



ARCHITECTURE  
INTERIORS  
URBAN DESIGN  
PLANNING  
LANDSCAPE

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HAMES  
SHARLEY

9<sup>th</sup> October 2018

## AUSTRALIAN MUSEUM ADDITIONS & ALTERATIONS

### DESIGN STATEMENT

The Australian Museum, Australia's first museum, has a history of more than 190 years and has occupied the site on the corner of College and William Streets since the 1850s. Although it has been expanded in a series of distinct additions, it has retained a sense of identity and cohesiveness through its integrated functions as a public building, a repository of important biological and cultural collections, and a home to precious knowledge and ongoing scientific enquiry. It is a much-loved institution that appeals to the public's curiosity and imagination. The Crystal Hall entrance building (2015) has helped to solve some of the challenges of access and circulation that have arisen through the agglomeration of so many different buildings on the site. The current project will build on this and ensure the Museum can continue to do its good work well into the future. The proposed larger touring exhibition gallery and ancillary spaces will expand the Museum's capacity to bring exciting and much-needed international exhibitions to Sydney.

The Business Case for the Australian Museum's phased Master Plan was supported by a Benefit Cost Ratio of 1:55 for Phase 1 (the basis for the current project), suggesting an excellent return on investment to the State of New South Wales. Not only will the Museum be able to bring the public larger and better exhibitions, it will also be able to offer improved a visitor experience through upgraded amenities and circulation, as well as dedicated facilities for handling school groups.

The Museum's public entrance, the Crystal Hall is an award-winning building that contributes to the sense of excitement, curiosity and enlightenment that is synonymous with this institution. The new extension and the improvements to the Biodiversity Garden and landscaping on William Street will add to the sense of arrival while taking nothing away from the distinctive heritage fabric that contributes so much to its sense of place and history. Indeed, the opening up of the Heart of the Museum – its Atrium, flanked on three sides by sandstone – will reveal parts of these buildings that have been lost to public view for decades.

The proposed additions and alterations respond to the Museum's location and context by addressing and activating the William Street frontage and creating an entry suitable for an iconic Australian institution. The proposed extension of Crystal Hall respects the important heritage fabric and features of the existing building, retaining the visibility of the sandstone walls of the Parkes Farmer Wing through glazing from William Street. The reorientation of the existing Lower Ground floor egress stairs will provide better clarity and legibility to the main entrance above. Museum visitors will be able to enjoy more of the fine view over William Street

towards Cook & Phillip Park. Much awaited refurbishments and improvements to circulation will contribute to a better and more accessible Museum experience for the community.

The Australian Museum champions access and inclusivity and welcomes all members of our diverse community, including young families, school children, people living with disabilities and those who speak other languages - Australians from all walks of life, not to mention a huge number of overseas visitors. The Museum's Accessibility consultant and its own Accessibility and Inclusion Steering Committee and Advisory Panel have taken an active role in ensuring the Museum remains barrier free during the planning of the current proposal, and the design will add to the well-received improvements to accessibility delivered by the Crystal Hall development in 2015.

The design team, including exhibition consultants Art of Fact, have undertaken detailed studies of queueing, cloaking and patron amenity, and the safety and comfort of Museum patrons and staff have been considered at all times during the design process. The Museum commissioned a comprehensive review of fire safety and services for the development in order to achieve a high-quality environment for staff and the growing number of people visiting the site.

The proposed redevelopment is an important first step in revitalising and maintaining the prominence of one of the nation's most valued institutions.

Yours Faithfully,

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

Aldo Raadik  
Director

Hames Sharley (NSW) Pty Ltd

In collaboration with

NEESON MURCUTT  
ARCHITECTS PTY LTD

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ARCHITECTURE  
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# AUSTRALIAN MUSEUM ADDITIONS + ALTERATIONS

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Sharley**

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barrabuwari muru  
  
AUSTRALIAN MUSEUM | MASTER PLAN

**DESIGN REPORT**

Prepared for Australian Museum

  
AUSTRALIAN MUSEUM  
OCTOBER 2018

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Revision Letter	Date	Reason for Issue
A	21/09/2018	FINAL DRAFT
B	09/10/2018	FINAL FOR APPROVAL

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#### ACKNOWLEDGEMENT

Prior to May 2016 the Museum worked with Johnson Pilton Walker (JPW) on the development of a functional brief, early master planning work, an Urban Design Study and a Vision statement. Some of the material produced in that process is reproduced in this report.

# AUSTRALIAN MUSEUM - ADDITIONS AND ALTERATIONS

## DESIGN REPORT



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ARTIST'S IMPRESSION OF THE ADDITIONS TO THE AUSTRALIAN MUSEUM FROM WILLIAM STREET.

# DESIGN OVERVIEW

01

EXECUTIVE SUMMARY

# 01 Design Statement

## 1.0 URBAN CONTEXT

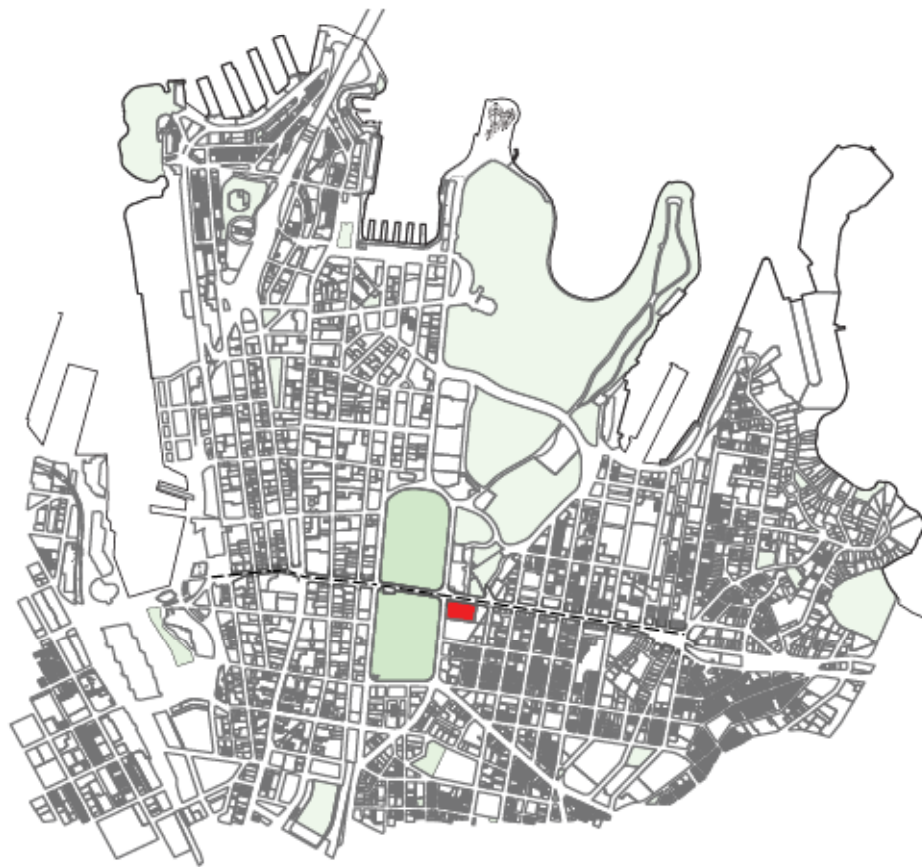
Sited at the corner of William and College Streets the Museum forms part of the eastern threshold to the city, and is one of the numerous institutions that lines the eastern side of College Street / Macquarie Street ridge.

William Street is an important eastern artery into the city that runs ridge to ridge, marked by the Coca Cola sign at one end, and Hyde Park (and by extension Town Hall) at the other. The Museum has significance presence on William Street and potential contribute to it in terms of public domain.

The Museum sits at the apex of a 'green cone' to the Harbour. This is a privileged position that has strong presence at the upper levels of the Museum, particularly from the Parkes Farmer rooftop restaurant, and from St Mary's Cathedral Square.

The Museum is well serviced by public transport in the city centre. It is located within a 5 minute walk of the city circle train line and within a 10 minute walk of the eastern and northern lines, and the new light rail. This renders the William / College Street corner strategically significant in terms of arrival.

With the exception of the Sydney Opera House cultural institutions within the city centre generally do not have visitor parking, and there is no expectation that the Museum will provide visitor parking now or in the future. Besides street parking in and around East Sydney, there are public parking stations at Cook and Phillip Park and the Domain, both relatively close and to the north.



**GREEN GATEWAY TO THE CITY**



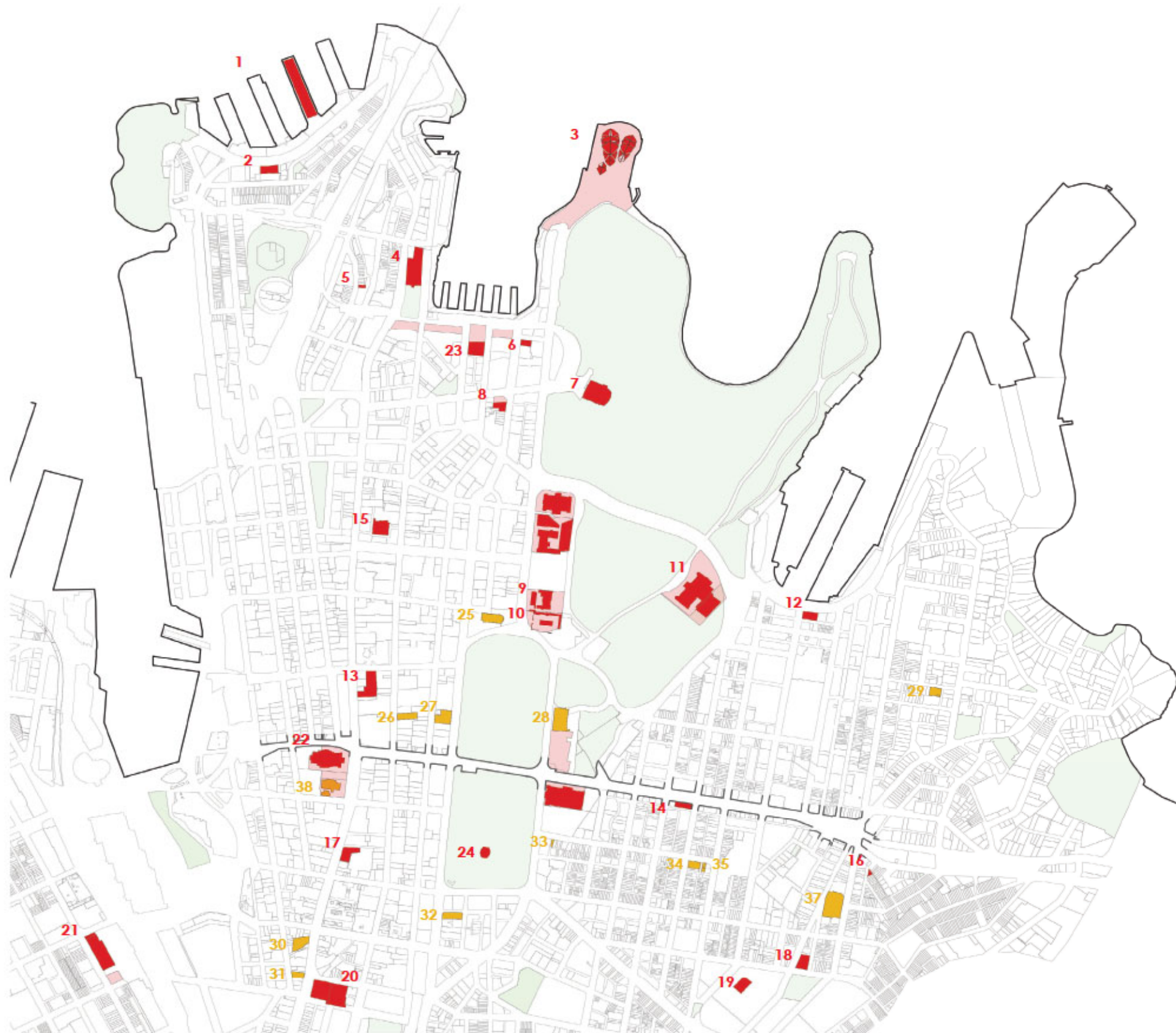
**GREEN CONE TO THE HARBOUR**



**RAIL, LIGHT RAIL + WALKING RADIUS**



# 1.1 CULTURAL INSTITUTIONS



The city's cultural institutions can be understood as:

- > monuments such as the Sydney Opera House, Art Gallery of New South Wales and Hyde Park Memorial, that sit within a larger open space;
- > urban infill such as Sydney Theatre Company and City Recital Hall, that sit within the walls of the city fabric; and
- > buildings such as Town Hall and Customs House, that are set within an associated and activated public space.

An activated public space along William Street is a long-term goal of the Australian Museum – located alongside this important threshold to the city, at the apex of the green cone.

In its early years entry to the Museum was via a driveway off College Street, to a portico addressing the William Street curtilage. The College Street entrance, originally designed as a secondary access point, became the main entry almost by default as the bigger William Street entrance was never realised. The William Street curtilage was reduced in 1916 with the resumption of land for the widening of William and Park Streets. The Crystal Hall began the reorientation of the Museum back to William Street, bringing life to an important city block that was previously inactive, and starting a 'conversation' with the cathedral and the park opposite. The proposed works will build on this through increased activation at William Street level and the lengthening of Crystal Hall.

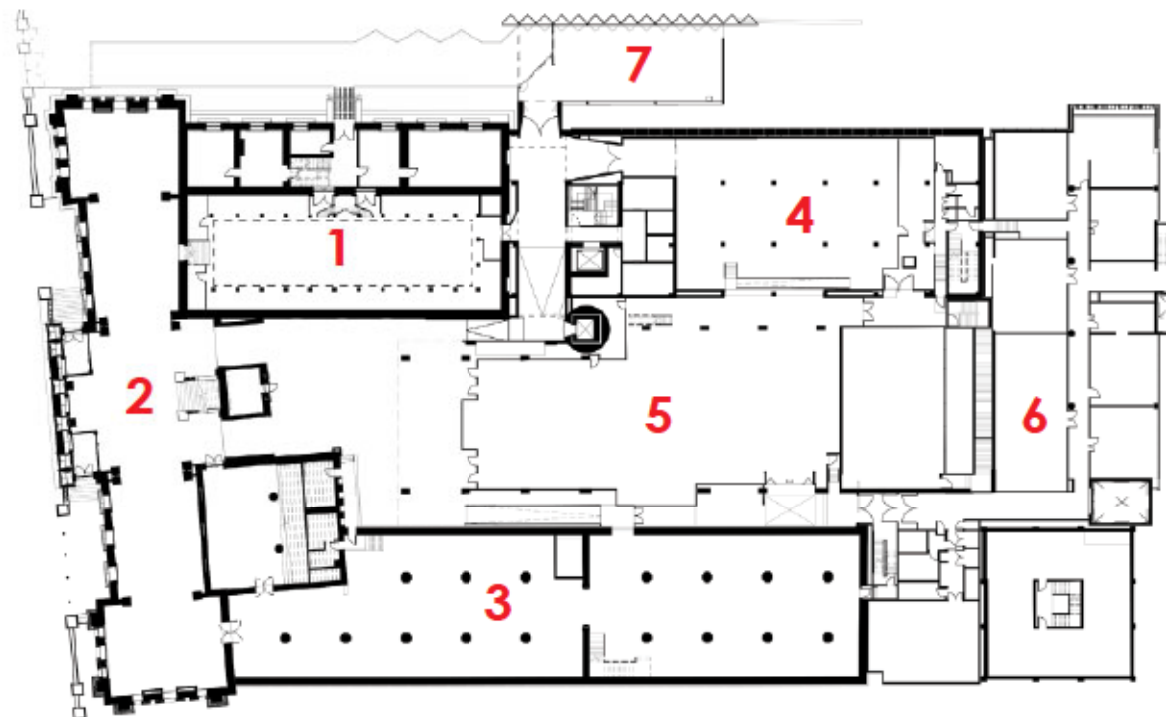
Cultural Institutions + Venues ■ Religious Buildings ■

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Wharf Theatre Pier 4/5</li> <li>2. Roslyn Packer Theatre Sydney</li> <li>3. Opera House</li> <li>4. Museum of Contemporary Art</li> <li>5. Susannah Place Museum</li> <li>6. Justice &amp; Police Museum</li> <li>7. Conservatory of Music</li> <li>8. Museum of Sydney</li> <li>9. The Mint Museum</li> <li>10. Hyde Park Barracks Museum</li> <li>11. Art Gallery of New South Wales</li> <li>12. Art Space</li> <li>13. State Theatre</li> <li>14. Australian Design Centre</li> <li>15. Angel Place</li> <li>16. Griffin Theatre</li> <li>17. Metro Theatre</li> <li>18. Jewish Museum</li> <li>19. National Art School Gallery</li> <li>20. Capitol Theatre</li> <li>21. Powerhouse Museum</li> <li>22. Sydney Town Hall</li> <li>23. Customs House</li> <li>24. War Memorial</li> </ol> | <ol style="list-style-type: none"> <li>25. St James Church</li> <li>26. Wesley Mission</li> <li>27. The Great Synagogue</li> <li>28. St Mary's Cathedral</li> <li>29. The Wayside Chapel</li> <li>30. Central Baptist Church</li> <li>31. St Peter Julian's Church</li> <li>32. Sydney Congress Hall</li> <li>33. St Paul's Lutheran Church</li> <li>34. C3 Church</li> <li>35. Uniting Church in Australia</li> <li>36. Sacred Heart Catholic Church</li> <li>37. St John's Anglican Church</li> <li>38. St Andrew's Cathedral</li> </ol> |
|---|--|

## 1.2 MUSEUM EVOLUTION



A SEQUENCE OF GRAND ROOMS



The Australian Museum is one of our most important public institutions. It welcomes over 450,000 visitors annually and is open every day of the year except Christmas.

Founded in 1827, it is the oldest museum in Australia. The building complex has developed in successive stages, primarily by Colonial and New South Wales Government Architects, over an extended period from 1846. The older gallery spaces in particular – the Lewis, Barnett and Vernon wings – are grand old rooms that are both impressive and historically significant.

The Museum grew relatively coherently as a 'U' around an open service courtyard, until this was eventually in-filled with the 1988 Still addition, and later closed across its eastern end by the JPW Architects AMRI Building in 2008.

A new entry was initiated by the Government Architect's Office and completed by Neeson Murcutt Architects. Opening in 2015 the Crystal Hall re-orientated the museum to William Street, its original frontage, with a new entry set within its curtilage. Importantly, Crystal Hall reinforced the Ground Floor as the primary public datum, which in this stage of work is now referred to as 'the heart.'

In 2016 the Museum engaged Hames Sharley to investigate opportunities across the entire site in the planning and envisioning of its future. The 2017 Master Plan outlines options for a phased approach to its expansion. The current proposal constitutes 'Phase 1', and sees the expansion of exhibition and visitor spaces largely within the existing envelope, made possible through the relocation of the Pacific Collection off-site. Phase 2 is by far the bigger project and is intended to be the subject of a major design competition. The 2017 Master Plan tested an additional 18,000m<sup>2</sup> on the site, a significant portion of this located along Yurong Street.

Carrying through from the Crystal Hall, to Phase 1, and onto Phase 2 are two key strategic moves:

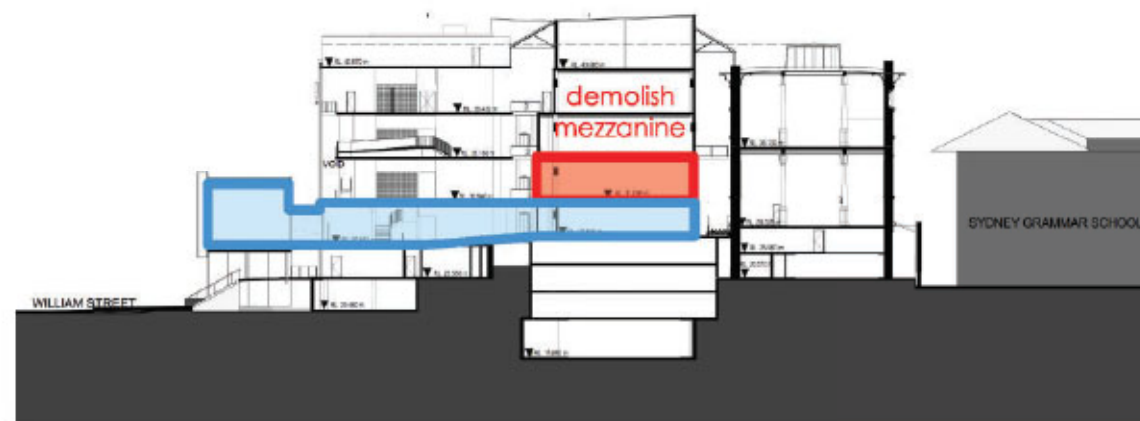
- > the Museum 'heart'
- > address to William Street

**KEY:**

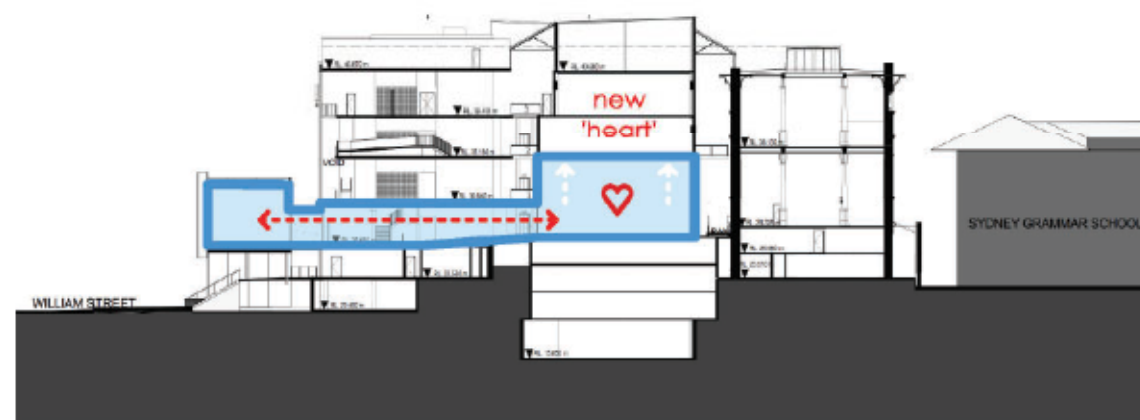
- 1. Lewis Wing
- 2. Barnett Wing
- 3. Vernon Wing
- 4. Parkes Farmer Wing
- 5. Still Addition
- 6. AMRI Building
- 7. Crystal Hall



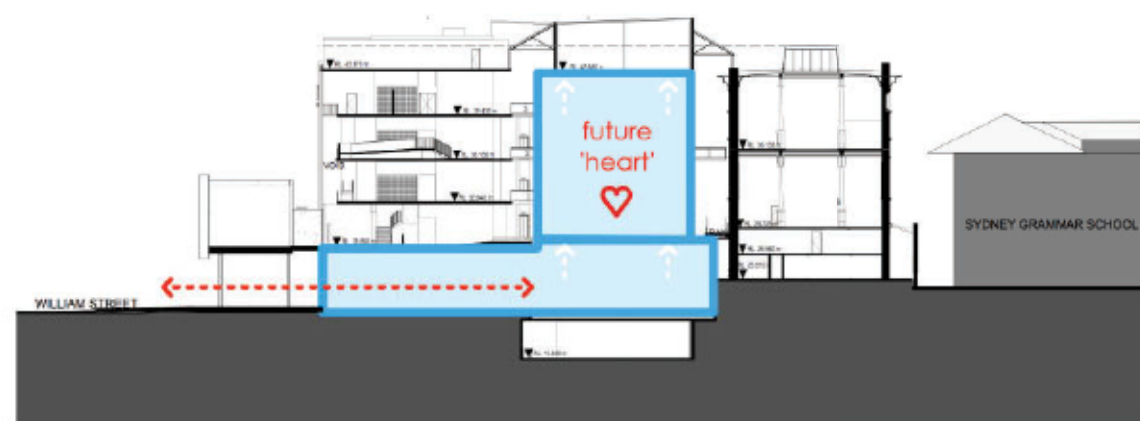
# 1.3 PROJECT AMBITION



EXISTING



PROPOSED



FUTURE

## What is the Museum achieving through this project?

Creating a bigger touring exhibition space and improved amenity for increased visitor numbers, largely within the existing envelope. The project anticipates a peak flow of 112.5 - 118.8 per 15 minute slot/ 7.5 - 7.9 entries per minute.

Improved visitor amenities requires:

- > separate entrance for groups
- > better way finding
- > increased queuing / ticketing space
- > increased toilets
- > new education gallery
- > better shop

## How is the Museum able to achieve this?

The relocation of the Pacific Collection off-site frees up roughly 7,400m3 of volume within the existing envelope.

## Why is the museum wanting to do this?

To be able to hold significant touring exhibitions, currently lost to Melbourne.

## How does this project fit into the bigger context of the Master Plan?

It anticipates:

- > future extension of Museum east to Young Street
- > future expansion of central hall or 'heart'
- > future forecourt and consolidated entry from William Street

## What is the strategic approach to dealing with heritage fabric?

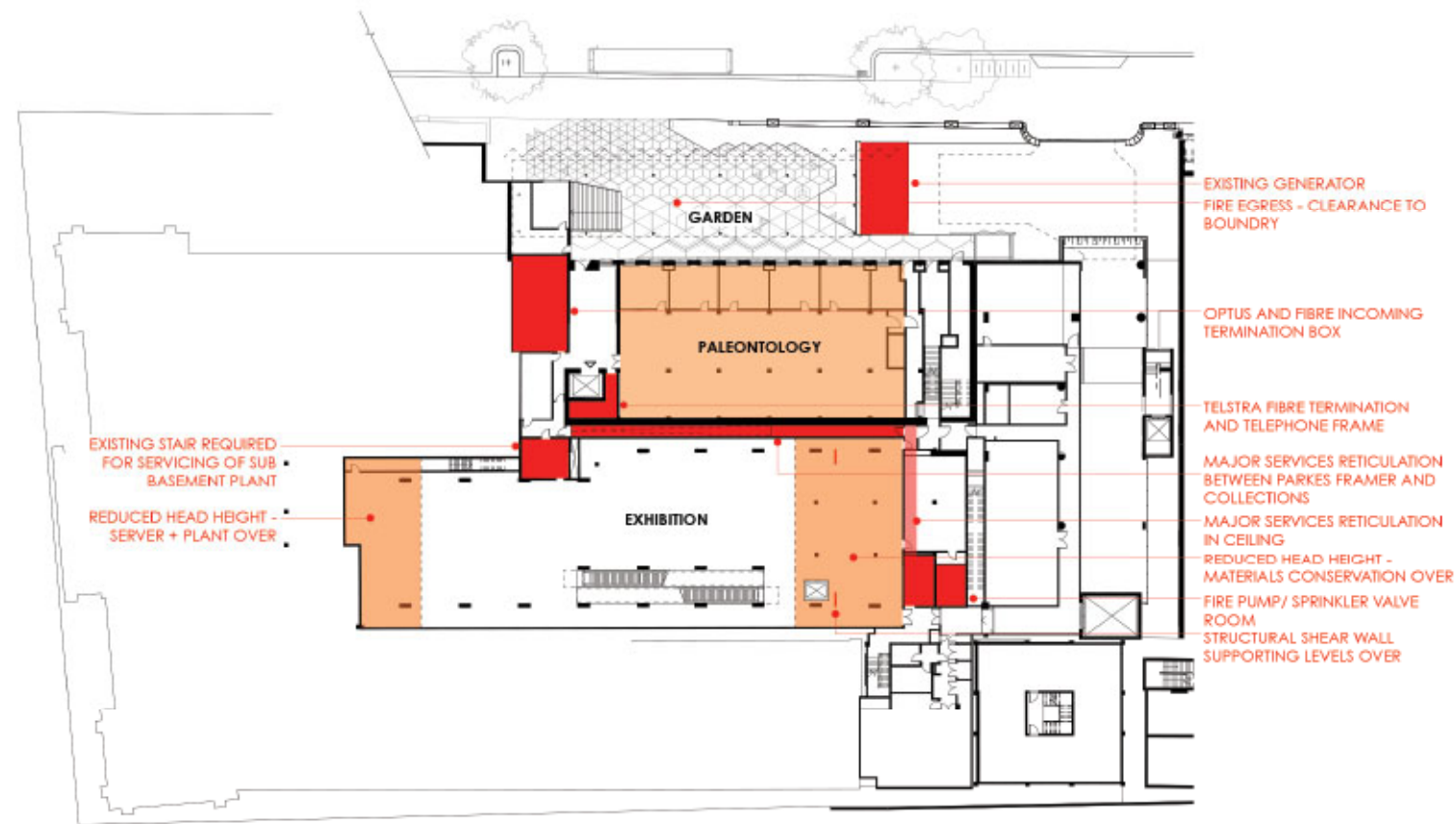
recover heritage:

- > reveal as much as the original fabric as possible
- > clearly express new and old following the established principle of separation

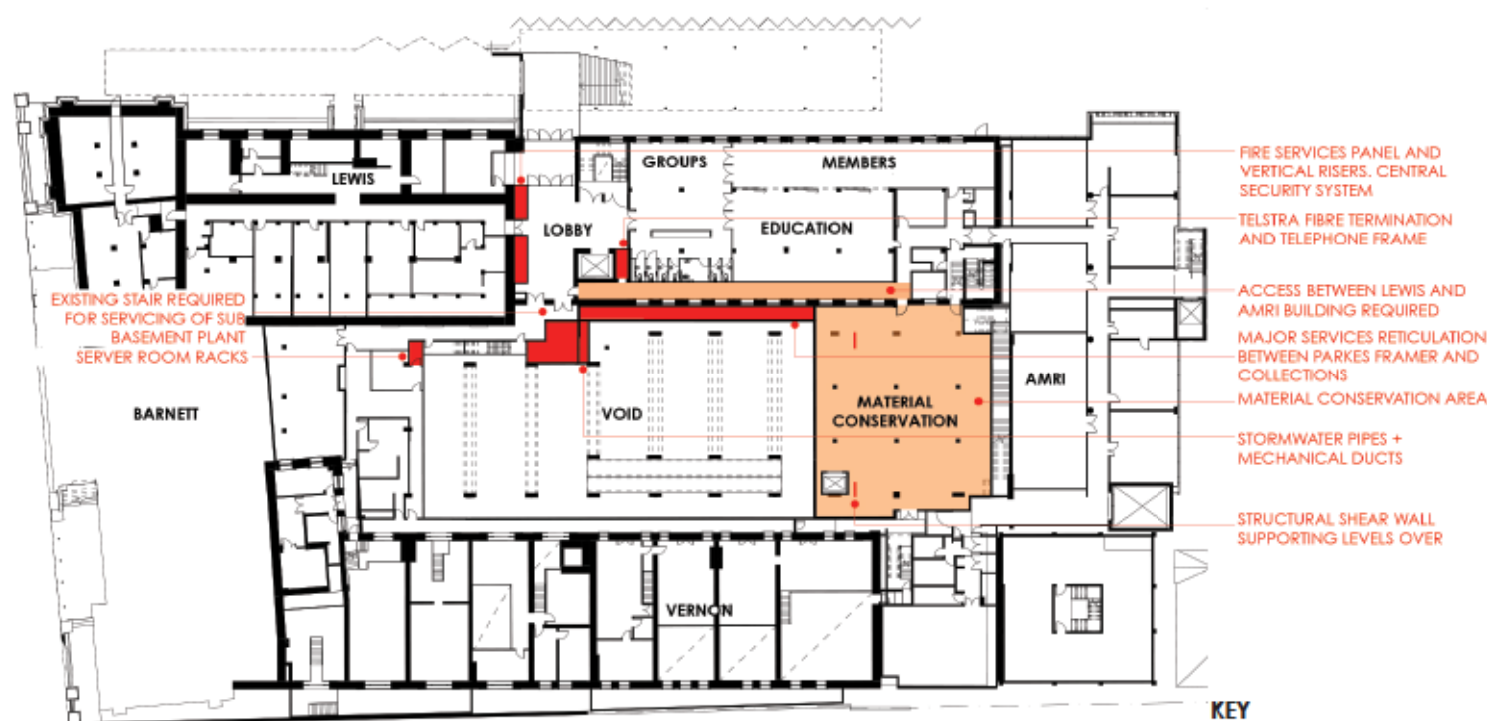
ensure new interventions:

- > are astute for the long-term
- > are carefully considered

## 1.4 PROJECT IMPEDIMENTS



**BASEMENT LEVEL**



The Australian The following operational and service impediments have informed the design

### Basement

#### Operational Impediments:

- > The museums palaeontology department currently occupies the basement level of th Parkes Farmer Wing. It is unable to move from this location
- > impact on the location of the groups entry and members lounge
- > impact on the basement levels connection to the biodiversity garden to the under-croft

#### Service impediments:

- > generator (impacts extent of landscaping)
- > plant and risers (impacts footprint of exhibition)
- > major services reticulation running between Parkes Farmer and Collections (impacts connection between William street and the touring exhibition)
- > major services reticulation in ceiling running north -south between Pares Farmer wing and Still Addition (impacts ceiling height)
- > existing fire service rooms

### Lower Ground

#### Operational impediments:

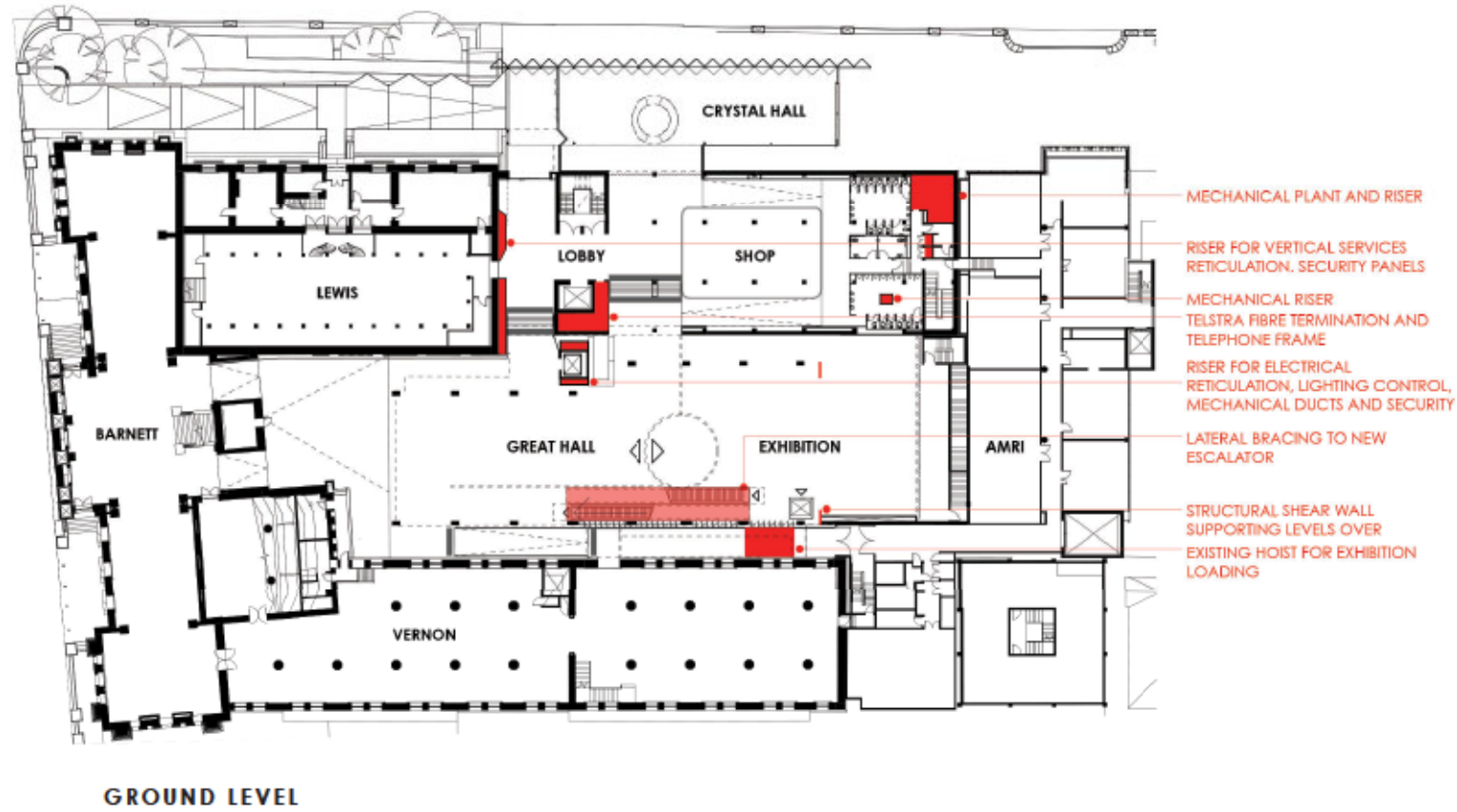
- > the materials conservation department currently occupies the eastern end of the Still Addition. This department has to remain in this location and the museum requires minimal construction impact in this area
- > impact on the head height able to be achieved to the basement level touring exhibition
- > impact on the location of the escalator and lift connecting the ground and basement touring exhibition levels
- > The museum requires ongoing on grade connection to be maintained between Collections and the AMRI building (running east-west)
- > impact on the design of the groups and members lounge

#### Service impediments:

- > server room (impacts on reduced head height to basement touring exhibition)
- > Fire services panel and security system (impacts on nature of lower ground lobby)
- > stair access to sub basement plant (impacts on touring exhibition space)
- > retain services around existing lift cores running vertically



# PROJECT IMPEDIMENTS



The following operational and service constraints have informed the design -

### Ground

#### Service impediments:

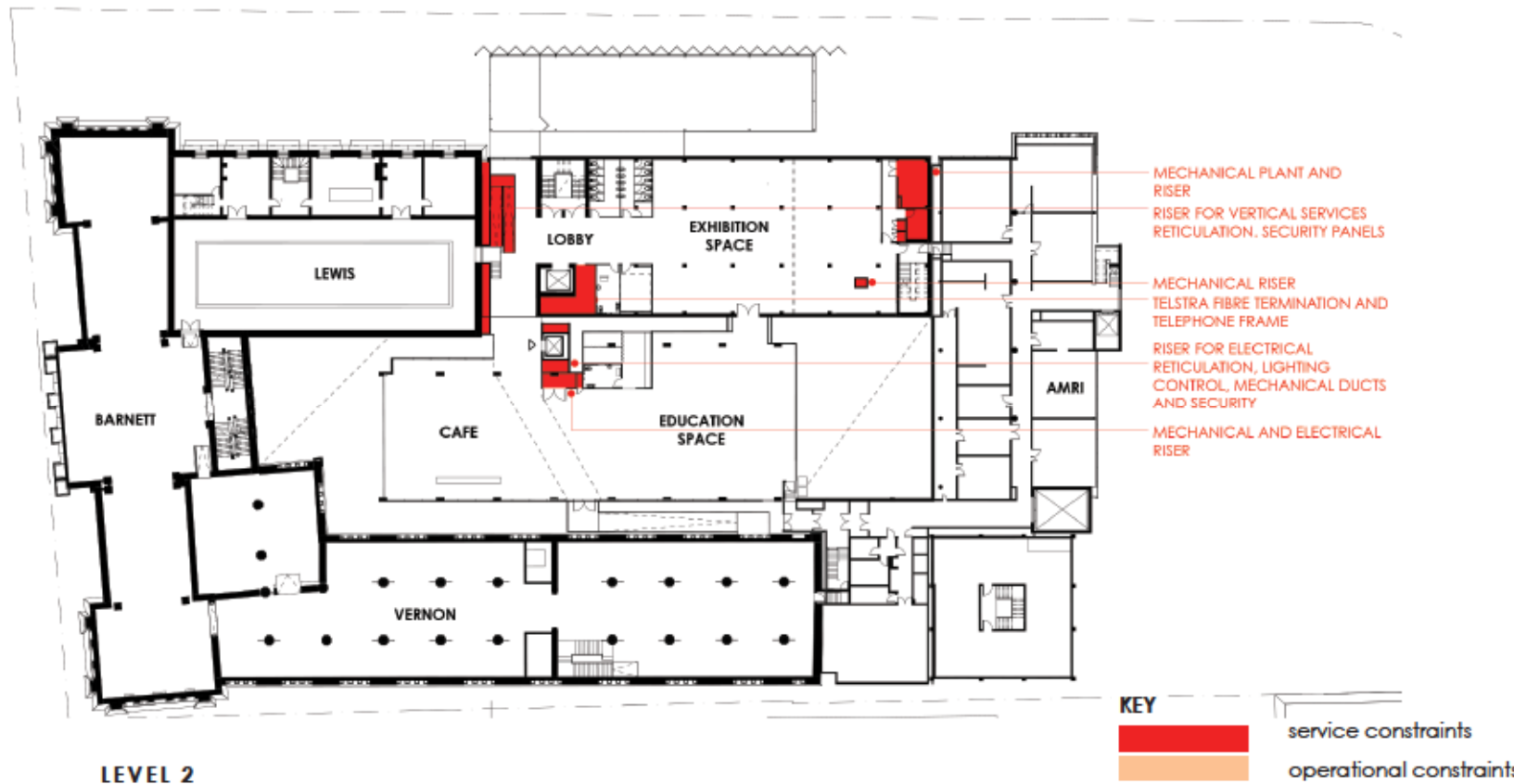
- > existing structural support to shear wall extending full height of the eastern Still Addition facade (impacts on touring exhibition space)
- > new escalator requires lateral bracing to slab opening
- > retain existing loading hoist
- > retain services around existing lift cores running vertically

### Level 2

#### Service impediments:

- > existing ramp is required to remain for accessibility and access to long gallery
- > retain services around existing lift cores running vertically

There are significant cost implications in moving these existing services. The design works to these existing impediments.



## 1.5 KEY MOVES



### 1. RELOCATE PARKES FARMER STAIR

- > Original stair compromised by modern fire requirements.
- > Significantly improves congestion, wayfinding and safety.
- > Re-establishes clear space between the Long Gallery and Parkes Farmer Wing.
- > Re-opens view to the cathedral.
- > Improves visibility from entry to the Long Gallery.
- > A move for the long-term.



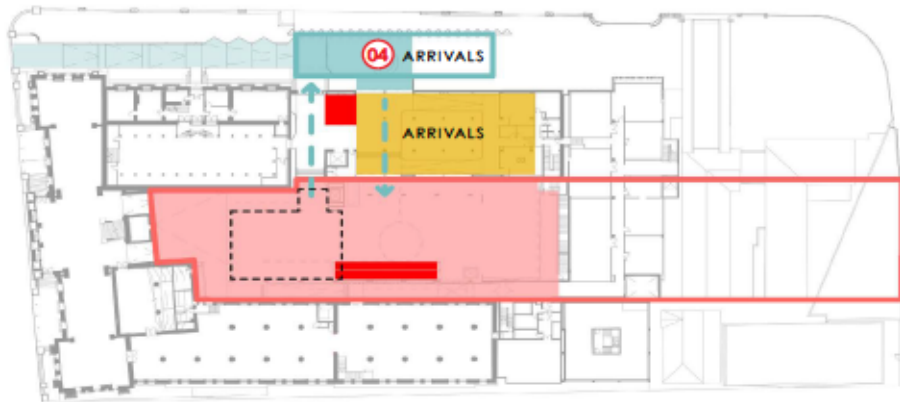
### 2. REMOVAL OF LEVEL 1 MEZZANINE

- > Establishes a generous Museum 'heart'.
- > Significantly improves visibility of Parkes Farmer and Vernon Wing stone walls.
- > A move towards the long-term.



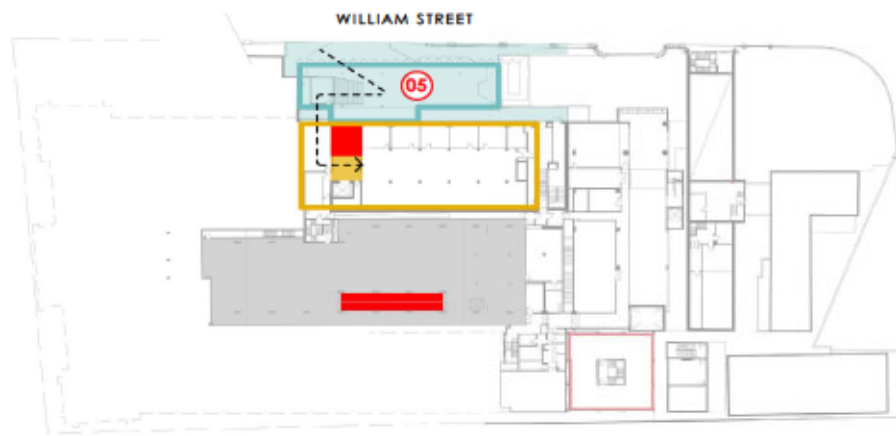
### 3. NEW ESCALATOR

- > Parallel with Vernon wing with potential for light spill to basement.
- > A move for the long-term.



### 4. CRYSTAL HALL EXTENSION

- > Improves circulation, queuing and ticketing.
- > Aligns with the Vernon Wing in plan.
- > Creates new entry opening in Parkes Farmer façade:
  - aligns with Parkes Farmer structural grid
  - sized to stone facing
  - retains stone for reuse internally
- > Retains separation to Parkes Farmer façade established in the original Crystal Hall project.
- > Retains visibility of stone wall through glazing from William Street.
- > Remakes existing bridge link as a lighter exit link – removed in the long-term.



### 5. NEW GROUPS ENTRY VIA WILLIAM STREET

- > Optimises space under Crystal Hall for groups.
- > New opening in Parkes Farmer façade, adapting west window as a door.
- > Relocates William Street stair to improve legibility.

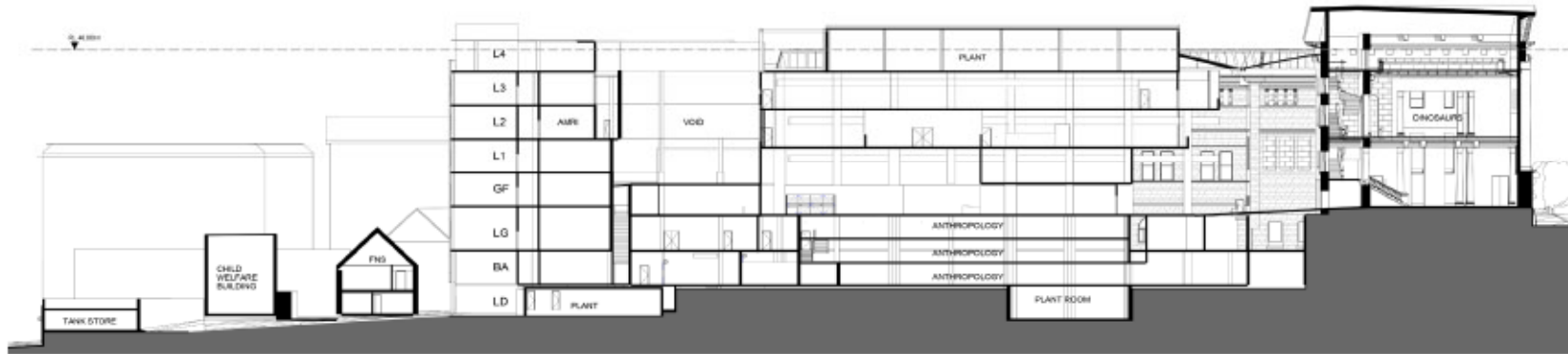


### 6. LANDSCAPE CURTILAGE

- > Achieves are more consolidated landscape.
- > Anticipates future removal of ramp and re-grading as an important public space.



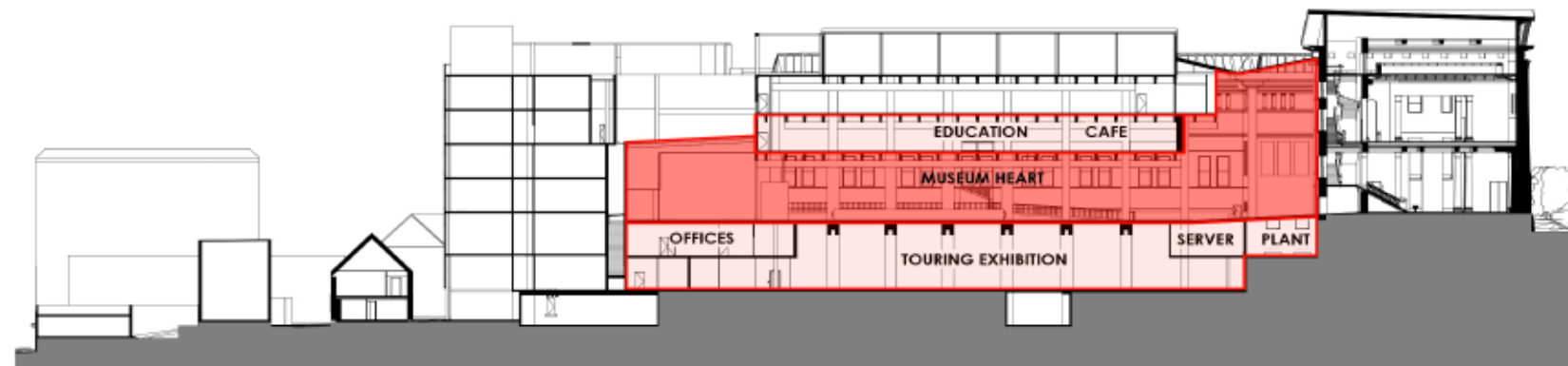
# KEY MOVES



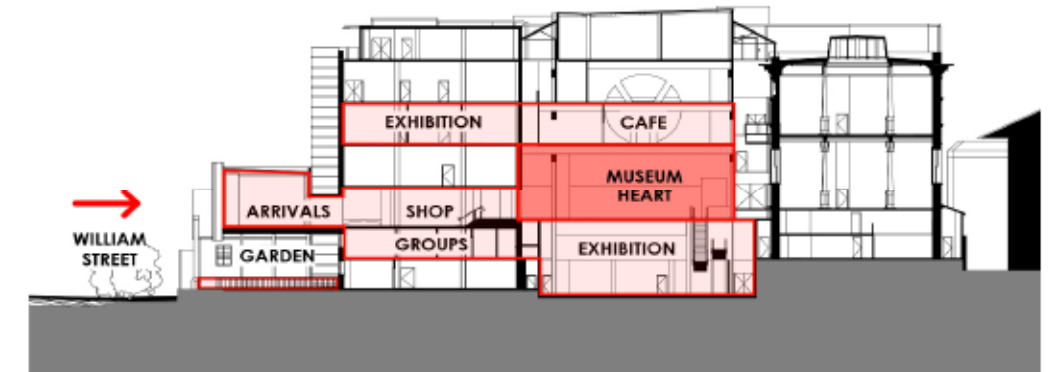
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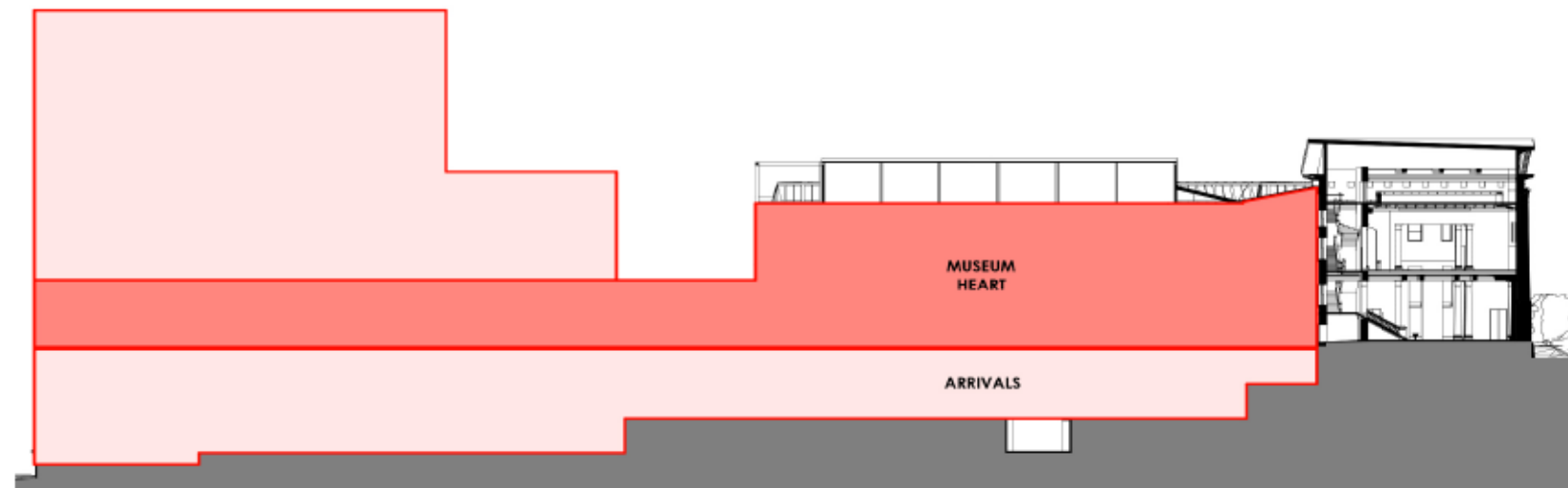
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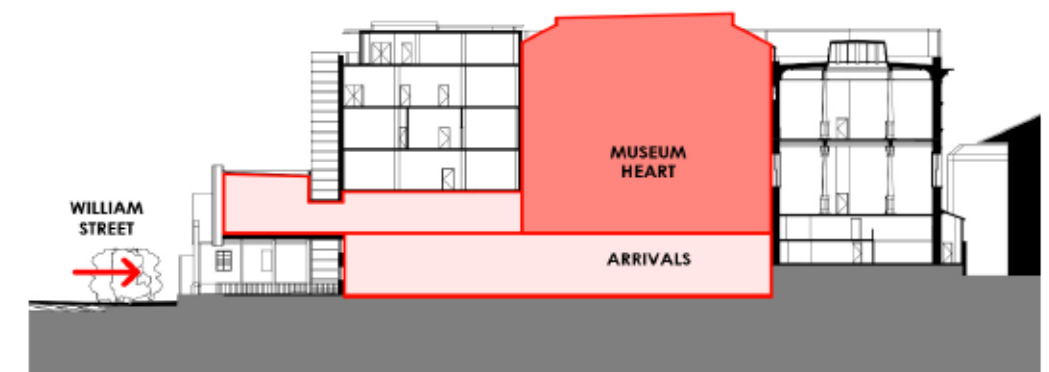
PROPOSED



PROPOSED

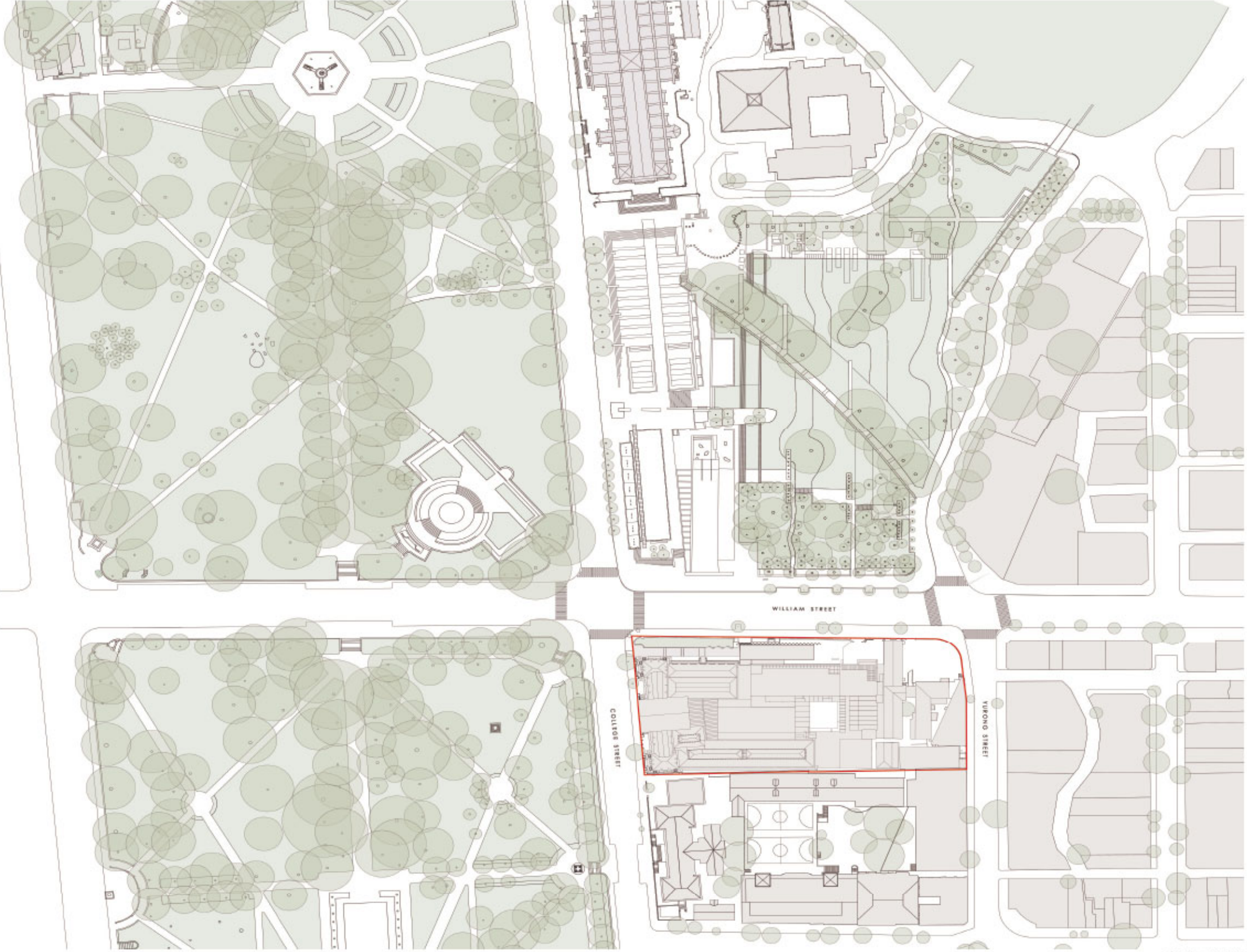


FUTURE



FUTURE

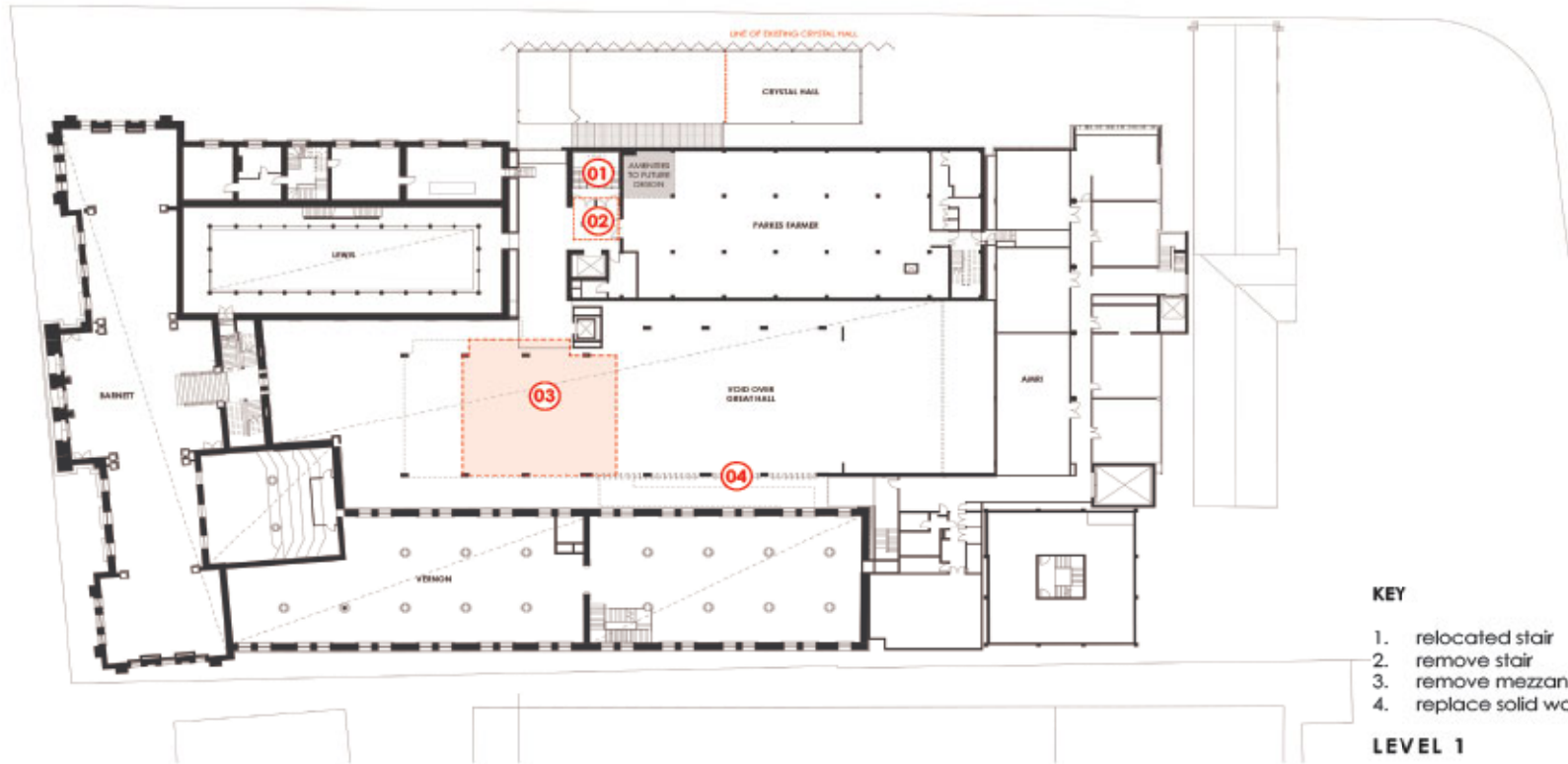
# KEY MOVES



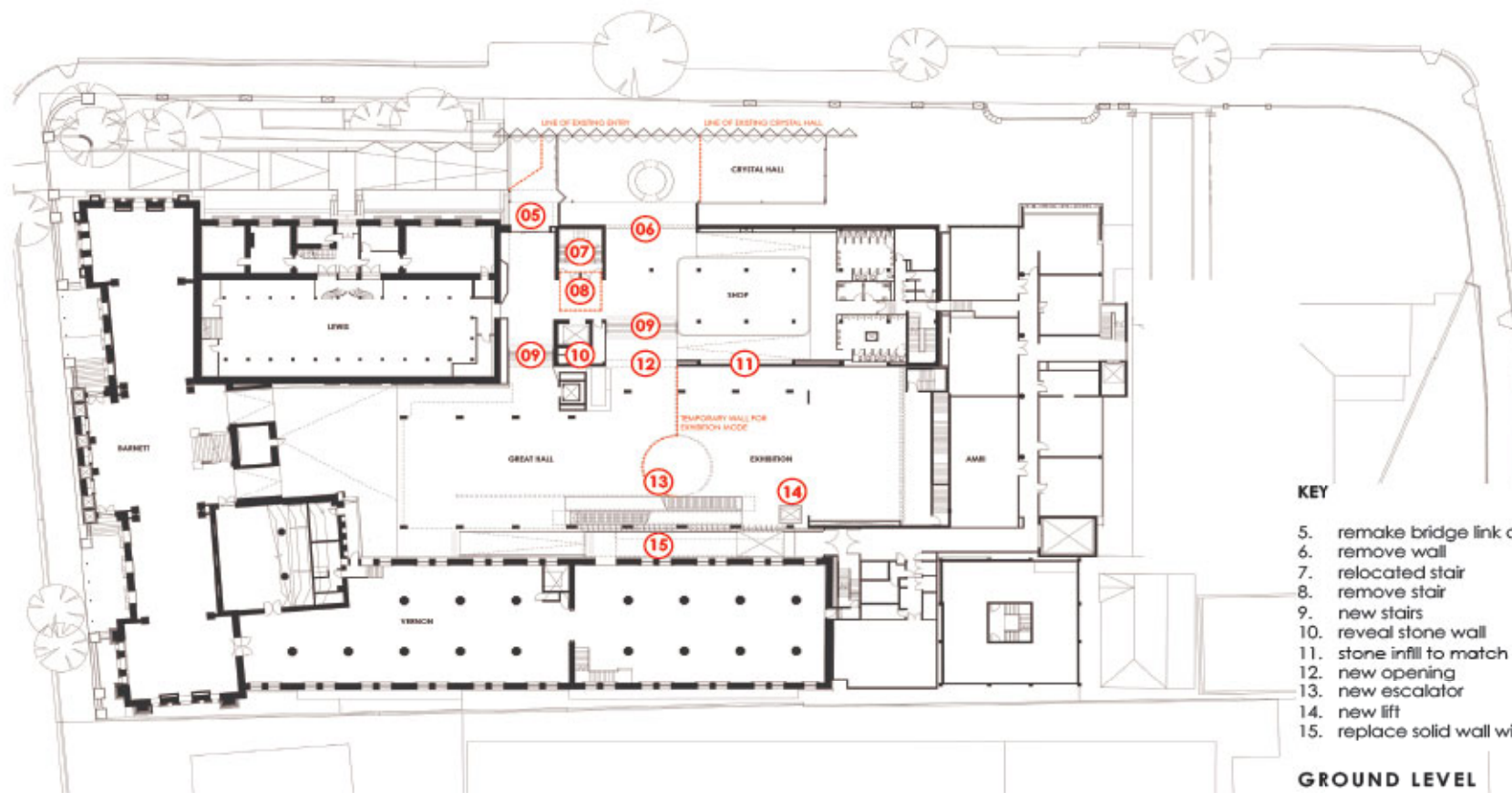
SITE PLAN



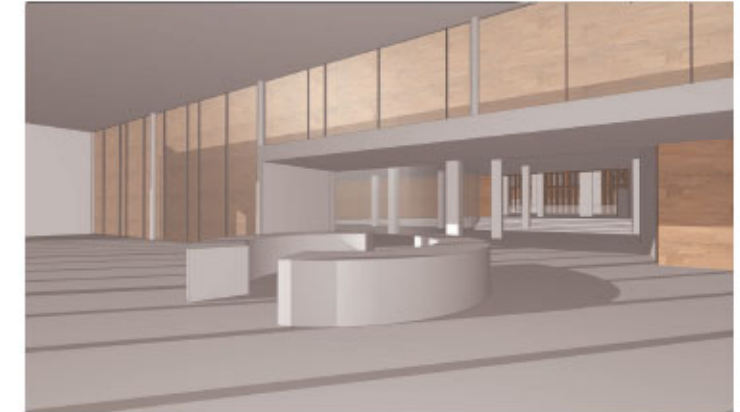
# KEY MOVES



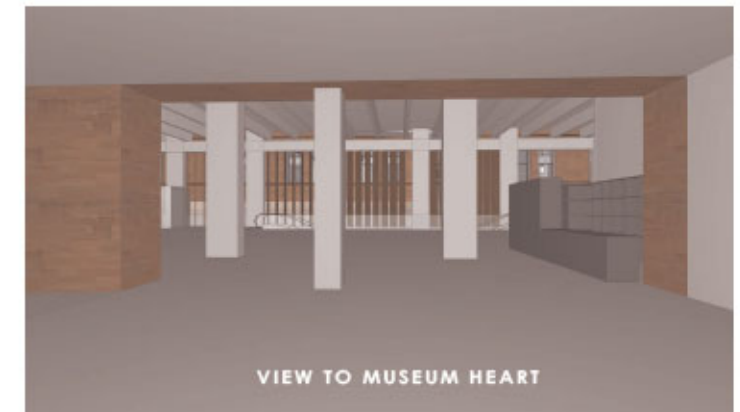
- KEY**
- 1. relocated stair
  - 2. remove stair
  - 3. remove mezzanine
  - 4. replace solid wall with operable louvre screen



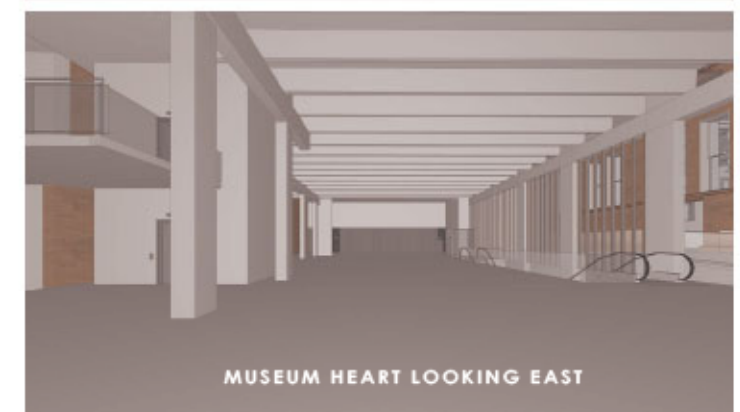
- KEY**
- 5. remake bridge link as exit
  - 6. remove wall
  - 7. relocated stair
  - 8. remove stair
  - 9. new stairs
  - 10. reveal stone wall
  - 11. stone infill to match using salvaged material
  - 12. new opening
  - 13. new escalator
  - 14. new lift
  - 15. replace solid wall with operable louvre screen



VIEW TO MUSEUM HEART

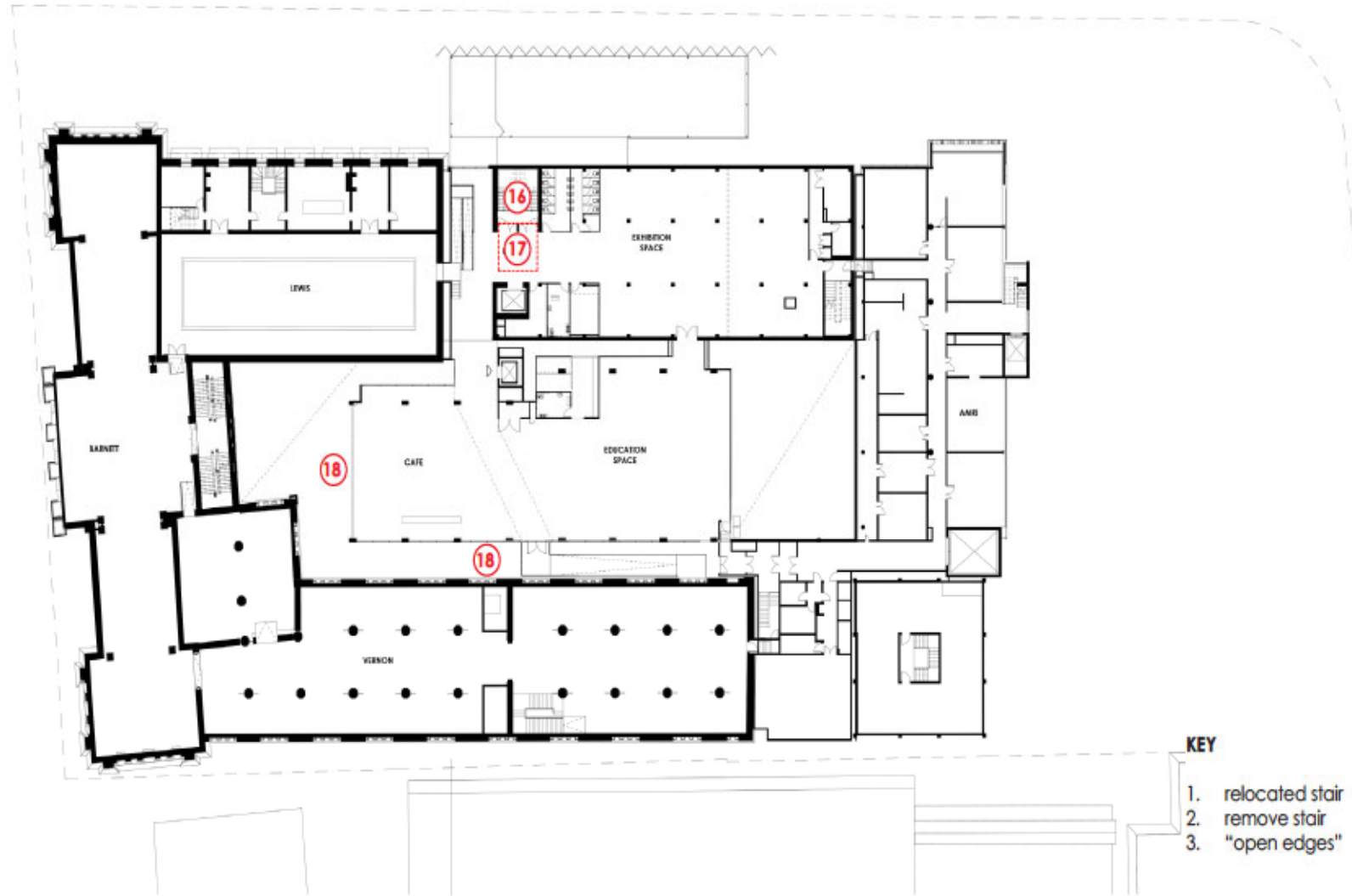


TOURING EXHIBITION TO WEST



MUSEUM HEART LOOKING EAST

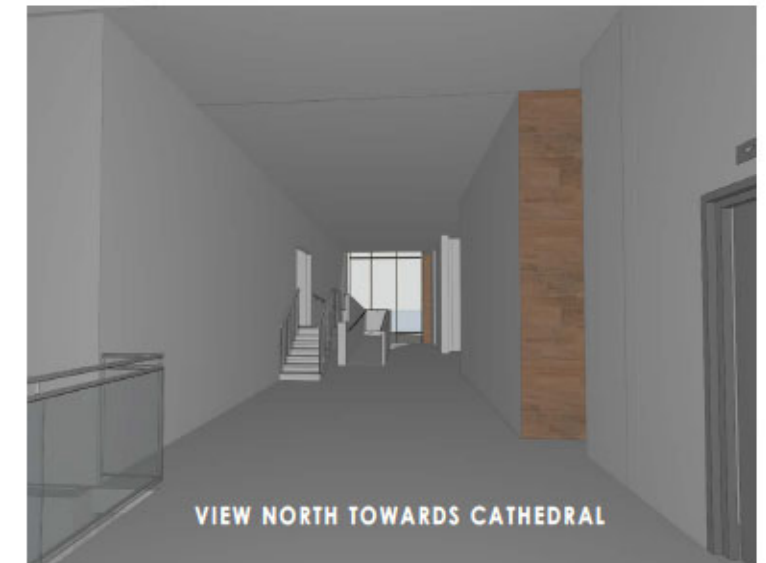
# KEY MOVES



## KEY

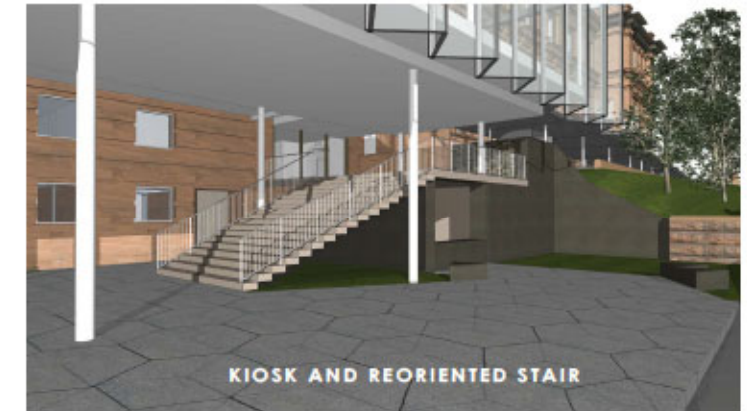
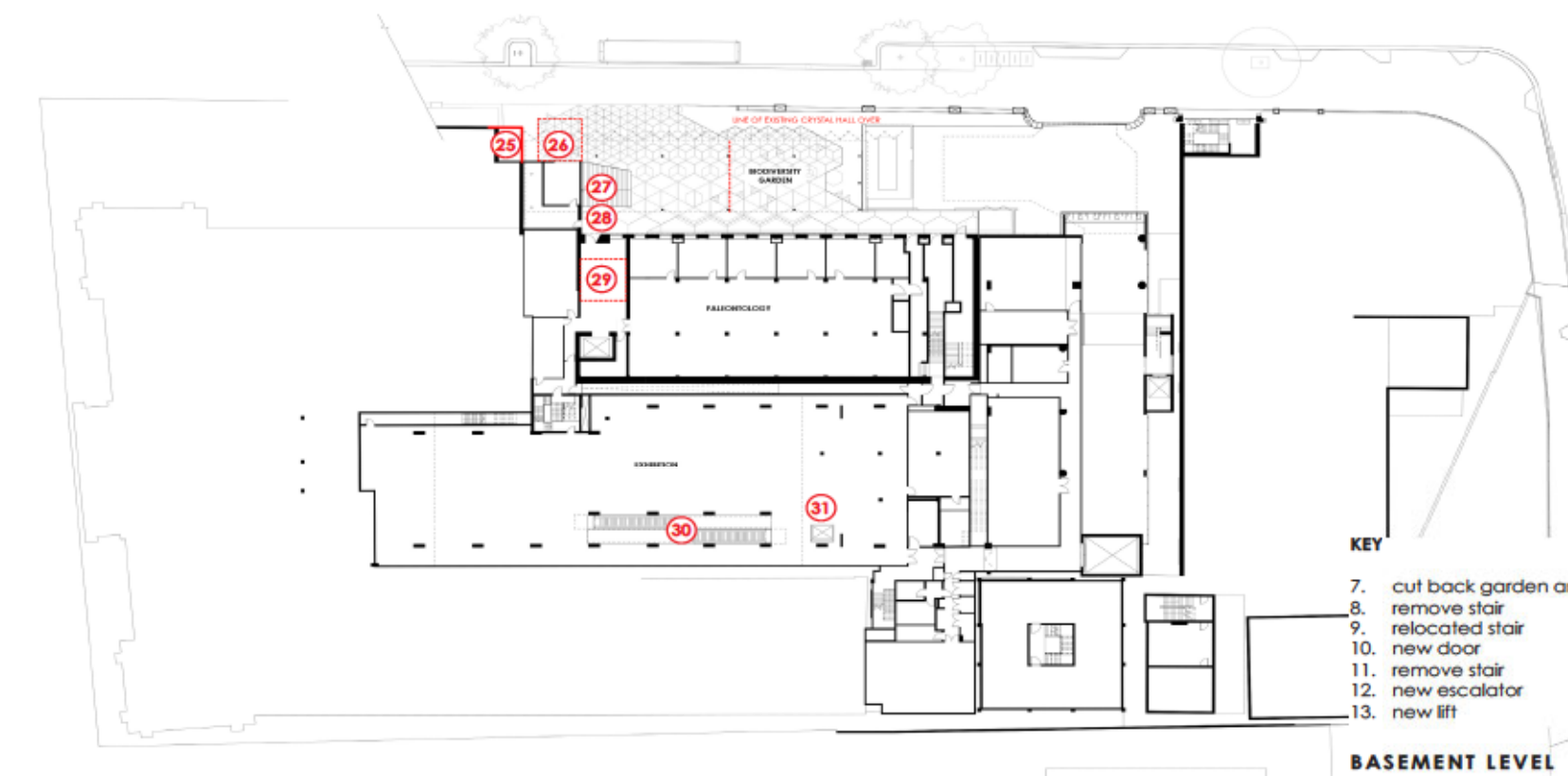
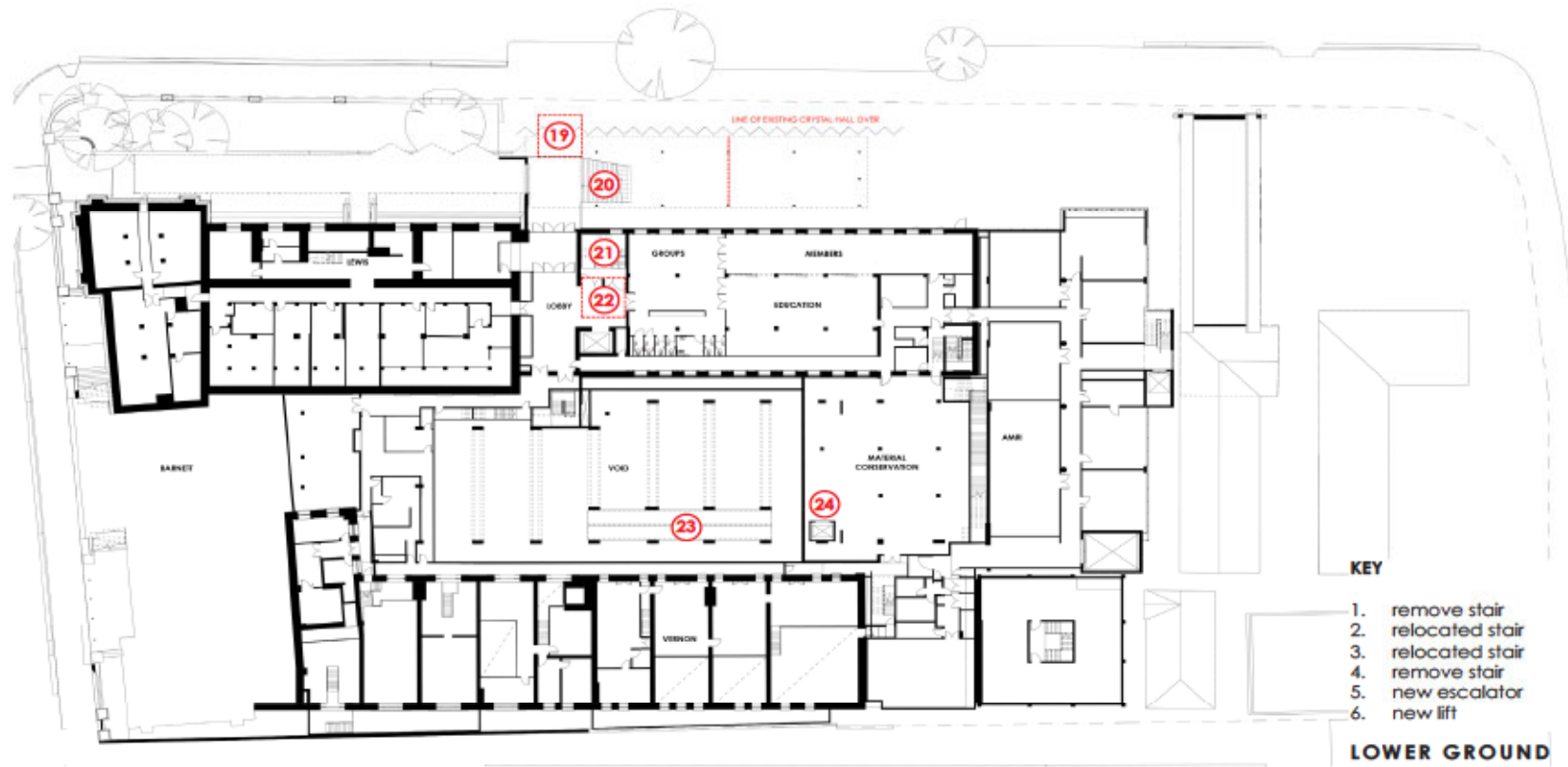
- 1. relocated stair
- 2. remove stair
- 3. "open edges"

## LEVEL 2





# KEY MOVES

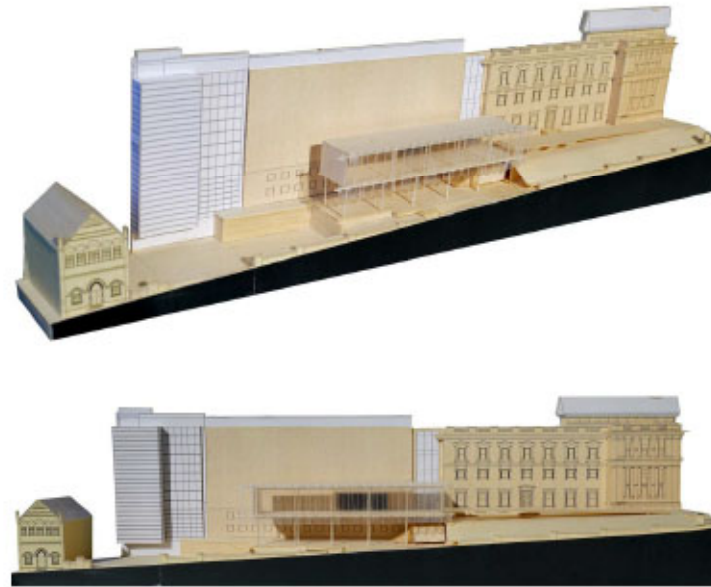


## 1.6 CRYSTAL HALL EXTENSION



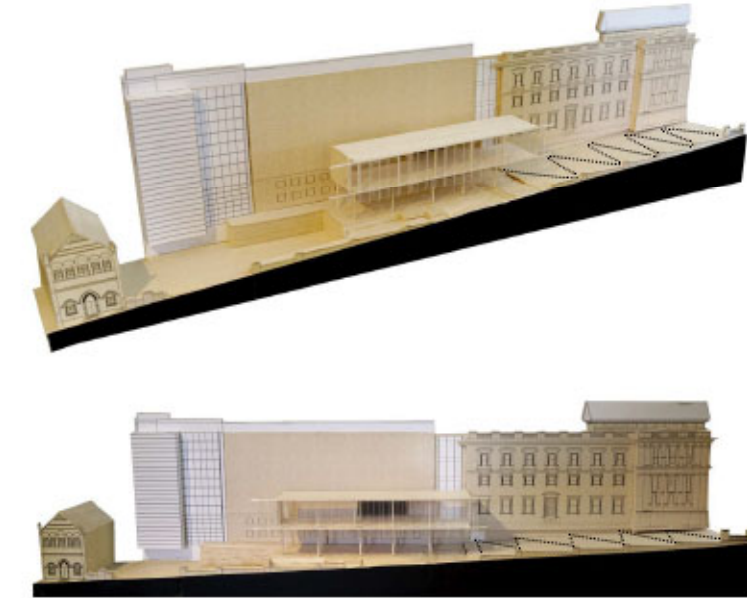
**CURRENT - single entry via ramp**

The Crystal Hall began the reorientation of the Museum back to William Street, bringing life to an important city block that was previously inactive, and starting a 'conversation' with the cathedral and the park opposite.



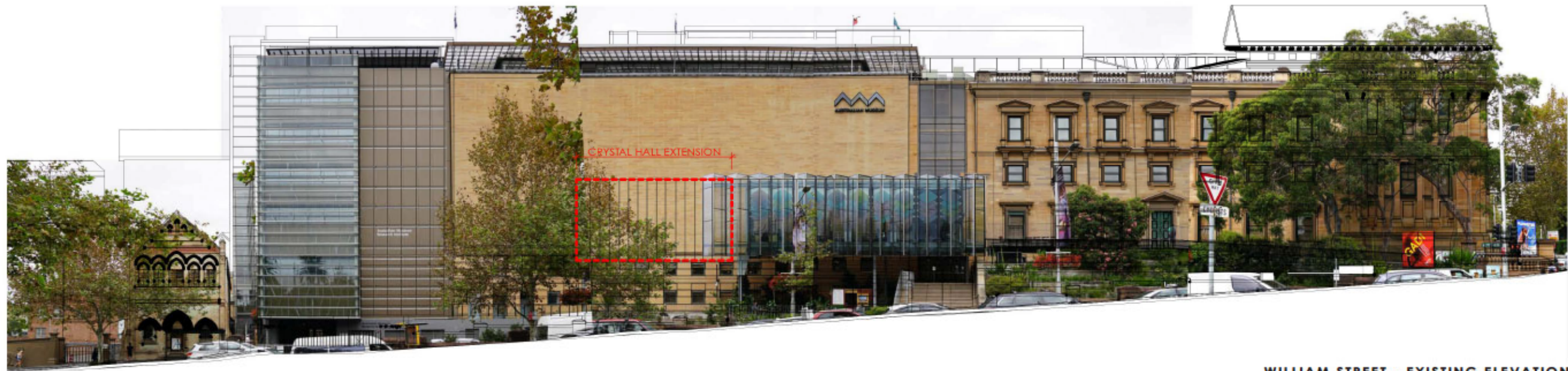
**PROPOSED - dual entry**

The proposal extends the Crystal Hall eastward, retaining the existing ramp as the primary entry and introducing a secondary entry below for groups. The William Street stair is reoriented to improve legibility of entry hierarchy and a more seamless landscaped curtilage. Amendments to the public domain incorporate a dedicated bus drop off and pick up bay for schools and other group visitors. The lengthened Crystal Hall removes the eastern skirt to achieve better light to the new Biodiversity Garden below, and visibility to Parkes Farmer façade.



**FUTURE - single entry via William Street**

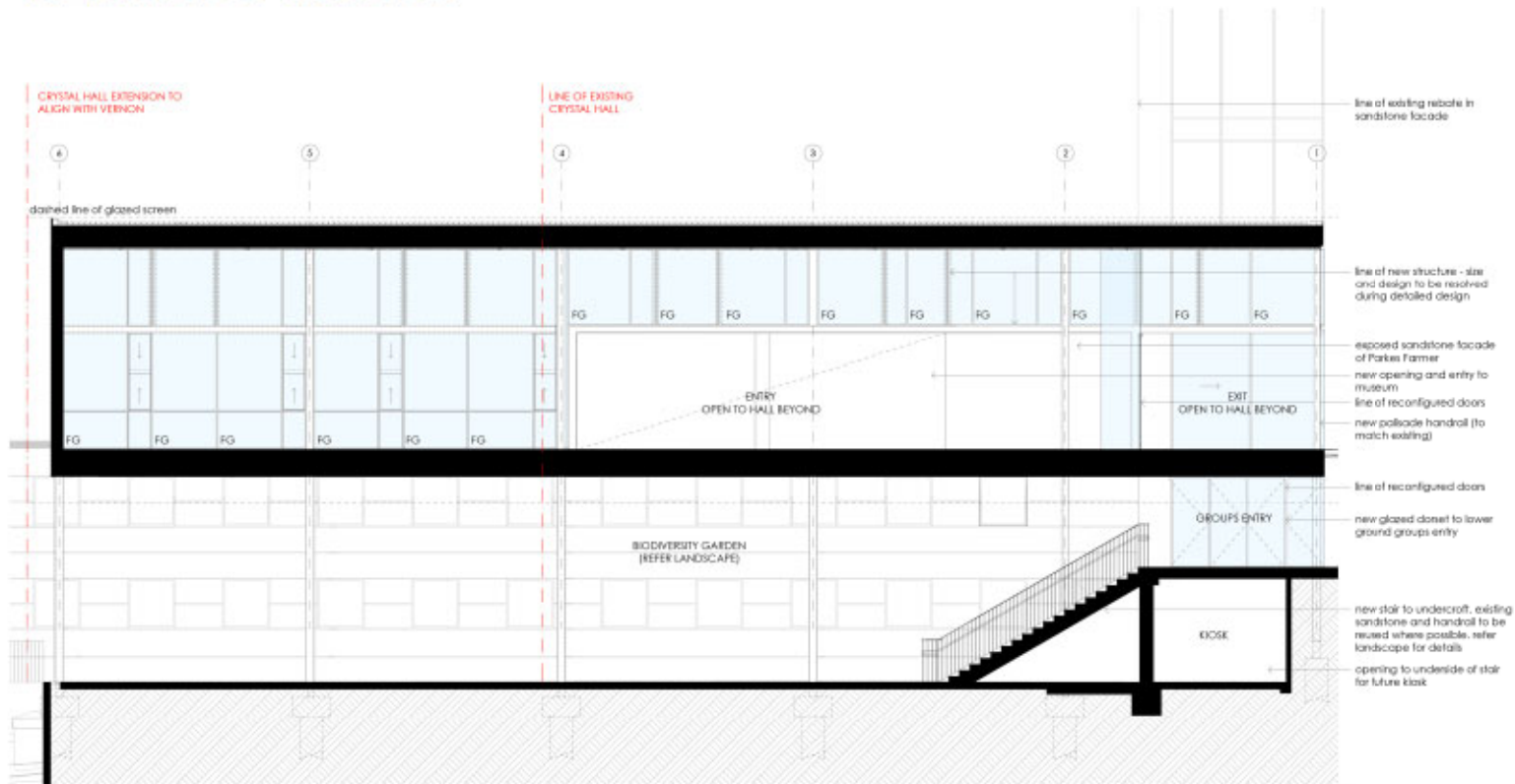
The Phase 2 Master Plan establishes William Street as the single entry to the museum. This involves the removal of the Crystal Hall ramp, link and William Street stairs, to create new sunny public space or forecourt along William Street, graded from the College Street corner. Crystal Hall becomes a sheltered 'portico' to the new entry in the lower portion of Parkes Farmer.



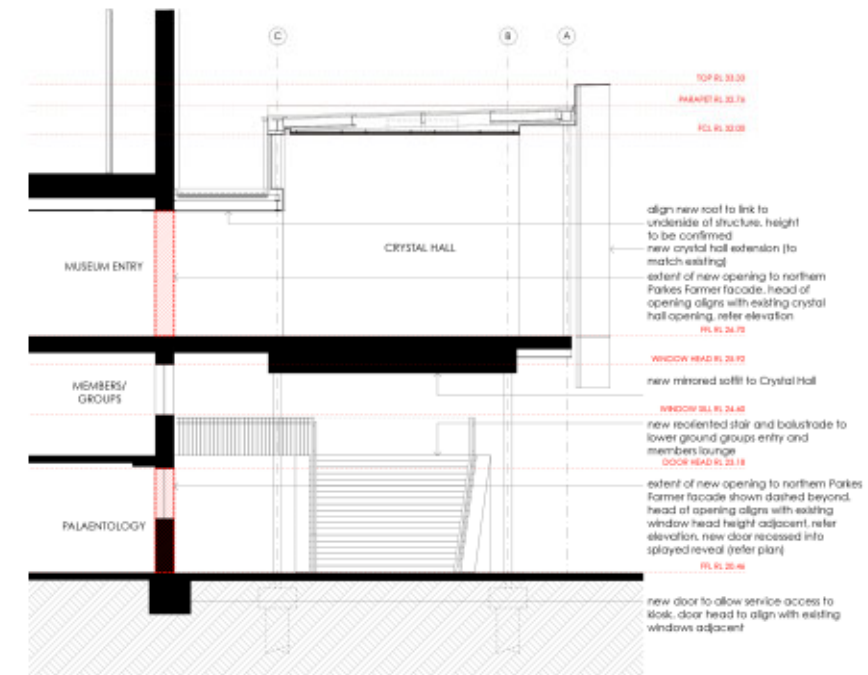
**WILLIAM STREET - EXISTING ELEVATION**



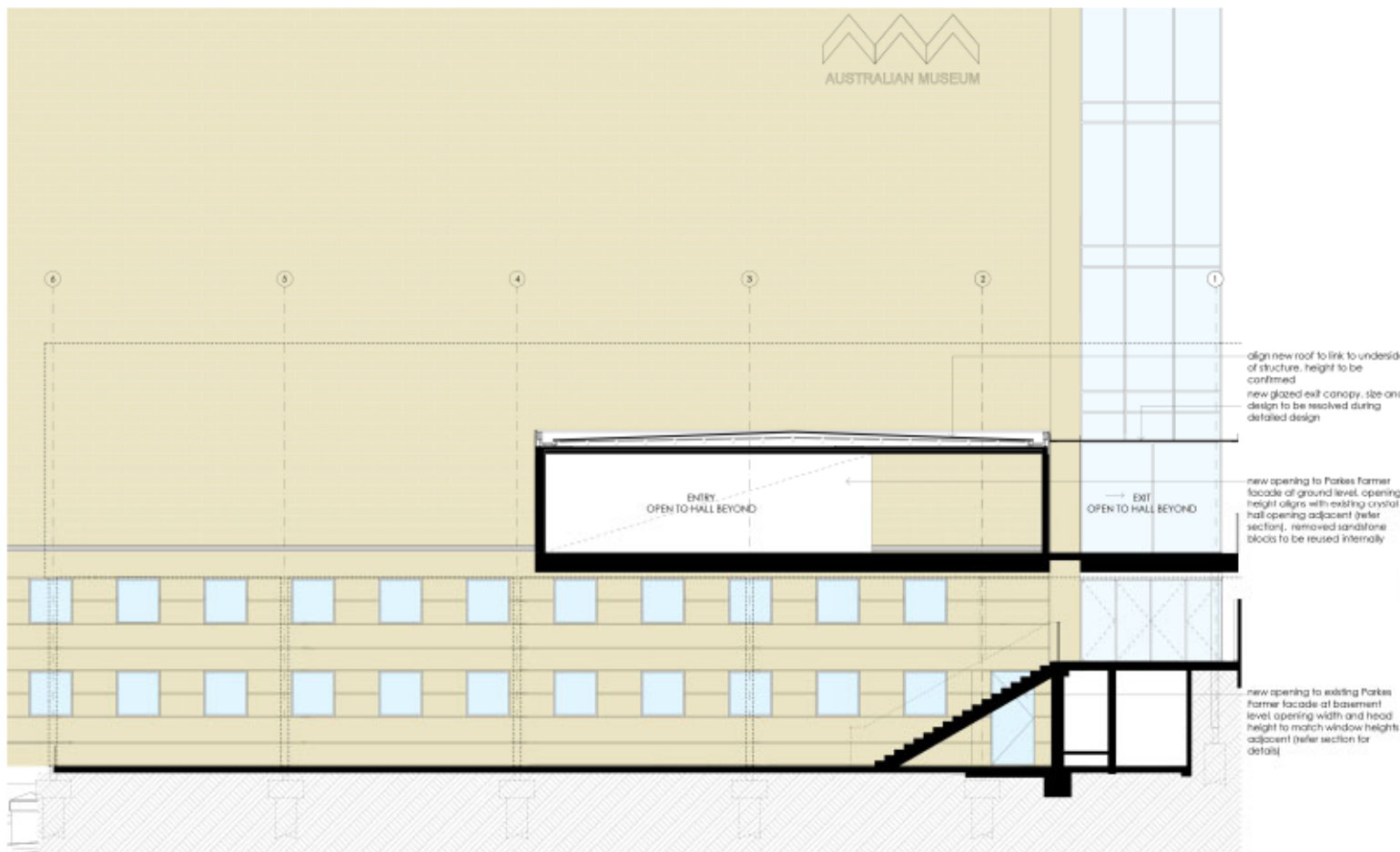
# 1.7 HERITAGE IMPACT



CRYSTAL HALL SECTION - HERITAGE



CRYSTAL HALL SECTION



CRYSTAL HALL SECTION - HERITAGE

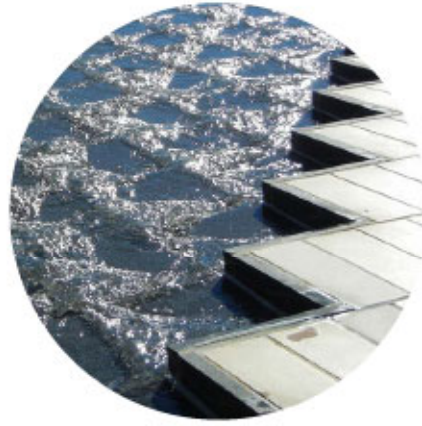
## 1.8 LANDSCAPE CURTILAGE



Sishane Park - SANALarc



Vincenzo De Cotiis Architects



Cascade Waterfall, HighCourt - Robert Raymond Woodward



Pteridophyte planting



Gadi trees connecting to an indigenous landscape

Biodiversity garden  
the proposal  
(words by sue barnsley design)

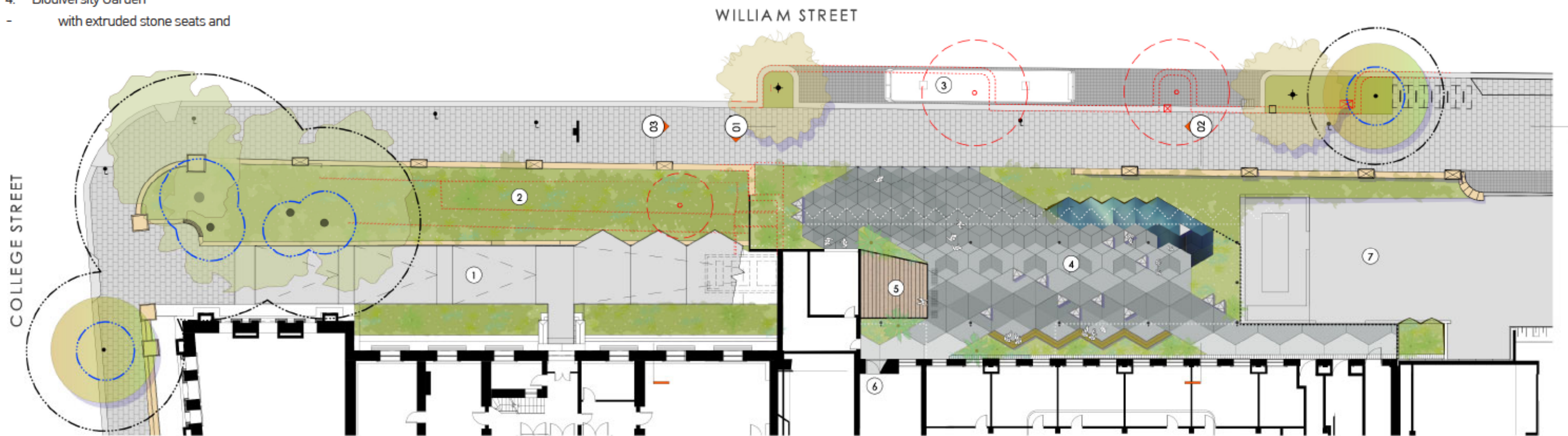
The floating crystalline form of the new entry to the Australian Museum frames a protected open-air space for gathering below. The expansion of the Crystal Hall entry to the Australian Museum is proposed in conjunction with a new and separate group entry on the lower ground floor. The new entry is configured as a Biodiversity Garden and immersive landscape address. This garden acts as a collective space for outdoor teaching, storytelling, performance and lunching. Suited to visitor groups comprised of up to 3 classes, or sixty children.

The principal work centres on the realignment of stairs to this lower ground group entry. Presently the stairs directly address William Street and are often confused as a secondary entrance to the Museum. In this proposal the stairs are realigned and accessed from within the Biodiversity Garden, giving prominence and increased legibility to the Crystal Hall Entrance from College Street- the main public entry to the Museum.

The work for approval includes the design of the Biodiversity Garden and amendments to the public domain that incorporate a dedicated bus drop off and pick up bay for schools and other group visitors, as well as a new planted embankment along the William Street frontage north of the garden.

### KEY

- |                                      |                                  |
|--------------------------------------|----------------------------------|
| 1. existing Crystal Hall entry ramp  | frog pond                        |
| 2. regraded and replanted embankment | 5. group entry<br>- lower ground |
| 3. bus drop off                      | 6. group entry<br>- basement     |
| - 14.5m rigid bus                    | 7. existing loading dock         |
| - with new tree planting             |                                  |
| 4. Biodiversity Garden               |                                  |
| - with extruded stone seats and      |                                  |



LANDSCAPE PLAN

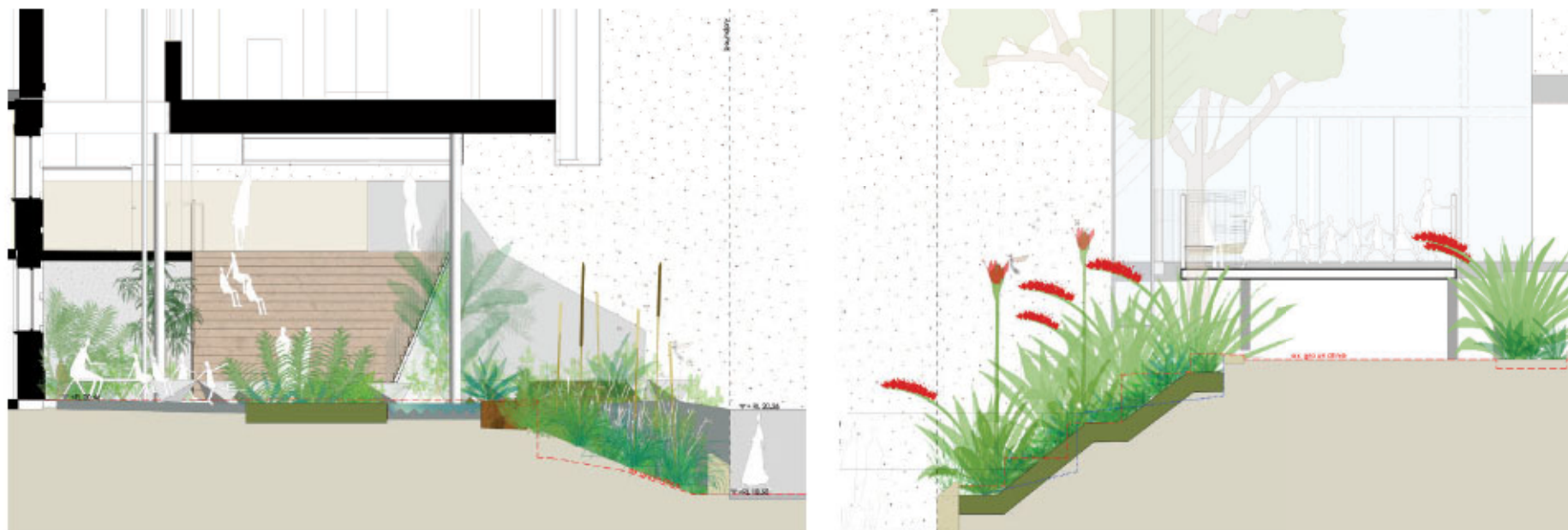


# LANDSCAPE CURTILAGE

## CONTENTS



01 NORTHERN ELEVATION - BIODIVERSITY GARDEN



### Access from the street

The steep gradient of the footpath on William Street makes equal access via College Street to the west and Yurong Street to the east impossible. The collocation of a bus stop on grade with the group entry, while not achieving compliant cross falls of <1:40, makes it possible for visitors in wheelchairs and with ambulatory concerns to be more easily assisted to the group entry. This arrangement offers an operational rather than a fully compliant solution for group access.

The provision of the bus stop on grade with the group entry to the Museum will result in the removal of four vehicular parking bays along with the pavement extension and bike parking racks in this location. Five bike racks have been proposed as part of the new works. Localised kerb and services adjustments will be required not only to reconfigure the bus parking bay but also to adjust the location of two replacement street trees. The proposed street trees are arranged to provide as much continuous canopy cover to the pavement as possible but vary from the symmetrical arrangement east of the Museum. Trees will be supplied and installed in accordance with the City's guidelines. Footpath levels remain unaffected.

### access within the biodiversity garden

The requirement for an 8 metre fire egress path from the basement and lower ground levels of the Museum defines a wide threshold to the Biodiversity Garden. This path connects to a kiosk located under the new stair and close to passers-by on William Street. Entry gradients are generally compliant, enabling access into the forecourt and along the main path of travel to the stairs and lower ground entrance above. As well as the basement level entry and internal lift for those visitors unable to use the stairs.

One section of entry pavement is however, not strictly compliant. Folding to a 1:10.8 gradient to meet the existing footpath levels alongside the entry garden at its lower extent. While this grade is deemed accessible for fire egress, the extent of the 1:20 accessible pathway will be highlighted through stone selection, colour and finish to increase legibility and safety.

### garden threshold

The entry to the garden adjoins an expanded landscape frontage that immediately transports the visitor from the urban environs of William Street into a landscape microclimate and world apart. The ground plane features a tessellated pavement, which abstracts the crystalline façade above and acts as a dark geometric foundation playing off the reflective zinc soffit. Like sacred rock foundations, the hexagonal paving shifts across the floor making a flexible gathering space edged by a stone lined pond and frog habitat

### seating

As a gathering place, the garden contains a variety of seating types allowing for multiple teaching practices and methods of engagement with pupils. Along the building, angled

seating amplifies the zig-zag of the paving, mirroring the public seating at the entry to Crystal Hall. The 'V' formation creates spaces for smaller groups with back and arm rests offering comfort. Elsewhere stone seats appear extruded from the pavement like large crystals and arranged in an informal 'yarning circles', making places to perch, do classwork, and lunch.

#### **materials**

The material palette is selected to respond to the historic context of the museum, and to compliment the architecture of the Crystal Hall. The tessellated pavement and geometric, extruded stone seats, in Wee Jasper bluestone, reflect the crystalline form of the hall above. In their tones of blue-greys and golden browns, the paving forms a visual link between the materiality of the adjacent city paving and the sandstone character of the museum. The intriguing textures and colours of the selected paving is intended to spark curiosity and conversations about geology and mineralogy.

The angled seating in metal along the building forms a contrast to the solidity of the paving and extruded seats, with a light, floating appearance that relates to the hall above. The re-aligned stairs utilize the existing pink granite to provide continuity and visual connection to the warm sandstone façade.

#### **planting**

The surrounding garden encourages curiosity and displays two unique biotopes. On the sunny, north facing street frontage, the garden contains species derived from Hawkesbury Sandstone based ecological communities, including xanthorrhoea species, while deep inside this space the garden is populated with Hawkesbury Sandstone based rainforest species and ancient plants. Mosses and liverworts, ferns and cycads or primitive angiosperms like the Bolwarra, *Eupomatia laurina*, showcase diverse forms of nature and stratagems for survival. Edible indigenous plants are woven into the garden, providing educational opportunities on site, with a hive of native stingless bees hidden amongst the foliage. Like a scientific garden, the planting could continue the cellular grid established with the stones, framing geometrically defined classification gardens with monocultures of low-growing bryophytes and pteridophytes, misting jets controlling the atmosphere.

The garden is not a space for harvesting or a vessel of threatened species but a curated urban habitat. The garden contends with overlapping concerns of biodiversity, sustainability and cultural connection, creating a resonant and elemental space for museum visitors and students.

# PROJECT BACKGROUND & BRIEF

02

PROJECT BACKGROUND & BRIEF

# 02 Project Background & Brief

## 2.1 PROJECT POSITIONING

The Australian Museum is the oldest museum in Australia and is one of Sydney's best-loved institutions. It also holds a significant collection of biological specimens and cultural artefacts that put it in the ranks of the world's top museums.

It does particularly important work in DNA research and is a recognised authority on Pacific and Australian indigenous culture.

### RECENT CHANGES AT THE AUSTRALIAN MUSEUM

In recent years a number of important changes have taken place at the museum.

These include:

#### New leadership

A new Executive Director & CEO and new Leadership Team were appointed in April 2014.

#### Stage 1 Transformation Projects complete

Since April 2014 the AM has implemented a number of historic physical changes to improve visitor experience, including:

- > New Crystal Hall public entrance from William Street - including accessible Museum Walk, Crystal Hall, Donor Lobby hallway and new elevator to new rooftop café (known as Project Zero)
- > New Wild Planet Gallery in the Barnet Wing across the former entrance, café space and shop - first permanent new gallery space in over 50 years
- > Upgrade of Atrium space, relocation of AM Store; reconfiguration of entrance to Temporary Exhibition space; relocation of Café to rooftop and creation of new venue hire space - all to provide improved visitor circulation and greater opportunity for venue hire
- > New First Australians galleries including two new permanent exhibits - Garrigarang Sea Country and Bayala Nura Yarning Country providing an inspiring experience for tourists and local visitors of Indigenous Australia yesterday and today
- > New Pacific Spirit gallery on Level 2 showcasing over 250 rare objects from the AM's renowned Pacific Collection, regarded as the best in the world
- > Restoration of the AM's historic Long Gallery - the first museum gallery in Australia - in time for the AM's 190th anniversary in 2017

#### Government commitment to cultural infrastructure

NSW Government announced a boost to Cultural capital funding through the proceeds of the poles and wires leasing contract.

#### Liberating William Street site

The new shared storage and exhibition facility at Castle Hill is complete and during the next year the Museum will progressively relocate some collection items to unlock the potential of spaces currently used as storage at the William Street complex, into new gallery spaces.

#### Powerhouse to Parramatta

NSW Government has announced the relocation of the Powerhouse Museum (Museum of Applied Arts and Sciences) to Parramatta within the next five years. As a consequence, the AM will be the sole major museum in central Sydney, focusing further demand on the AM from tourists and local patrons alike.

#### Responding to changing visitor expectations

- > Kids Free - The AM has implemented a number of innovative policies, including "Kids Free" - general admission is now free for under-16s and high school students - in line with a NSW Government initiative to make culture, arts and science more accessible to children. The AM is already seeing a positive impact on visitor numbers.
- > Connecting to international visitors - the emergence of new tourism markets, particularly China, as a major component of international tourists visiting the AM, demands a bespoke response to maximise the growing importance of this audience.

#### New commercial partners

The AM is now working with new commercial partners including Microsoft, Google, National Geographic and others on improving its digital experience to adapt to changing visitor expectations.

#### New Brand

In August 2015 the AM launched a new 'zig zag' brand to communicate its deep connections to Indigenous and Pacific cultures along with the contemporary nature of its exhibitions, public programs and science research.

#### New Address

The AM's new address - 1 William Street, Sydney - reflects the original entrance and sees the closure of the College Street doors for the first time in 145 years.

### AM VISION

In 2015 the Australian Museum announced a new Vision for its future. The current project represents the first step towards achieving this Vision.

By 2027, Australian Museum will be:

- > **A world class destination with 20% of its collection on display and annual visitation of 1 million people**
- > **A leader in digital engagement with the AM's science and cultural collections unlocked for school and life long learning**
- > **A sustainable Museum, generating new income streams and commercial partnerships, targeting 48% of the AM's annual operating expenses**

By 2027 the AM will be the most visited cultural venue in Sydney and Australia, and be globally recognised as the world's foremost resource for understanding Pacific and Australian Indigenous cultures, and the natural science of the region.

The AM will be the 'must see' museum in Australia by exhibiting more than 3 million Pacific and Indigenous cultural objects and natural science specimens from its world renowned collection. Currently the museum has less than 1% of its 18 million plus collection on display.

This vision will literally turn the Museum 'inside out'.

This awe-inspiring, world class experience will be enhanced by state-of-the-art digital interpretation, and will be renowned internationally as a new major attraction for Sydney.

Central to the AM Vision, the AM's Centre for Pacific and Indigenous Excellence will create a hub for learning in the region, encouraging research, scholarship, policy development and discourse, while promoting trade and cultural diplomacy between Australia and Pacific nations.

To realise the AM Vision, the Museum commissioned studies and found it would need to expand its facilities on the currently under-utilised eastern site area in order to meet its future needs.



## MUSEUM GOALS

Museum Goals	Medium Term Objectives (by 2027)	Short Term Objectives
Custodian of Australia and the Pacific's natural and cultural history	<ul style="list-style-type: none"> <li>+ Australia's largest permanent exhibition of Australian, Indigenous and Pacific artefacts</li> <li>+ Increase the proportion of the collection on display from less than 1% to 20%</li> </ul>	<ul style="list-style-type: none"> <li>+ Increase visitation by 200,000 visitors per annum (on average)</li> <li>+ Increase school visitations to 60,000 per annum</li> <li>+ Increase the Australian, Pacific and indigenous display space by 500m<sup>2</sup></li> </ul>
Financial sustainability	<ul style="list-style-type: none"> <li>+ Increase the proportion of self-generating revenue to 48% of total revenue</li> </ul>	<ul style="list-style-type: none"> <li>+ Increase the proportion of self-generating revenue to 41% of total revenue</li> </ul>
Improving awareness and educational outcomes of international cultures	<ul style="list-style-type: none"> <li>+ Increase annual visitation to 1 million</li> <li>+ Increase annual school visitors to 125,000</li> <li>+ Increase major blockbusters from 1 to 2 per annum</li> <li>+ Increase the single-day capacity of the Museum from 1,900 to 5,000 visitors</li> </ul>	<ul style="list-style-type: none"> <li>+ Increase touring exhibition attendance from 154,000 p.a. in 2017 to 332,000 p.a. by 2020.</li> </ul>
Elevating highly regarded scientific research and capabilities	<ul style="list-style-type: none"> <li>+ Increase research grant funding by 50%</li> <li>+ Increase the volume of DNA investigation support to industry by 50%</li> <li>+ Increase citation impact to 1.3</li> </ul>	<ul style="list-style-type: none"> <li>+ N/A</li> </ul>



THE AM VISION WILL TRANSFORM THE AM'S CAPACITY TO DELIVER WORLD CLASS PUBLIC PROGRAMS, EXHIBITIONS AND SCIENTIFIC RESEARCH BY MAXIMISING THE WILLIAM STREET SITE'S POTENTIAL.

## THE AM MASTER PLAN

Hames Sharley were commissioned by the Australian Museum in 2016 to develop the AM Master Plan, begin consultations with authorities and prepare for an international design competition to deliver the AM Vision and museum objectives.

Prior to May 2016 the Museum had worked with Johnson Pilton Walker (JPW) on the development of a functional brief, early master planning work, an Urban Design Study and a Vision statement. Some of the material produced in that process is included in this report. In 2017 the Museum revised the Master Plan to address the need to seek funding for the delivery of the project in phases.

This two phased option was supported by a compelling Business Case and the NSW Government announced funding for the first phase in June 2018.

## AM ADDITIONS & ALTERATIONS

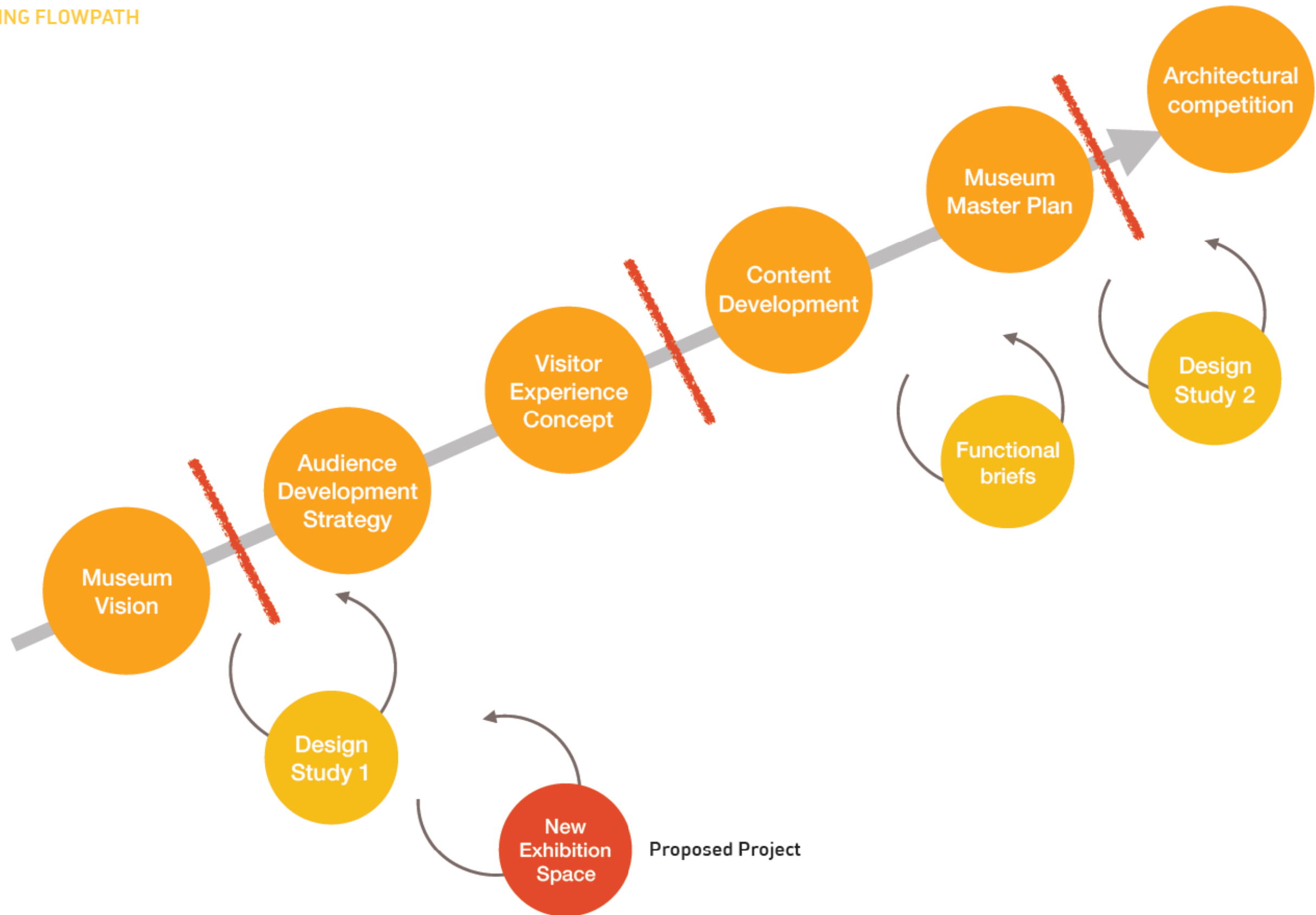
In March 2018 the Museum began planning the first phase of the Master Plan, which is now referred to as the Australian Museum Additions & Alterations project. Neeson Murcutt Architects, designers of the Crystal Hall entrance wing, joined the project team in February, long with a full team of consultants.

## PROJECT OBJECTIVES

The key components of the Museum's brief for the Additions & Alterations are as follows:

- > Reinforce the Museum's iconic status as Australia's first museum
- > New public entry – improved circulation and way finding
- > New flexible touring exhibition space to enable Sydney to host international blockbusters
- > Move Pacific Collection from Basement storage to off-site location
- > Separate entrance and facilities for schools and groups to ease congestion
- > Improved circulation and amenities for increased visitor numbers in the short term (including new cafe and servery)
- > Ensure key changes have longevity

## PROJECT PLANNING FLOWPATH



Source:

Graphic courtesy of Art of Fact



## 2.2 CHALLENGES & OPPORTUNITIES

### DESIGN CONSTRAINTS

A CAMPUS OF BUILDINGS THAT ARE NOT OPTIMALLY INTEGRATED OR CONNECTED.

#### THE EXISTING SITE

The Museum consists of many individual buildings that have been added to the site over its long history. Refer to the history section.

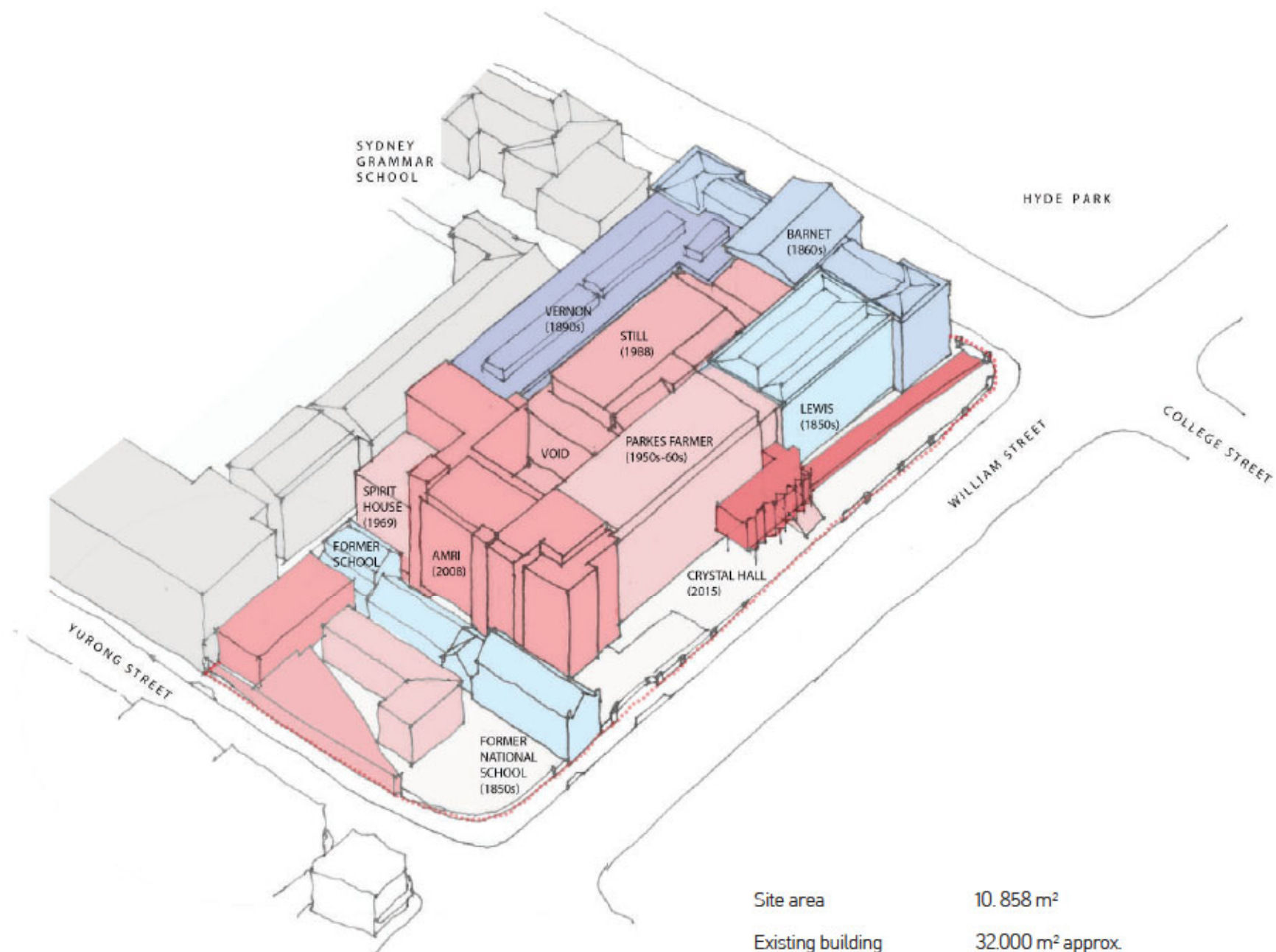
Many of the principal gallery spaces have been built at different levels and are connected by stairs.

Ramps have been added to aid patrons with prams and wheelchairs, however some of these modifications are no longer compliant with current standards, or have detracted from Museum's aesthetic appeal.

The difficulties of connecting galleries built at different times and at different levels - and even for different purposes - are immediately apparent to the visitor.

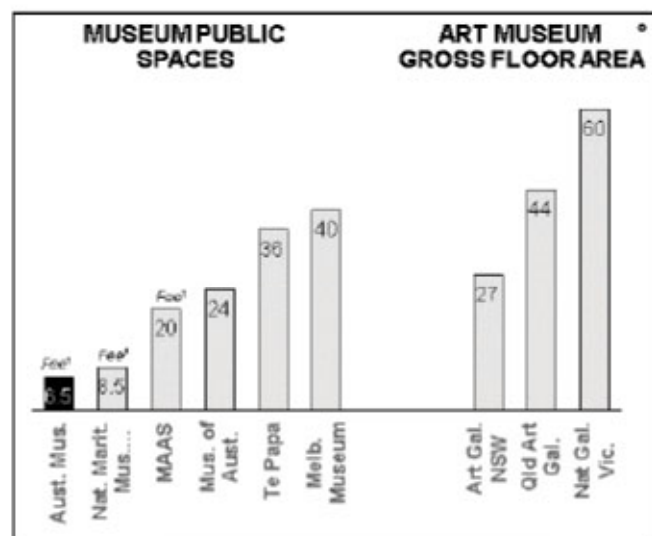
The historical former school buildings and the Australian Museum Research Institute (AMRI) building form a physical barrier to expansion of the museum on the underutilised eastern part of the site.

FIGURE BELOW: Museum has the lowest floor space ('000 m<sup>2</sup>) amongst other cultural institutions in Australia despite holding the country's largest collection.



#### MUSEUM SPACE & AM VISITOR EXPERIENCE

Square metres '000



The new WA Museum will have floor space of 23k sq. m.

- #### AM VISITOR EXPERIENCE LIMITATIONS
- Visitor circulation is constrained
  - Temporary exhibition & education spaces small
  - Minimal collection accessibility - < 1% displayed
  - Science research is not accessible to public

Site area	10,858 m <sup>2</sup>
Existing building	32,000 m <sup>2</sup> approx.
Existing GFA (CoS)	25,000 m <sup>2</sup> approx.

- City of Sydney LEP 2012
- Metropolitan Centre Zoning
  - FSR 5:1
  - Height Limit RL 46 (- pediment height)

Source: Sandwalk Partners 2016, Australian Museum: Museum Redevelopment Benchmarks. Note: WA Museum is expected to open in 2020

Refer also to section 1.4

## CHALLENGES + CONSTRAINTS

In its Vision study, the AM identified the physical constraints on its operations. Some of the key findings are included in the following pages.

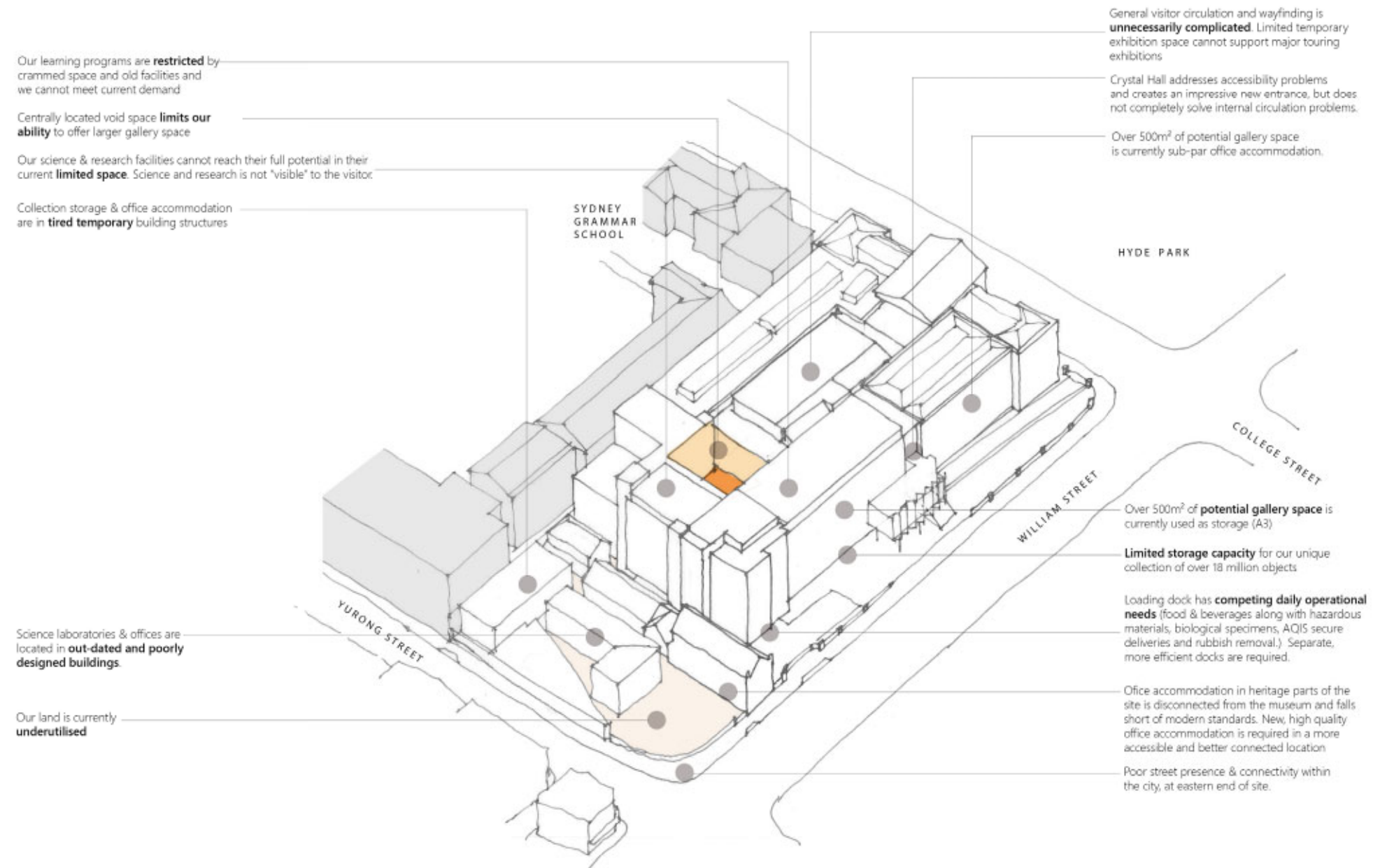
The AM faces many and diverse operational challenges due to the incremental development of the William Street site since the 1840s.

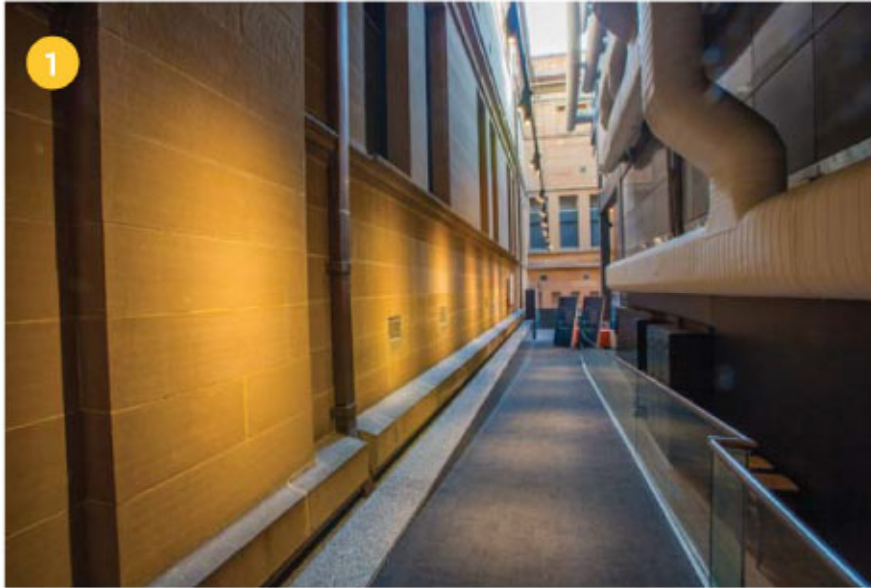
Whilst the AM comprises some of Sydney's finest sandstone buildings, subsequent projects have largely complicated, rather than clarified circulation, functional relationships, and use.

Today, the AM's William Street site operates like a campus of buildings that are not well integrated or connected, and in many cases the inherent value of the building and collection assets are underutilised:

- > Circulation is complex and constrained
- > Sightlines to key spaces are obscured
- > Some heritage spaces are poorly utilised for workspace
- > Many collections are not visible or accessible to the public
- > Science activities are not visible to the public
- > Temporary exhibition space is below international standards in size, support facilities and services
- > There are inadequate facilities for education programs
- > Visitors facilities are inadequate and poorly located
- > Commercial opportunities are limited, and not well located to maximise potential income streams
- > Theatre is constrained and services are outdated
- > Spaces for public programs inadequate
- > Members facilities inadequate

In the longer term, the Master Plan will address many of these issues by providing new infrastructure on the eastern part of the site. In the shorter term, the primary aim of the proposed Additions and Alterations is to ease circulation issues and allow the Museum to handle an increased number of visitors.





### CIRCULATION IS COMPLEX

The Museum's circulation system is difficult to navigate with no clear hierarchy or layout of gallery spaces.



### CIRCULATION IS CONSTRAINED

Circulation space, particularly at Ground Level, is constrained and the location of visitor services is unclear.



### RESTRICTED INCOME GENERATION

New cafe capitalises on views, but is remote from main museum experience.



### TEMPORARY EXHIBITION SPACE CONSTRAINED

The temporary exhibition space is limited in size, with insufficient queuing and support spaces, and restricts the AM's ability to present international touring exhibitions.



### SCIENCE NOT VISIBLE

Many visitors do not realise the extraordinary research undertaken at the AM as it is not visible, limiting opportunities to connect and utilise this invaluable resource and knowledge base for education and engagement.



### COMMERCIAL OPPORTUNITIES NOT INTEGRATED

Shop has constrained layout, restricting income potential.



### LIMITED CAPACITY FOR SCHOOL GROUPS

Circulation spaces and facilities throughout the Museum are inadequate for school groups and tour groups.



### EDUCATION FACILITIES INADEQUATE

Gathering spaces for school groups are inadequate, requiring public circulation spaces to be used.



### CLOAKING FACILITIES INADEQUATE

Cloaking and bag storage are inadequate, and compromise public circulation and exhibition opportunities.



### COLLECTIONS NOT VISIBLE

Most visitors do not appreciate the extent and value of the Museum's world class collections because they are hidden.



### KID'S SPACES ARE OUTDATED AND SMALL

Facilities for engagement with children and young adults are limited, and often outdated.



### CONSTRAINED THEATRE

The theatre is too small for many events and public programs, and the space is inflexible.

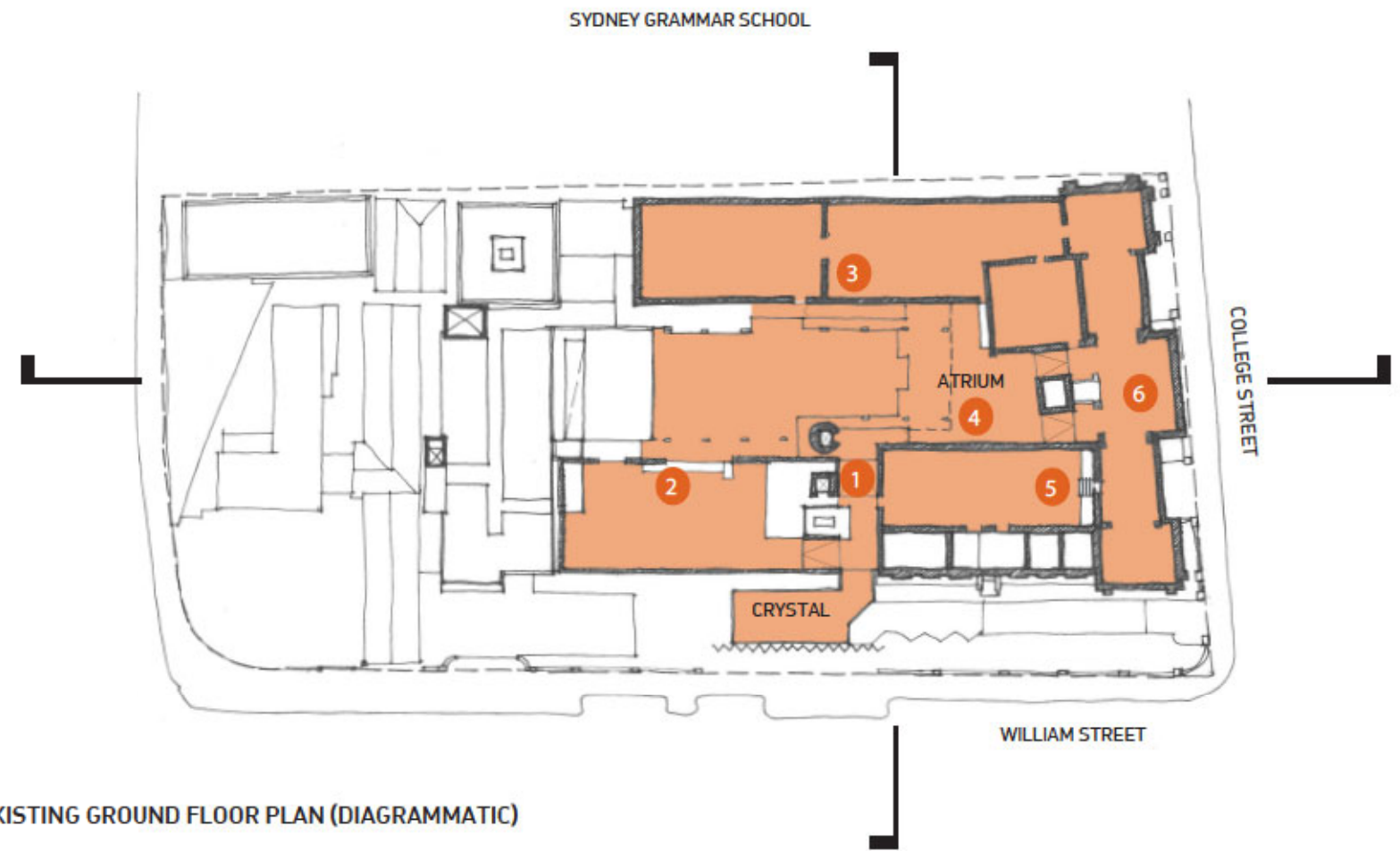


## MAXIMIZING PUBLIC SPACE IN THE MUSEUM\_

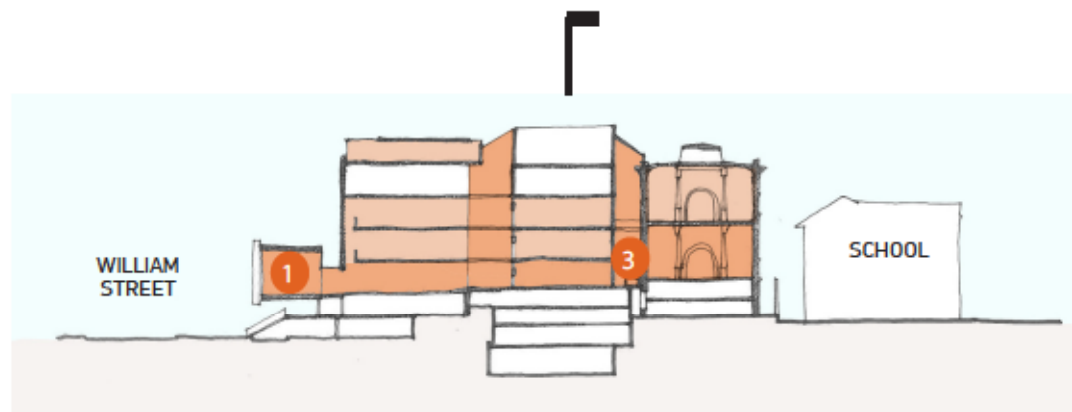
### EXISTING MUSEUM - LIMITED SPACE & LIMITED CONNECTIVITY

The sections through the existing museum show the principal public spaces on the ground floor, all at different levels, connected by a series of ramps of the main atrium floor in the forecourt of the Still Addition.

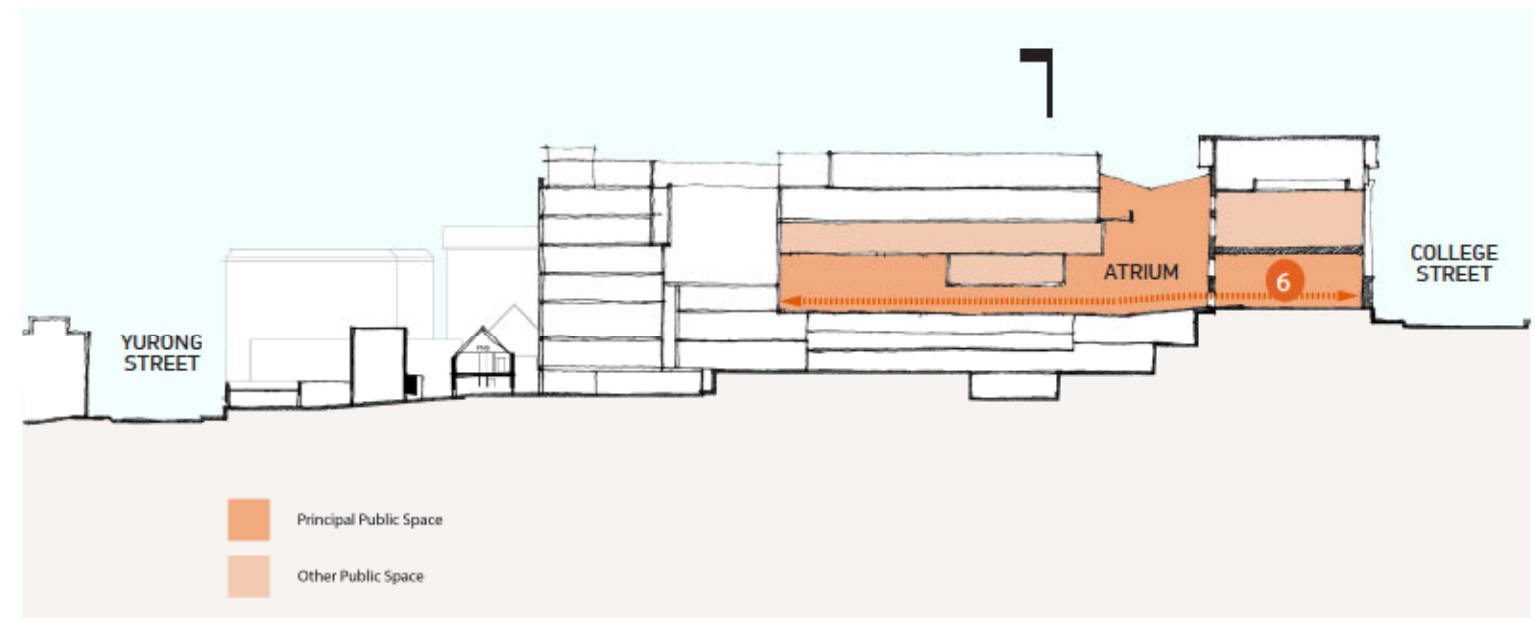
- 1 Existing Crystal Hall main entrance opens into a small corridor, connecting to galleries at three different levels by ramps.
- 2 Existing ramp connection between galleries in Still Addition and Parkes Farmer Wing.
- 3 Existing ramp connection between Still Addition and Vernon Wing gallery.  
Entrance to gallery obscured by structure of Still Addition.
- 4 Small atrium dominated by structure of Still Addition, floor is sloping.  
Only the entrance to the Barnet Wing is visible behind, up the ramp.
- 5 Stair to Barnet Wing 1800 mm level difference)
- 6 Barnet Wing.



EXISTING GROUND FLOOR PLAN (DIAGRAMMATIC)



EXISTING SHORT SECTION (DIAGRAMMATIC)



EXISTING LONG SECTION (DIAGRAMMATIC)

## 2.3 MASTER PLAN BACKGROUND & SUMMARY

### MASTER PLANNING THE AUSTRALIAN MUSEUM SITE

#### INTRODUCTION

The Australian Museum has been developing Master Plans to address its future needs on the William Street site since the 1970s. The idea of expanding the Museum by building a series of interconnected halls and galleries around a central courtyard was even present in the future plans of the colonial architect Walter Vernon over a century ago. In recent years the Museum has commissioned a number of studies to help it address site constraints and meet its growth targets.

The current Master Plan derives from work commenced prior to 2016 by the Australian Museum and Johnson Pilton Walker (JPW) on the development of a functional brief, accommodation brief, early blocking and stacking studies, an Urban Design Study and a Vision statement. Some of the material produced in that process is included in this report.

Hames Sharley were commissioned by the Australian Museum in May 2016 to develop the AM Master Plan, begin consultations with authorities and prepare for an international design competition to deliver the AM Vision and museum objectives.

In 2017 the Museum revised the Master Plan to address the need to seek funding for the delivery of the project in phases.

The two-phased option was supported by a compelling Business Case and the NSW Government announced funding for the first phase in June 2018. This first phase is the current project described in this report.

For context, a brief history of recent Master Planning is provided below.

#### ACCOMMODATION BRIEF

Existing building	32,000 m <sup>2</sup> approx.
<b>2013 Government Architect scheme</b>	+ 13,600 m <sup>2</sup> addition to east
<b>2016 Accommodation brief (JPW)</b>	+ 27,000 m <sup>2</sup> addition to east
<b>2017 Master Plan (Preferred option)</b>	
Demolition	- 10,000 m <sup>2</sup>
Additions	+ 28,000 m <sup>2</sup>
Total area	<hr/> 50,000 m <sup>2</sup>

#### JPW PROJECT - 2006-2008

Johnson Pilton Walker's scheme envisaged the site would be divided between Science and research in the east and public engagement and galleries in the traditional heart of the Museum to the west. The Collections & Research Building was built in 2008 to house the Australian Museum Research Institute (AMRI) and scientific collections. It also improved the Museum's infrastructure and loading dock facilities.

AMRI project	Stage 1/4	Science based accommodation Complete
Internal galleries	Stage 2/4	Internal upgrades Complete
East site development	Stage 3/4	Science / culture Incomplete
West (existing)	Stage 4/4	Public engagement Incomplete

#### GOVERNMENT ARCHITECT'S SCHEME - 2012

This scheme was developed for the 2013 Preliminary Business Case and proposed a new wing at the eastern end of the site with a public auditorium galleries and research space. The new wing would have independent access from William Street near the Yurong Street corner and there would be a separate new entry to the existing Museum in front of the Parkes Farmer Wing. Some of the Pacific Collection would be removed from the basement of the Still Addition to create new exhibition spaces linked by escalators and ramps to the Atrium. A plaza leading down from College Street would permit access on the Lower Ground Level, and a glazed foyer running across the front of the site would provide a connection to the new eastern Wing. (This idea was partly realised in the Crystal Hall entrance added in 2015, however the entrance level was retained at the Ground Floor with access provided by the Museum Walk ramp). The intention of the scheme was to comply with the current City of Sydney LEP height limit of RL46.

#### AM -5M PROJECT - 2016

Masterplan development based on then current accommodation brief;

Commence Planning issues resolution;

Create massing framework for future design competition

#### barrabuwari muru project - 2017

Develop planning as blocking and stacking envelop for entire accommodation brief;

Continue planning engagement with City of Sydney;

Prepare Gateway submission – Approved

Australian Museum advises potential temporary exhibition possibility.

Revise brief based on key requirements for Temporary exhibitions (access and accommodation)

Submit for Treasury funding (known as Phase 1)

Successful Tutankhamen Bid (handover date Nov 2020)

Successful funding Bid

Neeson Murcutt Architects join design team March 2018

Commence Concept design and Development application process.



## URBAN DESIGN PRINCIPLES CONSIDERED IN THE MASTER PLAN

### DERIVED FROM 2012 GOVERNMENT ARCHITECT'S OFFICE STUDY

Previous assessments from the GAO's Urban Design Study, including the potential responses to the Former National School building, have been considered and where possible integrated into the options assessed in this Design Report. It is important to recognize that since 2013 the museum has identified significant additional space requirements which will be difficult to accommodate on the site without some departures from the GAO study.

Key urban design principles of the previous study include:

- 1 Restrict bulk of New Building to general alignment of main existing buildings along William Street frontage
- 2 Set nearby or adjacent building façades back from the Former National School such that it retains legibility within the streetscape
- 3 Limit height of buildings North of the main building frontage to the side parapet line of the Former National School building
- 4 Lift the New Building up at the junction of William and Yurong Streets to keep the corner open and permeable for pedestrians
- 5 Consider a setback in the building form for natural light access to the AMRI Building and to acknowledge the setting of the Former National School Building
- 6 Respect the height line established by the key heritage buildings.

### Alternative approaches to site development

There may be other possible approaches to site development which increase floor area on a 'typical floor', and which could be justified through design excellence and benefits to the public domain and streetscape.

However, any such options should take the setting and integration of the Former National School into consideration.



### Urban Design Principles

Preliminary massing form depicting aspects of the Government Architect's Office scheme (Preliminary Business Case 2013) and AM Vision. New development within existing height control - nominally up to RL. 46, matches existing buildings

### Source:

Australian Museum AM - 5M Vision Urban Design Study, February 2016.

## 2.4 MASTER PLAN ASPIRATION

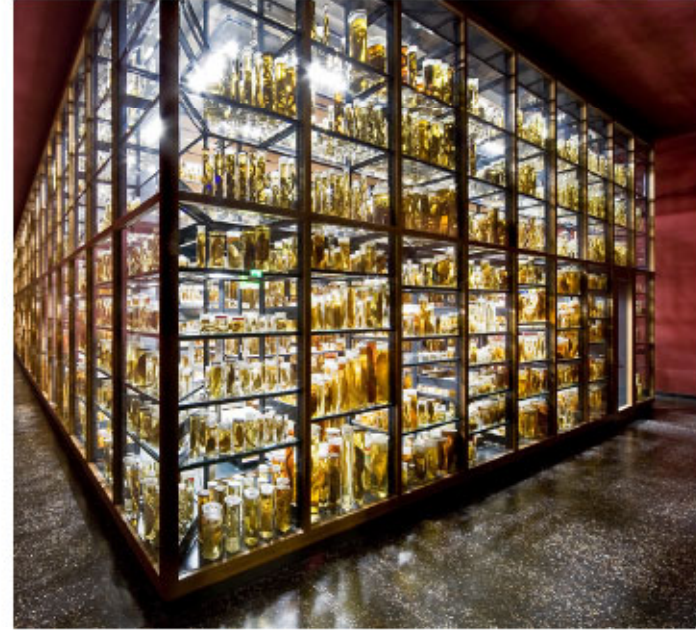
### ASPIRATIONS – LONG TERM



#### REINFORCE THE MUSEUM'S ICONIC STATUS AS AUSTRALIA'S FIRST MUSEUM

[Link to master plan](#)

- Amplify Museum's stature, especially its William Street presentation
- Create a generous urban setting for the Museum
- Structure an entry sequence befitting a building of this magnitude and importance



#### TURN THE MUSEUM INSIDE OUT

##### Technology

- Put 20% of its collection of 18 million items on display (now less than 1%)
- Consider a system for rotation of artefacts
- Harness potential of digital and interactive displays to access the archives
- Open up new exhibition space to bring never before seen artefacts to the public
- Put collections on display, allowing the public to walk among specimen jars



#### CURATE AN IMMERSIVE AND ILLUMINATING EXPERIENCE

##### Experience

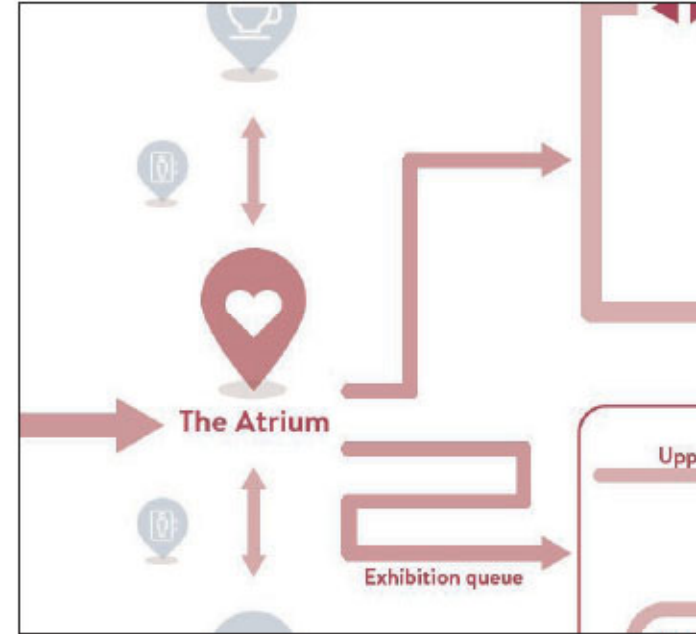
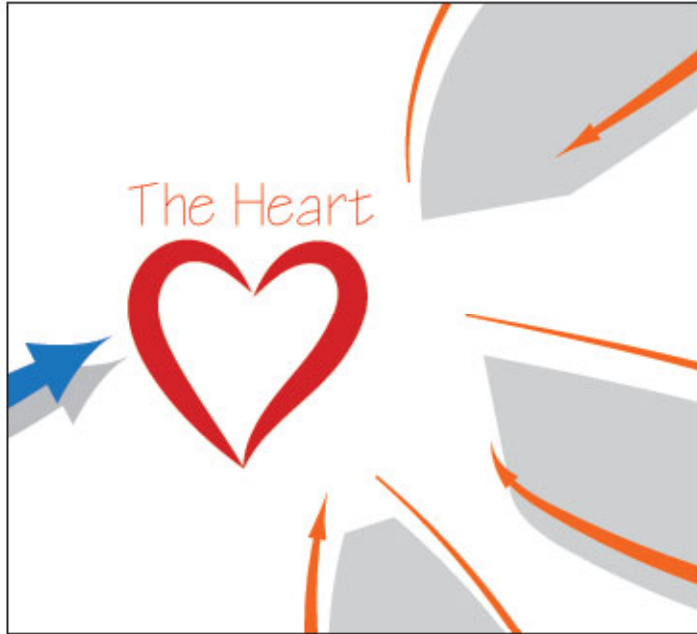
- Promote Pacific and Indigenous Australian Culture with new, dedicated exhibition galleries
- Bring the story of Australian geography, flora, fauna and culture to life
- Impress and imprint the memory of important facts and events



#### DESIGN AN INCLUSIVE ENVIRONMENT

##### Access and inclusiveness

Focus on social and physical inclusion rather than disability. Help the Museum in its goal of creating social change and alter the perception and treatment of museum visitors and staff living with disability. Access solutions will adhere to the principles of social equity, inclusion and dignity.



## ASPIRATIONS – SHORT TERM



### CREATE A NEW HEART FOR THE MUSEUM Space and Exhibitions

- Open up a new, generous circulation and organizing space for increased visitation
- Encourage visitors to return and reflect on experience before visiting another gallery
- Accommodate large gatherings events and openings

### FACILITATE SCIENTIFIC RESEARCH AND INNOVATION Science and Research

- Maintain the Museum’s dual functions on site
- > Scientific research and cultural knowledge
  - > Public engagement and exhibitions
- Improve workplace accommodation for staff
  - Structure research facilities for the sharing of knowledge and generation of ideas
  - Improve delivery loading and quarantine handling facilities

### IMPROVE CIRCULATION AND CONNECTIVITY Visitor Experience

- Rationalize the connection between public spaces on key floors
  - > William Street Level (existing basement) connection to new east wing
  - > Ground Floor – raised nearer to Barnet datum and connection to new east wing
  - > Level 2 – connection to new east wing

### MAKE THE VISION A REALITY TODAY

#### Immediate objectives

- New touring exhibition space to enable Sydney to host international blockbusters
- Move Pacific Collection from Basement storage to off-site location
- Separate entrance and facilities for schools and groups to ease congestion
- Improved circulation and amenities for increased visitor numbers in the short term

#### BUILD FOR POSTERITY

#### Allow for long term objectives to be achieved

- Consider the long term implications of built intervention
- Structure decisions in adherence with the overarching aspirations and design principles of the master plan
- Design for permanence in harmony with the existing heritage fabric

Image courtesy of Art of Fact.

## 2.5 MASTER PLAN PRECEDENT IMAGERY

### CREATING A NEW HEART FOR THE MUSEUM



SMITHSONIAN AMERICAN ART MUSEUM, WASHINGTON, D.C.\_



JEWISH MUSEUM BERLIN GLASS COURTYARD, DANIEL LIBESKIND\_



GREAT COURT AT THE BRITISH MUSEUM\_



NATIONAL PORTRAIT GALLERY & AMERICAN ART MUSEUM\_



SAN FRANCISCO US MINT -  
NEW GREEN MUSEUM\_



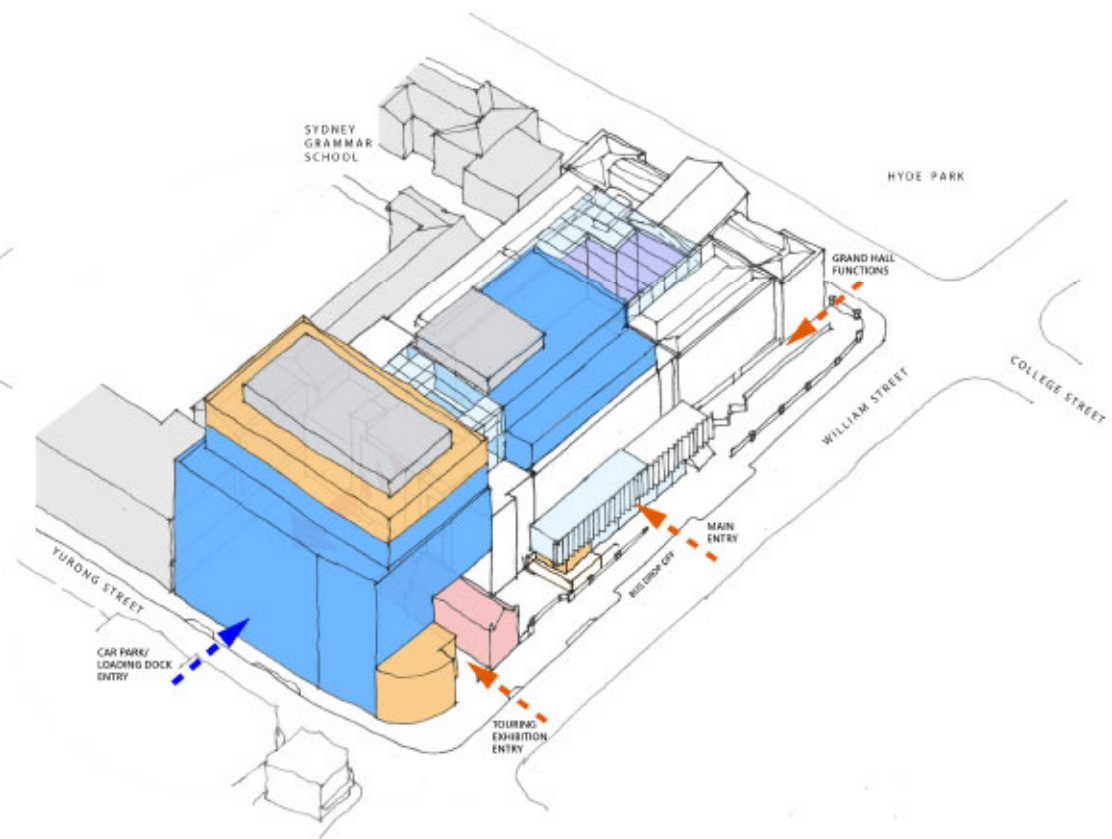
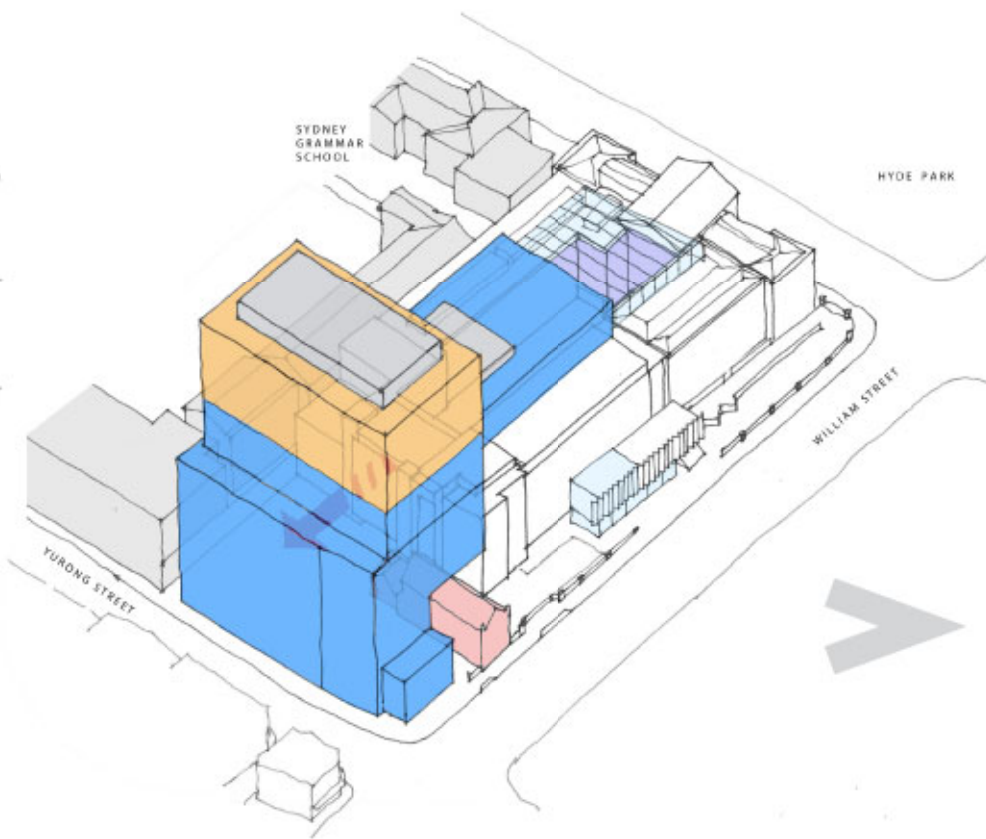
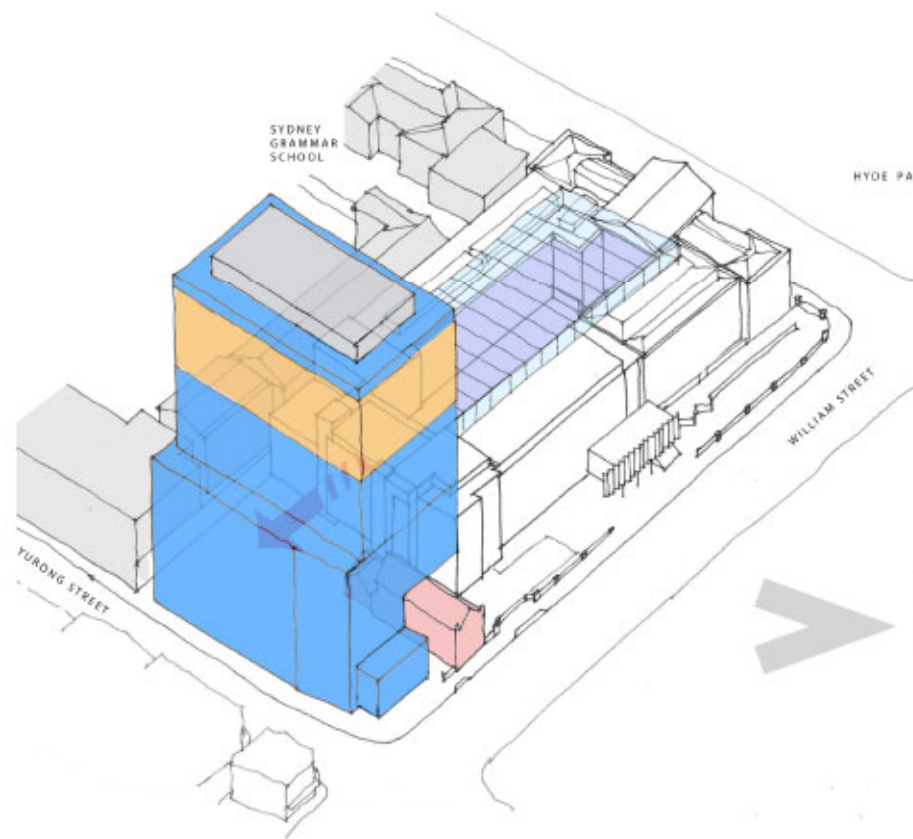
GREAT COURT AT THE BRITISH  
MUSEUM\_



MUSEUM OF HAMBURG HISTORY, GLASS ROOF, GMP-ARCHITEKTEN\_



## 2.6 MASTER PLAN OPTIONS DEVELOPMENT



### Tower option

- Maximises potential of eastern end of site
- Majority of additional GFA incorporated in tower at eastern end of site
- Not adopted due to bulk and scale, view impact, and overshadowing issues

### Integrated option

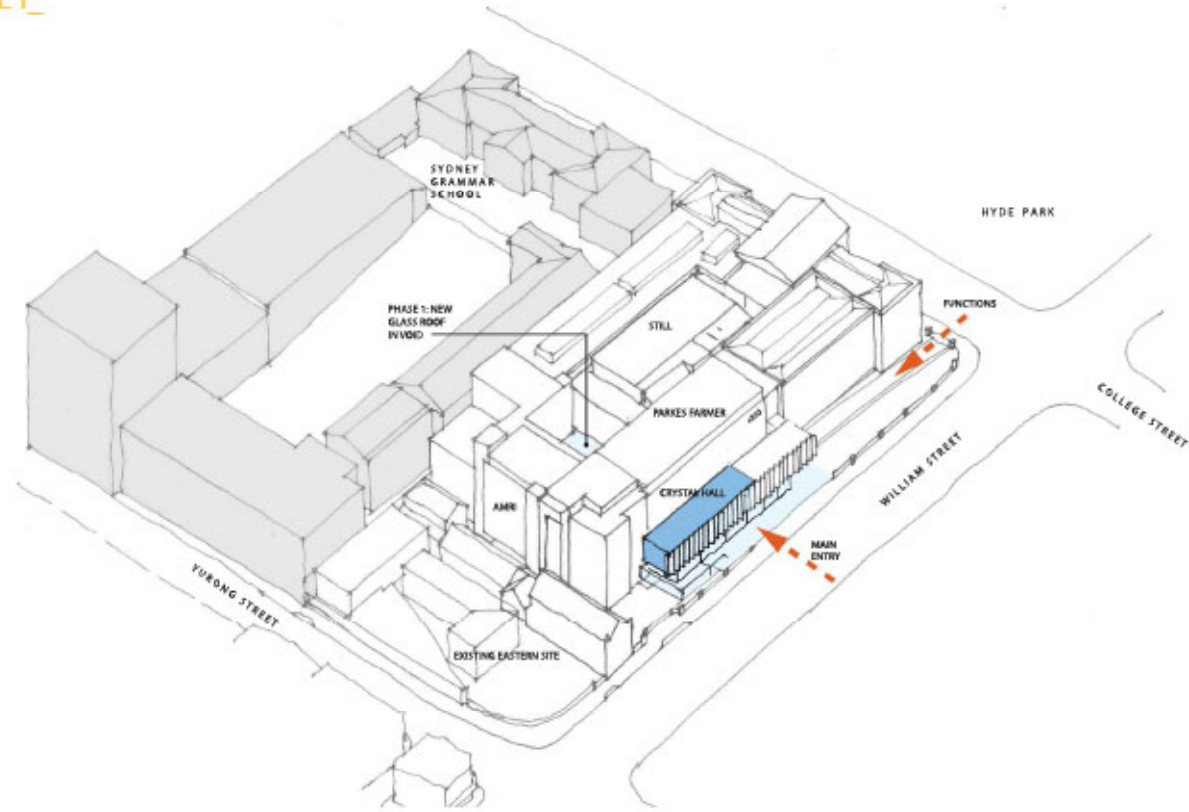
- Integrates proposed additional exhibition space in a volume above the Grand Hall
- Not adopted due to bulk and scale, view impact, and overshadowing issues

### Reduced height option (preferred option for 2017 business case)

- Addresses concerns about bulk, scale and overshadowing.
- Reduced GFA

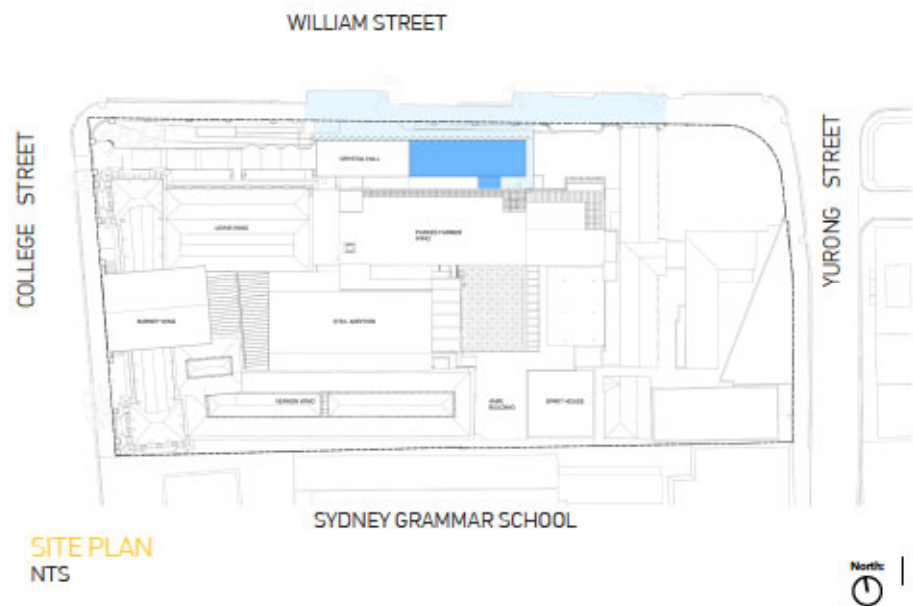
## 2.7 DIAGRAMMATIC SUMMARY OF MASTER PLAN - PHASED DEVELOPMENT (2017 BUSINESS CASE)

### PHASE 1



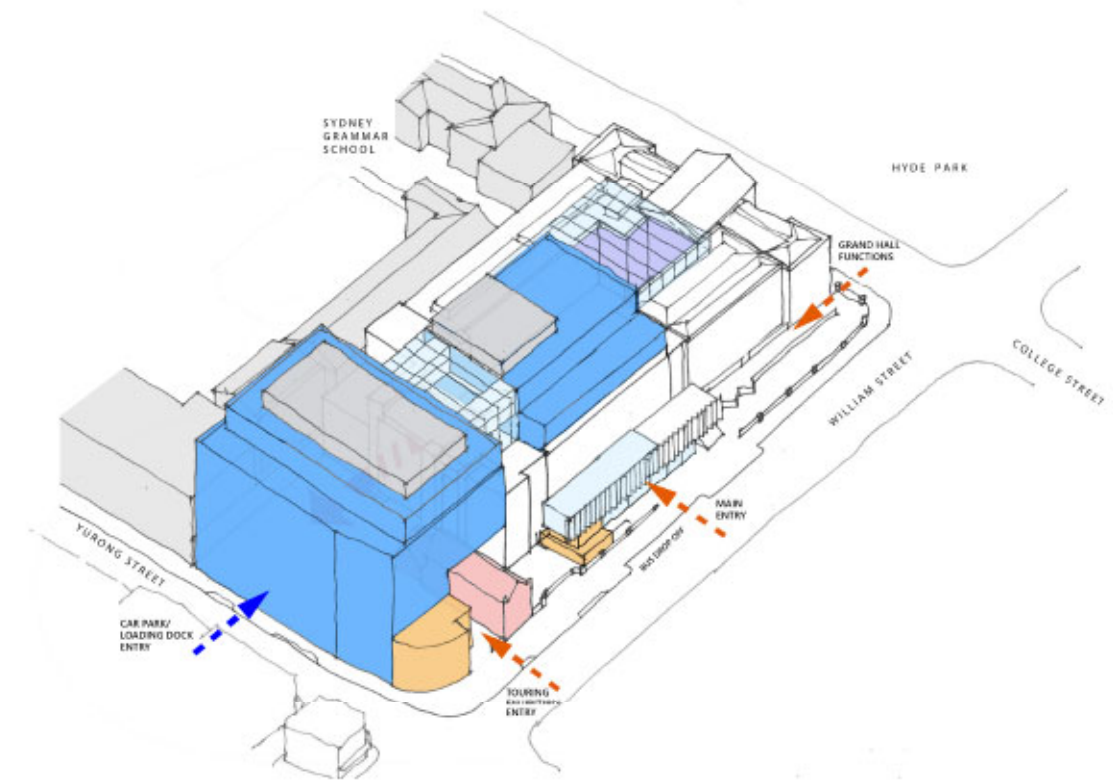
### INDICATIVE AXONOMETRIC VIEW FROM SOUTHEAST

In *Phase 1* the Crystal Hall is expanded to provide a new main entry off William Street. the building, the basement of the Still Addition is converted to house temporary exhibition.

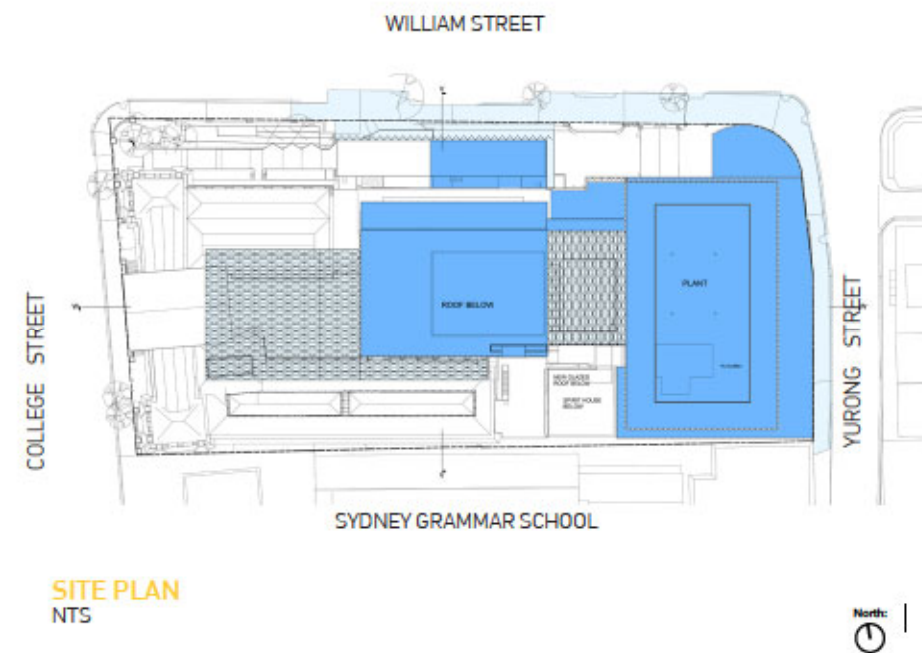


SITE PLAN  
NTS

### PHASE 2



### INDICATIVE AXONOMETRIC VIEW



SITE PLAN  
NTS



## 2.8 ADJUSTMENTS TO THE AUSTRALIAN MUSEUM MASTER PLAN

The NSW Government's preference to fund the Museum's future development needs in separate phases meant that the Master Plan was split into two broad phases for the 2017 Business Case.

Phase 1 of the Master Plan prioritized the attainment of an improved and expanded touring exhibition capacity, the most significant shortcoming of the current Museum when compared to its peers across Australia. Complementing the boost in exhibition space, improved circulation and visitor amenities (rest rooms, cafeteria, shop) and a larger entrance lobby were identified as key improvements for the first phase of redevelopment. The longer-term aspiration of transforming the underutilised eastern end of the site into new gallery space, research facilities and staff accommodation and providing a more efficient loading dock would be achieved in Phase 2, along with further improvements at the western part of the site. Most importantly, this second phase would see the removal of the Still Addition, revealing and celebrating the sandstone fabric and creating a Heart, or central atrium space, from which visitors could organize their Museum journey, and return and reflect. Overhead, a glass roof would admit light to the whole length of the atrium. In Phase 1, the first step towards opening the Heart of the Museum is achieved by removing a low-hanging mezzanine and liberating the obscured Vernon Wing façade.

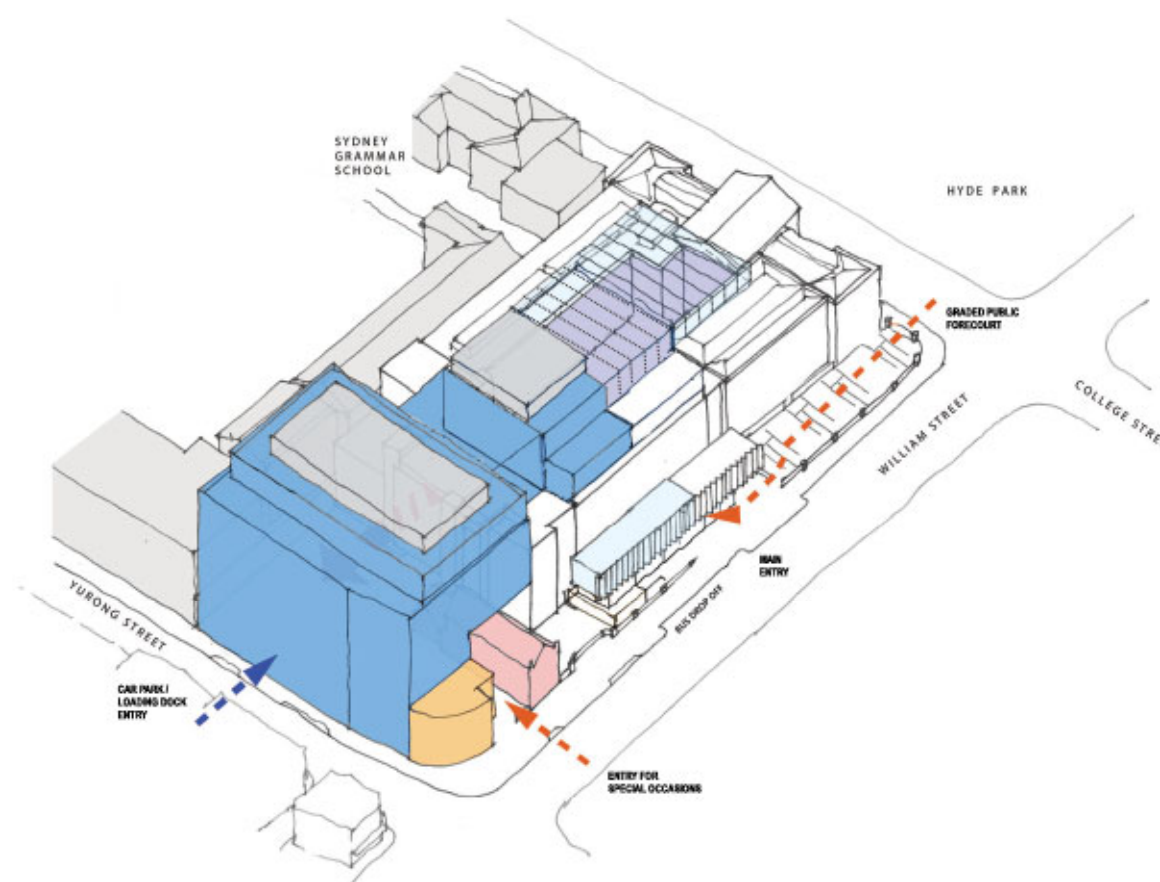
Phase 2 would also improve circulation and connectivity by raising the height of the atrium floor to the Barnet Wing datum, allowing visitors to move more freely between the central space and the surrounding galleries, including the new galleries to the east. This datum aligns roughly with the AMRI building floor levels, permitting a relatively easy connection. A vertical circulation node at the eastern end of the atrium would allow visitors to access every floor in the new exhibition wing as well as providing better access to the existing galleries in the sandstone wings.

A number of impediments to the Master Plan proposal were encountered during the concept design of Phase 1 (the current Additions & Alterations project). The Museum has decided that it is not practical to relocate the Palaeontology collection in the short term, meaning the proposed new basement entrance off William Street will have to be deferred. In addition, although not part of the site itself, the steepness of the William Street footpath was found to present problems for universal access to any major entrance at the lower level. A future entrance strategy has been developed in response, envisaging a graded public plaza, tying into the civic domain of Hyde Park, Cook & Phillip Park and Cathedral Square, and ramping down from the College Street corner to a future entrance forecourt sheltered below the Crystal Hall. Studies have shown that the future needs of the Museum will require expanded ticketing and visitor amenities at the basement level, from which visitors can be brought directly to the Museum's heart in the light-filled atrium above.

Concept design studies and site investigations have revealed a number of further impediments to the proposed master plan, which have necessitated the relocation of vertical circulation nodes. The new locations do not impede the future objectives. However, the proposed floor level adjustments and connectivity improvements in Phase 2 have always meant that any Phase 1 vertical circulation between basement and ground levels is likely to be modified or replaced in the future.

The objectives of the Master Plan remain achievable as long as there is the opportunity to develop the eastern end of the site. This is critical as it will permit the removal of the Still Addition, the installation of a new loading dock and the creation of a grand atrium space.

The State Design Review Panel has suggested that the Museum review its targets for increased exhibition space and floor area in the future and therefore adjust the Phase 2 Master Plan. If adopted, this suggestion will eliminate the need to suspend a volume above the atrium in the future, and may reduce the overall bulk and scale. Preliminary studies of the adjusted Master Plan are included in this report.



INDICATIVE AXONOMETRIC VIEW

### PREFERRED MASTER PLAN FOLLOWING ACCOMMODATION TESTING



ARTIST'S IMPRESSION OF THE GRAND HALL FEATURING THE '*RHOETOSAURUS BROWNEI*' AUSTRALIAN DINOSAUR SKELETON

# SITE ANALYSIS

## 03

SITE ANALYSIS

# 03 Site Analysis

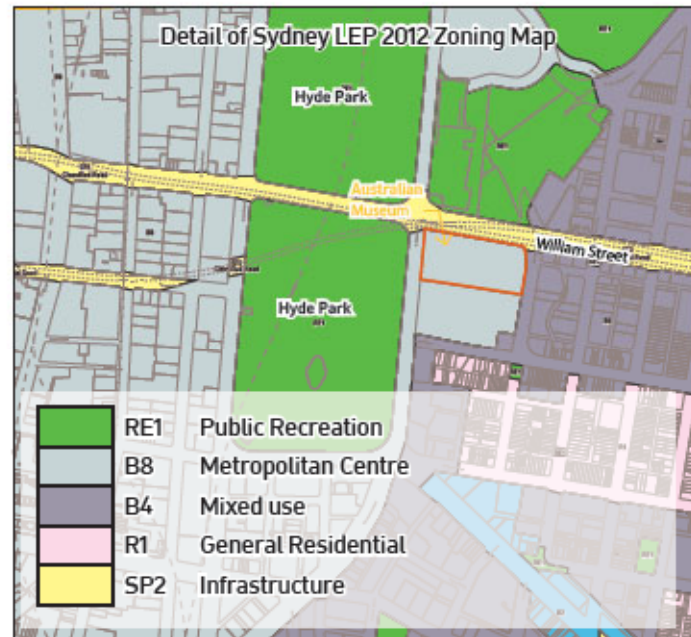
## 3.1 PLANNING OVERVIEW

### RELEVANT INSTRUMENTS AND FRAMEWORKS

The planning framework which applies to the site is:

- > Sydney Local Environmental Plan 2012 (LEP)
- > Sydney Development Control Plan 2012 (DCP)

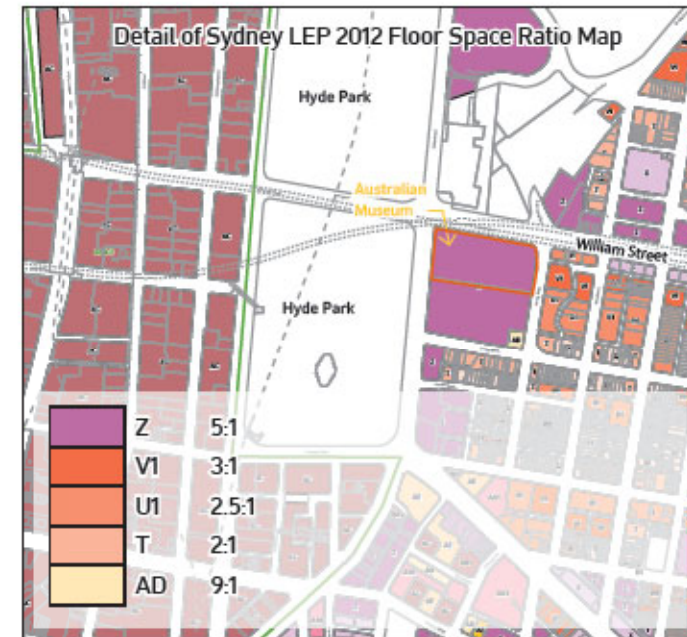
The LEP is the higher order control, and generally takes precedence over the DCP, although the two systems are intended to work in parallel.



City of Sydney LEP 2012  
Zoning

The Sydney LEP 2012 designates the site falling within a Metropolitan Centre (B8) zone. This zoning permits a diverse range of uses. The objectives of the B8 zone are:

- > To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy.
- > To provide opportunities for an intensity of land uses commensurate with Sydney's global status.
- > To permit a diversity of compatible land uses characteristic of Sydney's global status and that serve the workforce, visitors and wider community.
- > To encourage the use of alternatives to private motor vehicles, such as public transport, walking or cycling.
- > To promote uses with active street frontages on main streets and on streets in which buildings are used primarily (at street level) for the purposes of retail premises.



City of Sydney LEP 2012  
Floor Space Ratio

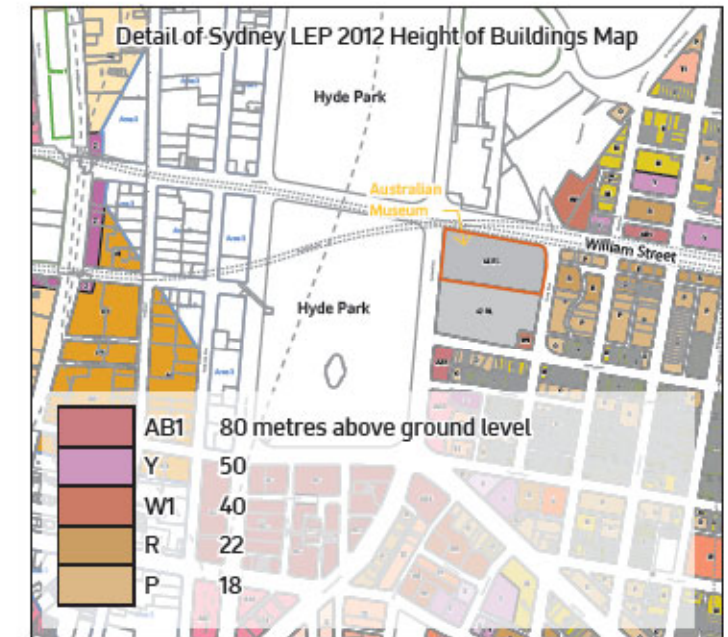
The maximum permitted floor space ratio for the Museum site is 5:1, plus 10% for Design Excellence (clause 6.21).

Additional floor space bonuses may apply, but are dependent on use, most of which are not likely or consistent with the AM Vision.

The AM's existing site area is approx. 10,850 m<sup>2</sup>.

The Floor Space Ratio (FSR) defined by the current LEP is 5:1, which means the site's full development potential is approximately 54,250 m<sup>2</sup> Floor Space Area (FSA).

**The existing buildings on the site provide approximately 25,000m<sup>2</sup> GFA (excluding buildings on eastern part of the site), meaning that less than 50% of the site's development potential is currently utilized.**



City of Sydney LEP 2012  
Maximum Building Height

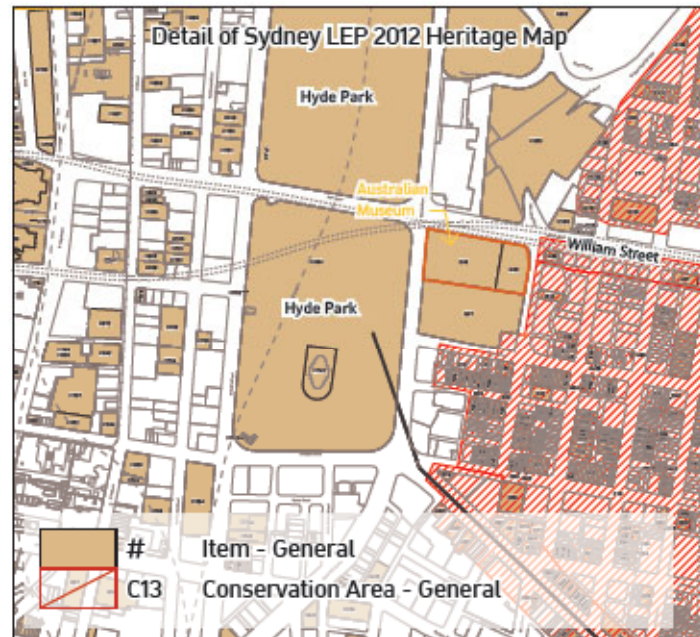
The maximum building height on the site is RL. 46. This is approximately 1.5m above the parapet height of the Parkes Farmer Wing, and below the existing canopy.

It should be noted that for many surrounding sites, the height limit is defined as 'metres above existing ground level' rather than a 'relative level'.

There are several nearby sites with height limits up to 80m above existing ground level.

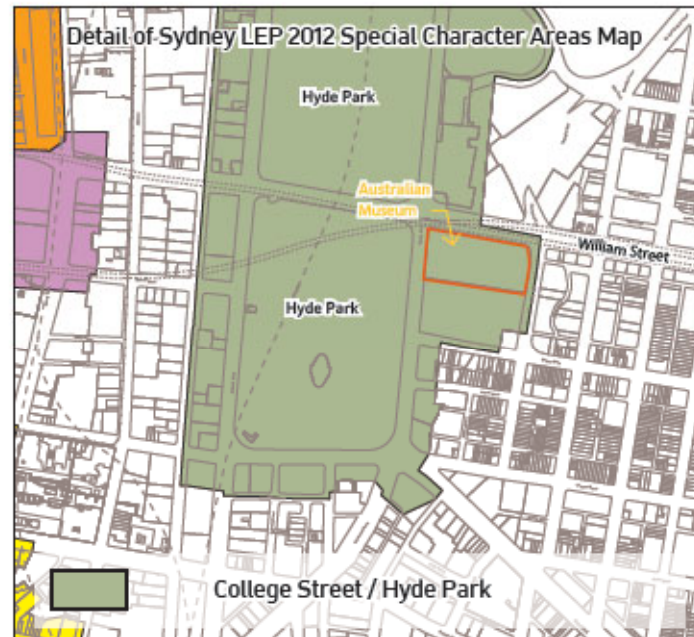
**Source:**

Australian Museum AM - 5M Vision Urban Design Study, February 2016.



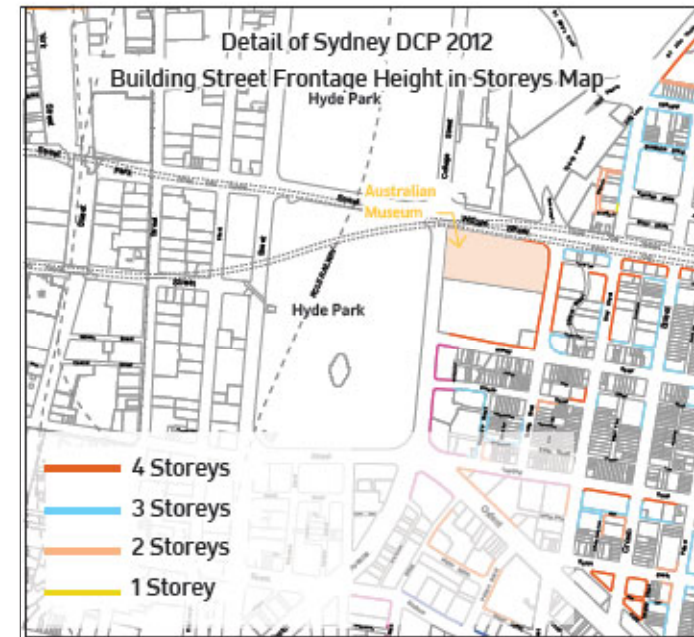
City of Sydney LEP 2012  
Heritage

The Museum comprises two Heritage Items:  
I246: (Western Area) - Australian Museum including interior, Crown land 143-858, 143A-858 and 145-858  
This Item is noted as having State Significance.  
I495: (Eastern Area) - Former National School Building including interior, Lot 11, DP 588102; Lot 3, DP 1046458  
This Item is noted as having Local Significance.  
  
Yurong Street marks an edge of the East Sydney Heritage Conservation Area within Darlinghurst.  
  
Sydney Grammar School, immediately to the South of the Museum is also listed as having Local Significance.



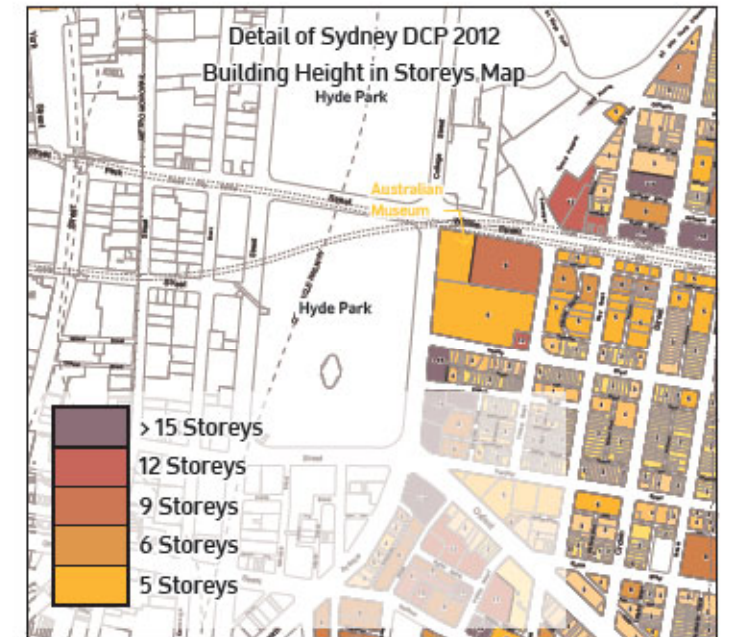
City of Sydney LEP 2012  
Special Character Areas

The Museum site is within the College Street / Hyde Park Special Character Area. Whilst noted in the LEP 2012, details of the Special Character Area are set out in Section 2 of the DCP 2012.  
Development is required to be consistent with the character statement and supporting principles.  
The key Principles related to the AM Vision include:  
(b) Recognise the institutional area east of College Street as one of Sydney's pre-eminent public areas characterised by a concentration of heritage items which house activities of State and National significance.  
(d) Enhance and reinforce the precinct's role as a major gateway to the City from the east, particularly from William Street to Park Street, by ensuring that development does not adversely affect the views when approaching the City.  
(h) Protect and extend mid-winter lunchtime sun access to Hyde Park and other open spaces in this Special Character Area.



City of Sydney DCP 2012  
Building Street Frontage Height

The DCP defines a 4 storey height limit for the Eastern end of the Museum site.  
The DCP Glossary defines:  
> Street frontage height in storeys is the vertical height of that part of the building closest to the street boundary.  
There is no dimensional limitation for a storey.



City of Sydney DCP 2012  
Building Height in Storeys

The DCP defines a 5 storey height limit for the Western end of the Museum site, and 9 storeys for the Eastern end.  
The DCP Glossary defines:  
> Storey means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include: a space that contains only a lift shaft, stairway or meter room, or a mezzanine, or an attic.

**Source:**  
Australian Museum AM - 5M Vision Urban Design Study, February 2016.

## 3.2 SITE ANALYSIS AND CONTEXT

### SITE IDENTIFICATION

The Australian Museum is located in a prominent setting on the corner of College and William Streets, adjacent to Hyde Park and opposite Cook and Phillip Park and St. Mary's Cathedral. It shares a large block with Sydney Grammar School and a mid-rise residential apartment block in the southeast corner. The block is bounded by William Street to the North, Yurong Street to the East, College Street to the West and Stanley Street to the South. The Museum fronts onto all but Stanley Street.

Each of these streets has a distinct character.

#### William Street

A major link between the CBD and Sydney's Eastern suburbs, William Street is a relatively wide street (4 traffic lanes, 2 in each direction, plus parallel parking on both sides). A formal cycleway runs on each side of the street.

Generally, buildings on the North side of William Street are taller than those on the South.

William Street rises quickly from the junction with Yurong Street to College Street and Hyde Park.

The museum has a formal address to William Street and reveals the history of its development through the changes to the building facade along this street.

#### Yurong Street

Yurong Street defines one edge of East Sydney Heritage Conservation Area within Darlinghurst.

The buildings on the Western side of the street are generally taller than those on the East - the Sydney Grammar School buildings on Yurong Street are 5 - 6 storeys and the building on the corner of Yurong and Stanley Streets is 12 storeys, whilst on the Eastern side the tallest building is 4 storeys.

Currently the museum has little addressing the street apart from a brick wall with service openings and a relief artwork on a lower wall on the corner.



SITE LOCATION



### College Street

The Museum's frontage to College Street is an imposing classical sandstone facade, the Museum's original entrance.

Directly adjacent to the South, the sandstone facade of Sydney Grammar School is equally imposing.

The two complexes have a strong heritage relationship in scale and detail. They formally address Hyde Park opposite.

### Stanley Street

Like William Street, Stanley Street rises sharply from Yurong Street to College Street. It is predominantly residential in use on the southern side, with a combination of heritage terraces and contemporary high-rise residential apartments.

The museum has no boundary on Stanley Street. Sydney Grammar School and a residential apartment building occupy the part of the block south of the Museum.



## SITE TODAY

The diagrams on this page are extracted from the Urban Design Study prepared by the NSW Government Architect's Office in 2012 for the (Preliminary) Business Case submission.

They remain relevant as the precinct context around the site has not changed significantly since that time - the only significant change is the conversion of the former NSW Police Headquarters building on the corner of College and Stanley Streets to residential use.

## SITE IDENTIFICATION

The AM site occupies an important site on William Street, forming a gateway between the Hyde Park to the West and the finer grain of the mixed used neighbourhoods to the East of College Street.

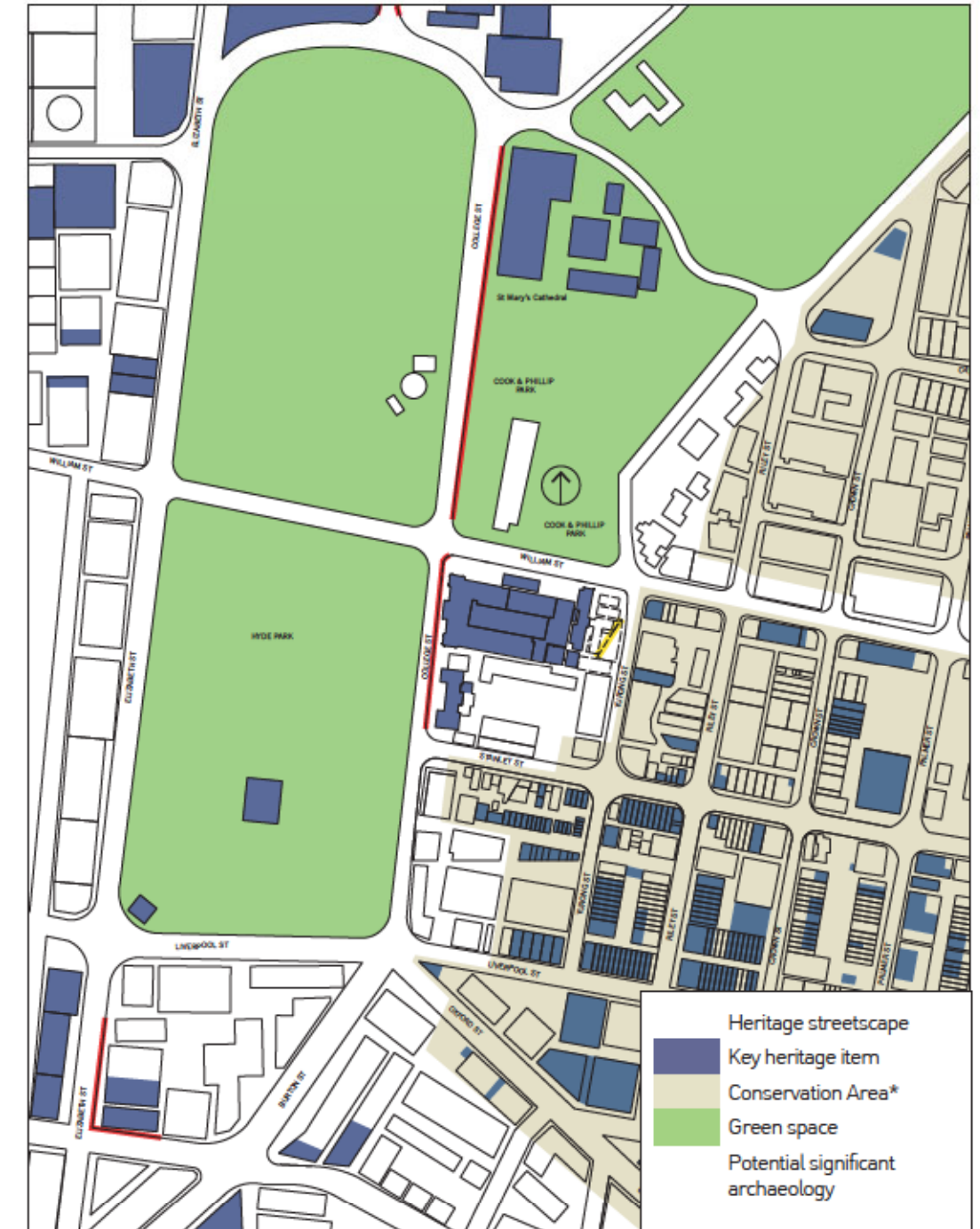
The existing complex of Museum buildings is prominent from a number of approaches.

The Former National School, which projects beyond the general building alignment, is a significant feature in views along William Street in both directions.



Extract from NSW GAO Urban Design Study, 2012 for the Australian Museum

## SIGNIFICANT VIEWS



- Heritage streetscape
- Key heritage item
- Conservation Area\*
- Green space
- Potential significant archaeology



## BUILT FORM - HEIGHT

There is diversity of building heights in the vicinity of the site.

It should be noted that storey heights across the precinct vary considerably - for example, parts of the Museum are 3 or 4 storeys, yet this is equivalent in height to a residential building on the Northern side of William Street of 8 storeys.

The South side of William Street is generally of a lower height than the Northern side, but there are some exceptions.

## EXISTING LAND USES

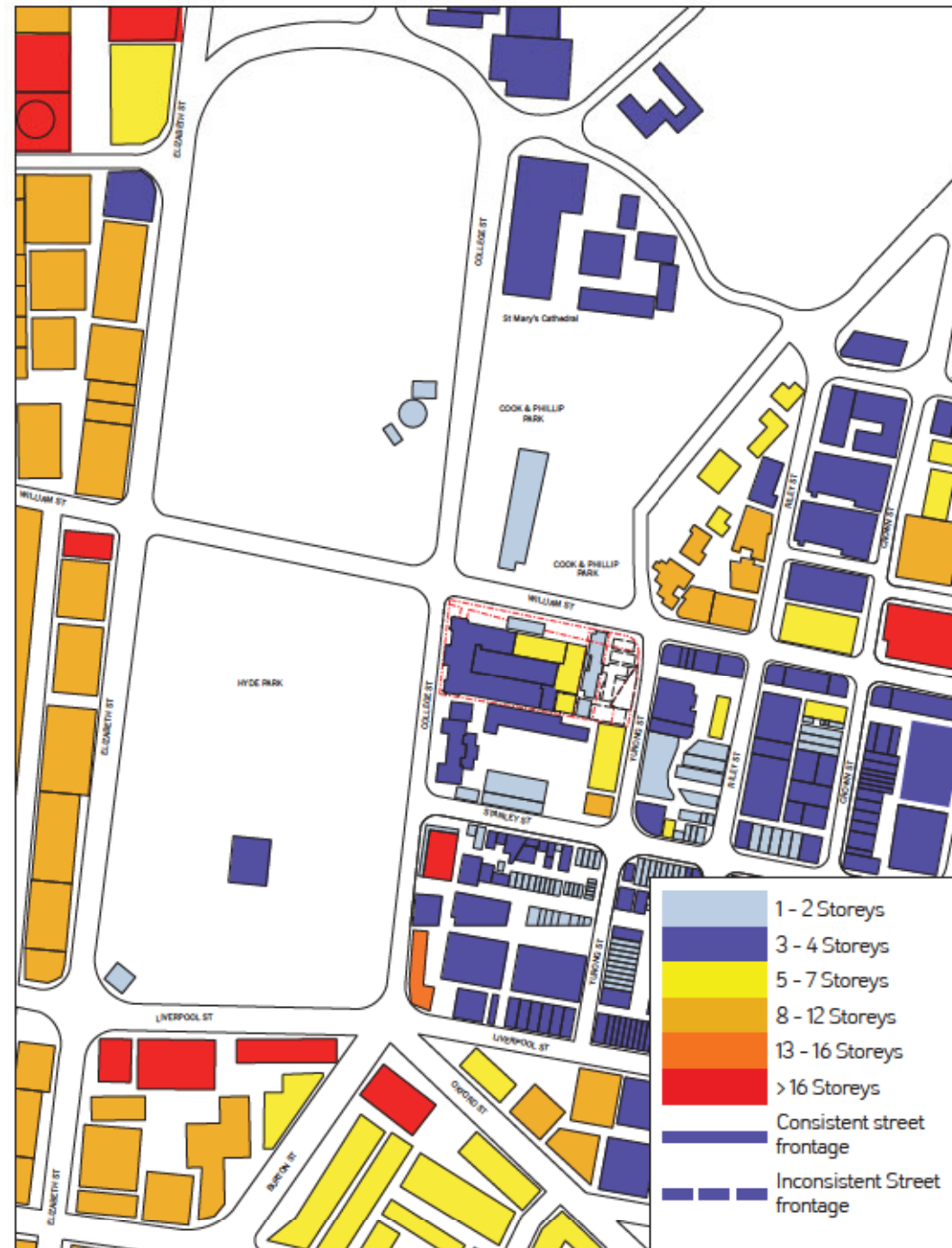
The precinct contains a diverse range of building typologies and uses.

The spatial character of the precinct is also diverse, from major open spaces and public parks, to small laneways and narrow streets.

## PUBLIC TRANSPORT ROAD NETWORK & VEHICULAR ACCESS

A report as been prepared by TTW.

Please refer to the Traffic Impact Assessment section appended to the design report.



Extract from NSW GAO Urban Design Study, 2012 for the Australian Museum

### BUILT FORM - HEIGHT

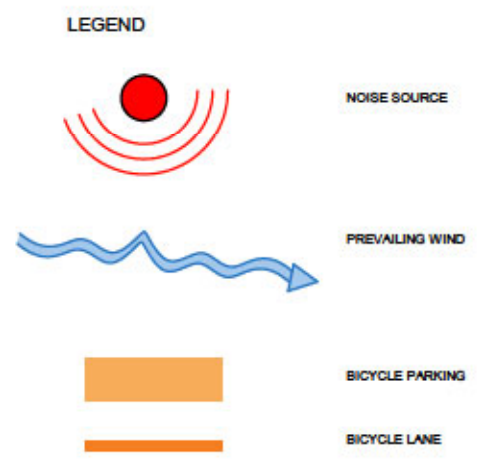
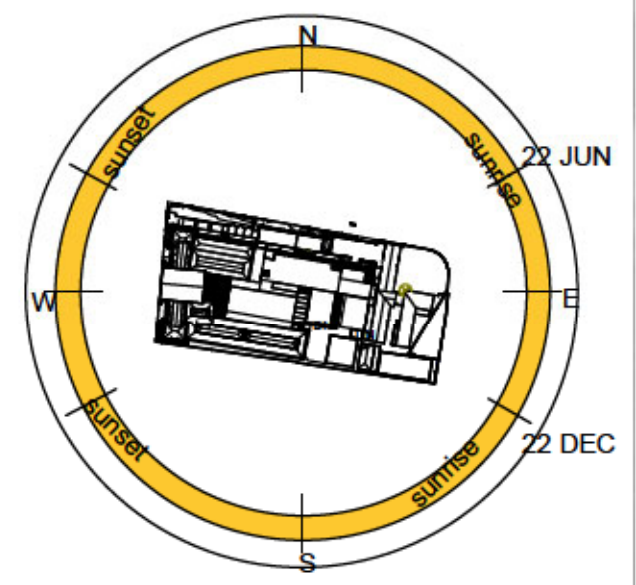
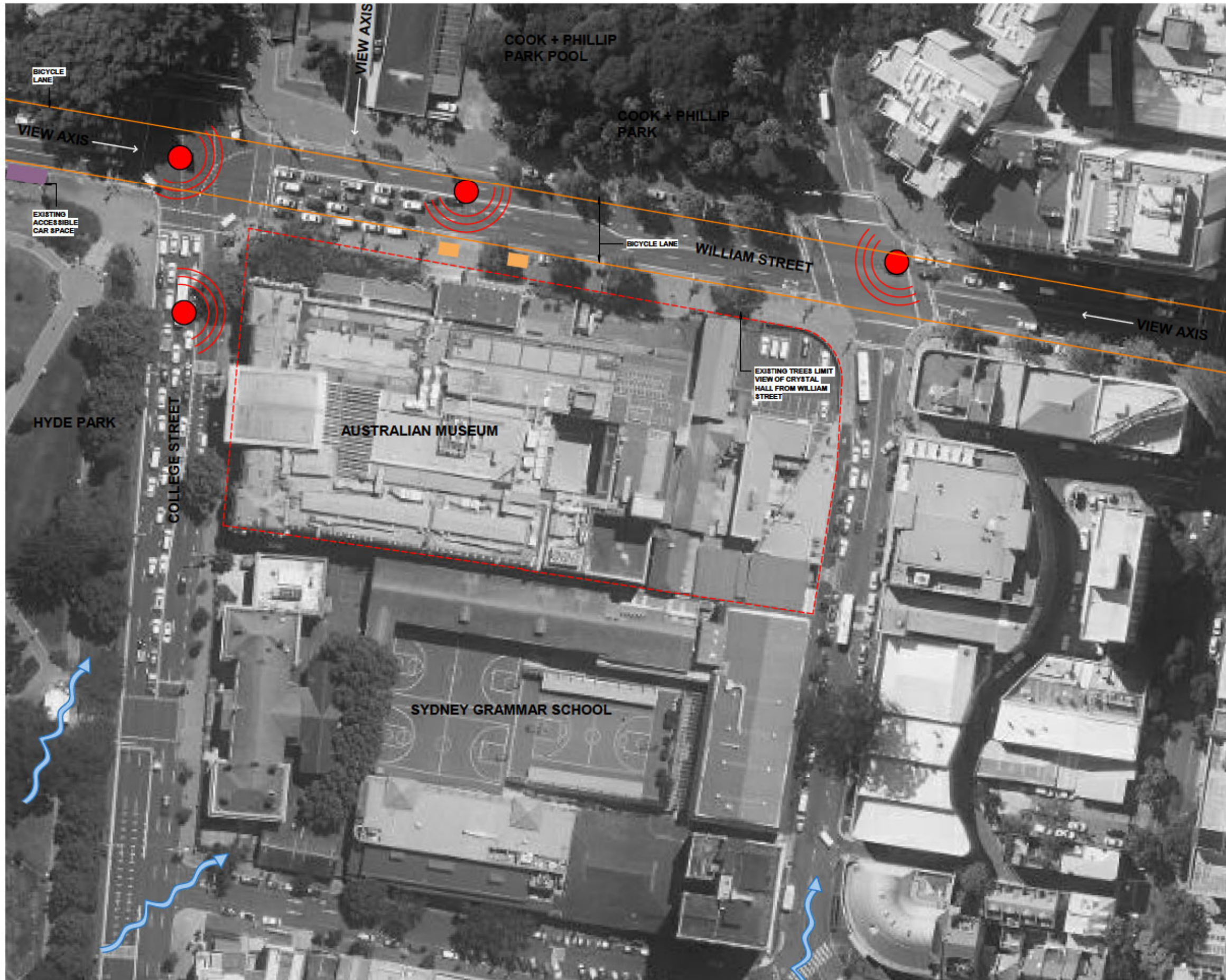


Extract from NSW GAO Urban Design Study, 2012 for the Australian Museum

### BUILT FORM - HEIGHT



# SITE ANALYSIS PLAN



## SITE TODAY\_KEY VIEWS



### Key Views

Key existing views:

- 1 Travelling South along College Street
- 2 Travelling South along College Street, from corner of William and Park Streets
- 3 Looking East along Park Street
- 4 Looking West from William Street
- 5 Looking West from William Street
- 6 Looking East from Hyde Park



## CHARACTER AND PROMINENCE

### Sydney Grammar School

The Museum's only direct neighbour, Sydney Grammar School is one of the oldest schools in Australia. It is a secular school for boys (day school - no boarding).

Commencing operations as Sydney College in the building fronting College Street in 1835, Sydney Grammar School was subsequently founded by an Act of Parliament in 1854, and has remained in operation on the College Street site ever since.

Preparatory Schools at St Ives and Paddington now complement the original school, and the College Street Campus is attended by approximately 1,100 pupils.

With the exception of a residential building on the corner of Yurong and Stanley Streets, School buildings make up the rest of the block, running around the streets to form a central courtyard containing 3 basketball courts (the Eastern court is raised).

Three School buildings run along the Museum's Southern boundary:

- 1 The original School on College Street (3 storeys)
- 2 A [insert storeys] building containing a library, classrooms for science, geography and applied arts.  
This building is similar in height to the Museum's Vernon Wing.
- 3 The northern end of a 5 - 6 storey building backing onto Yurong Street, known as the Palladium Building, containing a theatre, gymnasium and foyer for an auditorium built below the central courtyard.





PLAN IDENTIFYING PUBLIC AND PRIVATE OPEN SPACES AROUND THE MUSEUM

## SURROUNDING CONTEXT

Aerial photograph identifying key axes and significant high-rise buildings in the area.

### SIGNIFICANT AXIS



### BUILDING D - TERRACE TOWER

The Terrace Tower: 17/80 William St, Woolloomooloo NSW

### AUSTRALIAN MUSEUM

### BUILDING A

The Residence Building: 18 College St, Darlinghurst NSW

### BUILDING C - THE CONNAUGHT

The Connaught Building: 211 Liverpool St, Sydney NSW

### BUILDING B

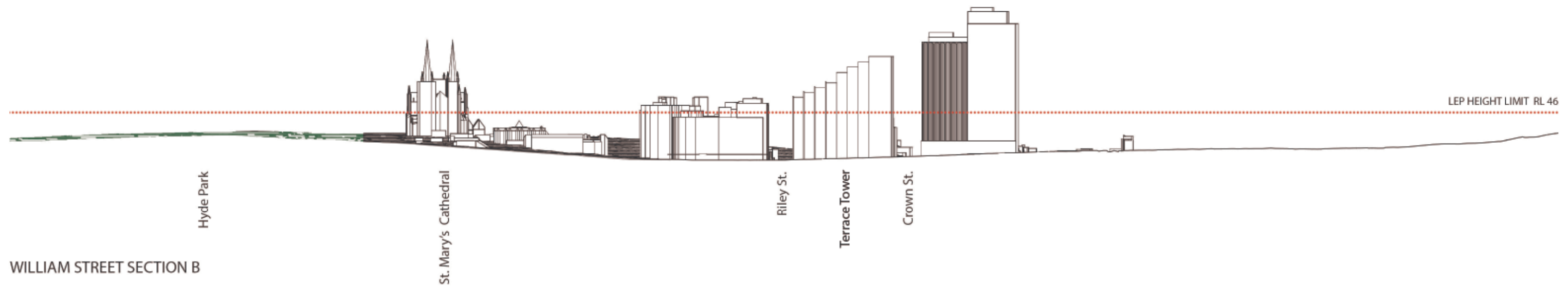
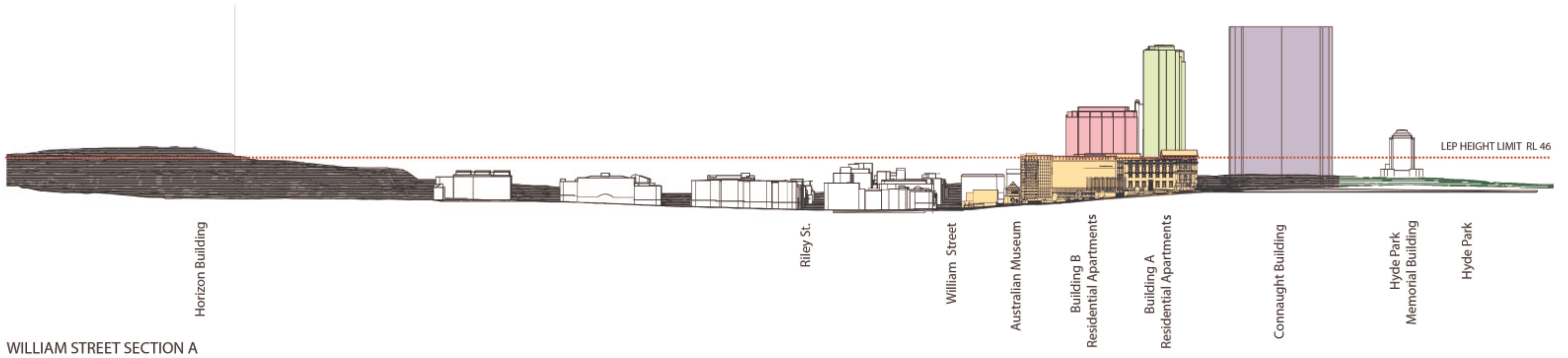
Building A: 15 Francis St Darlinghurst NSW

### BUILDING E - THE HORIZON

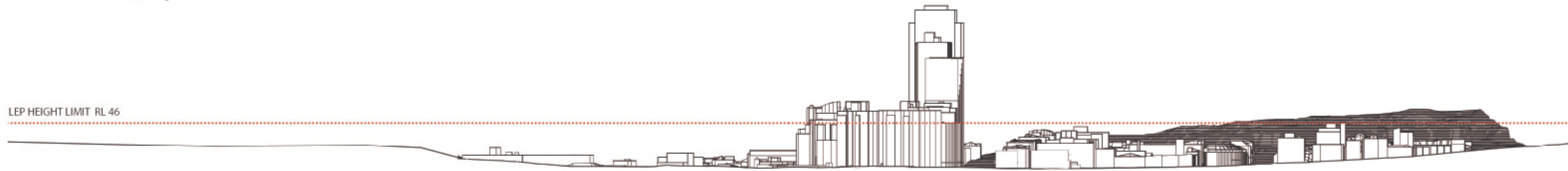
The Horizon Building: 184 Forbes St, Darlinghurst NSW



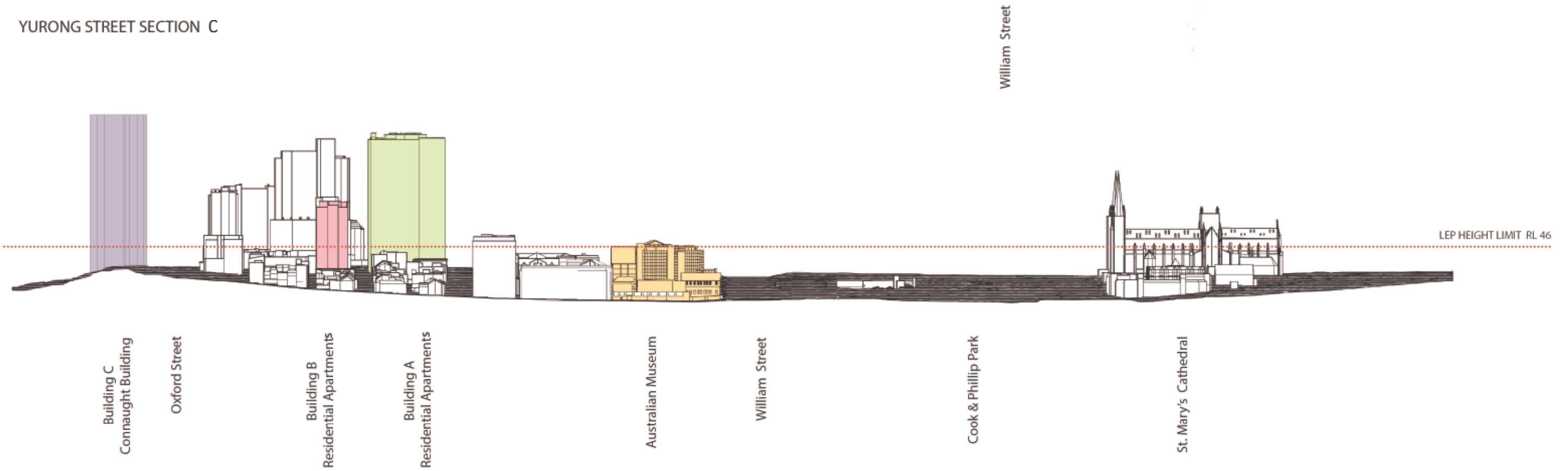
# EXISTING STREET SECTIONS: WILLIAM STREET



# EXISTING STREET SECTIONS: YURONG STREET



## YURONG STREET SECTION C



## YURONG STREET SECTION D

# EXISTING STREET SECTIONS: COLLEGE STREET

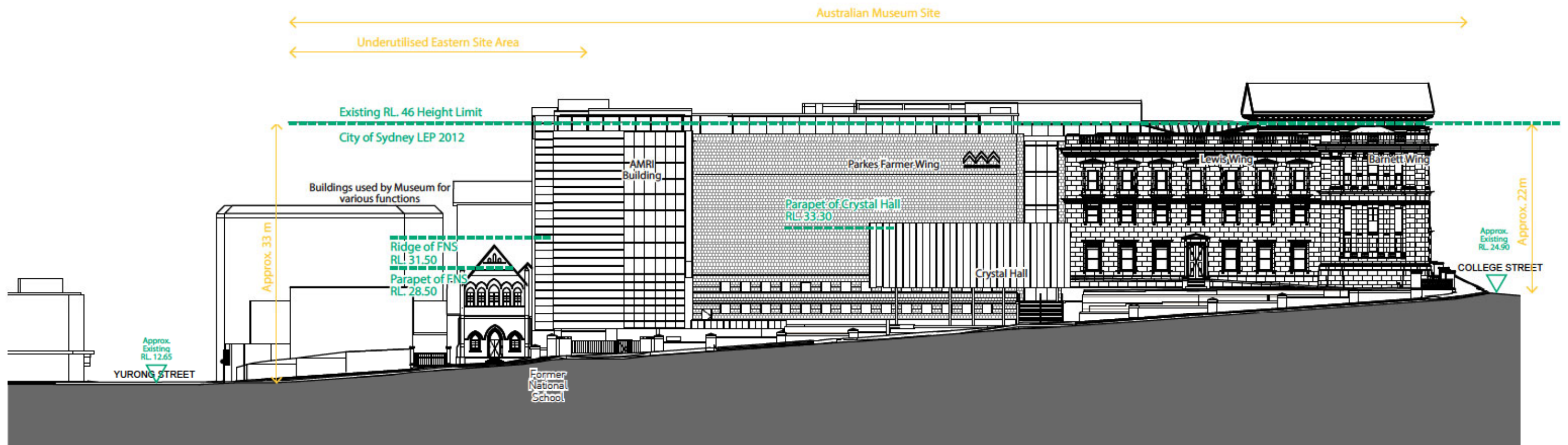


## EXISTING BUILDING HEIGHTS

The existing buildings on the Western part of the site are all of a similar height, close to, or just above the current LEP height limit.

The existing buildings in the underutilised Eastern site area vary in height considerably but are all much lower than the other buildings on the site and even those on the adjoining Sydney Grammar School property.

Note that the ground level rises approximately 12m along the William Street frontage, from Yurong Street to College Street.



EXISTING NORTH ELEVATION (WILLIAM STREET) NTS @ A3

Source:

Australian Museum AM - 5M Vision Urban Design Study, February 2016.

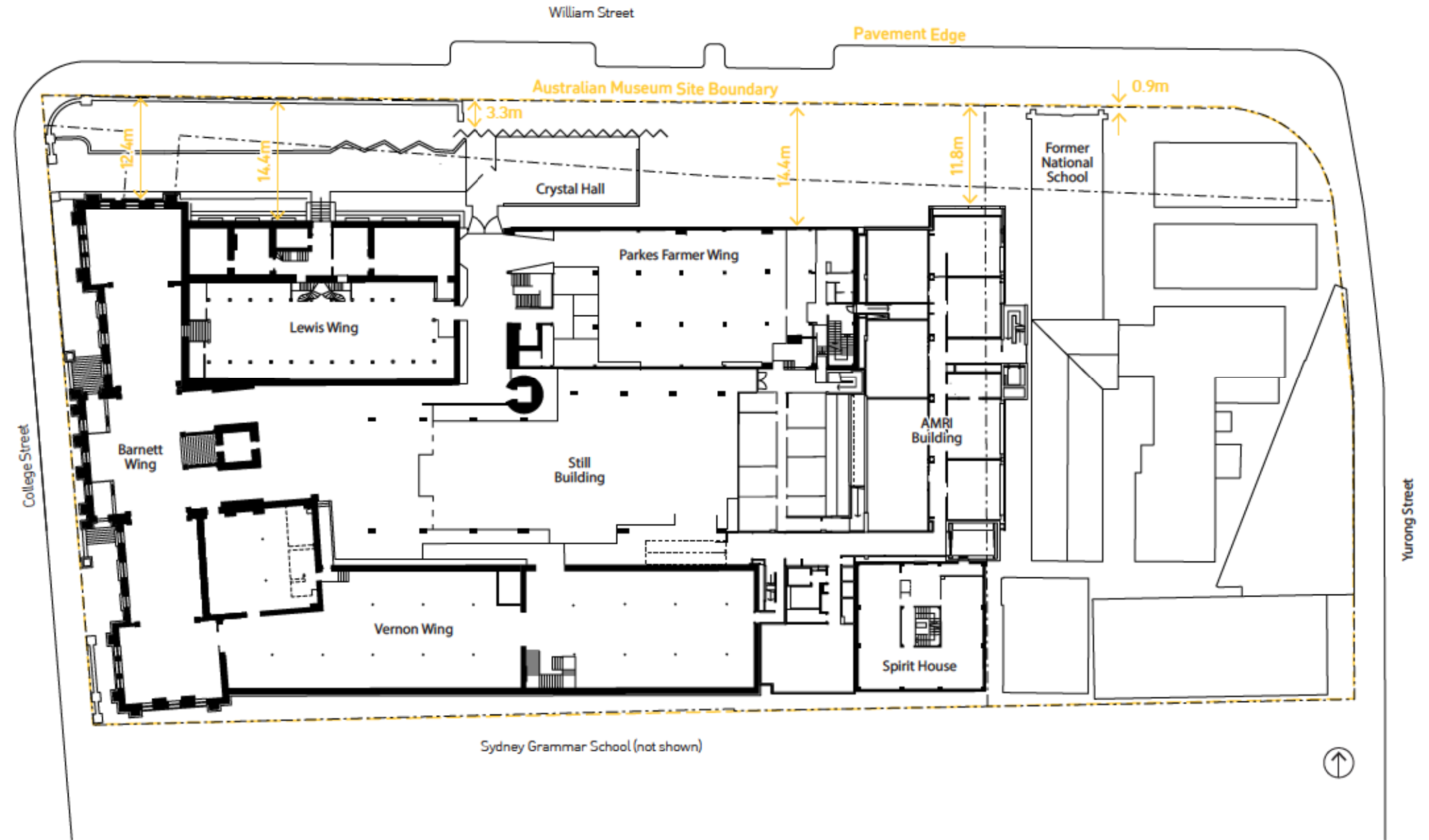
## EXISTING SETBACKS

The alignment of building façades along William Street is not parallel with the street edge.

The principal existing buildings are set back, on average, more than 14m from the Northern boundary.

The northern facade of the Former National School is set less than 1m from the boundary.

Although lower than the principal building façades, the scale and projection of the Former National School make it a prominent building on the site.



EXISTING SITE PLAN NTS @ A3

Source:

Australian Museum AM - 5M Vision Urban Design Study, February 2016.

PHOTO MONTAGE / CONTEXTUAL IMAGES



COLLEGE STREET

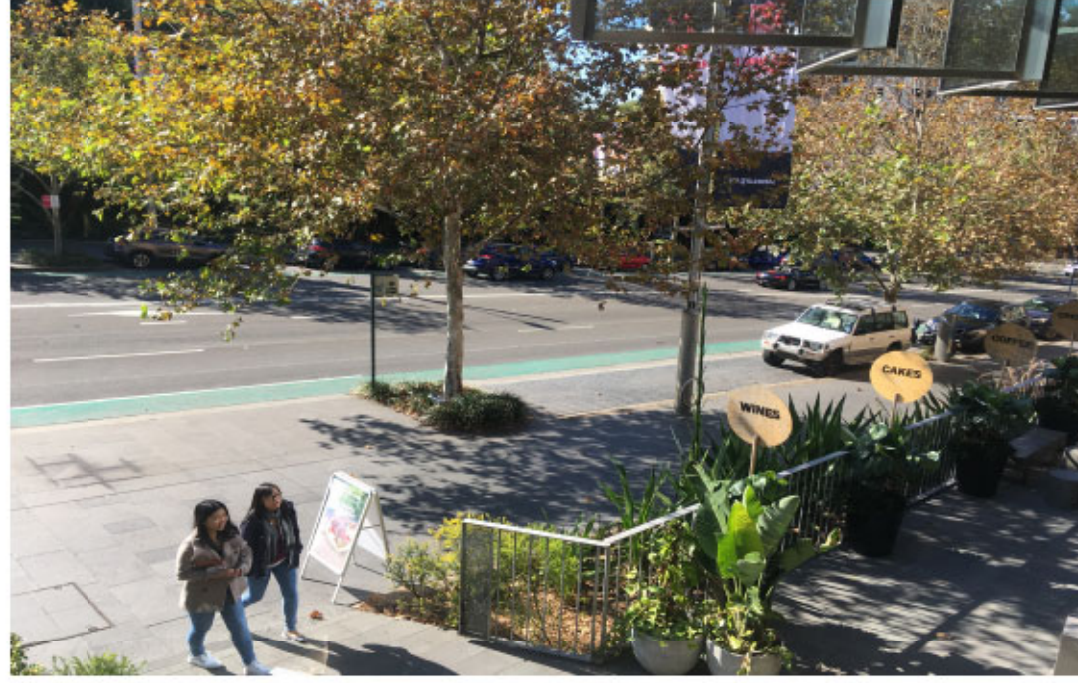


WILLIAM STREET



YURONG STREET

SITE PHOTOGRAPHS - CRYSTAL HALL & UNDERCROFT



CRYSTAL HALL



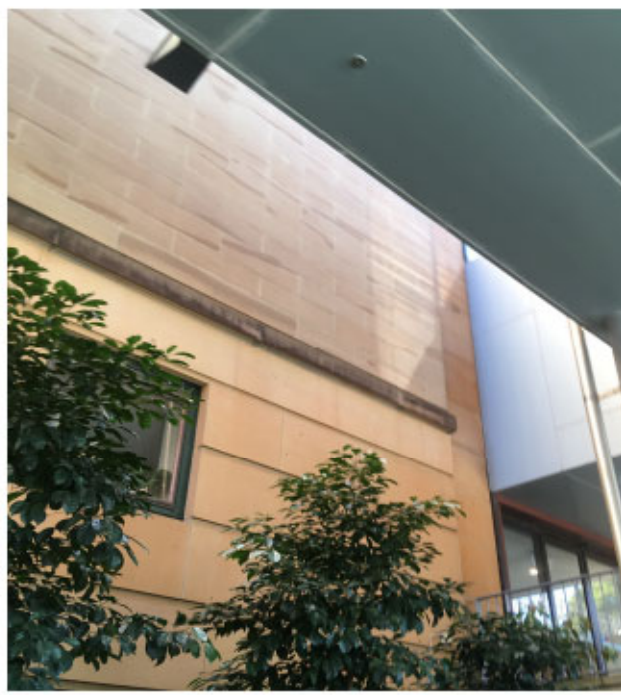
CRYSTAL HALL UNDERCROFT



FACADE OF PARKES FARMER WING



FACADE OF PARKES FARMER WING



## SITE HISTORY

A Heritage Report and a detailed Conservation Management Plan for the Australian Museum have been prepared by Orwell & Peter Phillips. The following is an extract from the first volume of the CMP.

### Brief history of the Museum site

The land on which the Museum now stands is part of Gadigal country. Following European settlement, the sites later occupied by the Museum and William Street National School were cultivated in the 1820s as a convict garden associated with Hyde Park Barracks. The remaining area of the current Museum site was adjacent to the stream which ran down to Woolloomooloo Bay.

The first Museum building on the site, the **Lewis wing**, was constructed as a two-storey building with basement between 1846 and 1852. During this period the **National School** was completed in 1851 as a single storey building, with a temporary iron shed to the south for the infants. The two-storey **Barnet wing** of the Museum was added to the Lewis wing between 1862 and 1864. Behind the museum buildings was a yard which gradually became occupied by a number of sheds and outbuildings. The infants shed at the **National School** (renamed **William Street Public School** in 1867) was replaced by a two-storey building, completed in 1875, and a number of buildings were constructed on the formerly vacant land along Yurong Street between 1873 and 1880.

In 1890, a third storey was added to the Lewis wing, altering its William Street facade to match that of the Barnet wing. Shortly afterwards, between 1896 and 1901, a separate south wing (two storeys with basement) was constructed, linked to the Barnet wing by a covered walkway. At about the same time, a spirit house (to house preserved specimens) was built in 1897 behind the Barnet wing. The covered way was replaced by an extension to the south wing, completed in 1909, linking it to the Barnet wing and incorporating a lecture theatre, the whole forming the **Vernon wing**. The main museum buildings now formed a U shape around the courtyard. Additions were constructed to the Public School building in 1892 (a second storey and new facade to the northern wing at the William Street end) and in 1911-12

(two-storey additions along the western side). In 1911 the Yurong Street buildings were demolished for the construction of the **Palladium building**, which occupied a site extending to the south behind Sydney Grammar School. In 1916 William Street was widened with the resumption of a strip of land from the northern sides of both the Museum and School sites, and a new wall was built along the William Street boundary of the Museum.

The next major building campaign at the Museum began in 1956, with the removal of sheds in the yard and the construction of the **Parkes Farmer wing** (six floors with a roof terrace) between 1957 and 1964. A new spirit house to the east of the Vernon wing was completed in 1969, and the old spirit house was converted to an education centre. Meanwhile, William Street Public School had closed in 1950, and a two-storey addition with basement had been built on the eastern side in 1951 for the Child Welfare Department which had taken over the site. In 1971, the former school buildings were taken over by the Museum and modified for museum use, and part of the former Palladium building was added to the Museum site in 1977, creating the present site. The building was partly demolished and adapted as the Tank Store in 1986.

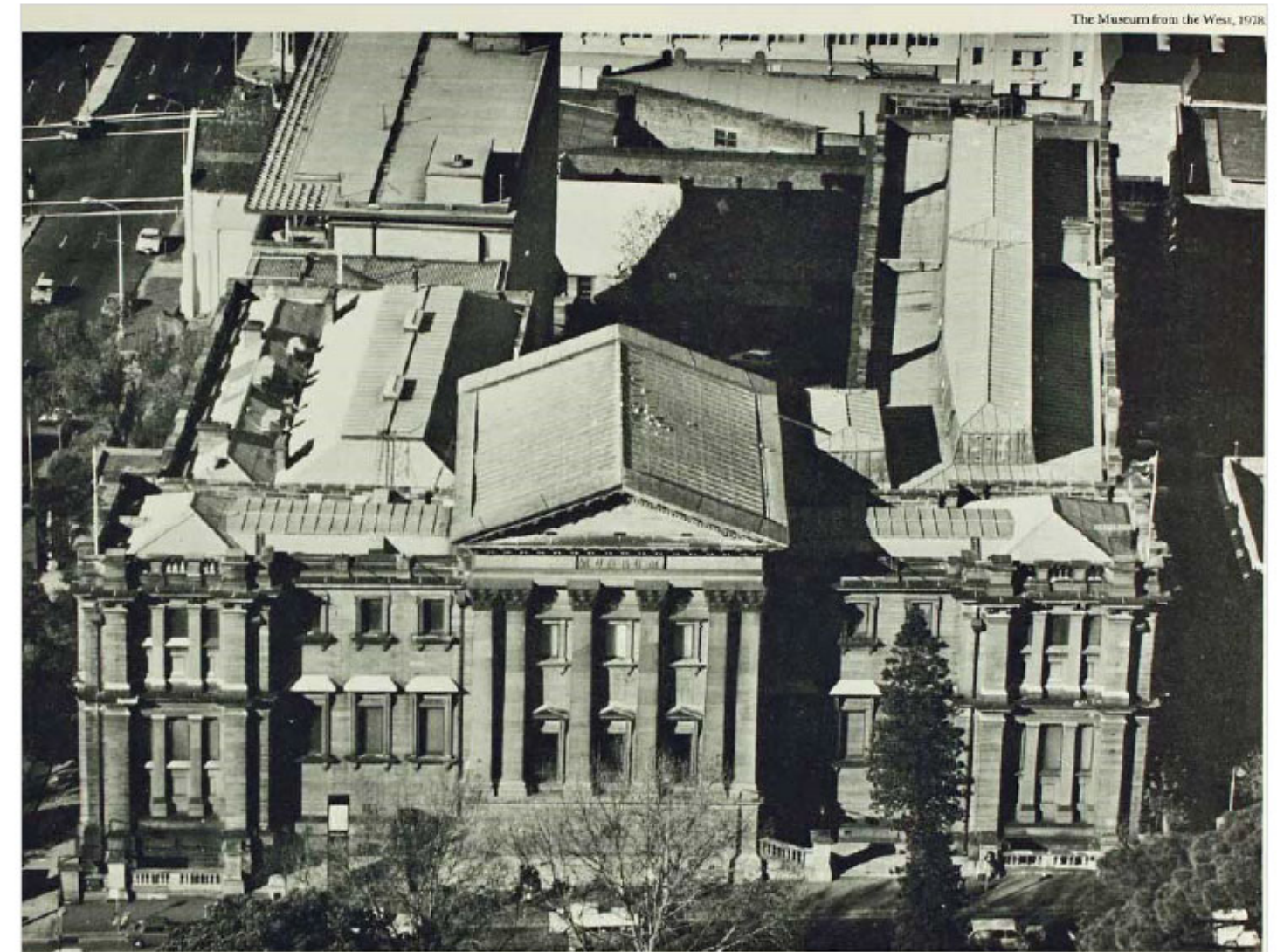
The old spirit house was demolished for the construction of the Still addition, which was completed as a Bicentennial project in 1988. It had six floors with two basement levels, and occupied the whole of the former yard. Additional accommodation was provided by means of demountable buildings at the eastern end of the site. Between 2006 and 2008, the Collection and Research building was constructed, sandwiched between the former school buildings and the Museum buildings.

In 2015, a new entrance to the Museum, the Crystal Hall, was constructed in front of the Parkes Farmer wing, with ramp access from the gate near the corner of College and William Streets.

### Sources:

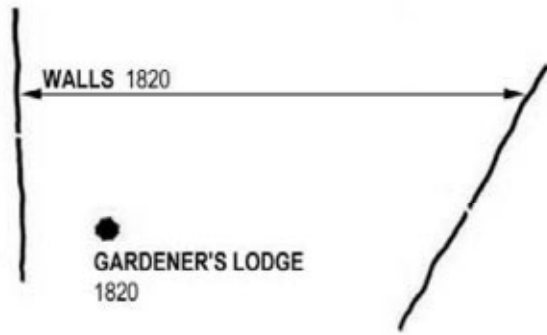
*Conservation Management Plan The Australian Museum College Street, Sydney.*  
September 2016, Orwell & Peter Phillips

### Aerial view of the Museum about 1979



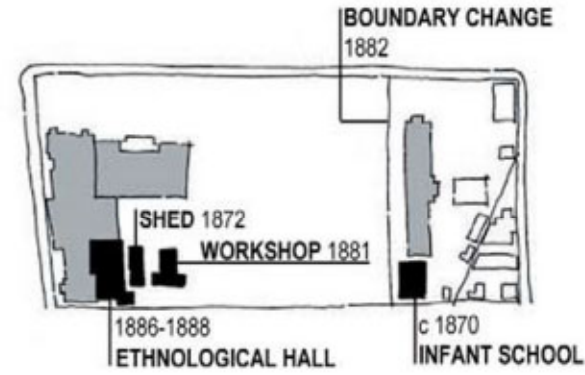
Source: Strahan, *Rare and Curious Specimens*, p 118  
(Extract from *Conservation Management Plan The Australian Museum College Street, Sydney*, September 2016, Orwell & Peter Phillips), P 161.)

Development: 1820s - 1860s



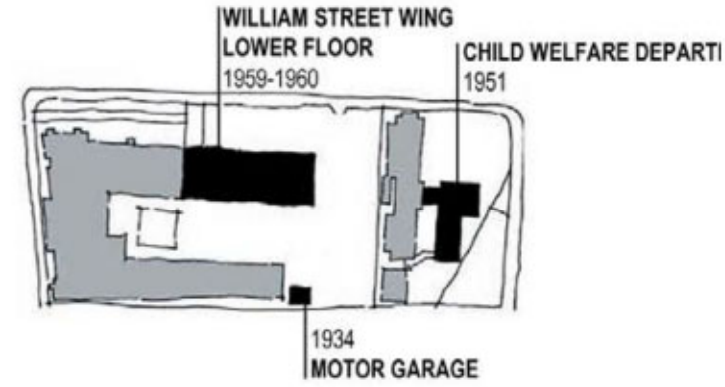
1820s

Development: 1870s - 1920s



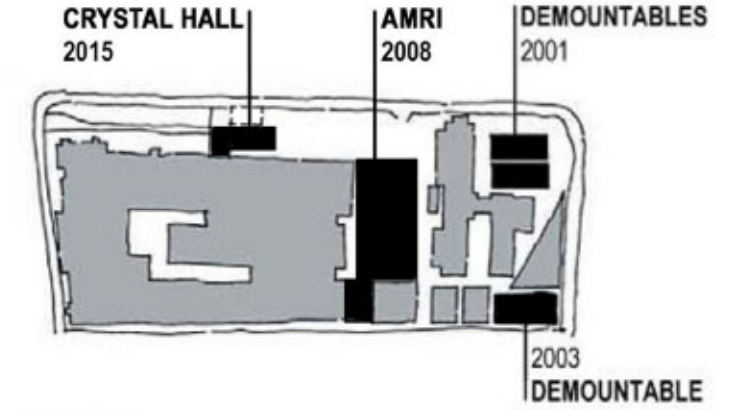
1870s + 1880s

Development: 1950s - 1990s

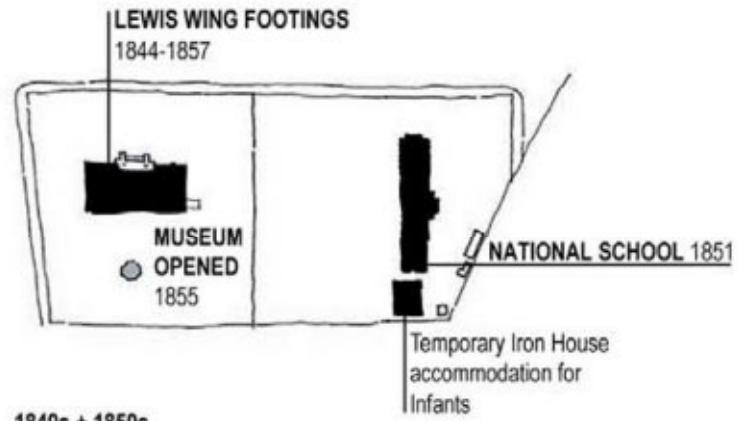


1950s

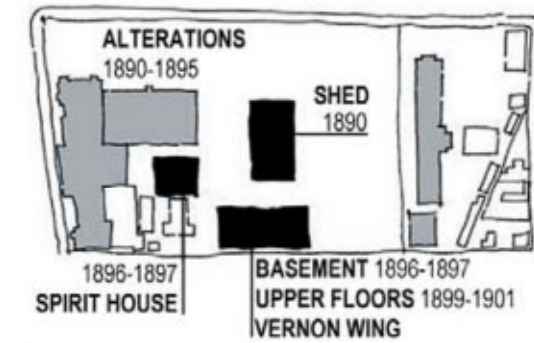
Development: 21st Century



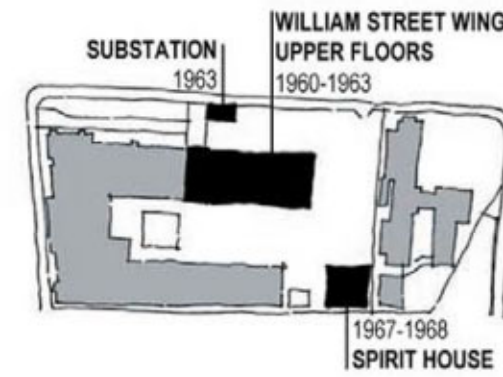
CURRENT



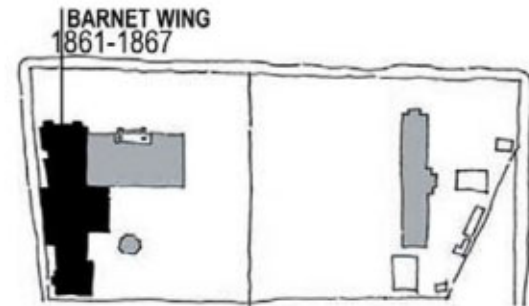
1840s + 1850s



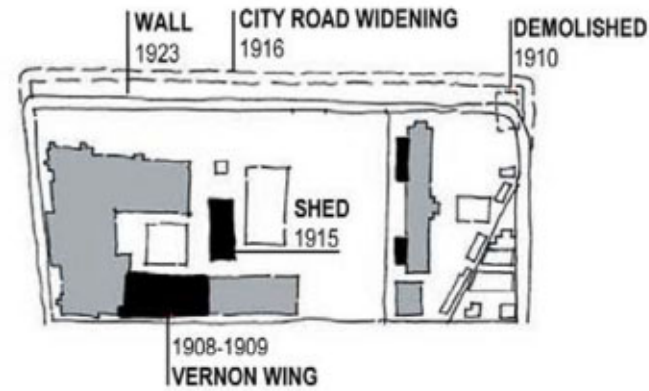
1890s



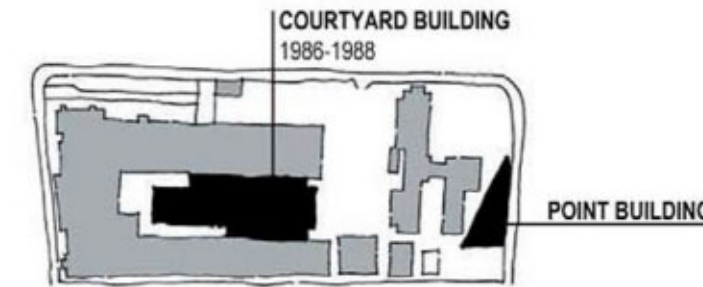
1960s



1860s



1910s + 1920s



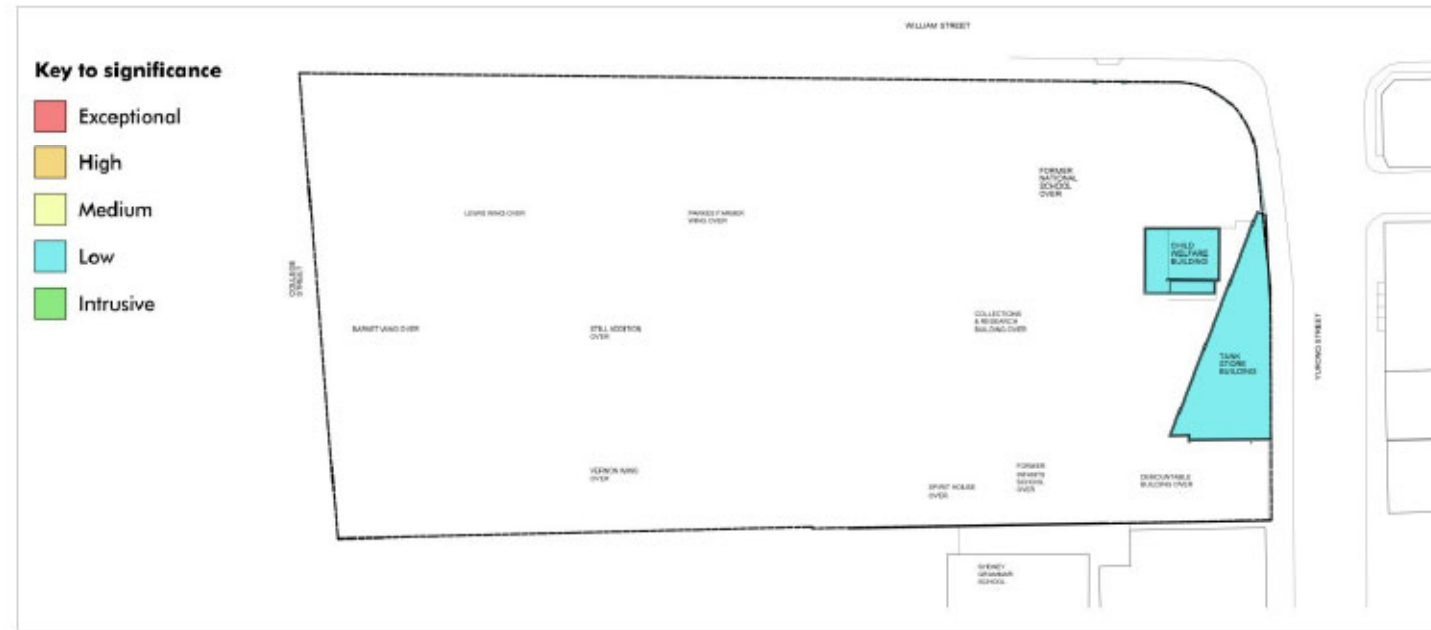
1980s

Sources:

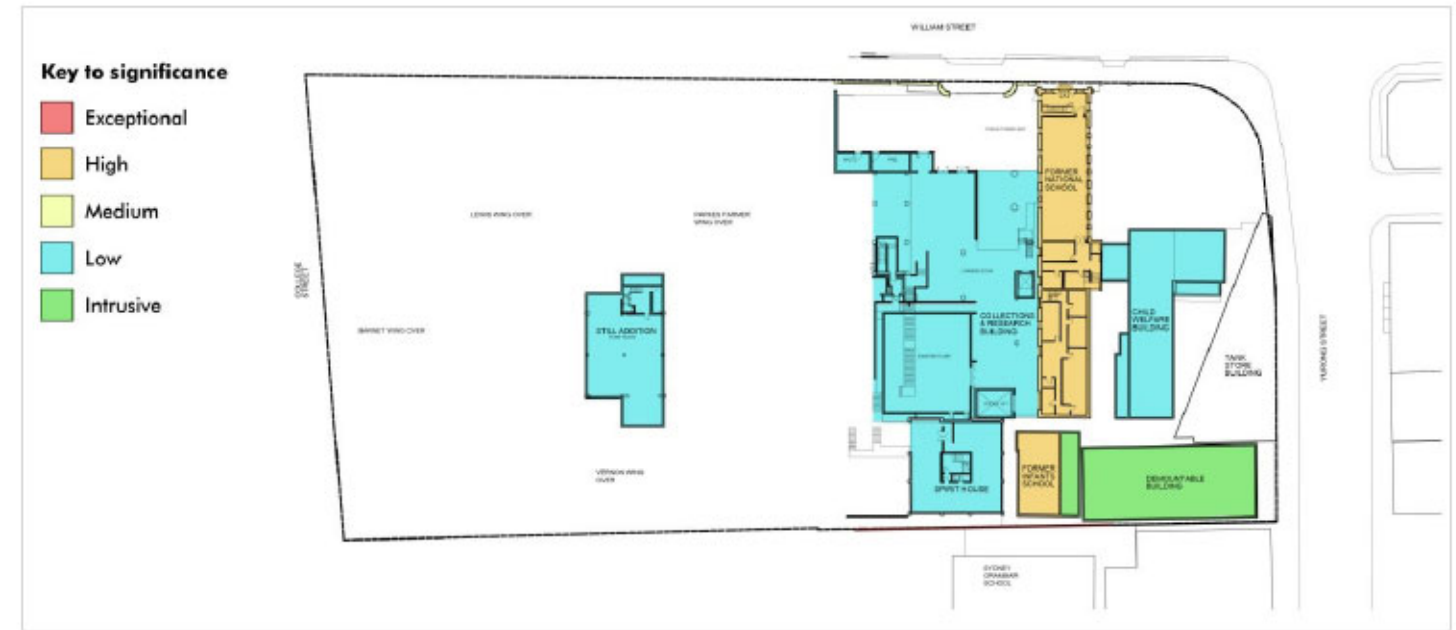
Australian Museum Conservation Management Plan (2005)  
by Clive Lucas Stapleton & Partners, amended by Orwell & Peter Phillips.



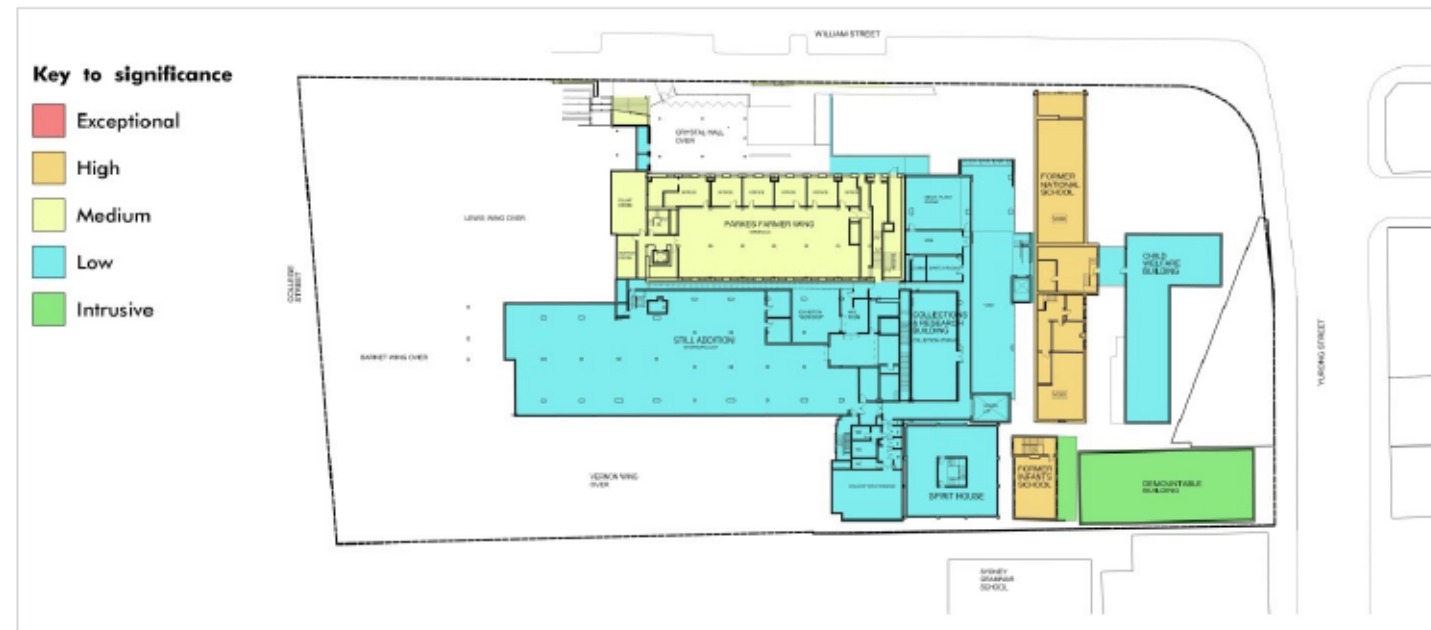
### Site plan of the Australian Museum showing significance of major built elements



**PLAN AT YURONG STREET LEVEL** 0 5 10 15 20 25 M ↑  
 Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 23.)



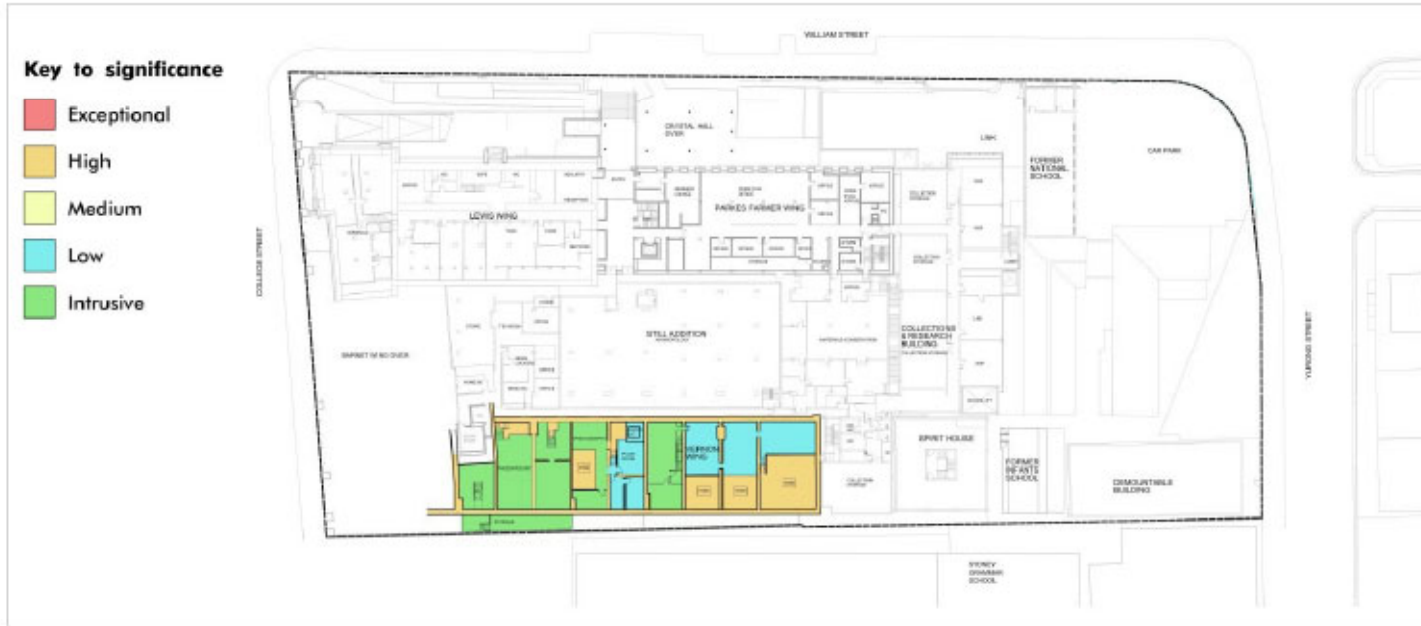
**PLAN AT LOADING DOCK LEVEL** 0 5 10 15 20 25 M ↑  
 Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 23.)



**PLAN AT BASEMENT LEVEL** 0 5 10 15 20 25 M ↑  
 Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 24.)

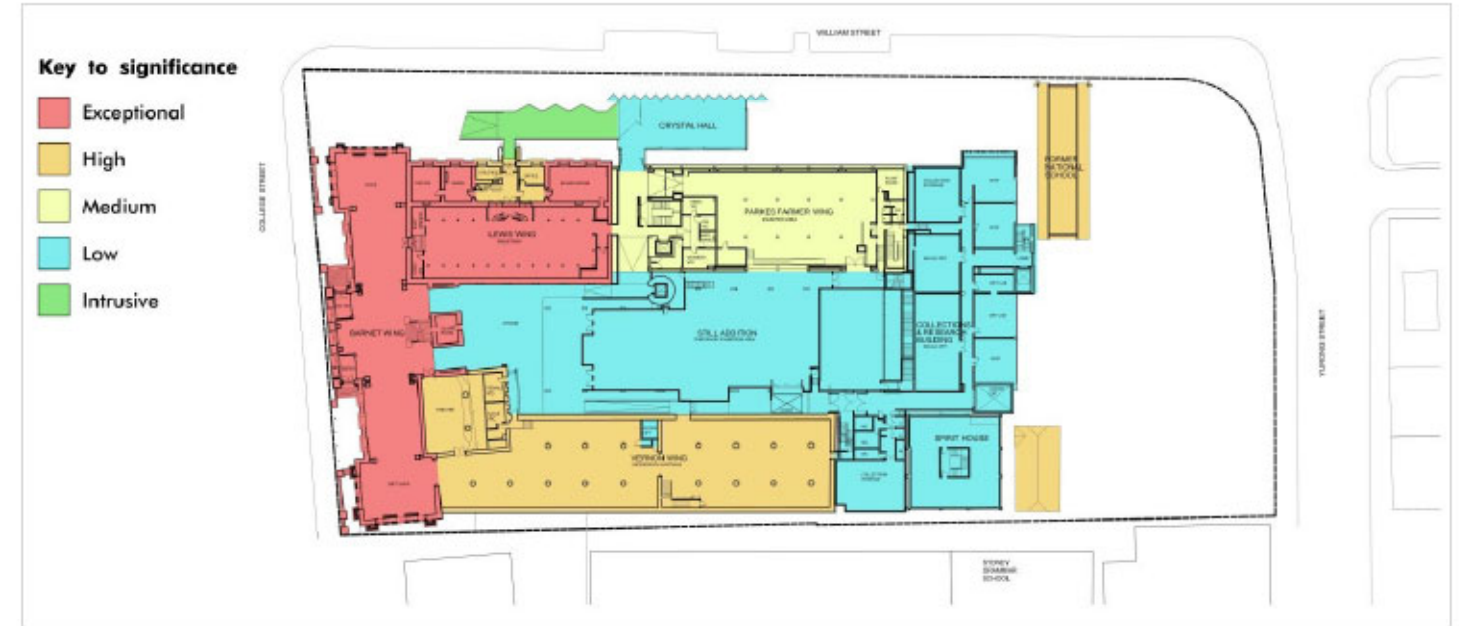


**PLAN AT LOWER GROUND LEVEL** 0 5 10 15 20 25 M ↑  
 Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 24.)



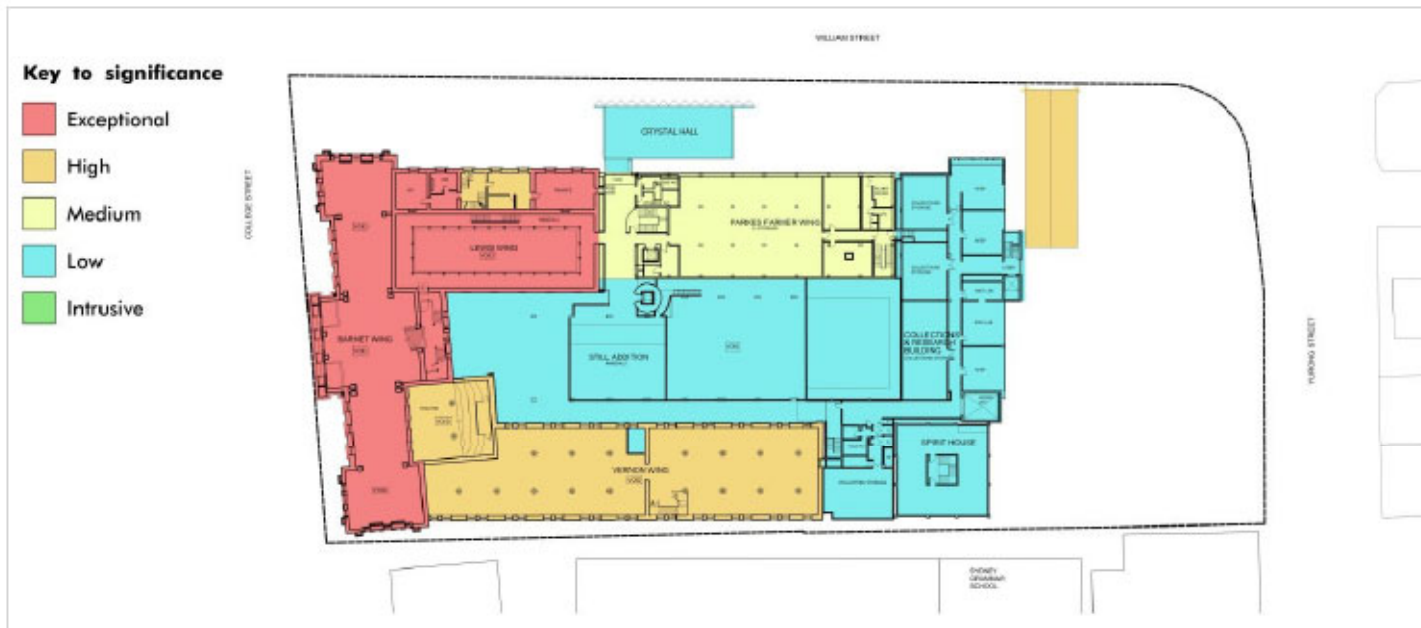
**PLAN AT VERNON MEZZANINE LEVEL**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P25.)



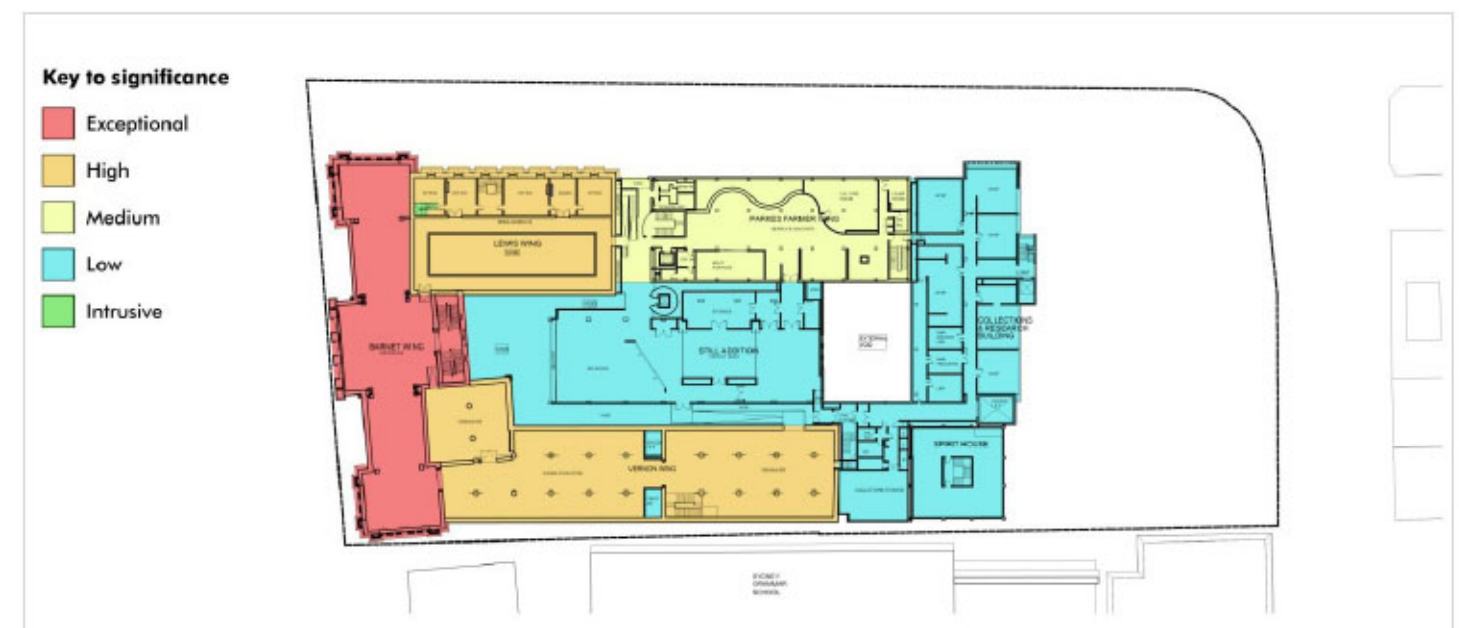
**PLAN AT GROUND LEVEL**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P25.)



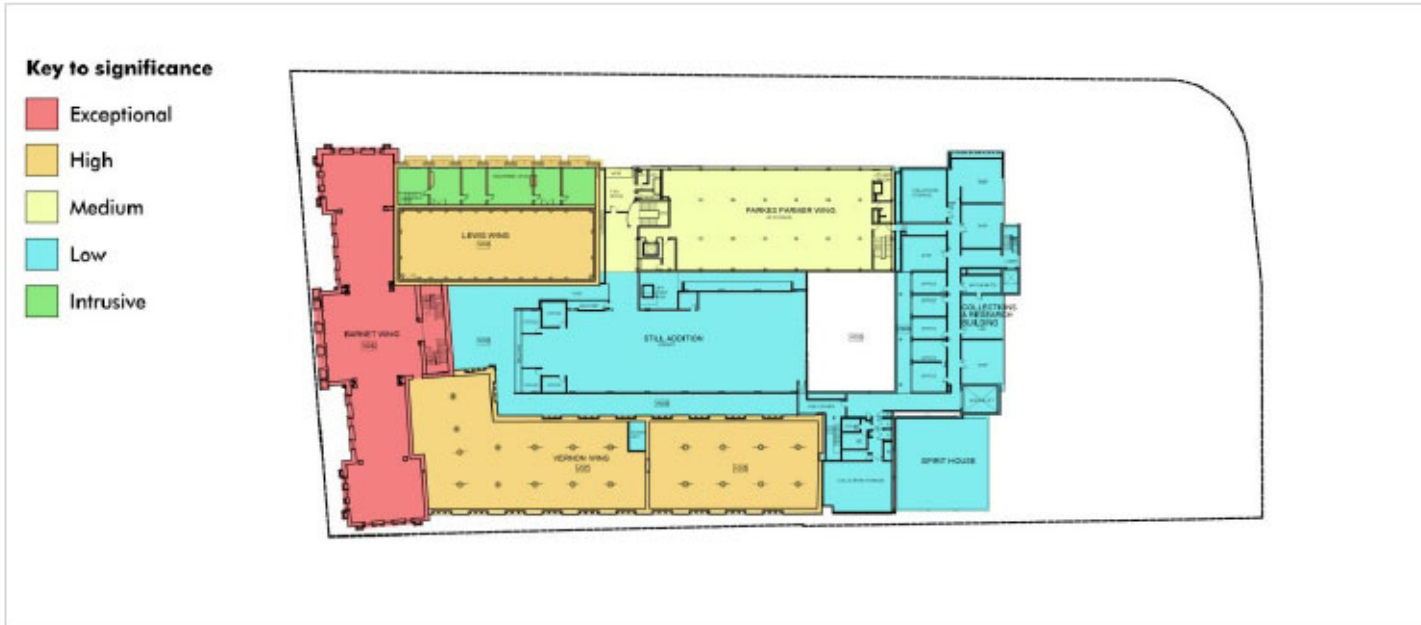
**PLAN AT LEVEL 1**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P26.)



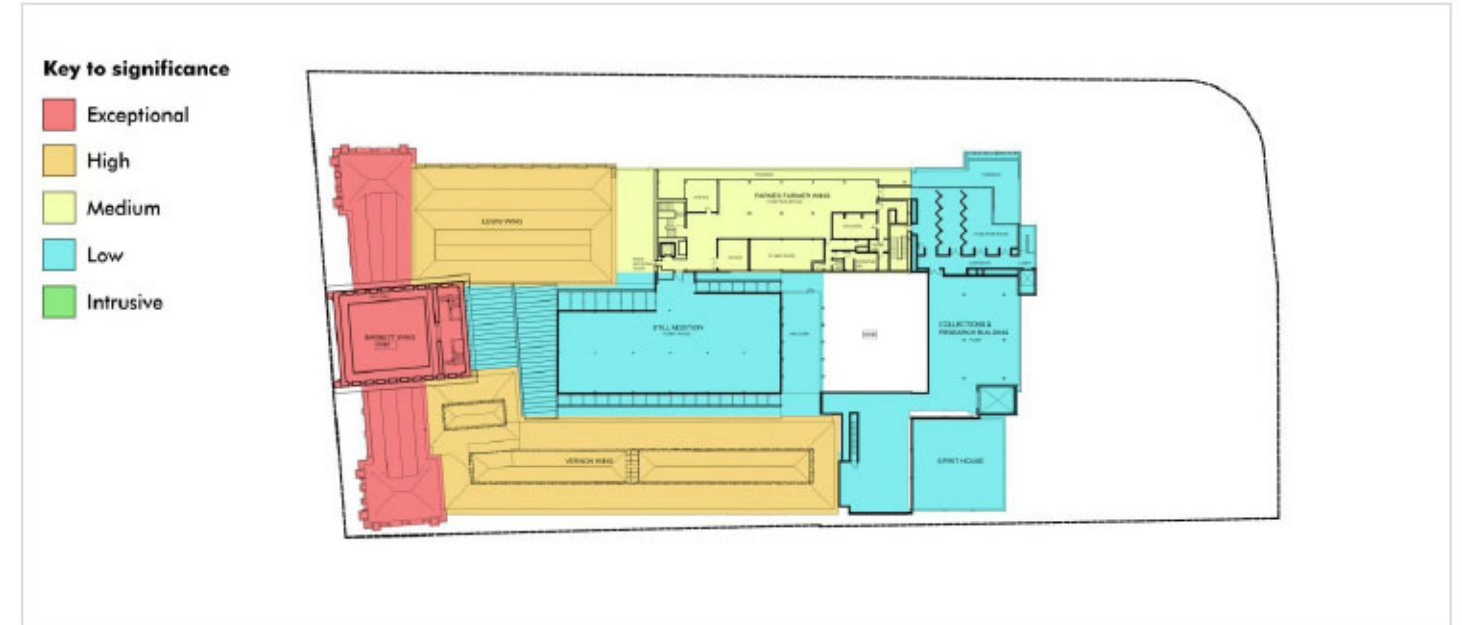
**PLAN AT LEVEL 2**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P26.)



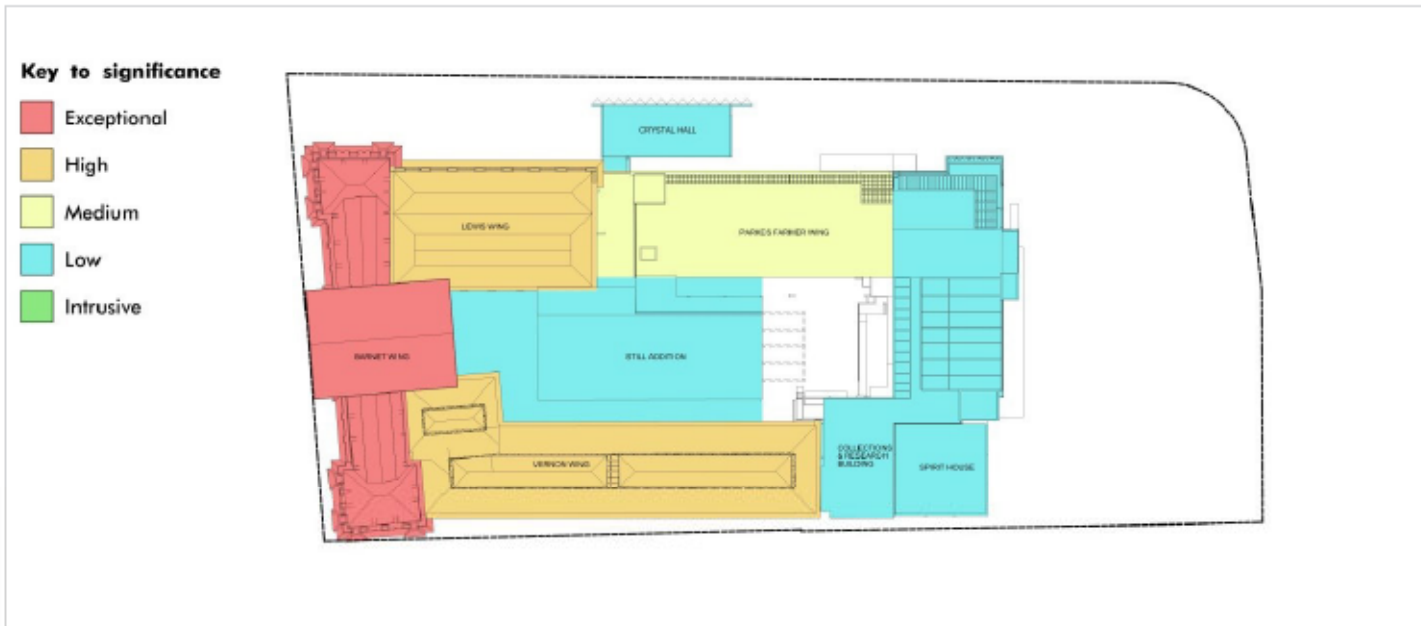
**PLAN AT LEVEL 3**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 27)



**PLAN AT LEVEL 4**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 27)

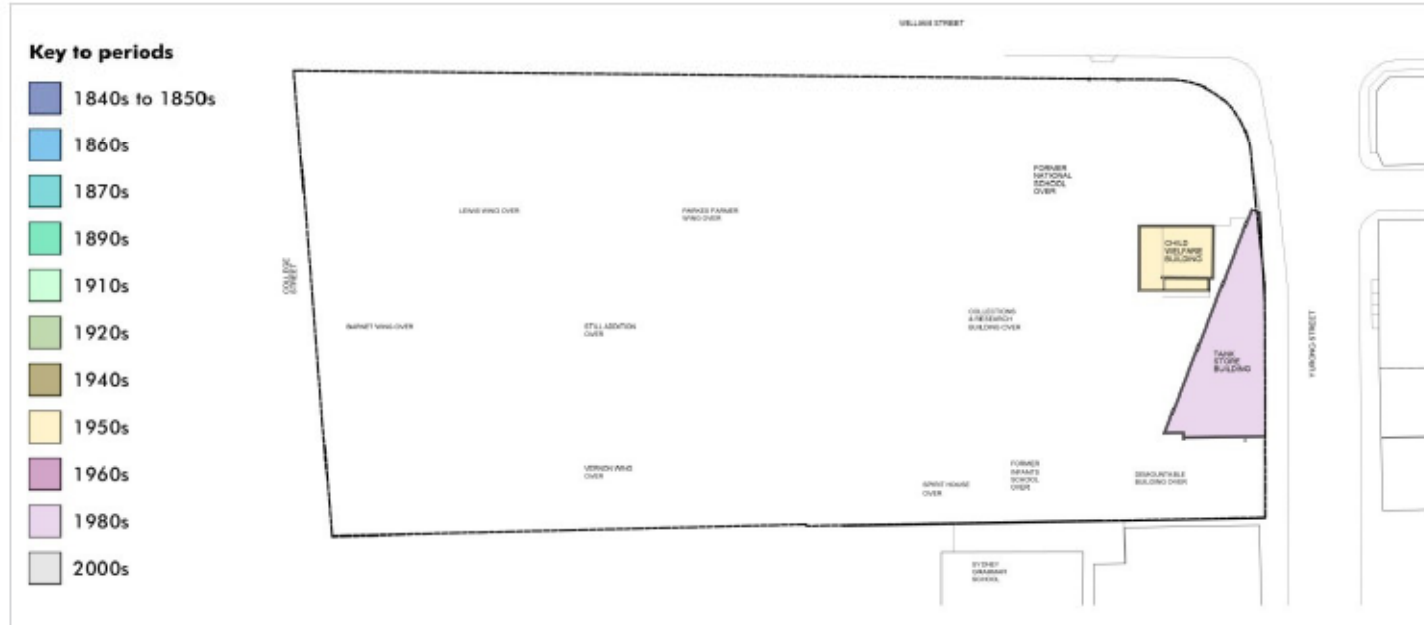


**PLAN AT ROOF LEVEL**

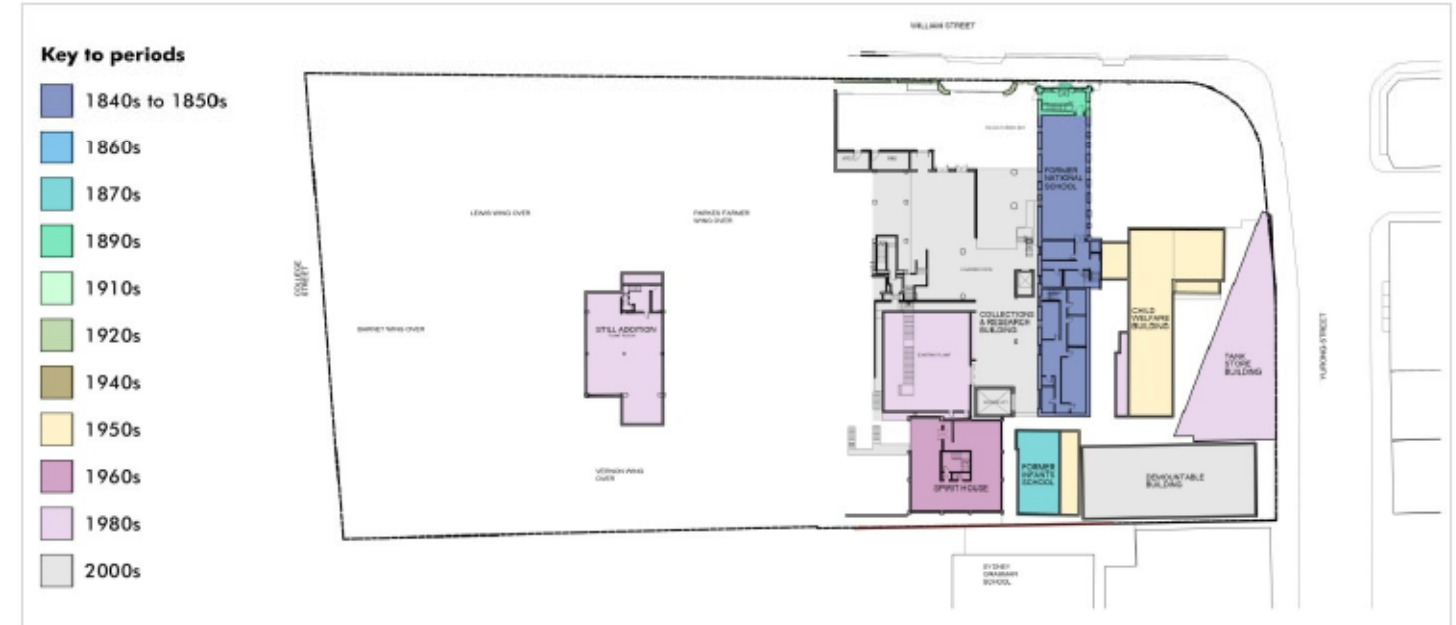
Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 28)



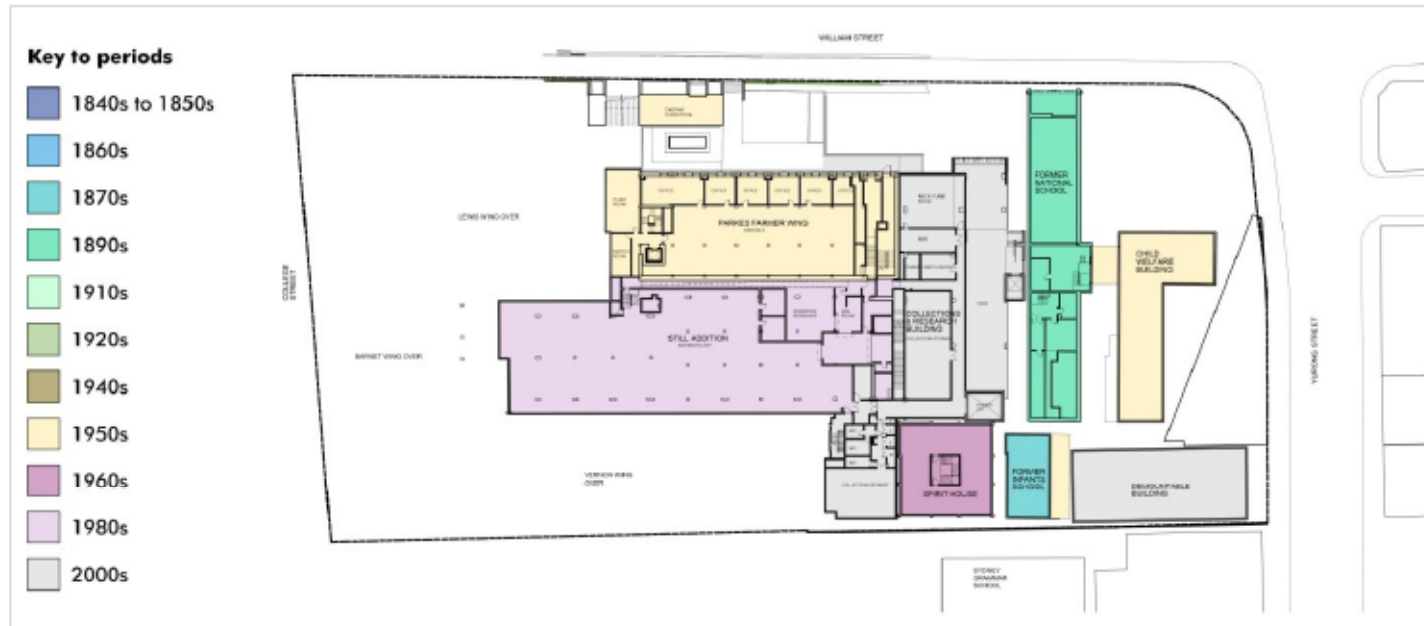
Site plan of the Australian Museum showing evolution of built elements



Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 51.)



Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 52.)



Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 52.)

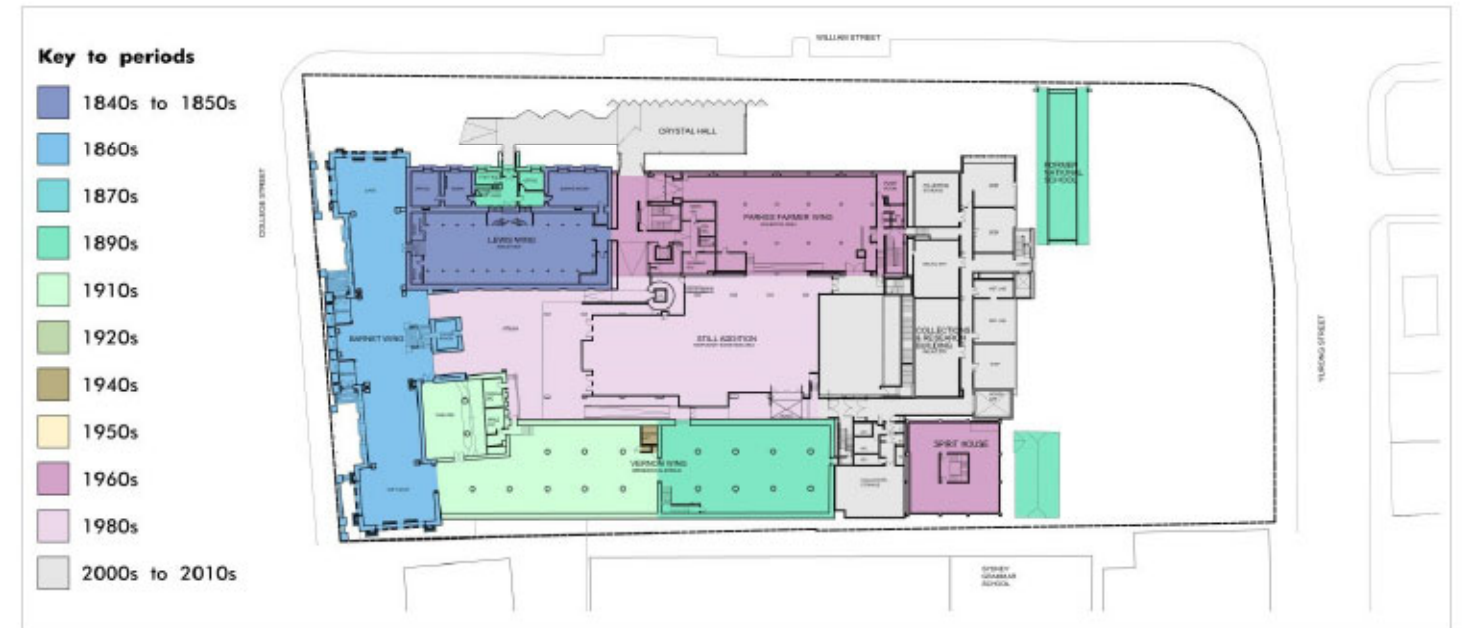


Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 53.)



**PLAN AT VERNON MEZZANINE LEVEL**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 53.)



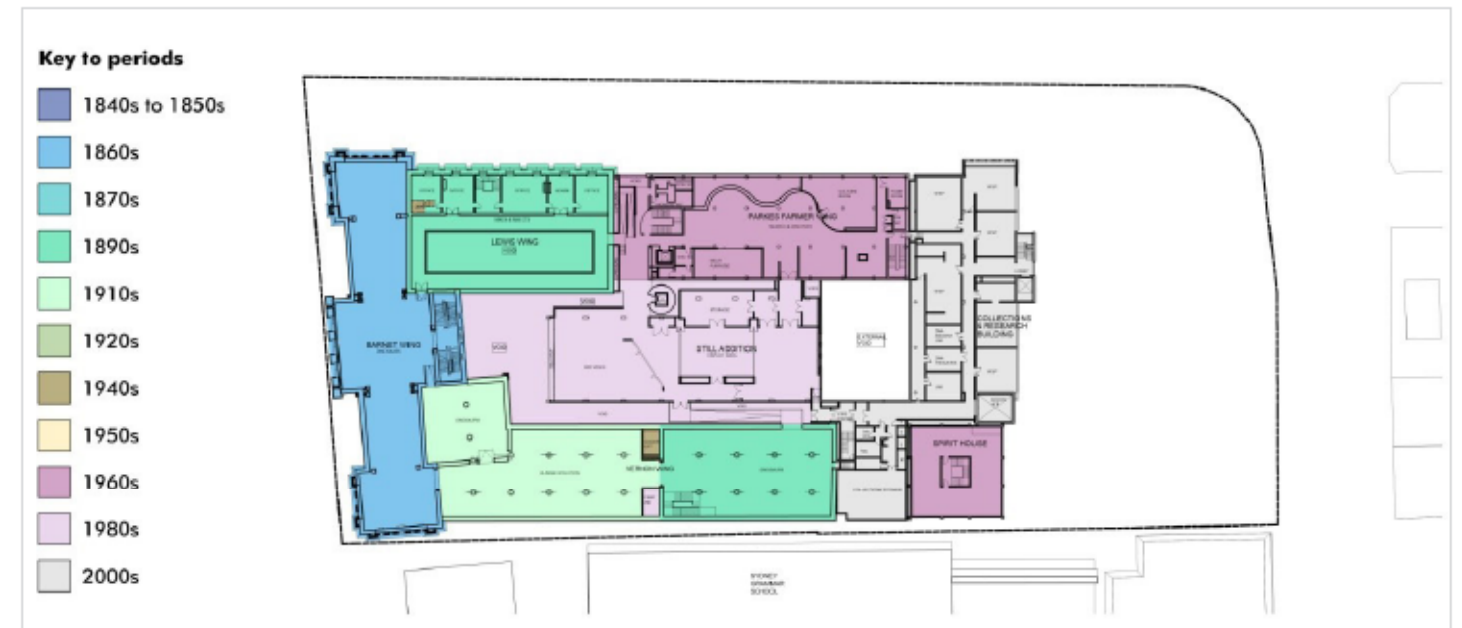
**PLAN AT GROUND LEVEL**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 54.)



**PLAN AT LEVEL 1**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 54.)



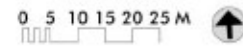
**PLAN AT LEVEL 2**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 55.)



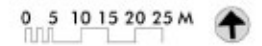
**PLAN AT LEVEL 3**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 55.)



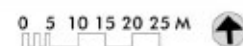
**PLAN AT LEVEL 4**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 56.)



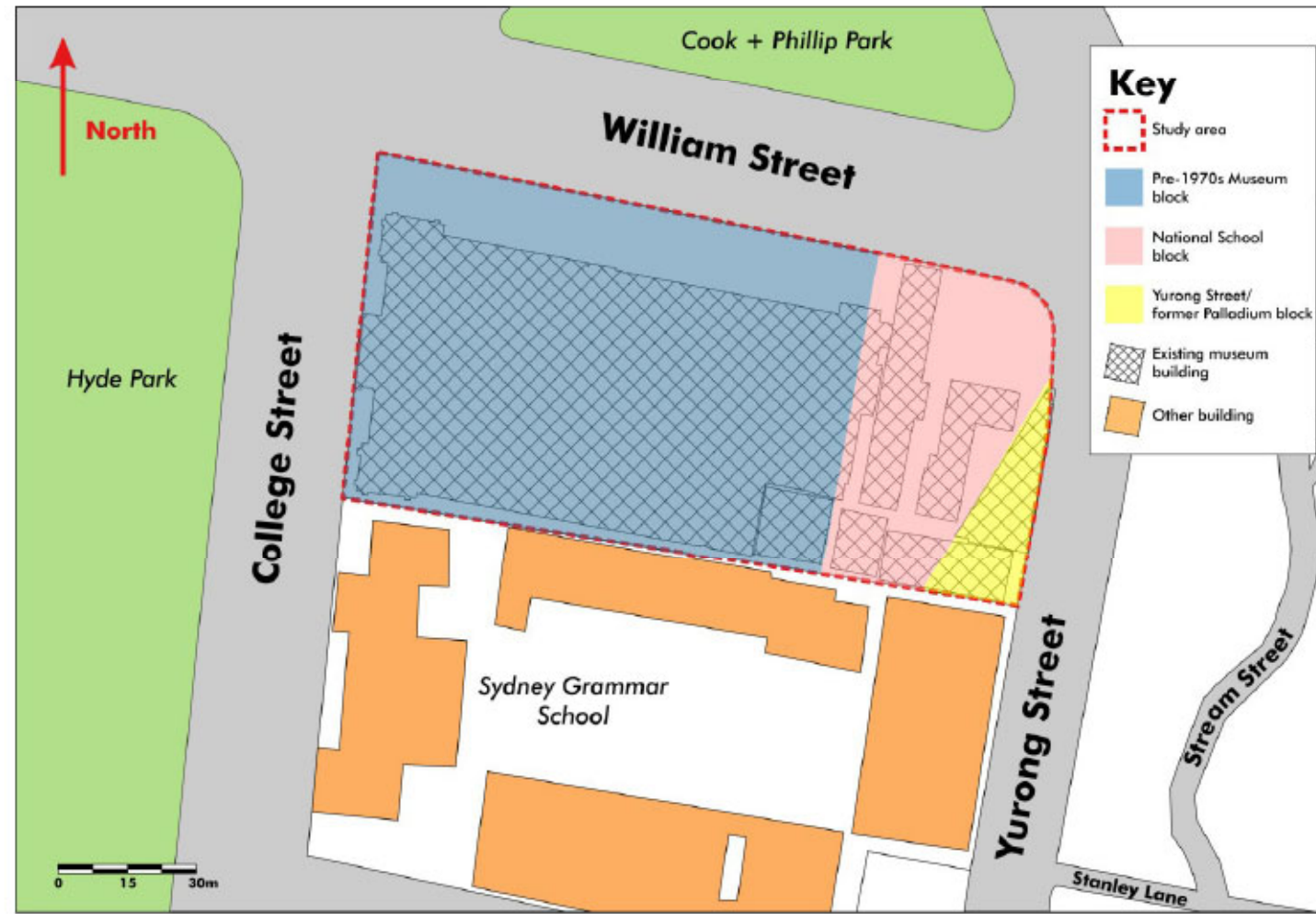
**PLAN AT ROOF LEVEL**

Source: SJB Architects. Australian Museum, August 2012, adapted by Orwell & Peter Phillips  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, September 2015, Orwell & Peter Phillips), P 56.)



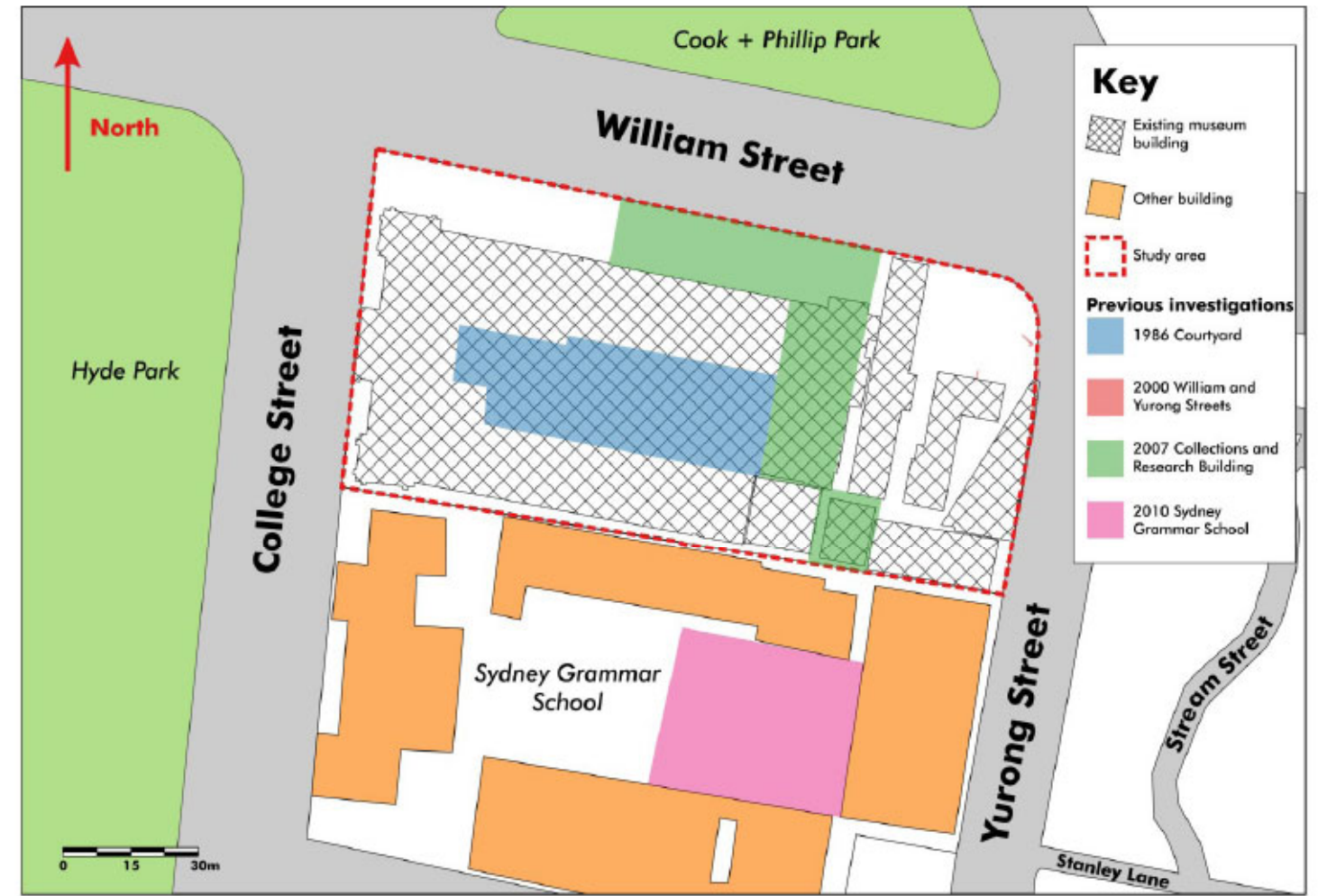


Map showing the three historic lots which currently comprise the Australian Museum site



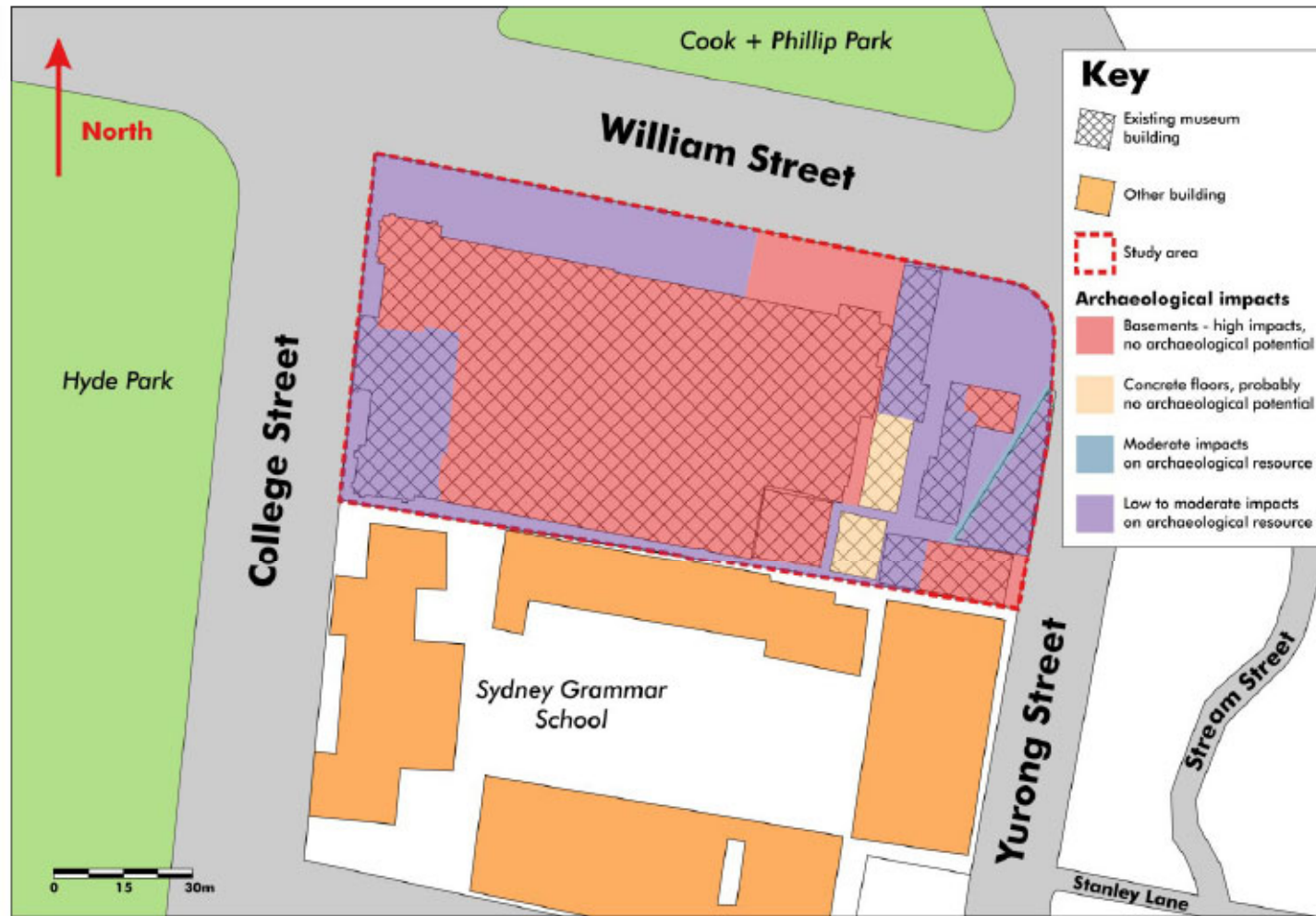
Source: Casey & Lowe Pty Ltd  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, February 2015, Orwell & Peter Phillips), P 59.)

Map showing extent of previous archaeological investigations in and around the Australian Museum site.



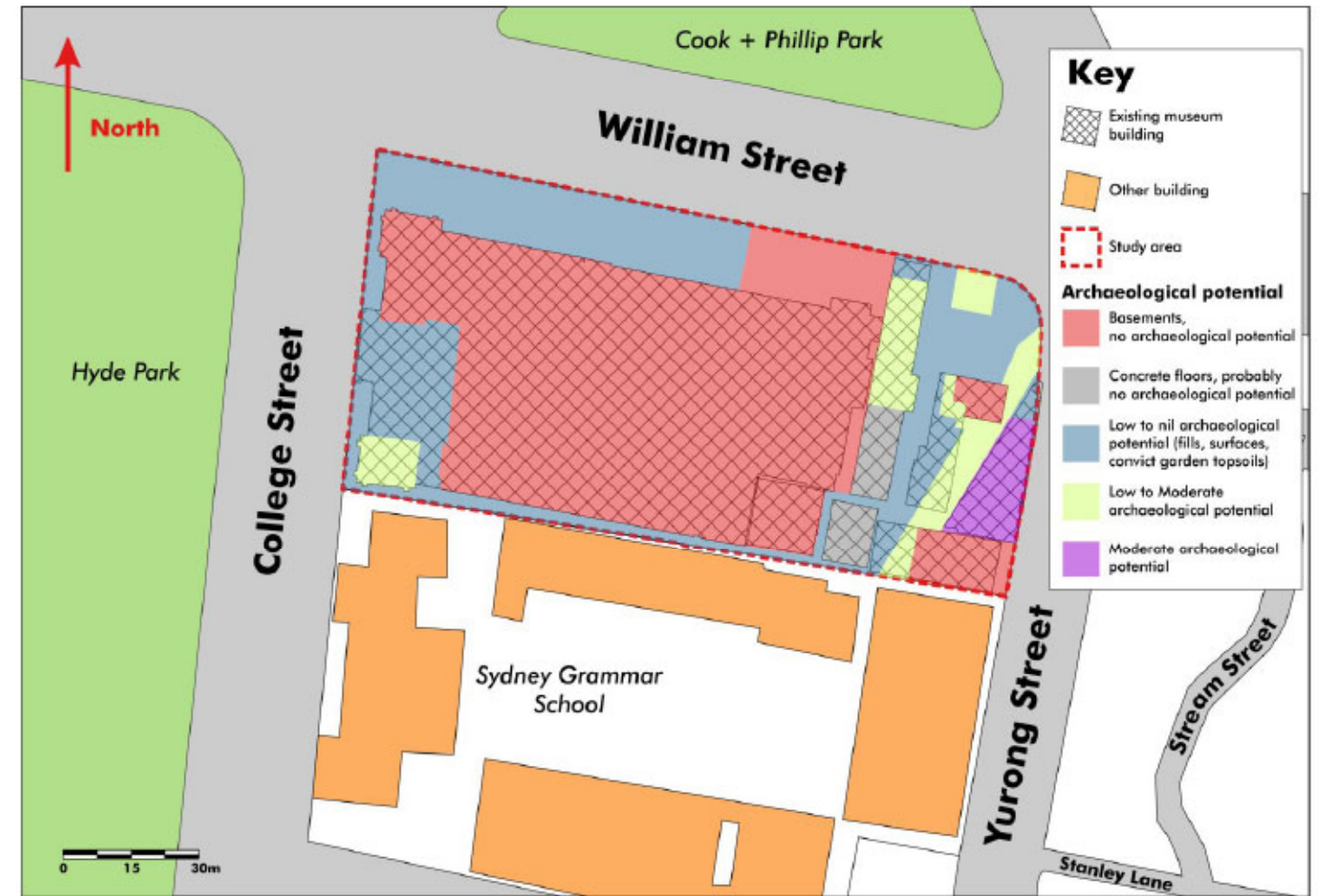
Source: Casey & Lowe Pty Ltd  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, February 2015, Orwell & Peter Phillips), P 69.)

Impacts by current buildings on archaeological potential across the Australian Museum



Source: Casey & Lowe Pty Ltd  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, February 2015, Orwell & Peter Phillips), P 76.)

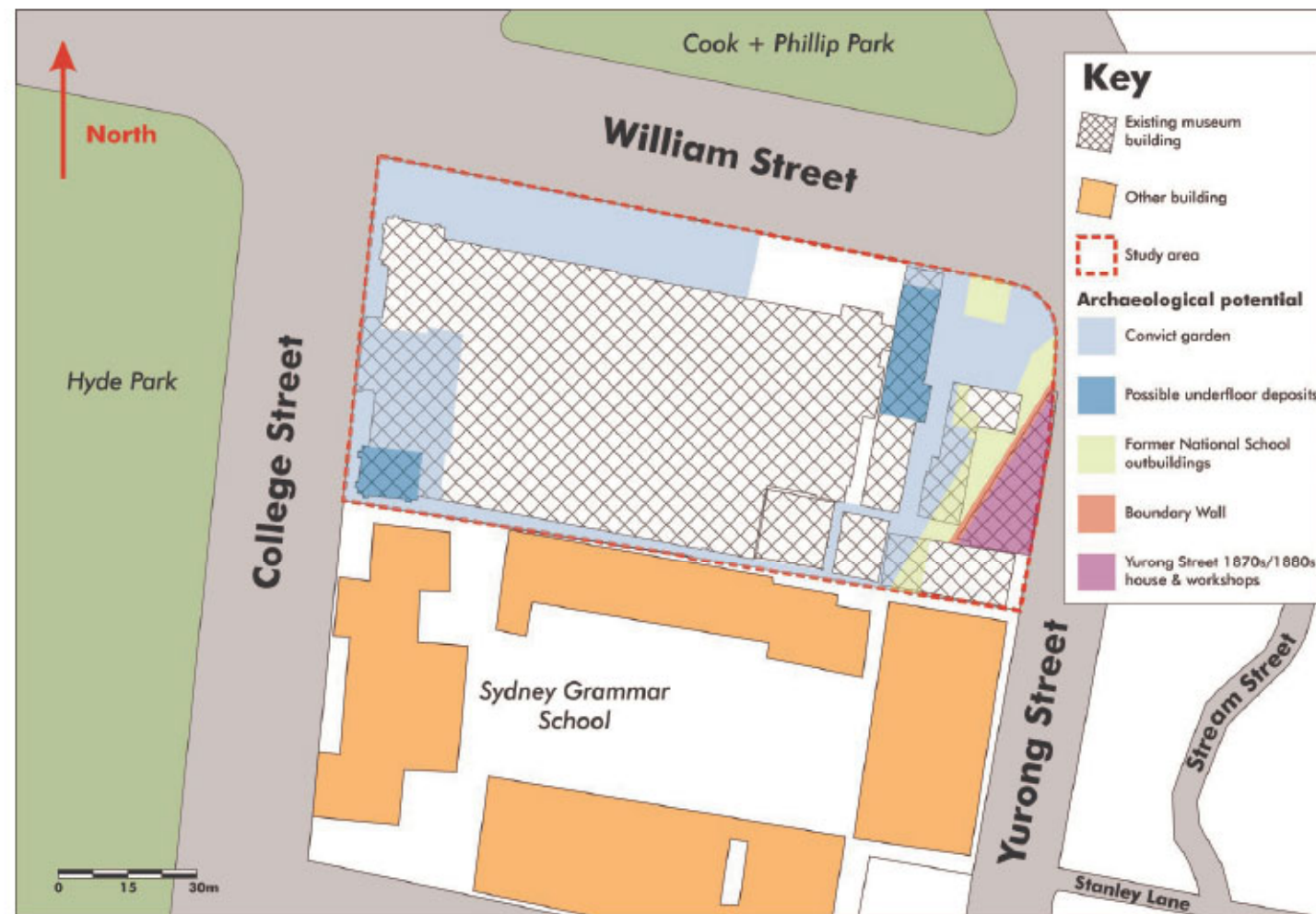
Map of archaeological potential across the Australian Museum site



Source: Casey & Lowe Pty Ltd  
 (Extract from Conservation Management Plan The Australian Museum College Street, Sydney, February 2015, Orwell & Peter Phillips), P 80.)



Map showing areas of archaeological potential



Source: Casey & Lowe Pty Ltd  
(Extract from Conservation Management Plan The Australian Museum College Street, Sydney, February 2015, Orwell & Peter Phillips), P 81.)

### NOTE ON ARCHITECTURAL POTENTIAL:

Although the Museum is situated in a historical precinct, being limited in scope, the development is unlikely to disturb an areas of archaeological significance.

Refer to Heritage Impact Statement by OPP.

Remnant of Governor Macquarie Estate



Source: Remnant of Government Macquarie estate.

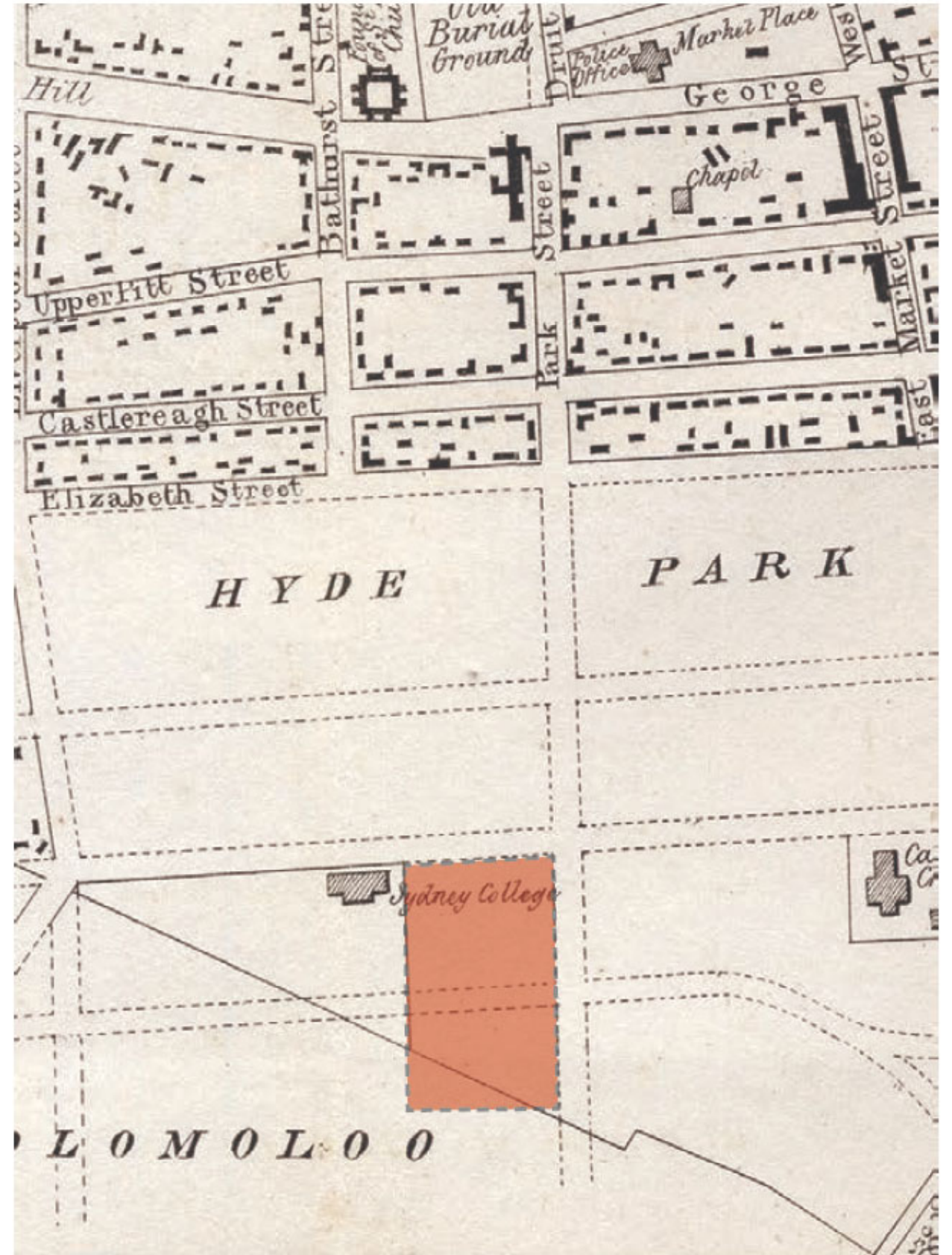
In December 1792, Governor Phillip put two lines on the map of the colonial settlement in NSW, New Holland, the first line defined the boundary from Cockle bay to Woolloomooloo Bay, and the second line which was marked on the ground by a ditch, ran from the southwest corner of [first] Government House to the head of the creek running into Woolloomooloo Bay. A Government Order decreed that 'no ground within the boundary is ever granted or let on lease and all houses built within the Boundary line are to remain the property of the Crown'. The Order lacked clarity. Two decades later Governor Bligh declared the boundaries enclosing the Government Domain, Governor Macquarie transformed it into a gentleman's estate.

The wall remnant is believed to be the remains of the former convict garden wall on the site of what is now Cook and Phillip Park. It is a rare remnant of Macquarie period convict infrastructure and also marks the official limits of Sydney Town established by Governor Phillip.

Plan of the town and suburbs of Sydney, August, 1822



Plan of the town and suburbs of Sydney, August, 1822 (zoom in)



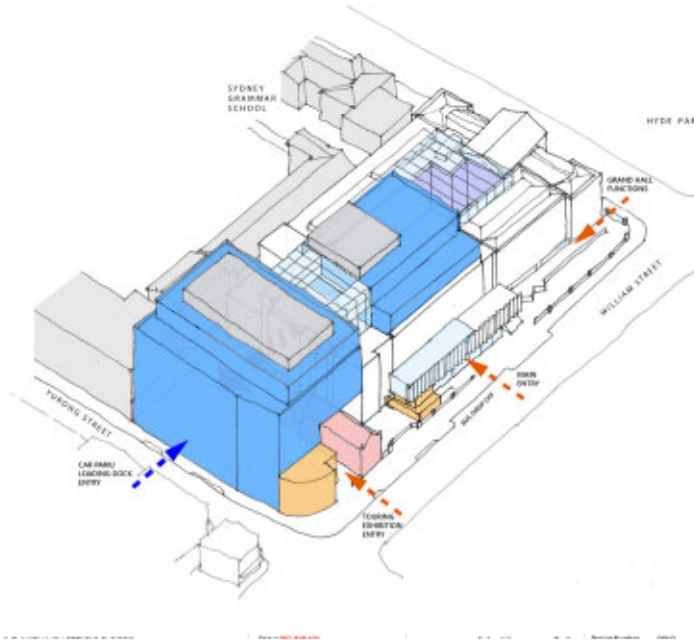
# ARCHITECTURAL DESIGN

04

ARCHITECTURAL DESIGN

# 04 Architectural Design

## 4.1 ASPIRATIONS



### IMPLEMENT KEY STRATEGIES AND SPATIAL RELATIONSHIPS OF THE MASTER PLAN

#### Maintain the Museum's vision

The proposed alterations and additions will allow the Museum to expedite some of its Master-plan goals.

- A dedicated "Heart" for the Museum: special place surrounded by beautiful sandstone façades.
- A touring exhibition hall that will bring international blockbusters to Sydney for the first time
- Clarification of circulation
- Dedicated group facilities
- Improved visitor amenities

### CREATE AN URBAN SETTING

#### Landscape and Context

- Respond to the heritage context and the Museum's location at the eastern gateway to the city.
- Create a sense of anticipation and curiosity on the approach to the Museum
- Create a relaxing sheltered space to step away from William Street and rediscover nature

### ENHANCE THE MUSEUM'S ADDRESS AND STATURE

#### Build upon the iconic status of Australia's first Museum

- Treat the variable heritage fabric with respect
- Clarify the entrance hierarchy
- Expand and improve the arrival and orientation sequence
- Create gallery spaces that will allow the Museum to bring the best international touring exhibition to Sydney

### DEFINE AN APPROPRIATE SCALE FOR THE MUSEUM

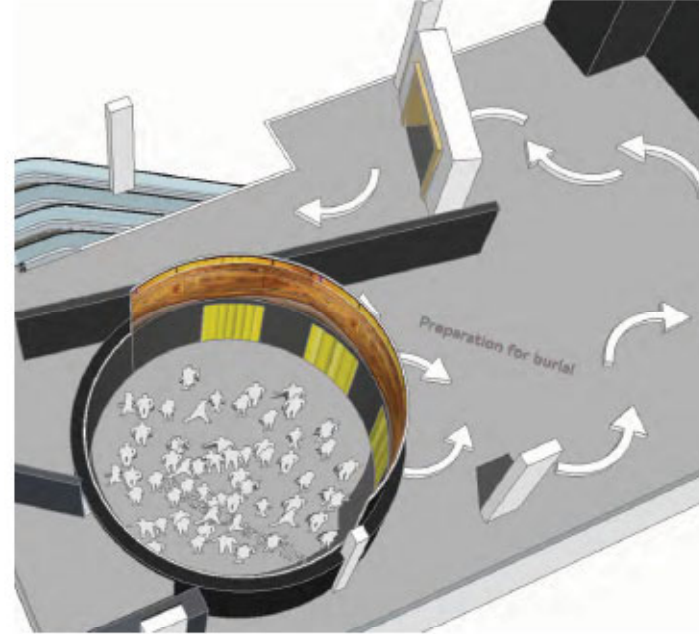
#### Better design for a better future

#### Exterior:

- An entrance suitable for a growing number of visitors
- Create a sheltered forecourt on William Street, to welcome groups

#### Interior:

- Open up the 'heart' of the Museum and reveal the heritage fabric
- Design an appropriately scaled circulation space



### EXPAND THE MUSEUM'S SPATIAL CAPACITY FOR INTERNATIONAL EXHIBITIONS

#### A flexible double storey exhibition hall

- Create spaces capable of holding a large exhibition of up to 1500 sqm over two storeys or two separated exhibitions running at the same time.
- Provide the option of opening up the Heart of the Museum for temporary gallery space or for large functions and venue hire

### CREATE A NEW "HEART" FOR THE MUSEUM

#### Innovation and Design

- Locate a central node and organizing point for the journey through the Museum
- A space to build anticipation before the journey begins
- A space to return to and reflect on the day's discoveries

### ACCESS AND INCLUSIVENESS

#### Design

Focus on social and physical inclusion rather than disability.

Help the Museum in its goal of creating social change and alter the perception and treatment of museum visitors and staff living with disability.

Access solutions will adhere to the principles of social equity, inclusion and dignity.

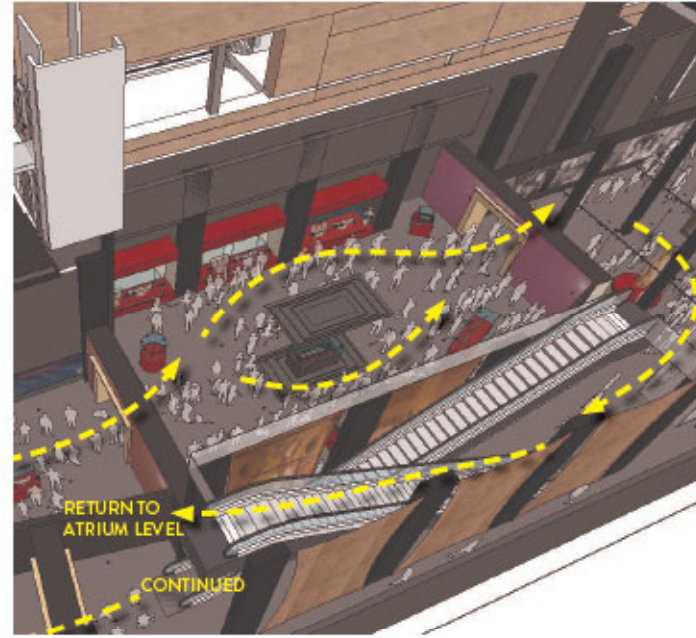
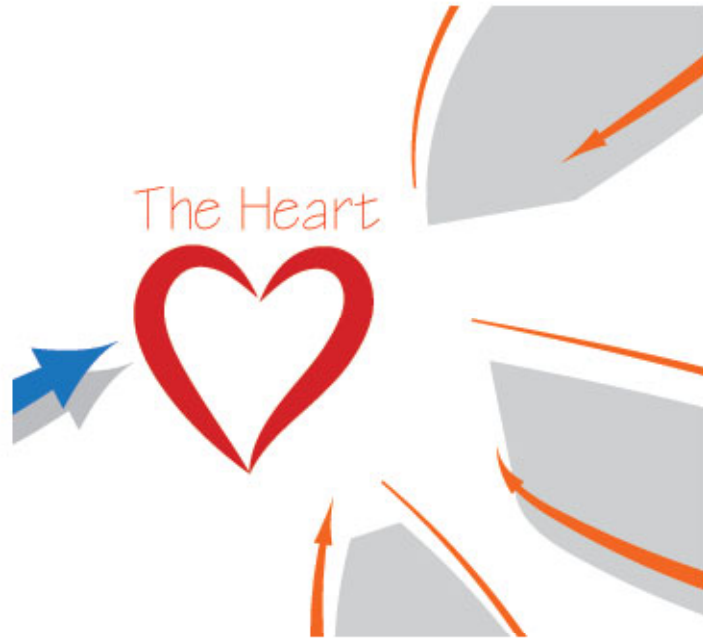
### FACILITATE DELIVERY OF LONG TERM MASTER PLAN VISION

#### Design

- Update William street entrance
- Remove Still Addition to create a grand hall (atrium) at the heart
- Develop the underutilized eastern part of the site
- Improved connection between major new and existing exhibition spaces on the key floors.
- Facilitate delivery of larger term Masterplan vision

Graphic courtesy of Art of Fact.

## 4.2 REDEVELOPMENT DESIGN PRINCIPLES



### TURN THE ATRIUM COURTYARD INTO A NEW HEART FOR THE MUSEUM

- Remove, partially remove or reconfigure the Still Addition to open up space for the new Museum heart.
- Structure queueing, ticketing, amenities and cloakroom functions to clarify movement paths and legibility of Museum programme.
- Allow sufficient space for milling, gathering, waiting and reflection.
- Leverage sandstone heritage facades surrounding the courtyard as a backdrop to a new public room for Sydney.
- Raise Ground Floor – to Barnet datum and connect to new east wing

### EXPAND TOURING EXHIBITION CAPABILITY FOR INTERNATIONAL BLOCKBUSTERS

- Move Pacific Collection from basement storage to an off-site location
- Create a flexible touring exhibition space with double height volumes over two levels.
- Insert a pair of escalators to move large volumes of visitors between the two levels of exhibition space.
- Configure entrances and exits to avoid circulation conflict and congestion.

### STRUCTURE AN EXPERIENCE FOR GROUPS

- Design an entry sequence for groups to ease congestion
- Create space for assembly and teaching.
- Allow flexibility to deal with expanded groups or functions.

### IMPROVE THE MUSEUM EXPERIENCE FOR FAMILIES

- Redevelop the Kids' Space and Search and Discover gallery to provide a fresh, new and engaging experience for children
- Locate a new café and amenities including baby change room adjacent to the Kids' Space to create a convenient and casual family friendly precinct



## 4.3 PRECEDENT IMAGERY

### ESCALATOR AND STAIRS



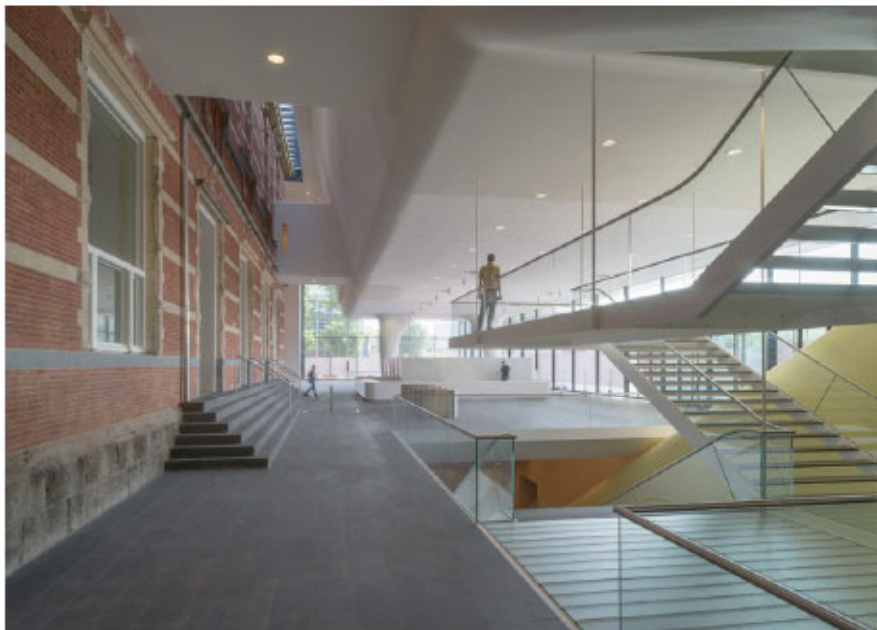
IM PEI - EAST WING NATIONAL GALLERY



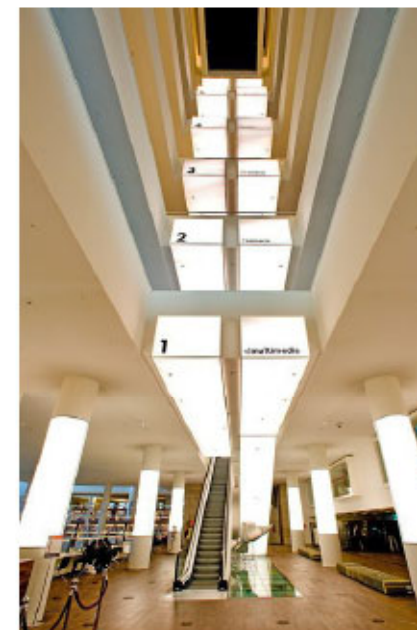
IM PEI - EAST WING NATIONAL GALLERY



BROAD ART STAIR - PAUL WARCHOL



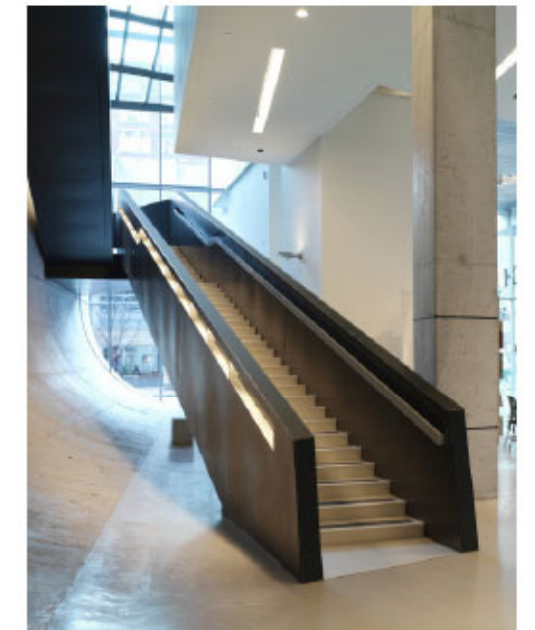
BENTHEM CROUWEL ARCHITECTS STEDELIJK MUSEUM



OPENBARE BIBLIOTHEEK AMSTERDAM



DANISH NATIONAL MARITIME MUSEUM BIG



ZAHA HADID - ESCALATOR

CEILINGS



BREUER - STOLLER WHITNEY MUSEUM - CEILING



SCARPA - MUSEO CANOVA



ZUMTHOR - BREGENZ



RENZO PIANO - MUSEUM IN ATLANTA

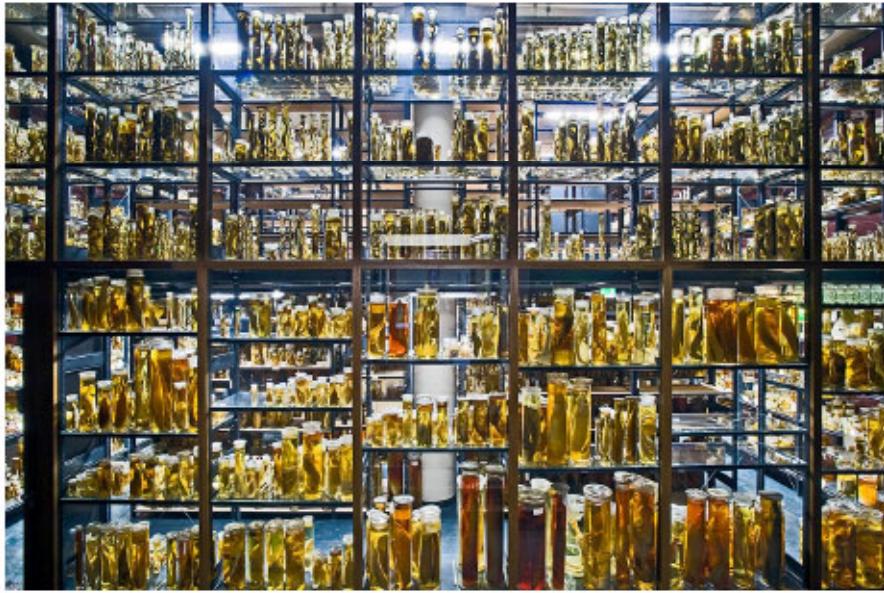


RENZO PIANO - MUSEUM IN ATLANTA



RENZO PIANO - MUSEUM IN ATLANTA

COLLECTIONS ON DISPLAY



BERLIN NATURAL HISTORY MUSEUM



BERLIN NATURAL HISTORY MUSEUM



BERLIN NATURAL HISTORY MUSEUM



PARIS NATURAL HISTORY MUSEUM



PARIS NATURAL HISTORY MUSEUM



PARIS NATURAL HISTORY MUSEUM

## 4.4 RESPONSE TO NSW DESIGN POLICY

### BETTER PLACED

An integrated design policy for the built environment of New South Wales.

How the proposed design meets the seven distinct objectives created to define key considerations in the design of the built environment.

### OBJECTIVE 1:

### BETTER WORKING

#### FUNCTIONAL, EFFICIENT AND FIT FOR PURPOSE

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.

### DESIGN RESPONSE:

The Australian Museum, Australia's first museum, has a history of more than 190 years and has occupied the site on the corner of College and William Streets since the 1850s. Although it has been expanded in a series of distinct additions, it has retained a sense of identity and cohesiveness through its integrated functions as a public building, a repository of important biological and cultural collections, and a home to precious knowledge and ongoing scientific enquiry. It is a much-loved institution that appeals to the public's curiosity and imagination. The Crystal Hall entrance has helped to solve some of the Museum challenges of access and circulation that have arisen through the accretion of so many different buildings on the site. The current project will build on this and ensure the Museum can continue to do its good work well into the future and indeed expand its capacity to bring exciting and much-needed international exhibitions to Sydney.

### OBJECTIVE 2:

### BETTER VALUE

#### CREATING AND ADDING VALUE

Good design generates ongoing value for people and communities and minimizes costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry.

### DESIGN RESPONSE:

The Business Case for the Australian Museum's phased Master Plan was supported by a Benefit Cost Ratio of 1:55 for Phase 1 (the current project), suggesting an excellent return on investment to the State of New South Wales. Not only will the Museum be able to bring the public larger and better exhibitions, it will also be able to offer improved a visitor experience through upgraded amenities and circulation, as well as dedicated facilities for handling school groups.

### OBJECTIVE 3:

### BETTER LOOK AND FEEL

#### ENGAGING, INVITING AND ATTRACTIVE

The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.

### DESIGN RESPONSE:

The Museum's public entrance, the Crystal Hall is an award-winning building that contributes to the sense of excitement, curiosity and enlightenment that is synonymous with this institution. The new extension and the improvements to the Biodiversity Garden and landscaping on William Street will add to the Museum's aesthetic qualities while taking nothing away from the distinctive heritage fabric that contributes so much to its sense of place and history. Indeed, the opening up of the Heart of the Museum – its Atrium, flanked on three sides by sandstone – will reveal parts of these buildings that have been lost to public view for decades.



#### OBJECTIVE 4:

### BETTER FIT

#### CONTEXTUAL, LOCAL AND OF ITS PLACE

Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, heritage and communal aspirations. It also contributes to evolving future character and setting.

#### DESIGN RESPONSE:

The proposed additions and alterations respond to the Museum's location and context by addressing and activating the William Street frontage and creating an entry suitable for an iconic Australian institution. The proposed extension of Crystal Hall respects the important heritage fabric and features of the existing building, retaining the visibility of the sandstone walls of the Parkes Farmer Wing through glazing from William Street. The reorientation of the existing Lower Ground floor egress stairs will provide better clarity and legibility to the main entrance above. Museum visitors will be able to enjoy more of the fine view over William Street towards Cook & Phillip Park. Much awaited refurbishments and improvements to circulation will contribute to a better and more accessible Museum experience for the community.

#### OBJECTIVE 5:

### BETTER PERFORMANCE

#### SUSTAINABLE, ADAPTABLE AND DURABLE

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.

#### DESIGN RESPONSE:

The Crystal Hall is a modern extension to the Museum's historical core and will address environmentally sustainable principles such as energy efficiency by utilizing advanced glazing and climate control systems.

#### OBJECTIVE 6:

### BETTER FOR COMMUNITY

#### INCLUSIVE, CONNECTED AND DIVERSE

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.

#### DESIGN RESPONSE:

The Australian Museum champions access and inclusivity and welcomes all members of our diverse community, including young families, school children, people living with disabilities and those who speak other languages - Australians from all walks of life, not to mention a huge number of overseas visitors. The Museum's Accessibility consultant and its own Accessibility and Inclusion Steering Committee and Advisory Panel have taken an active role in ensuring the Museum remains barrier free during the planning of the current proposal, and the design will add to the well-received improvements to accessibility delivered by the Crystal Hall development in 2015.

#### OBJECTIVE 7:

### BETTER FOR PEOPLE

#### SAFE, COMFORTABLE AND LIVEABLE

The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.

#### DESIGN RESPONSE:

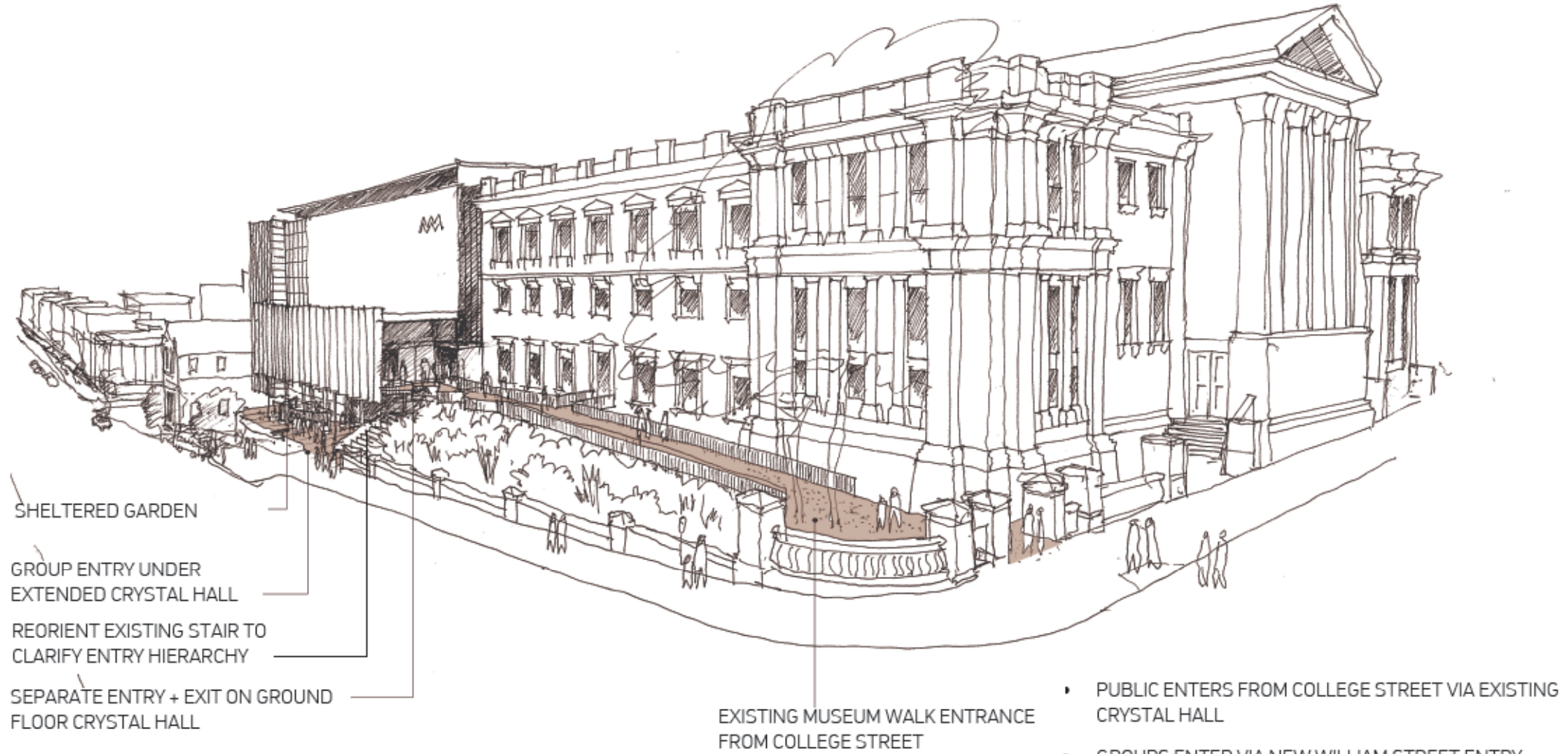
The design team, including exhibition consultants Art of Fact, have undertaken detailed studies of queueing, cloaking and patron amenity and the safety and comfort of Museum patrons and staff has been considered at all times during the design process. The Museum commissioned a comprehensive review of fire safety and services for the development in order to achieve a high quality environment for staff and the growing number of people visiting the site.

## 4.5 DESIGN APPROACH

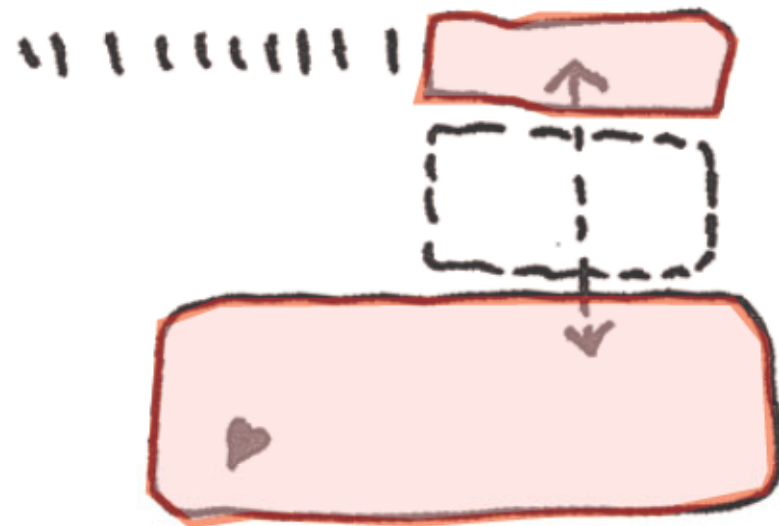
### ENTRY SEQUENCE - PREFERRED OPTION

#### ARCHITECTURAL QUALITIES

- 1 - Impressive arrivals hall with outlook across St Mary's Cathedral Square
- 2 - Clear view + access to the heart
- 3 - Primary one level - ticketing, cloak, amenities, shop, heart
- 4 - Excellent group entry with high level of amenity

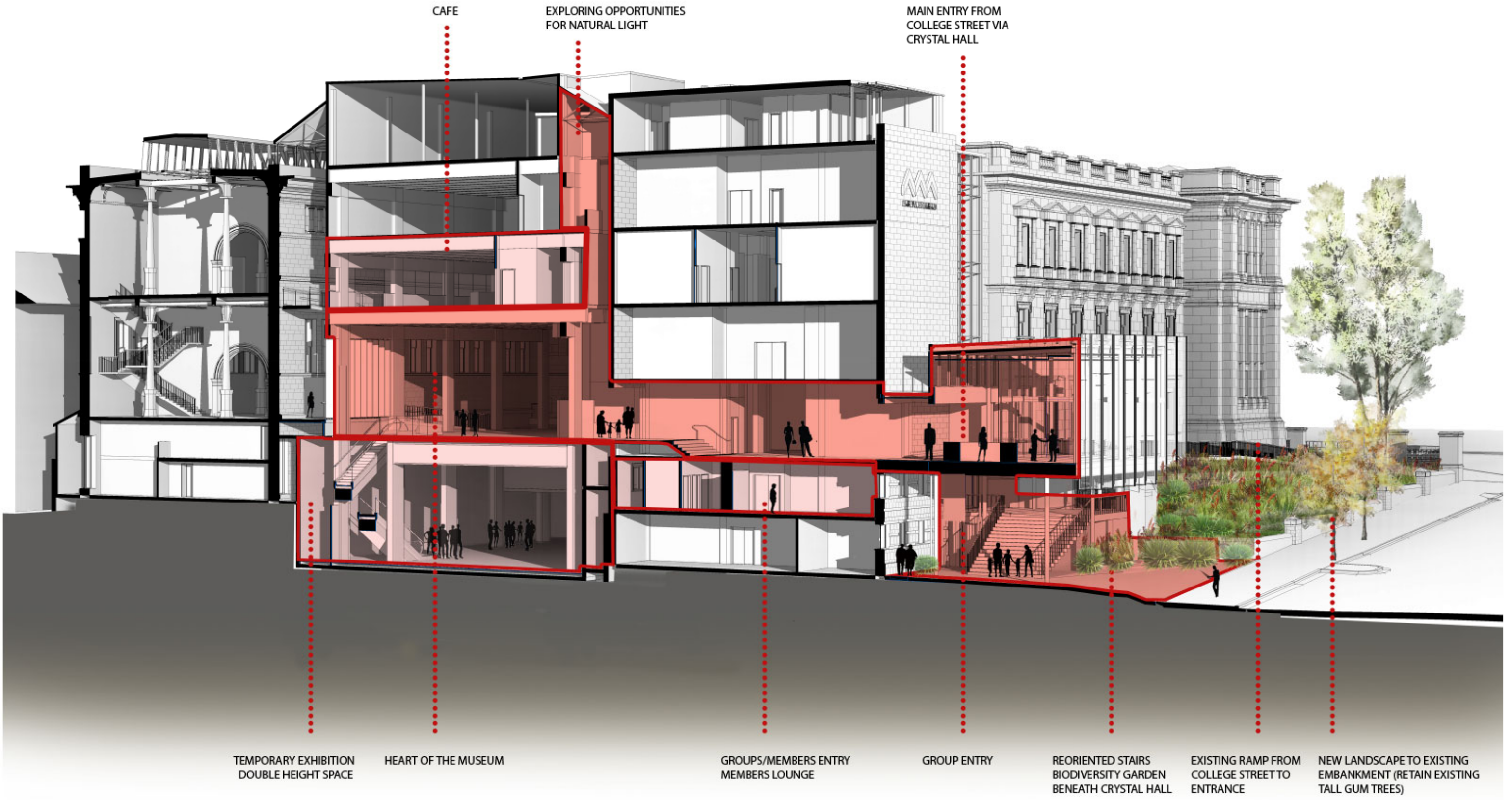


ENTRY SCHEME - PERSPECTIVE SKETCH





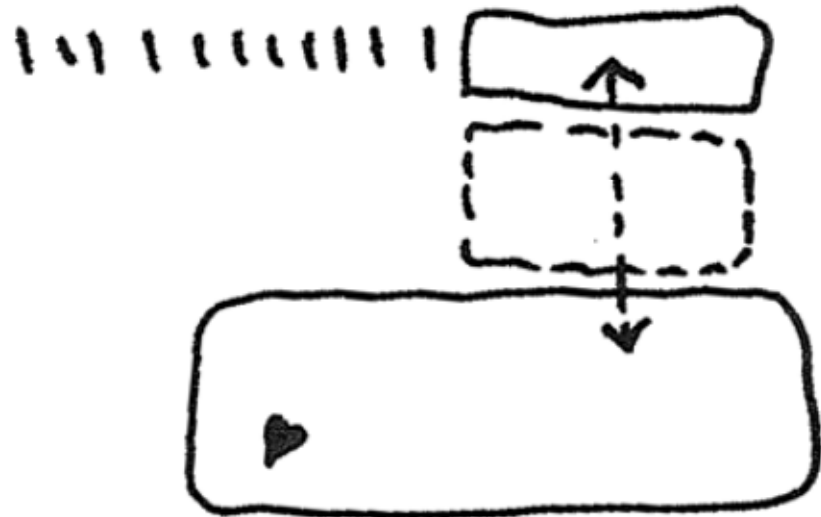
# CONCEPT SECTION / PERSPECTIVE



## 4.6 DESIGN INVESTIGATION - SCENARIO OPTIONS DIAGRAM

### INTRODUCTION

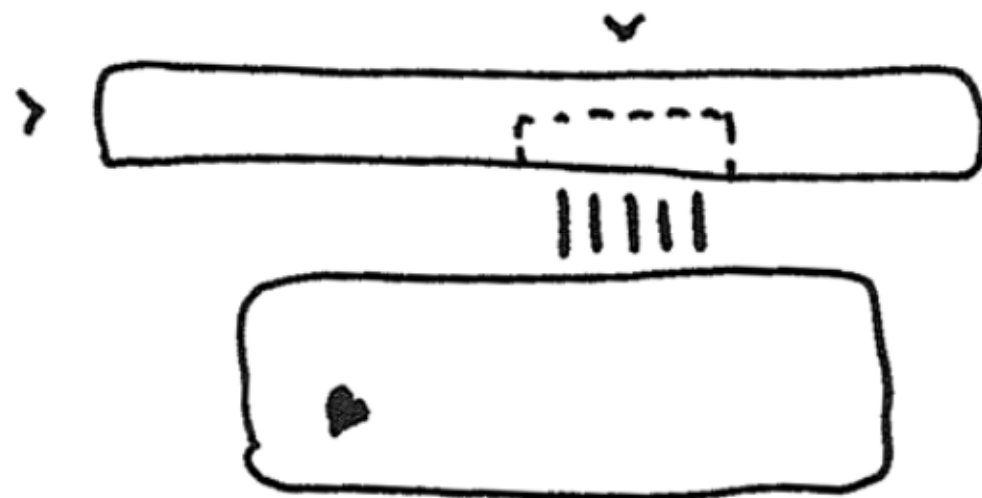
The following pages outline design investigation into two alternative schemes based on entry location, Single Entry and Dual Entry. After careful consideration the DUAL ENTRY SCHEME was selected as the preferred option.



### DUAL ENTRY SCHEME

#### ARCHITECTURAL QUALITIES

- 1 - Impressive arrivals hall with outlook across St Mary's Cathedral Square
- 2 - Clear view + access to the heart
- 3 - Primarily one level - ticketing, cloakroom, amenities, shop, heart
- 4 - Excellent group entry with high level of amenity

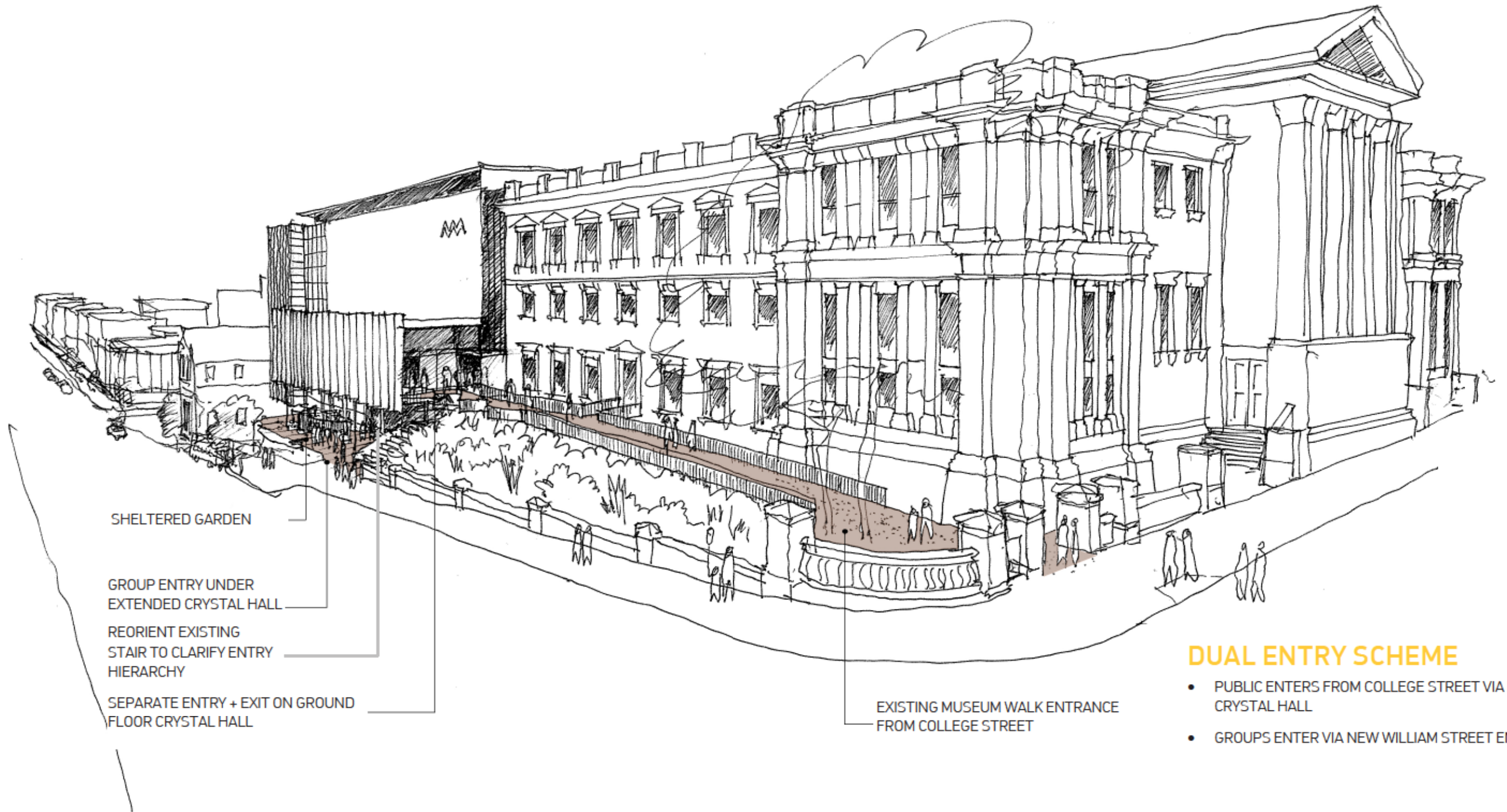


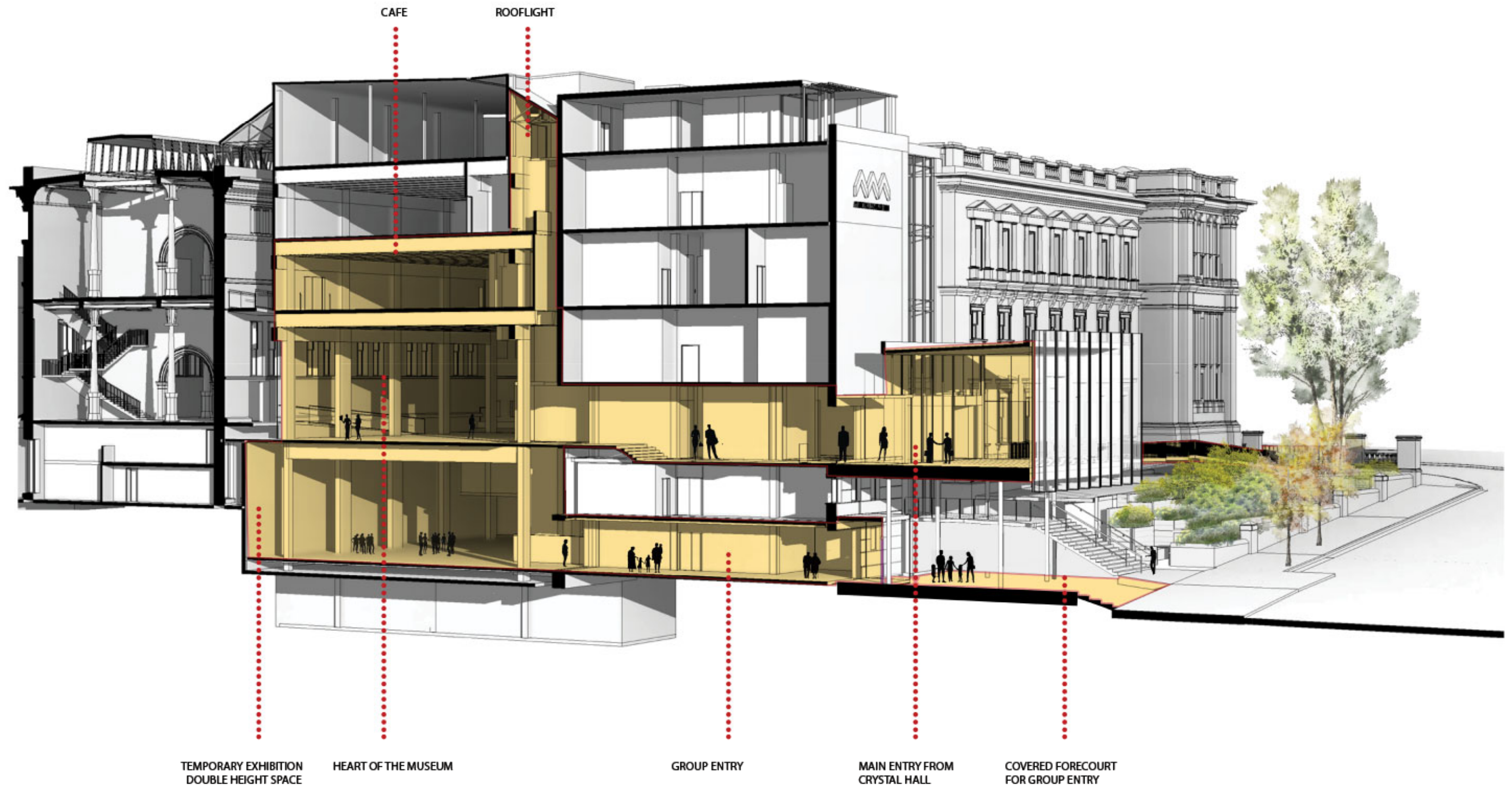
## SINGLE ENTRY SCHEME

### ARCHITECTURAL QUALITIES

- 1 - Gracious civic space with grand covered forecourt
- 2 - Enhanced heritage setting
- 3 - Clear single entry / exit
- 4 - Impressive vaulted Museum entry space

## 4.7 DUAL ENTRY SCHEME

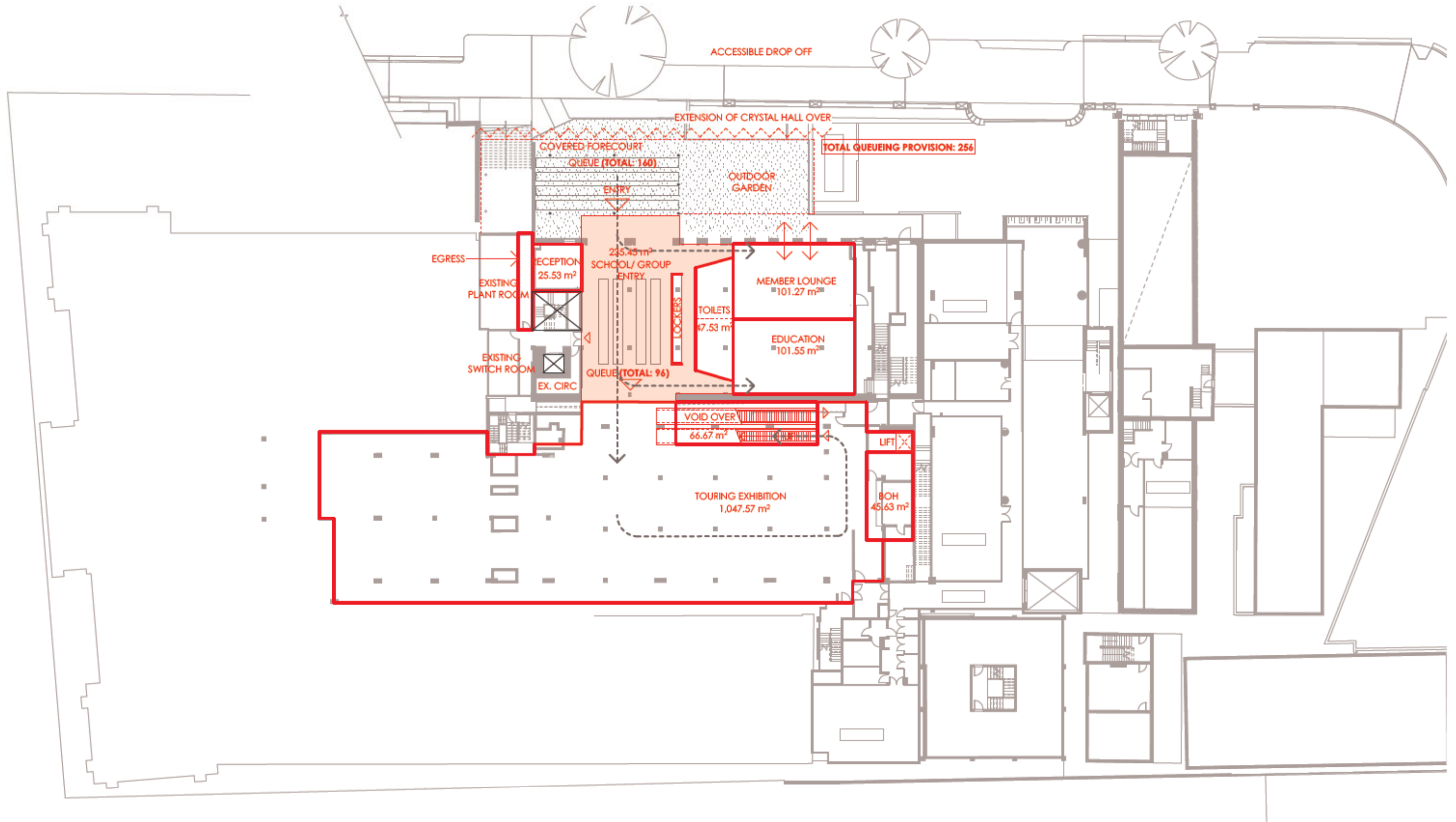




## DUAL ENTRY SCHEME

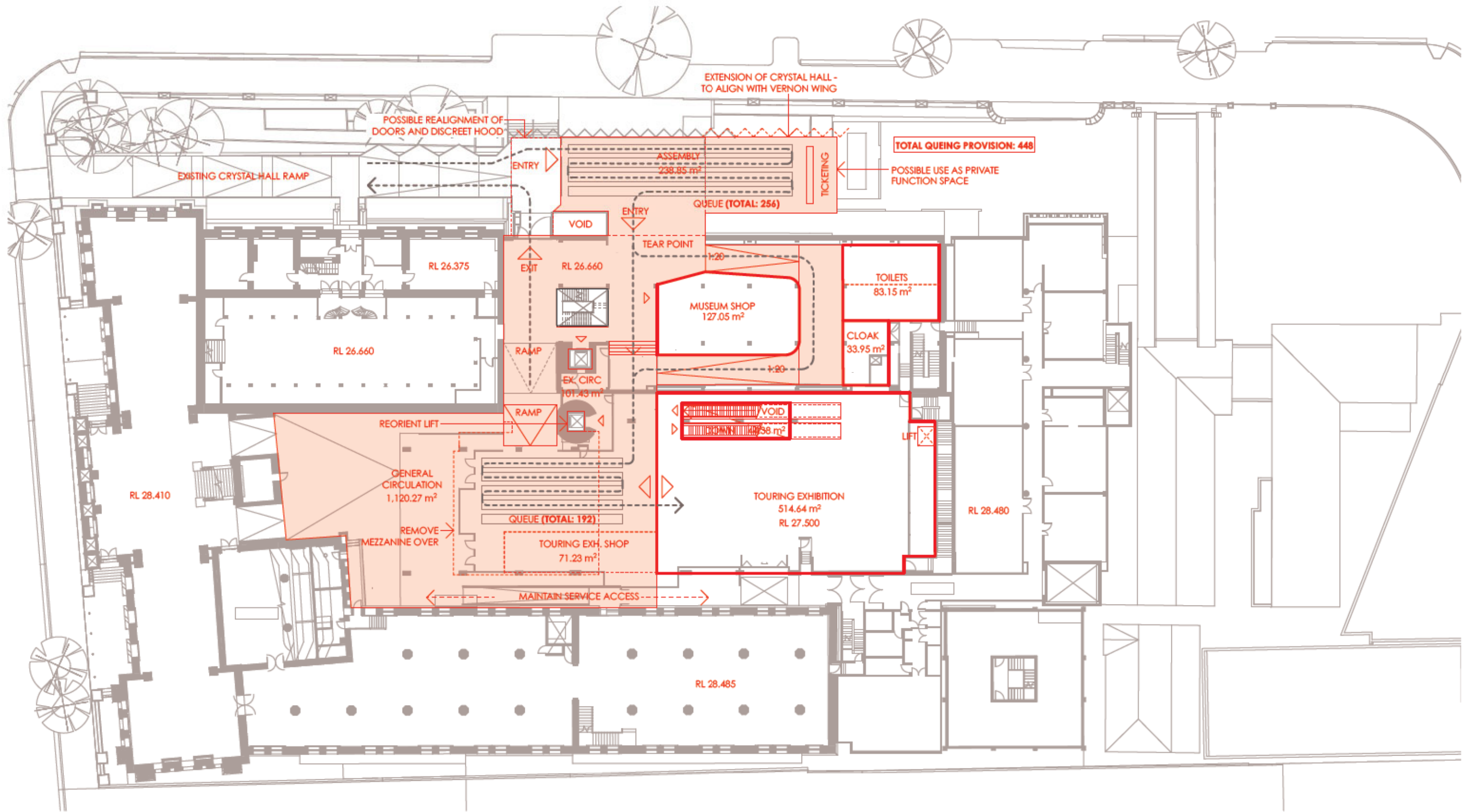
# DUAL ENTRY SCHEME

## BASEMENT

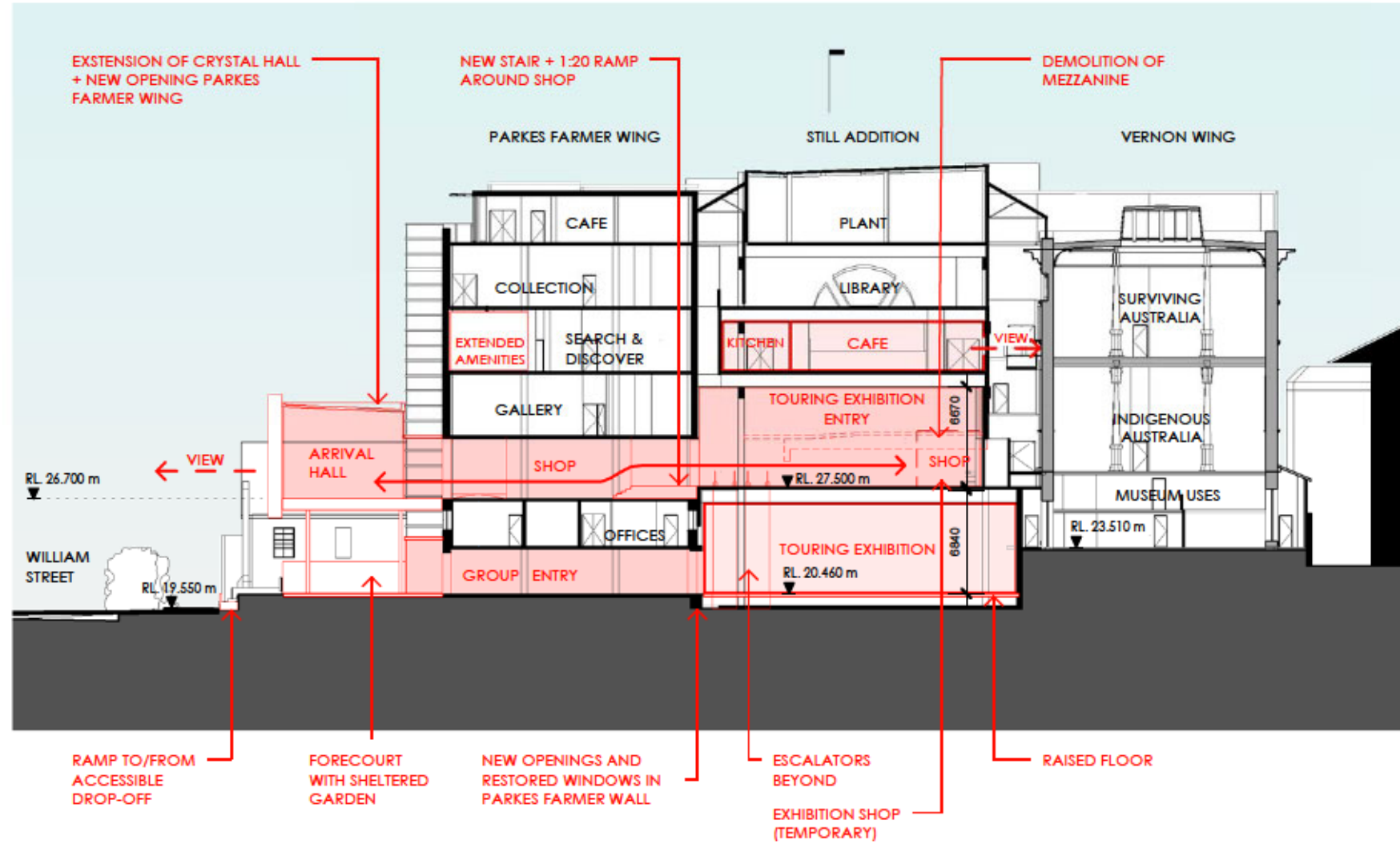




GROUND



## DUAL ENTRY SCHEME - SECTION



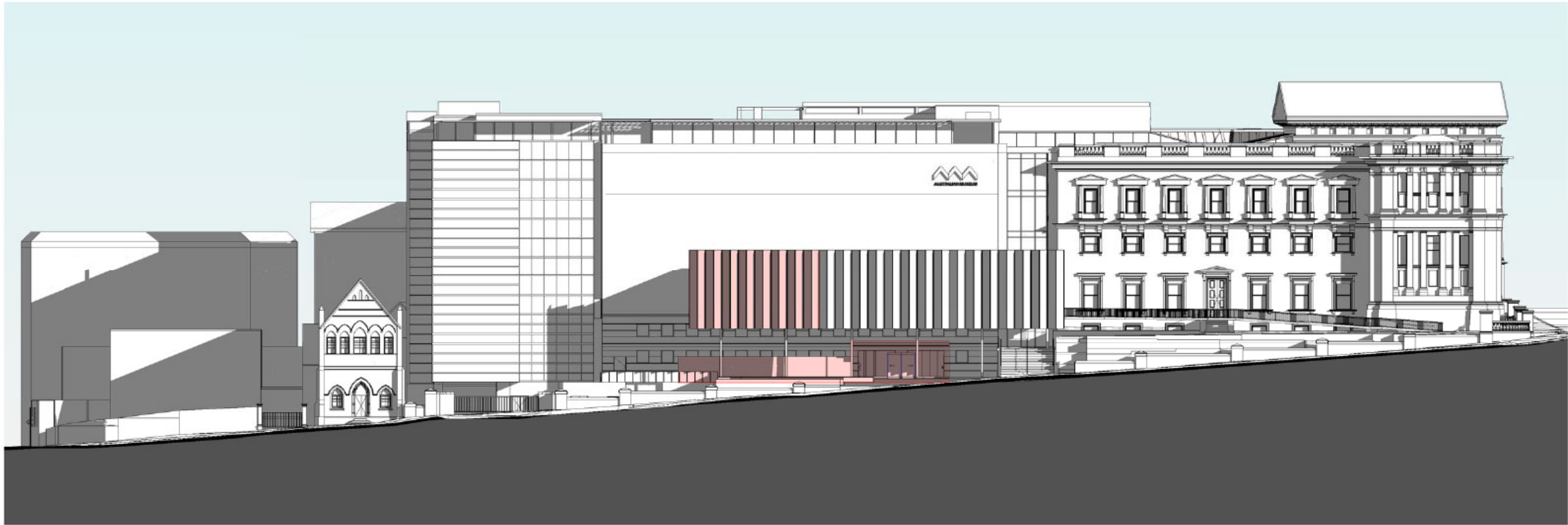
- NEW WORK - GENERAL
- NEW WORK - MAJOR PUBLIC CIRCULATION ("HEART" OF THE MUSEUM)

## DUAL ENTRY SCHEME

- PUBLIC ENTERS FROM COLLEGE STREET VIA EXISTING CRYSTAL HALL
- GROUPS ENTER VIA NEW WILLIAM STREET ENTRY



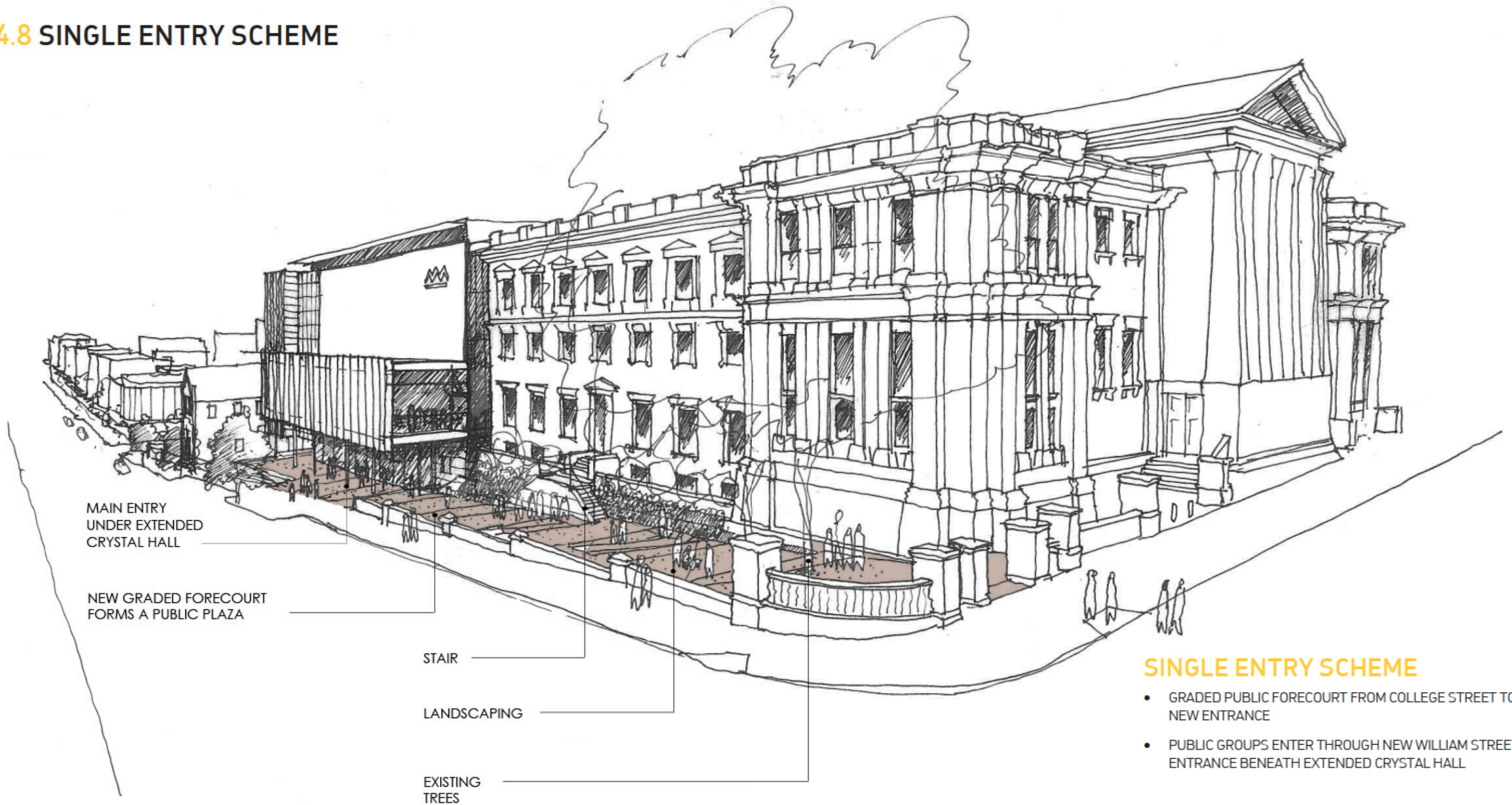
DUAL ENTRY SCHEME - ELEVATION

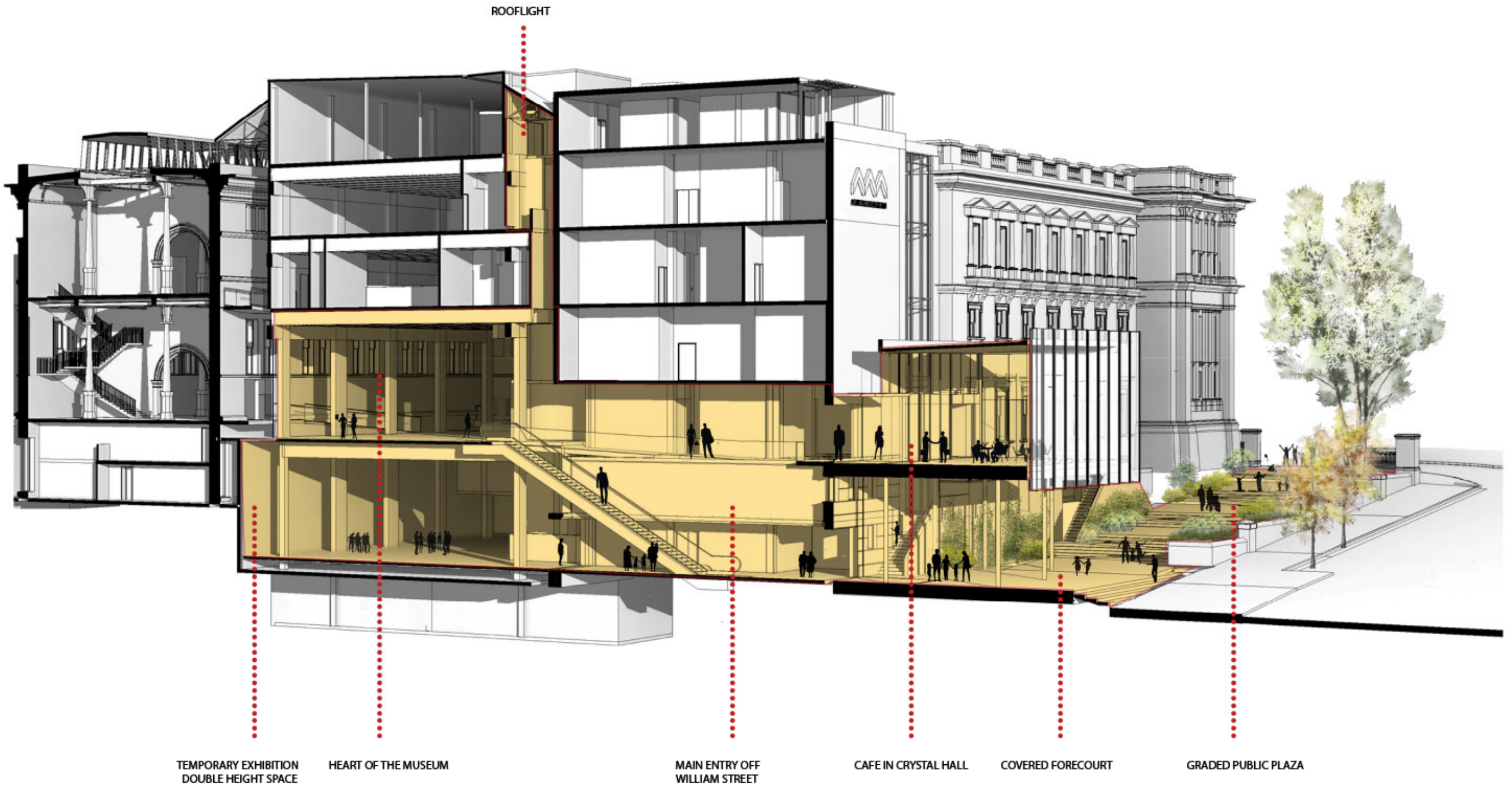


YURONG STREET

COLLEGE STREET

## 4.8 SINGLE ENTRY SCHEME





TEMPORARY EXHIBITION  
DOUBLE HEIGHT SPACE

HEART OF THE MUSEUM

MAIN ENTRY OFF  
WILLIAM STREET

CAFE IN CRYSTAL HALL

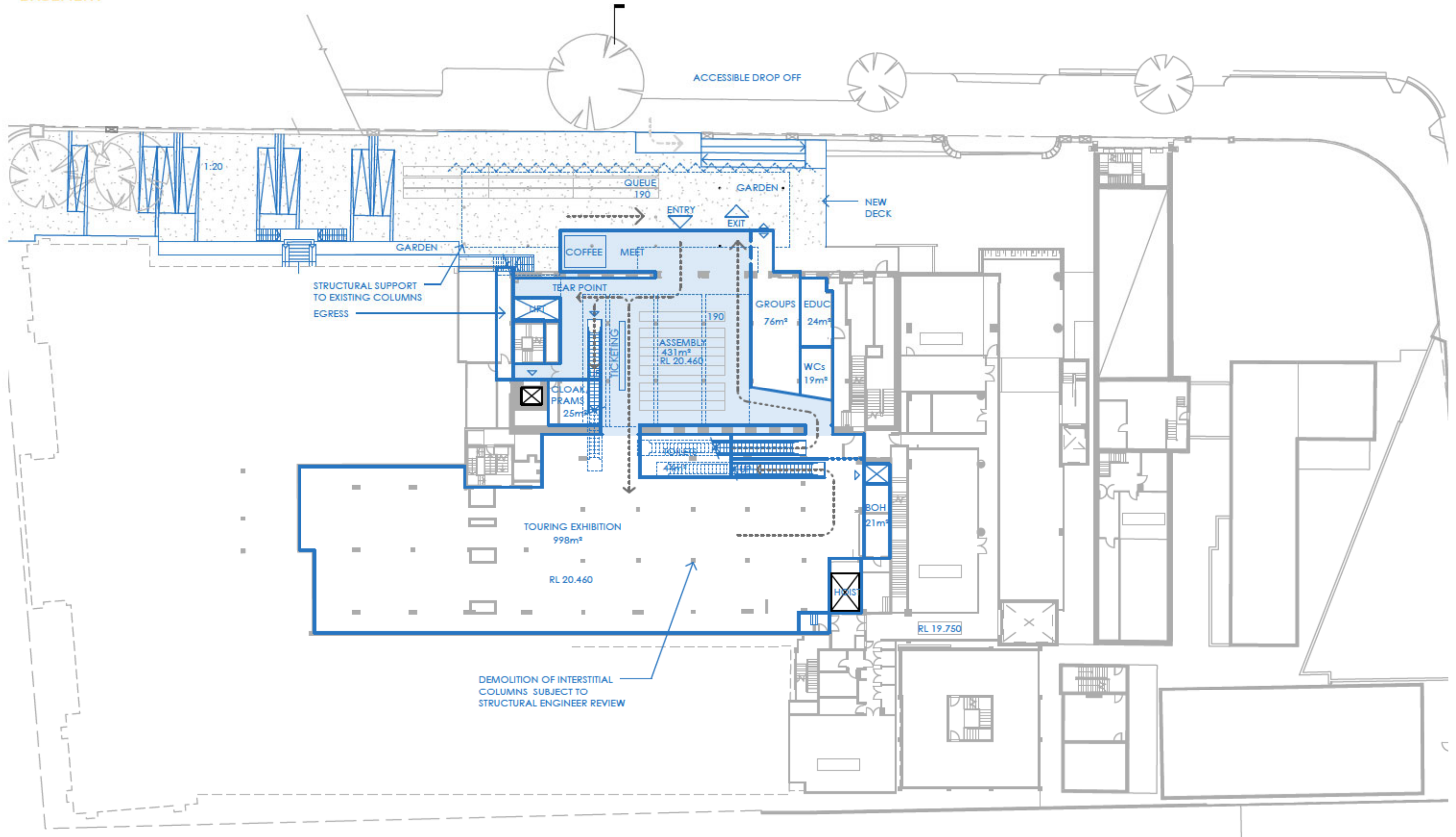
COVERED FORECOURT

GRADED PUBLIC PLAZA

## SINGLE ENTRY SCHEME

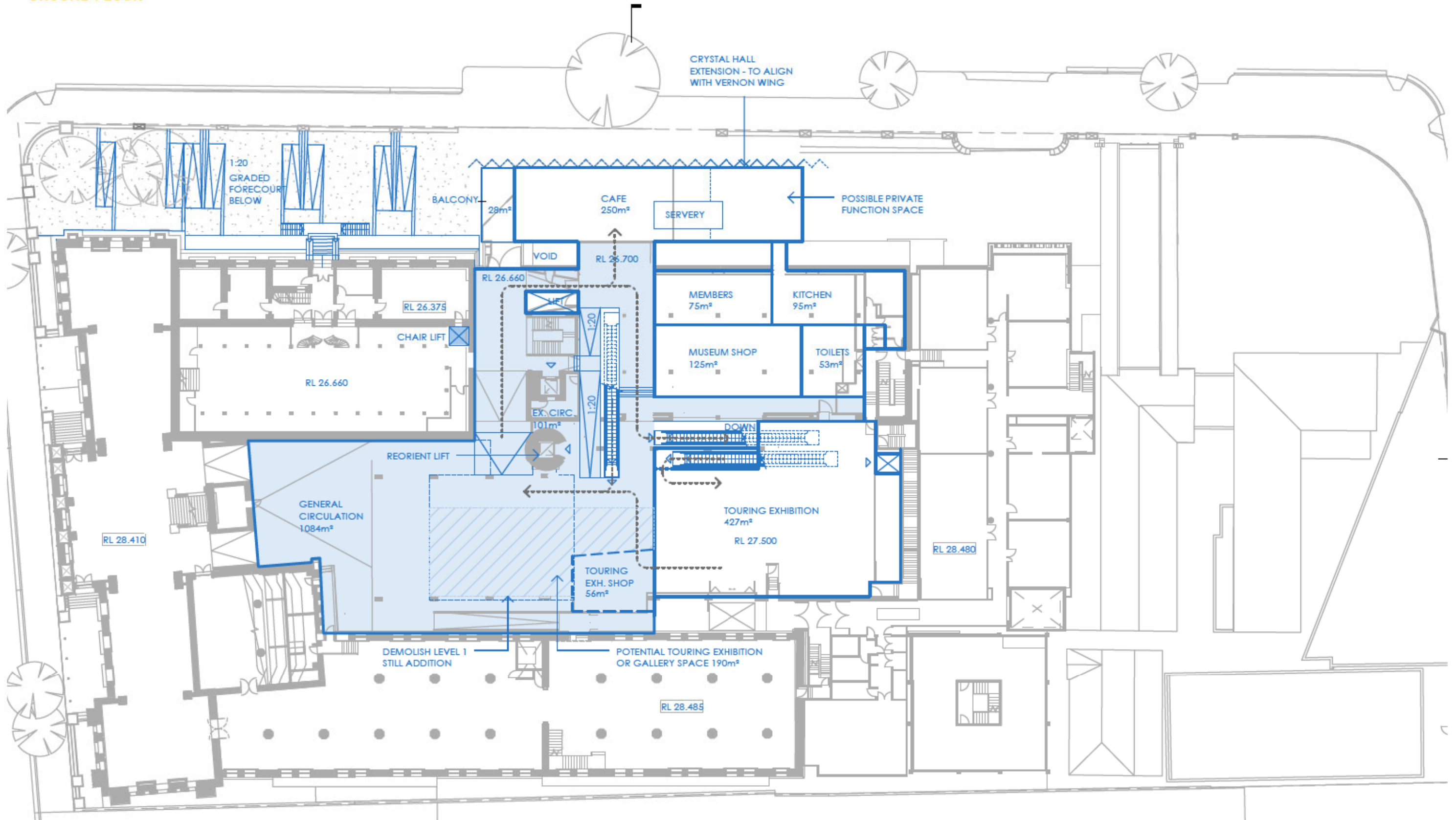
# SINGLE ENTRY SCHEME

## BASEMENT

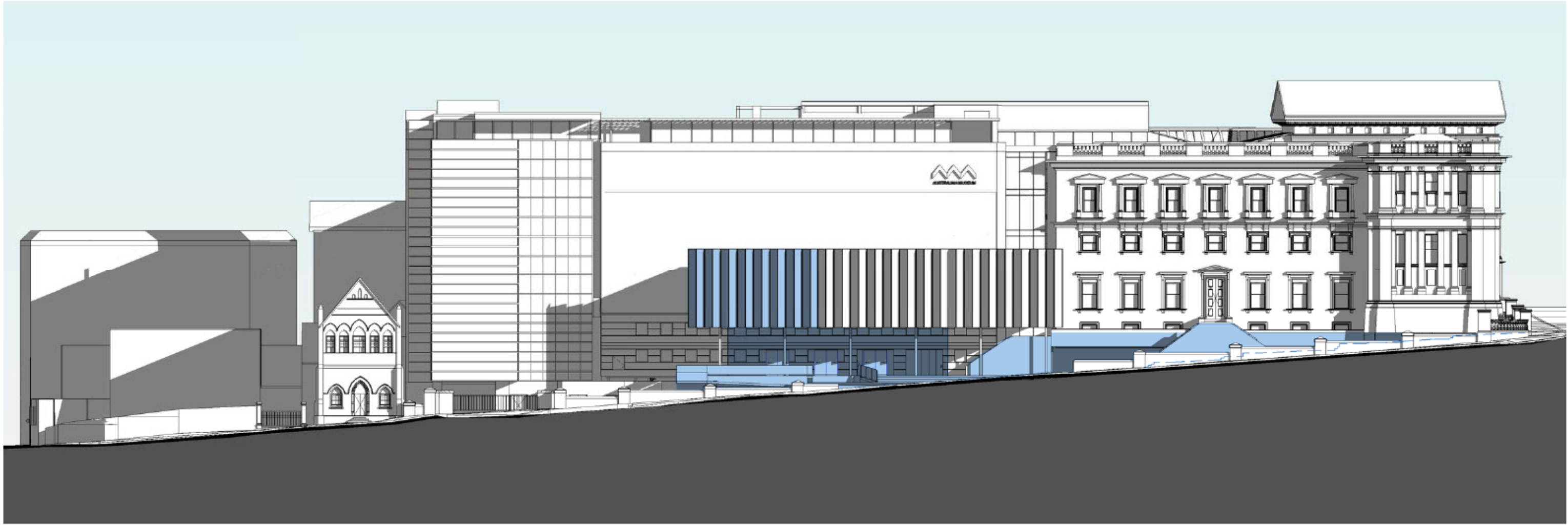




GROUND FLOOR



SINGLE ENTRY SCHEME - ELEVATION

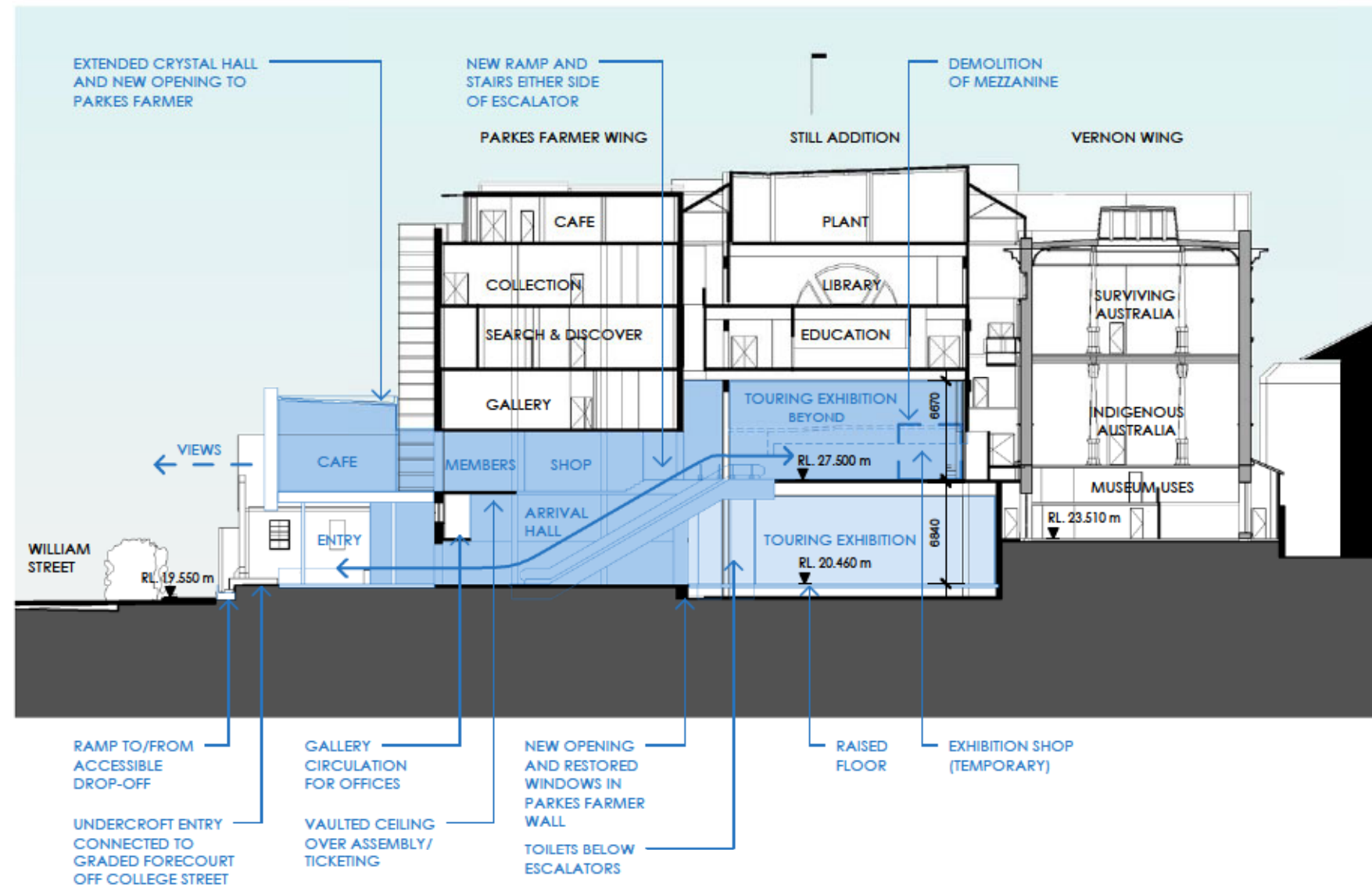


YURONG STREET

COLLEGE STREET



## SINGLE ENTRY SCHEME - SECTION

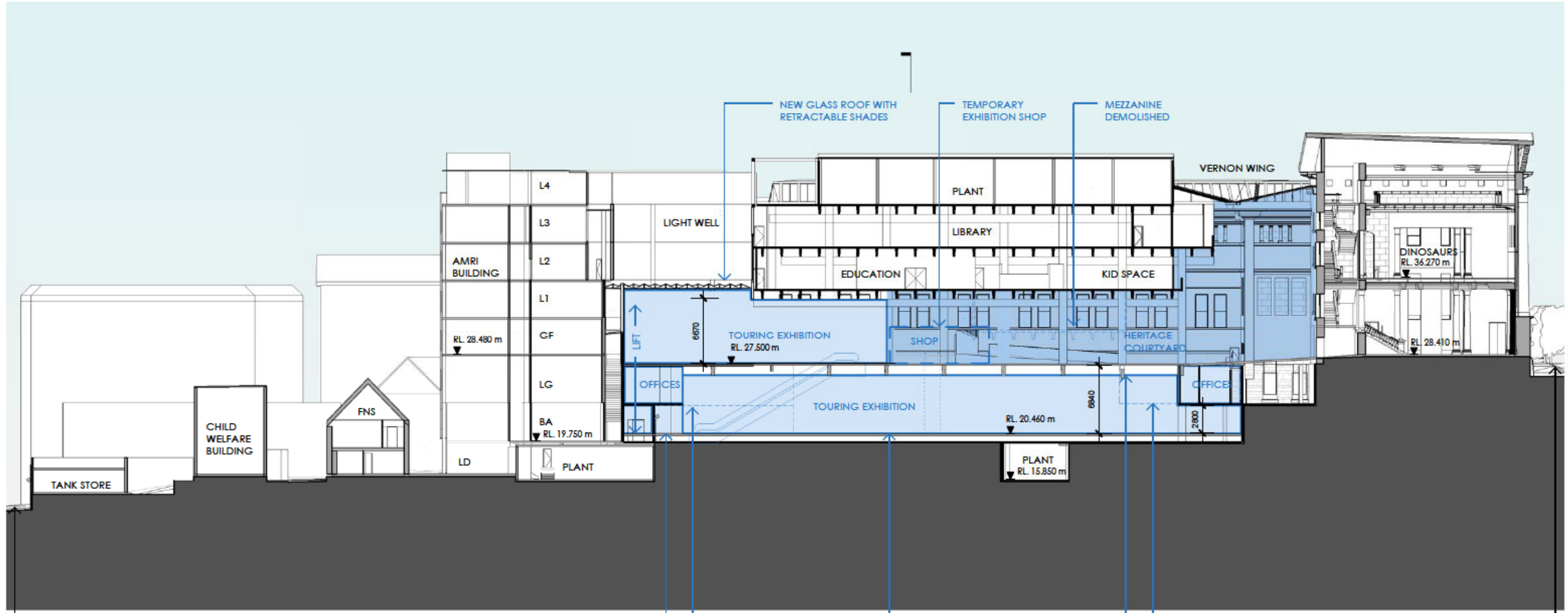


- NEW WORK - GENERAL
- NEW WORK - MAJOR PUBLIC CIRCULATION ("HEART" OF THE MUSEUM)

## SINGLE ENTRY SCHEME

- GRADED PUBLIC FORECOURT FROM COLLEGE STREET TO NEW ENTRANCE
- PUBLIC GROUPS ENTER THROUGH NEW WILLIAM STREET ENTRANCE BENEATH EXTENDED CRYSTAL HALL

SINGLE ENTRY SCHEME - LONG SECTION



YURONG STREET

NEW HOIST FOR GOODS ACCESS FROM AMRI BUILDING

LINE OF DEMOLISHED COLLECTIONS / CONSERVATION

NEW RAISED FLOOR LEVEL TO SUIT WILLIAM STREET ENTRY

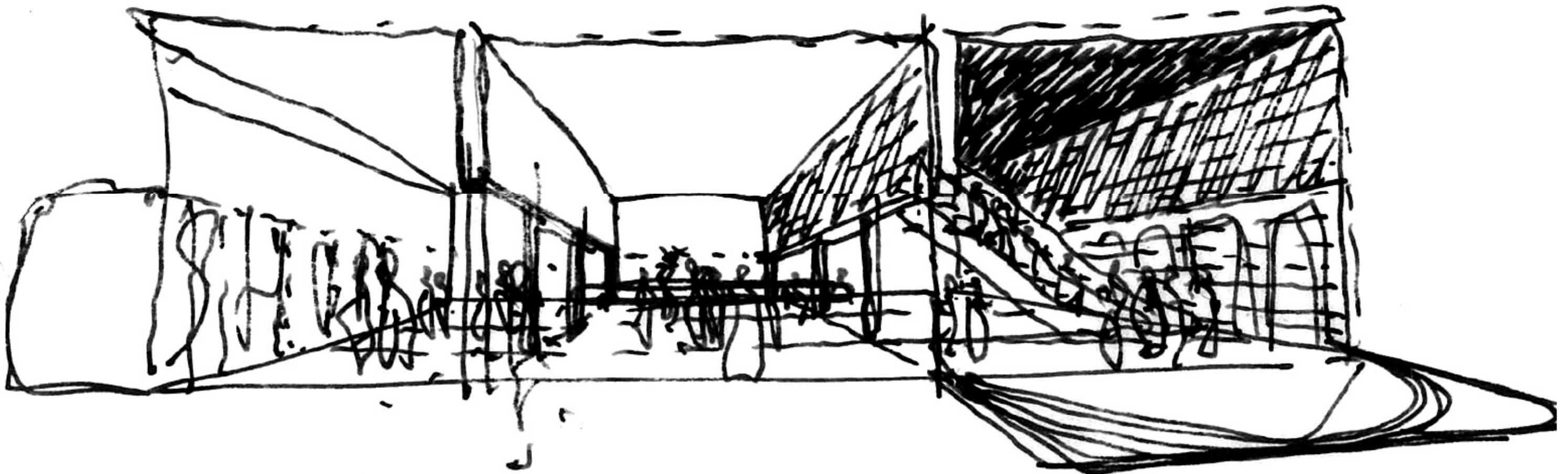
DEMOLITION OF OFFICES SUBJECT TO STRUCTURAL ENGINEER'S DESIGN

NEW STRUCTURE TO SUPPORT EXISTING FLOOR SUBJECT TO STRUCTURAL ENGINEER'S DESIGN

COLLEGE STREET

- NEW WORK - GENERAL
- NEW WORK - MAJOR PUBLIC CIRCULATION ("HEART" OF THE MUSEUM)

## SINGLE ENTRY SCHEME - SKETCH



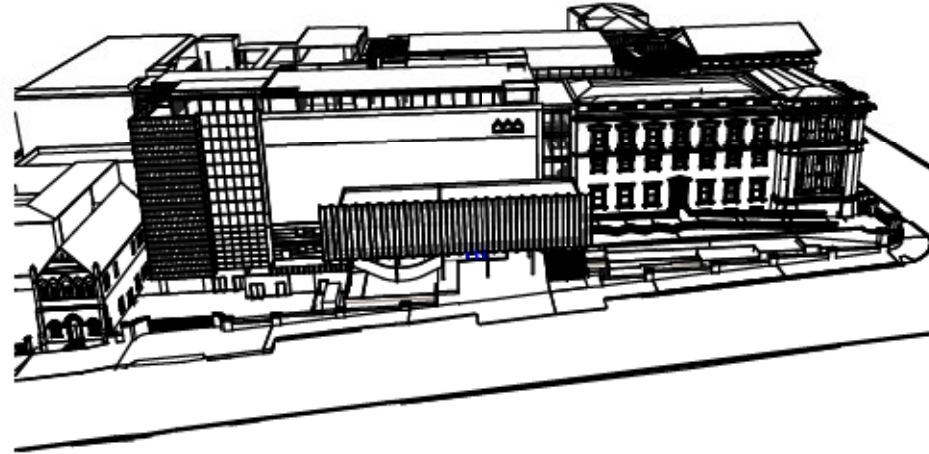
### CONCEPT SKETCH

BASEMENT LEVEL PARKES FARMER WING PUBLIC ENTRANCE LOBBY. DOUBLE HEIGHT SPACE WITH VAULTED CEILING AND EXPRESSED SANDSTONE FACADES. ESCALATORS TAKE VISITORS DIRECTLY TO GROUND FLOOR ATRIUM (THE HEART)

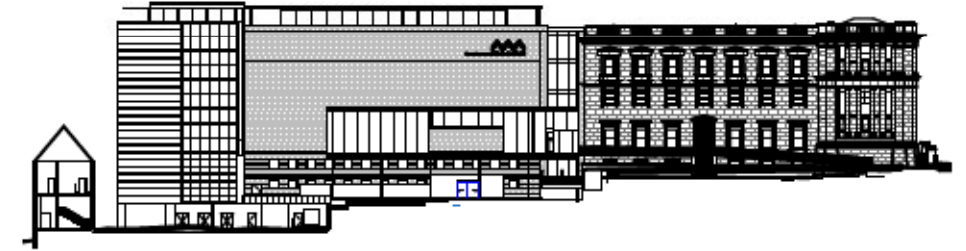
DUAL ENTRY SCHEME - 3D VIEW



DUAL ENTRY SCHEME - 3D VIEW



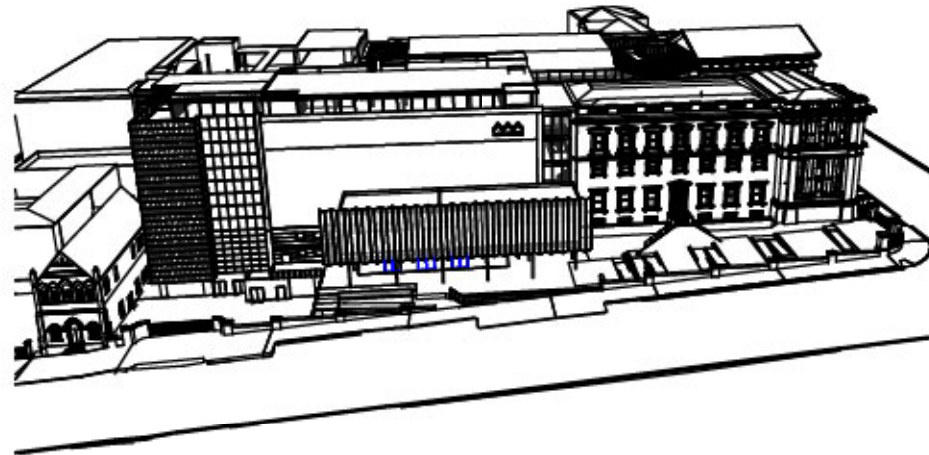
DUAL ENTRY SCHEME - SECTION



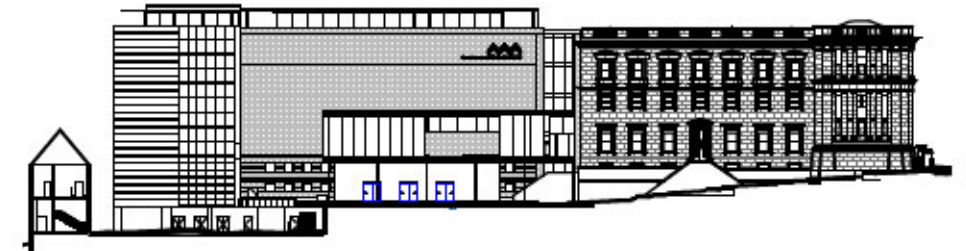
SINGLE ENTRY SCHEME - 3D VIEW



SINGLE ENTRY SCHEME - 3D VIEW

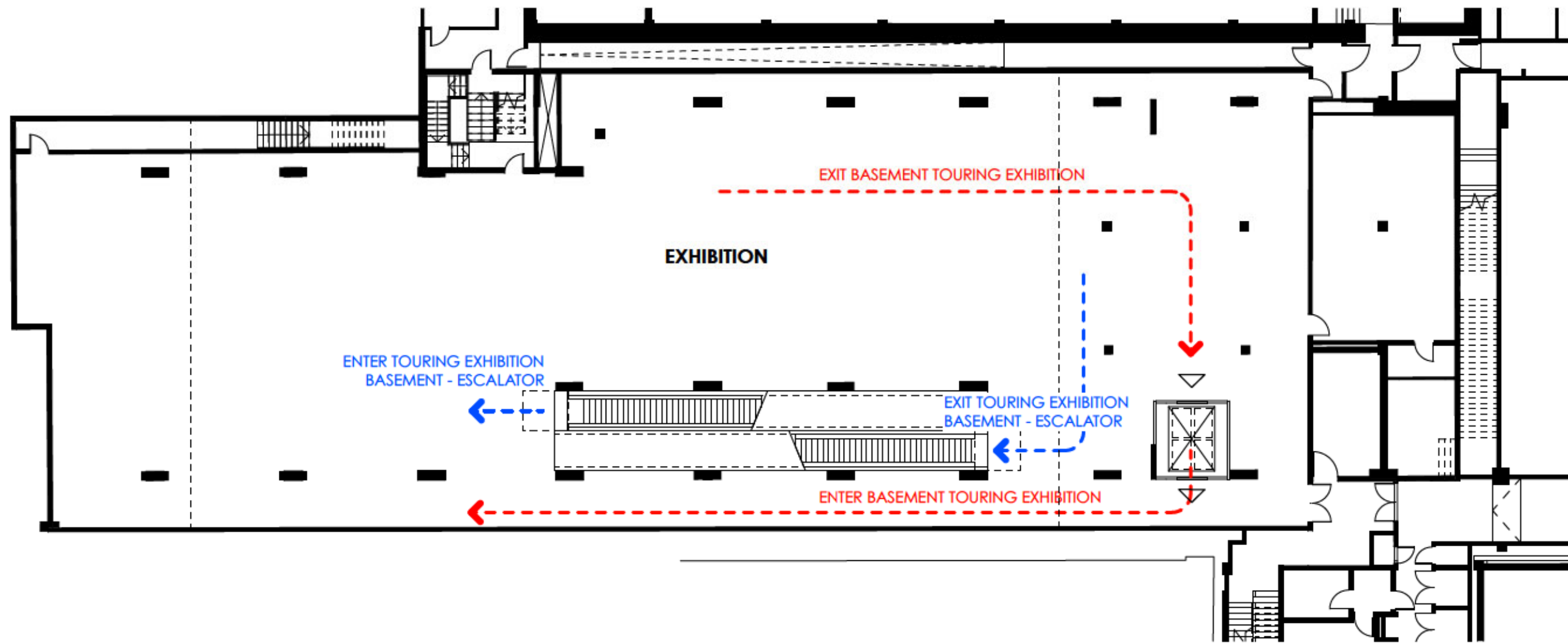


SINGLE ENTRY SCHEME - SECTION

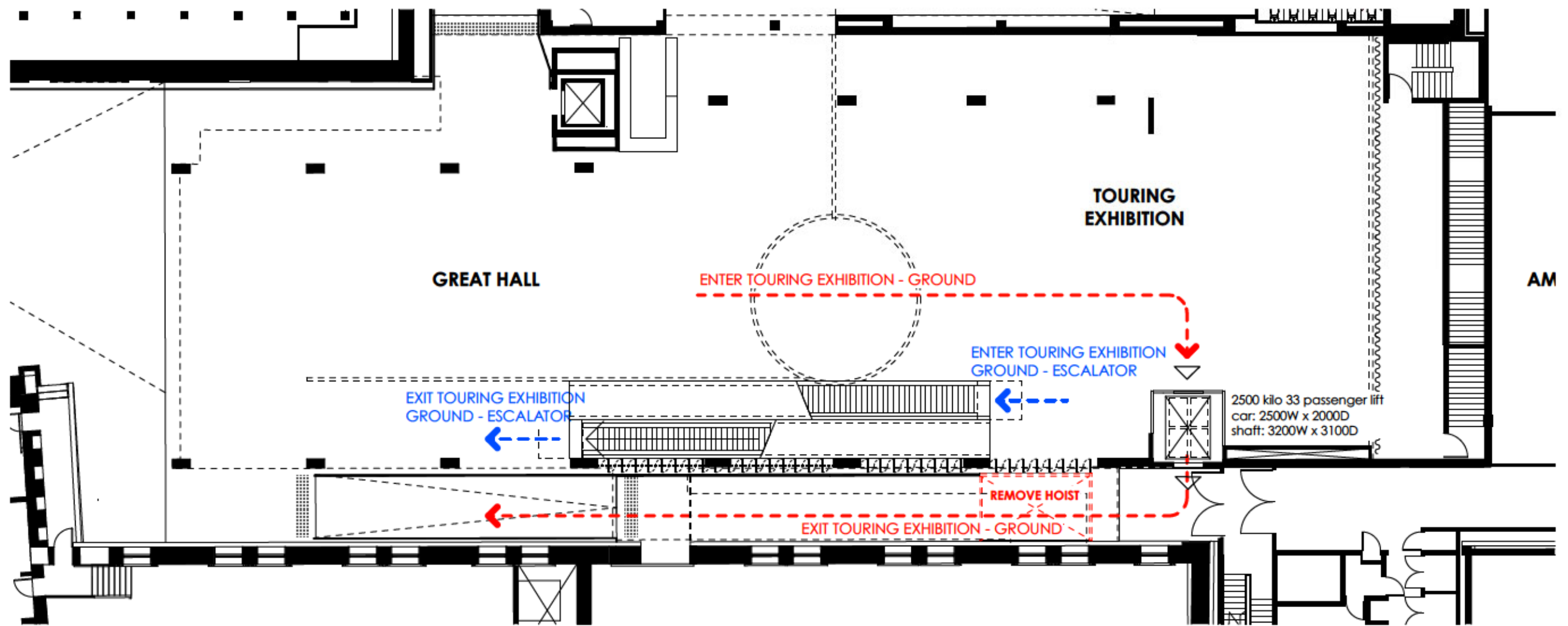




## 4.9 ALTERNATIVE LIFT LOCATION



Basement Level



Ground Level

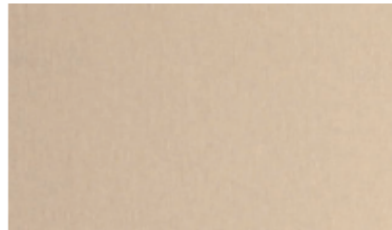


## 4.10 EXTERNAL MATERIALS



*design intent: the colours of refracted light*

**GL1** Glazing  
Internal diamond shades (to match existing)  
Colour Laminated glass with pyramid glass interlay (to match existing)



*design intent: changes in fire regulation since 2016 has triggered the requirement for new cladding to Crystal Hall. Selection is a warmer tone than the original zinc and more complimentary to sandstone facade.*

**CL1** External Wall Cladding type 1  
Zinc cladding: standing seam  
location: Crystal Hall cladding



*design intent: reflecting the water, reflecting the garden, reflecting the pavement pattern, reflecting the activity of children.*

**SOF1** Soffit  
Aluminium Cladding: Mirror finish  
location: Crystal Hall soffit



*design intent: recessive to the heritage stone and garden, like a soft shadow.*

**CL2** External Wall Cladding type 2  
Steel cladding: warm bronze  
location: retaining wall to undercroft garden



*design intent: to match the existing heritage facade*

**Existing sandstone**  
location: facing to Parkes Farmer Wing



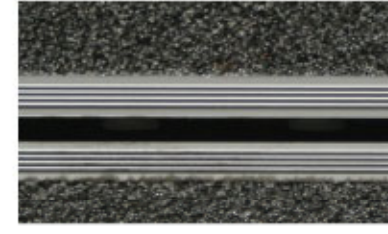
*design intent: to match the existing sandstone wall*

**Existing sandstone**  
location: rusticated sandstone retaining wall



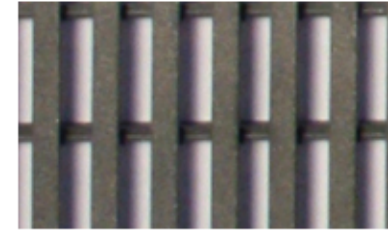
*design intent: Australian stone - 'feels' like an extension of the public domain into a public institution*

**PAV1** Paving and flooring  
Honed Bluestone (to match existing)  
location: Crystal Hall/ Ground level



*design intent: utilitarian and colour matched to bluestone. Defines the entry threshold*

**FL1** Floor Finish type 1  
Latham Matting  
location: Crystal Hall entry threshold



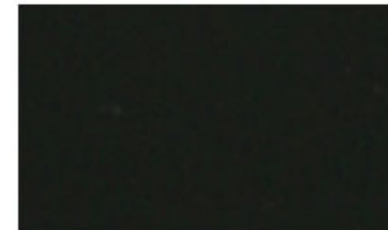
*design intent: light and filigree, looks almost temporary*

**FL2** Floor finish type 2  
Garnet Blasted Stainless Steel trench grate  
location: infill to Crystal Hall floor



*design intent: Australian stone*

**PAV2** Paving and flooring  
Wee Jasper Stone  
location: Crystal Hall undercroft



*design intent: to match the existing Crystal Hall roof*

**RS1** Metal roof sheeting  
Colorbond: Monument (to match existing)  
Crystal Hall and Touring Exhibition roof



*design intent: to reuse the existing stair material*

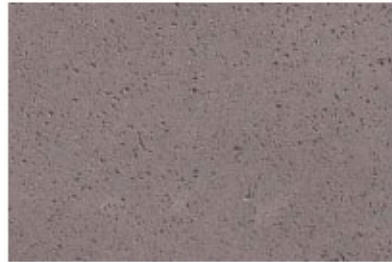
**ST1** Stair type 1  
Existing pink Granite  
location: stair to undercroft



*design intent: light and filigree, in contrast to the mass of stone*

**HR1** Handrail Type 1  
Palisade handrail (to match existing)  
location: all external handrails

## 4.11 INTERNAL MATERIALS



*design intent: Australian stone - 'feels' like an extension of the public domain into a public institution*

**PAV** Paving and flooring  
Honed Bluestone (to match existing)  
location: Crystal Hall/ Ground level and undercroft



*design intent: recessive*

**CAR1** Carpet type 1  
Internal floor finish (exhibition space)  
location: touring exhibition space (basement)



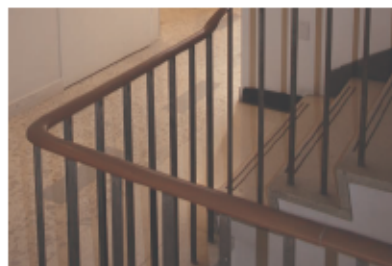
*design intent: defining thresholds between historic buildings*

**FL3** Floor finish type 3  
location: Sandstone cladding and floor inlay (to match existing)



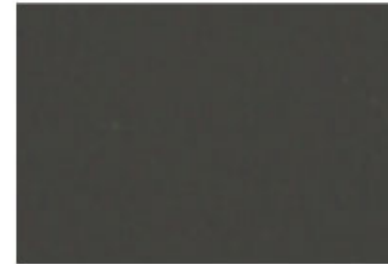
*design intent: echo of the original stair*

**FL4** Floor finish type 4  
Internal terrazzo floor finish (to match existing)  
location: relocated fire stair



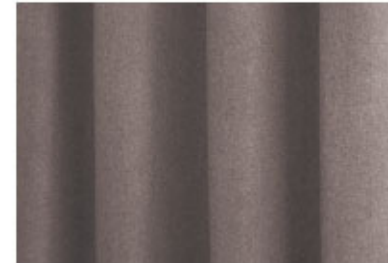
*design intent: echo of the original stair*

**HR2** Handrail type 2  
bronze handrail (to match existing)  
location: relocated fire stair



*design intent: recessive*

**PA1** Paint type 1  
Black Paint  
location: touring exhibition space



*design intent: recessive*

**CUR** Curtain  
Mid Gray Curtain to exhibition space  
location: touring exhibition space (eastern end)



*design intent: like the wooden cabinets of home*

**LIN1** Internal wall lining  
Hardwood timber; Tasmanian Oak  
location: touring exhibition - louvred wall (north face)



*design intent: to reveal the Vernon Wing facade and provide acoustic and light separation during exhibition mode*

**LIN2** Internal wall lining type 2  
painted - exhibition graphics (changing)  
location: touring exhibition - louvred wall (south face)



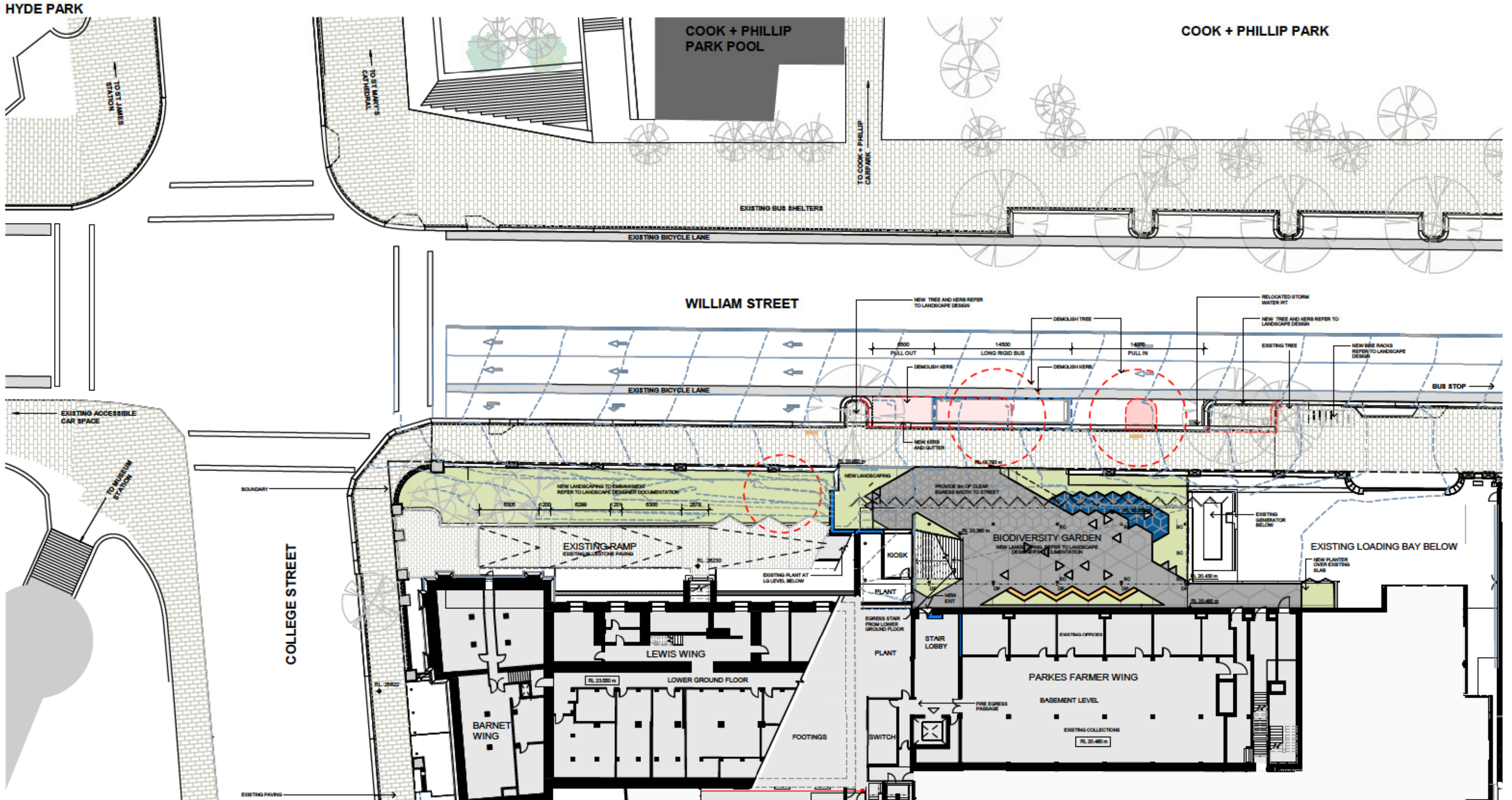
*design intent: to 'open up' the level 2 cafe and connect to the heart*

**ME1** Mesh type 1  
Stainless Steel cable mesh  
location: level 2 screening

# 4.12 ARCHITECTURAL DRAWINGS

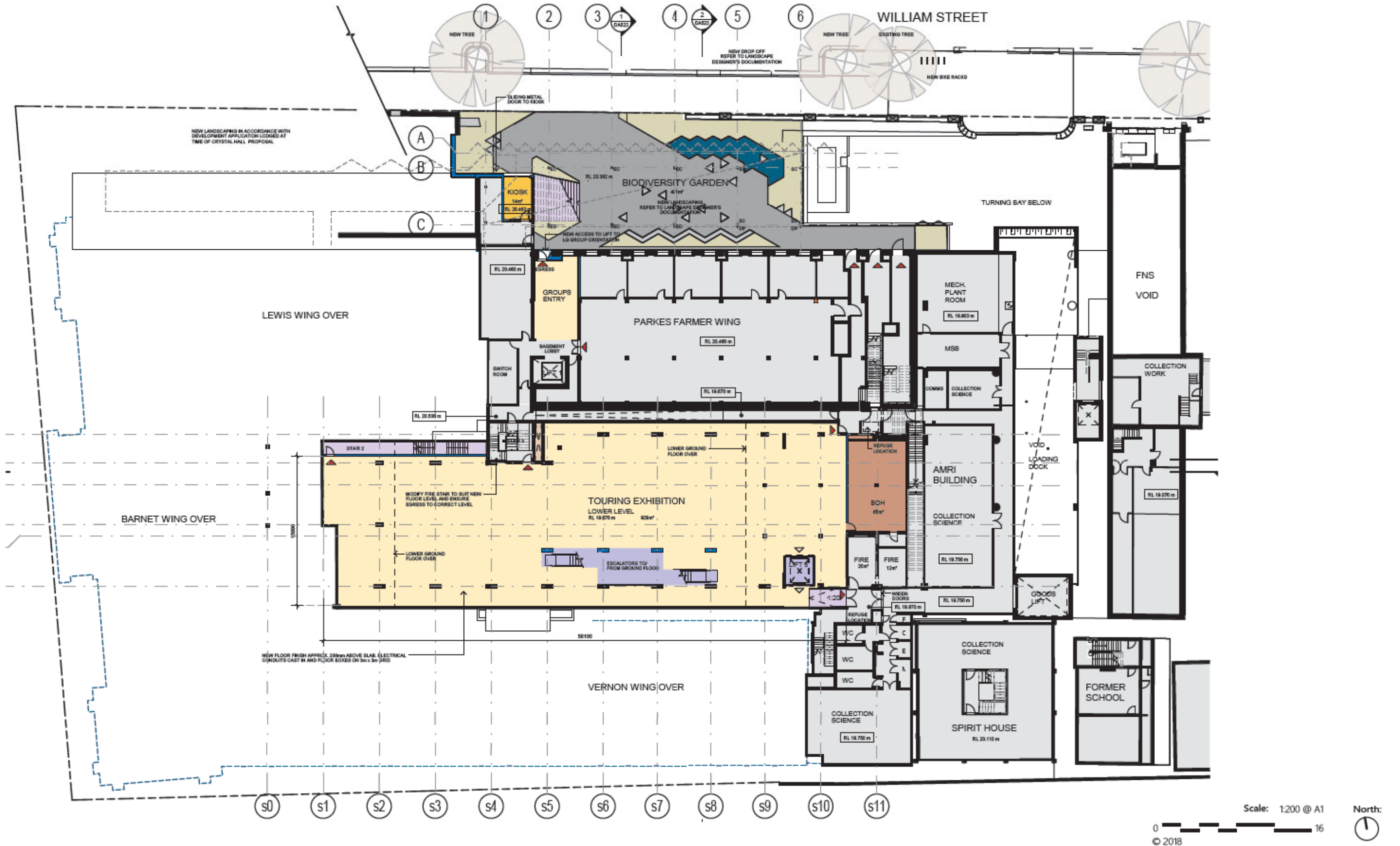
## PUBLIC DOMAIN PLAN

Scale: 1:200 @ A1  
0 16  
© 2018  
North:



# PROPOSED PLANS OF KEY LEVELS

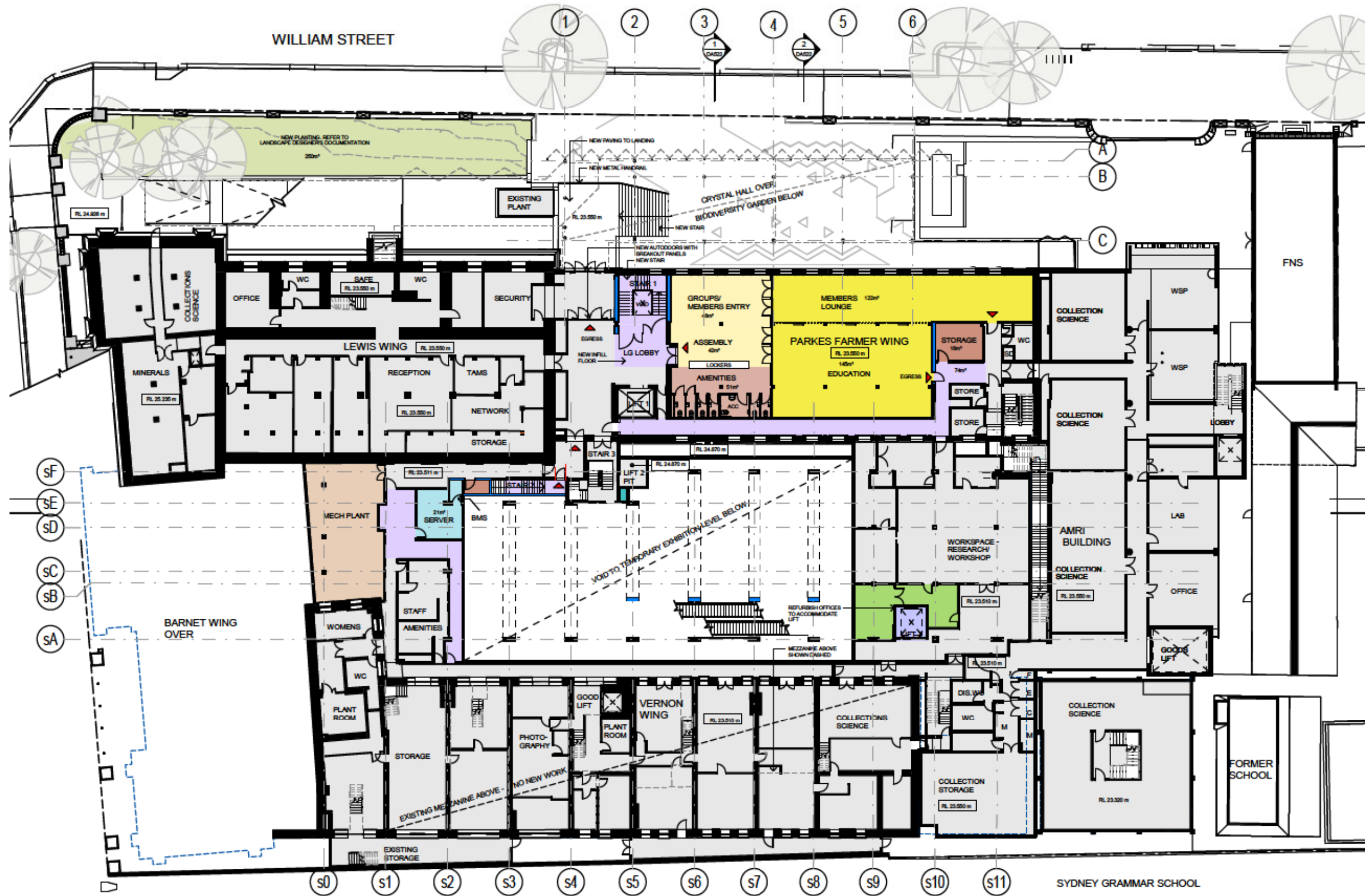
## Basement plan



Scale: 1:200 @ A1  
 0 16  
 © 2018  
 North



Lower Ground plan



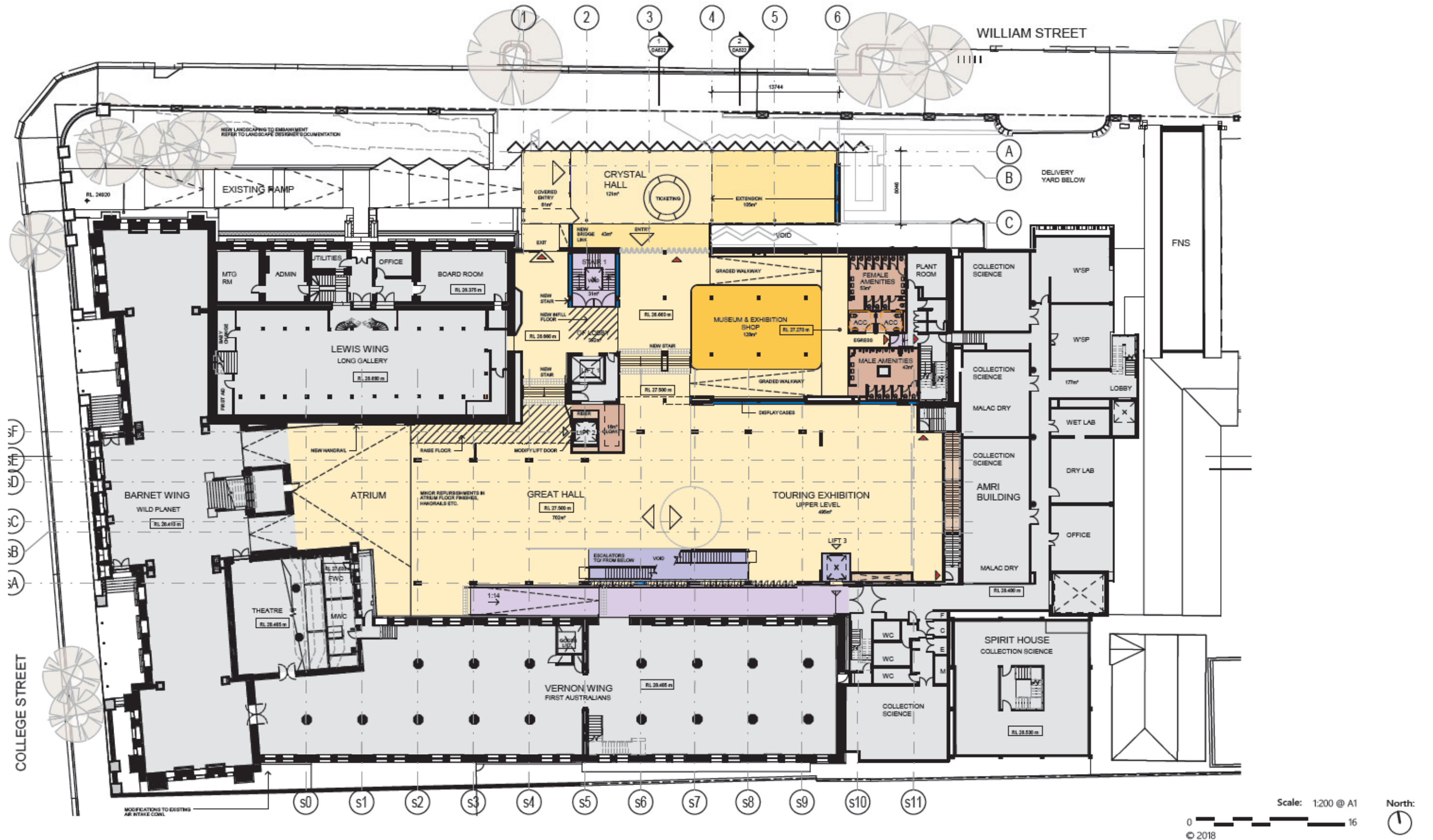
Scale: 1:200 @ A1

North

0 16

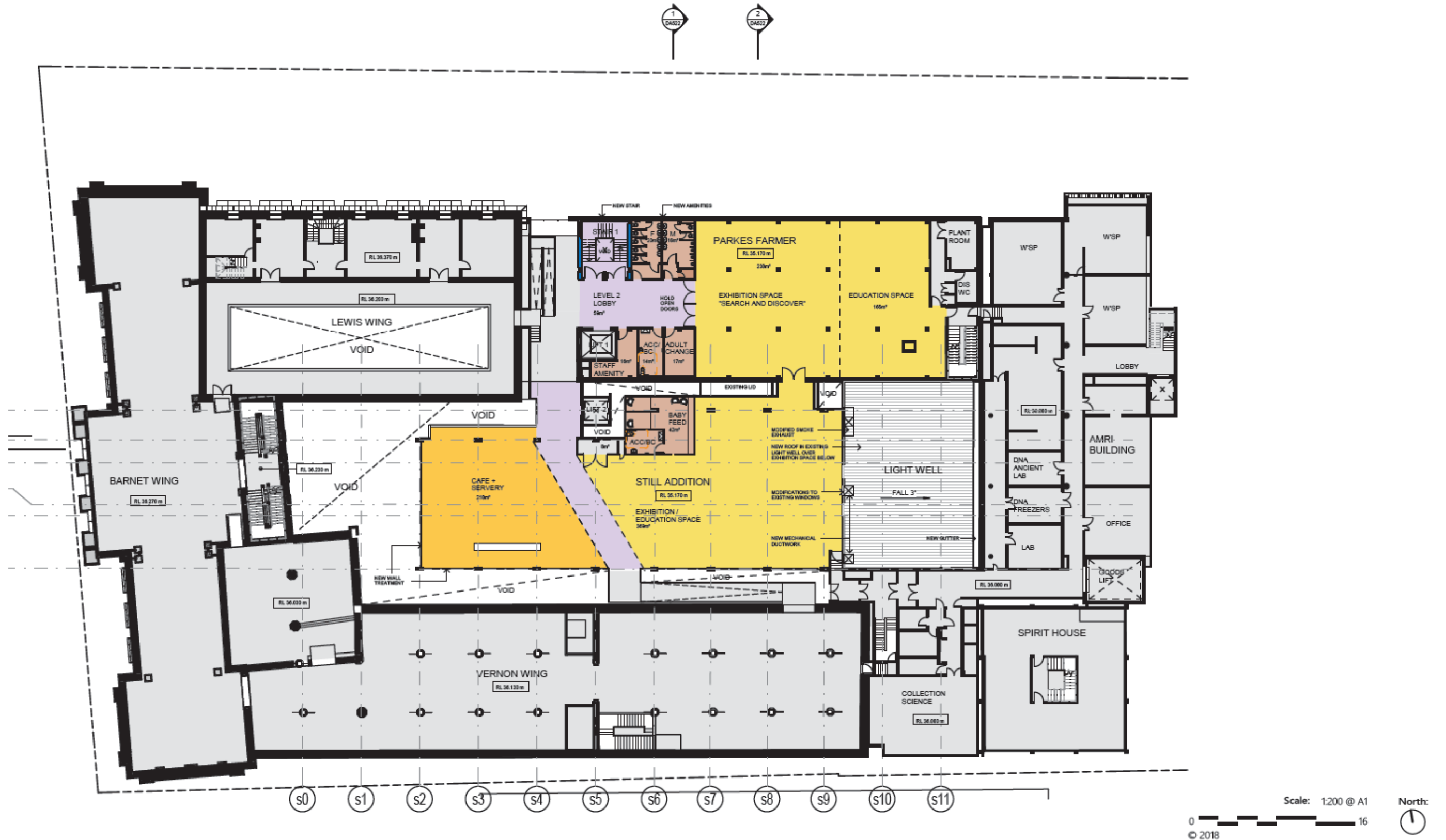
© 2018

Ground Floor plan





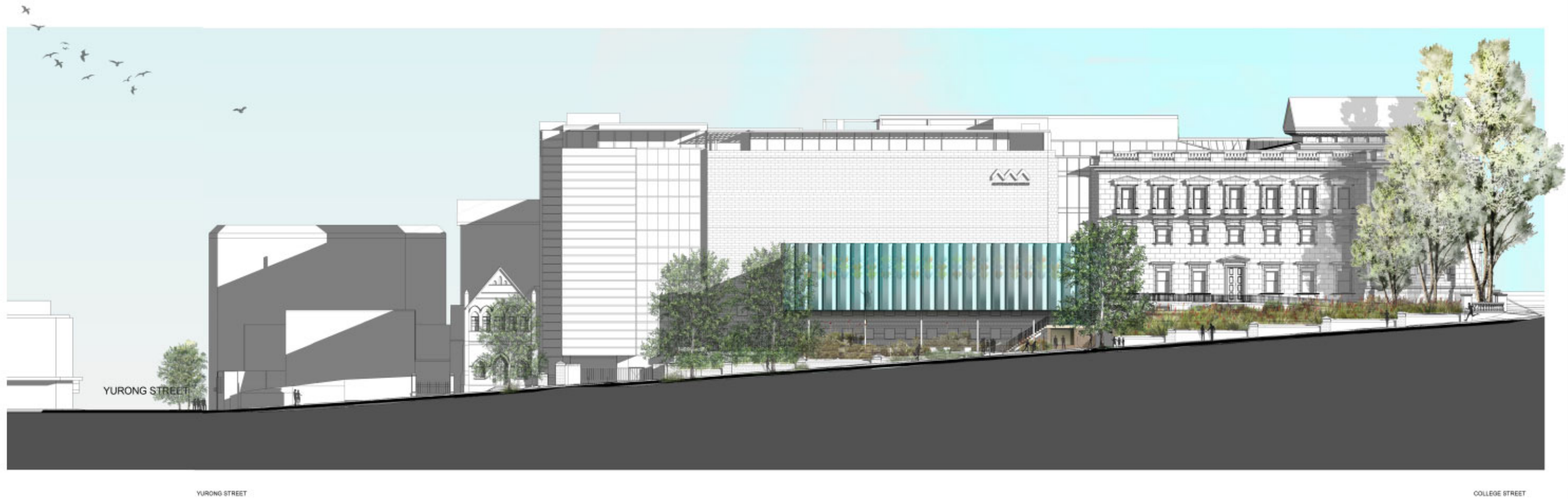
Level 2 plan



Scale: 1:200 @ A1  
 0 16  
 © 2018  
 North:



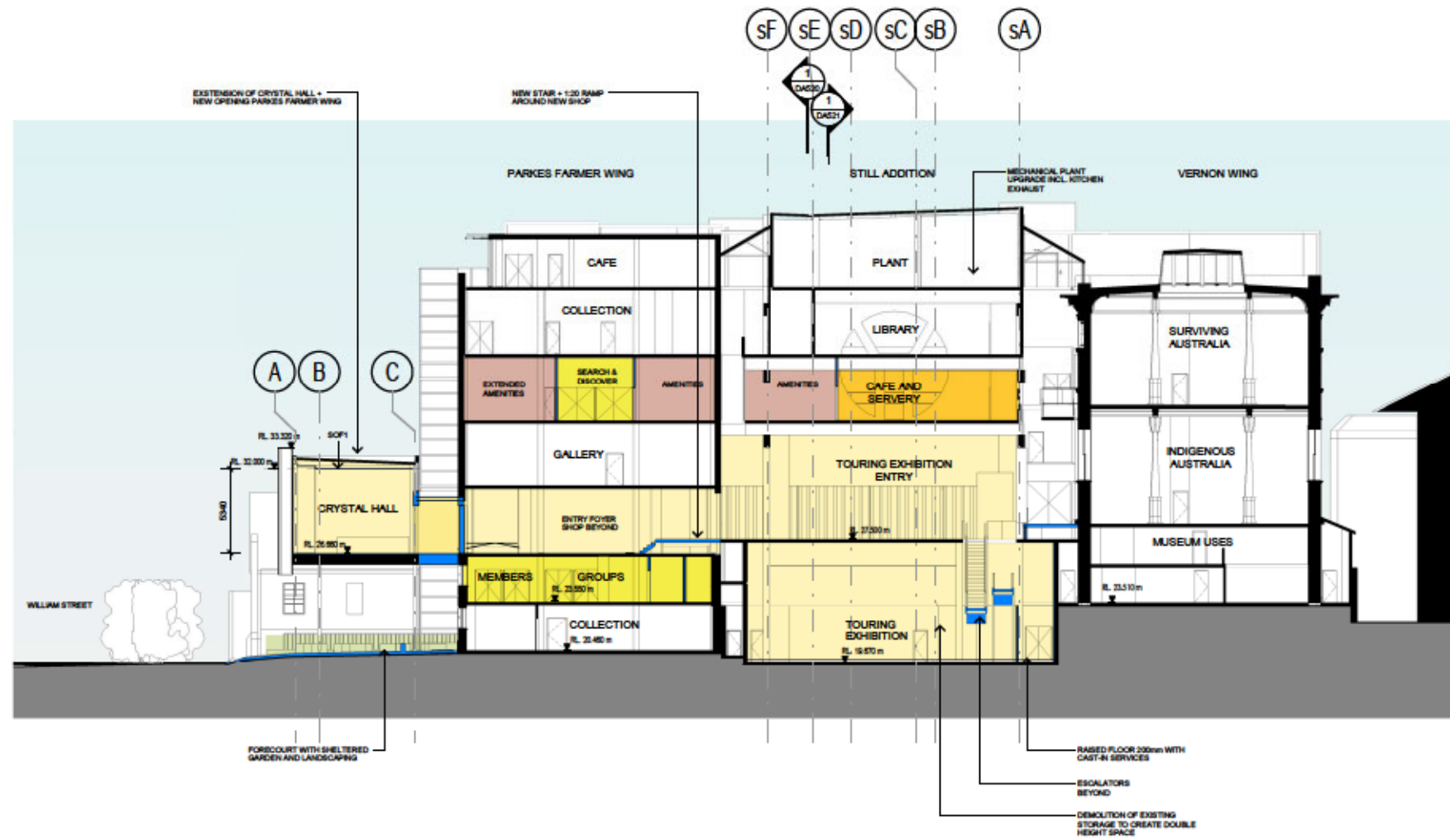
## PROPOSED ELEVATION



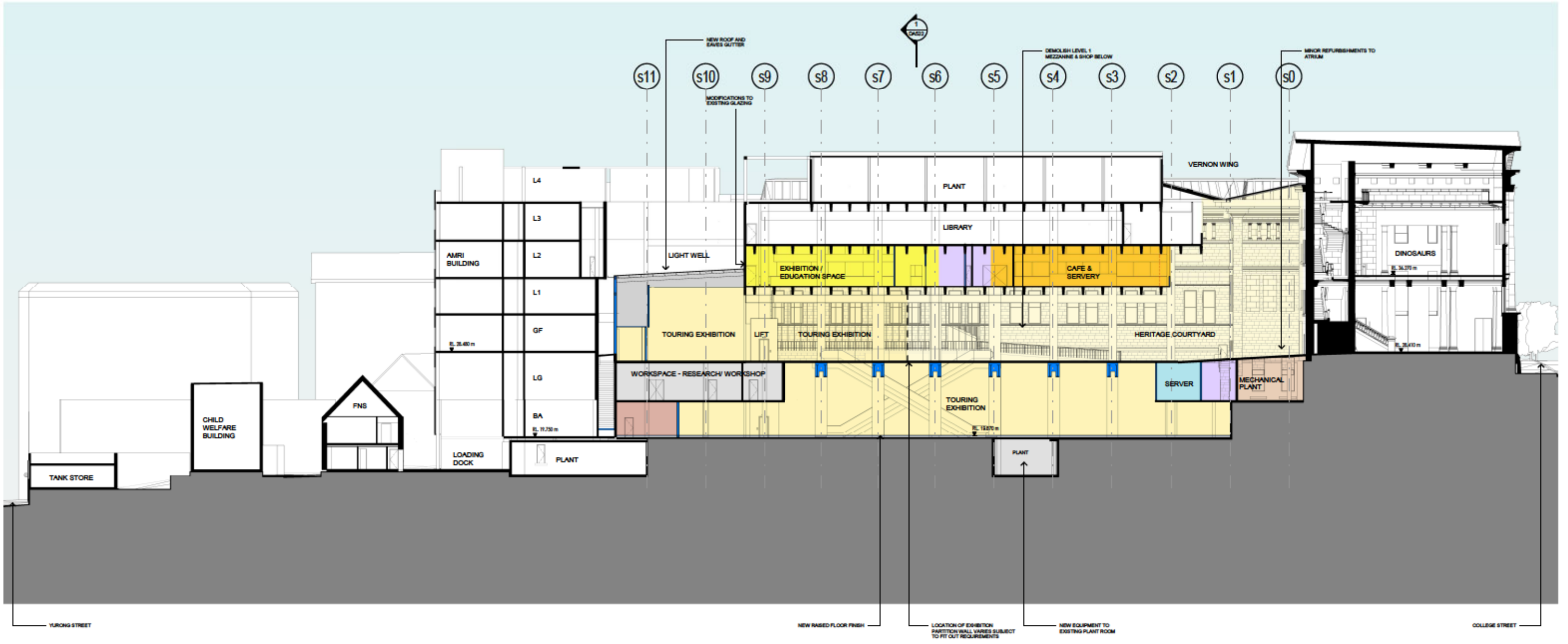
Artist's impression - Proposed Elevations William Street

## PROPOSED SECTIONS

Proposed sections



Cross sections



- |   |  |
|---|--|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: yellow; border: 1px solid black;"></span> PUBLIC / EDUCATION     | <span style="display: inline-block; width: 15px; height: 15px; background-color: grey; border: 1px solid black;"></span> BOH                     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: orange; border: 1px solid black;"></span> RETAIL - FOOD/SHOP     | <span style="display: inline-block; width: 15px; height: 15px; background-color: tan; border: 1px solid black;"></span> PLANT                    |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: lightyellow; border: 1px solid black;"></span> PUBLIC / GALLERY  | <span style="display: inline-block; width: 15px; height: 15px; background-color: brown; border: 1px solid black;"></span> STORAGE                |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: lightblue; border: 1px solid black;"></span> WORKSPACE / OFFICES | <span style="display: inline-block; width: 15px; height: 15px; background-color: purple; border: 1px solid black;"></span> CIRCULATION - GENERAL |

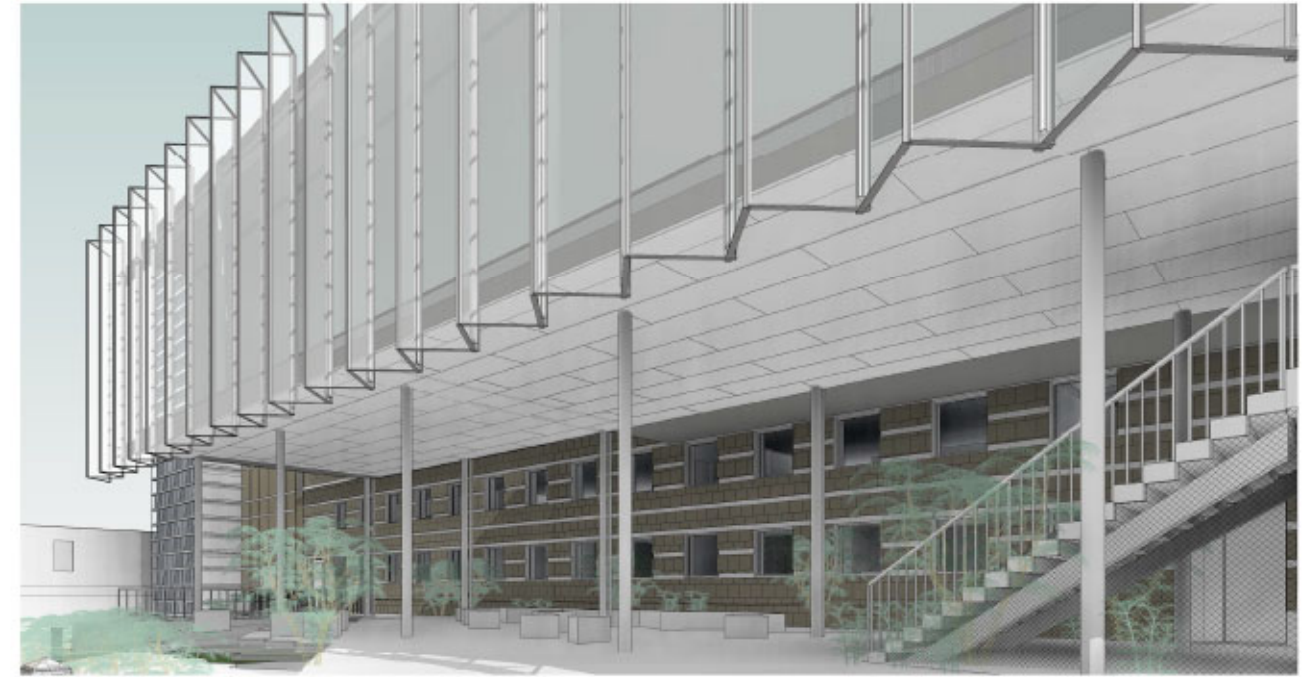
Long sections - Looking South

## PROPOSED PERSPECTIVE VIEWS

3d views



1 3D VIEW OF CRYSTAL HALL UNDERCROFT



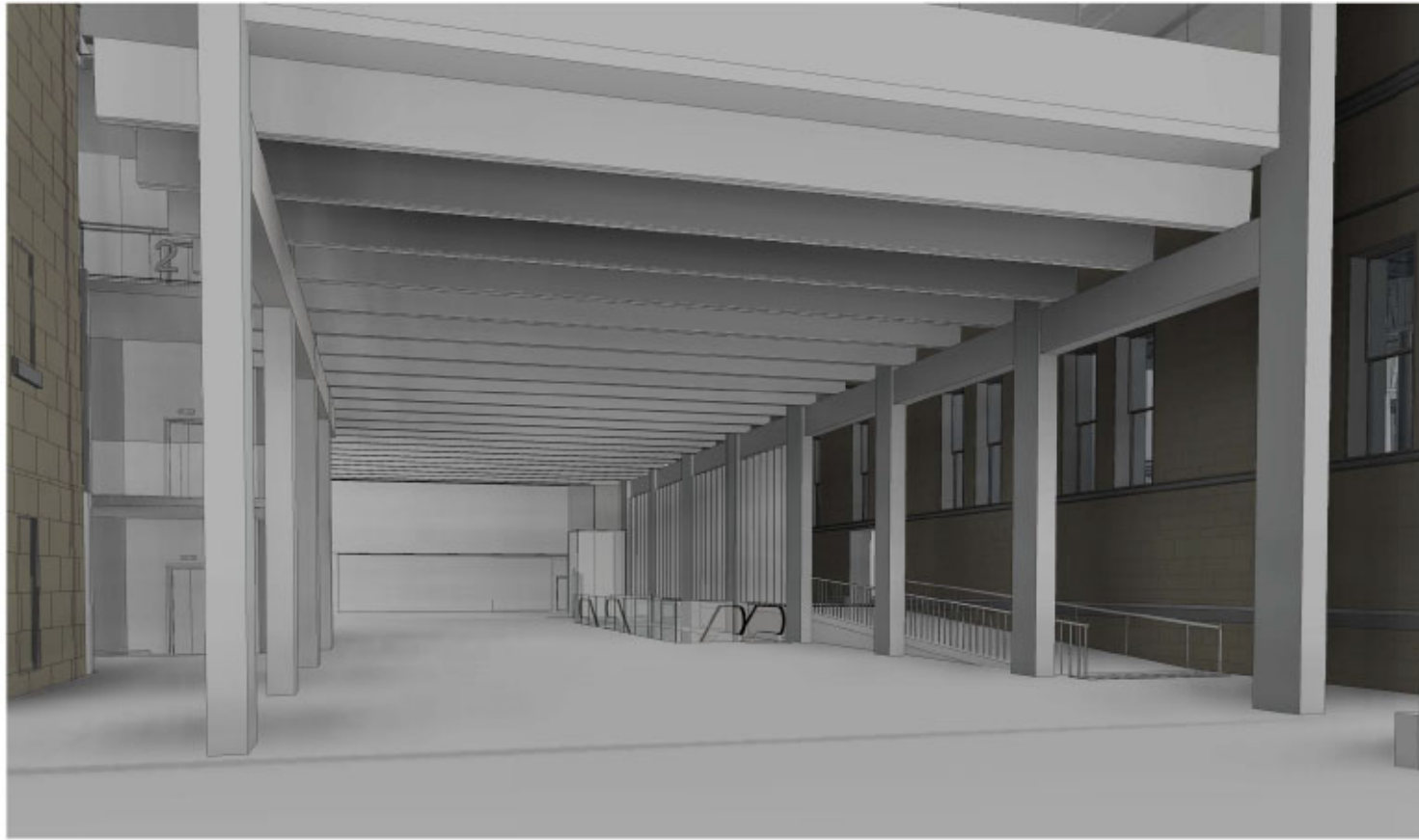
2 3D VIEW OF CRYSTAL HALL UNDERCROFT



3 3D VIEW OF CRYSTAL HALL



4 3D VIEW OF CRYSTAL HALL



1 'HEART' VIEWED FROM ATRIUM



2 UPPER LEVEL EXHIBITION SPACE



3 'HEART' FROM VERNON WING RAMP



4 LOWER LEVEL TOURING EXHIBITION HALL

## BEFORE AND AFTER



### EXISTING STILL ADDITION BUILDING

View of the existing Still Addition with the shop in the middle of the Atrium.



### PROPOSED STILL ADDITION BUILDING (ARTIST'S IMPRESSION)

Part of the proposed design is creating a big atrium for events and exhibitions.

The proposed alterations will open up the Heart of the museum for events and exhibitions and reveal more of the heritage fabric.

## VIEW IMPACT ANALYSIS

### The project will achieve:

- > a more seamless landscaped curtilage along William Street through regrading and planting
- > clear entry hierarchy through the 'rotated' William Street stair
- > a more activated front through the dual entry and integrated kiosk
- > stronger presence through the lengthened Crystal Hall
- > clear distinction between old and new through the continued separation of built elements
- > a more complementary material relationship between Crystal Hall and Parkes Farmer with a warmer tone of wall cladding, visible at the eastern end, and reflective soffit to 'mirror' garden and tessellated paving

### VIEW 1 - Looking East along Park Street

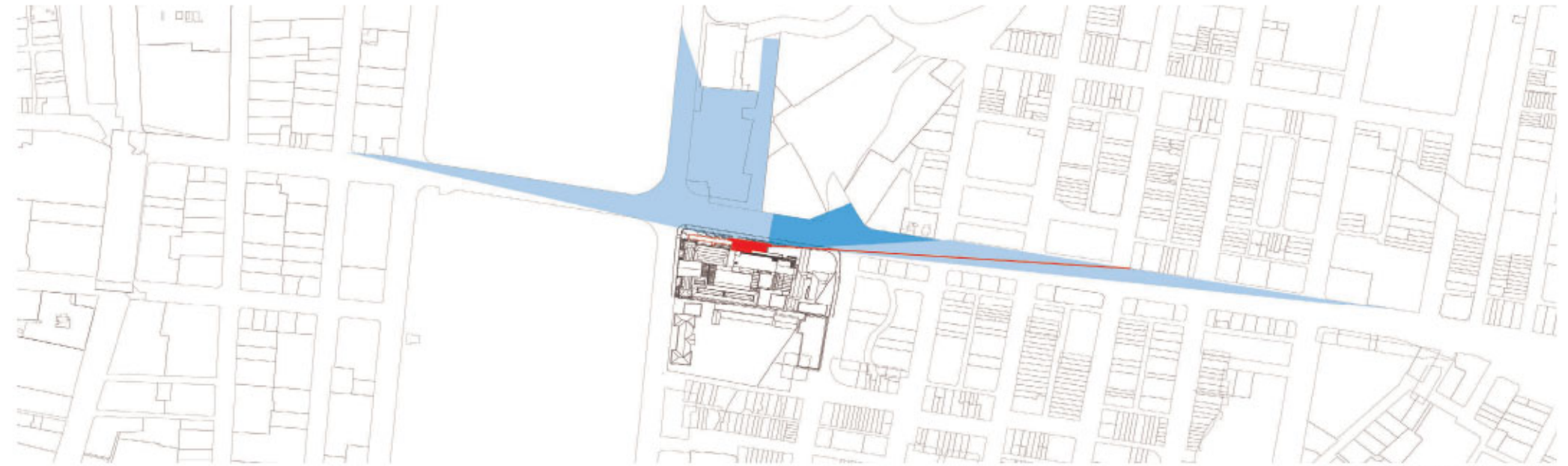
- > The Crystal Hall is currently obscured by foliage of trees
- > Former National School remains visible
- > William St stair less present in what feel more like a continuous landscape

### VIEW 2 - Looking South from Cook and Phillip Park to Museum

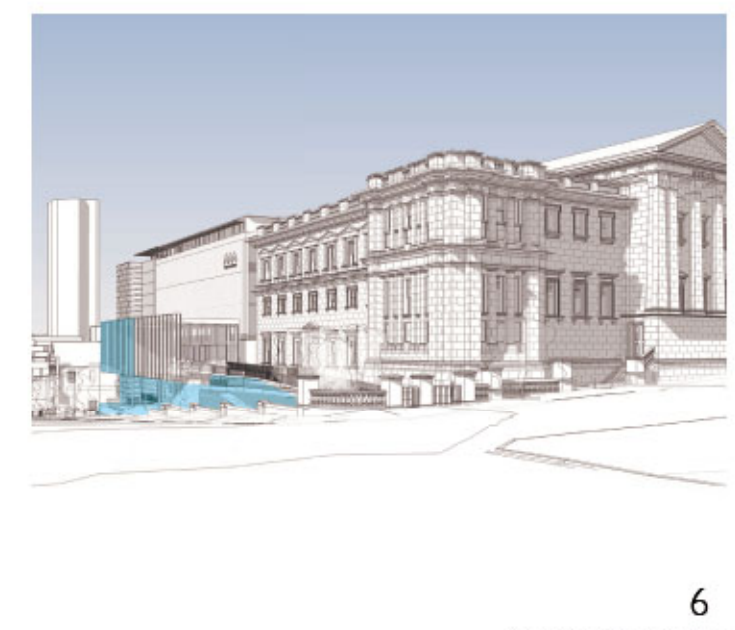
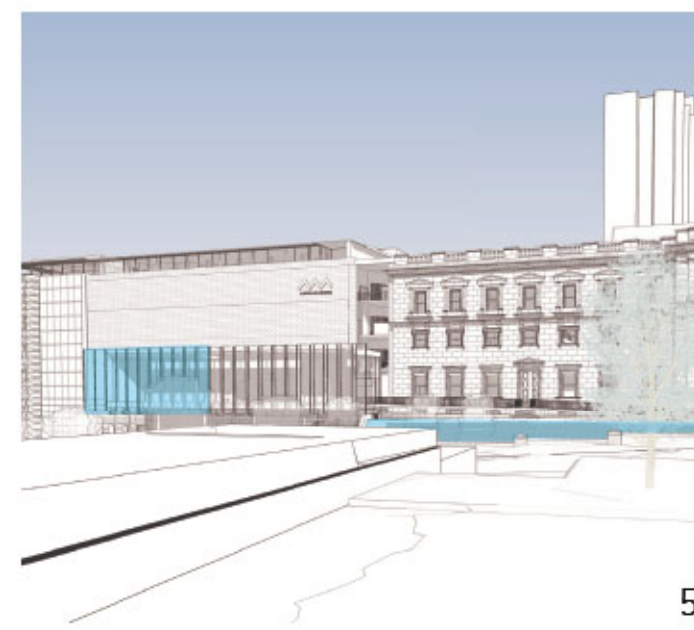
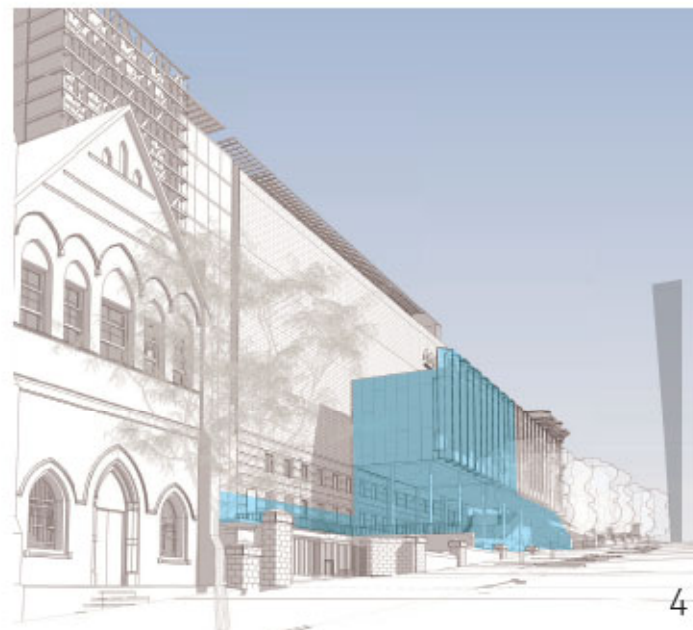
- > Crystal Hall extended as a screen that sits in front of Parkes Farmer building. The façade of the Parkes Farmer remains visible.
- > no change to Lewis Wing
- > the crystalline quality of Crystal Hall complements water in the St Mark's Square

### VIEW 3 - Looking West from William Street

- > Crystal Hall and its pleated glass screen extends eastward
- > removal of Crystal Hall skirt to the eastern end allows increased visibility to the garden
- > mirrored material of soffit is more visible and reflects the garden below
- > The sandstone facade of the Parkes Farmer Wing remains visible below and behind through building separation



VIEW CONE DIAGRAM





ARTIST'S IMPRESSION OF THE ADDITIONS TO THE AUSTRALIAN MUSEUM FROM WILLIAM STREET.

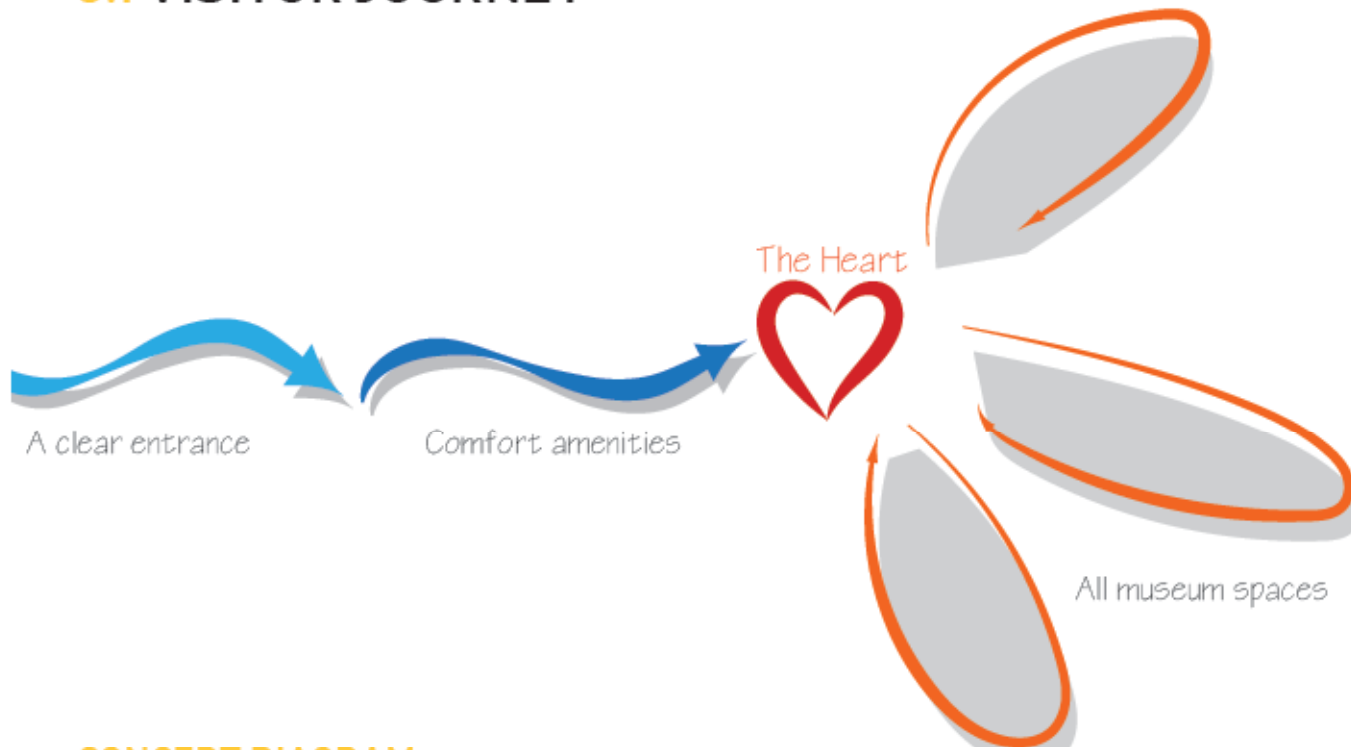
# EXHIBITION & QUEUEING STUDIES

05

COURTESY OF ART OF FACT

# 05 Exhibition & Queueing studies

## 5.1 VISITOR JOURNEY



### CONCEPT DIAGRAM

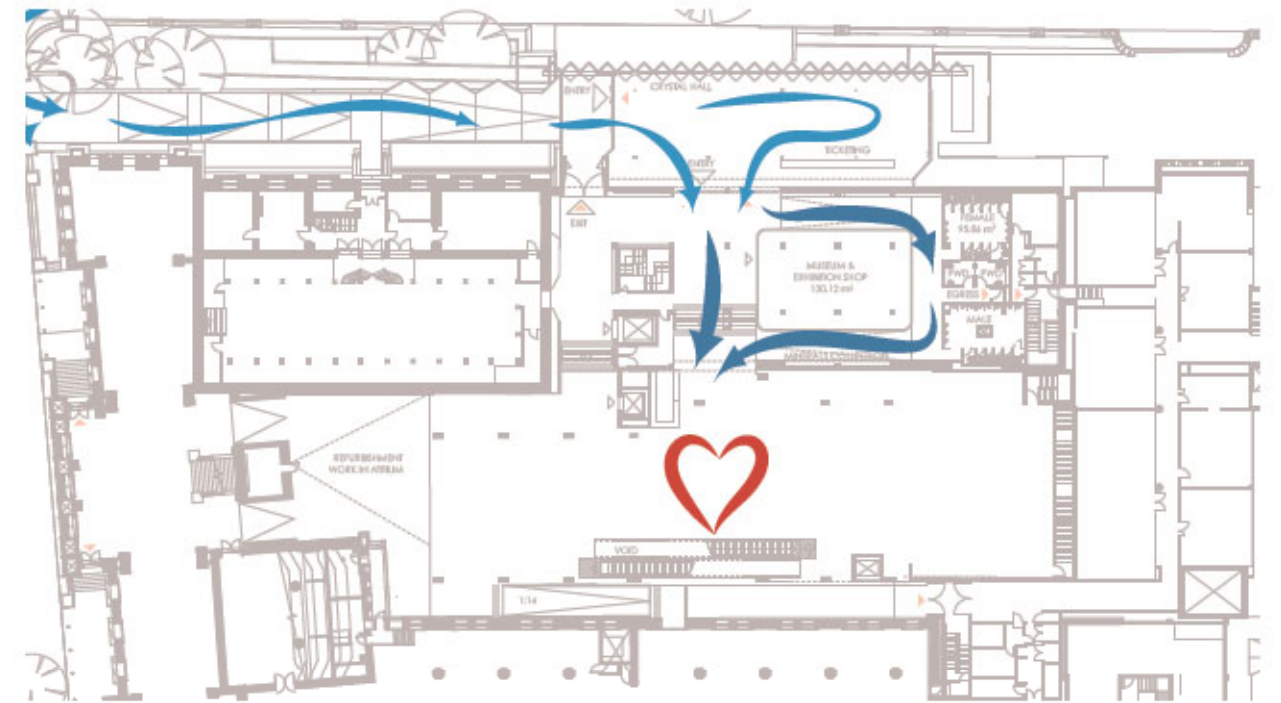
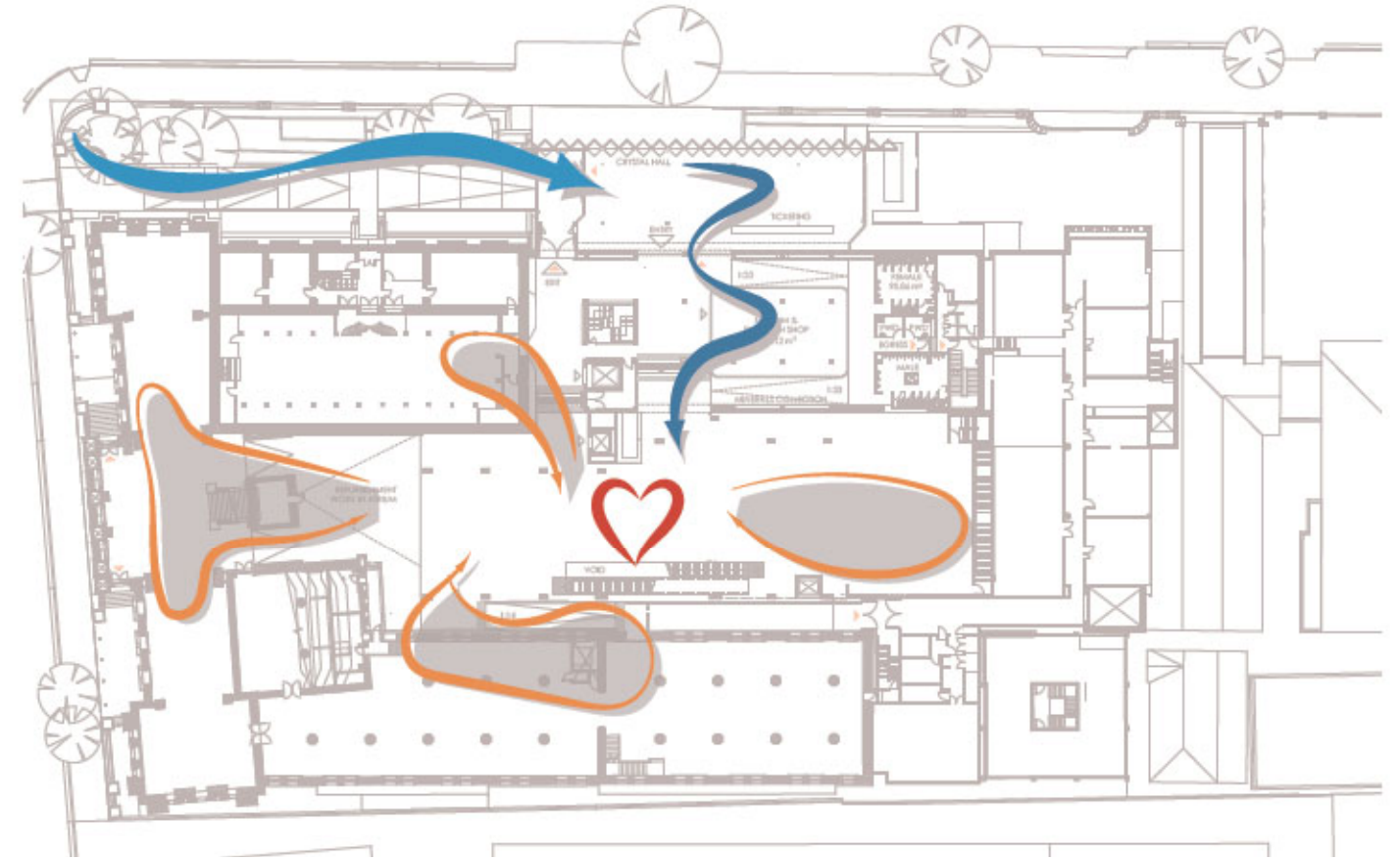
A peak flow of 112.5 - 118.8 per 15 minute slot/ 7.5 - 7.9 entries per minute is expected for the major touring exhibition.

The diagram shows the main parts of the new extent of the project:

1. Entrance,
2. Amenities
3. The Heart (new main space on the museum)
4. Better connection with the rest of the museum spaces

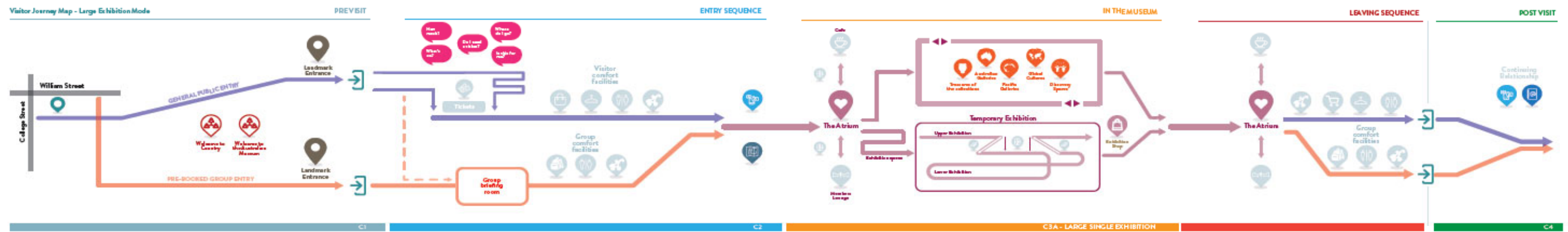
**Source:**

Diagrams Courtesy of Art of Fact



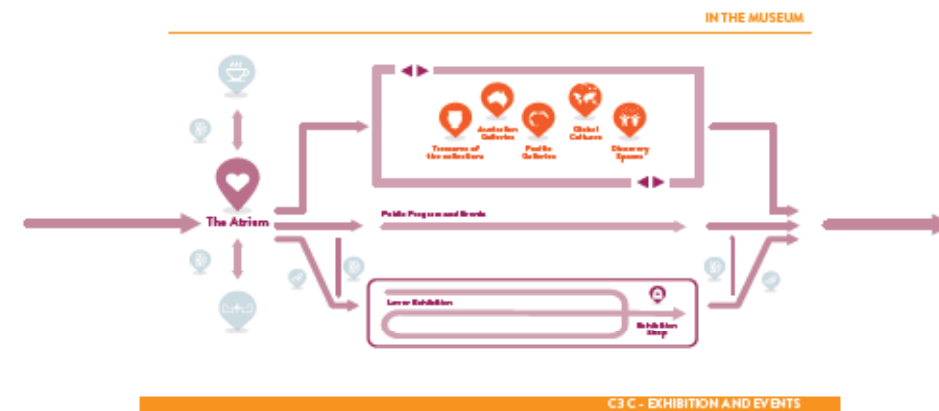
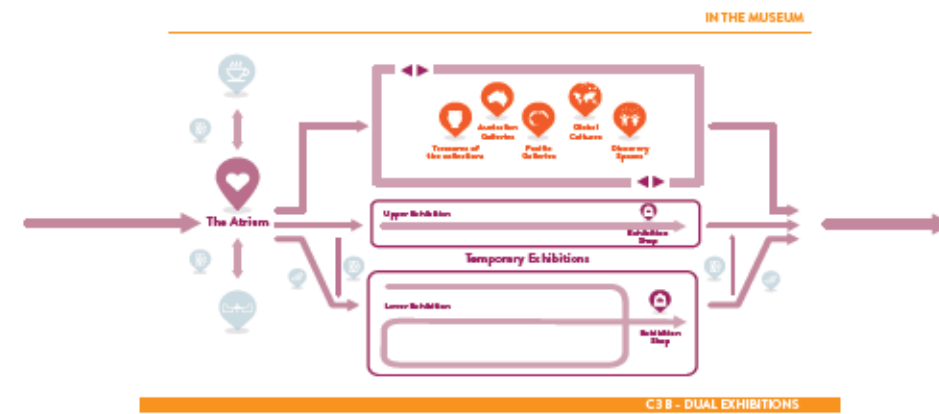


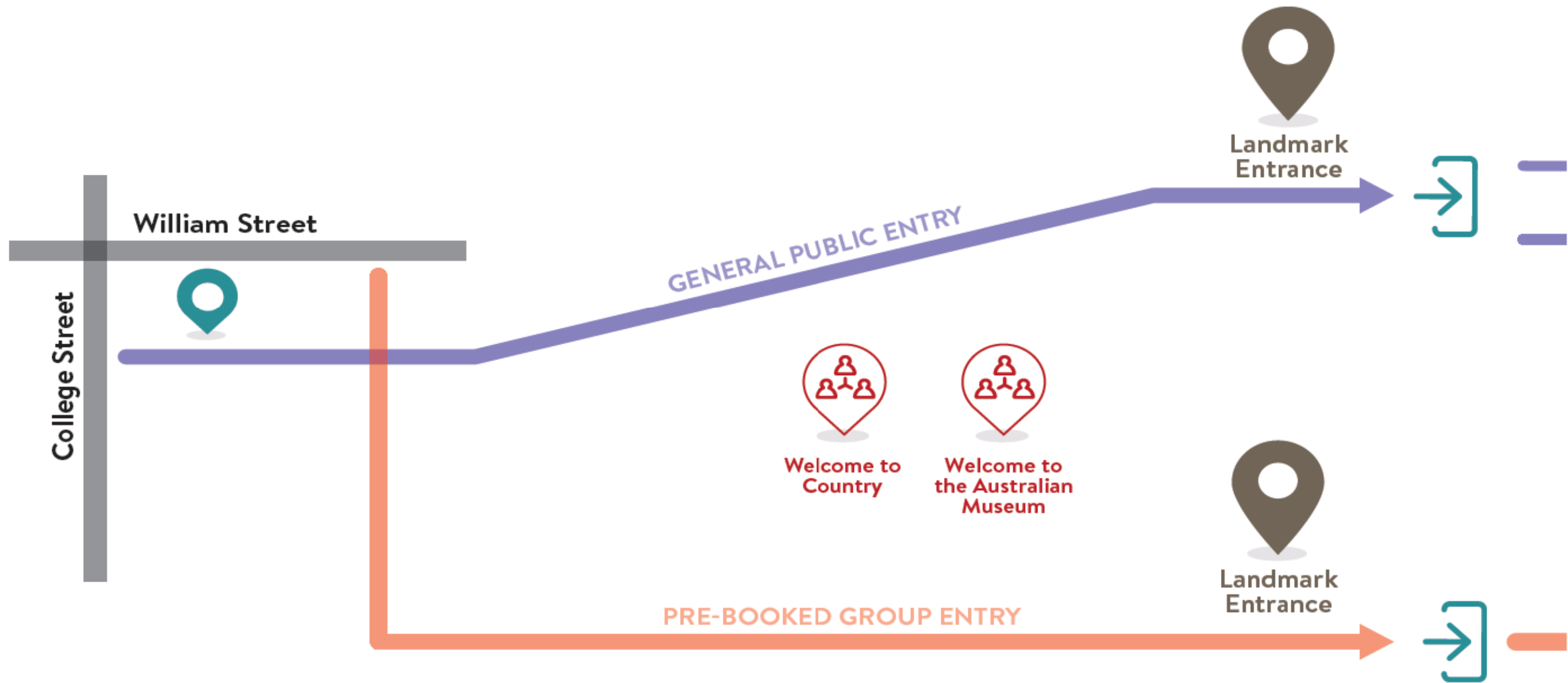
# Australian Museum, Masterplan, Visitor Journey Map



The extensive redevelopment of the Australian Museum will create a new visitor experience. For the first time, general public visitors and pre-booked groups will have access to purpose designed comfort facilities.

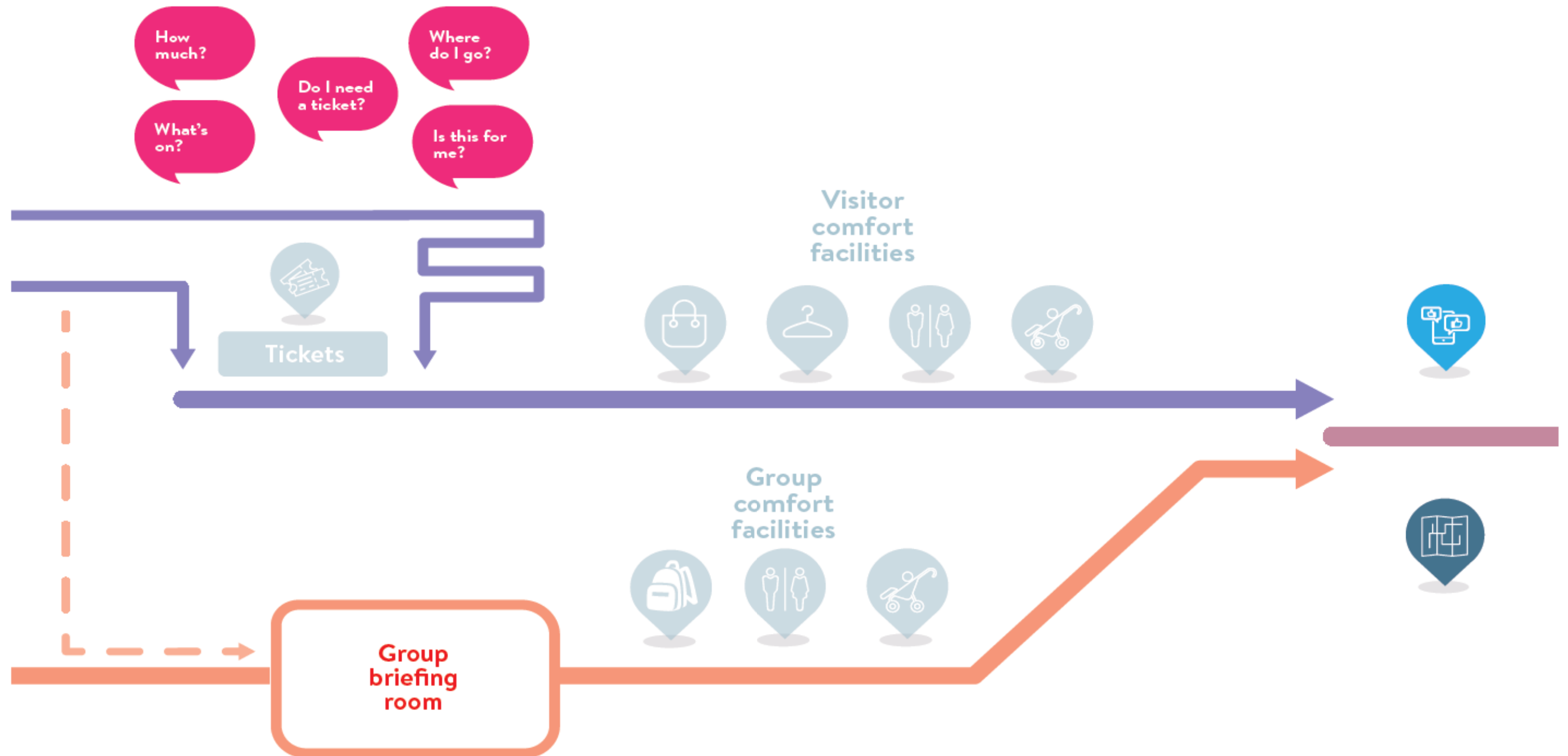
The following drawings show the proposed visitor journey map, including the three modes of use of the central atrium space.

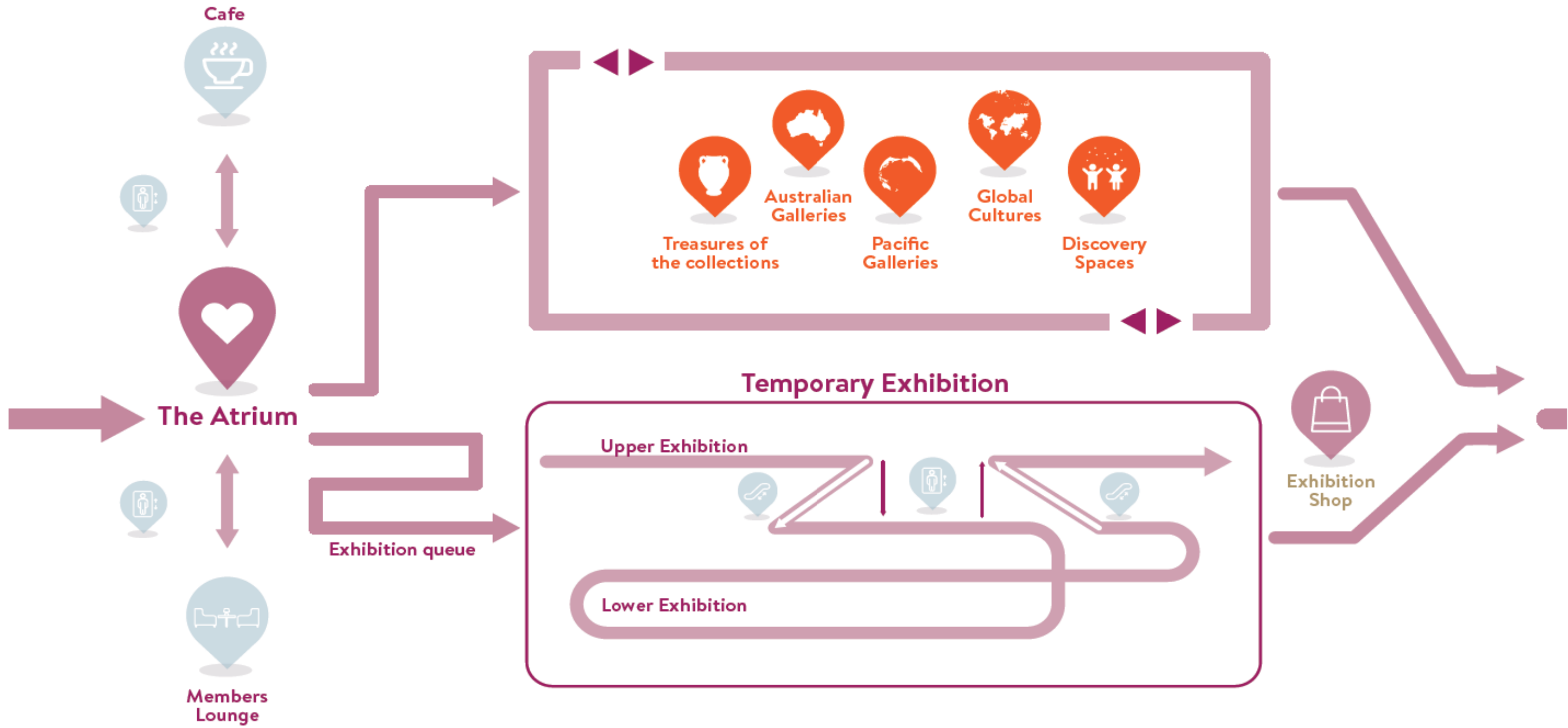






## ENTRY SEQUENCE

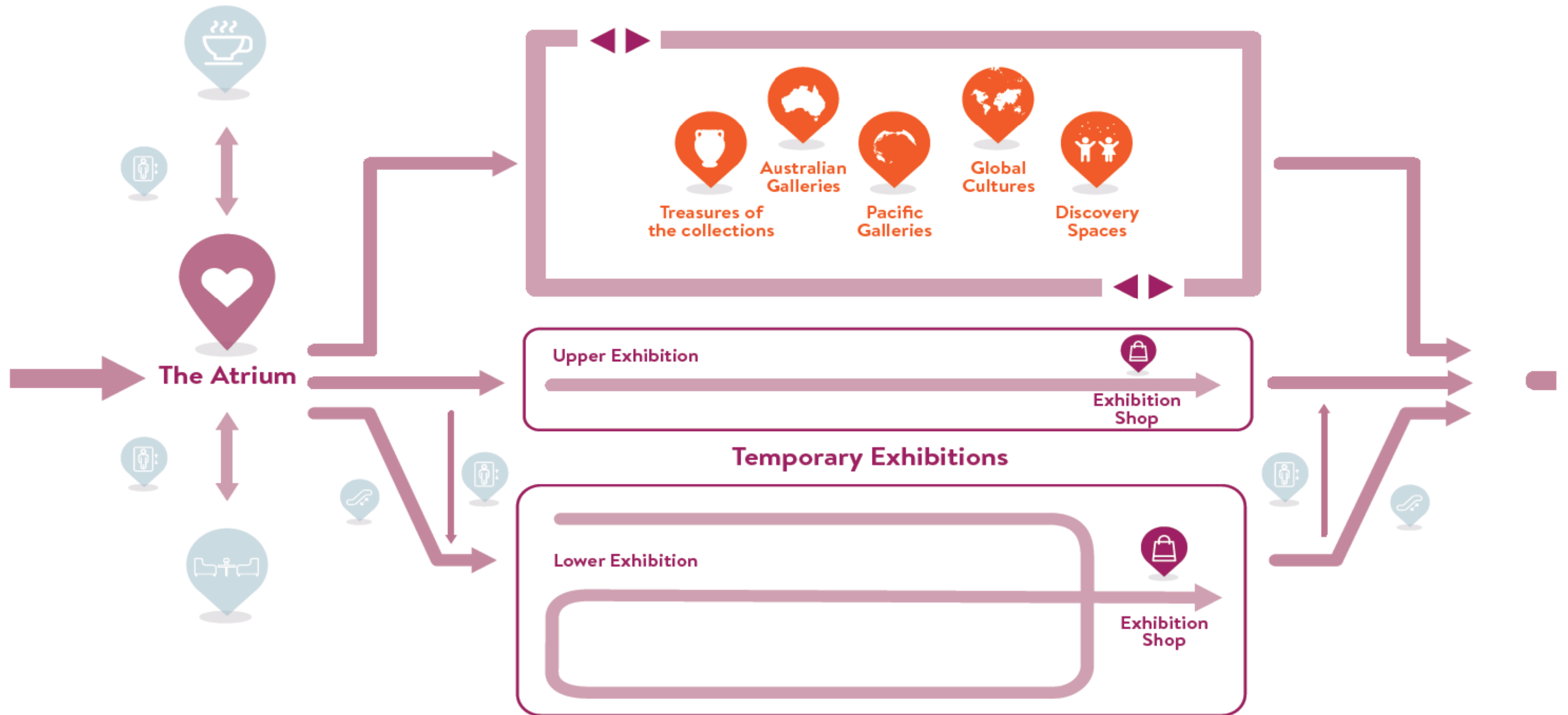


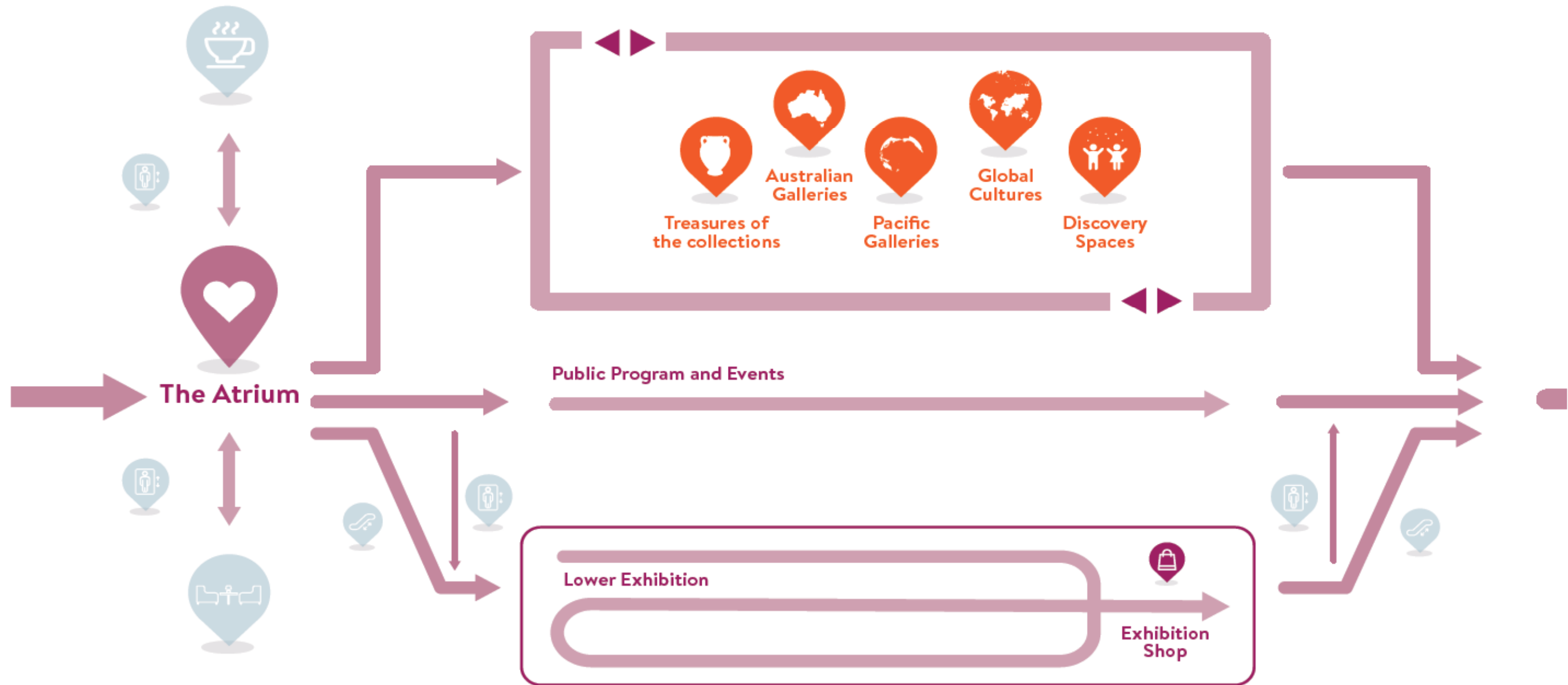




B - DUAL EXHIBITION MODE

IN THE MUSEUM

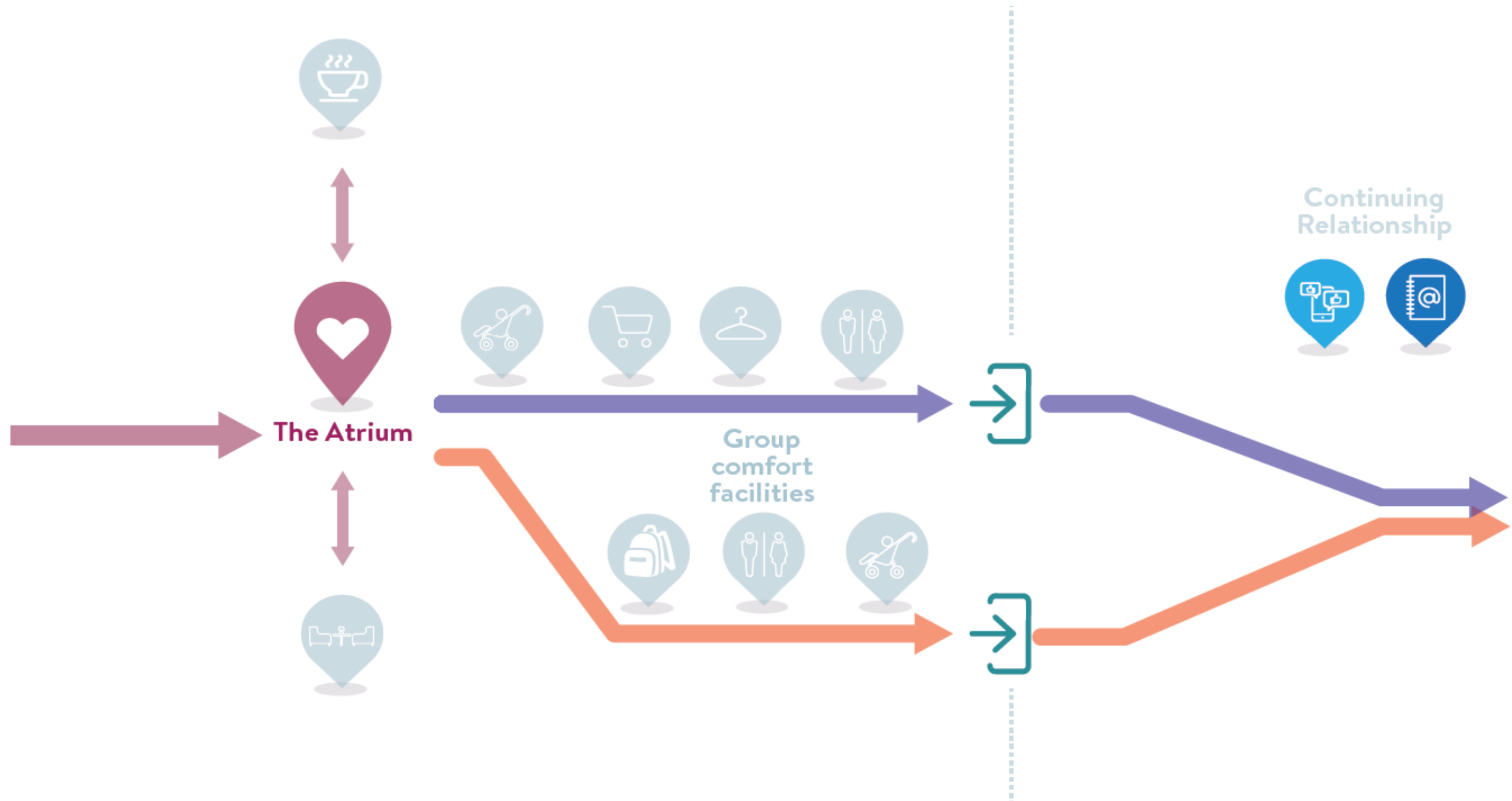




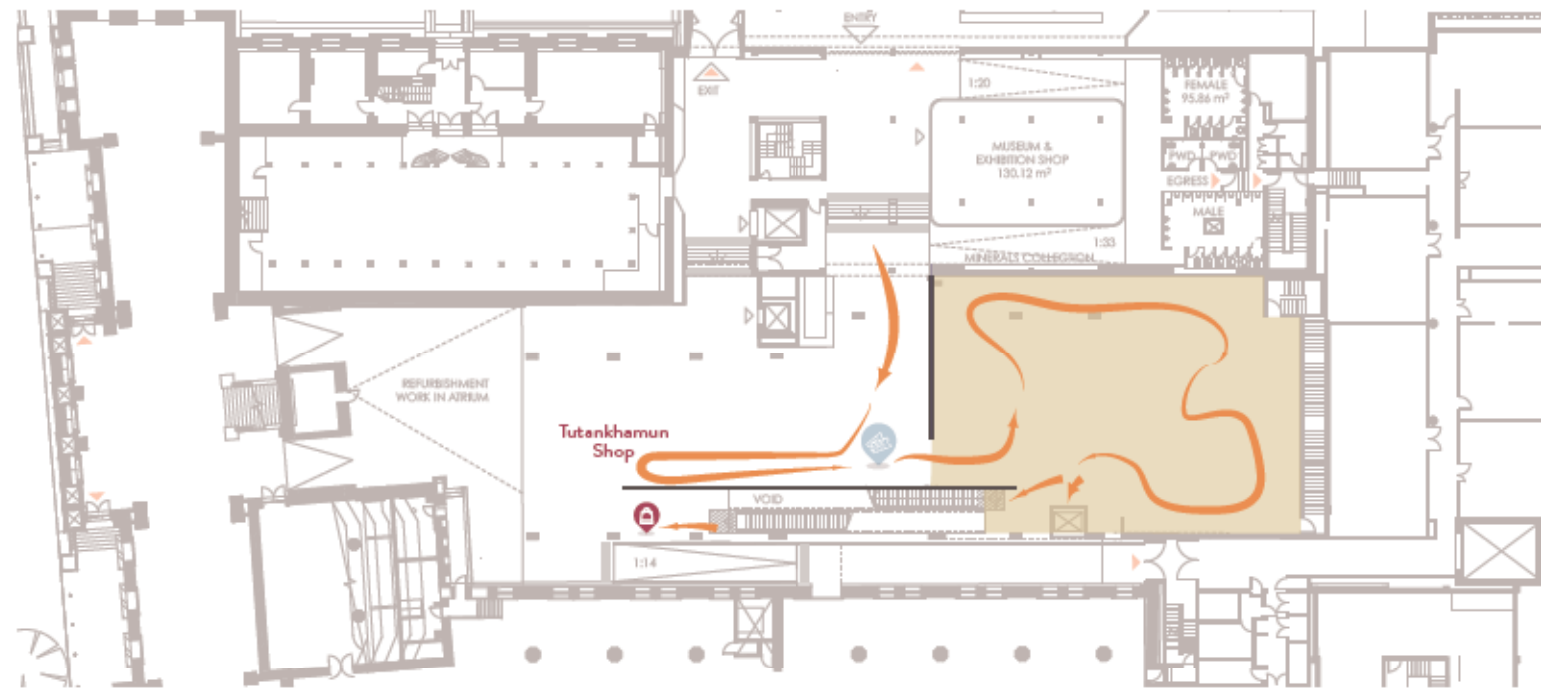


## LEAVING SEQUENCE

## POST VISIT

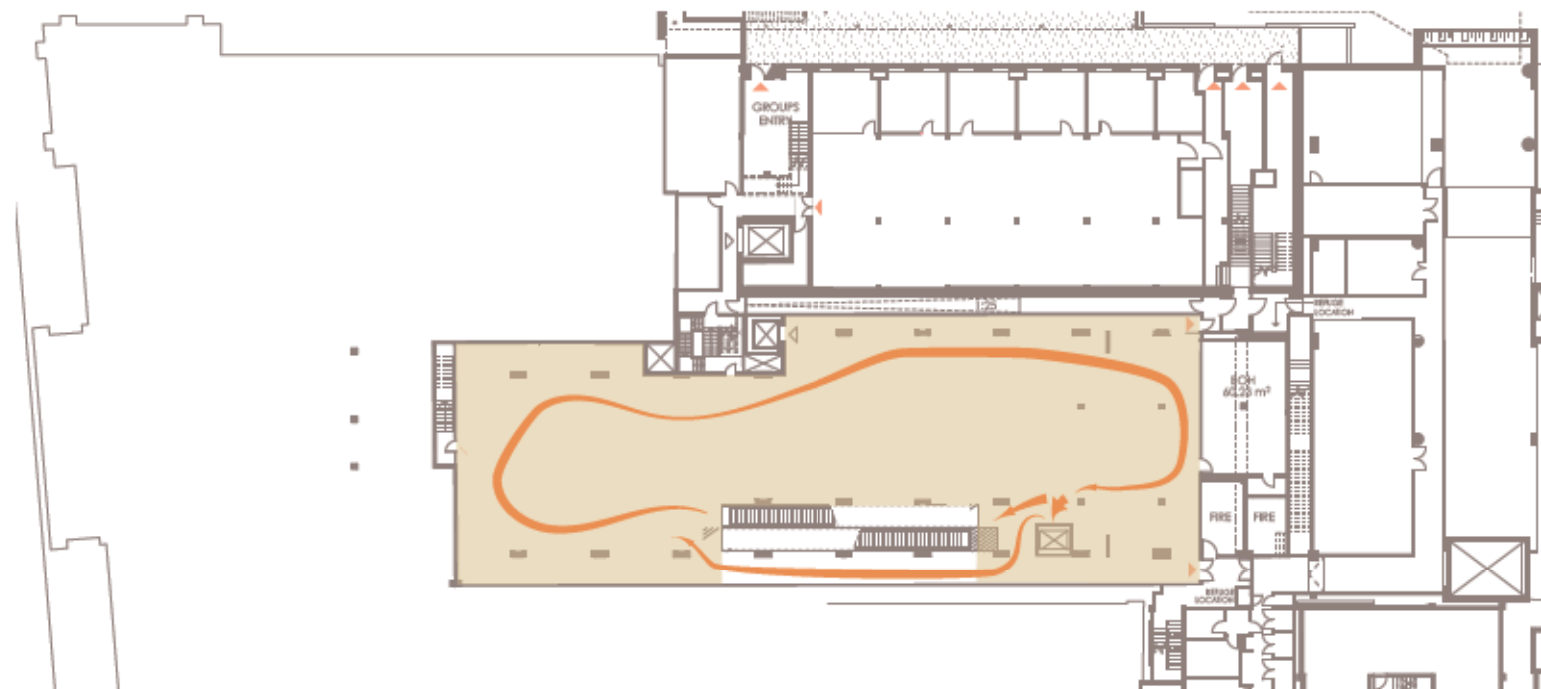


## GROUND LEVEL TOURING EXHIBITION CIRCULATION STUDY



The diagram shows the new visitor experience journey: from the entrance the visitor will go straight to the Heart of the museum before queuing for the touring exhibition.

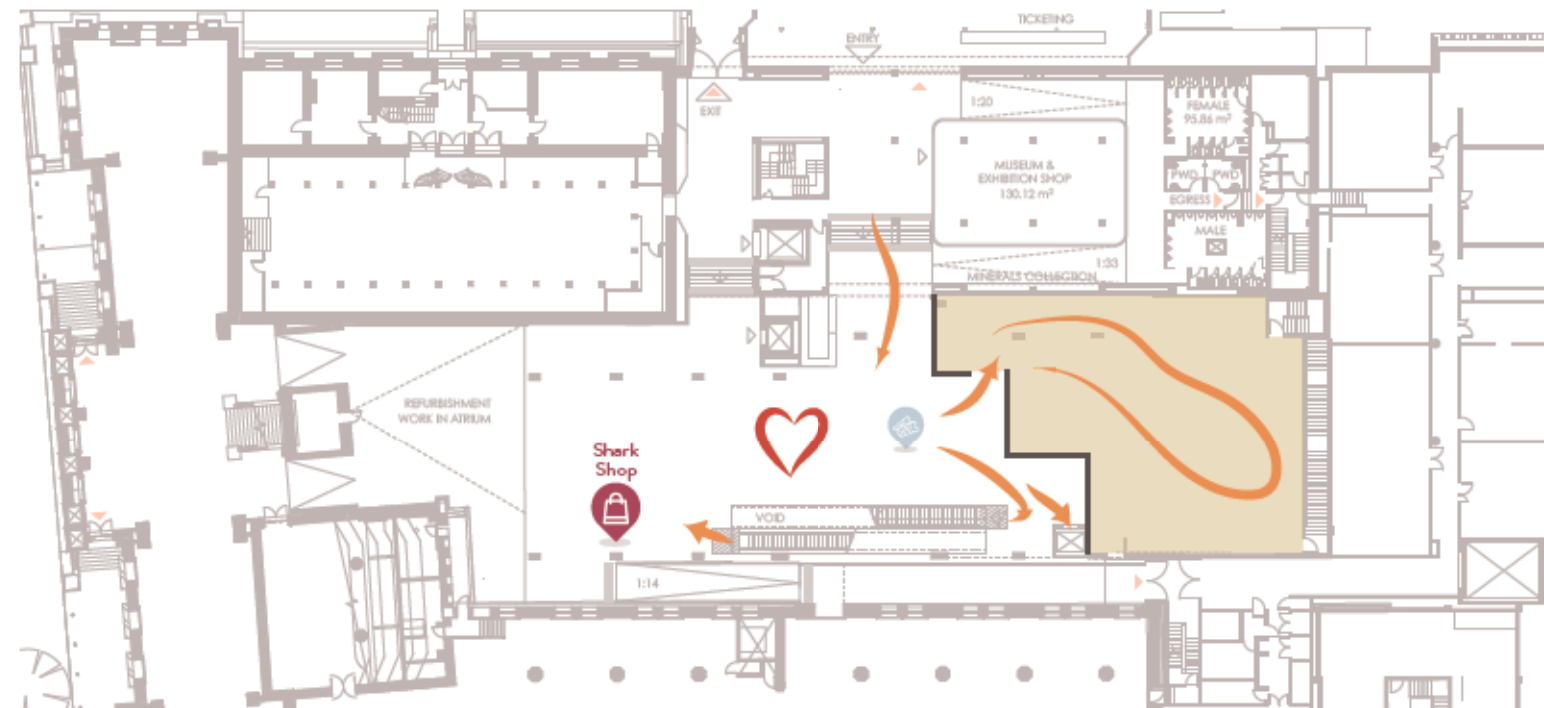
## BASEMENT LEVEL TOURING EXHIBITION CIRCULATION STUDY



Visitors arrive on the lower level by escalator or lift and complete a circuit of the exhibition before returning to the ground floor Atrium via the shop.

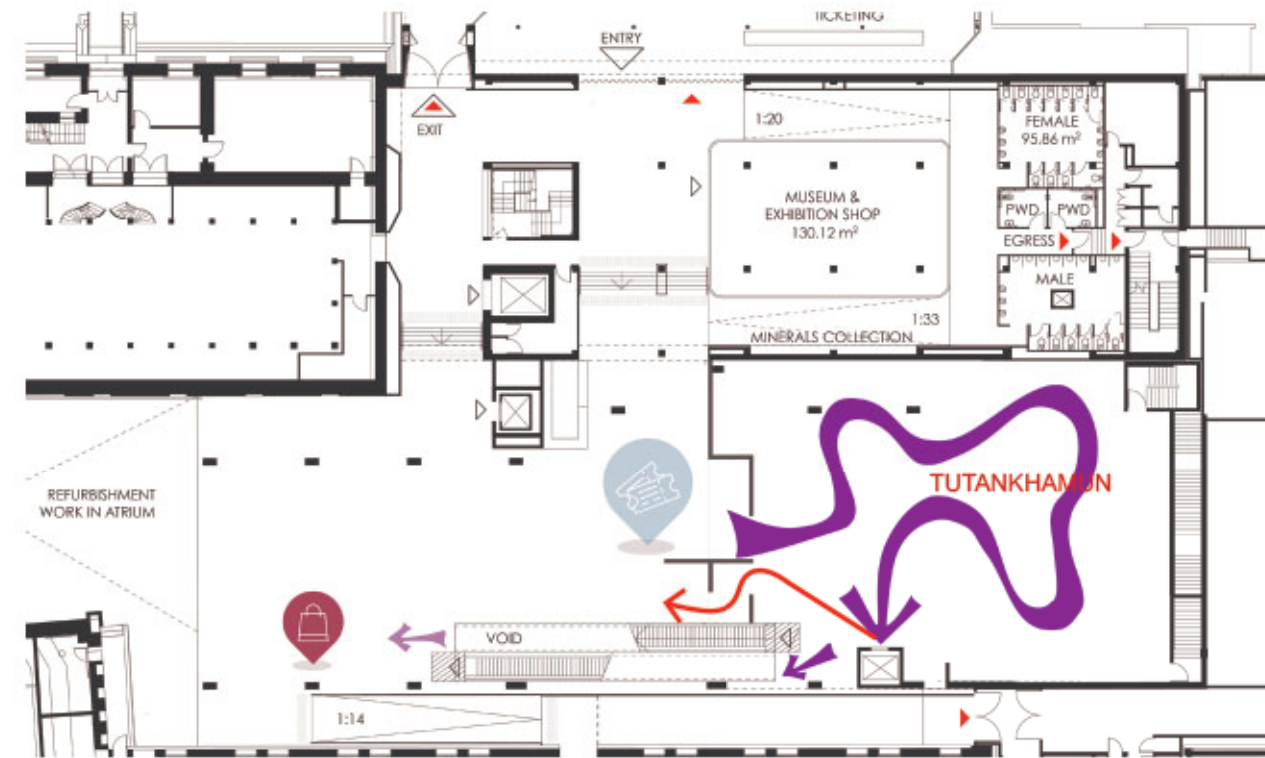


## GROUND LEVEL - SEPARATE EXHIBITION MODE



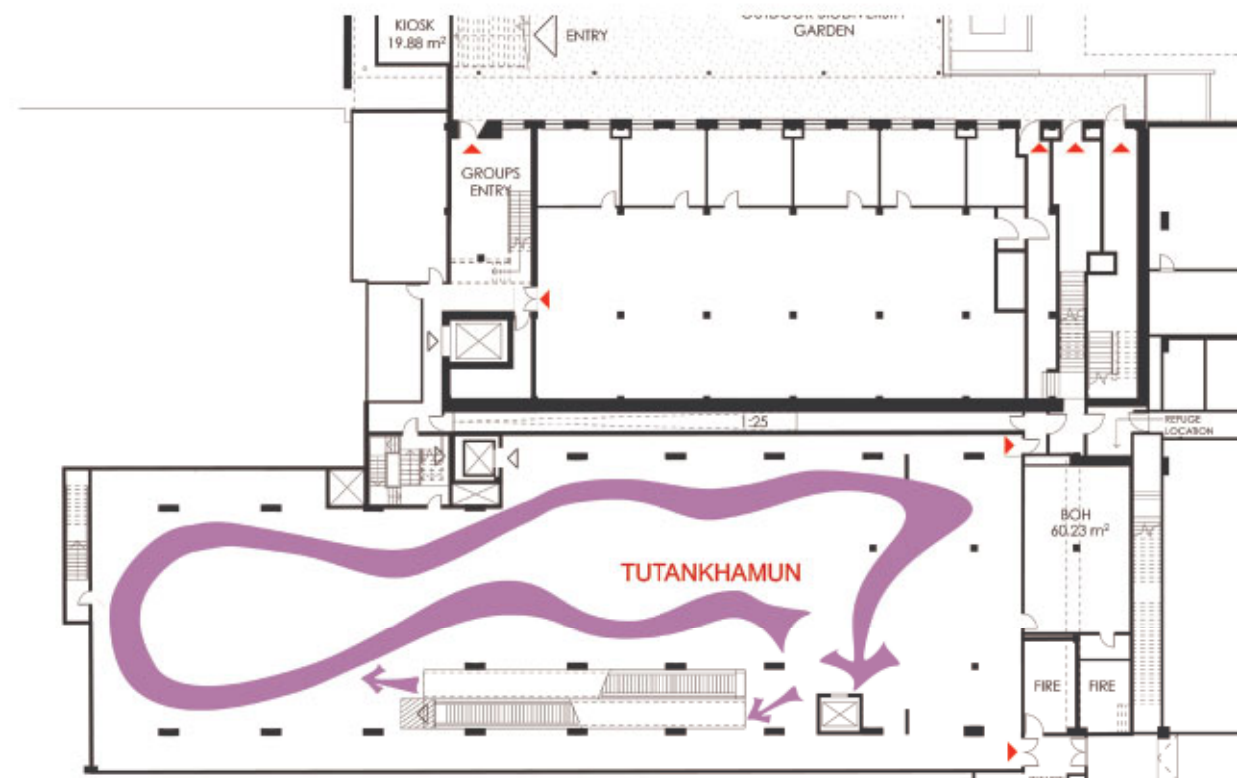
In this mode, visitors can access separate exhibitions via the Heart: a smaller space on the Ground Floor, and, via the vertical circulation, a larger space on the basement level.

## SCENARIO 1: TWO - LEVEL TOURING EXHIBITION



The diagram shows typical touring exhibition circulation on both levels, via the vertical transportation node.

## SCENARIO 1: BASEMENT LEVEL TOURING EXHIBITION CIRCULATION STUDY



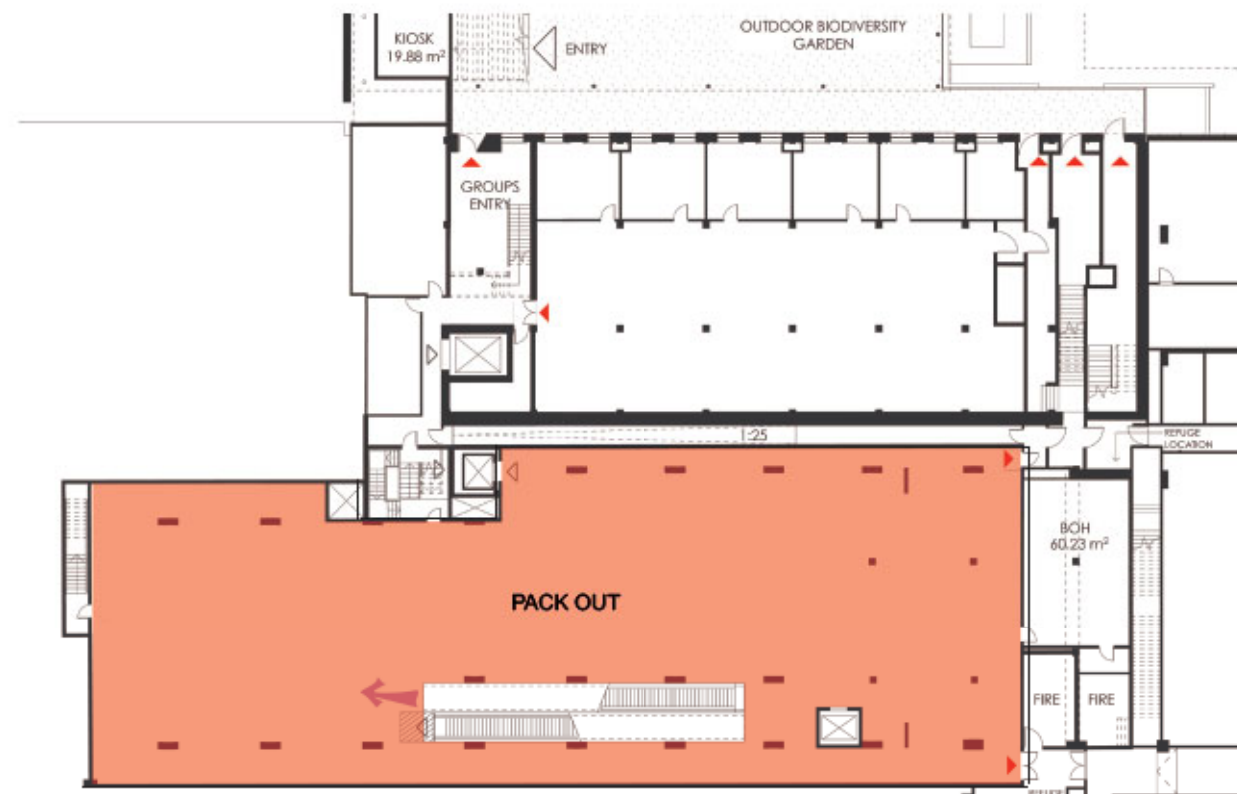


## SCENARIO 2: FUNCTION - GROUND LEVEL



The diagram shows the upper level in function mode, with an event for 600 people, while the lower level exhibition space is being packed up.

## SCENARIO 2: BUMP-OUT - BASEMENT LEVEL



### SCENARIO 3: EXHIBITION ON LOWER LEVEL WITH TEMPORARY RELATED PROGRAMS ON UPPER LEVEL TOURING



The diagram shows a large exhibition on the lower level gallery space while a related program is available to the public on the upper level.

### SCENARIO 3: BASEMENT LEVEL





## SCENARIO 4: SEPARATE EXHIBITION - GROUND LEVEL



The diagram shows the upper level in small exhibition mode, while a separate larger exhibition is held in the lower level exhibition space.

## SCENARIO 4: BASEMENT LEVEL





## QUEUEING STUDIES

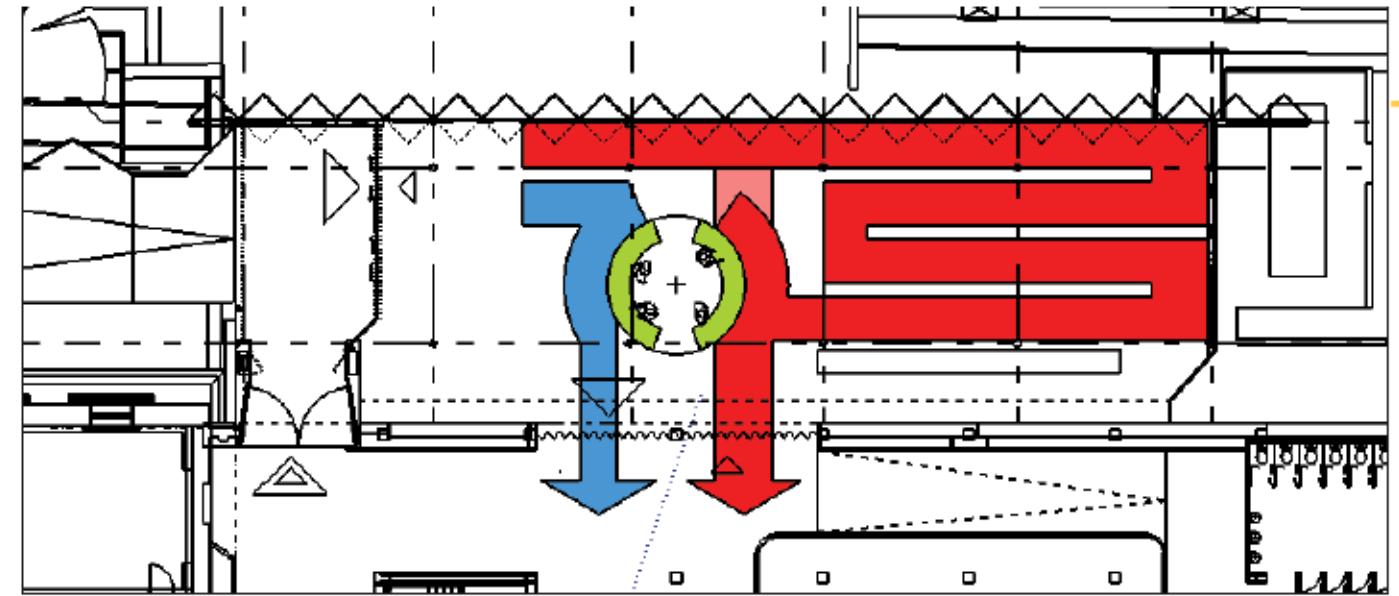
### Tickets area layout options

The design team reviewed a numbers of options for queueing and ticketing in the Crystal Hall entrance lobby.

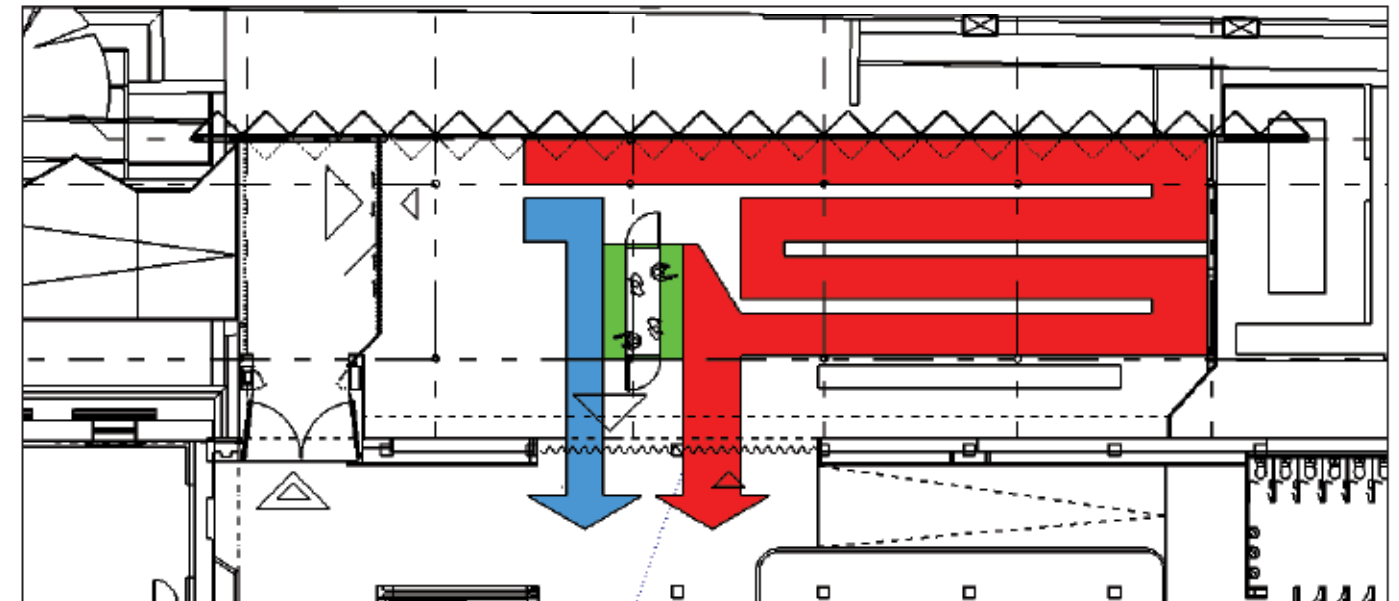
The preferred options allows general admission patrons (blue) to be served on one side of the ticketing counter while patrons arriving to visit the touring exhibition (red) are able of queue at the eastern end of the lobby, with the option of approaching the counter for service or simply joining the queue with pre-booked time allocated tickets.

This layout avoids the circulation clashes apparent in option C and maximises the space available in the eastern end of the lobby for separate functions at other times.

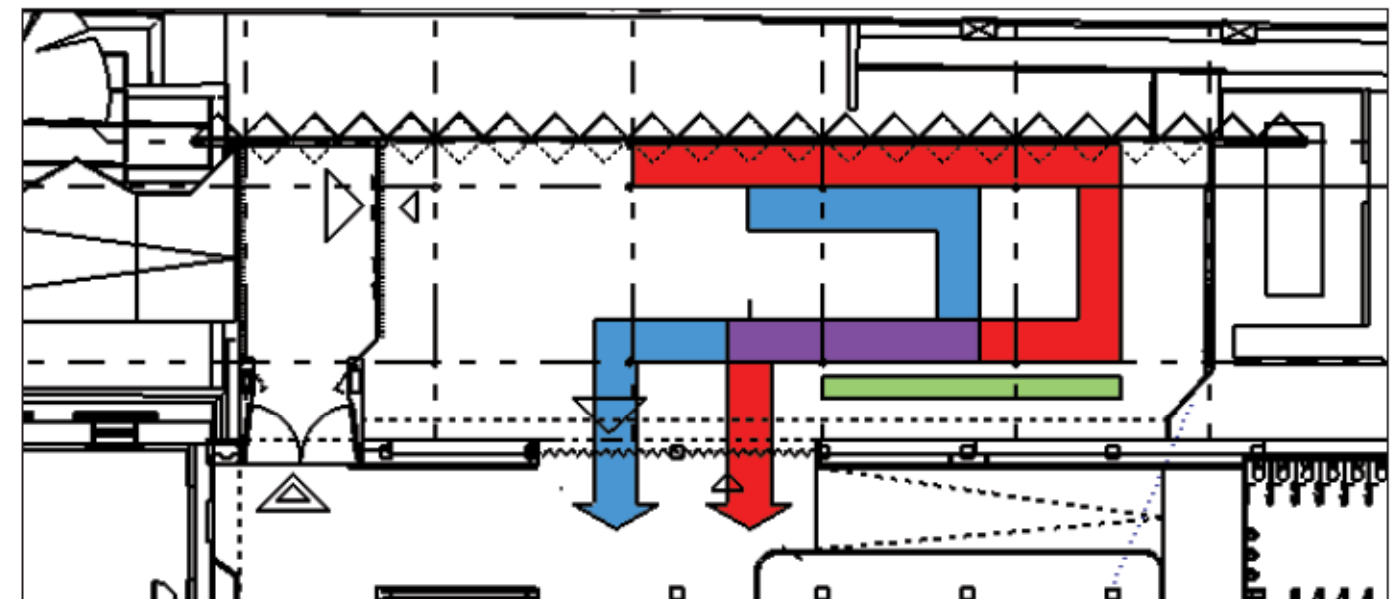
Preferred option



Option B



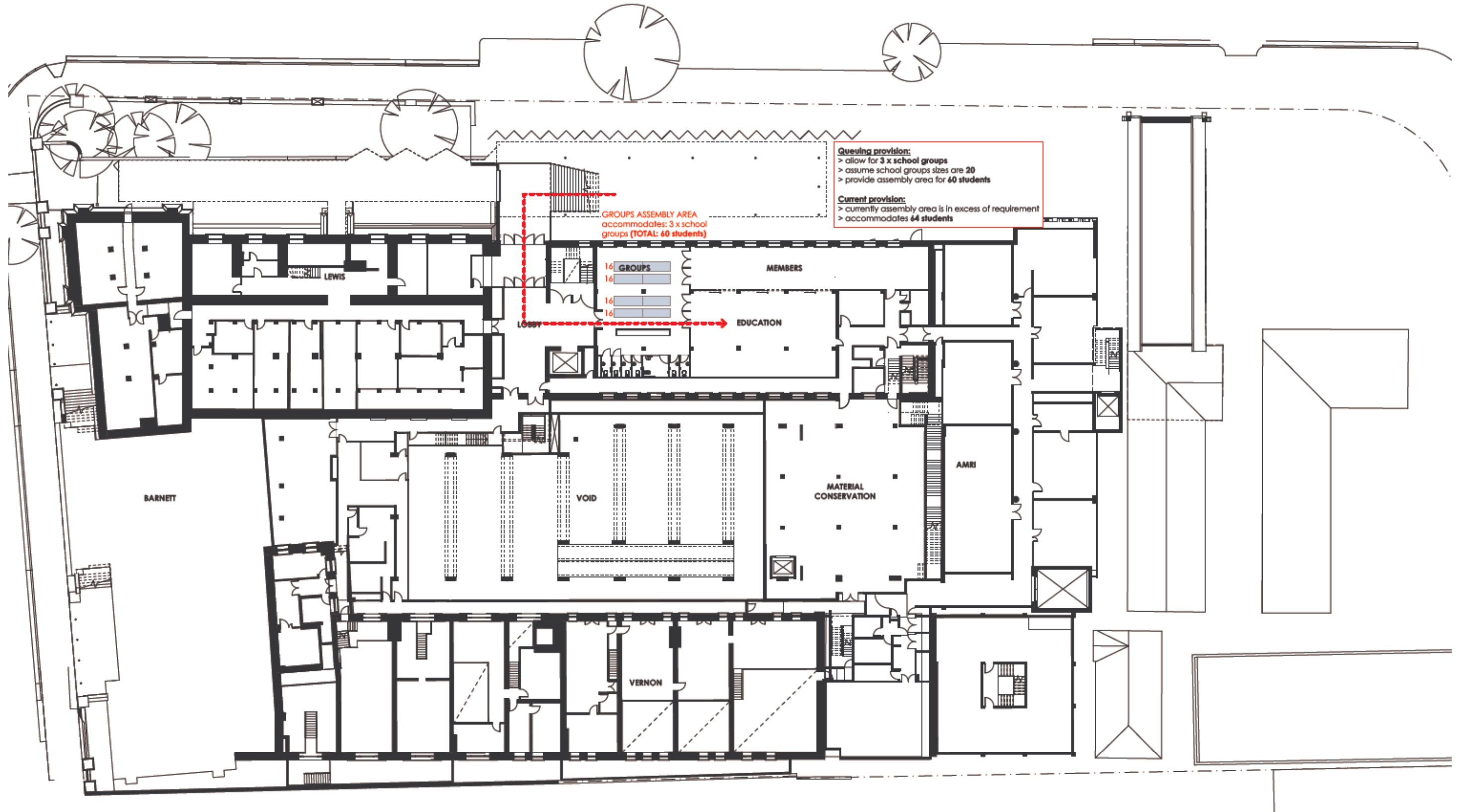
Option C



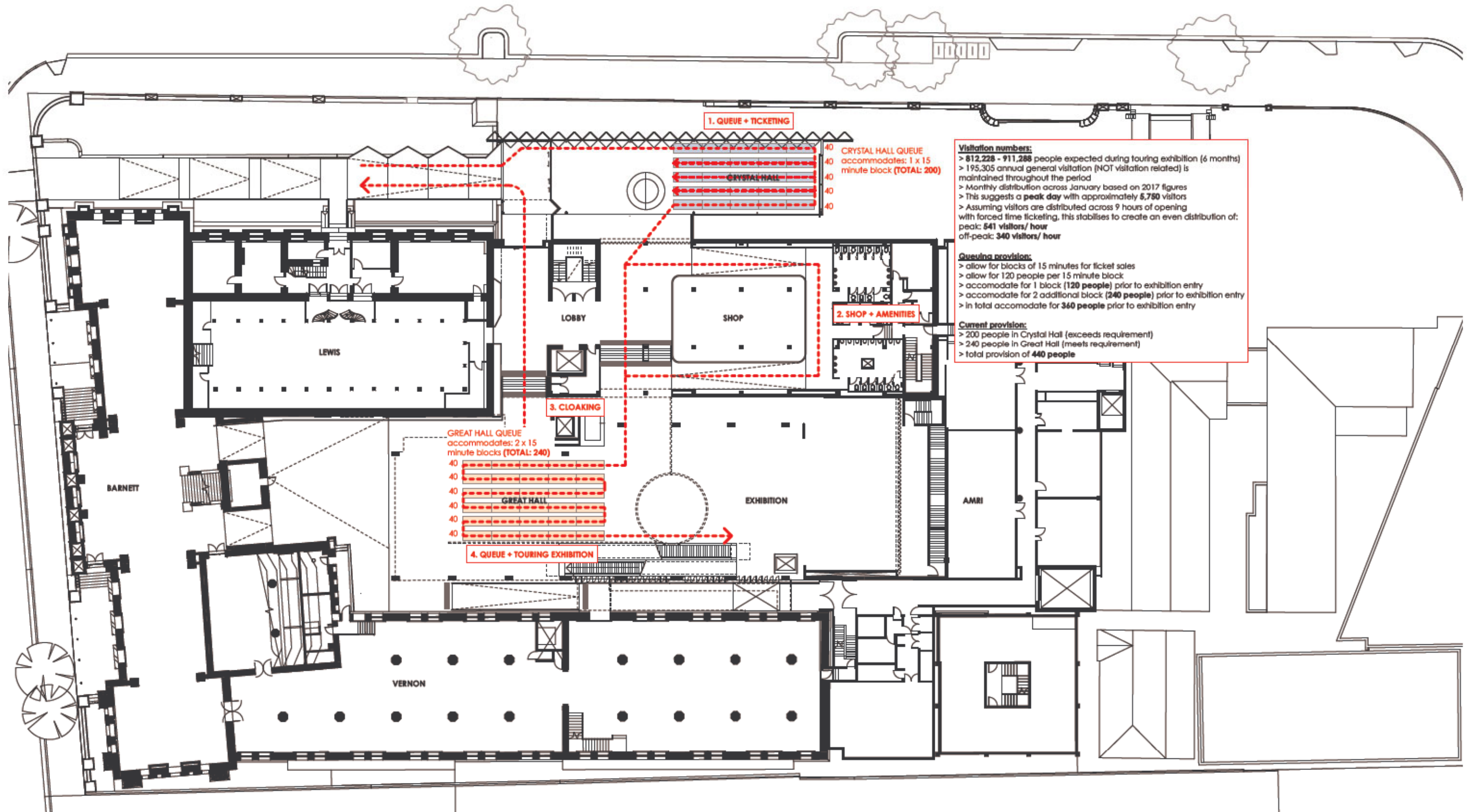
### SOURCE:

Graphic courtesy of Art of Fact.

## QUEUEING STUDIES - LOWER GROUND



# QUEUEING STUDIES - GROUND FLOOR



**Visitation numbers:**

- > 812,228 - 911,288 people expected during touring exhibition (6 months)
- > 195,305 annual general visitation (NOT visitation related) is maintained throughout the period
- > Monthly distribution across January based on 2017 figures
- > This suggests a **peak day** with approximately **5,780** visitors
- > Assuming visitors are distributed across 9 hours of opening with forced time ticketing, this stabilises to create an even distribution of: **peak: 641 visitors/ hour** **off-peak: 340 visitors/ hour**

**Queueing provision:**

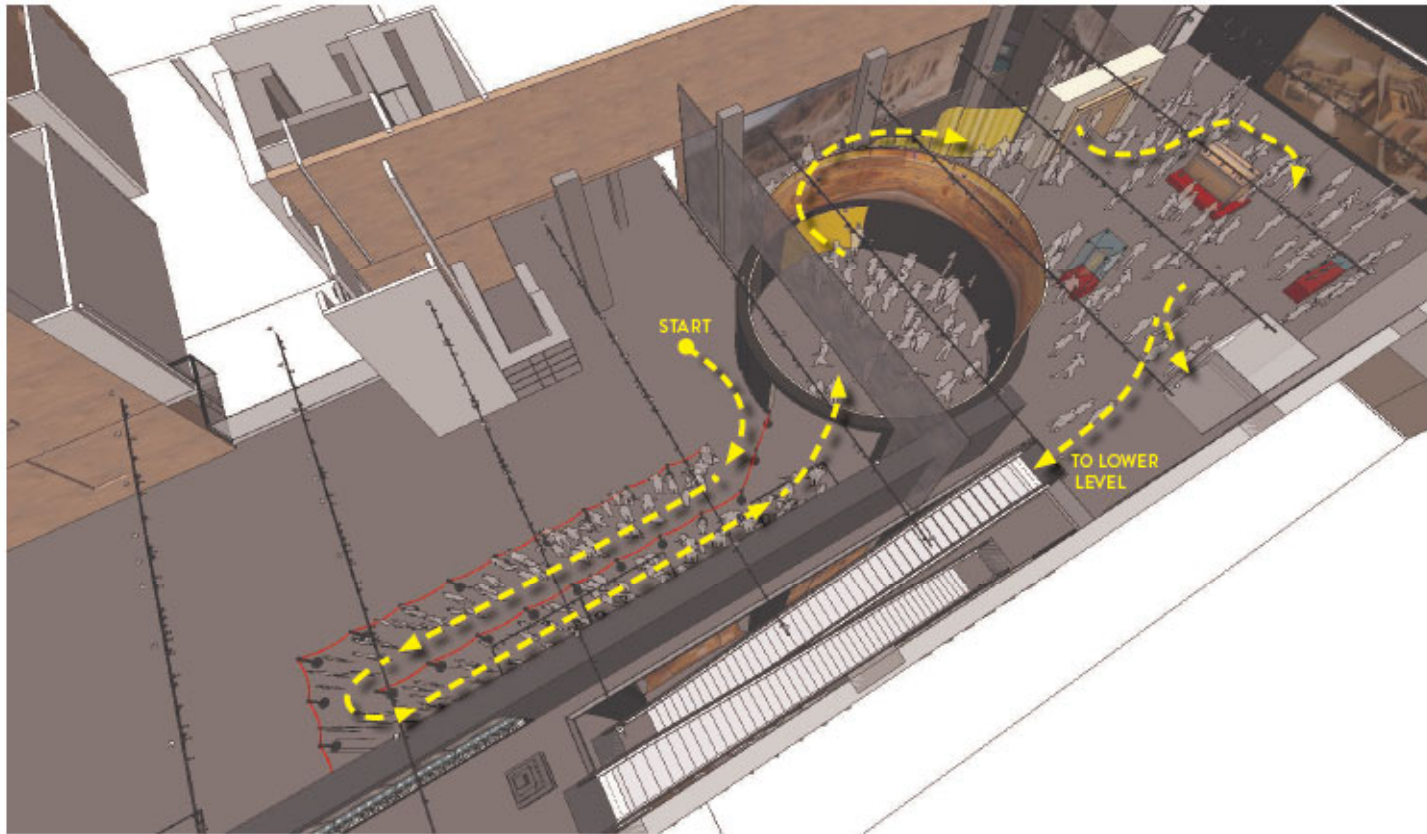
- > allow for blocks of 15 minutes for ticket sales
- > allow for 120 people per 15 minute block
- > accommodate for 1 block (**120 people**) prior to exhibition entry
- > accommodate for 2 additional block (**240 people**) prior to exhibition entry
- > in total accommodate for **360 people** prior to exhibition entry

**Current provision:**

- > 200 people in Crystal Hall (exceeds requirement)
- > 240 people in Great Hall (meets requirement)
- > total provision of **440 people**

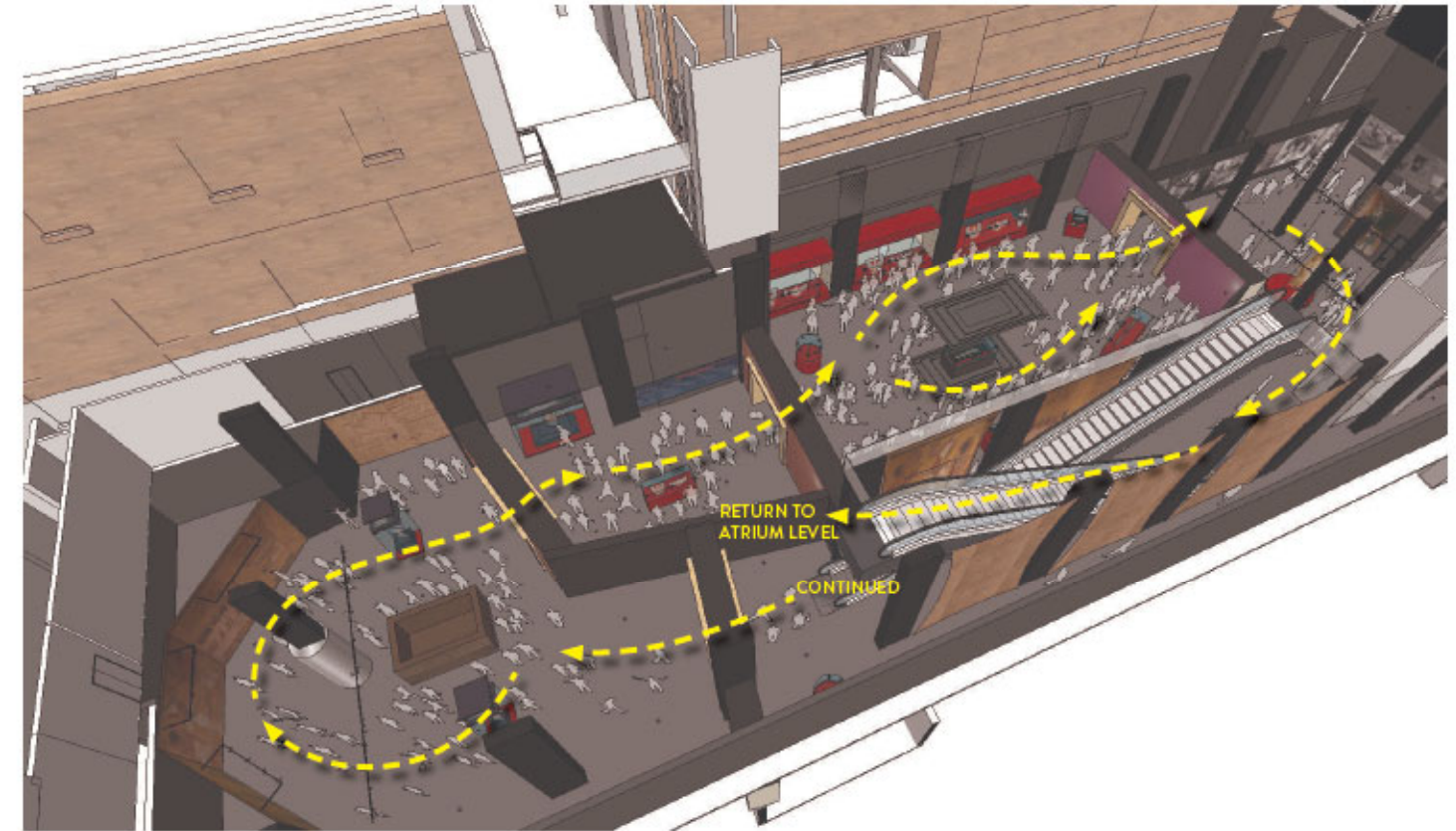
## 5.2 EXHIBITION DESIGN FIT OUT

### UPPER LEVEL GALLERY, CONCEPTUAL EXHIBITION FIT OUT



Patrons queueing to enter the exhibition and going downstairs via escalator or lift.

### LOWER GALLERY CONCEPTUAL SUBDIVISION INTO "CHAPTERS"



Patrons continues ex journey in the lower gallery before returning to the upper level via escalator or lift

#### SOURCE:

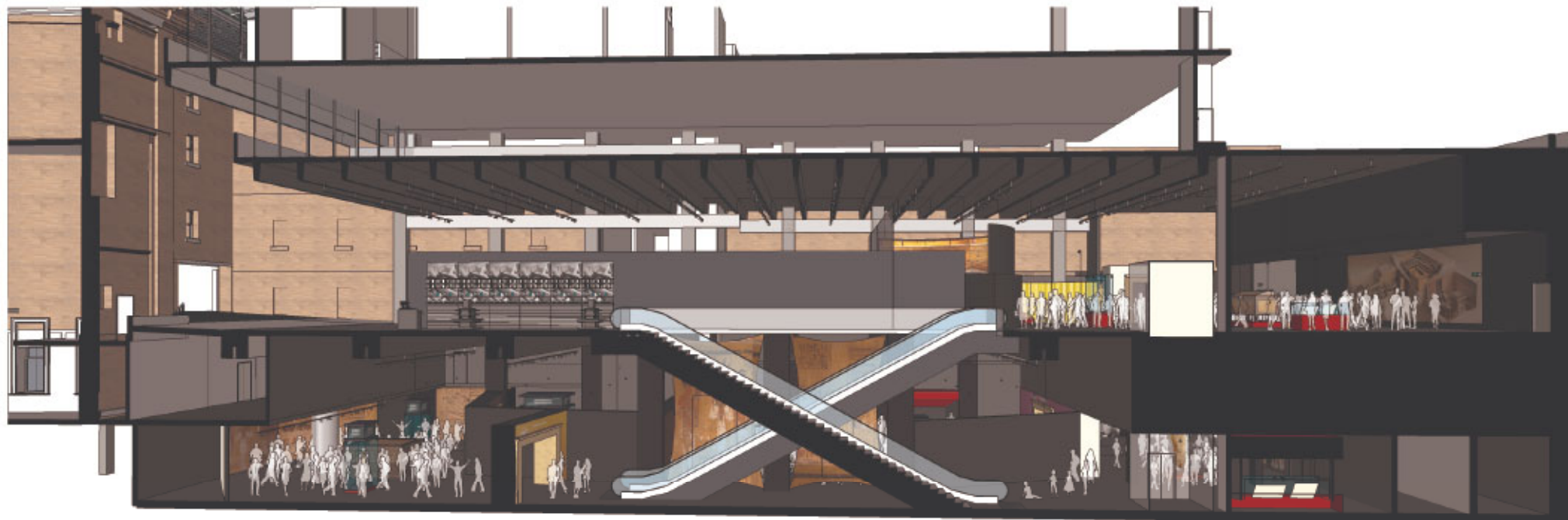
*Graphic courtesy of Art of Fact.*



LONG SECTION LOOKING SOUTH, SHOWING UPPER GALLERY AND ATRIUM SPACE, AND LOWER GALLERY

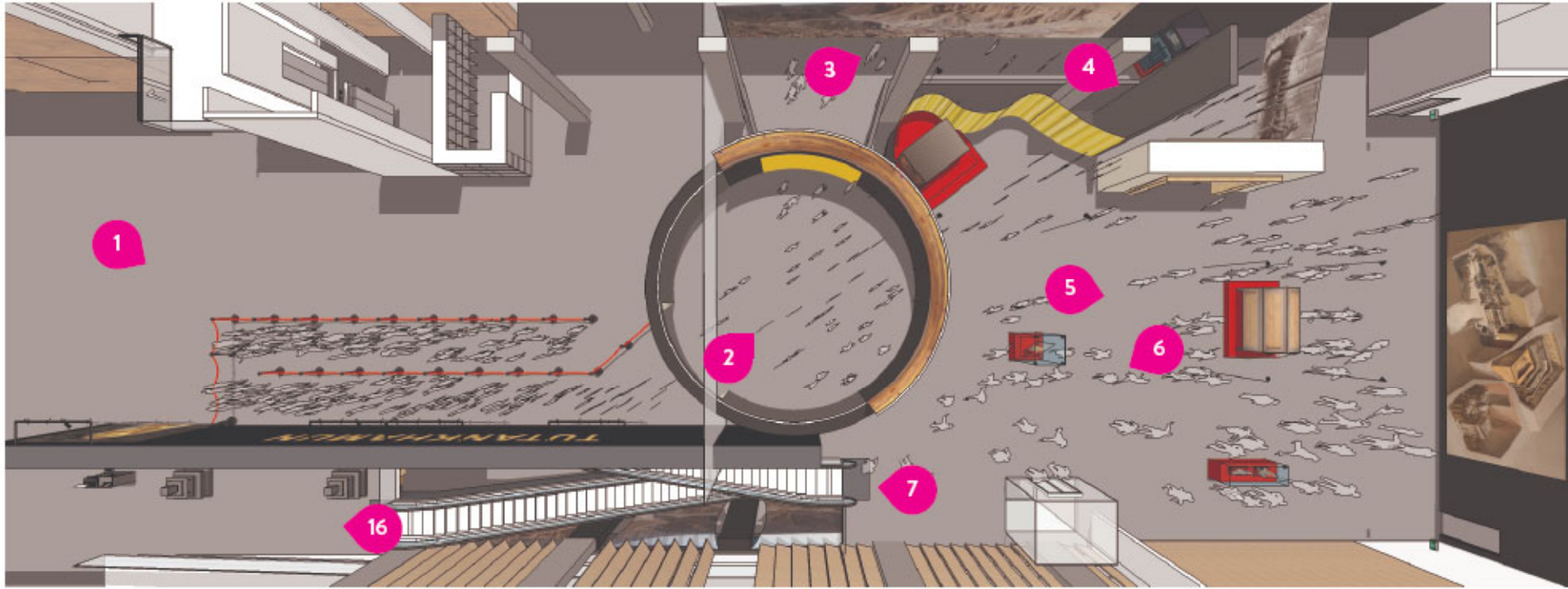


LONG SECTION LOOKING NORTH, SHOWING UPPER GALLERY AND ATRIUM SPACE, WITH LIFT AND ESCALATOR



SOURCE:  
*Graphic courtesy of Art of Fact.*

## UPPER FLOOR PLAN, WITH KEY VIEWS



Touring exhibition patrons queue in the atrium (1), or the new "heart" of museum, awaiting their preallocated timeslot for entering the gallery (2).

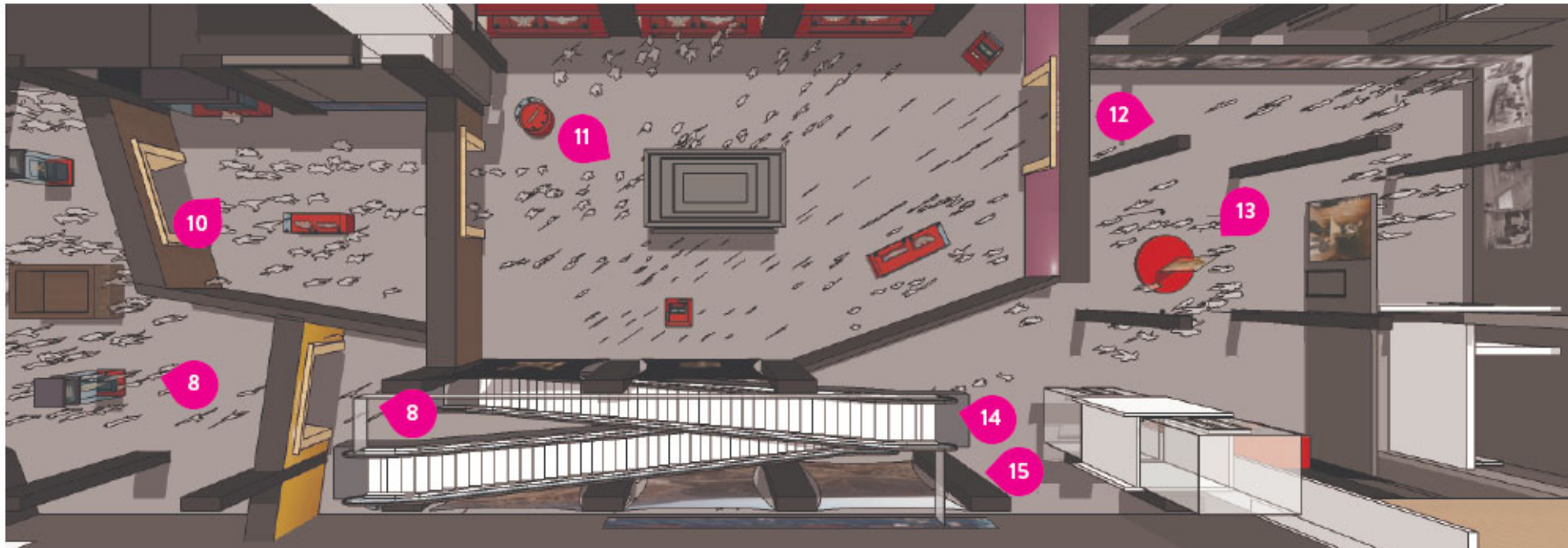
Down escalator (7)

Up escalator and shop (16)

Escalator down from upper gallery (14)

Escalator to upper level (15)

## LOWER FLOOR PLAN, WITH KEY VIEWS



SOURCE:

Graphic courtesy of Art of Fact.



### THE EXHIBITION QUEUE IN THE NEW EXPANDED ATRIUM



### DOWN ESCALATOR.

Note temporary wall on the right. Daylight from atrium beyond.



### WEST END OF LOWER GALLERY, SHOWING THE LOWER CEILING HEIGHT SPACE.

Note encapsulated column, to reflect colours of exhibits around it.



SOURCE:

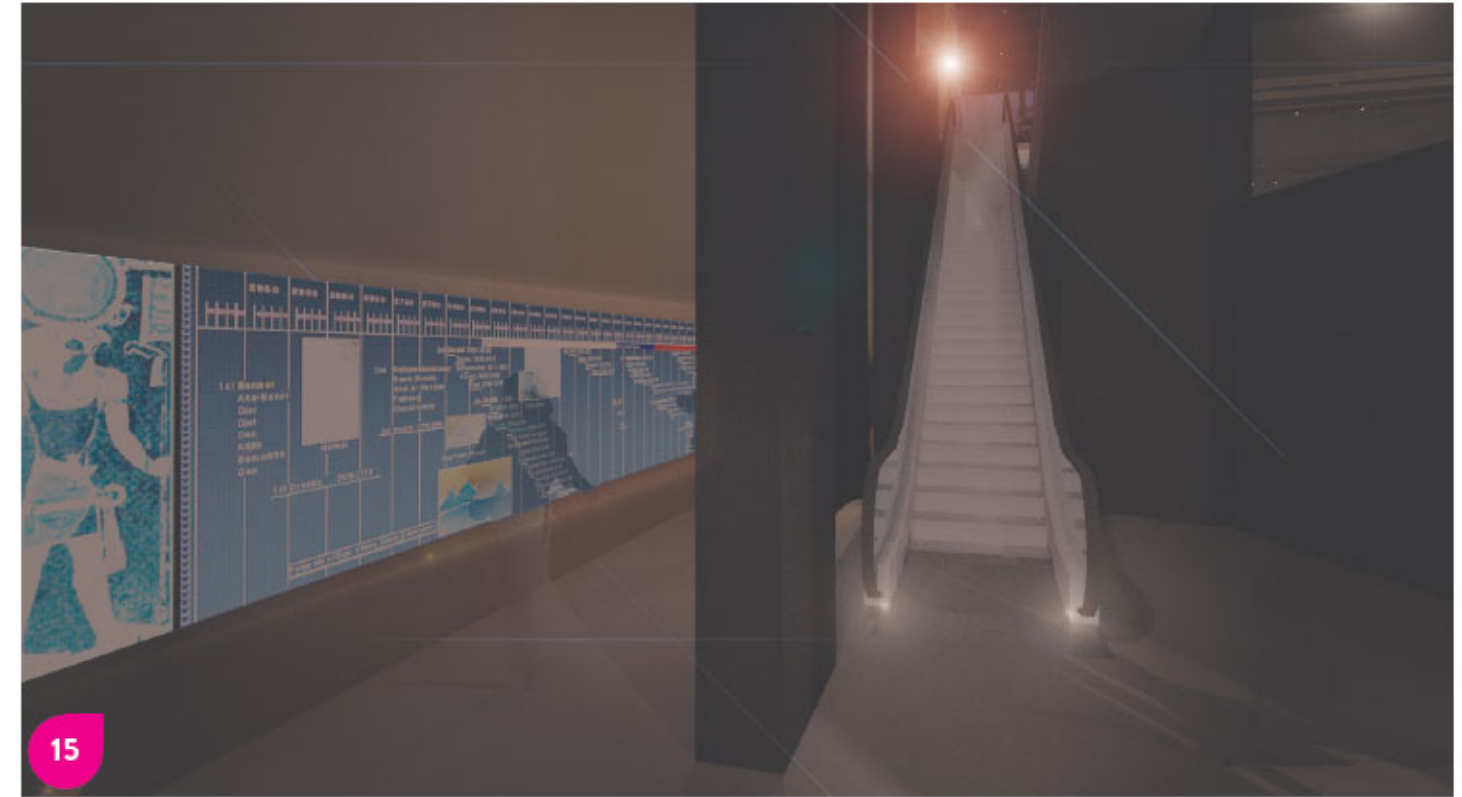
*Graphic courtesy of Art of Fact.*

**EAST END OF THE LOWER GALLERY SHOWING LOWER CEILING HEIGHT (3.3M)**

Note gallery access door in far right hand corner.

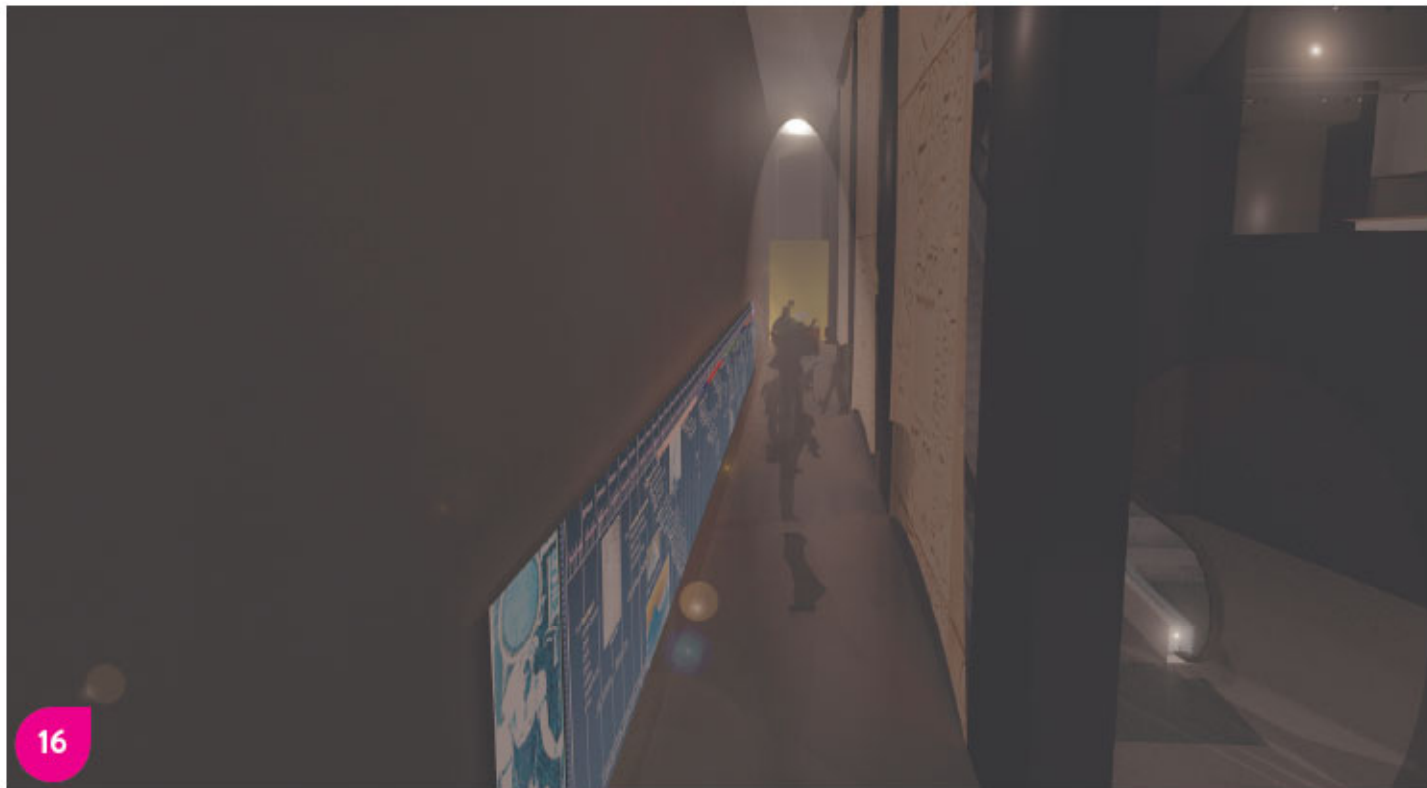


**VIEW OF THE UP ESCALATOR, WITH BY-PASS CORRIDOR TO THE LEFT**



**BY-PASS CORRIDOR**

Note lightweight banners adjacent to the escalators.



**ARRIVAL BACK INTO ATRIUM, SHOWING TEMPORARY EXHIBITION SHOP**



