



# STREETSCAPE DESIGN RESPONSE

## GROUND FLOOR

With a dramatic connection to the vertical street atrium spine, the ground floor entry foyer is an open and transparent front door to the student accommodation, with adjacent informal gathering spaces.

The east entry addresses the precinct point of arrival for most residents. This entry also provides a direct connection to Cardigan Street and linkage to Lygon Street and greater Carlton retail and entertainment offerings.

The west entry relates directly to the oculus and access to the academic connections of the University campus.

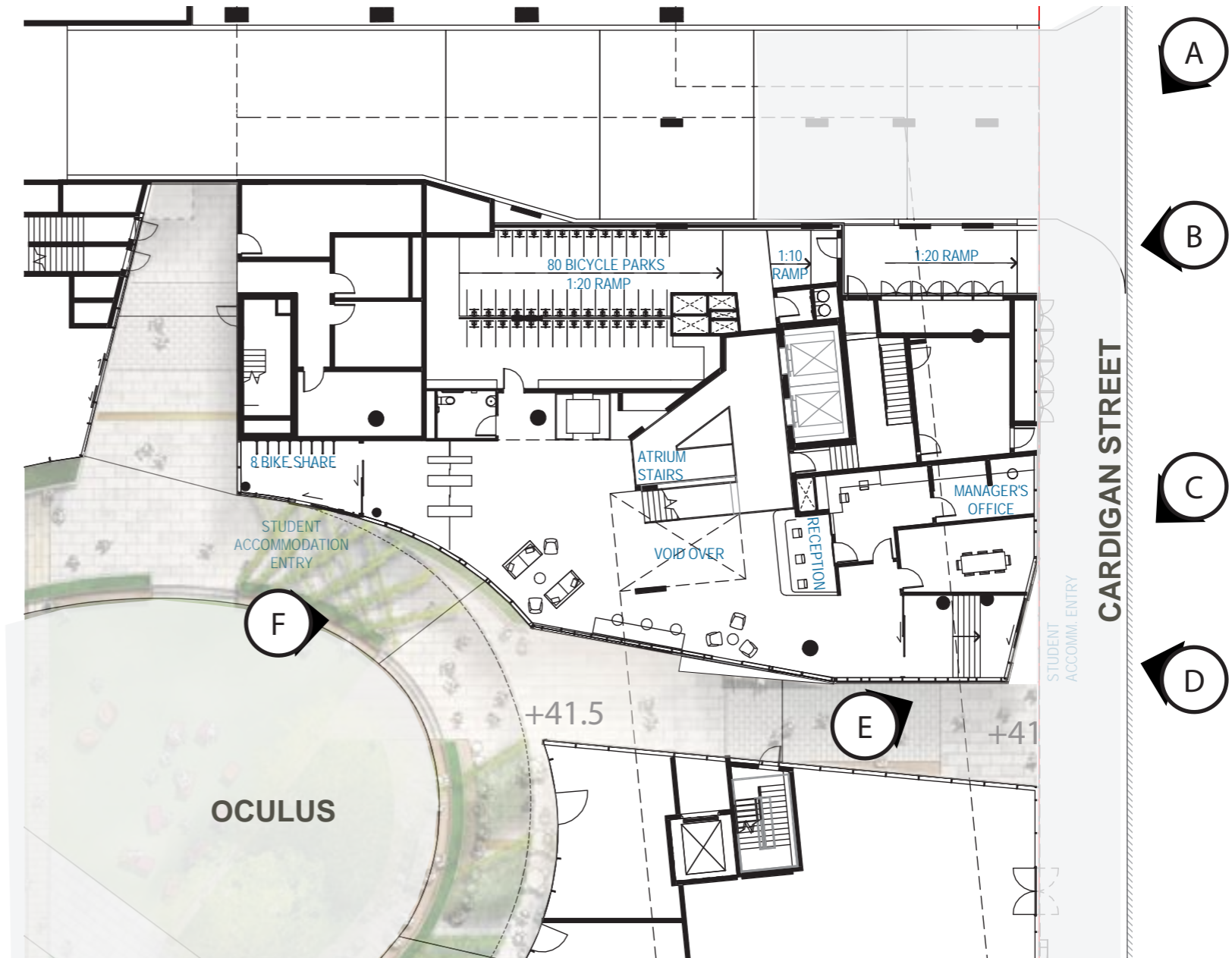
- Entry on the east facade provides a point of identity for the student accommodation from Cardigan Street. This enables visibility of the destination for new arrivals and a drop off point adjacent to the ground floor entry. A direct suburban link from the precinct for the tenants and visitors.
- West entry is a conduit to the main campus engaging with the activities of the oculus en route.
- Location of entry to the west of the building is within a safe wind speed area. The airlock with doors at 90 degrees further protects from direct gusts from within the oculus.
- Passive surveillance is enabled to the entry points out to the oculus and Cardigan Street from the Student Accommodation communal area.

## STREETSCAPE EXPERIENCE

Approaching the precinct from the north east the residential Carlton area transitions into the University of Melbourne campus and the north of the city.

The material language of the suburb is replicated to guide through this change in scale. Activity along the street edge varies as pedestrians walk around and into the precinct proper.

- Basement entry ramp extends the bluestone pavers from the footpath into the ramp and bike store entry blending the service transition into the footpath
- Bike store entry produces arrival point to Cardigan Street that is separated from the pedestrian entry points
- Service access points are integrated into the tessellated brick forms as they come to ground
- Glazed corner to student accommodation opens up visibility between Cardigan Street & Cardigan Lane. Eastern entry establishes an address and a presence on Cardigan Street
- Chamfered corner to ease pedestrian foot traffic into the laneway and precinct
- High visibility into student accommodation and signage signifies destination
- 24 hour activity with manned reception provides security entry through oculus after hours
- Western entry provides equal amenity to UoM campus and Carlton's Cardigan Street. This contributes to the oculus by opening onto and engaging the inner precinct.



# PEDESTRIAN EXPERIENCE



**A** CARDIGAN ST NORTH EAST SITE BOUNDARY



**B** CARDIGAN ST CENTRALISED SERVICES & BIKE ENTRY



**C** CARDIGAN ST STUDENT ACCOMMODATION GROUND FLOOR



**D** CARDIGAN ST CORNER OF CARDIGAN LANE



**E** CARDIGAN LANE VIEW TO CARDIGAN STREET



**F** CARDIGAN LANE FROM OCULUS



Activation of Cardigan Lane through retail and residential entry.



Low scale podium form and solid materiality to Cardigan Street responding to established nature of the Carlton environs further east and north.



Balconies provide passive surveillance to Cardigan Street below.



Street activation of Cardigan Street through the location of residential lobby.



Pedestrian connection links to Cardigan Street and provides students with a sense of address.

## NORTHERN EDGE:

# DENTAL HOSPITAL INTERFACE

The Dental Hospital is the precinct's northern neighbour. The relationship varies across 4 zones.

- Zone 1 - Hospital entry and cafe area
- Zone 2 - Hospital connection to administration wing
- Zone 3 - Administration
- Zone 4 - Student Accommodation

Future development will allow for a 9 storey, 36 metre commercial building. To ensure future amenity of the apartments, a 5 metre setback will be maintained from the north title boundary.

Lower level apartments also have a solid Juliette balcony across the base of windows to limit overlooking to the existing premises.

The Dental Hospital comprises 8 storeys, dropping to 2 storeys at Cardigan Street.







## ENHANCING THE PUBLIC REALM:

# THE LANEWAYS

## FAB LAB PLAZA

The Fab Plaza is designed to meet the needs of a high capacity Space between the Dental Hospital, the Fab Lab and the Superfloor Event Space. The proposal creates a public space that can be used by both the educational precincts and the general public.

It is noted that the design currently incorporates some Dental Hospital Land and therefore is indicative of what may be pursued in the future. The current outdoor space for the Dental Hospital is primarily designated for staff and this will need to be addressed at the next design stage.

It would be highly beneficial to be able to use the deep soil areas of the Dental Hospital land to provide large tree plantings.

The design is defined by a spine of public urban furniture which acts as an intuitive way-finding device to the central Oculus. Furniture in the Fab Lab Plaza responds to the activation of retail spaces and provides flexible seating opportunities for small to large groups.

## GALLERY LANE

Gallery Lane is positioned near the gateway corner of Swanston and Grattan Streets and forms the primary entry to the lobby of the integrated MSD and Commercial floors above.

Sculptural urban seating elements and shifting paving alignments mark a wide welcoming space before inviting pedestrians into the laneway. This provides intimacy to contrast with the grandeur of the civic facade.

Further into Gallery Lane urban furniture is designed to allow people to sit and enjoy Science Gallery exhibitions and associated projections at all hours to induce a gallery feel. These areas also form covered waiting spaces for school children and precinct users. Gallery Lane becomes a place to stay, learn and watch and is distinctly not an 'unadorned' laneway.

## HOSPITAL LANE

Hospital Lane is characterised by the opportunity to facilitate outdoor seating and dining.

The majority of Hospital Lane is open to the sky. Reinterpreted hospital theatre lights add character as a nod to the history of the site.

Active retail and cafe frontages create a vibrant social experience for all visiting Carlton Connect. Hospital Lane also incorporates the "End of Trip" ramp facility for cyclists.

## THE CONNECTOR

The Connector is primarily a thoroughfare gateway connecting the site to Carlton. The Connector is a cultural threshold that offers additional outdoor seating and gathering opportunity for residential students. Here an opportunity exists to build upon the connection to Carlton by incorporating local narratives and vernacular into the detailed design elements.

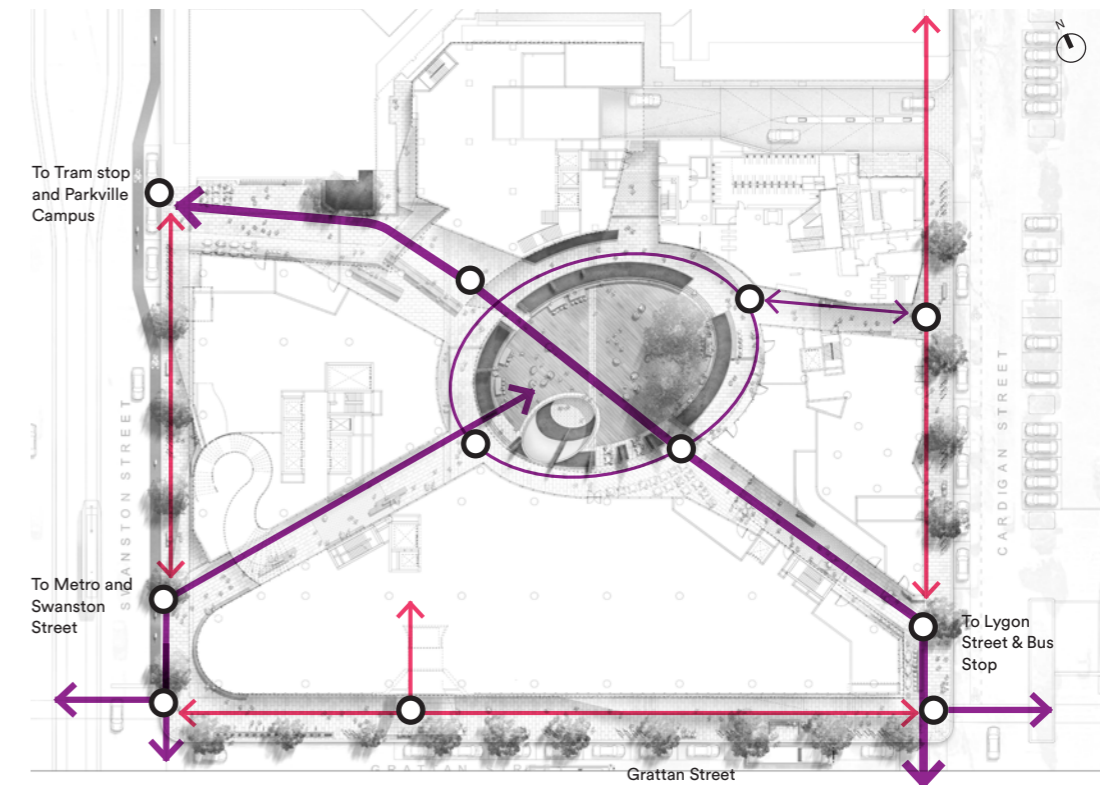


Figure 21 Movement plan

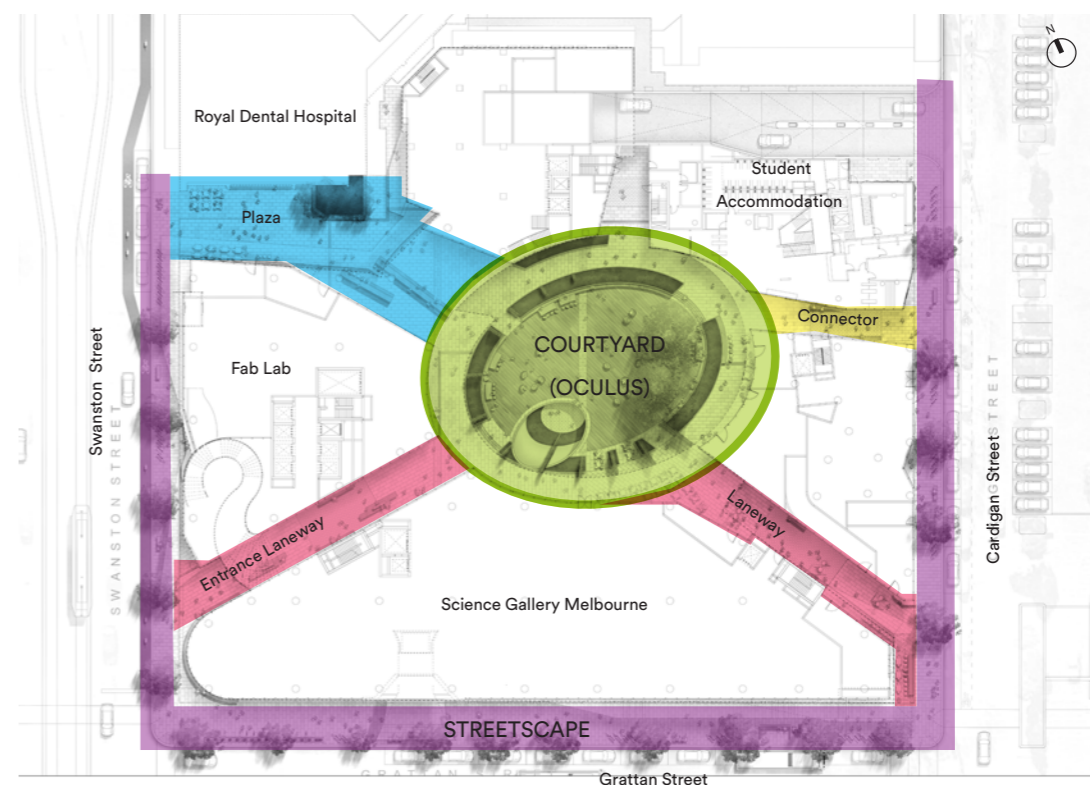


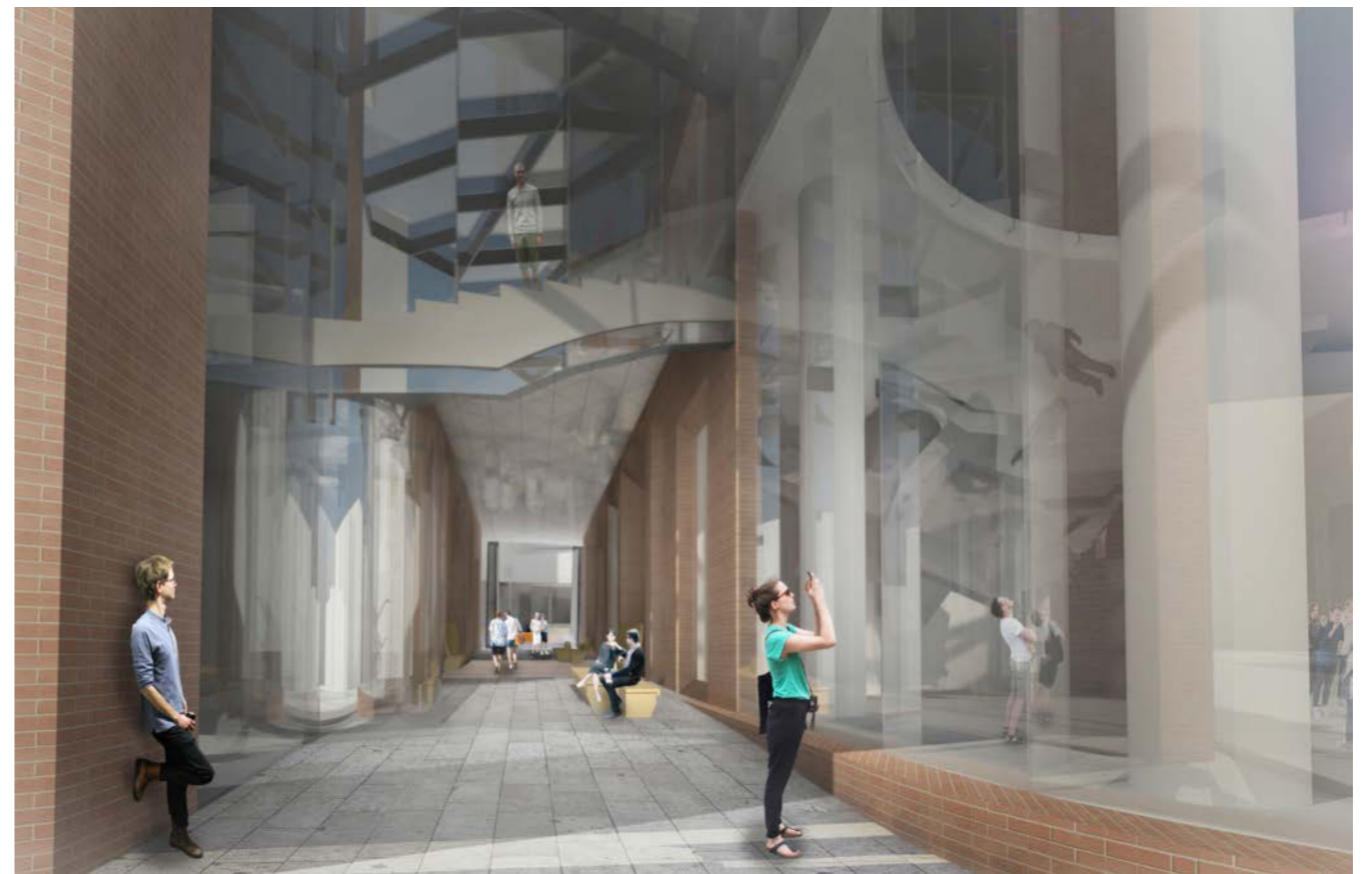
Figure 22 Laneways plan



Hospital Lane



Fab Lab plaza



Gallery Lane

## A NEW OPEN SPACE FOR PUBLIC ENJOYMENT:

# THE OCULUS

The open space created in the centre of the site is intended to draw visitors and occupants into its heart. It is designed as a point of focus; a space for people to enjoy.

The oculus-shaped green space provides a place of exchange where working outside of the office enclosure is encouraged to facilitate serendipitous moments of knowledge sharing.

Sunlight tracks around the space throughout the day to illuminate all sides of the inner facades, thus offering direct sunlight to the heart of the building throughout the day.

This high-quality public space creates:

- An immersive, sheltered and human-scaled space accessible to all;
- A place that takes patrons on a journey of scientific discovery through the tracking of sunlight over the course of the day;



Typical University of Melbourne view, through a threshold into a courtyard space with feature trees.

- A net public benefit on this site, providing the University's portfolio with an additional public space;
- An outdoor working space, building further on the variety of work spaces and work preferences that the precinct accommodates;
- A potential stage for outdoor events.

The Oculus is the central and main public open space for the precinct. At 1,3000m<sup>2</sup>, it is large enough to accommodate many types of events and activities whilst remaining small enough to feel full when there are reduced numbers of patrons.

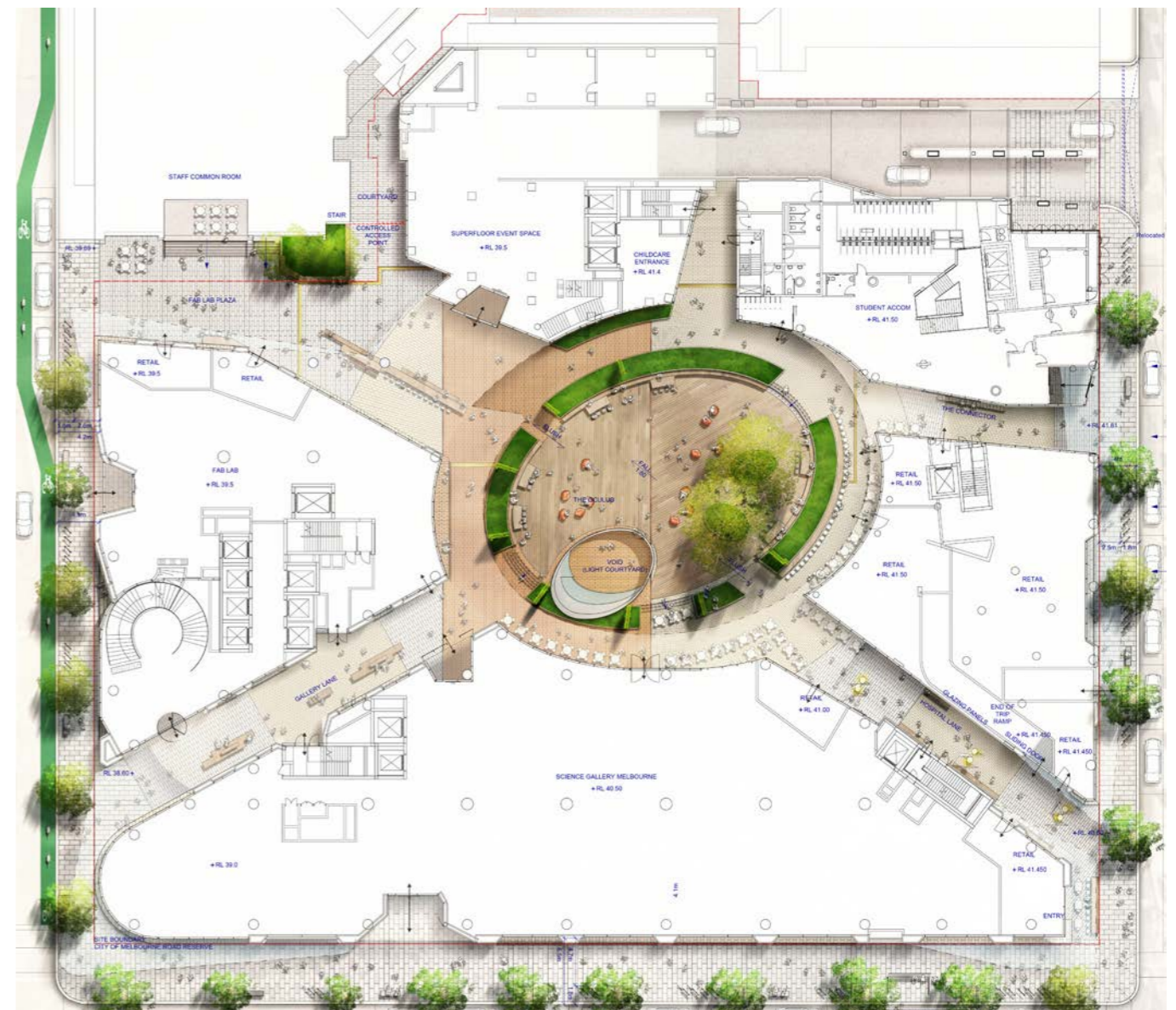
The design has evolved out of the master plan figure ground taking key references from the University's Parkville courtyards in addition to a series of other highly functional and successful spaces from other precincts. These spaces all have a similar spatial DNA - that of a central flexible open space with public occupiable edges and activated built interfaces.

The layout and design of this space allows for people to reorientate themselves to make the most of sunlight and weather conditions.

A further smaller space that can be described as a 'living well' links the ground plane with the lower floors of the Science Gallery and theatre.

Similar to many university squares and courtyards, the central space is defined by large deciduous specimen trees.

The overall design adds significantly to the overall wellbeing of the precinct users. From all buildings looking inwards, one can find a view of greenery with vantages either to the Oculus and trees or the upper roof and vertical gardens of the living architecture.



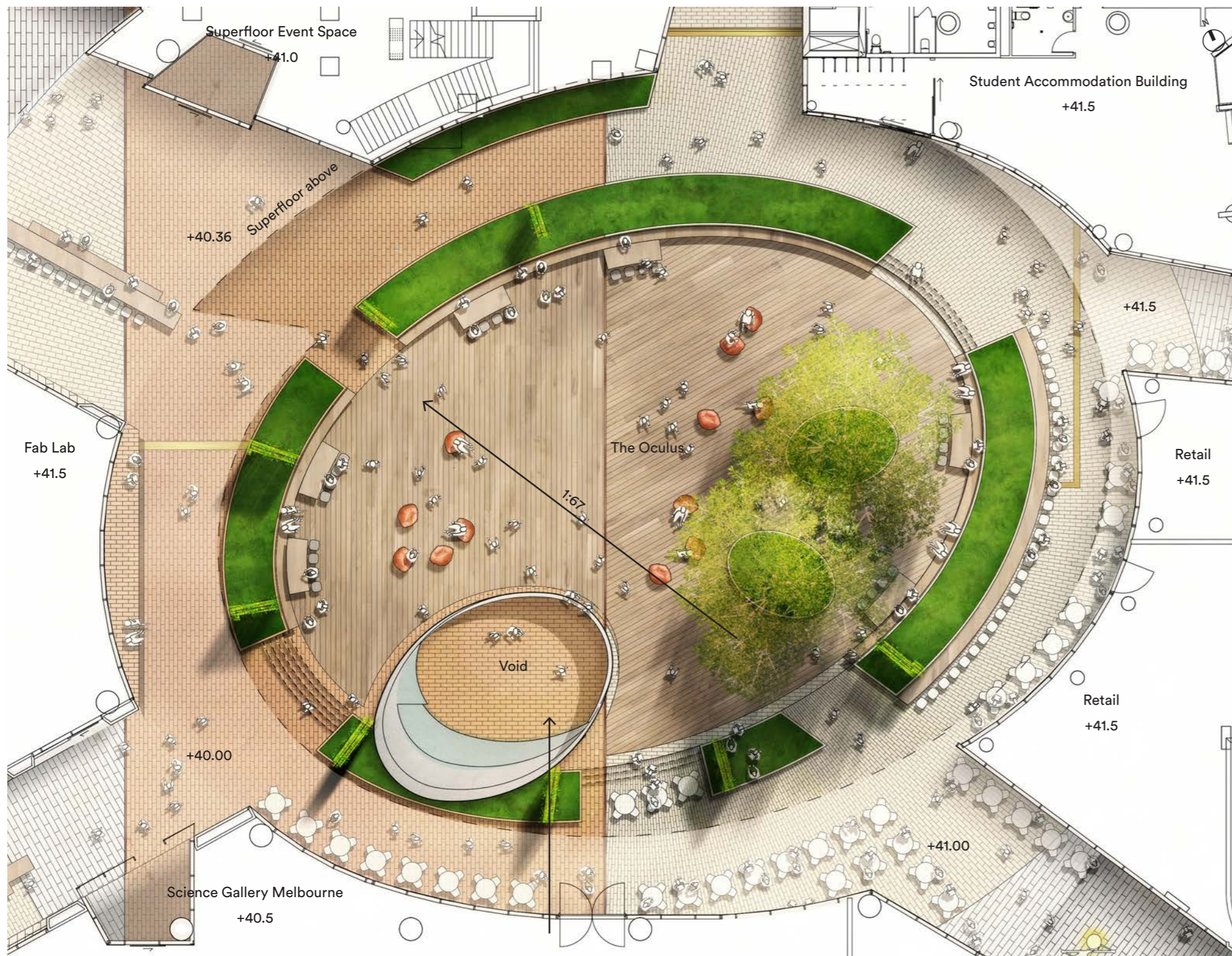






Figure 23 Oculus plan

## URBAN HISTORY INTERPRETATION AND ADAPTIVE REUSE

The history of the site has been depicted in the design through interpretation and adaptive reuse.

### LEGEND

Refer to numbering description on the following page

-  Former "Lying In Hospital" Courtyard footprint  
Opportunity to reference in Tenant interior design
-  Former "Lying in Hospital" Public Realm Interpretation
-  3AW Wing Original footprint  
Opportunity to reference in tenant interior design
-  3AW Wing Public Realm Interpretation.

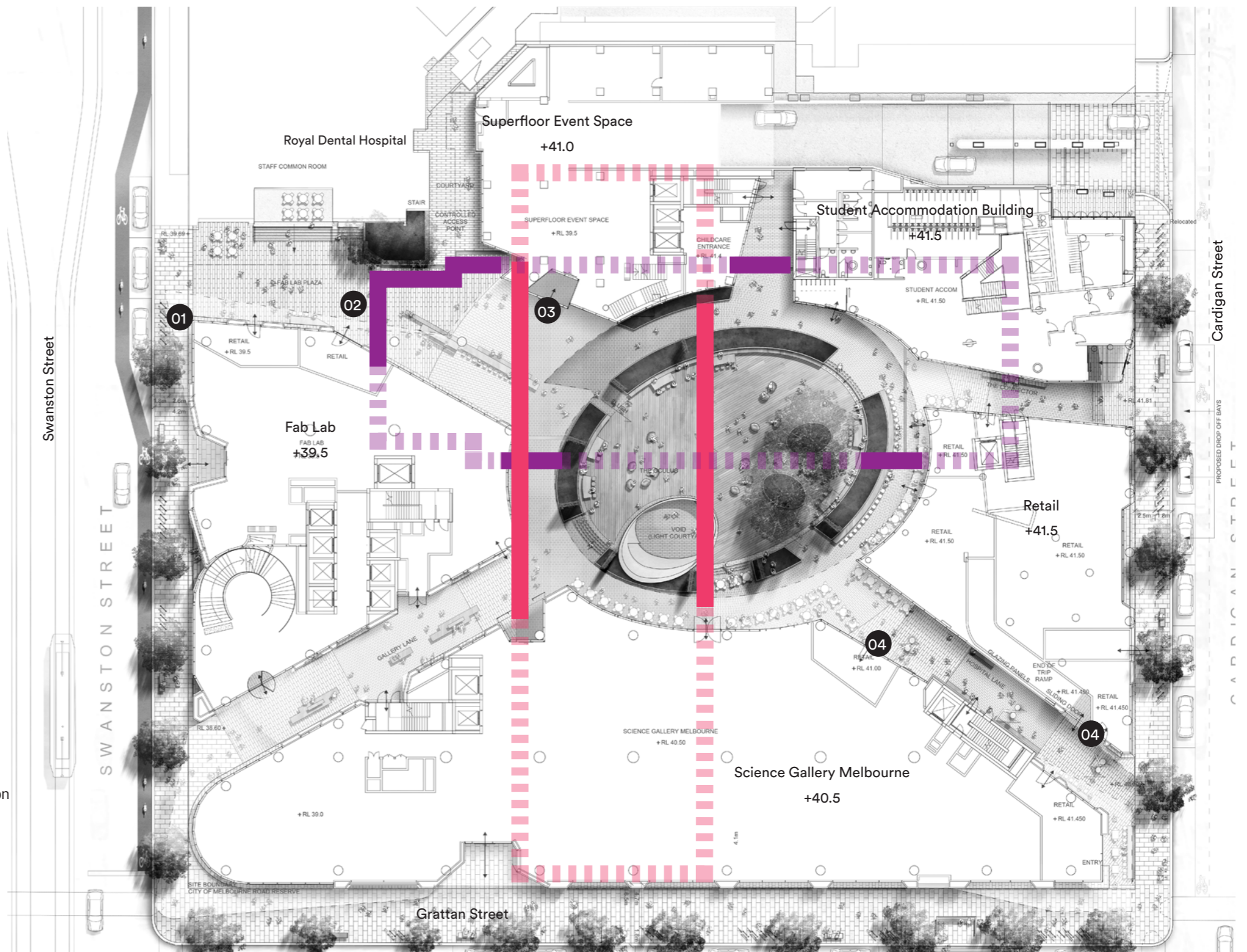


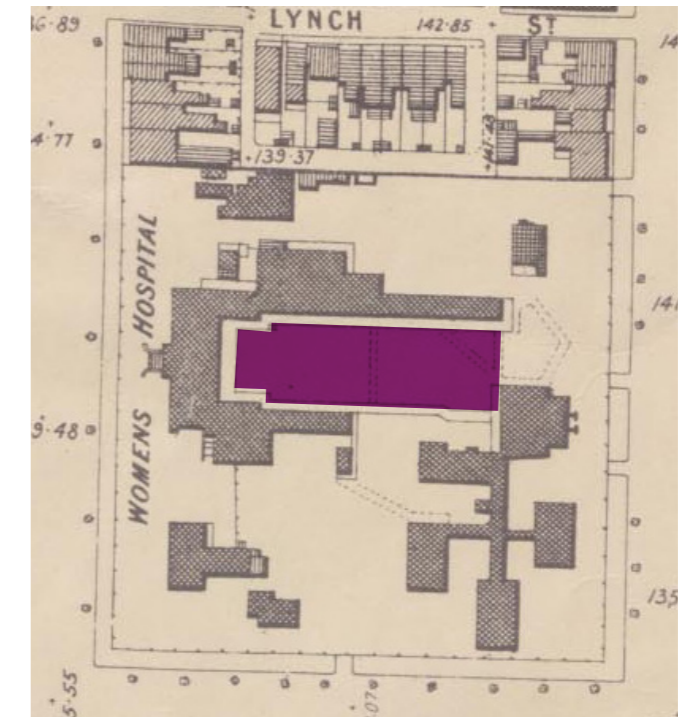
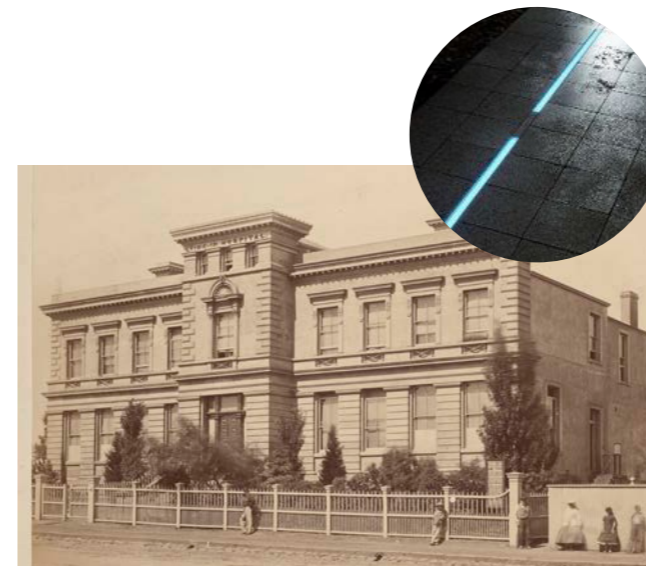
Figure 24 History interpretation plan

01 Historical "Lying in Hospital" Plaque - New Location



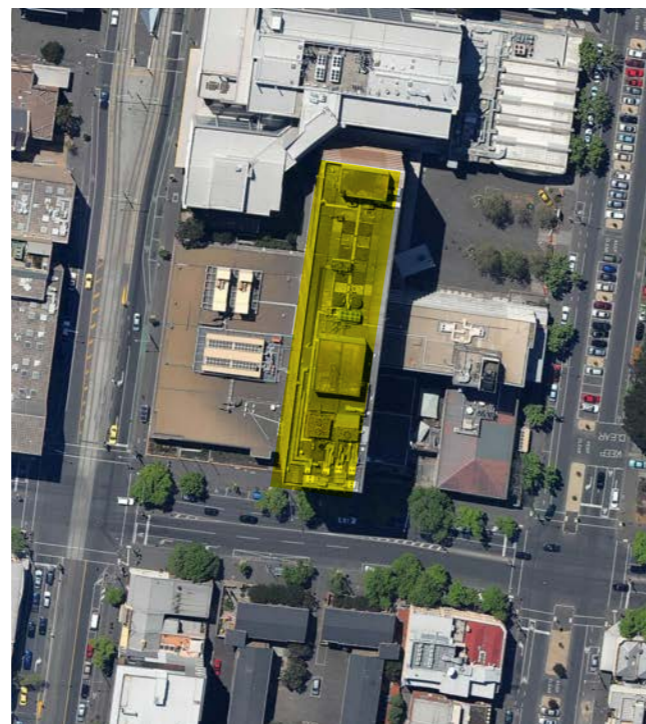
02 Former Lying in Hospital

Demarcate the former "Lying in Hospital" courtyard with in-ground LED feature lighting strips.



03 3AW Wing

The 3AW Community Wing's footprint will be traced in the public space by adaptive reuse of the bricks from the same building (subject to strength and slip resistance testing). The trace is not intended to be literal, but will evoke curiosity in the change in pavement.



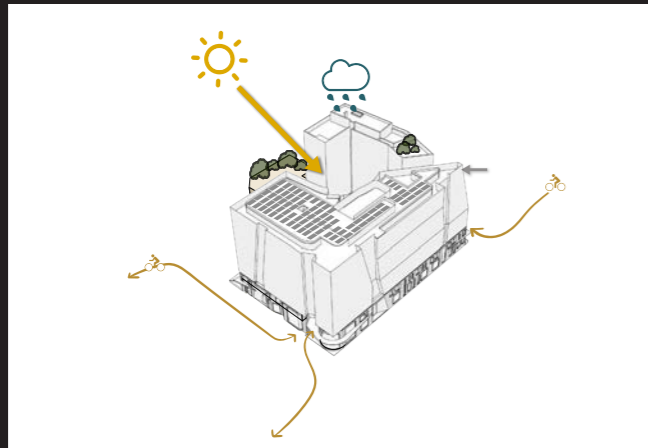
04 Hospital Theatre Lights

Reinterpretation of hospital theatre lights from 3AW Wing to Hospital Lane



## PRINCIPLE 4:

### LEADING INNOVATION AND EMBEDDED ESD



### A CENTRALISED PRECINCT APPROACH

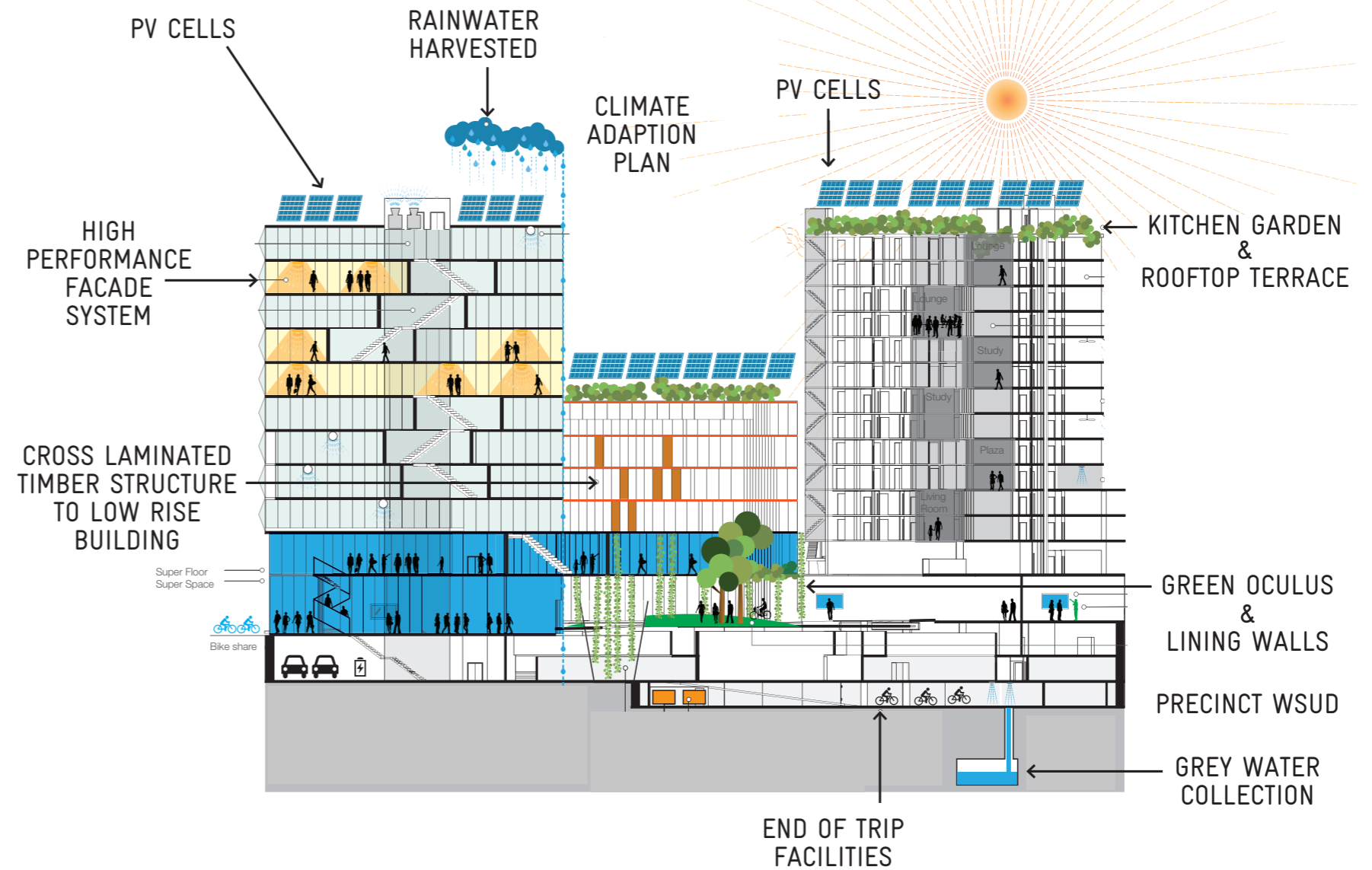
A centralised services and sustainability approach has been adopted that allows for electricity, cooling, heating, recycled water, fire and security services to be shared across the site.

The provision of site-wide infrastructure allows for efficiency in construction costs and in operation. The use of resources will be monitored and reported digitally, with opportunities to make aspects of the building performance available to the student, research and entrepreneurial community to learn from and innovate based on the building's performance itself.

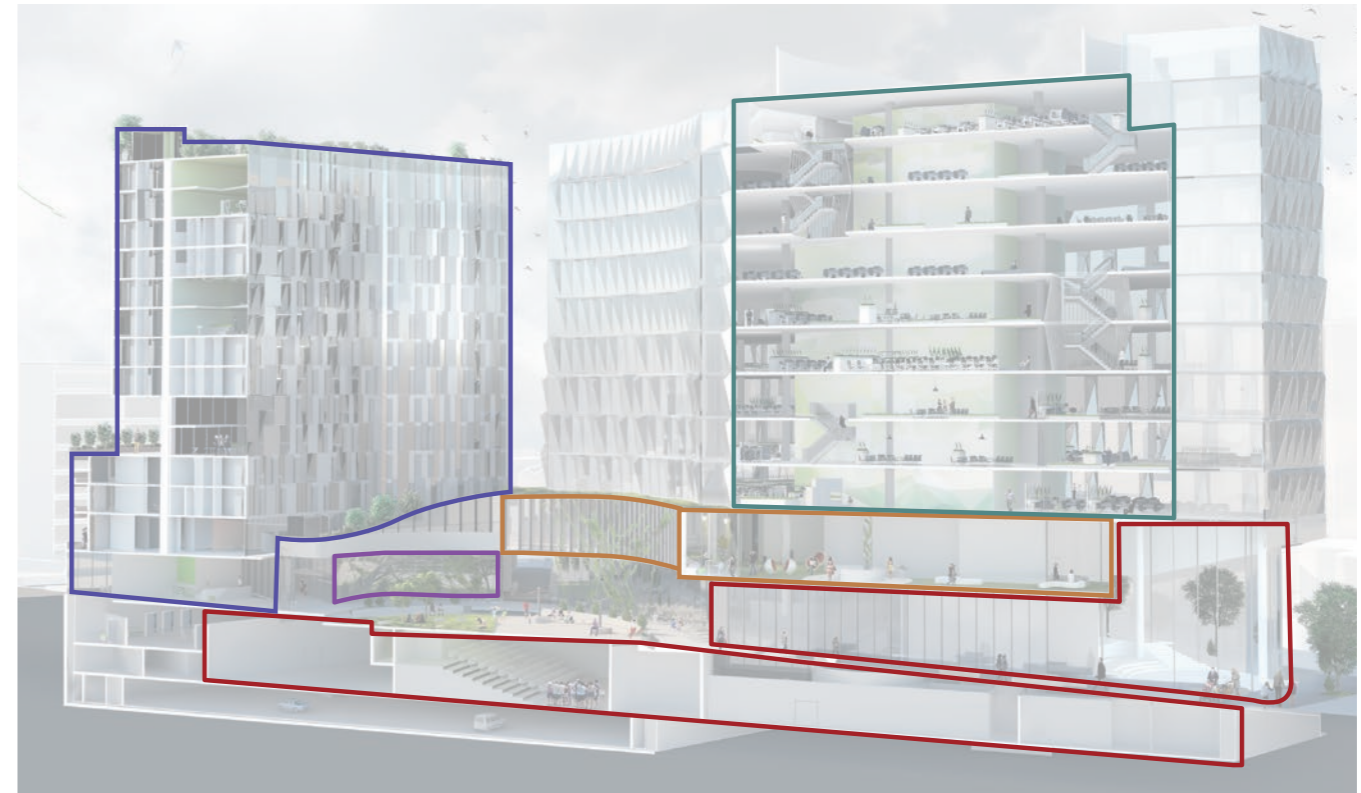
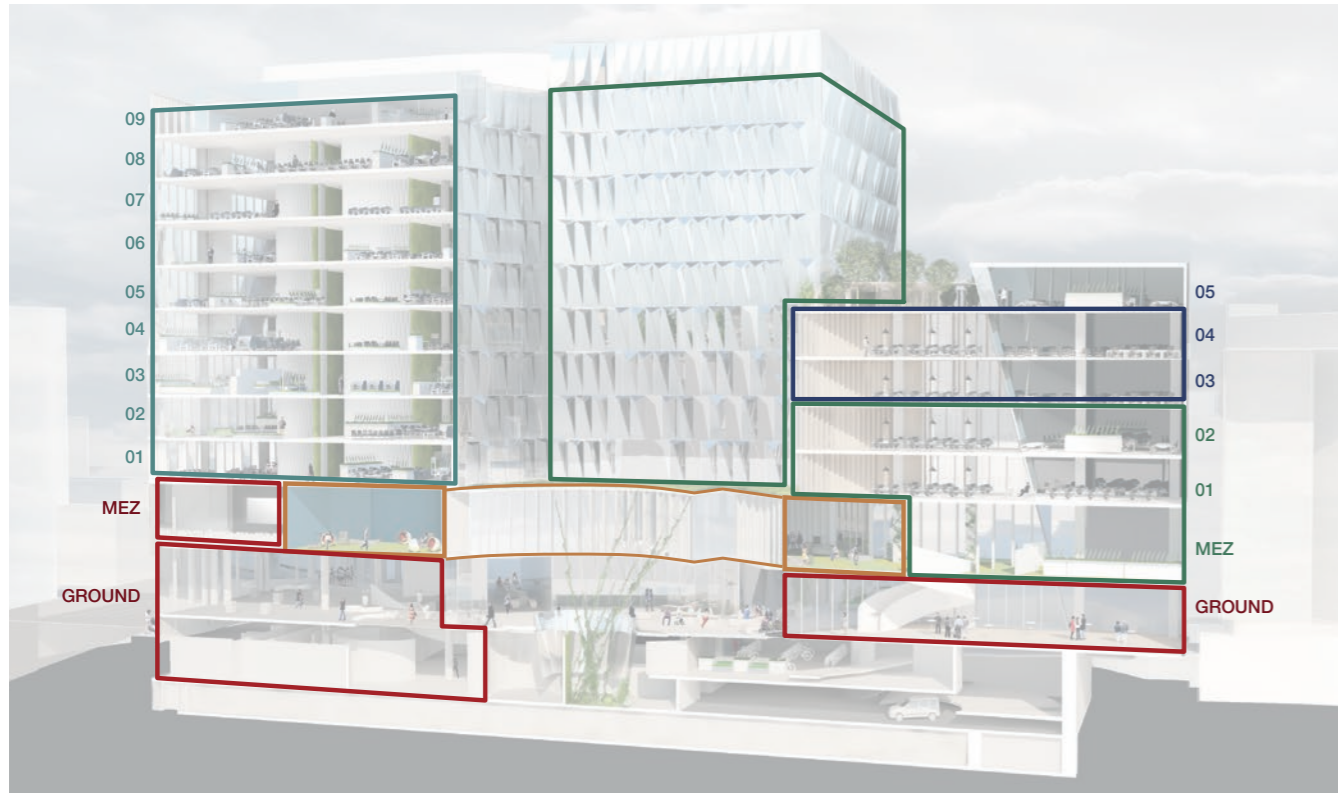
This centralised approach to precinct services and sustainability enables:

- A research and knowledge-led approach to implementing innovation in sustainability
- Opportunities to display and engage with industry to further research outcomes around building technologies and precinct-wide sustainability initiatives.

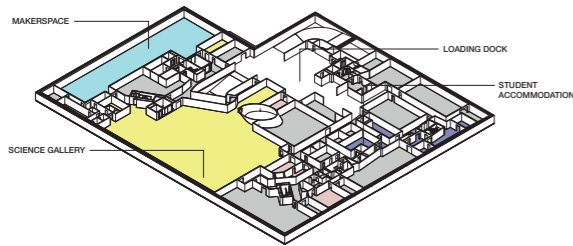
### VISION FOR DEMONSTRATABLE ESD INITIATIVES



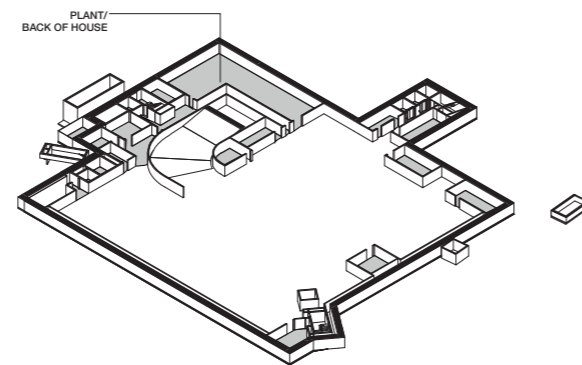
# AN INTEGRATED MIX OF USES ENABLING COLLABORATION



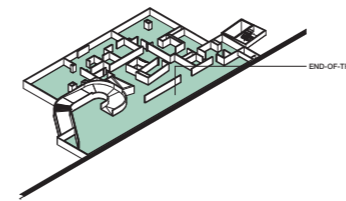
- SUPERFLOOR
- UNIVERSITY OF MELBOURNE
- INDUSTRIE PARTNERS
- SCIENCE GALLERY MELBOURNE
- CHILD CARE
- RETAIL
- STUDENT ACCOMODATION



BASEMENT 01



BASEMENT 02

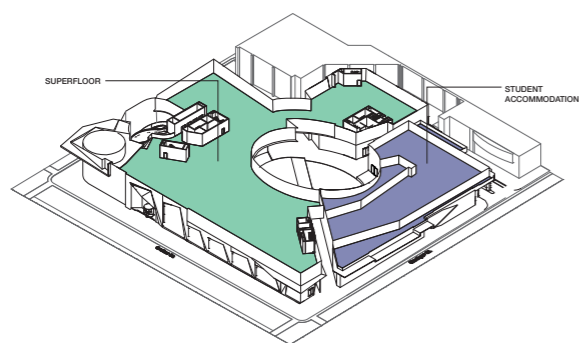
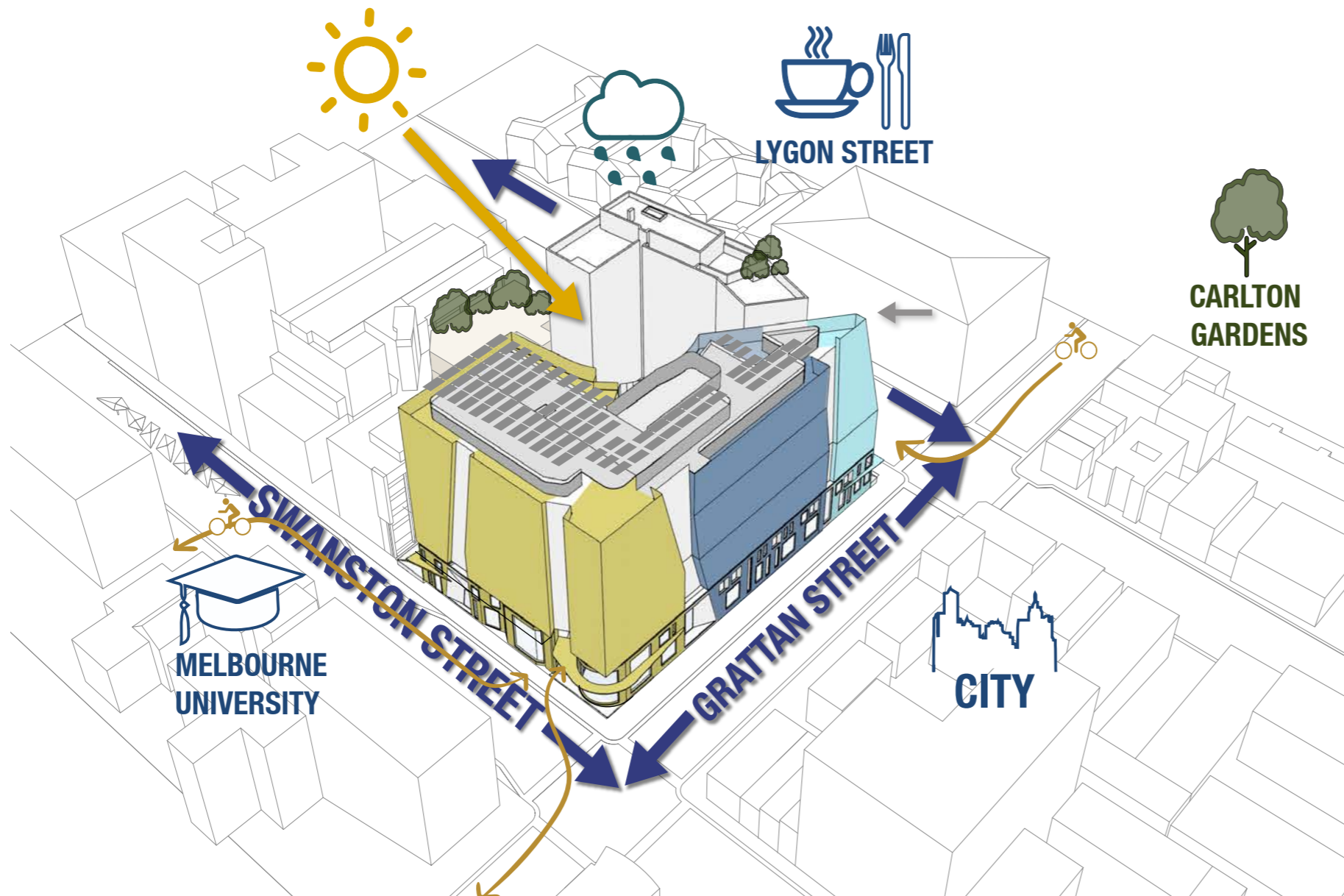


BASEMENT MAZZANINE

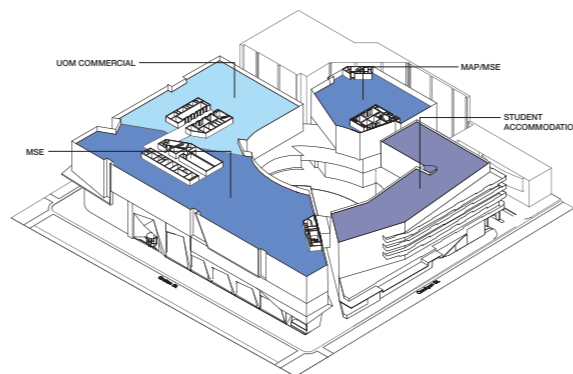


GROUND PLAN

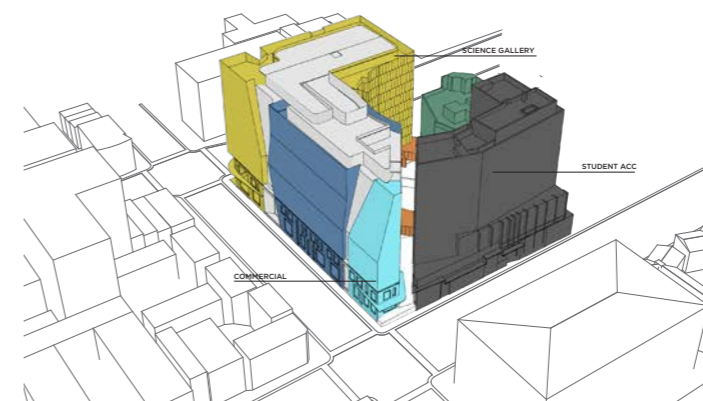




SUPERFLOOR



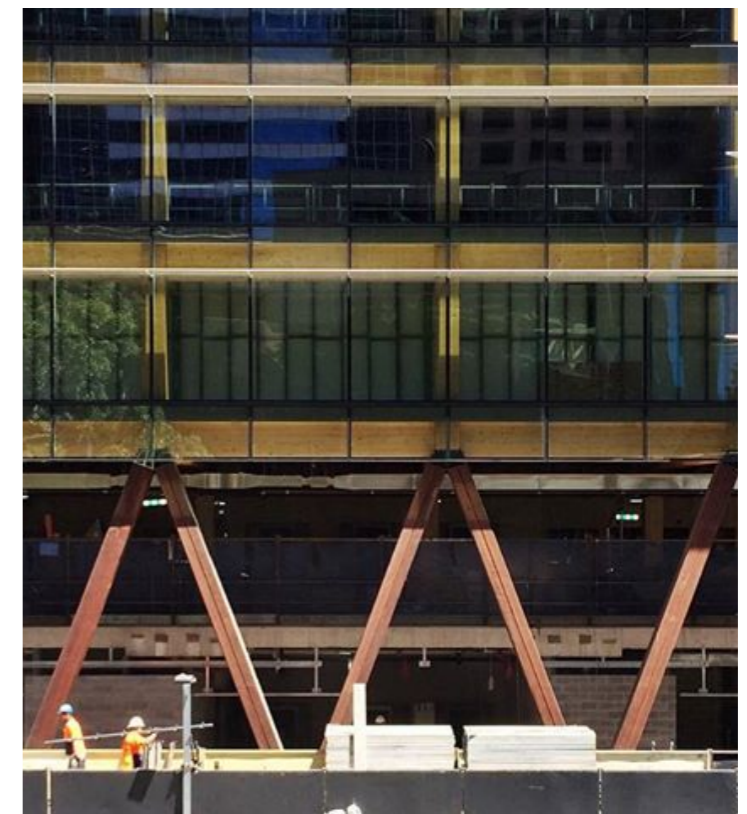
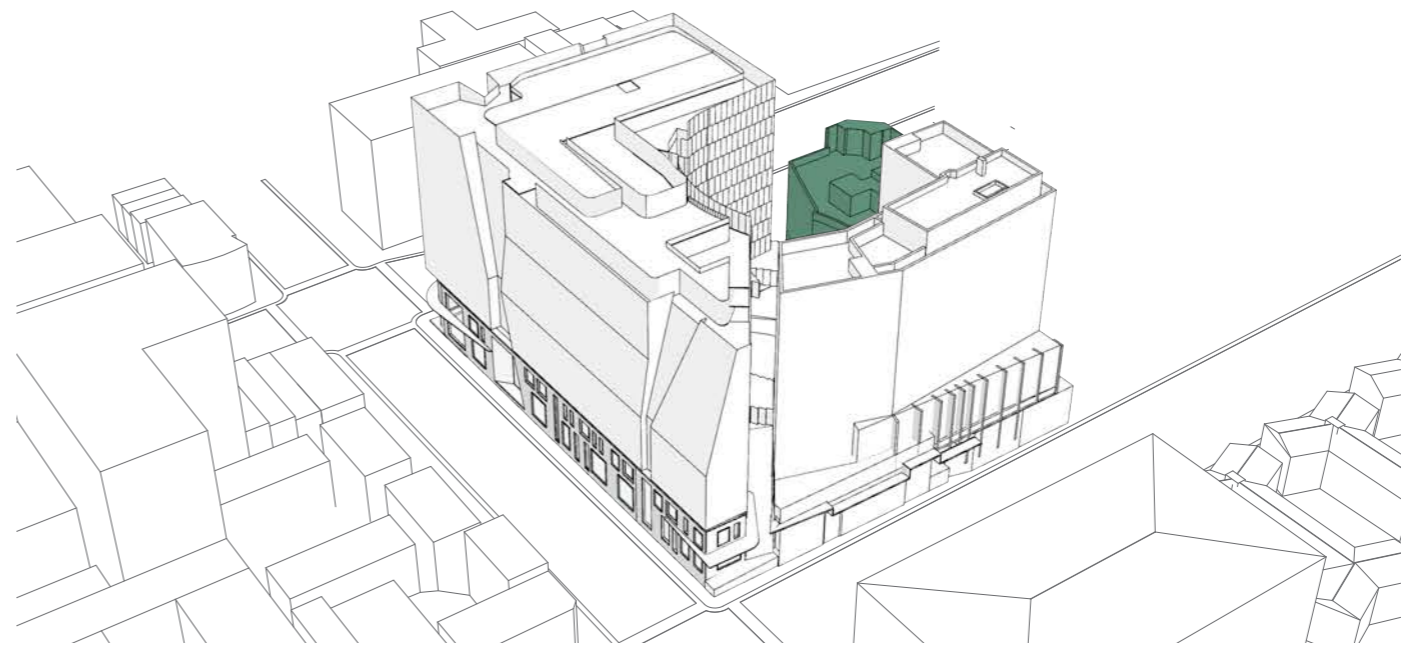
TYPICAL FLOOR



OVERALL MASSING

AREA SUMMARY LEGEND

- CARPARK
- CHILDCARE
- COMMERCIAL
- END OF TRIP
- FAB LAB/MAKERSPACE
- FACILITIES MANAGEMENT
- PLANT/BOH
- RETAIL
- SCIENCE GALLERY
- STUDENT ACCOMMODATION
- SUPERFLOOR



## THE OCULUS LIVING ARCHITECTURE

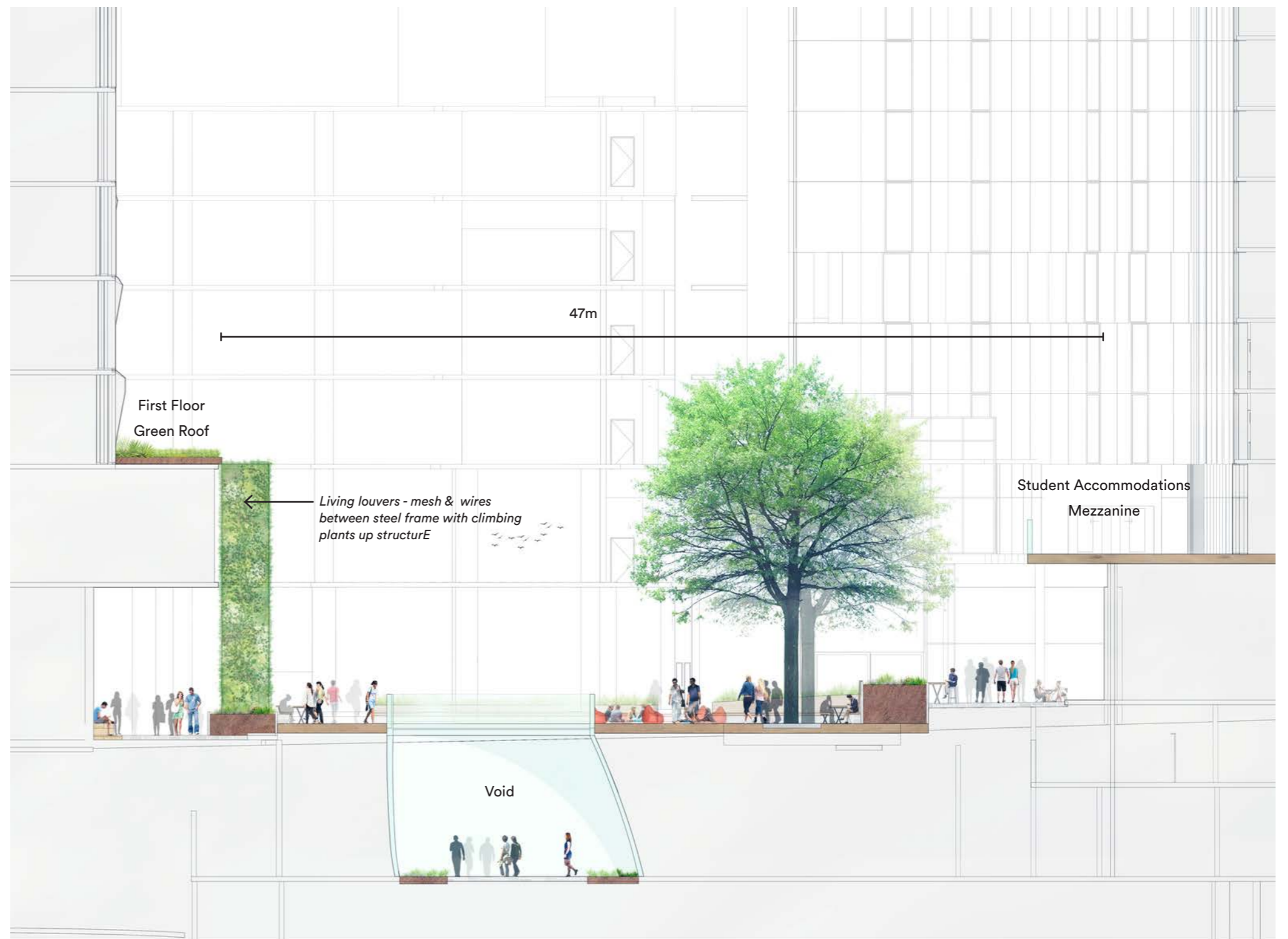
### SUSTAINABILITY & GREEN INFRASTRUCTURE

The Oculus is designed as a functional example of green infrastructure and is integrated into the overall environmental sensitive design of the precinct. Being a podium situated over structure, it is proposed to use structural soil filled cells to ensure high growth performance for the substantially sized trees. These generous soil volumes will have the ability to retain moisture and manage storm water. Surplus water collected from the space is also stored in underground water tanks and used for irrigation for the plantings across the site.

### LIVING ARCHITECTURE

Living architecture / vertical greening is a prominent element in the Oculus and adjacent facades. The Superfloor Green roof is connected to the Oculus with a series of living louvers. The Living Louvers extend from a generous ring of planters at the edge the Oculus. The living louvers have been designed and placed to mitigate the effects of wind in the Oculus to ensure and inviting usable space throughout the year. Plant species will be chosen in response to the various daylight and wind conditions around the Oculus to ensure their long-term viability. For example, the climbers on the northern face could be deciduous to ensure a green shady trellis in the summer months, while allowing light to penetrate into the spaces during winter.

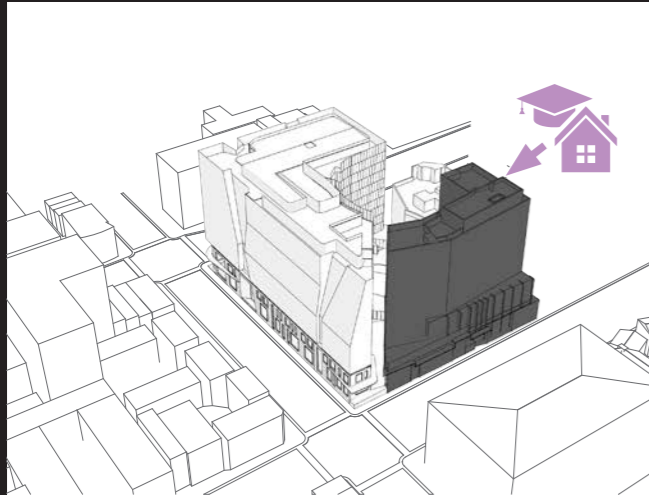
The Superfloor includes an extensive green roof which will help moderate temperatures to the building below whilst reducing storm water runoff within the precinct.



SECTION ELEVATION - THE OCULUS

## PRINCIPLE 5:

### LIVING AND LEARNING



The Student Accommodation proposal delivers upon the Carlton Connect project vision to:

- Respond to gaps within current university housing provision through diverse apartment offerings and cluster models specifically targeting graduates and visiting academics
- Develop open and inviting environments that encourage social interaction and exchange
- Integrate formal and informal learning settings with internal and external living environments
- Promote flexibility within the design to meet future and emerging needs
- Achieve a 5-star Green Star (GBCA) As Built certification

The architectural and urban design response has been carefully considered to mediate the transition between the institutional / academic context and the historic finer grain of the Carlton environs.

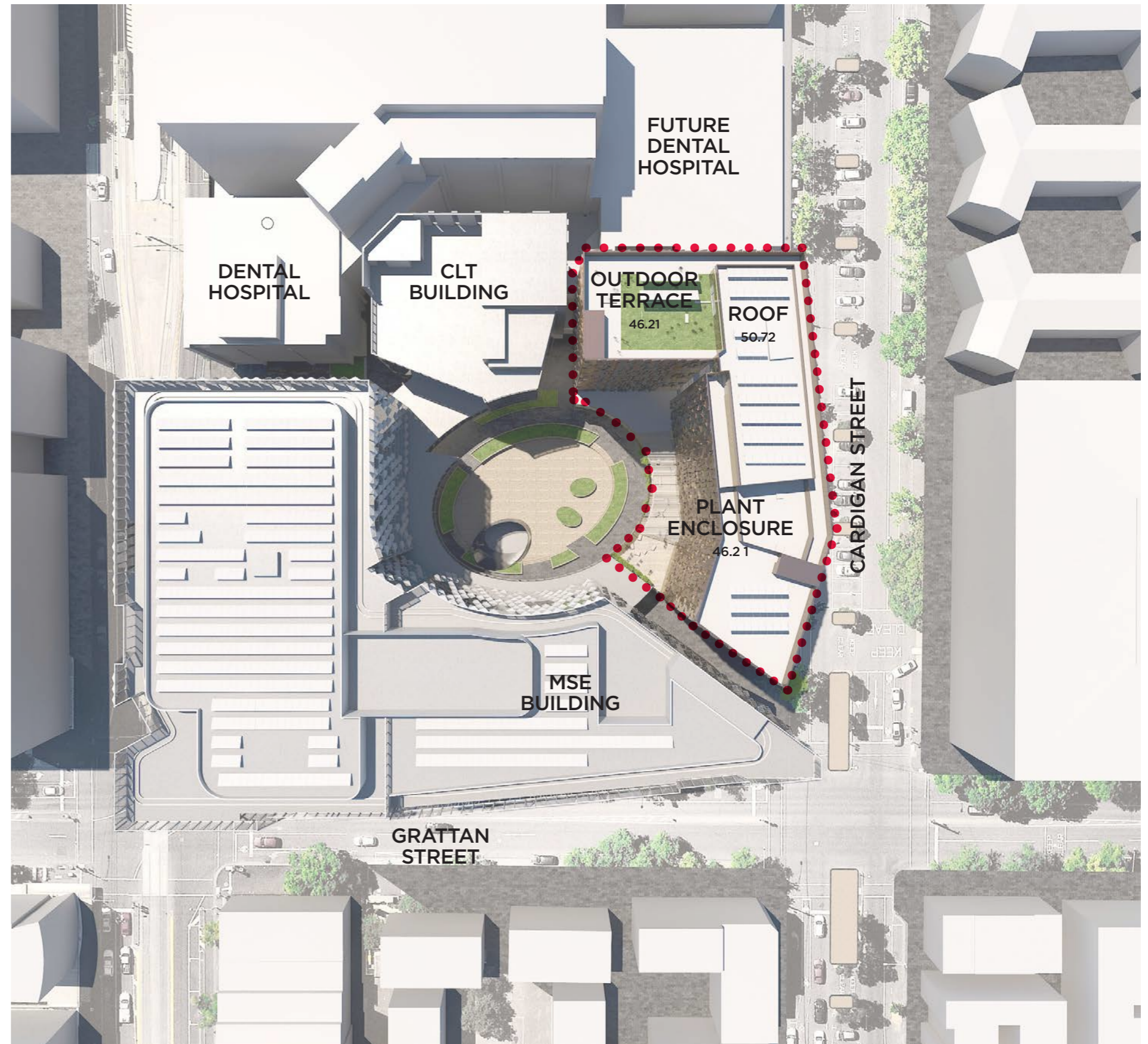


# PRECINCT PLAN

## STUDENT ACCOMMODATION BUILDING SAB

The accommodation not only supports the University's strategic objective of providing high quality accommodation close to campus but also supports the University's engagement objectives with the co-location of students, academics, researcher, entrepreneurs and industry partners, offering exciting opportunities for synergies and enriching educational experiences.

The design of the accommodation will foster an active and engaged cohort that meaningfully use facilities and amplify academic energy, contributing to the vibrancy of CCI at all times.



## COMMUNAL CONCEPT DESIGN

# OCULUS CONNECTIVITY

The sweeping form of the MSE Superfloor continues through the residential accommodation, framing the activity centre through to the rooftop communal area. This draws the eye through the building highlighting the active spine of the tower.

From the open and transparent ground floor foyer, to the vegetated mezzanine terrace and up to the varied inhabitation of the atrium, the focus of residential communal life orients and connects to the central oculus outdoor space.

- A** STUDENT ENTRY WEST - SUPPORTING THE OCULUS & UoM CAMPUS
- B** CARDIGAN LANE 'THE CONNECTOR'
- C** COMMUNAL AMENITY - MULTIPURPOSE PURPOSE SUITE
- D** COMMUNAL AMENITIES - MUSIC & GAMES
- E** STUDENT TERRACE & EXTERNAL GYM
- F** THE VERTICAL STREET - COMMUNAL AMENITIES
- G** THE VERTICAL STREET - ATRIUM SPINE

