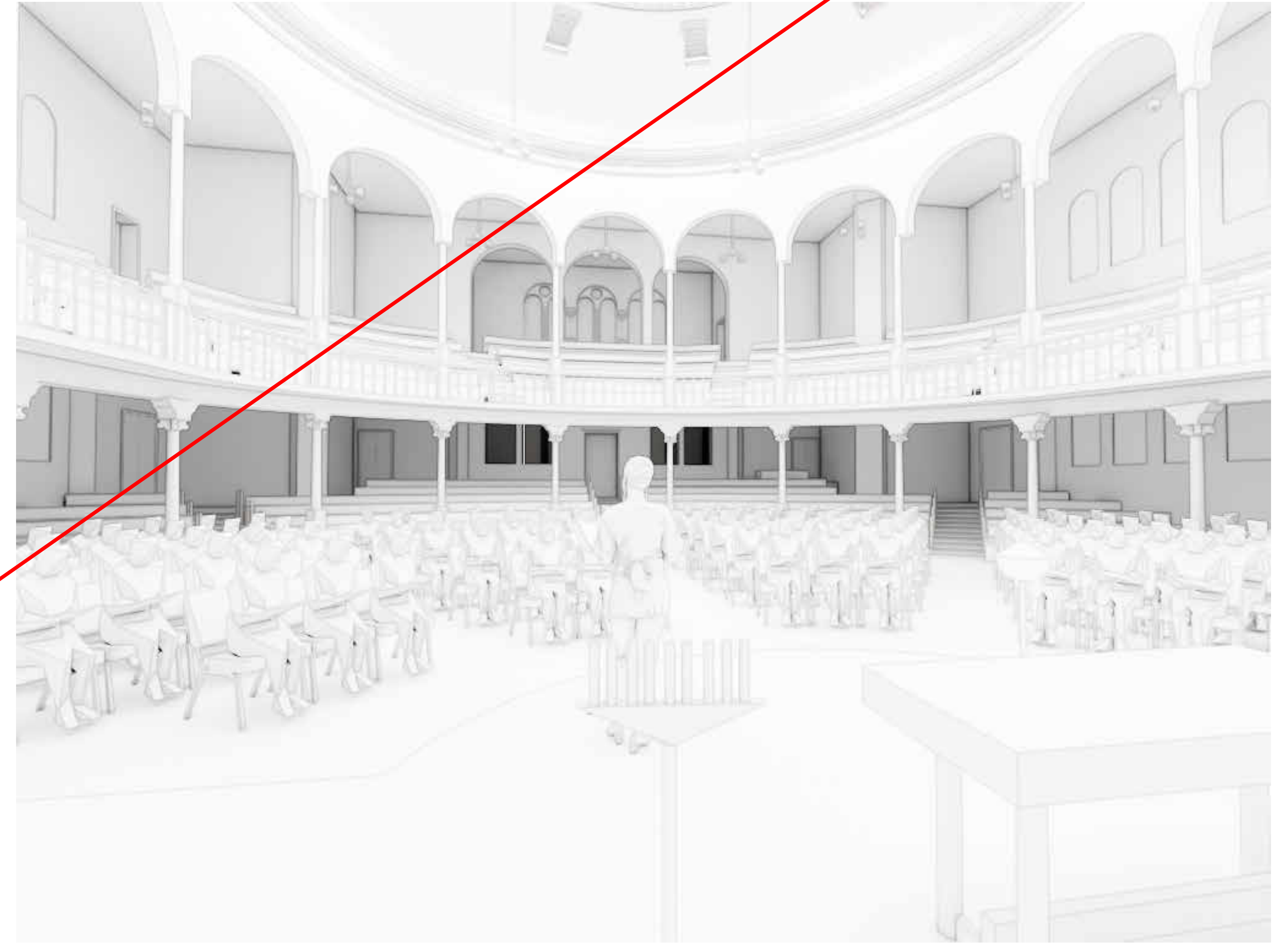
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EXISTING - AUDITORIUM VIEW FROM STAGE



PROPOSED - AUDITORIUM VIEW FROM STAGE

**No Comments from Access Central**

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
**ISSUED FOR REVIEW**

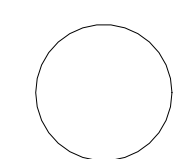
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PROJECT  
**St Michaels Uniting Church**  
 122-136 Collins Street, Melbourne

DRAWING TITLE  
**DB3 - Auditorium Perspective - Sheet 1**

SCALE



DRAWING NO.

**SK-480**

DATE REV





EXISTING - AUDITORIUM VIEW FROM BALCONY



PROPOSED - AUDITORIUM VIEW FROM BALCONY

**No Comments from Access Central**

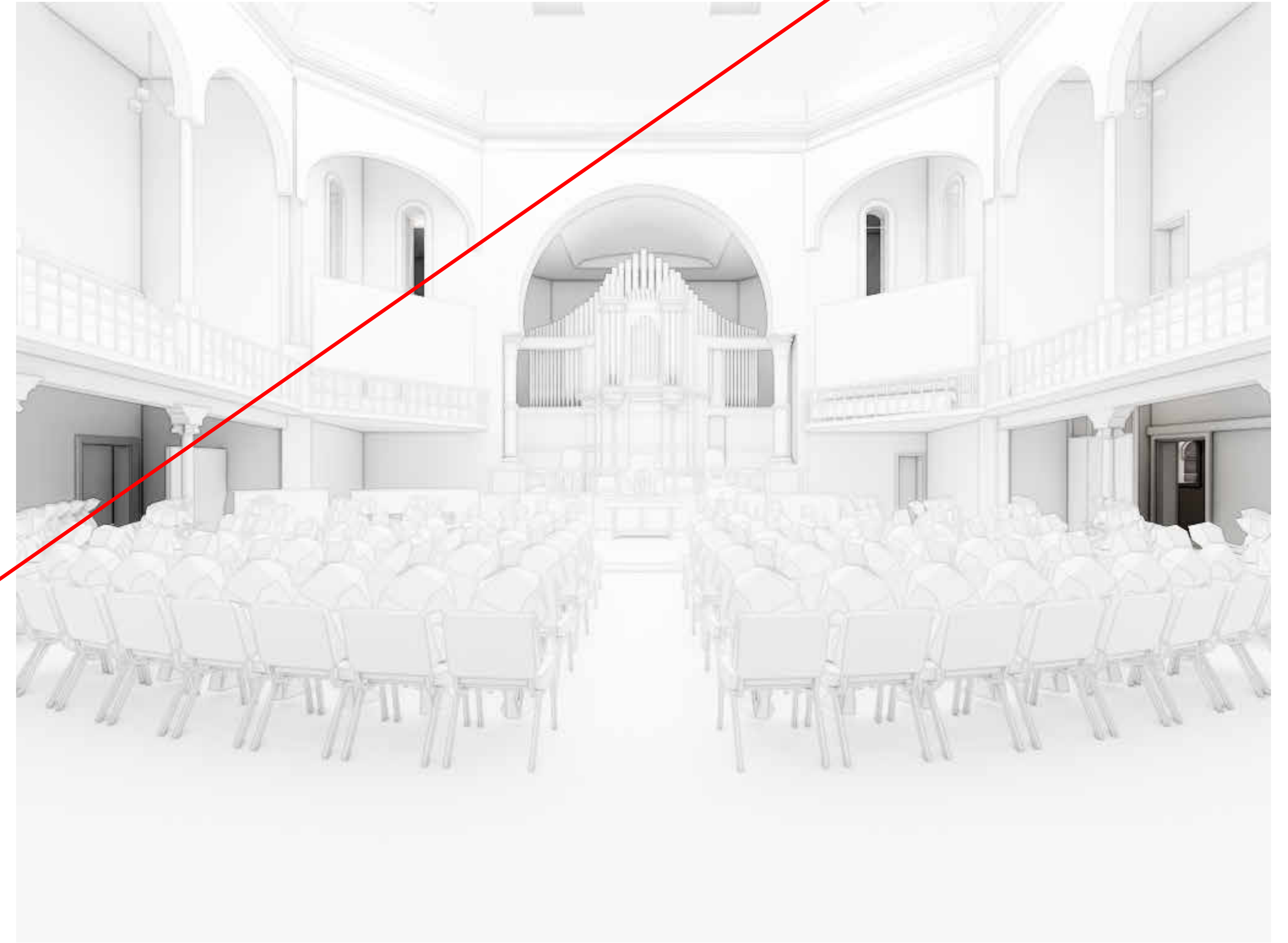
**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE	ISSUE PURPOSE	PROJECT	SCALE	DRAWING NO.
			ISSUED FOR REVIEW	St Michaels Uniting Church 122-136 Collins Street, Melbourne		<b>SK-481</b>
			<b>trethowan</b> ARCHITECTURE INTERIORS HERITAGE	DRAWING TITLE DB3 - Auditorium Perspective - Sheet 2		DATE REV
			25 William Street, Cremorne T 03 9421 5448 - trethowan.com.au			21/2/2024 03:39:49 PM



EXISTING - AUDITORIUM VIEW AISLE



PROPOSED - AUDITORIUM VIEW FROM AISLE

**No Comments from Access Central**

**GENERAL NOTES**  
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**DRAFT ISSUE**

REV	DESCRIPTION	DATE
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ISSUE PURPOSE  
 ISSUED FOR REVIEW

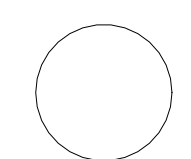


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DRAWING TITLE  
 DB3 - Auditorium Perspective -  
 Sheet 3

SCALE



DRAWING NO.

**SK-482**

DATE REV