

105 Miller St

Heritage Presentation

Investa

May 2025

BATESSMART™

CUNIO
PROJECTS

Acknowledgement of Country

We acknowledge the Cammeraygal as the Traditional Owners of Country on which this project is located, and recognise their continuing connection to land, waters and culture. We thank them for protecting this land and its ecosystem since time immemorial and pay our respects to their Elders past, present and emerging.

Artwork
Within by Jasmine Miikika Craciun

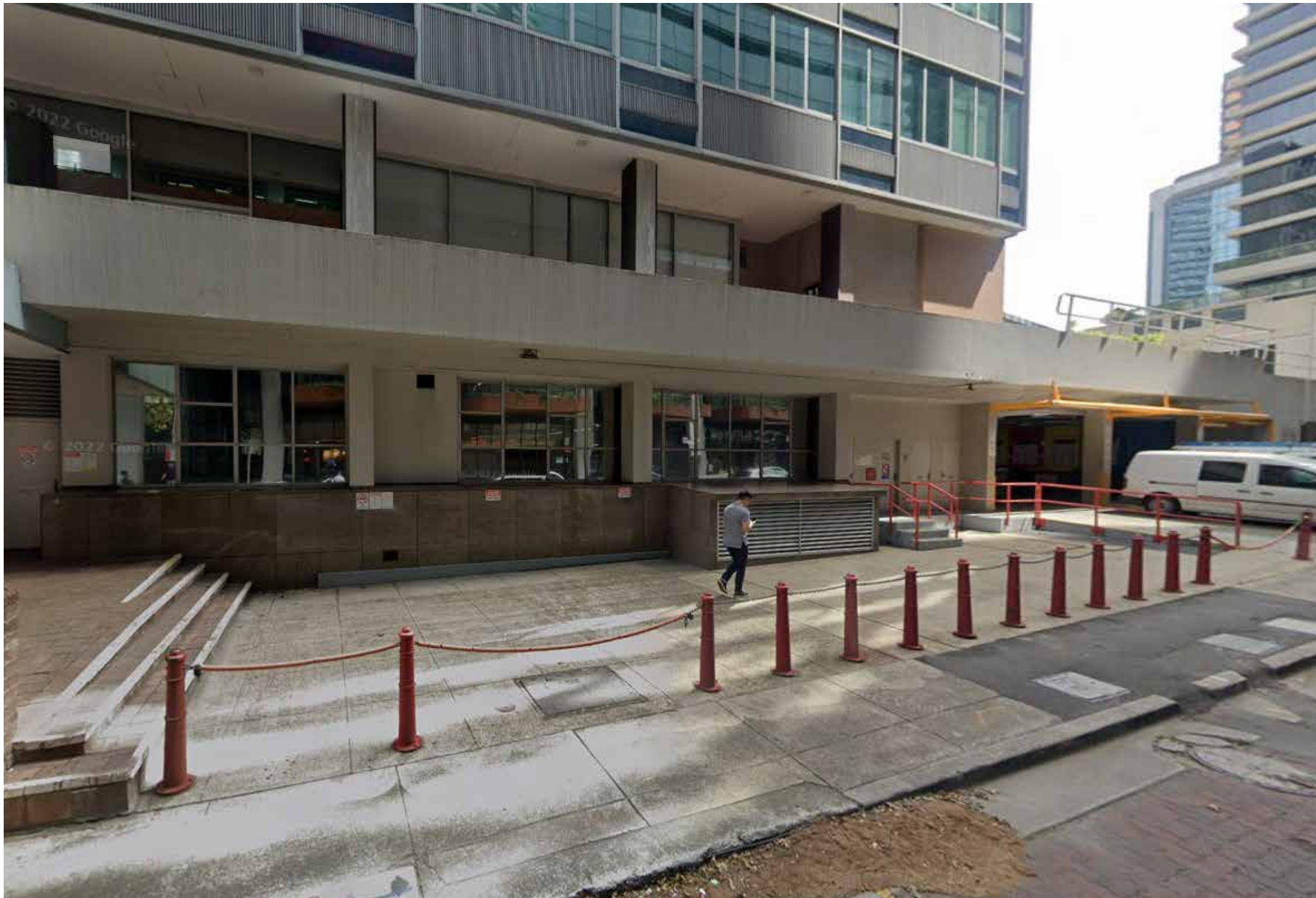


Agenda

- Miller St flood mitigation
- Colonnade height
- Miller St wing slab replacement
- Miller St wing curtain wall replacement

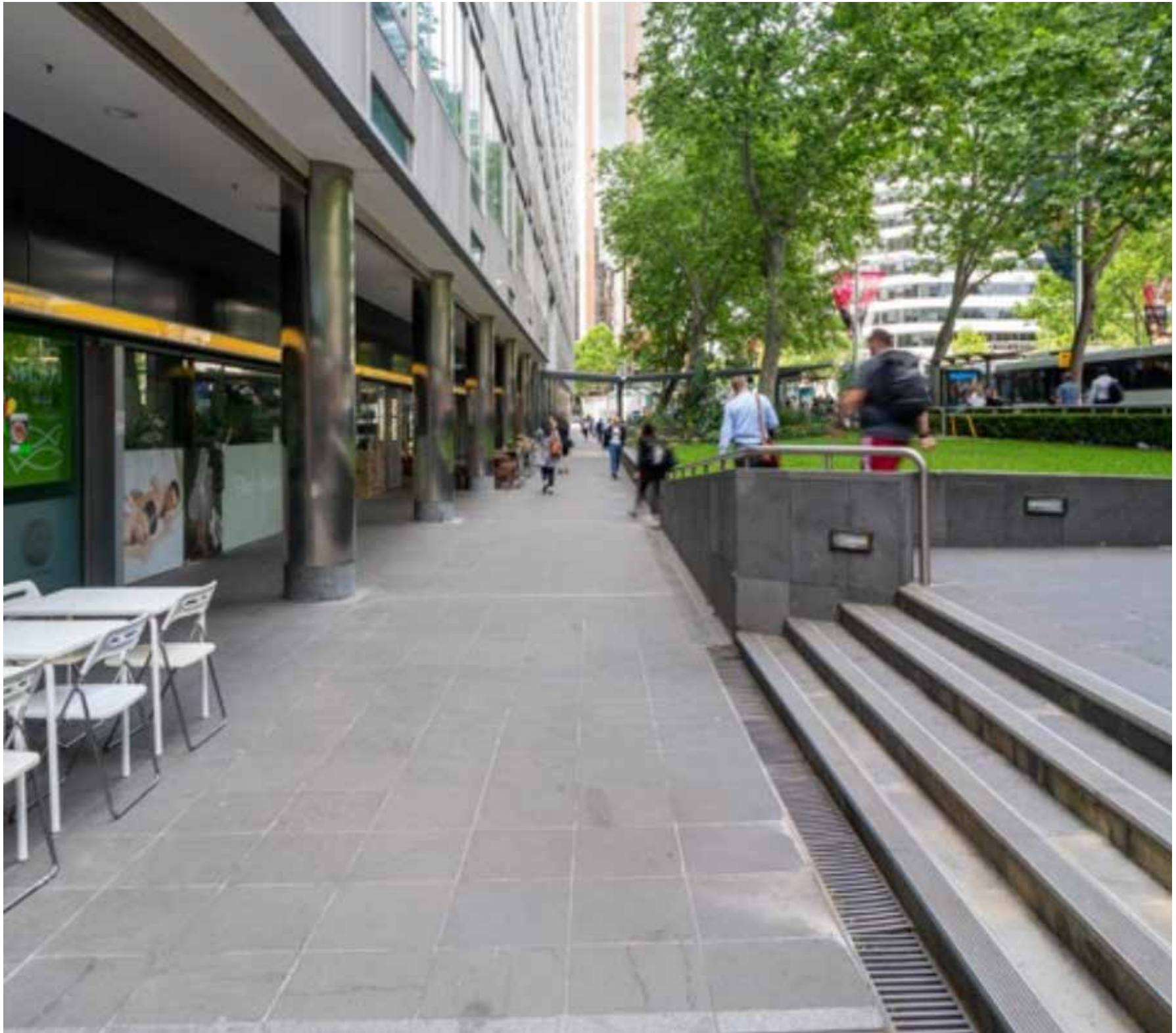
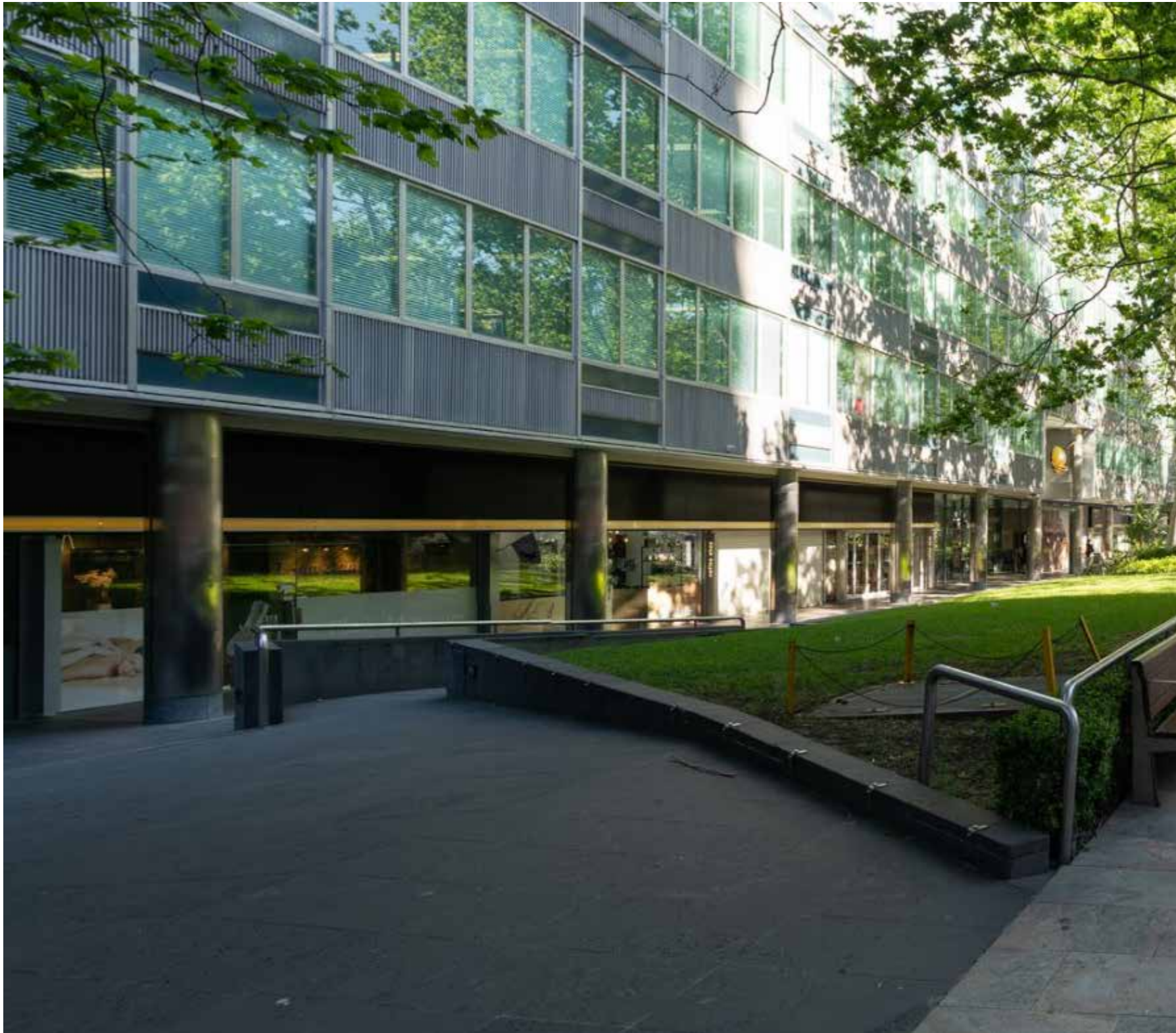
Heritage Context

- SHR listed in December 2023
- The CMP was completed in August 2023 in consultation with Heritage NSW
- The CMP assigns a higher heritage significance to the Miller Street wing than Denison Street wing
- The CMP supports additions to the Denison wing
- The CMP acknowledges that extensive fabric replacement is required
- The significance of the site is broadly defined in the CMP in terms of technical achievement, innovation in commercial design and historical milestones in construction



Miller Street Challenges

- Currently the Miller Street Special Area falls towards the building creating a sunken retail colonnade
- There are issues with accessibility, street activation and overland flow



Miller Street Challenges

- The ground floor floods when there is a 100 year rain event which is approximately every two years
- This results in flood water entering the basement via lift shafts which presents a risk to life safety, damage to critical infrastructure and insurance risk

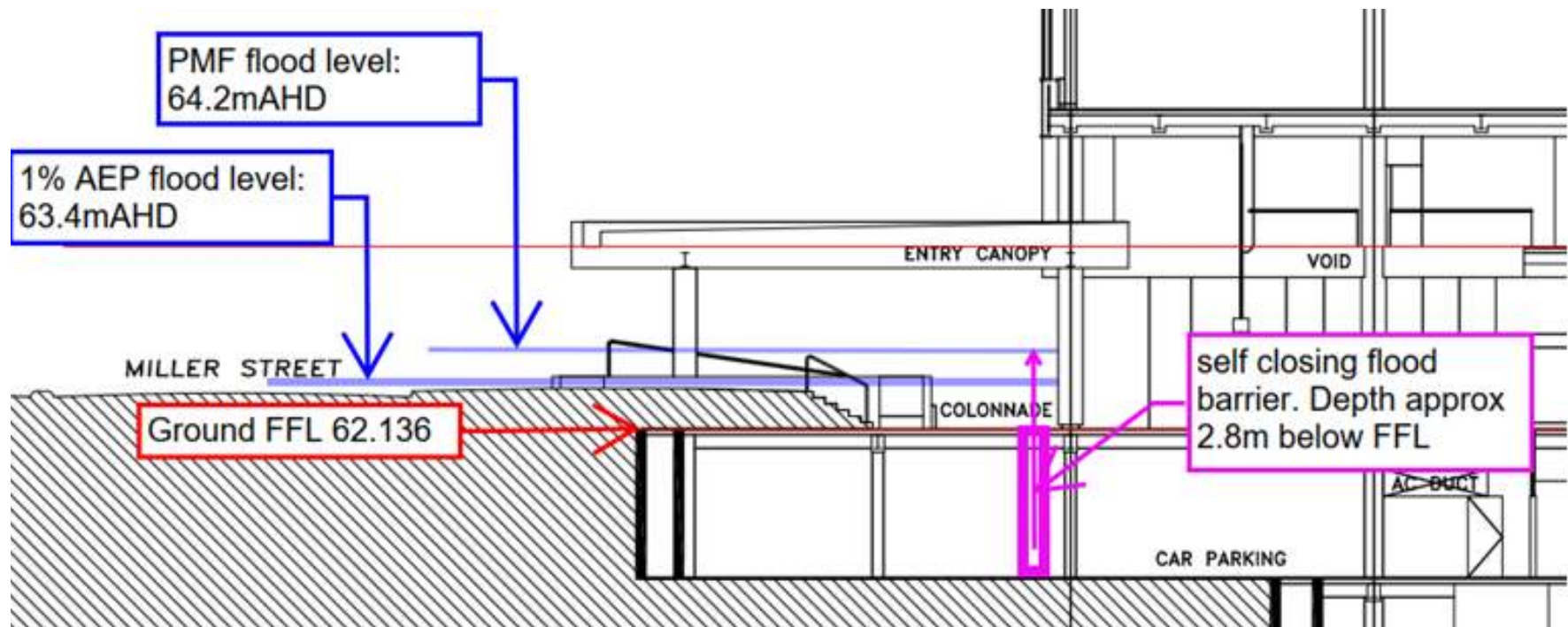


Miller Street

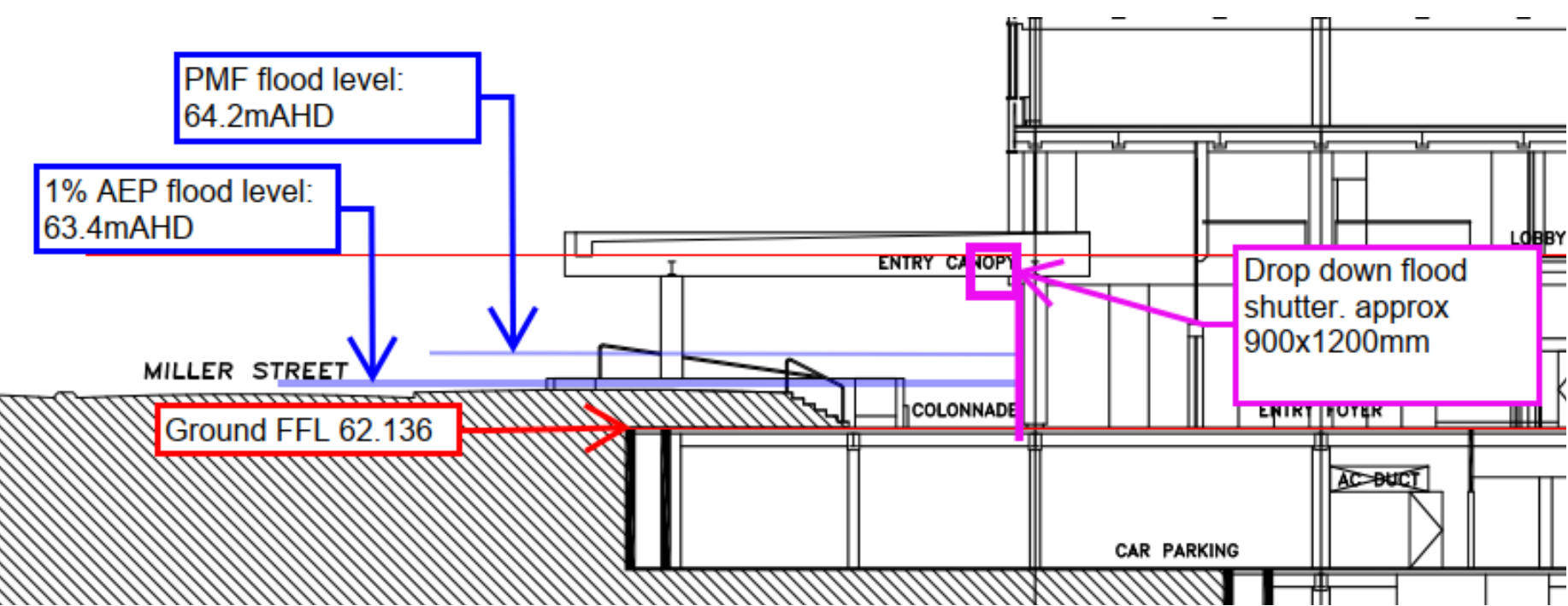
Flood Mitigation Studies

by Civil Engineer

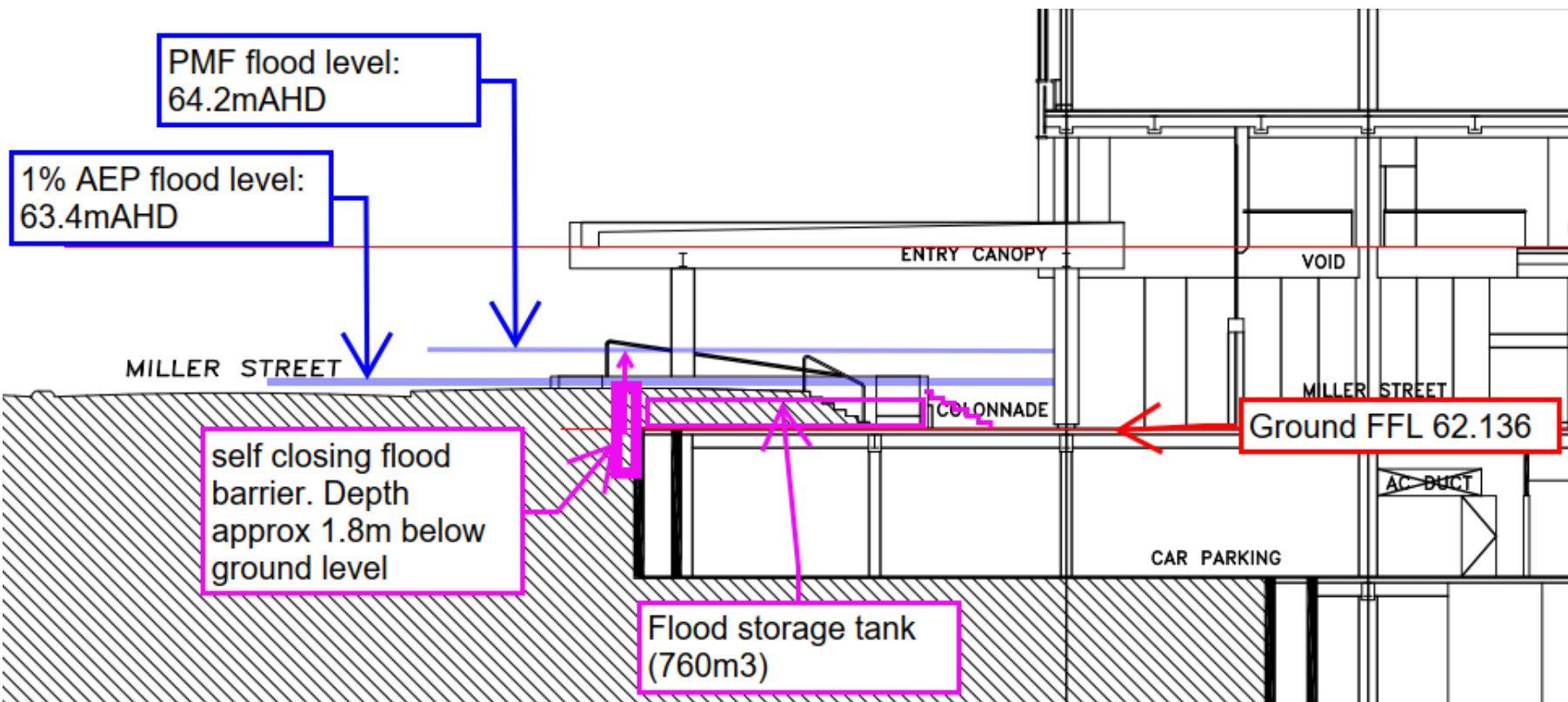
Self Raising Flood Barriers



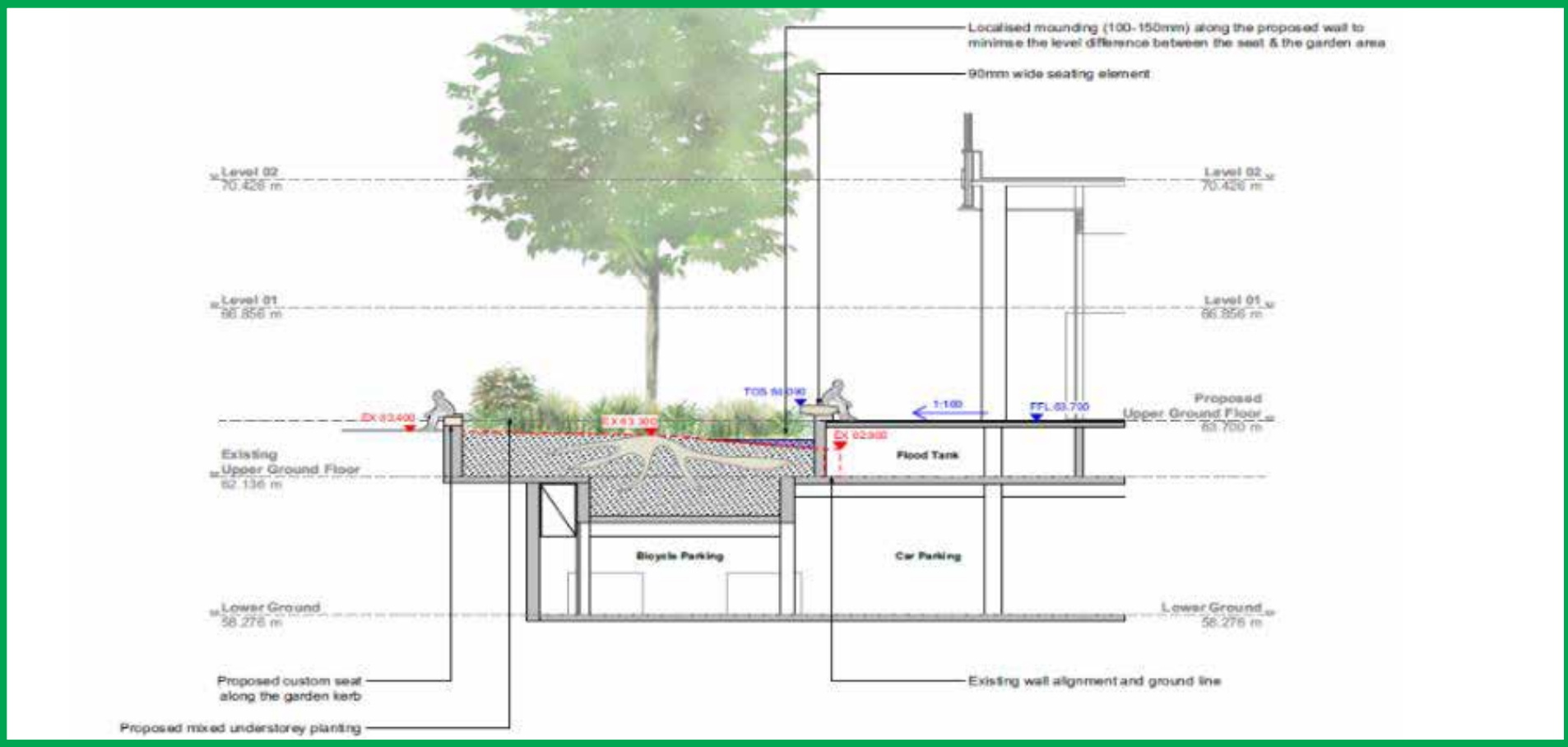
Self Raising Flood Barriers or Drop-down Barrier



Storage Tank in the Verge



Raising the level on Miller Street (Proposed Option)



Miller Street Flood Mitigation Response

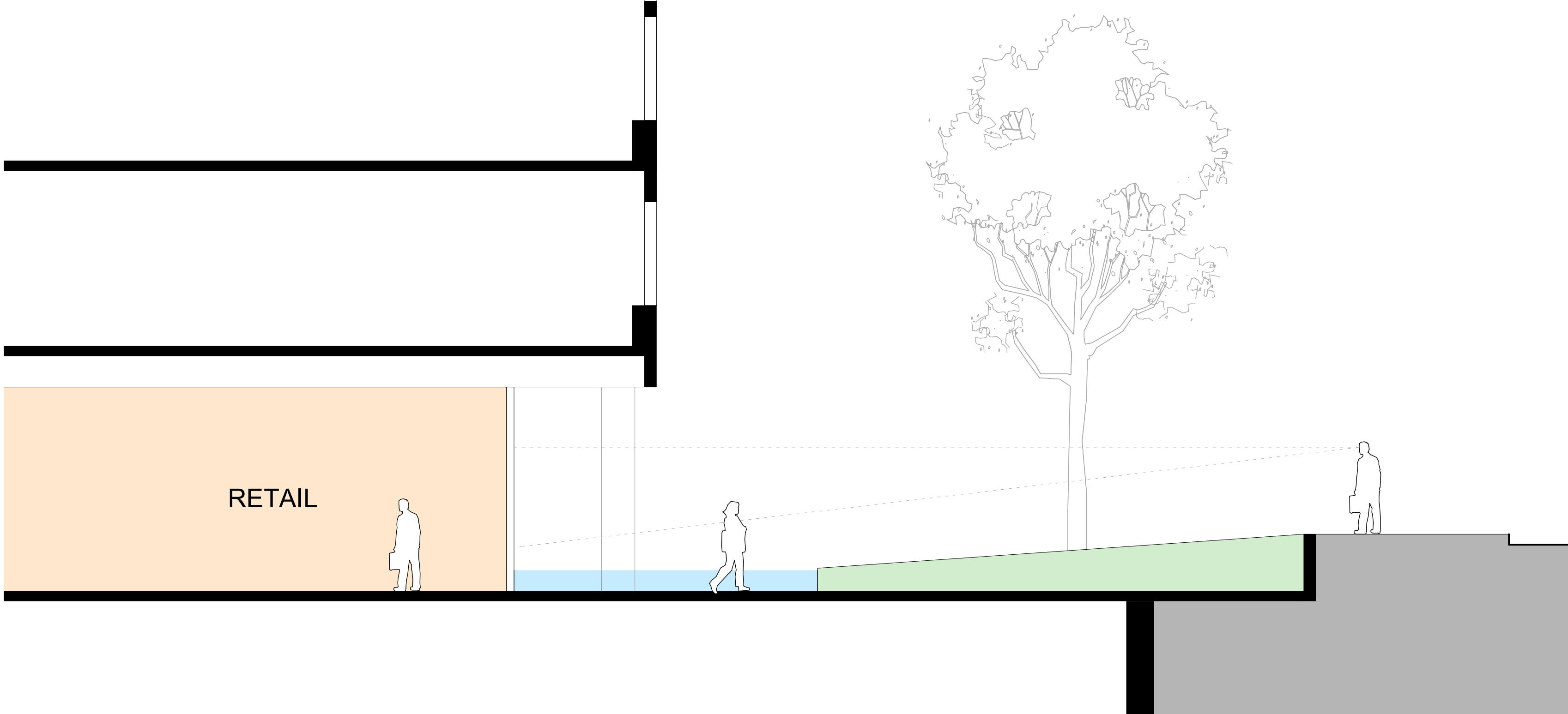
Raising the Level on Miller Street is the most suitable as it provides:

- The highest practical level of flood protection
- A BCA (fire and access) compliant solution.
- The best urban design response
- Meets insurance and commercial requirements

| | Self-Raising Flood Barriers | Flood Shutter or drop-down barrier | Flood Gate & Storage Tank in the verge | Raising the level on Miller Street | |
|---|-----------------------------|------------------------------------|--|---|---|
| ✓ | ✓ | ✓ | ✓ | ✓ | Provides a flooding solution |
| x | x | x | ✓ | ✓ | Flooding solution will not fail mechanically |
| x | x | x | ✓ | ✓ | Resolves accessibility issues |
| x | x | ✓ | ✓ | ✓ | Does not block emergency access when deployed |
| x | x | x | ✓ | ✓ | Resolves urban design issues present at the site |
| ✓ | x | ✓ | x | x | Does not require the removal/disruption of original building fabric |
| ✓ | ✓ | x | ✓ | ✓ | Does not require the removal of plane trees |
| ✓ | ✓ | x | ✓ | ✓ | Does not require the removal and reinstatement of the landscape forecourt |
| x | x | x | ✓ | ✓ | Meets insurance requirements |
| x | x | x | ✓ | ✓ | Results in a leasable property |
| x | x | ✓ | ✓ | ✓ | Adds downstream flooding risk to adjacent properties and spaces |

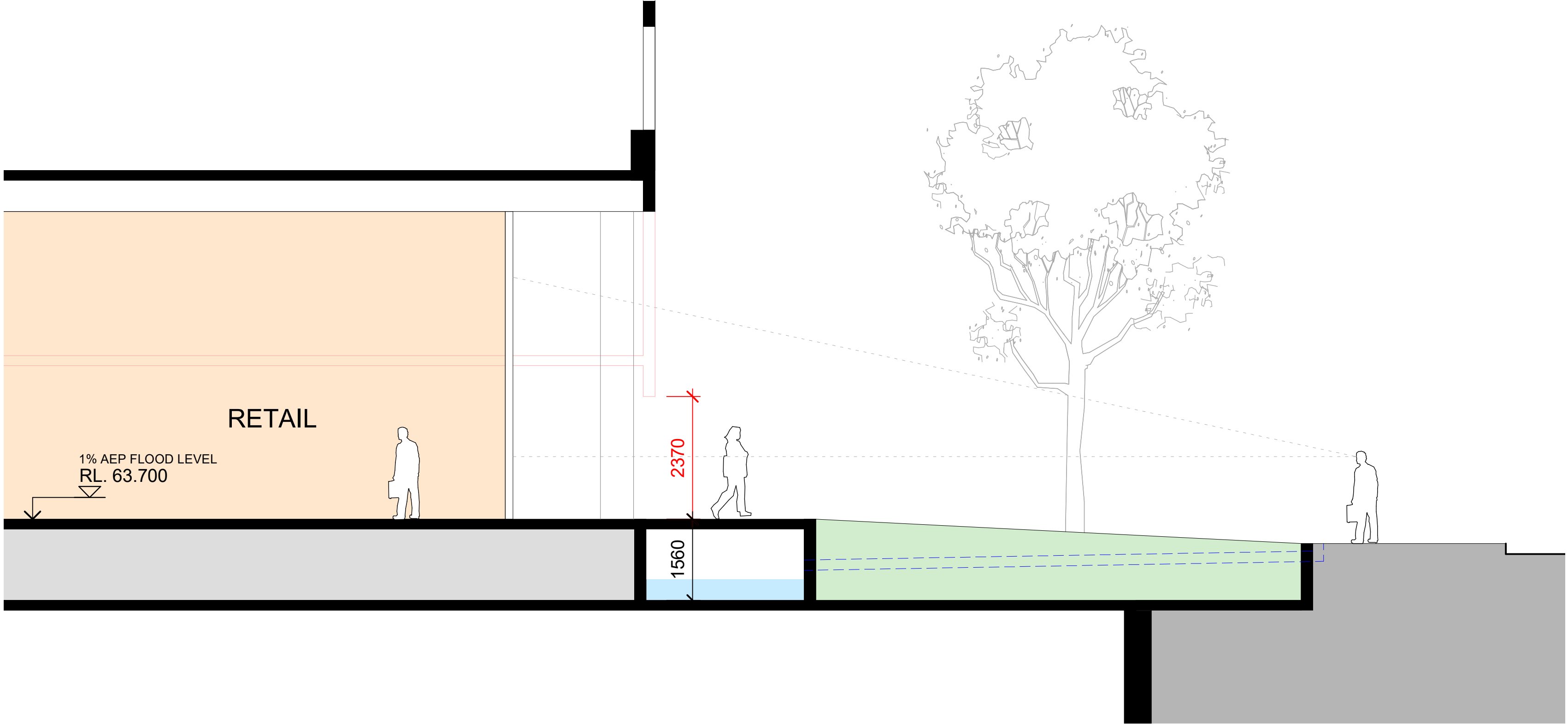
Miller Street Challenges

- The ground floor floods when there is a 100 year rain event which is approximately every two years
- This results in flood water entering the basement via lift shafts which presents a risk to life safety, damage to critical infrastructure and insurance risk



Miller Street Proposals

- Flooding to be mitigated by raising the Miller St FFL to meet the AEP 1% flood RL
- This requires the existing L01 slab to be removed to provide an adequate clear height to ground floor
- The resulting colonnade and retail facade provides improved activation to Miller Street and addresses accessibility issues
- Original shape and materiality of columns to be reinstated
- Facilitates Council's Public Domain Strategy to pedestrianise Miller Street as a contiguous level public open space





↑ City

Pacific Hwy

West Whistler

NTS
675

40
AREA



40
AREA



NITE
675

Miller St Colonnade

Existing / Proposed
Comparison



Existing Condition



Proposed Design

Miller St Colonnade

Original Design

- Original drawings have been used to design the colonnade. Each shopfront has been designed with an aluminium clad portal that recalls the original portal to the MLC entry
- The existing circular metal-clad colonnade columns, which are not original and lack heritage value, will be replaced as part of the redevelopment. In their place original square-format columns will be reinstated
- This approach ensures a respectful and accurate restoration, enhancing the architectural integrity of the colonnade while contributing to the overall heritage aesthetic of the building



Miller St Colonnade

Proposed Design

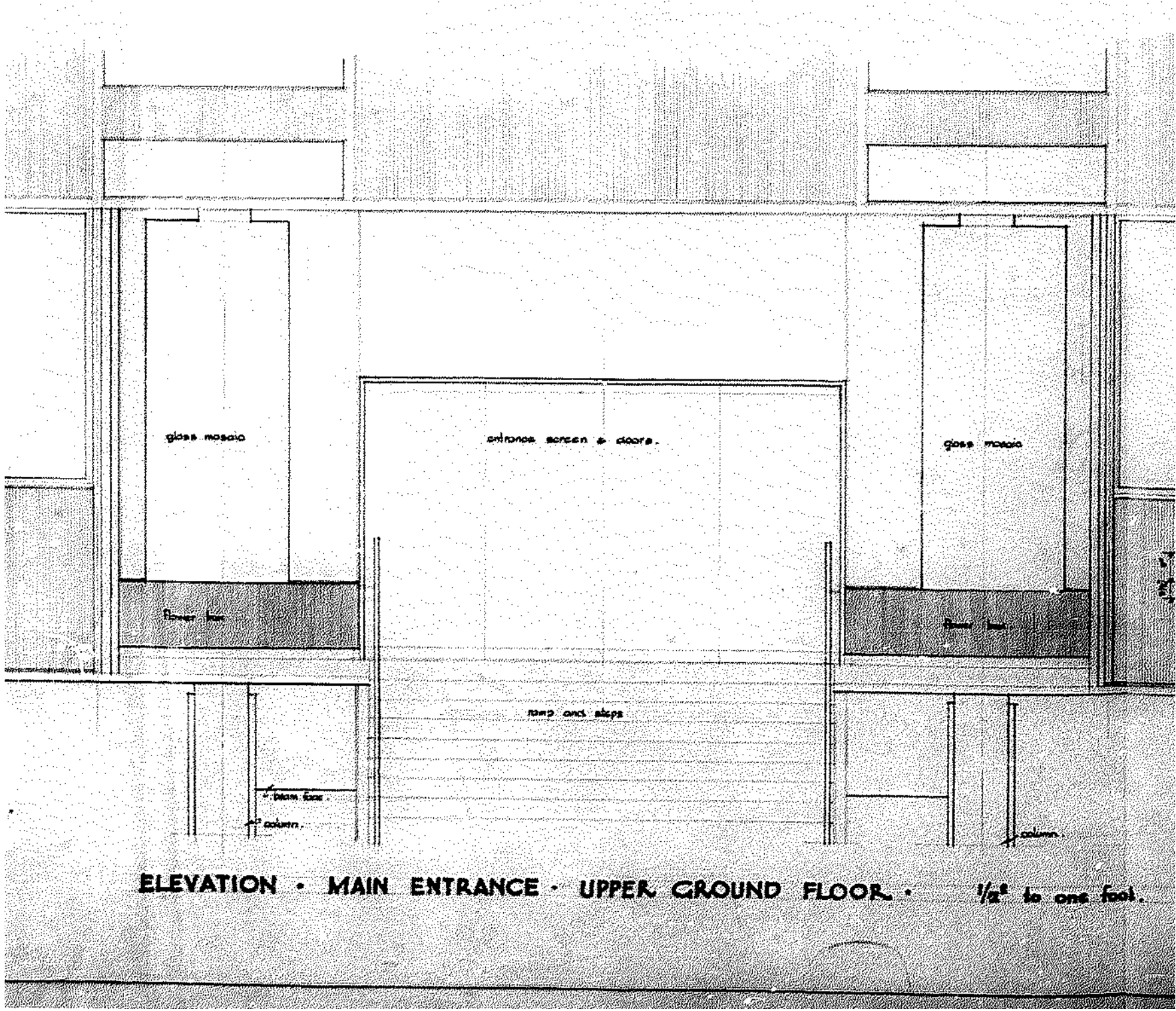
- Mitigates against flooding by raising ground floor to PMF flood level
- Improves urban design by creating a greater street presence
- Meets contemporary standards in terms of retail heights and shopfront quality
- Meets current DDA requirements
- Enhances heritage significance by reinstating original shape and material to columns



Miller St Colonnade

Main Entry

- The proposed entry and retail facades make reference to the original portal-framed entry doors and frameless glazing



Miller St Colonnade

As Lodged

RECOMMENDED



Miller St Colonnade

Retain L01 as Hanging Screen

NOT RECOMMENDED



Miller St Colonnade

Retain L01 Glazing Only

NOT RECOMMENDED



Miller St Colonnade

Introduce Beam

NOT RECOMMENDED



Miller St Colonnade

Reinstate Original Blinds

NOT RECOMMENDED



Miller St Colonnade

Introduce Awning

NOT RECOMMENDED



Miller St Stair

Original Design

- Main entry was originally at Level 1 accessed via external stair and ramp
- Stair would not meet current accessibility code in terms of providing equitable access to the building
- Reinstatement of the stair would force the entry lobby to be located at Level 1 detached from the public realm
- A lift would be required adjacent to the stair to ensure equitable access and the stair features would need to be amended to meet AS1428.1 requirements
- The stair would dominate and overshadow the forecourt and discourage pedestrian flow through the site



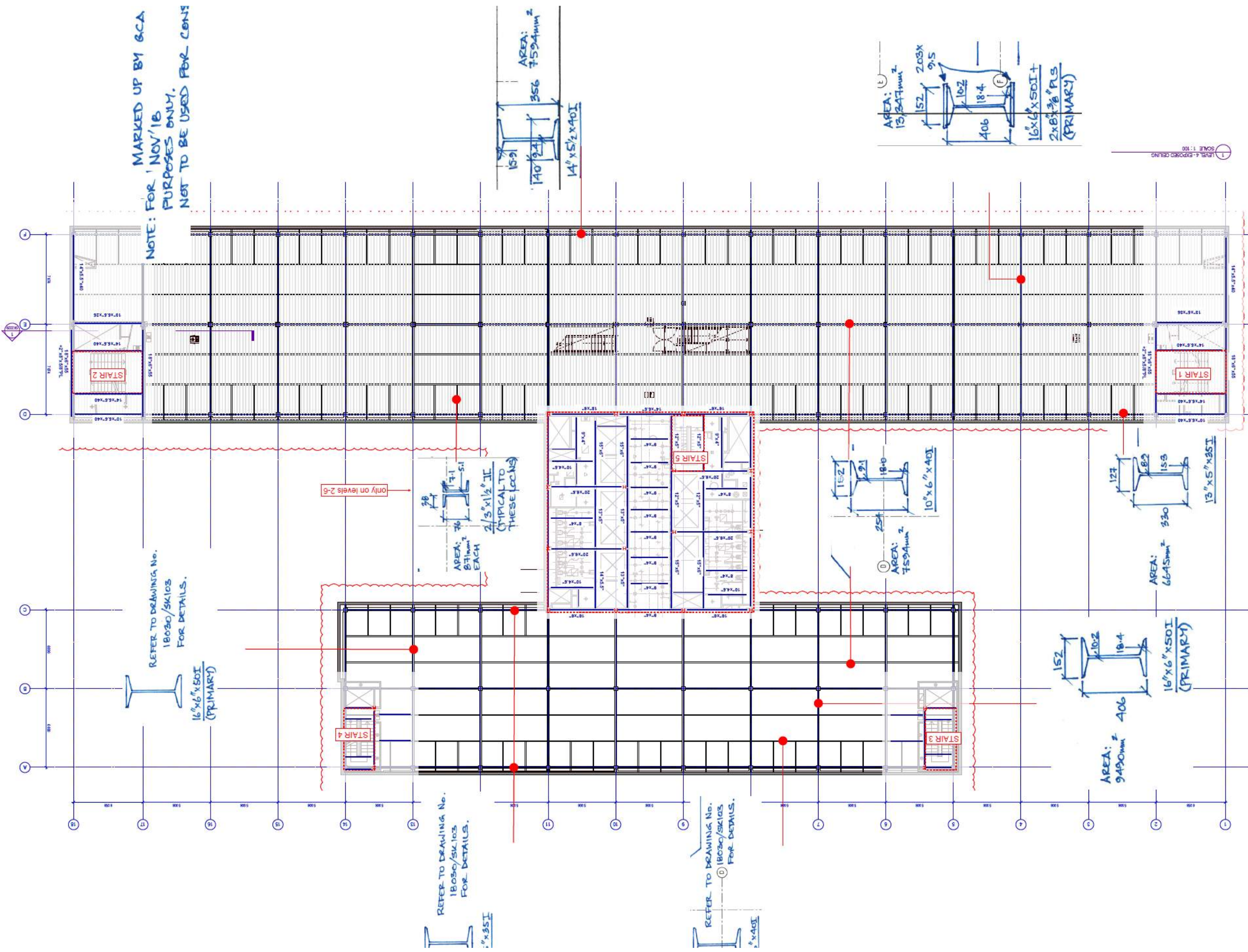
Miller St Colonnade

Compliance with CMP

| Policy Number | Relevant CMP Policy | Curio Projects Response |
|-------------------|---|--|
| <p>3.4</p> | <p>Ground Floor Retail- the retail and commercial tenancies on the ground floor level have been altered considerably over the years, and have little significance, thereby tolerance for change to these spaces is high. The colonnade to the Miller Street façade has moderate significance as despite material changes, it continues to contribute the overall visual prominence of the Miller Street façade. Changes to the colonnade should be allowed only in terms of materiality.</p> | <p>The Miller Street Wing colonnade intent will be retained and refurbished as closely as possible to the original colonnade design based on the original architectural documentation. The proposal is to reinstate the original square format columns to their original size and detail and replicate the original design of the aluminium shopfront portals. The proposed design will contribute to the overall visual prominence of the Miller Street façade whilst resolving the flooding and access issues and improving the urban design response.</p> |
| <p>8.2</p> | <p>There is an opportunity for future potential adaptive reuse options that allow for change of use provided the works are sensitive to the heritage significance of the building.</p> <p>The heritage significance of 105 Miller Street does not preclude changes to the place that can enhance its uses and viability. The ongoing use of a place is the best way to ensure its conservation into the future.</p> <p>The Miller Street Forecourt is to be retained as a predominantly soft-landscaped forecourt as per the original intended use for the space.</p> | <p>The proposed works include the adaptation of the front entry to eliminate the issue of flooding and raise the height of the ground floor to street level, which will eliminate the flooding issues and provide an improved retail experience at the ground floor plane.</p> <p>The Miller Street Wing colonnade intent will be retained and refurbished as closely as possible to the original colonnade design based on the original architectural documentation.</p> <p>The proposal is to reinstate the original square format columns to their original size and detail and replicate the original design of the aluminium shopfront portals, is a positive heritage outcome that was not anticipated by the CMP, as it was not considered that the reinstatement of the original colonnade format would likely ever be achievable, as opposed to desirable</p> |

Existing Building Structural Overview

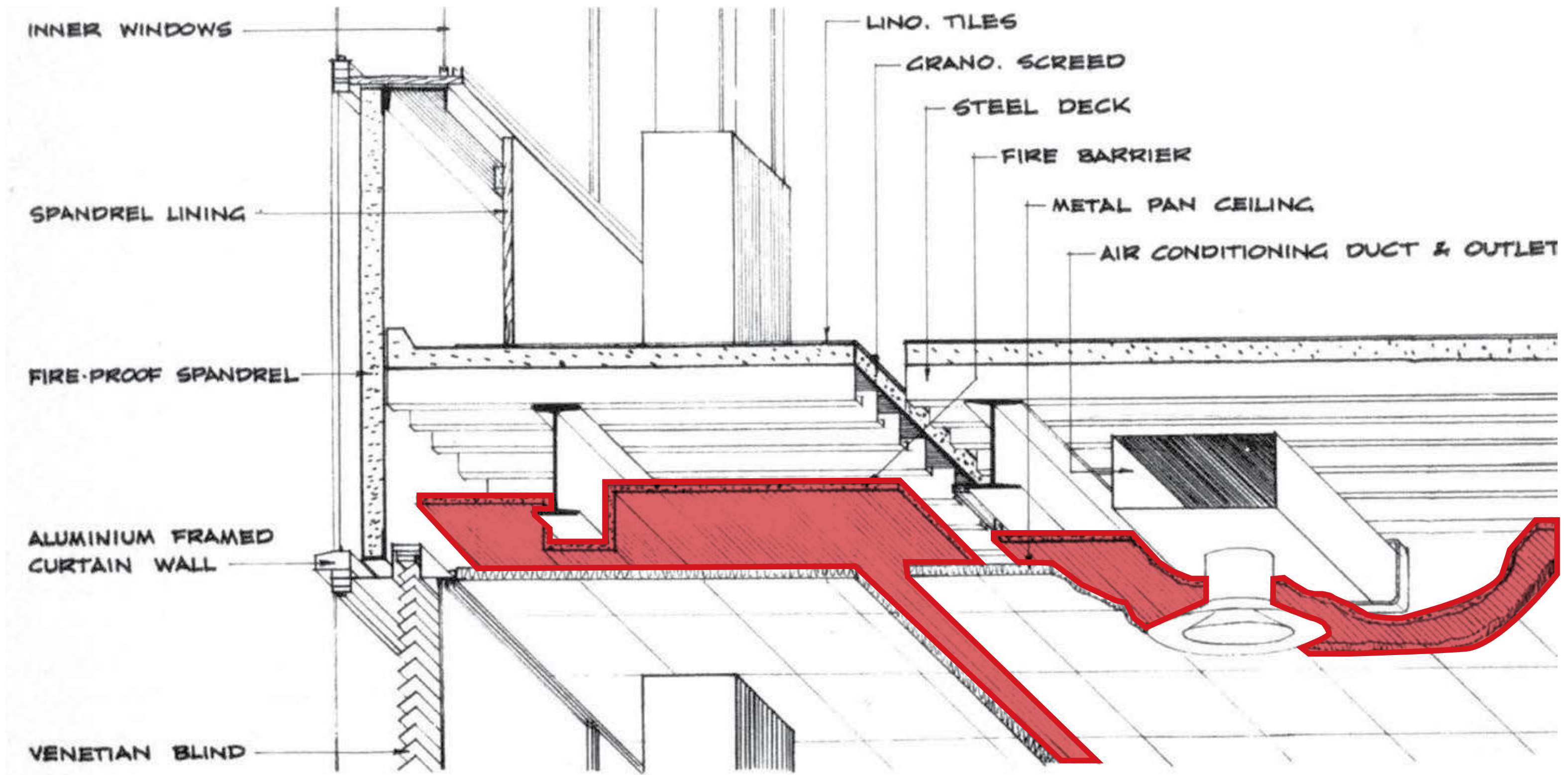
- The existing stability system is not compliant with current wind or seismic standards
- The current core located in between the two wings, provides little more than nominal capacity. The existing core is therefore required to be upgraded to have sufficient capacity for lateral and vertical loads. The alternative would require bracing within the floor plate which would detract from the user experience and heritage outcome
- Suspended slabs in the Miller Street wing, are 63mm thick on a 100mm metal deck with minimal reinforcement. The slabs do not meet 2-hour fire rating or the tension capacity / in-plane diaphragm forces required by code
- Ultimately the structure is well beyond its 50-year design life



Miller St Wing Floor Slabs

Existing Condition

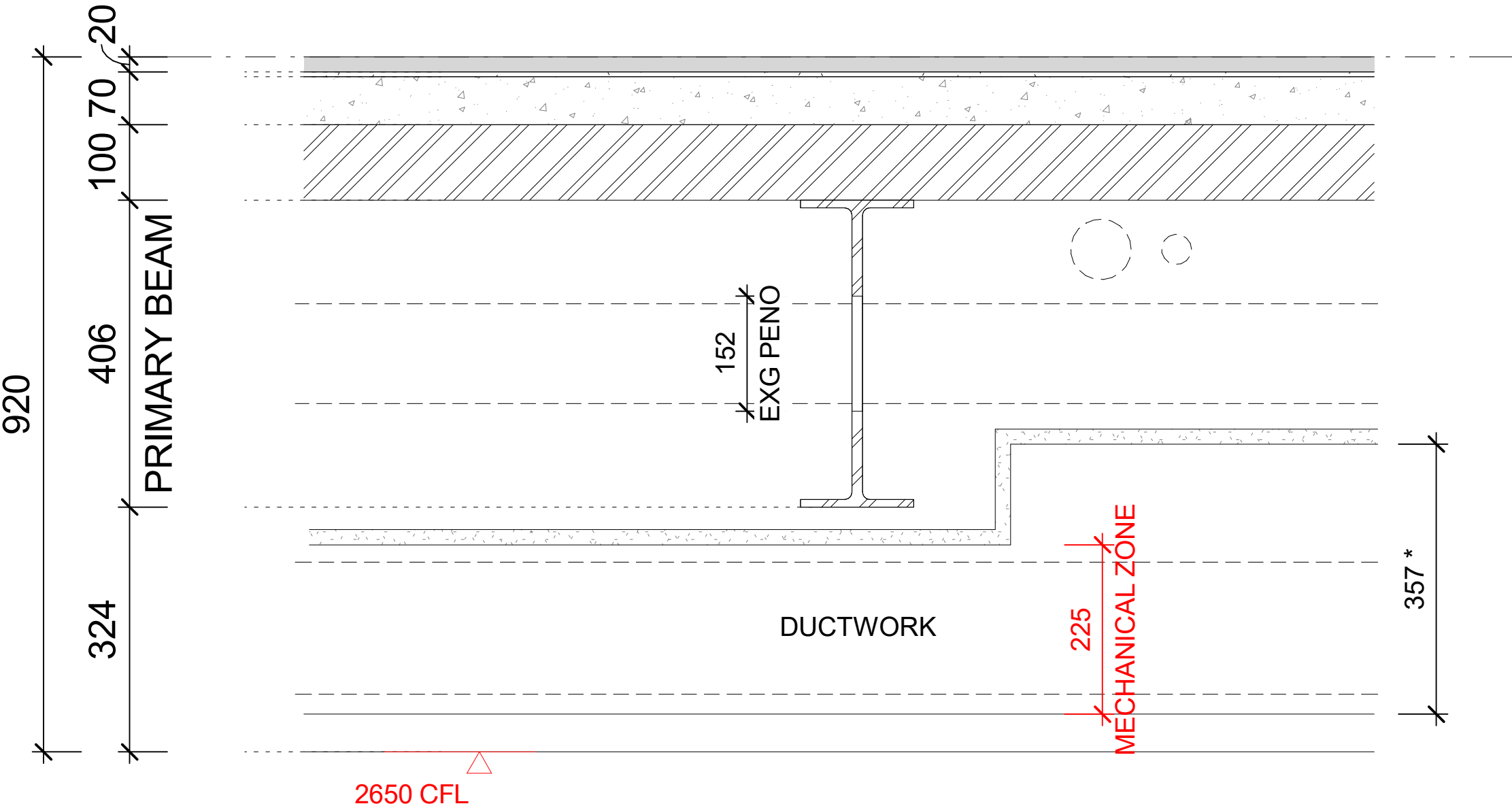
- Fire protection from above is limited to a 63mm screed which provides less than a 45 minute fire rating from above and does not comply with code
- The floor structure is currently protected from below with a fire barrier that sits beneath the mechanical services and tenant services
- The existing fire barrier does not achieve code compliance and nor provide flexibility for installing and maintaining contemporary services and meeting tenant fitout requirements
- Existing services are end of life and require replacement requiring full removal of existing fire barrier below the slab



Miller St Wing Floor Slabs

Existing Condition

- Existing mechanical ducts are extremely shallow and wide fitting within a 225mm zone which does not meet current mechanical design and energy efficiency standards
- Ceiling heights are currently at a maximum of 2650mm which does not meet PCA A-Grade criteria



20mm FINISHES*

63.5mm STEEL REINFORCED SCREED + 6.35mm TOPPING

100mm STEEL FLOOR DECK (250 x 100 C-SECTIONS)

SERVICES ZONE

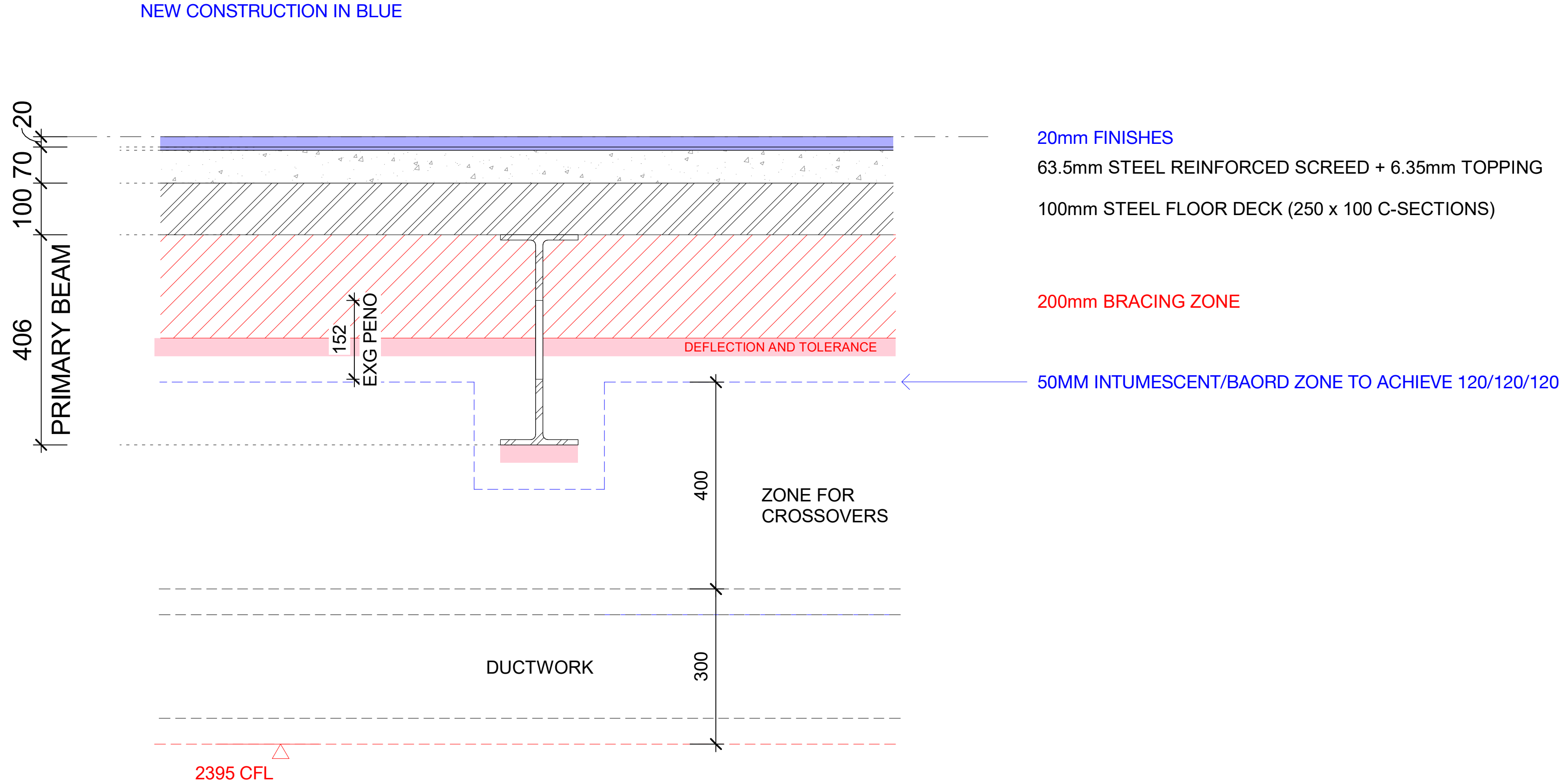
22mm FIRE-RATED VERMICULITE/PLASTERBOARD CEILING

METAL PAN CEILING SYSTEM

Miller St Wing Floor Slabs

Retain and Upgrade Slab

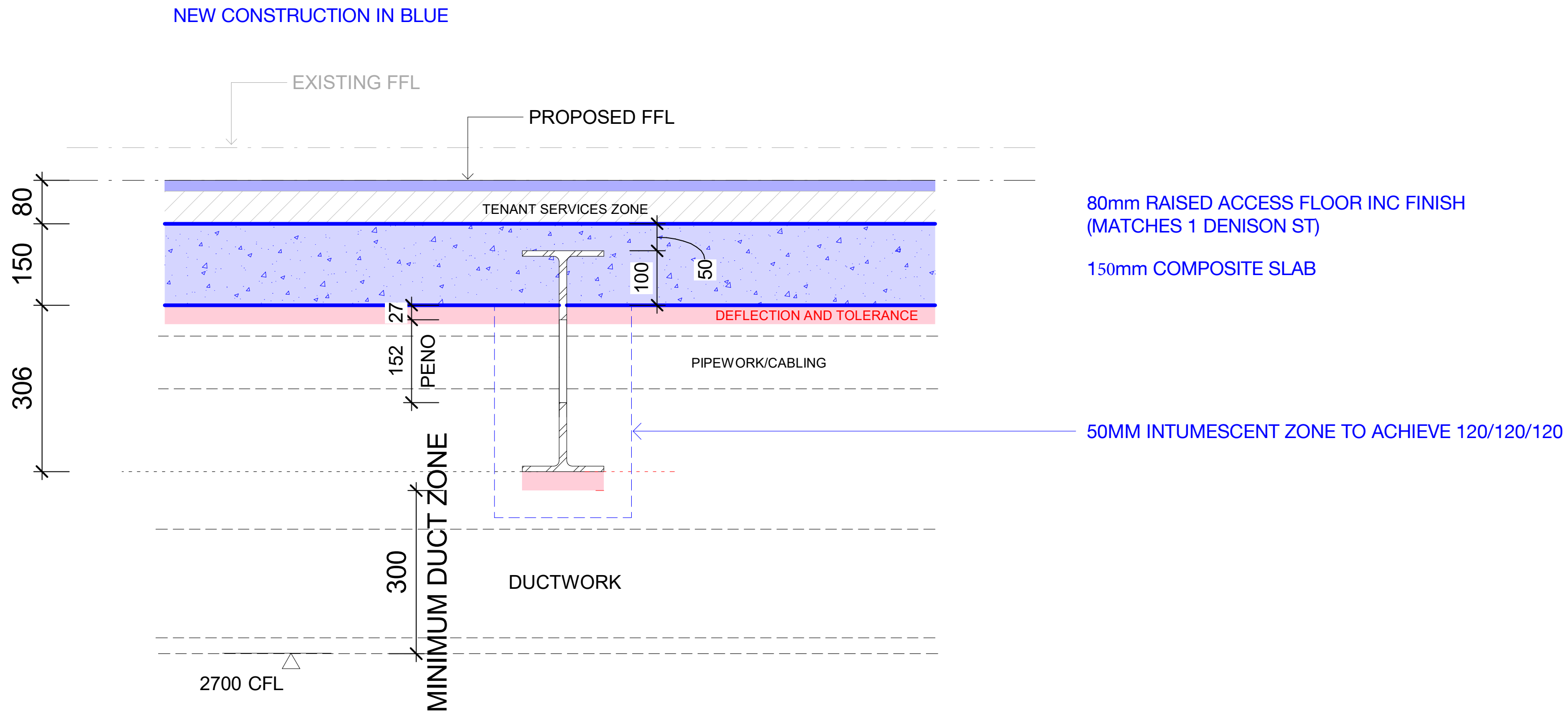
- Replace current fire barrier with intumescent paint/fire rated board to provide required fire rating from below
- Performance solution required to permit 45 minute rating from above
- Existing steel deck does not have enough tension capacity to comply with current standards including AS1170.4 related to seismic design
- 2395mm ceiling height achieved



Miller St Wing Floor Slabs

Replace Slab

- Retain existing steel beams and replace steel deck and screed with new 120mm concrete slab to achieve 2hr fire rating in two directions
- Concrete slab is able to meet current code requirements for floor diaphragm and resist seismic loading
- Positioning of slab within depth of beam optimises available height and makes the target 2.7m ceiling height feasible



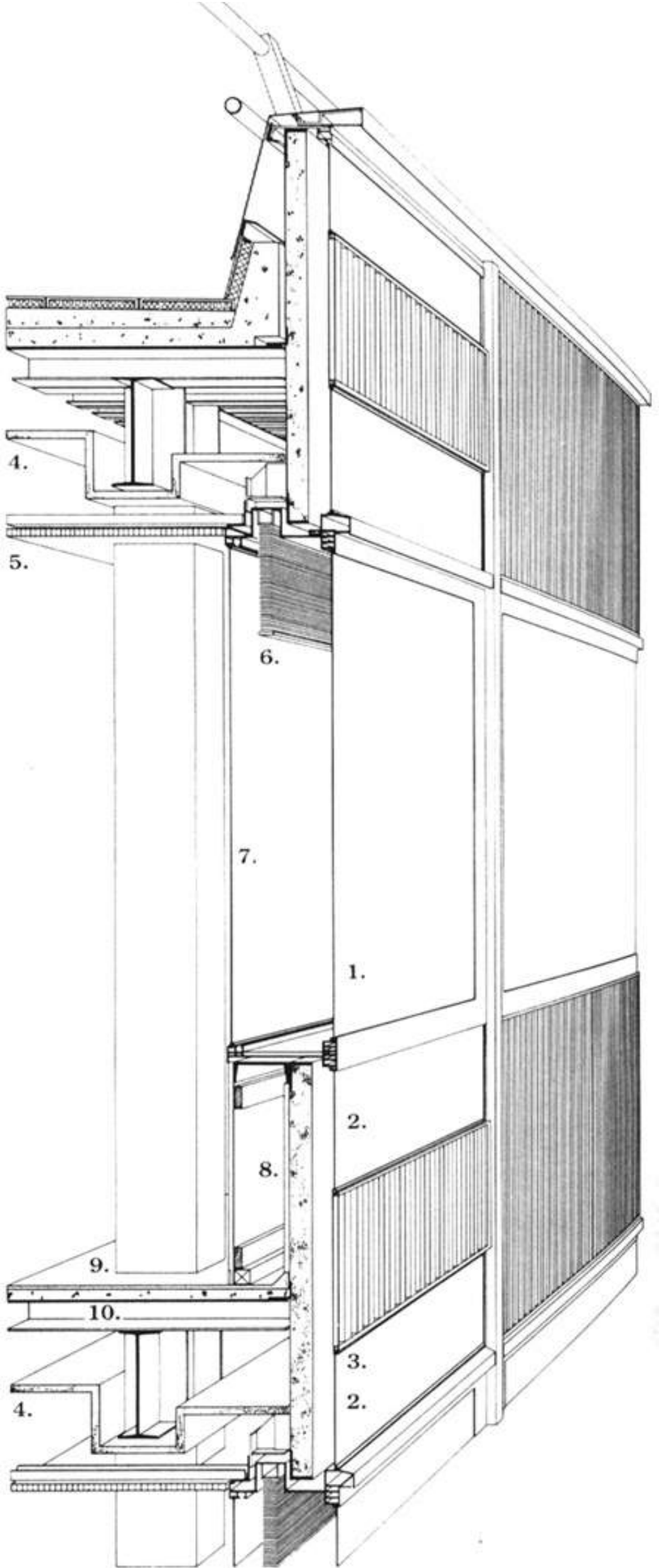
Slab Replacement

Compliance with CMP

| Policy Number | Relevant CMP Policy | Curio Projects Response |
|-------------------|---|---|
| <p>3.1</p> | <p>Policy 3.1 Interiors – the interiors of 105 Miller Street have been altered considerably especially from Levels 1 to 12, as part of the major 2000 and 2017 interior renovations. Proposed changes to the interiors in terms of adaptive reuse and new works, can be supported on the basis that there very little fabric of value on these levels. The extent of changes to the Basement, Lower Ground Floor and Ground Floor levels will need to be more considered as there is fabric of exceptional and high significance on these levels.</p> | <p>Due to the requirement to remove the concrete slabs throughout, the interiors across the site will be impacted. Generally, the key interiors of significance will be reconstructed, including the squash courts and the auditorium, noting that the current auditorium is not in its original condition.</p> <p>Most of the interiors are no longer original having been removed in 2000 and 2017, so the loss of significant, original fabric is not high.</p> <p>In terms of original plant room machinery, examples will be retained on site for interpretative purposes. Machines to be retained and interpreted will be finalised as part of the detailed design.</p> |

Existing Facades

Challenges and Proposals



- Challenges:
- Asbestos has been detected in seals across the curtain wall facades
 - The aluminium has corroded requiring treatment or replacement
 - The terracotta tiling to the north and south facades and core are delaminating from their substrate
 - Loose tiles have been mechanically fixed to prevent from falling which is unsightly
 - Does not meet wind load requirements
 - Does not meet BCA Section J or NABERS 5.5 energy rating which is a requirement

- Proposals:
- Full replacement of tiles and substrate with a new rainscreen system to be visually consistent with the original design intent
 - Opportunity to retain and refurbish the curtain wall facades requires further investigation

Miller St Wing Curtain Wall

Site Investigations

- Window frames are made of **unsealed interlocking extrusions** that don't provide fully weathertight joints. The system **will not comply with the BCA or AS/NZ 4284** for weatherproofing and without a weather tight façade, the development **will not be able to achieve the statutory sustainability targets**, specifically a GBCA 5 Star rating and 5.5 NABERS Energy Rating
- Existing spandrel panels have **damaged foil, dislodged junction flashing and unsealed flashing** in some locations which is **leading to water ingress and corrosion**. If the façade is not weathertight the project will be unable to achieve the statutory sustainability targets
- **Metal back pans** have been installed in some locations and **plastic sheets** have also been installed behind corrugated metal cladding, **none are in a good state of repair** or are suitable to satisfy weather tightness
- Risk of water ingress presents an **insurance risk** and will reduce lifespan of long-term maintenance works



Site Investigations

Contamination and Corrosion

- Testing has verified the **widespread presence of asbestos**-containing material in the mastic sealant requiring a licenced asbestos removal specialist to undertake any repair works, including glass replacement
- The external glass has been glazed into the window frames on all sides, testing of the sealant has confirmed that it contains asbestos, as a result any glass replacement would require a licenced asbestos removal specialist to undertake the work
- Tenant leasing, statutory planning and insurance requirements dictate that the building needs to achieve a GBCA 5 Star rating and a 5.5 NABERS Energy Rating; workspaces are free from hazardous materials including asbestos; and workspaces that comply with BCA requirements.
- Aluminium surfaces have deteriorated with pitting corrosion evident throughout. The surface pitting is not reparable, it can be managed, but further deterioration in the surface finish would be expected in the medium to long term



| Sample ID | Material Type | Sample Location | Specified Analysis | Laboratory Result |
|-----------|------------------------------------|--|--------------------|-------------------------------------|
| CW-A4 | Grey, soft mastic material | Outer vision window (glazing channel) | Asbestos | Chrysotile asbestos detected |
| CW-A5 | Grey, soft mastic material | Colour-back glass panel (glazing channel) | Asbestos | Chrysotile asbestos detected |
| CW-A7 | Grey / brown, soft mastic material | Back of mullion / head transom connection in spandrel cavity | Asbestos | Chrysotile asbestos detected |

Site Investigations

Glass

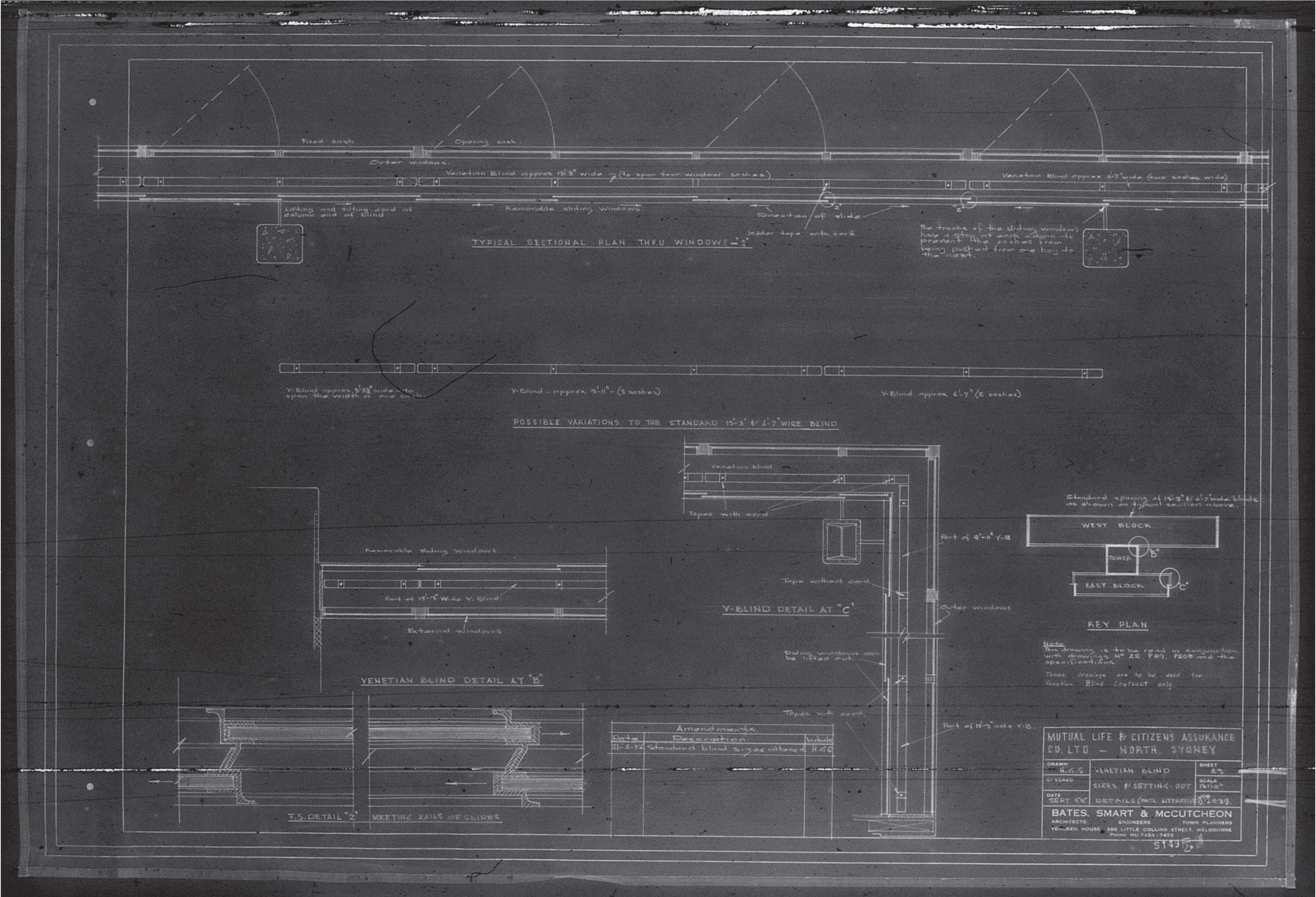
- Glass testing has been carried out that indicates that the **solar height gain coefficient (SHGC) for the glass is 0.66**. Inhabit ESD completed an energy assessment, which outlines that the **glass needs to be replaced** to achieve BCA Section J compliance and a GBCA 5 Star rating and 5.5 NABERS Energy Rating
- The glass has been confirmed as **6mm float glass which is a safety hazard** and non-compliant with AS1288



Miller Wing Facade

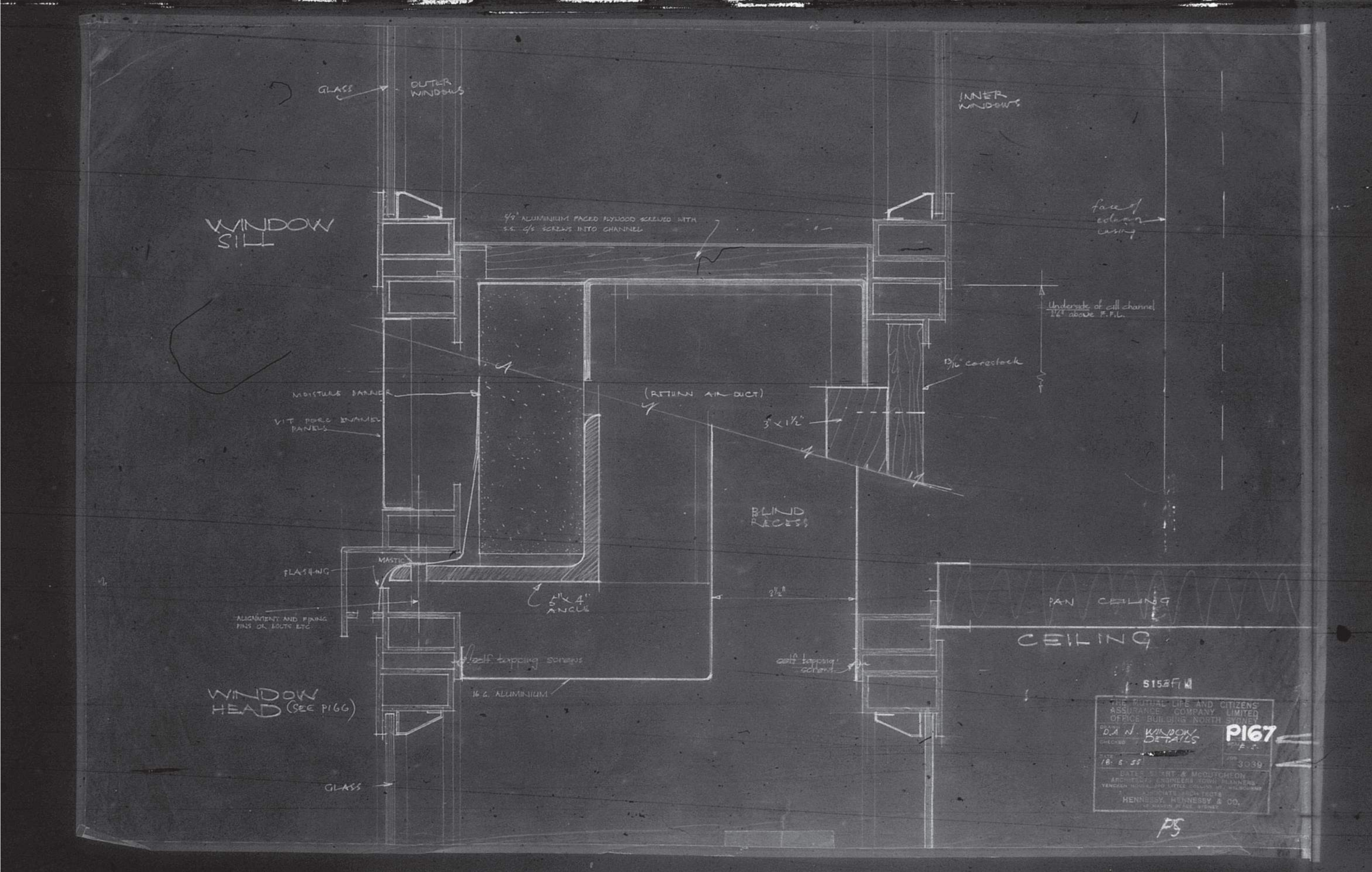
Original Detail

- Typical details showing window arrangement and blind setout
- Confirms that outer leafs were designed to be operable but were later screwed shut
- No requirement for operability in proposed condition but the capping should resemble the various framing depths



Miller Wing Facade Original Detail

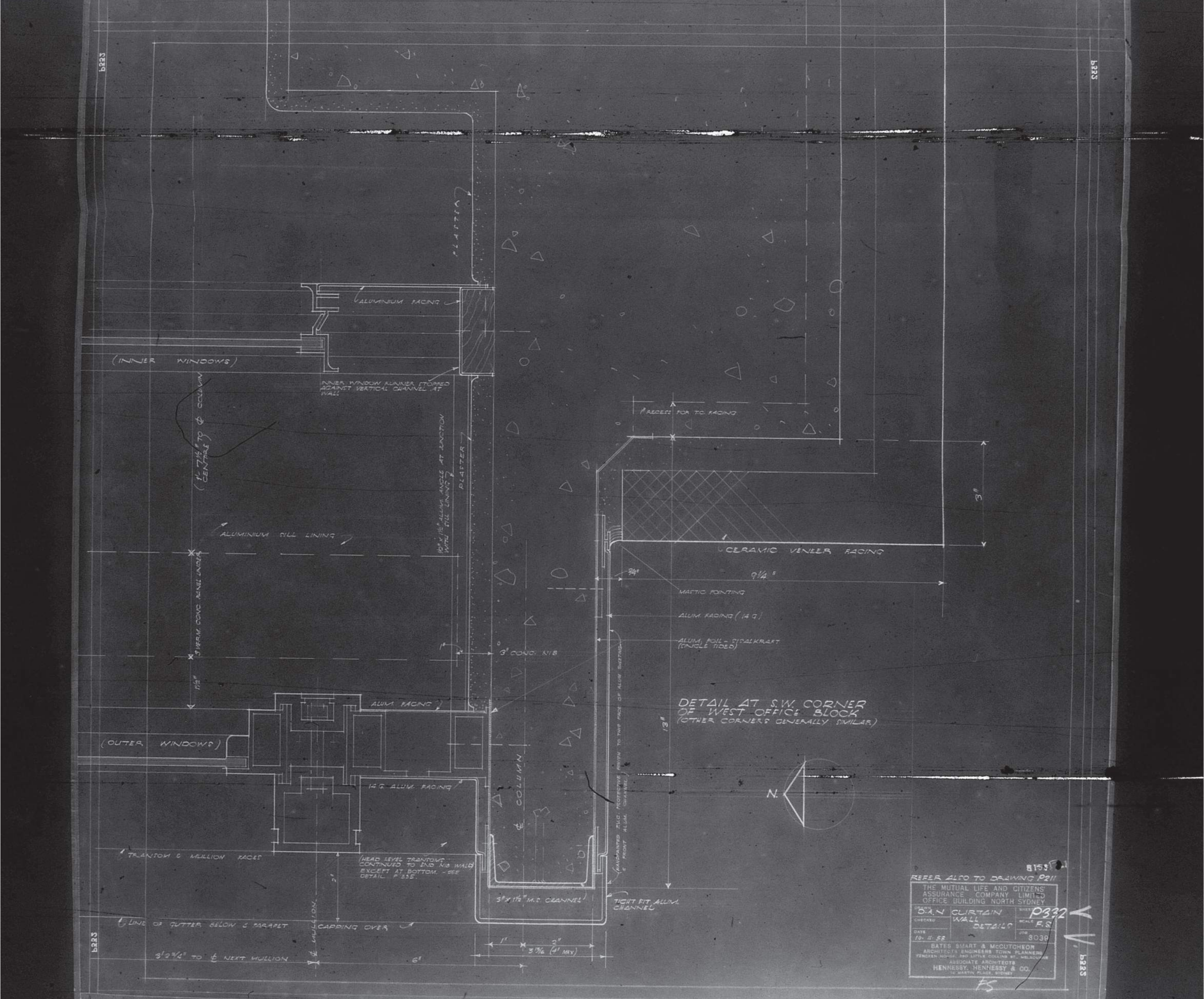
— Typical sill detail



Miller Wing Facade

Original Detail

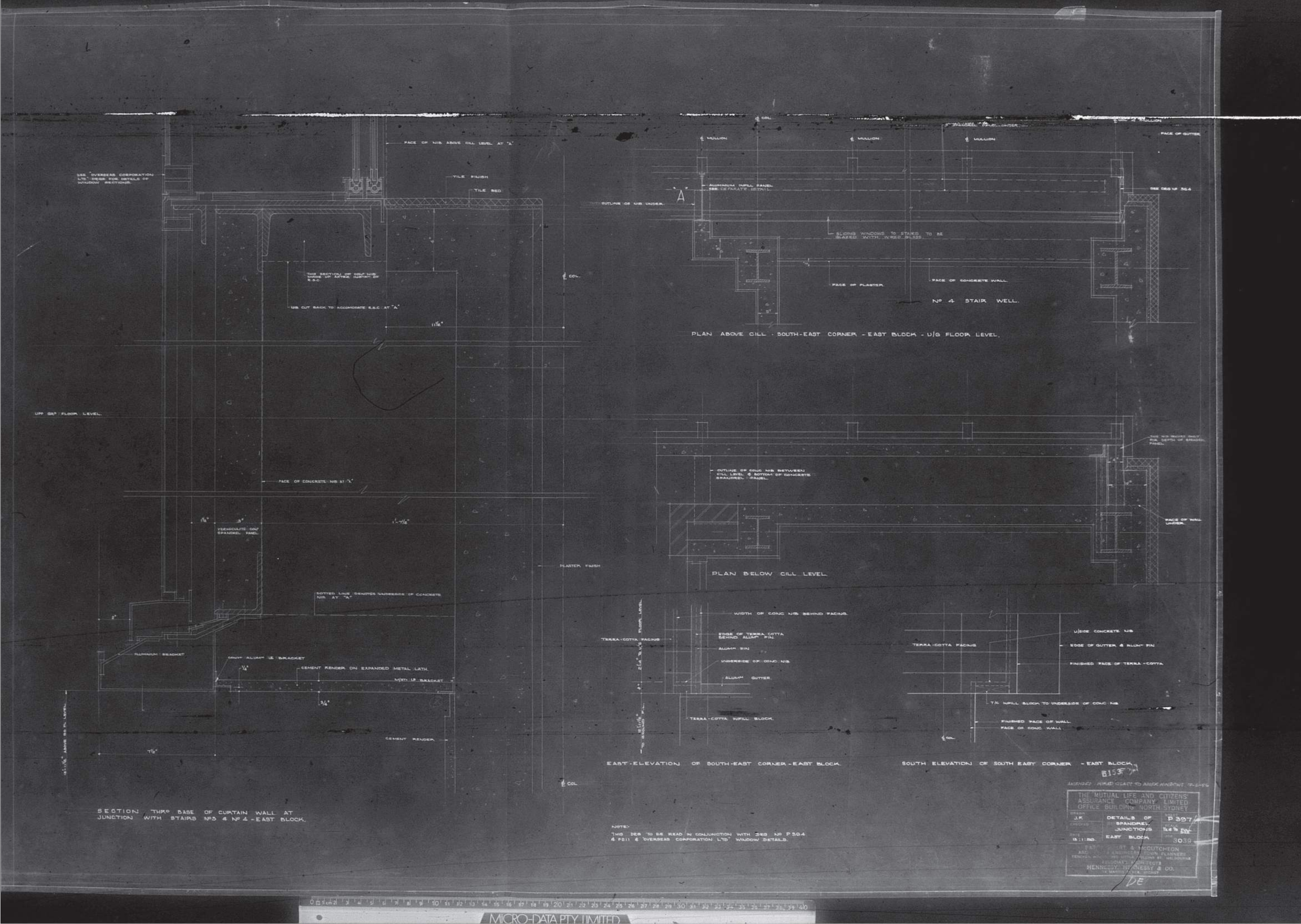
— Detail at corner of Miller wing



Miller Wing Facade

Original Detail

- Typical section of Denison wing
- It appears that the Denison wing was originally constructed with the smaller cavity and internal sill (as per the existing condition) and the Miller wing had a larger cavity with no internal sill which was later amended to match Denison



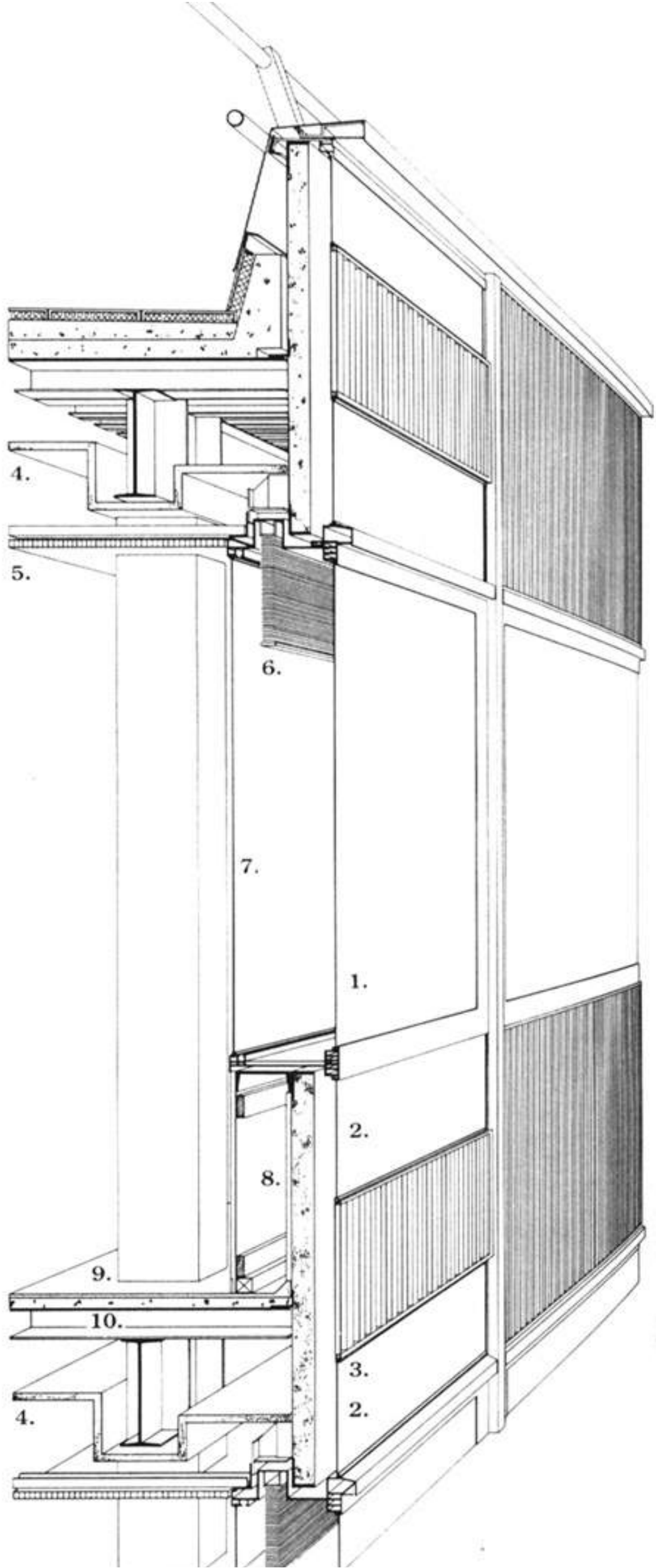
Heritage Fabric Curtain Wall Facade

Replacement of facade is deemed necessary for the following reasons:

- Asbestos has been detected in mastic joints and seals across the curtain wall facades
- Coatings are damaged and have surpassed their design life of 50 years resulting in widespread corrosion and pitting
- Structural damage to fixings, rivets and framing
- Repairs would require disassembly and reassembly of facade which is not possible without causing damage

Proposals:

- A replacement curtain wall facade with a like-for-like aesthetic
- Performance will be enhanced through contemporary technology and materials to meet current ESD requirements
- Venetian blinds to be replicated between two layers of glazing as existing



EXISTING FACADE



EXISTING FACADE

Miller St Wing Curtain Wall

Proposed Design

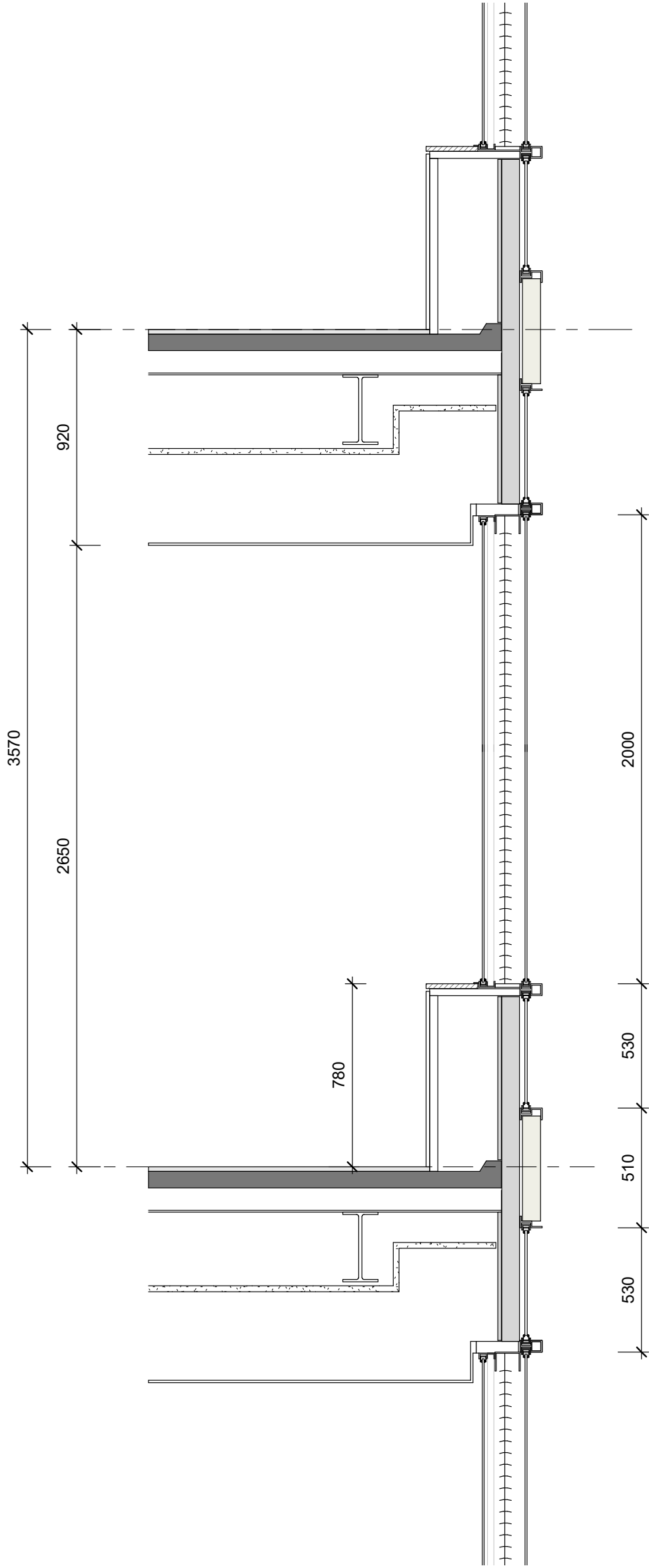
- A replacement facade design has been developed to ensure a like-for-like appearance with two layers of glazing and blinds within the cavity which is **compliant with the CMP**
- Two full-depth mullions proposed per structural bay to allow unitised curtain wall system (panel sizes maximised to emulate original stick system)
- The double-skin facade allows the glass to be equivalent in appearance to the existing with a high visual light transmittance
- The existing glass has been tested for its visual characteristics which will be used in selecting a proposed glass type



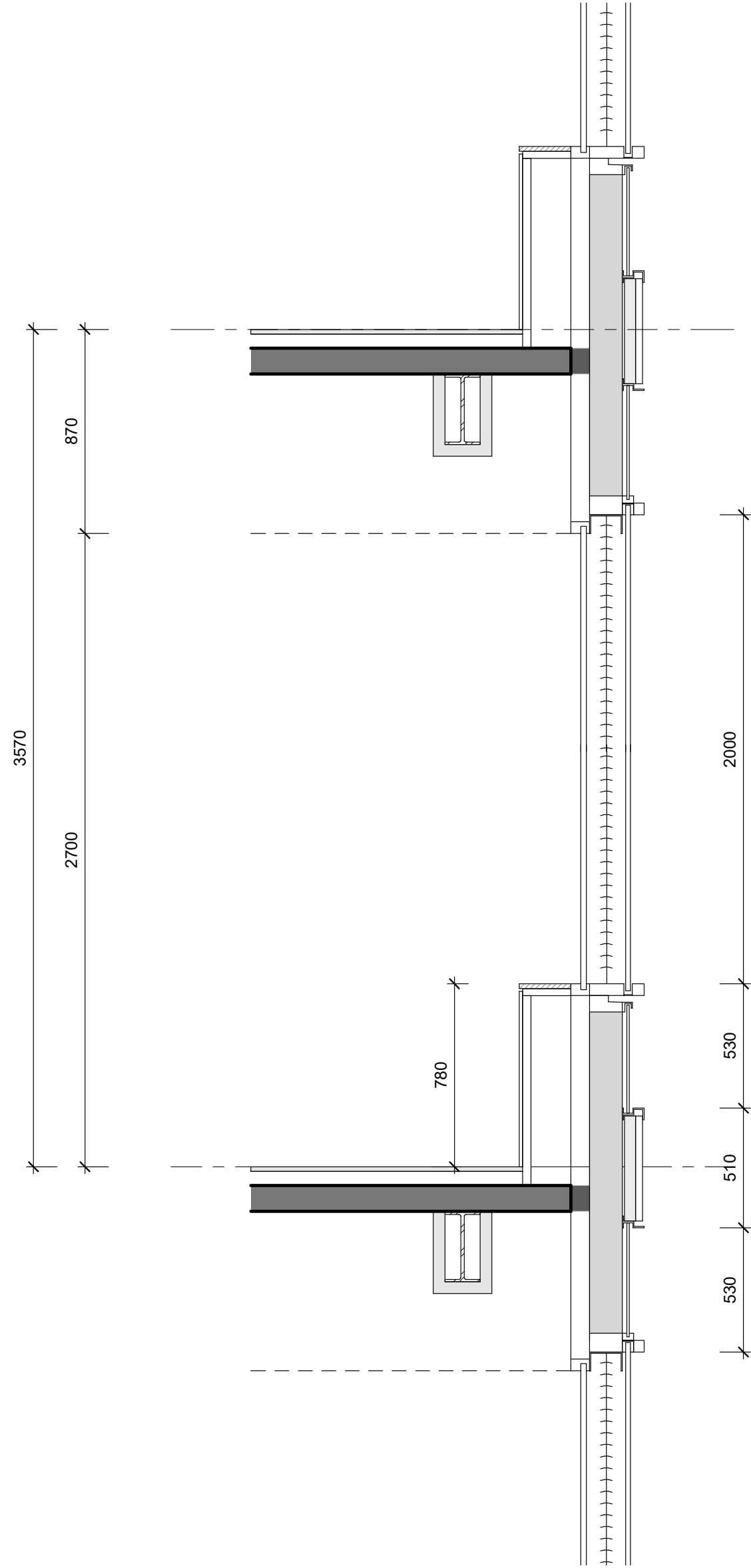
PROPOSED FACADE

Miller St Wing Curtain Wall

Existing vs Proposed Design



EXISTING SECTION



PROPOSED SECTION

Existing Facade Historical Photos



1950s International Style

International Precedent



Curtain Wall Replacement

Compliance with CMP

| Policy Number | Relevant CMP Policy | Curio Projects Response |
|-------------------|--|--|
| <p>8.2</p> | <p>Changes to the external facades, including replacement of fabric associated with the curtain walls and terracotta tiling, even though likely to require the use of new technologies and materials will need to retain a similar aesthetic in terms of colour, look and feel to the current curtain wall and terracotta tiling</p> <p>Policy 9.1.2. Future-Proofing Modern Buildings and Section 9.2 Management of Fabric support the refurbishment of the curtain walls either in sections or as a whole to ensure compliance with building standards, as long as visual identify and aesthetic significance is retained.</p> | <p>The proposed reconstruction of the Miller Street façade is compliant with the Conservation Management Plan (CMP) for the site as the CMP allows for the wholesale replacement of the façade, to ensure its continued longevity.</p> <p>In addition to the multiple policies and discussions throughout the CMP in relation to façade replacement, the updated statement of significance clearly notes that:</p> <p>105 Miller Street is likely to require wholesale replacement of façade fabric, including its curtain wall facades and terracotta tiling, similar to its curtain wall counterparts, such as Lever House, ICI House, AMP Building and Qantas House, which have all had their curtain walls replaced at different stages of the life of the building. (CMP:107)</p> |



Appendix

Heritage Interpretation

Auditorium

Original drawings will guide the restoration process, ensuring that the geometry and detailing faithfully reflect the original intent.



Squash Courts

Heritage fabric within the squash court zone will be refurbished and reinstalled where feasible and fit for purpose.



Heritage Fabric

Squash Courts

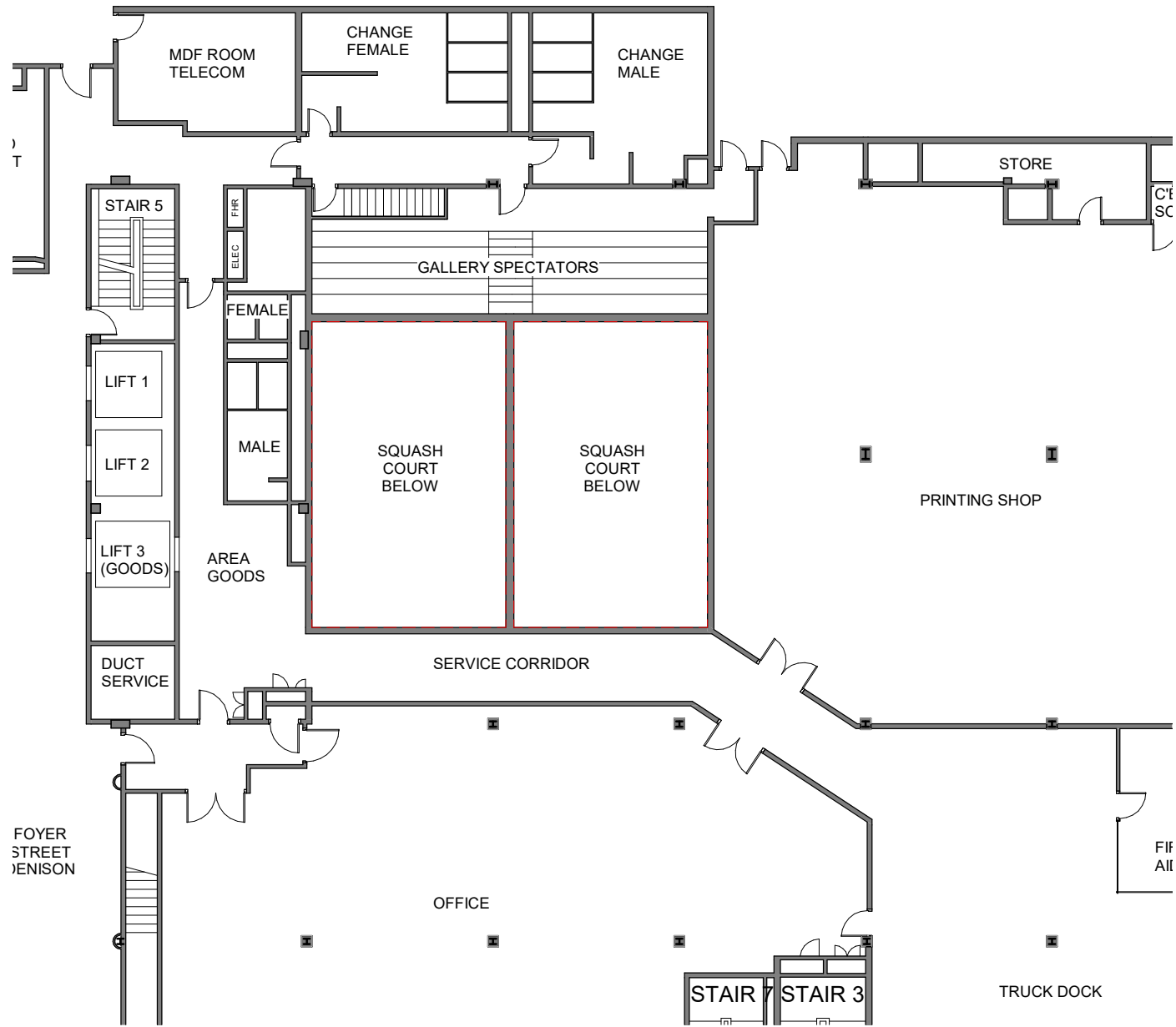


Challenges:

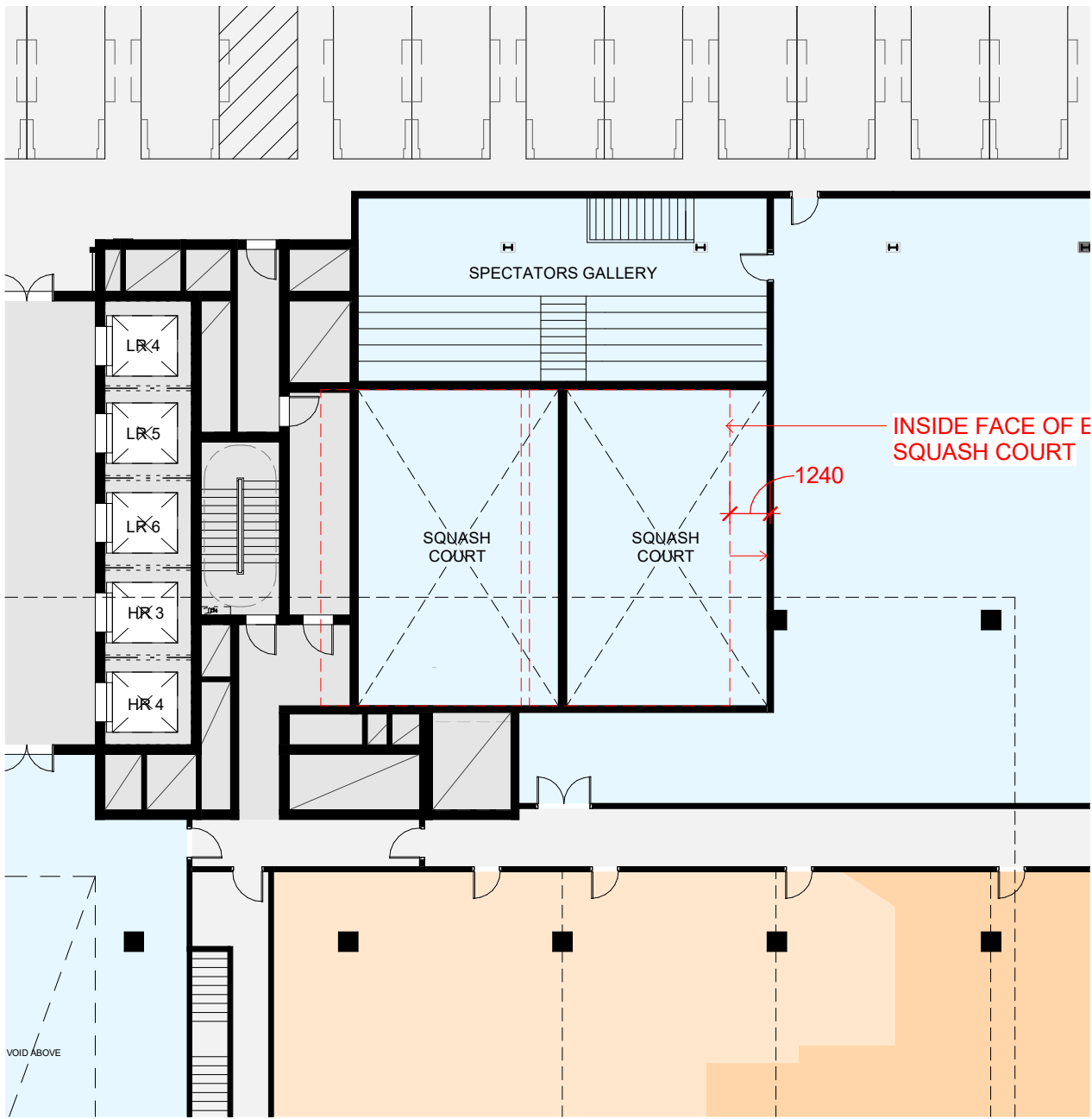
- The southern wall of the squash courts would need to be demolished with the core
- New structural columns to support the Denison St wing fall within the squash court zone

Proposals:

- Squash courts to be shifted north by approximately 1200mm to suit new core extend and column locations
- Bleacher seating to be refurbished and reinstalled to match existing
- All other heritage fabric to be refurbished and reinstalled where feasible and fit for purpose
- Existing amenities serving squash courts are not original and have no heritage value
- Squash courts will be attached to the new end of trip facility



EXISTING



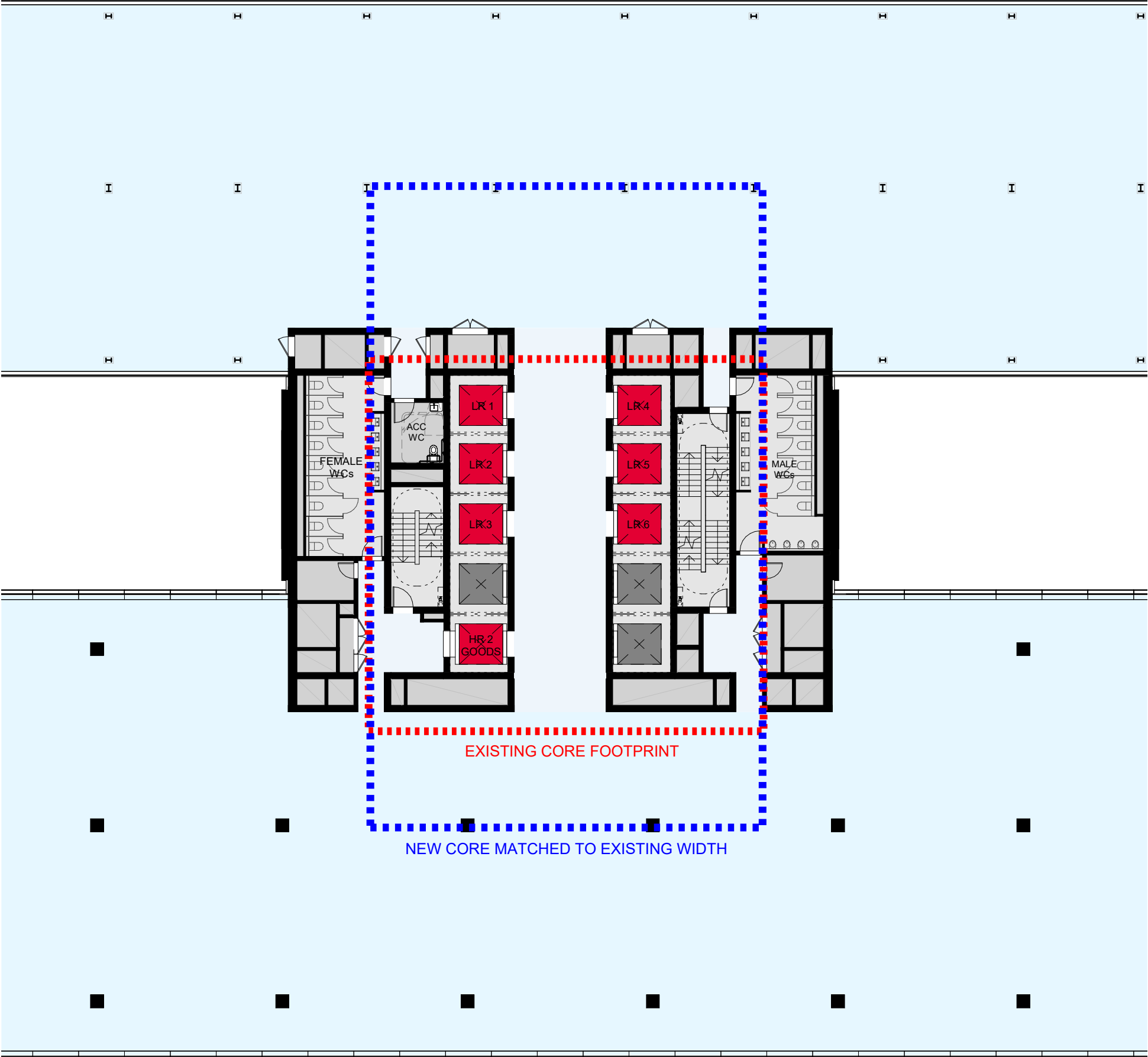
PROPOSED

Squash Court

The design team determined that the best design outcome for the site and to ensure the longevity and adaptability of the redevelopment was to demolish the core for the following reasons:

- Approximately two thirds of the core footprint would need to be demolished due to compliance issues
- The existing fire stair requires significant strengthening to meet current codes and standards and amendments to stair and handrails to meeting BCA/accessibility requirements.
- The existing riser provisions do not support a services design that can meet current codes and standards and ESD targets.
- Tiled facade and substrate require complete replacement.
- The contemporary reinterpretation of the Denison Street Wing requires the core to be removed as it is unable to be retained due to structural issues and increased size of the building.
- The core building is not compliant with current code and standards from a structural perspective (seismic loads to AS1170.4, Wind loads to AS1170.2, and fire safety to AS3600)
- Without the replacement of the core lateral bracing will be required to the north and south fire stairs in the Miller Street wing, significantly impacting the condition of these stairs which are of exceptional Heritage significance

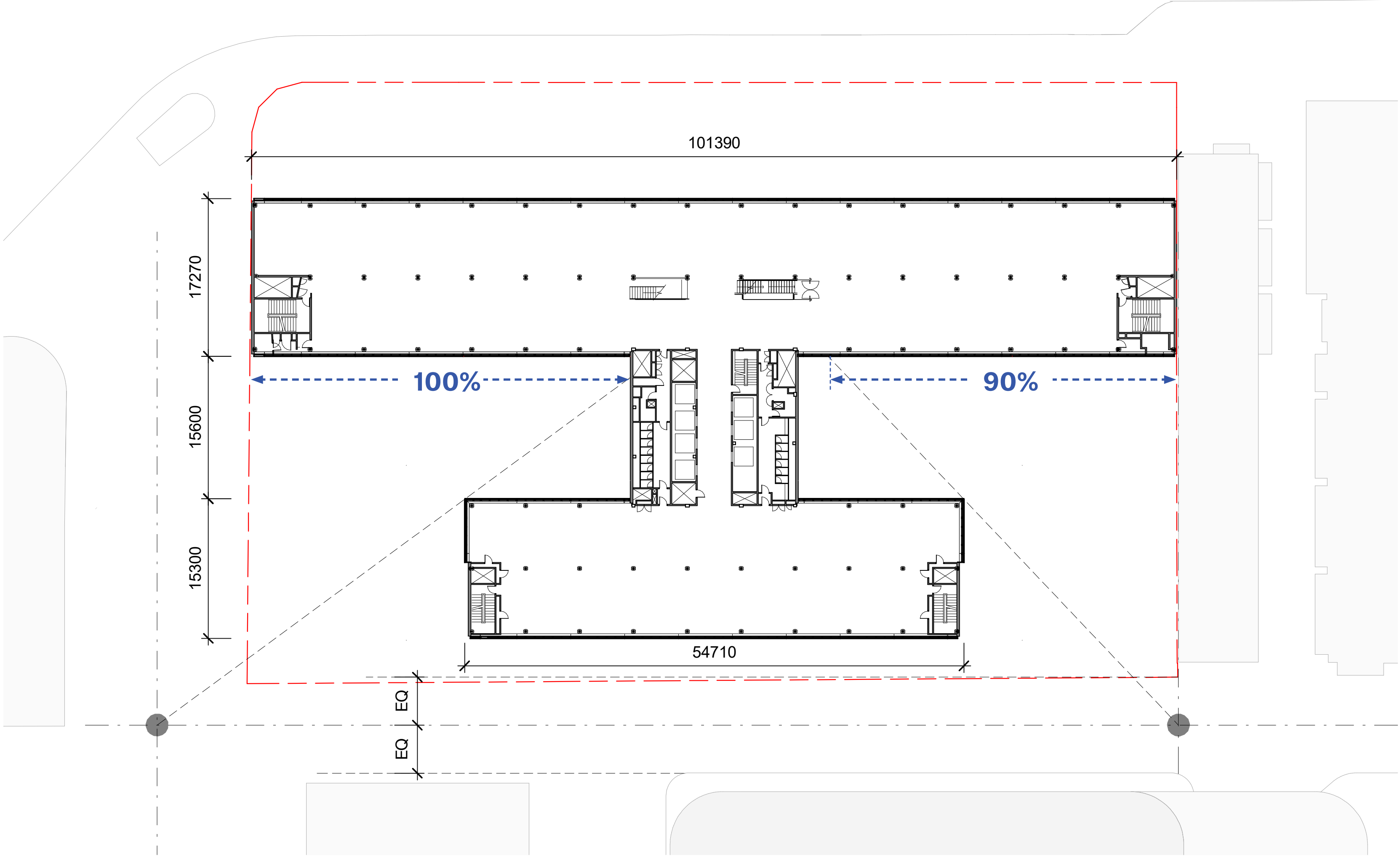
Redeveloped core options



Denison Wing Floorplate

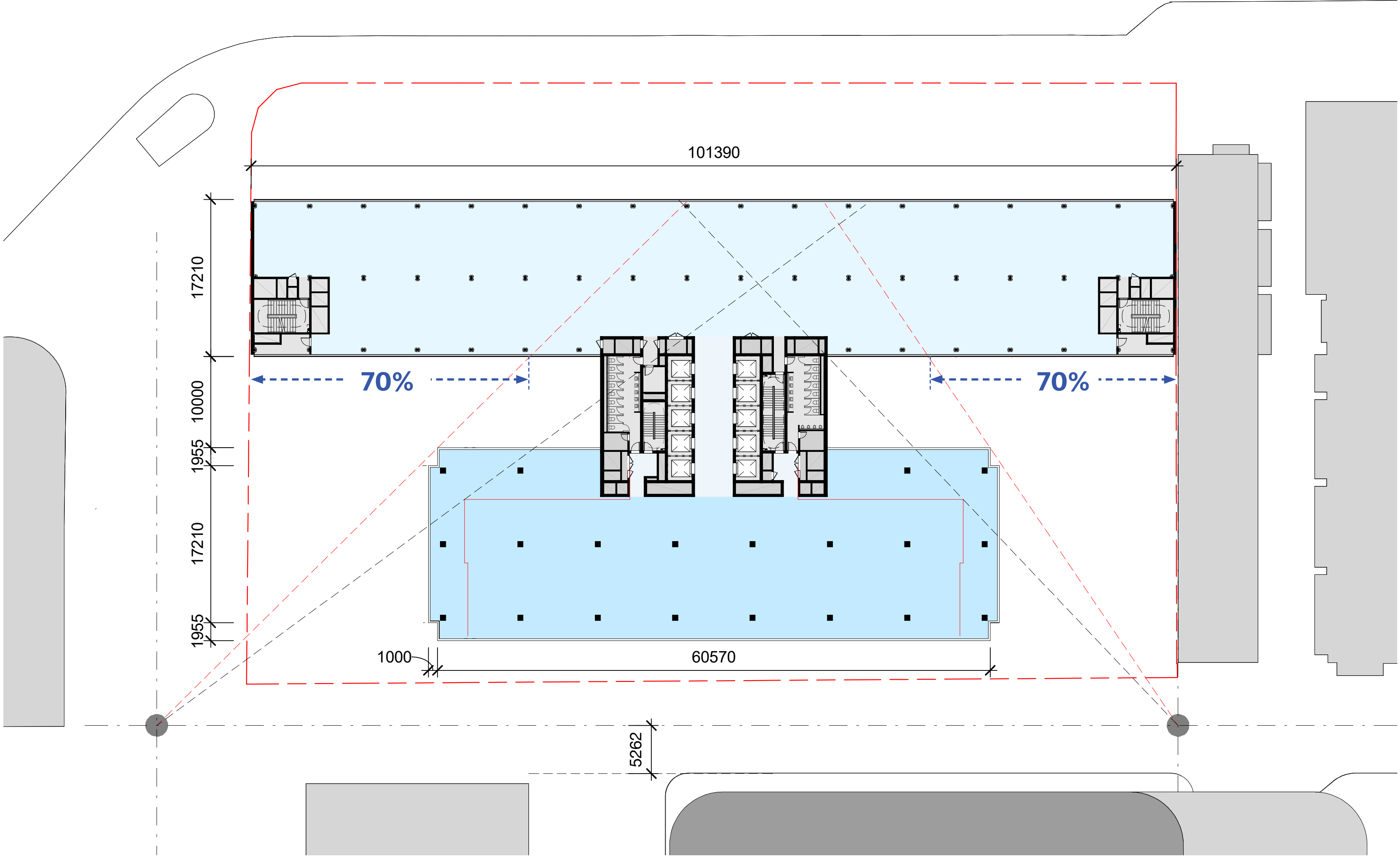
Existing Building

- Denison Wing Floorplate NLA: 733m²
- Does not achieve PCA A-Grade floorplate size for existing buildings
- Can only be let to a single whole of building tenant which totals 25,000 sqm which has proven challenging and resulted in the building being vacant since March 2022



Denison Wing Floorplate Proposed

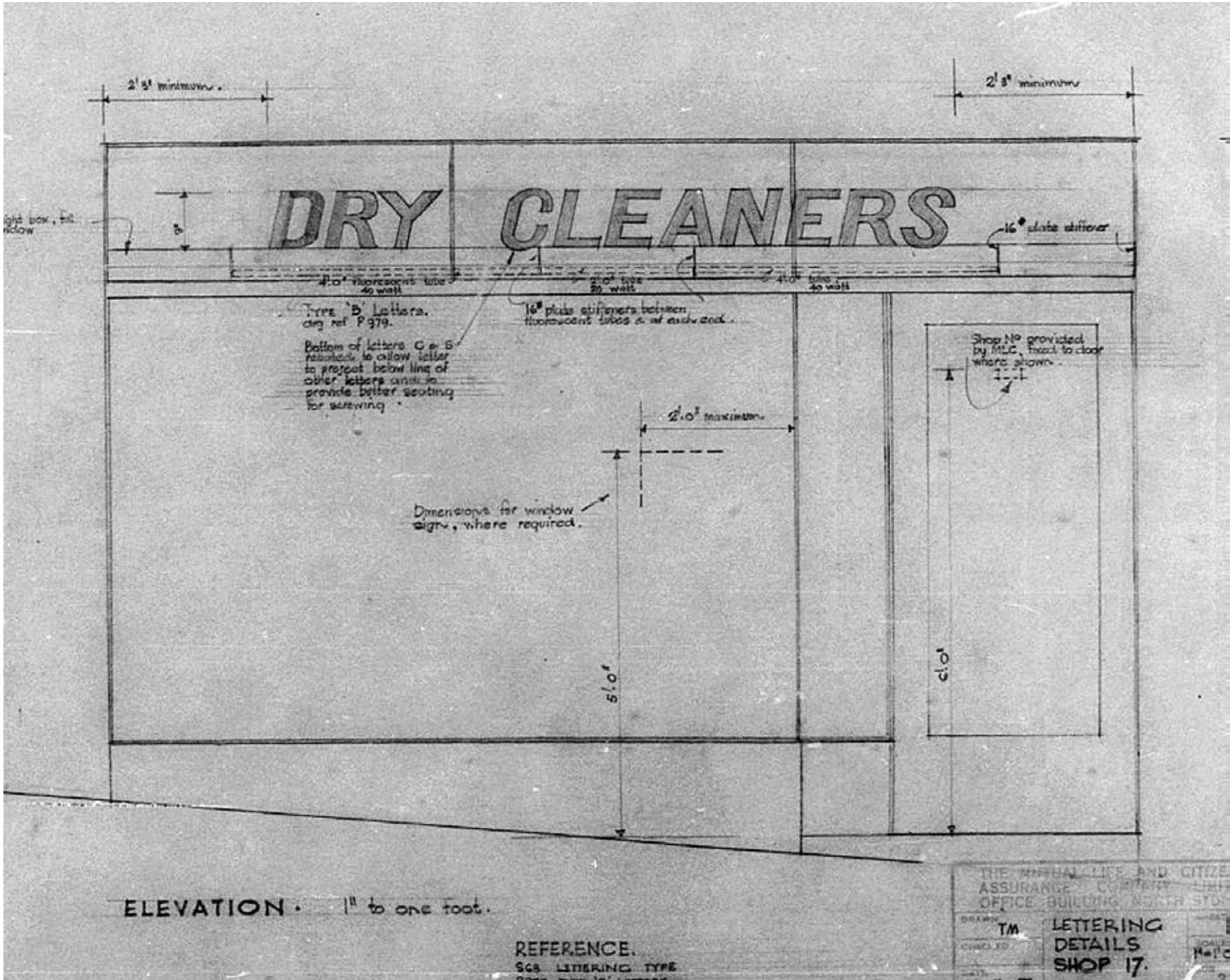
- Denison Wing Upper Floorplate NLA: 1170m²
- Achieves PCA A-Grade floorplate size for existing buildings
- Limited reduction in visibility of heritage facade from Denison Street
- Reduces expressed width of Denison St wing to match width of Miller St wing and enhances slenderness



Heritage Interpretation

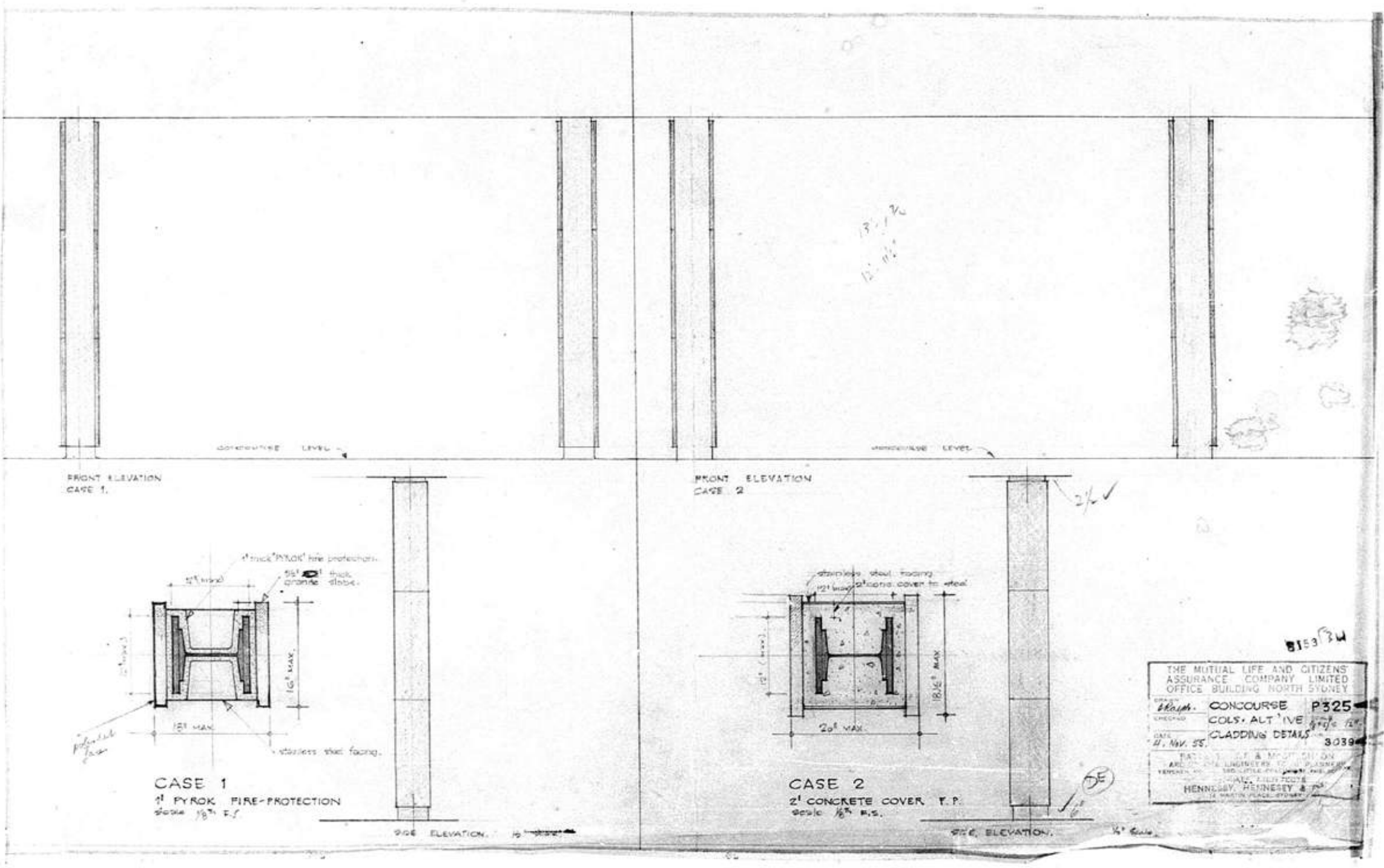
Signage

The proposed retail and wayfinding signage draws inspiration from a range of original 1950s signage details, which serve as a key reference in the design process.



Colonnade

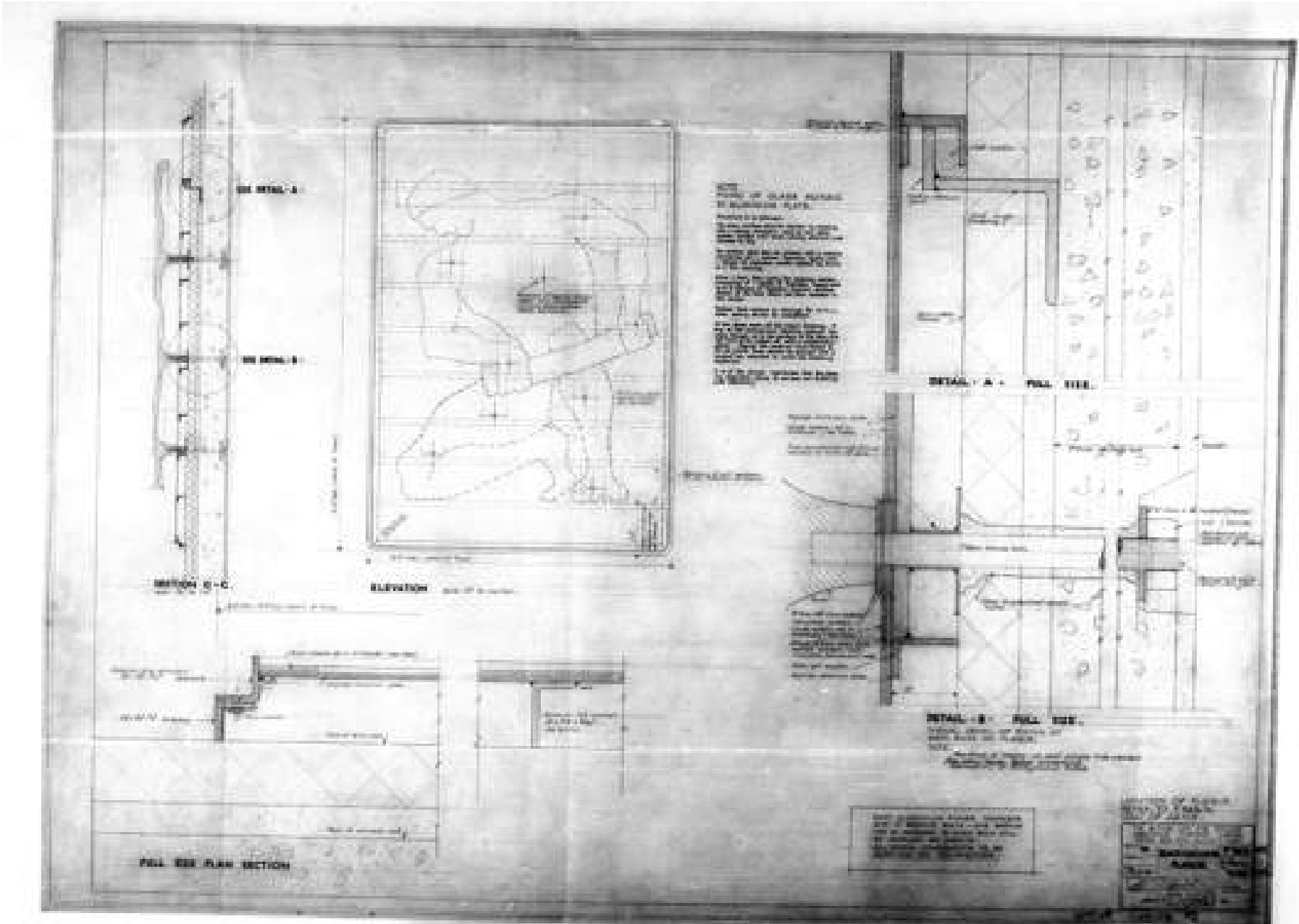
The proposal reinstates the original square-format columns, replicating their original size and detailing to honor the building's mid-century design.



Heritage Interpretation

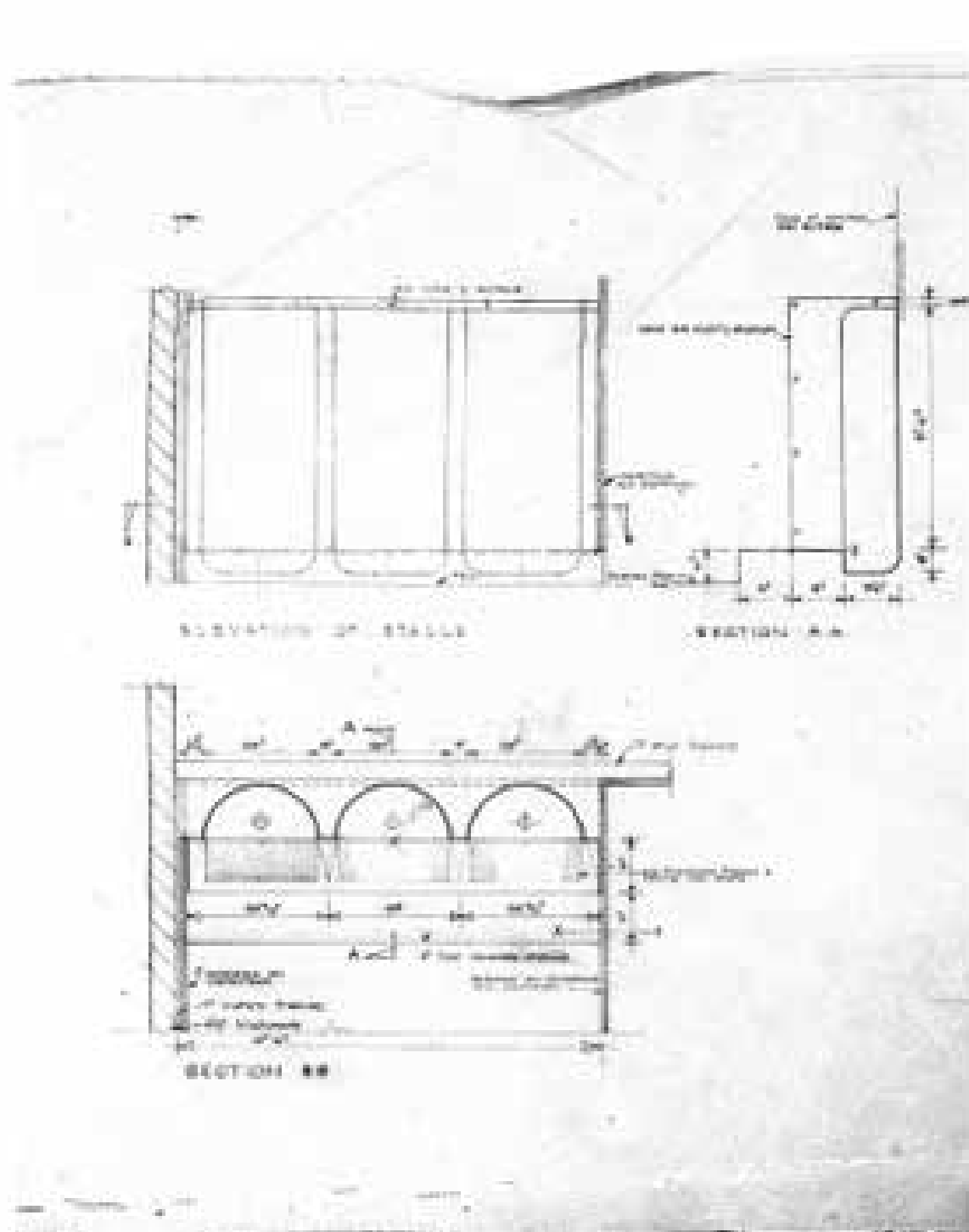
Bas-Relief

The bas-relief, recognized for its exceptional heritage significance, will be carefully removed, meticulously restored, and reinstalled.



Ground Floor Amenities

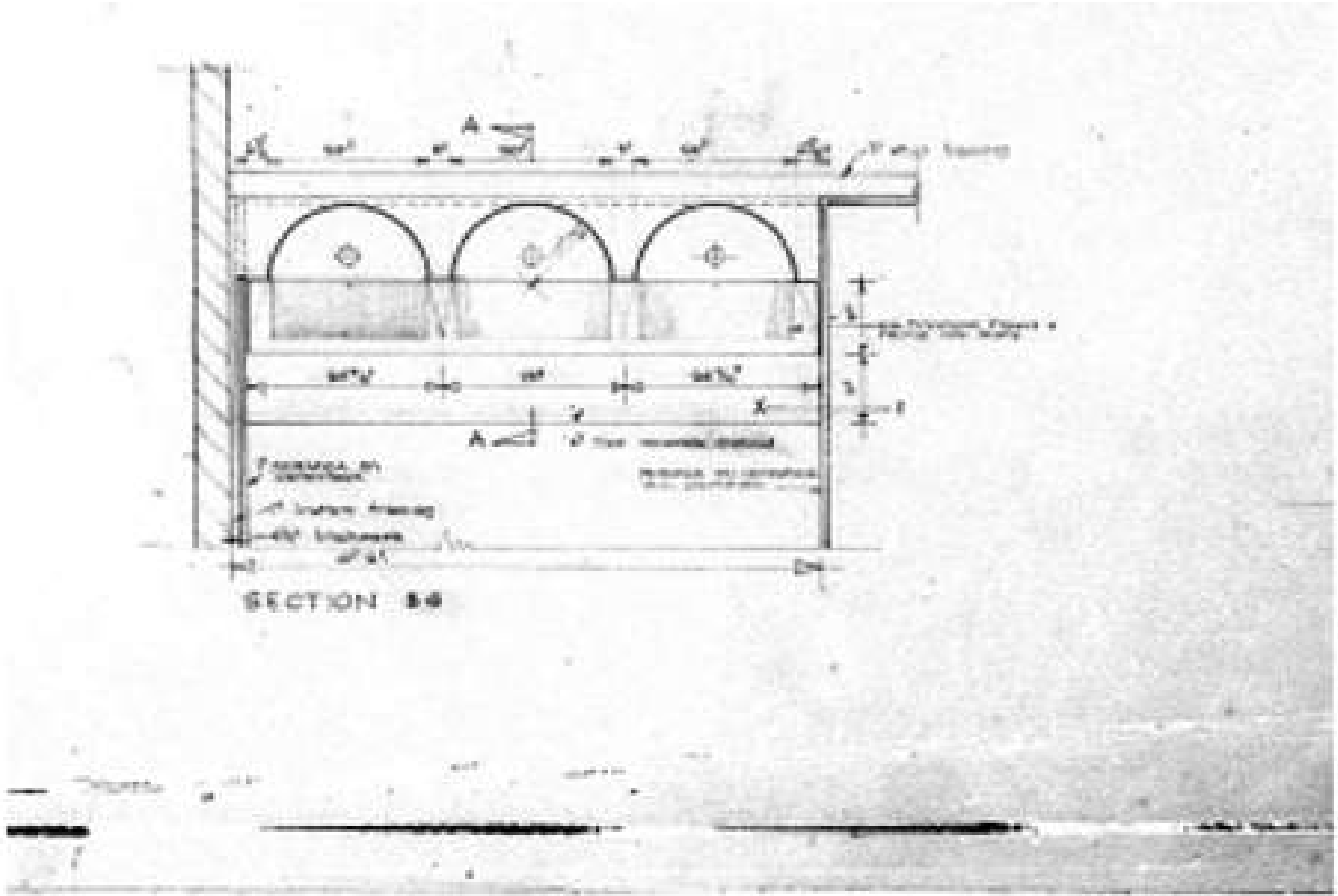
Where possible original fabric will be retained and restored. Replacement will be informed by original documentation.



Heritage Interpretation

Typical Floor Amenities

The existing amenities on the upper floors are not original and hold no heritage value. As part of the proposed base building design, the original details, fittings, and materials will serve as inspiration for the concept, ensuring a respectful nod to the building's history.



Ground Floor Amenities

The fire stairs located to the north and south of the Miller Wing are will be retained and refurbished. The fire stair within the central core does not meet the necessary dimensional requirements for stair width and riser/going compliance and is therefore proposed for demolition as part of the core's reconstruction.



Heritage Interpretation

Lift Lobbies

The lift lobbies will be thoughtfully designed to reference the original layouts and details, echoing the heritage design and maintaining a strong connection to the building's historical character.



Ground Floor Amenities

A Heritage Interpretation Strategy has been developed that identifies a range of potential interpretive options and concepts.

