

## DPE ISSUE 3 Response Attachment

## LEES1: Carslaw impacts

### DPE Issue 3:

**An assessment is required to be undertaken which assesses the impact on the loss of natural light and resultant amenity to the occupants of the existing Carslaw building.**

Response:

The LEES building is originally briefed and has been designed to functionally integrate with the Carslaw building through a phased process. Both the immediate impact on amenity, and a long term strategy of a functionally combined building have been considered in the LEES planning stage.

The Carslaw building is a narrow floorplate building of approximately 14m with a long northern face. Approximately 18% of the south façade adjacent to LEES1 is core area without amenity requirement. The greatest amenity asset of the existing Carslaw building is its long northern façade. The proximity of the LEES building to the south does not diminish this. The overall depth of the Carslaw floorplate is similar to many modern commercial buildings window-to-core depth, and is comparable in space typology and functionality to many recently approved buildings in Sydney.

An additional 33% of Carslaw south façade is located in east and west zones where LEES steps away from Carslaw, providing light and views from these corners.

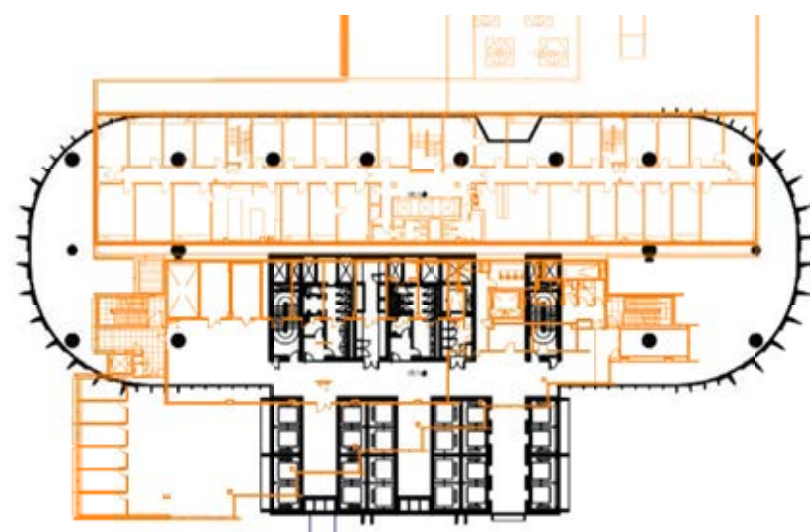


Diagram 3:

At 14m wide, the overall Carslaw floorplate is narrower than the window-to-core dimension of the Barangaroo commercial towers.

Diagram 1:  
Section indicating  
planned functional  
connections between



Diagram 2:  
The LEES1 building  
has been developed  
from concept planning  
stage to be functionally  
integrated with Carslaw  
through a phased  
process. Consideration  
of internal amenity and  
functionality has been  
part of this work.



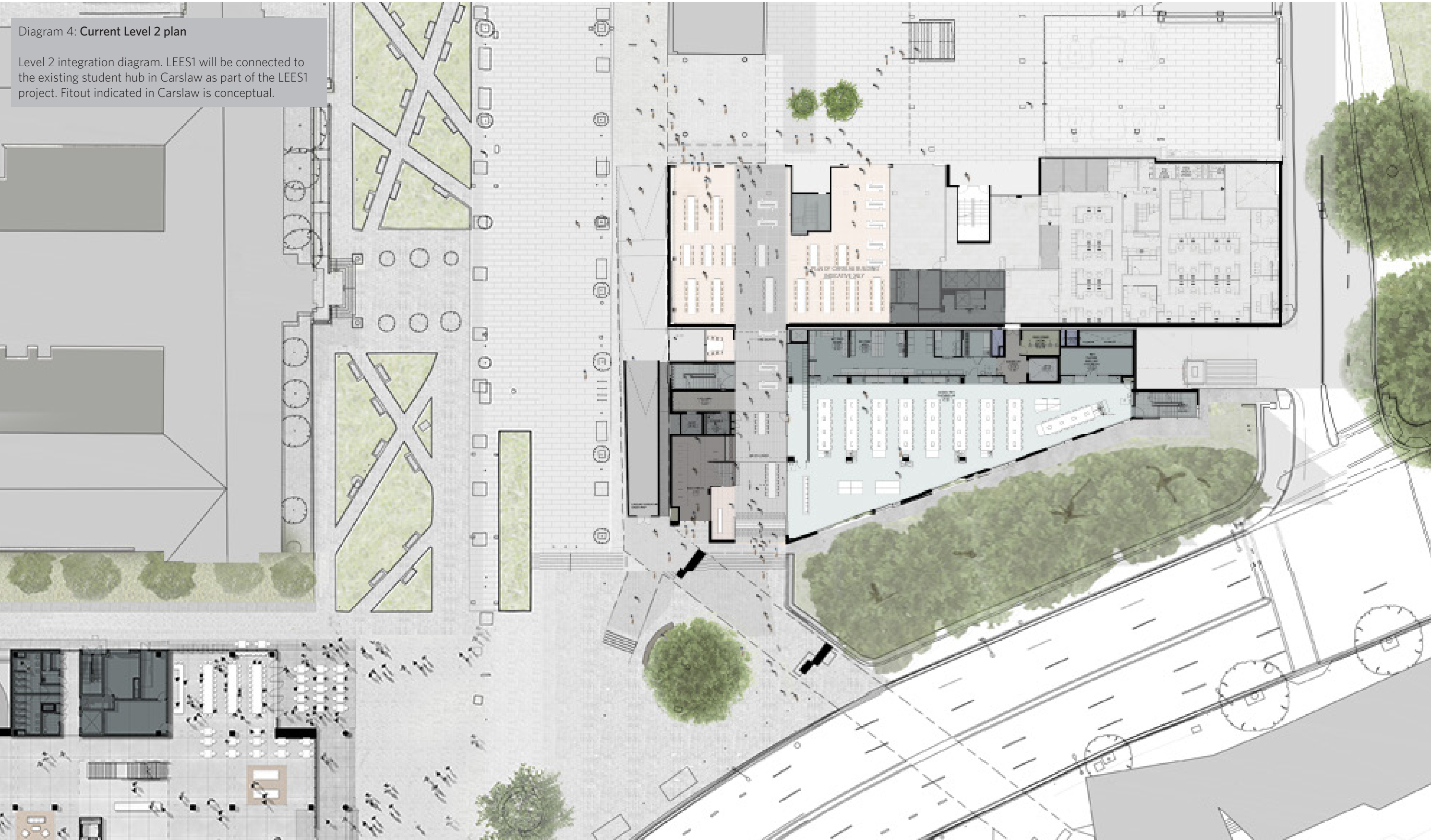








Diagram 6: Conceptual Level 3/4 integration plan

A conceptual Level 3/4 integration plan, showing refurbished teaching labs accessed from an integrated LEES1/Carslaw student lobby.

In the LEES1 project scope, existing Carslaw teaching labs on these levels will retain their access from the north.





Diagram 7: Conceptual Level 5-7 plan

A conceptual Level 5/6/7 integration plan.

The space between the two buildings becomes new riser space to service the upgraded Carslaw building to contemporary mechanical and fire standards.



Diagram 8: Level 5 Carslaw fitout plan

Current Carslaw internal planing reconfiguration proposal. The internal planning changes are currently being developed with user groups.

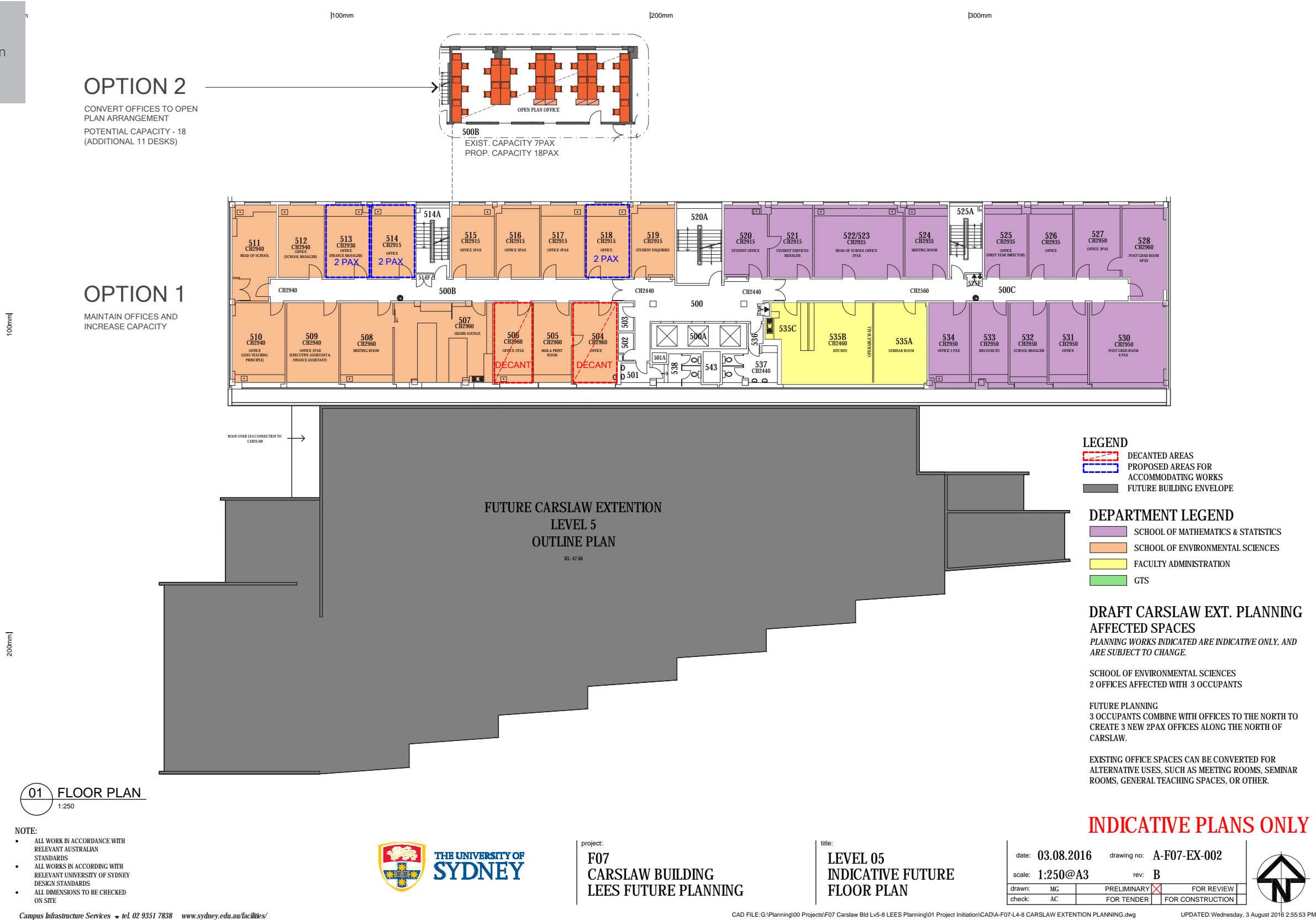




Diagram 9: Level 6 Carslaw fitout plan

Current Carslaw internal planing reconfiguration proposal. The internal planning changes are currently being developed with user groups.

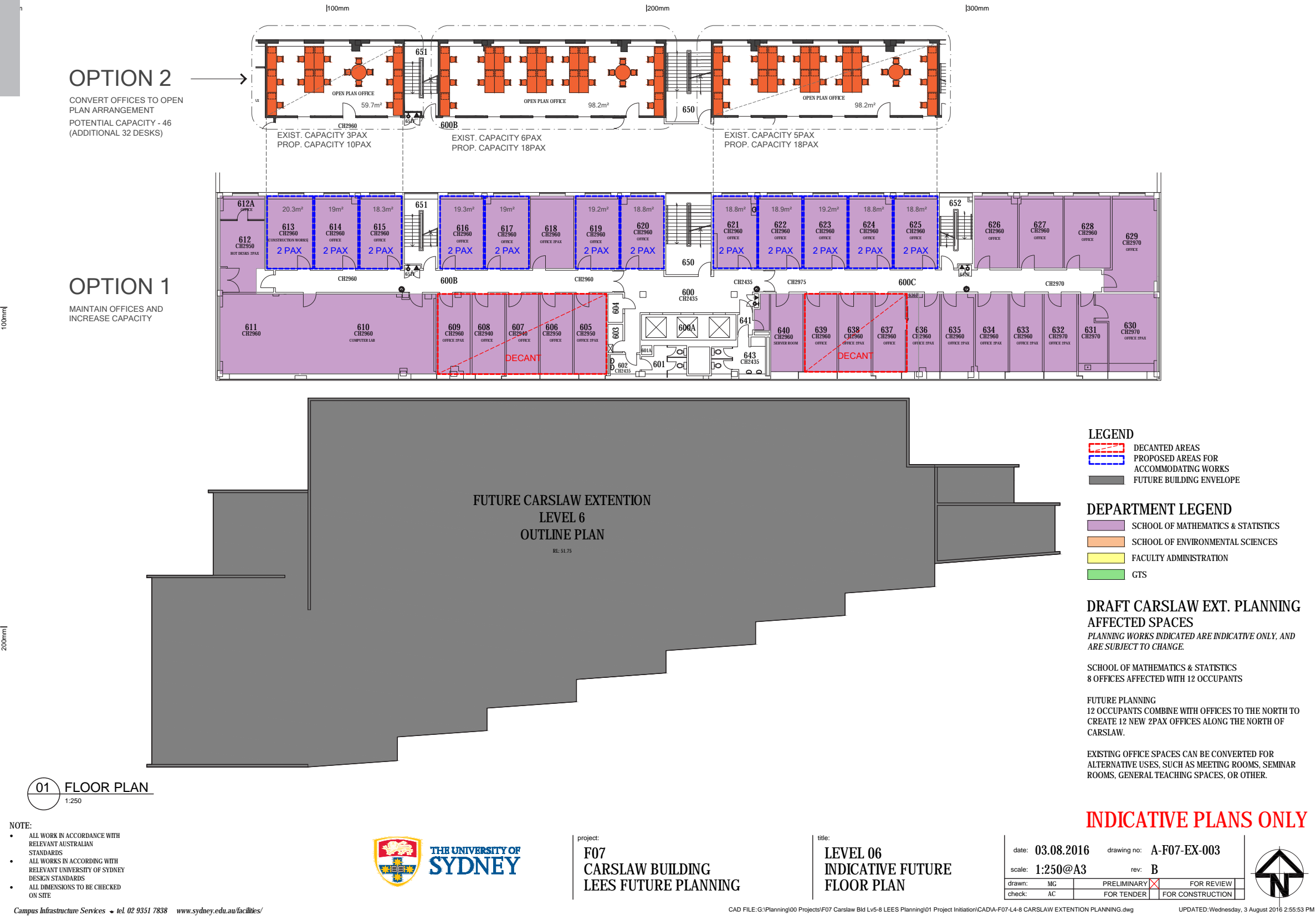
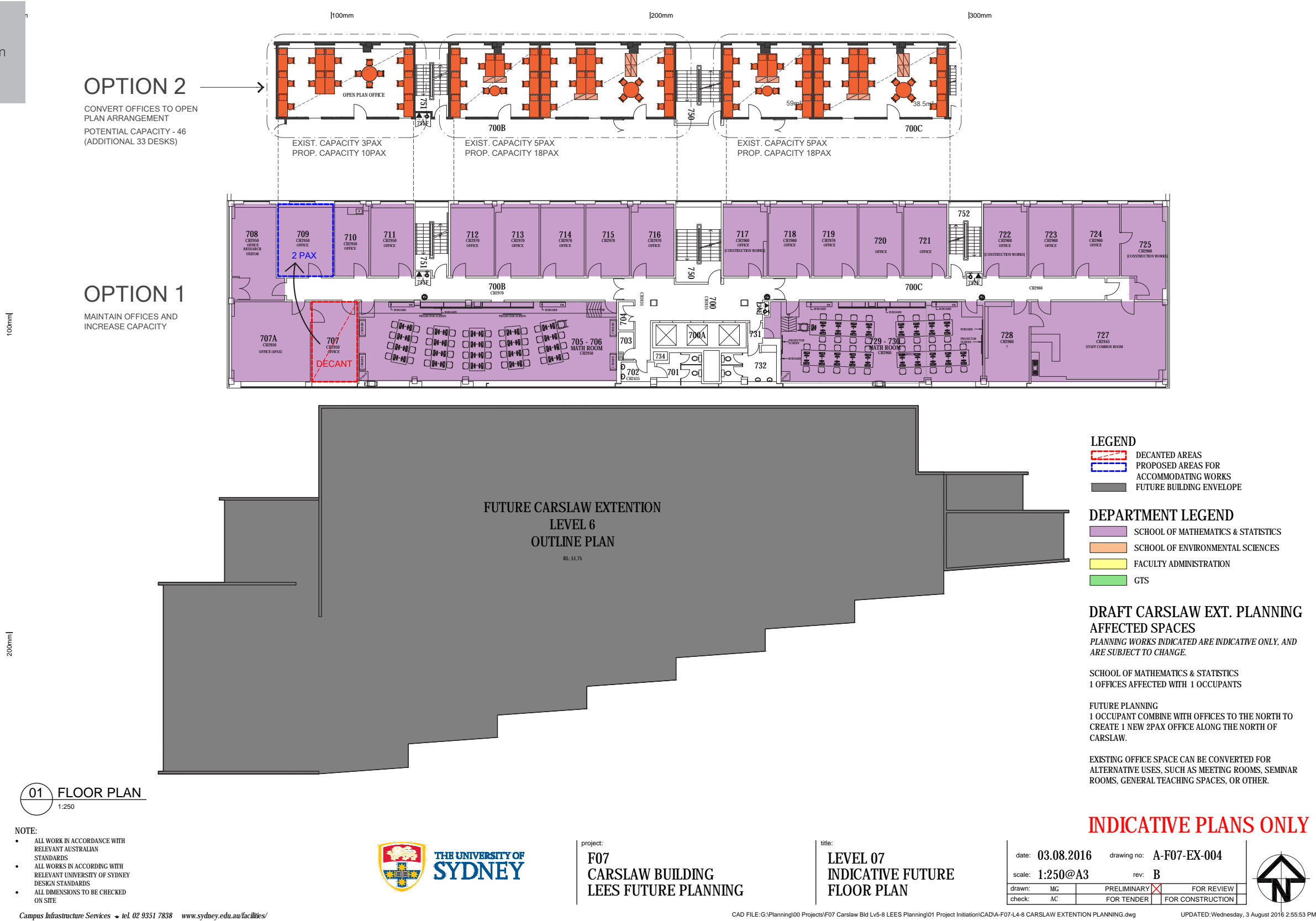


Diagram 10: Level 7 Carslaw fitout plan

Current Carslaw internal planing reconfiguration proposal. The internal planning changes are currently being developed with user groups.





Current Carlsaw internal planning reconfiguration proposal. The internal planning changes are currently being developed with user groups.



**NOTE:**

- ALL WORK IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS
- ALL WORKS IN ACCORDING WITH RELEVANT UNIVERSITY OF SYDNEY DESIGN STANDARDS
- ALL DIMENSIONS TO BE CHECKED ON SITE

Campus Infrastructure Services • tel. 02 9351 7838 [www.sydney.edu.au/facilities/](http://www.sydney.edu.au/facilities/)



project:  
**F07**  
**CARSLAW BUILDING**  
**LEES FUTURE PLANNING**

title:  
**LEVEL 08**  
**INDICATIVE FUTURE**  
**FLOOR PLAN**

date: 25.07.2016		drawing no: A-F07-EX-005	
scale: 1:250@A3		rev: A	
drawn: MG	PRELIMINARY	<input checked="" type="checkbox"/>	FOR REVIEW
check: AC	FOR TENDER	<input type="checkbox"/>	FOR CONSTRUCTION



## INDICATIVE PLANS ONLY

DPE ISSUE 4 Response Attachment

LEES1: Bicycle facilities

**DPE Issue 4:**  
**Clarification is required regarding the provision of bicycle parking spaces and associated end of trip facilities, i.e. number of parking spaces, lockers and showers and their location. An assessment shall also be undertaken of the availability, access to and adequacy of other shower facilities, as reported in the Traffic and Transport Impact Statement to meet the demands of the proposed development.**

Response:  
  
The LEES building provides the following:

	Peak No	USyd standards requirement			LEES Building provisions		
		Bike Parking	Shower	Lockers	Bike Parking	Shower	Lockers
Staff	150	15	2	15	15	3	90
Student	384	12	0	12	12	1	12

30 staff lockers are associated with a unisex shower and WC's on each staff level (Levels 5, 6, 7). Showers and lockers are co-located on each level as these facilities are also used as staff amenity between workplace/laboratory.

A unisex student shower is provided with the amenity block on Level 1. Student lockers are provided with the bike store on Level 2.

100% of bike parking spaces are secure and protected from the elements.

Diagram 12: Level 2 bike parking  
Space for 27 bike parks to USyd standards.  
Includes space for 15 student lockers.

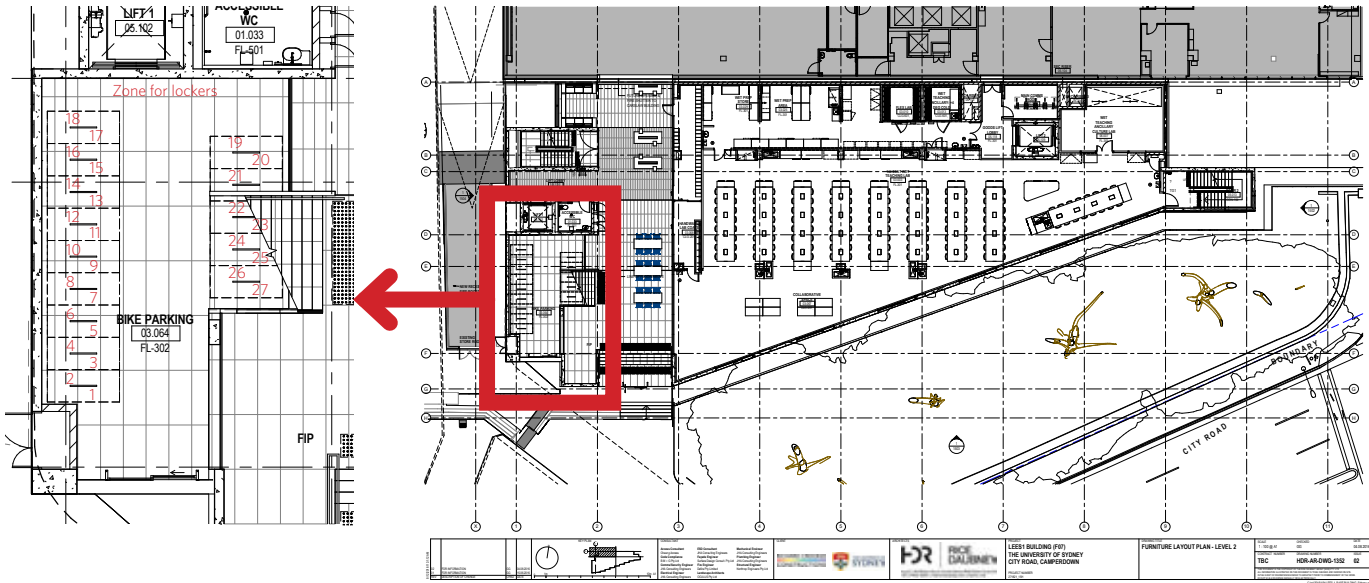


Diagram 13: Level 1 student shower  
One accessible student shower has been provided with the amenities block on Level 1

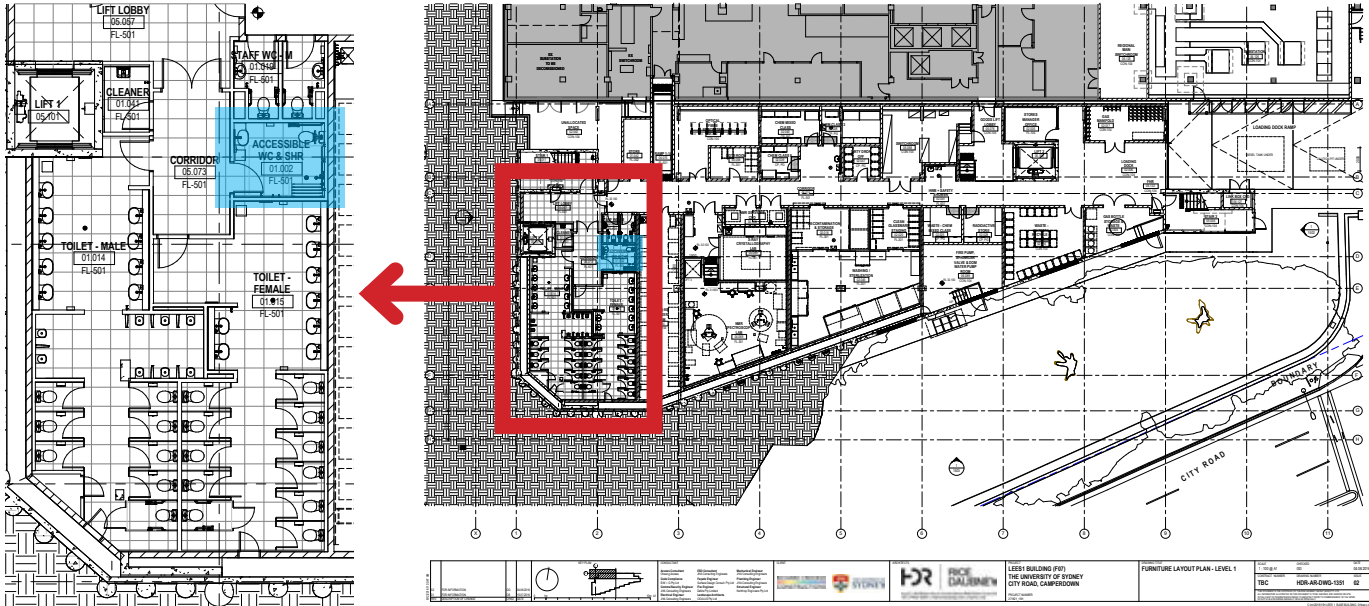
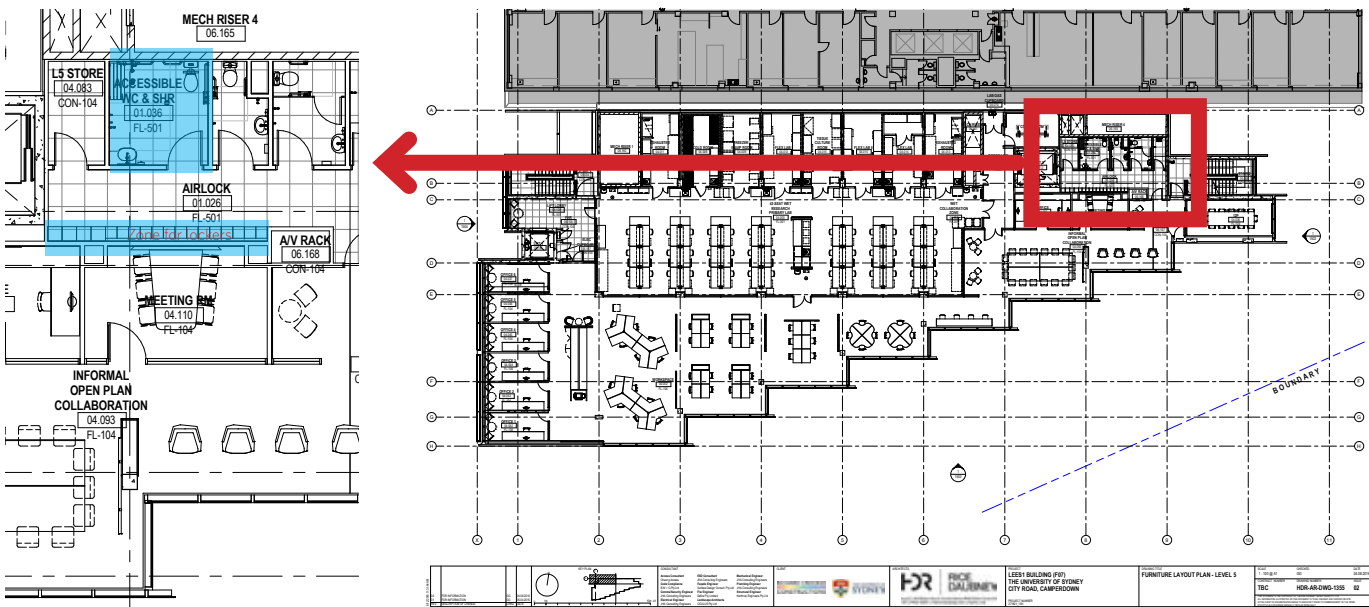


Diagram 14: Level 5/6/7  
An accessible staff shower and 30 lockers are provided on research (staff) levels.  
User groups indicated a preference for shower and lockers to be immediately accessible from laboratory areas rather than consolidated in a single Level 1 or 2 facility.





OGA ISSUE 3 Response Attachment

LEES1: Eastern Avenue alignment

OGA Issue 3:  
The proposed encroachment of the western façade beyond the heritage alignment of Eastern Avenue is not supported.

Response:

It is important to note that there is no heritage basis to the building alignment of the eastern edge of Eastern Avenue. Eastern Avenue has taken many forms through the development of the campus over the last 100 years. Issues of alignment on Eastern Avenue are an urban design discussion, where issues of heritage frame a conversation around what the defining nature of the Camperdown Campus is, and how those qualities can be strengthened through new buildings.

Both the LEES and F23 designs resulted independently from a similar analysis of the morphology of the University of Sydney campus and the built and landscape conditions of Eastern Avenue – both posing a considered response to the question of how built context – past, present, and future – should define the campus.

As the two buildings extend the campus to meet City Road in a meaningful manner, the representation of the University's campus and the correct interpretation of its structure is an important consideration. It should be of note that both designs arrived at the same interpretation of the campus.

The major points of this position are:

- The intention of the university from its earliest days was to be set apart from the city. This is reflected in the siting of the original Main Building, and in the subsequent campus structure.
- All masterplans from 1915 (Burley Griffin) through to current proposals demonstrate continuity of the idea of the 'campus' as distinct to the 'city' urbanisation of the university grounds. Building locations sit within a landscape frame, where alignments are established by axis in the public realm rather than ordered by continuous built edges.
- A major quality of the 'campus' is off-set buildings emphasising the importance of corners, individual buildings landing in the campus, and interlocking landscape 'frames' established by the relationships between built and open space.
- A analysis of the edge conditions in the University reveals that it has not been developed or planned with principles of street walls and urban edges intended, consistent with the legacy of intention on the campus, and the tradition of the 'OxBridge' campus typology.
- The limited length of 'alignment' on Eastern Avenue is a recent development, and not a legacy structure in the campus. Prior to this, no indication of edge continuity existed in the built form, yet campus legibility was recognised through the alignments of Science Road and Eastern Avenue.
- There is a strong argument that this recent edge is an aberration - not only in the structure of the existing campus, but also in the history of its development and genesis in the tradition of the university campus.

- Other existing buildings along Eastern Avenue suggest an implied principal edge line, but also interrupt this rigour, giving definition of individual buildings and entry points while also forming a larger legible urban form.
- The LEES1 building continues this morphology, deliberately disrupting the recent inconsistent alignment, and resolves the conclusion of Eastern Avenue by presenting a face to both Eastern Avenue and the City as the building turns the corner into City Road.

The University of Sydney Grounds Conservation Plan mentions the importance of Eastern Avenue:

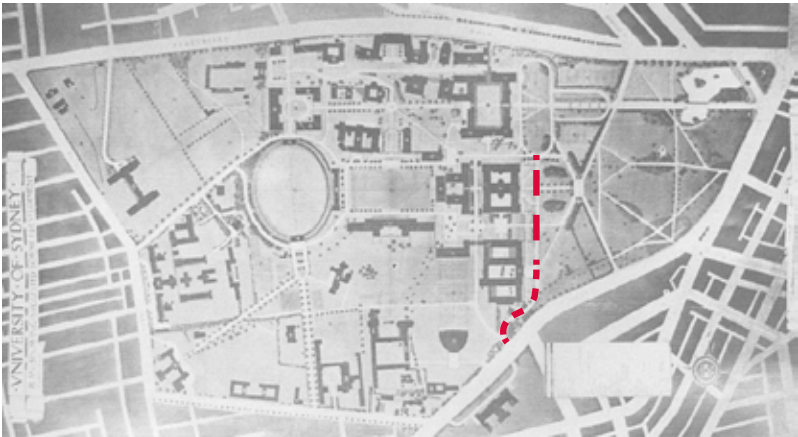
- As a major visual axis "Along Eastern Avenue from City Road to University Place."
- "This is a tree lined, rising axis towards University Place."
- Eastern Avenue lawns: "Strong association because of remnant green space and recreational use"
- "axes of development that established the historical form of the University."
- "...illustrate post-war absence of a unifying planning and design concept for the university, in face of pressing need for accommodation."
- "This landscape has some appealing qualities as a long rising/falling road which is lined with trees. It also provides a view towards University Place."
- "The road alignment of Eastern Avenue is of significance" – (the Grounds report was written in 2002, the current form of Eastern Avenue was designed in 2003/2004).
- "Lawns and plantings south of the Carlaw Building"
- "Further 'wall' effect along Avenue should be avoided."
- "...need to maintain sense of City Road as boundary to Camperdown campus."

The design of the LEES building is not contrary to any of these statements or the policies they form.

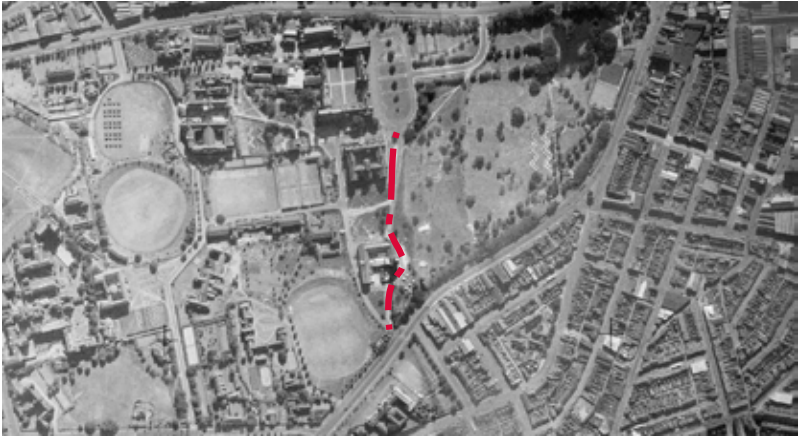
- The LEES building does not impact on the visual axis from City Road to University Place.
- The LEES building plays a part in disrupting the development of a recent 'wall' to Eastern Avenue, a development contrary to the Grounds Management Plan.
- The LEES building enhances the sense of City Road as the boundary to the Camperdown Campus, and establishes F23 as an important building and site.

The interpretation and the result of the design were peer-reviewed by Howard Tanner.

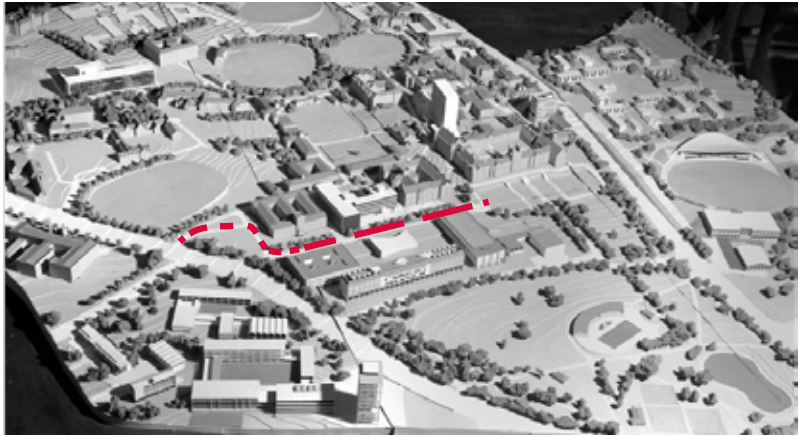
Howard Tanner noted in his review "this scheme had merit, as it gave some real definition and conclusion to the view south down Eastern Avenue – which has a dull street wall in this vicinity – and helped conceal the poorly resolved 'baby blue' upper levels of the Carlaw Building. It also provided better, clearer entry into LEES1."



Leslie Wilkinson's 1920 Masterplan underpinned campus development in the 20th Century.



Eastern Avenue was realigned after construction of the Madsen building. Aerial photo c.1943



The next phase after the Wilkinson masterplan saw the addition of buildings in front of the Quad, Anderson Stuart and Madsen. New stock evolved to reflect contemporary architecture as evidenced by the introduction of Modernism and continues to evolve as evidenced by the new Law building.



# MORPHOLOGY OF A CAMPUS

## ‘THE CAMPUS’ IS A POSITIVE URBAN TYPOLOGY

The University of Sydney Camperdown campus, set on its generous grounds, continues a tradition of the campus as a common ground that defines the place of learning and reflection - a foil to the pressures of commerce and ownership that gives structure to the urban form of the city.

Many of the oldest universities still enforce their patterns of organic development even as the growth of cities - with their sharp boundaries between owned and public space - accumulates around them with.

‘The campus’ as an urban form has many positive experiential qualities, as well as an enduring legacy appropriate to the institution of the university. These qualities should not be conflated with the norms of ‘main street’ urban planning principles.

The classic campus morphology could be simply defined by 3 attributes - primacy of a ‘democratic’ pedestrianised ground plane; blurred boundaries between interlocking landscapes; and an anthology of curated buildings with singular identities.

A typical urban setting relies on almost exactly the opposite attributes - boundaries between public and private are reinforced by the contrasts between built edges and open space. In the city, non-uniform definition of edges leads to ambiguous ownership cues. In the campus, all space is held in common.

Oxford university  
aerial view



Princeton  
university plan





# THE ORIGINAL CAMPUS

## ORIGIN OF THE UNIVERSITY

The intention of the university from its earliest days was to be set apart from the city.

Siting of the Main Buildings was made to ensure not only a visual separation, but also symbolic - situated on the hill, orientated to look back on the city.

“Externally and internally the buildings reflected the founders’ affection for and allegiance to a British heritage and their aspirations to follow in the tradition of the great universities of Oxford and Cambridge.” - Rosemary Kerr.



Photograph taken of the Main Buildings by the first dean, Professor John Smith, 1852

# CAMPERDOWN CAMPUS LEGACY

## BURLEY GRIFFIN TO LESLIE WILKINSON

Rosemary Kerr’s heritage report on the campus notes “In 1914 the Buildings, Grounds and Improvements Committee turned its attention to landscaping issues and recommended that a landscape architect be engaged to advise on the best method of laying out the grounds, including sites for buildings”. Walter Burley Griffin was appointed and produced a masterplan in 1915.

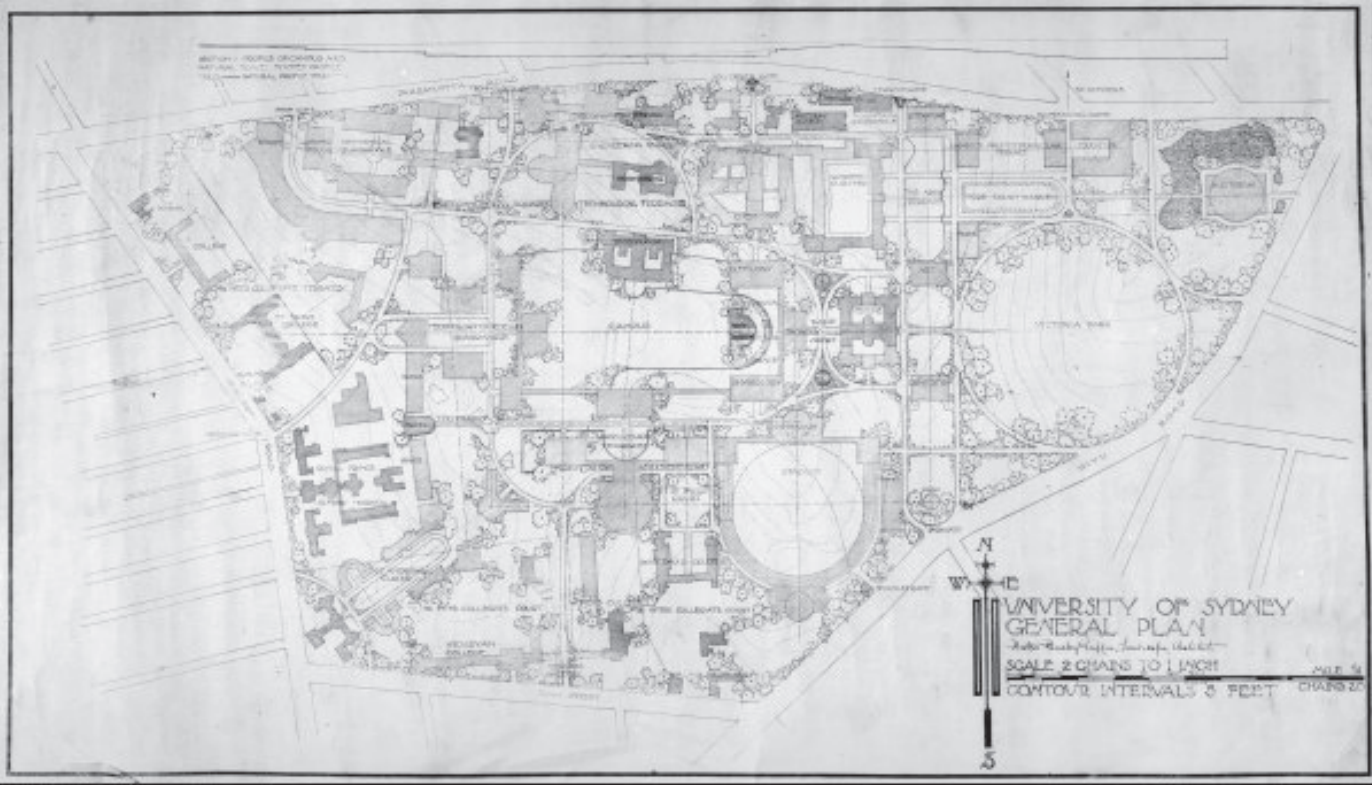
His plan was not realised, but underpinned thinking about the campus through the work and influence of the University Architect, Leslie Wilkinson.

Griffin’s original masterplan demonstrates a continuity of the idea of the ‘campus’ as distinct to an urbanisation of the university grounds. Building locations sit within a landscape frame, where alignments are established by axis in the public realm rather than ordered by continuous built edges.

Off-set buildings emphasise the importance of corners, individual buildings landing in the campus, and interlocking landscape ‘frames’ established by the relationships between built and open space.

Wilkinson’s continuation of these principles was played out through his “concept of small scale areas of visual interest or ‘courts’” as exemplified by the Vice-Chancellor’s Quadrangle.

These intentions are clear underpinned by the classic notion of the ‘campus’ as distinct to the ‘city’.





# STRUCTURE OF THE CAMPERDOWN CAMPUS TODAY

## CAMPUS EDGE CONDITIONS

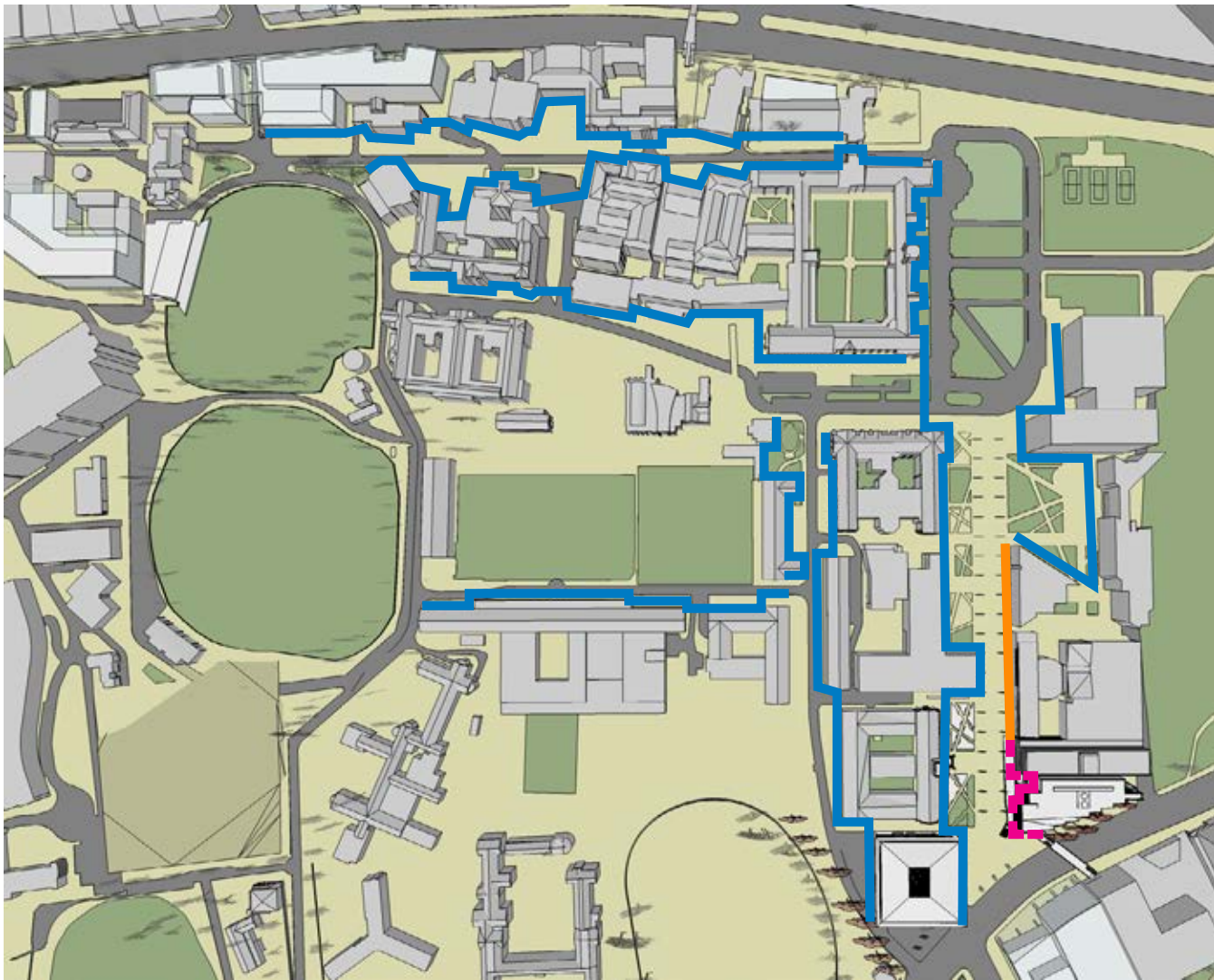
A simple analysis of the edge conditions in the University reveals that it has not been developed or planned with principles of street walls and urban edges intended, consistent with the legacy of intention on the campus, and the tradition of the 'OxBridge' campus typology.

Only the three buildings on the south east edge of Eastern Avenue begin to hint at the formation a continuous edge.

It is telling that two of these buildings are recent additions to the University, having been developed within the last decade.

Prior to this, no indication of edge continuity existed in the built form, yet campus legibility was recognised through the alignments of Science Road and Eastern Avenue.

There is a strong argument that this recent edge is an aberration - not only in the structure of the existing campus, but also in the history of its development and genesis in the tradition of the university campus.





# RECENT DESIGN OF EASTERN AVENUE

## JEPPE AAGAARD ANDERSEN'S VISION

After an international design competition in 2003, a team of Jeppe Aagaard Andersen, Turf Design Studio, and Tinka Sack were commissioned with the masterplan and landscape/public domain design of Eastern Avenue.

The designer's statement reinforces the idea that it was not the role of the buildings to provide a street-wall to give Eastern Avenue its legibility:

*"A distinctive yet functional structure that marries the diverse spatial mix of the campus grounds is principal in bringing together the mixing of student and teacher life in a central public domain..."*

Andersen cites Barcelona's Rambles as inspiration for the character of the design - "a central corridor for the energetic rhythm of the University". A defining quality of La Rablas is that its built edges do vary, dissolve, and disrupt the edges of the 'street'. This gives rise to a character that is distinctly different - less 'formal' - to boulevards in Berlin or Paris for example.

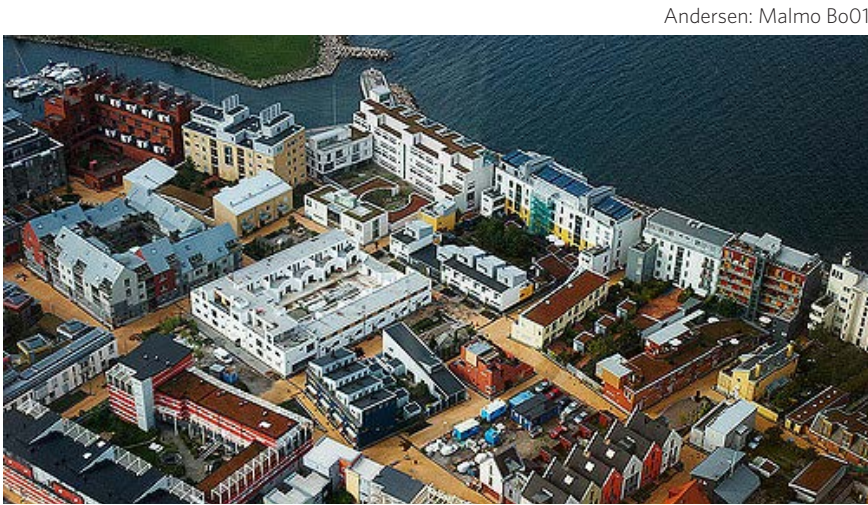
Andersen's previous work includes the landscape for Malmo's remarkable new waterfront town - Bo01 - which draws on the campus typology for its unique character. This reinforces that Andersen would have been familiar with the 'looseness' of built structures that the campus contains, but could propose public domain strategies for the creation of cohesive places by articulating the overlapping implied sequence of landscape spaces within the overall structure.



Andersen/Turf/Sack's final design for Eastern Avenue



La Rambla - Andersen's inspiration for Eastern Avenue place qualities



Andersen: Malmo Bo01



# EASTERN AVENUE PRECEDENTS IN A CAMPUS MORPHOLOGY

## UNSW’S MALL

Eastern Avenue has a contemporary counterpart in UNSW’s ‘Mall’.

The Mall demonstrates clearly that within the landscape setting of the campus, legibility and order can be provided through scale and spatial relationships in the built form, complementary to but independent of the geometry of the public realm.

UNSW’s Mall is an example of how an attractive, active, highly used space can be created within a campus - without defaulting to city street based urban conditions to achieve a high quality public place.

Positive qualities of occupation, activity, and visual attractiveness are not mutual exclusive with the campus urban morphology.



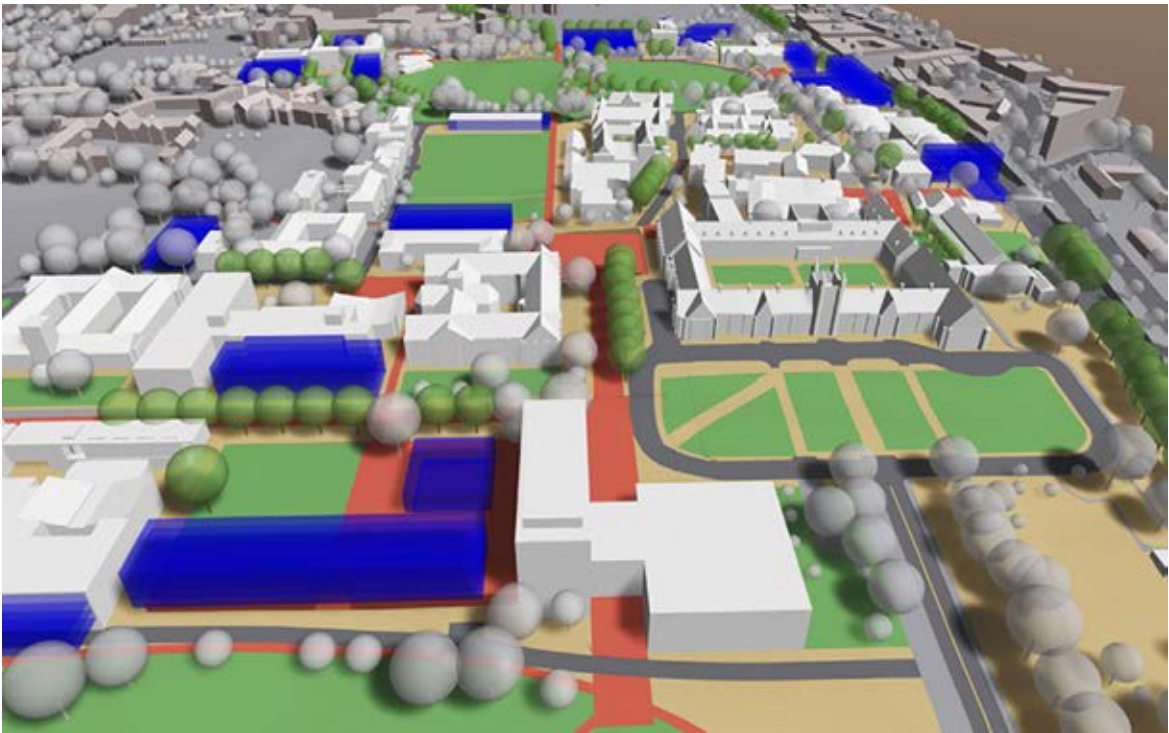
# OTHER PLANS FOR THE CAMPUS

## FJMT'S 2020 PLAN

In recent years, other eminent designers have produced plans for the university campus.

Rather than analysis of specific building sites, these documents show the consistency of thinking about the morphology of the campus, and the way that the characteristics of this can be preserved even with a developing building programme.

Sites seek individual infill locations, and edges only on the perimeter of the campus.



FJMT's 2020 plan



# CONTINUING THE STRUCTURE OF EASTERN AVENUE

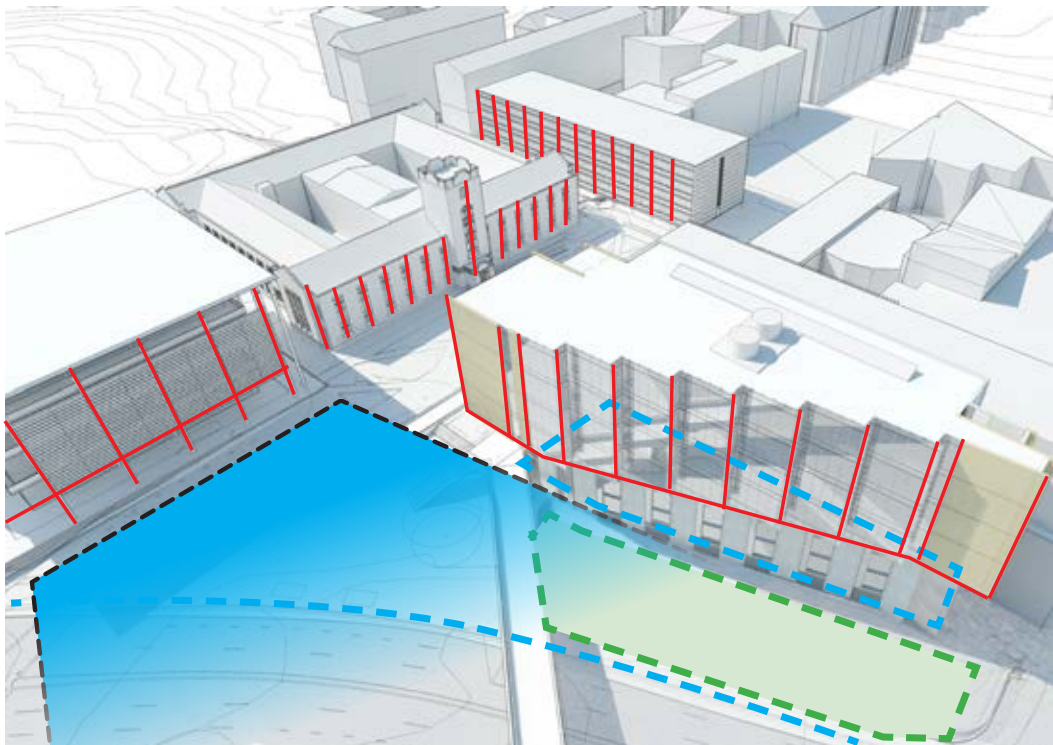
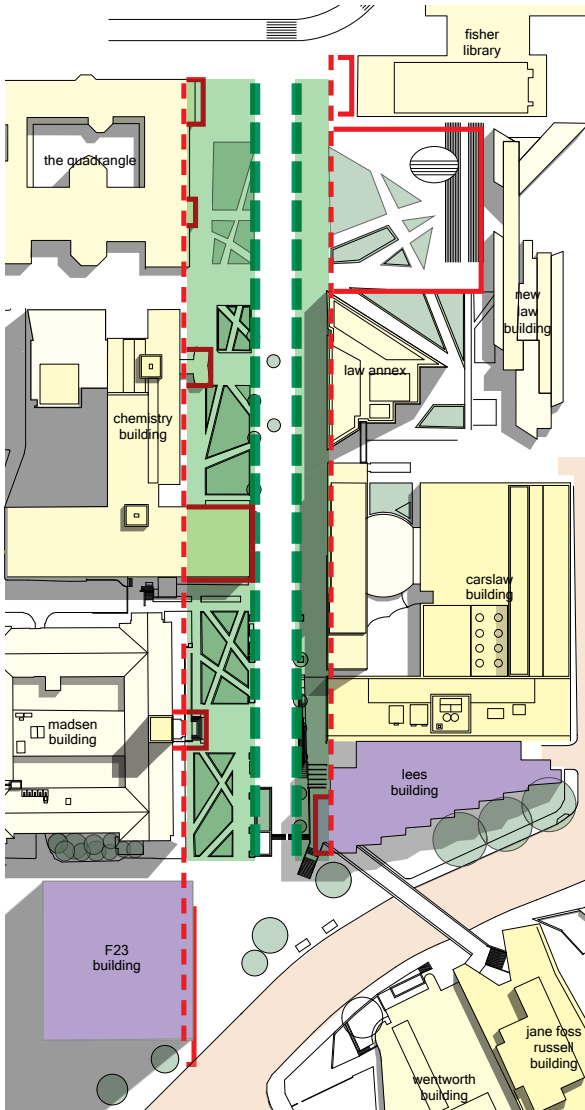
## A MORPHOLOGY UNIQUE TO EASTERN AVENUE

A campus morphology defines a majority of the edge characteristics on Eastern Avenue.

Existing buildings along Eastern Avenue suggest an implied principal edge line, but also interrupt this rigour, giving definition of individual buildings while also forming a larger legible urban form.

Importantly, Eastern Avenue also establishes a series of datum that are relatively consistently applied across most of the western edge, and lend it an intermediate scale despite the variety and proportions of building forms.

The LEES1 building continues these, and extends them across the southern face to resolve them at the Victoria Park aspect as the building turns the corner into City Road, providing definition to the edge of the Camperdown campus against City Road, and creating an appropriate siting for F23 as a building of high significance.





# OGA ISSUE 6 Response Attachment

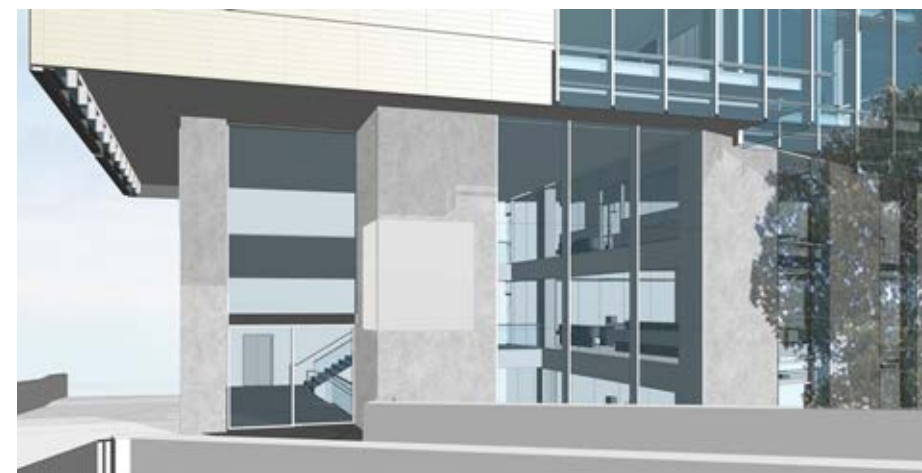
## LEES1: Legibility of Entries

**OGA Issue 6:**  
**Enlarge the entries at levels 02 and 03 to improve clarity, accessibility and connection with the public domain. Investigate ways to provide a greater level of transparency and sense of arrival**

Response:

Due to the existing conditions, it can be difficult to interpret the relationship of the entries to the campus ground planes on Levels 2 and 3. The LEES building has been designed with a large single space that allows a high degree of visibility to an internal atrium and teaching laboratories, that also connects each public entry points of the building. It is substantially glazed with high-transparency glass, and is structured to provide a single legible 7m wide connection into the existing Carslaw building.

The major connection into Carslaw connecting the building to the campus ground levels is provided as part of the LEES1 project. Additional connections to student levels will be phased in future works on Levels 3 and 4.



1: Legibility of entry from City Road bridge (Level 3)

2: High visibility to teaching labs through main foyer from Eastern Avenue



3: Legibility of entry from City Road forecourt



4: All public entries lead to the lobby space - a single volume connecting the 3 publically accessible teaching lab levels, with views to City Road and Eastern Avenue.



Diagram xx: Level 2 & 3 entries



## SCC ISSUE 6 Response Attachment

## LEES1: Accessible entries

**SCC Issue 6:**

**Two The accessible route from City Road to the closest entrance to the proposed building appears to be lengthy in comparison to the primary path.**

**As an Accessibility Report was not submitted with the application, there is insufficient information available to determine whether alternative accessible routes are available. However, the opportunity for an accessible at grade route should be explored further to comply with DDA requirements.**

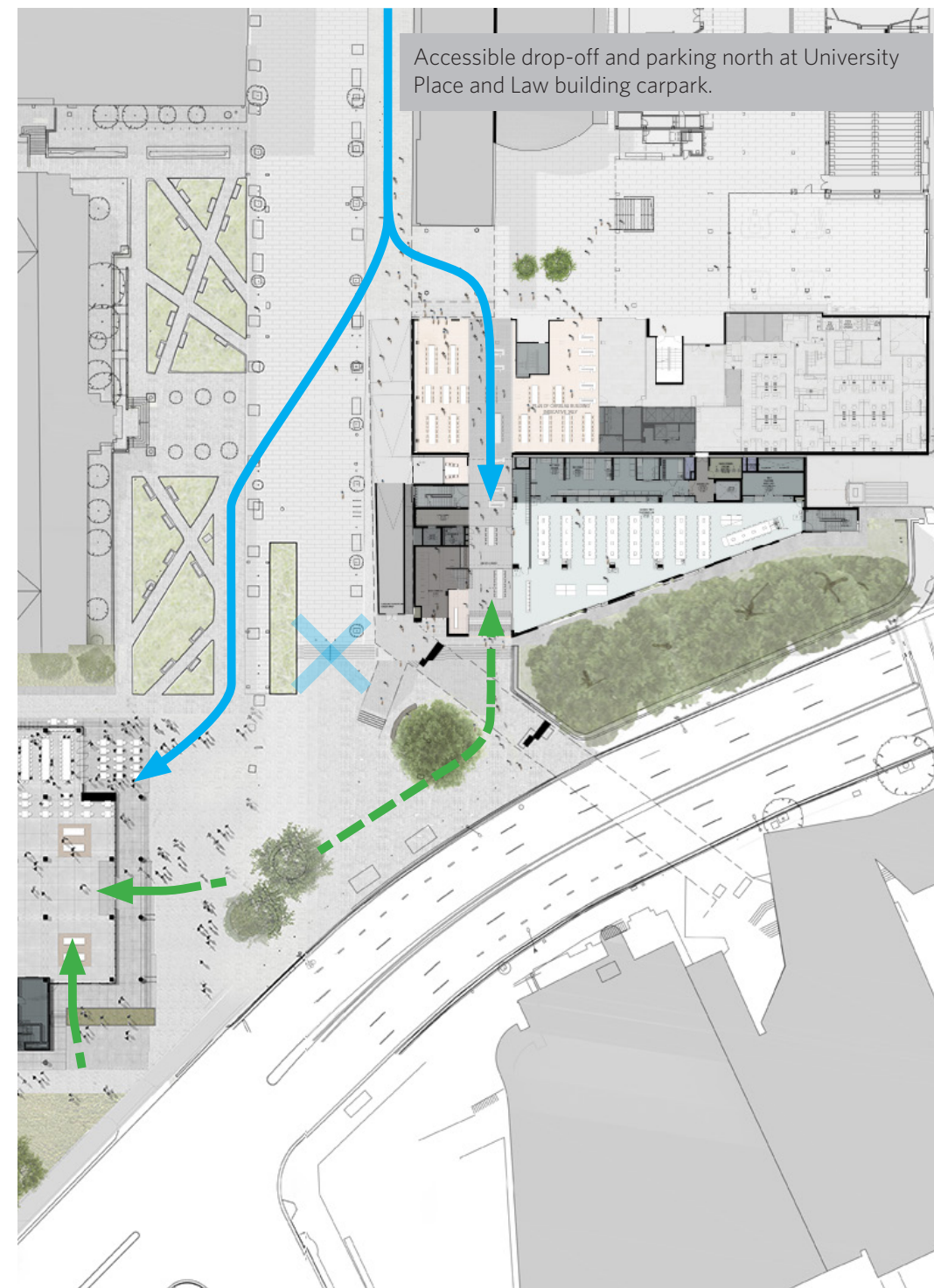
## Response:

The primary path of accessible movement is north/south across the existing City Road bridge. A majority of all crossing of City Road occurs via the bridge. Due to the level change and stairs across Eastern Avenue, accessible movement from the south at the City Road kerb brings people closer to the major entry in the Carslaw building – which is also the primary entry to the LEES building from the north.

Major and accessible entries are therefore:

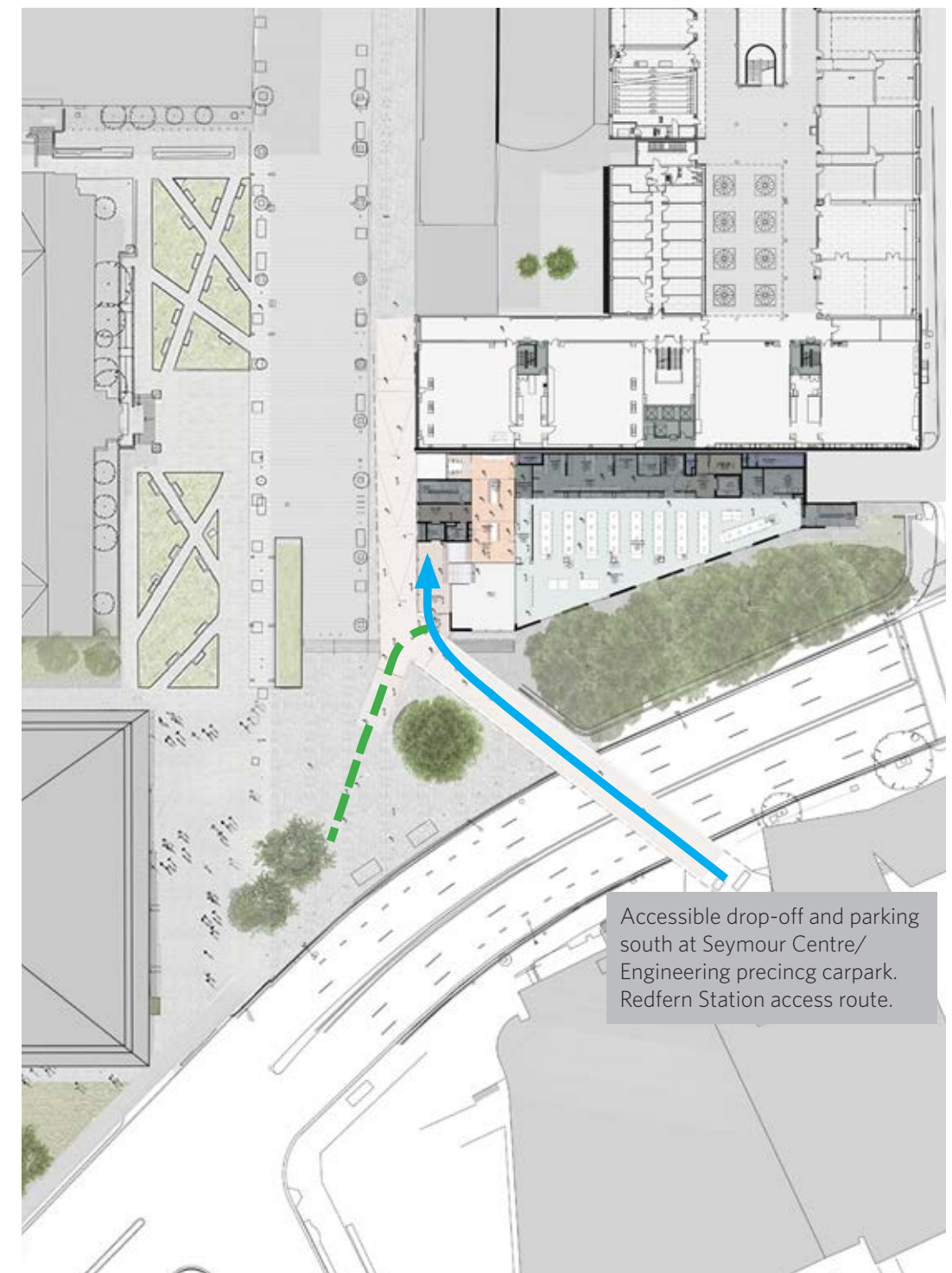
- Level 2 north (integrated with Carslaw)
- Level 3 south (at City Road bridge level)

The LEES building is designed to open up to an additional entry at Level 2 onto Eastern Avenue in the future. This requires major regrading works to a significant portion of Eastern Avenue adjacent to the LEES and F23 buildings, and is beyond the scope of the current project. The University is developing other public realm projects which overlap with this area of Eastern Avenue.



## From Eastern Avenue:

North - major entry off Eastern Avenue as part of Carslaw integration.  
South - entry for visual legibility. Eastern Avenue levels fall away quickly at the City Road bridge. Due to the sightlines and amenity under the bridge, this entry is not promoted as a significant assessable route.



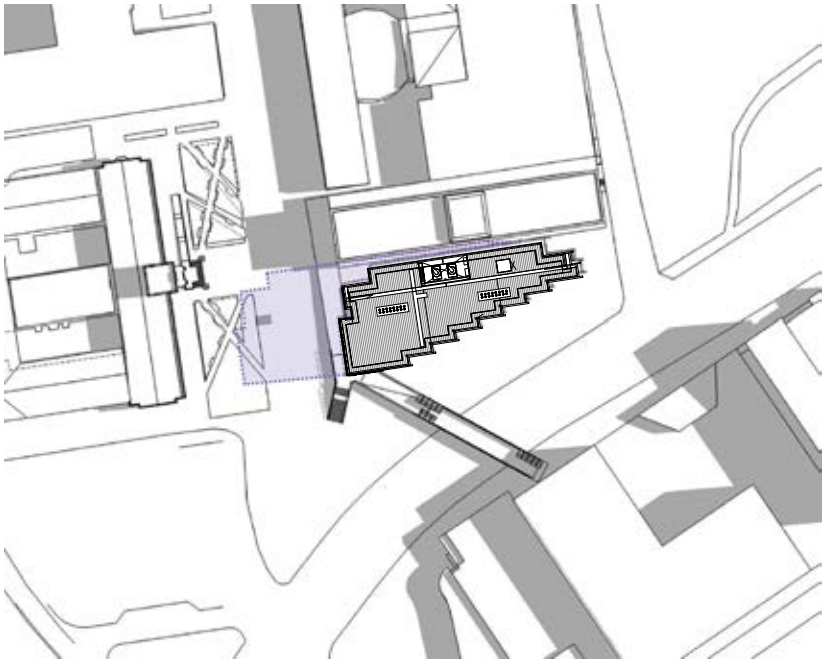
## From City Road bridge:

City Road bridge is a significant arrival point (approximately 50% of City Road crossings). Direct access is provided into the LEES1 lobby.

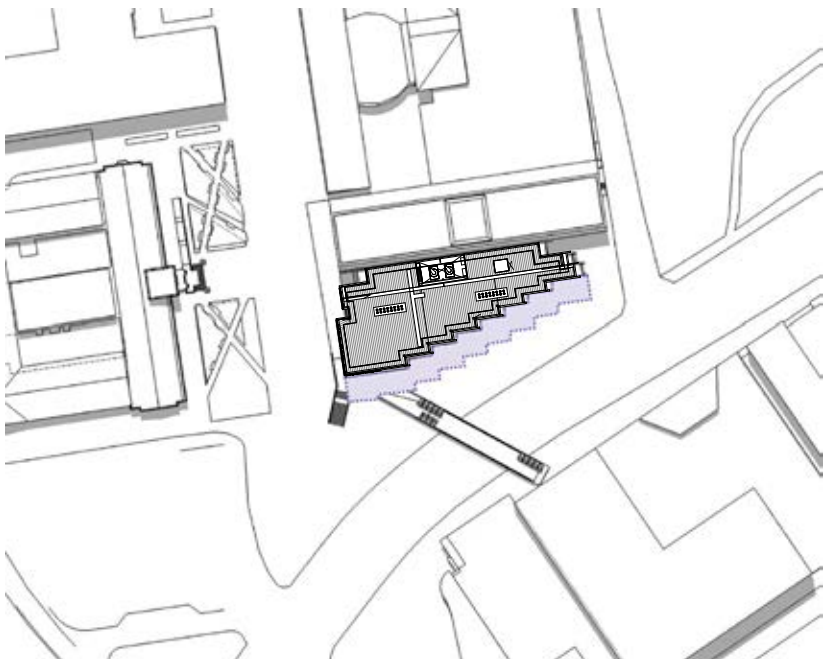
**SCC Issue 8:**  
**Detailed diagrams are required to differentiate the existing shadow from that of the shadows cast by the proposal.**

Response:

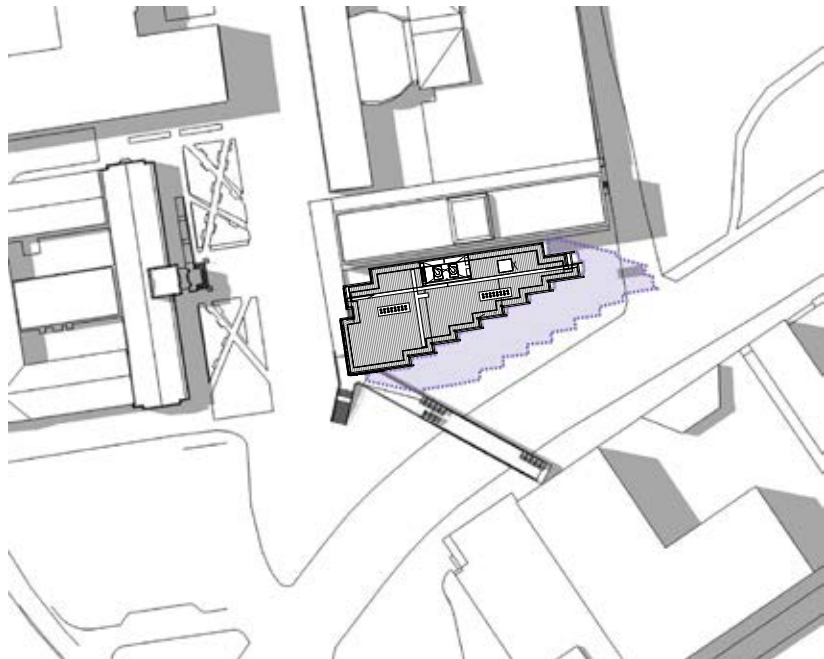
Updated diagrams attached.



9AM- 22 DECEMBER



12PM- 22 DECEMBER



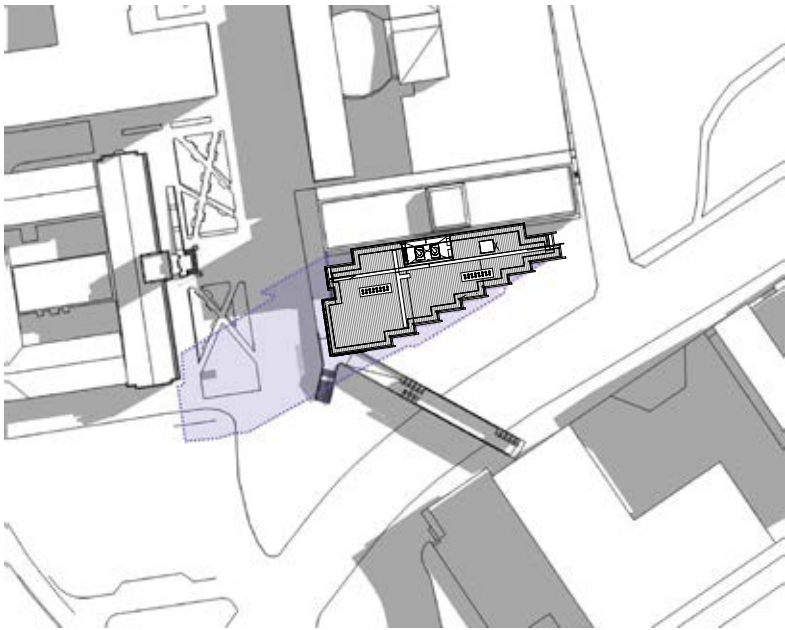
2PM- 22 DECEMBER

FOR INFORMATION														
8/15/2016 5:00:23 PM REV C B A	FOR INFORMATION	AM	15.08.2016		CONSULTANT	CLIENT  	ARCHITECTS   Level 1, 110 Walker Street, North Sydney NSW 2060, Australia +61 2 9956 2646   hdrinc@hdrinc.com   rice@rice.com	PROJECT LEES1 BUILDING (F07) THE UNIVERSITY OF SYDNEY CITY ROAD, CAMPERDOWN  PROJECT NUMBER 271821_1SH	DRAWING TITLE SHADOW DIAGRAMS - SUMMER SOLSTICE					
	ISSUED FOR DA	GG	17.05.2016											
	ISSUED FOR DA	AM	14.04.2016											
	DESCRIPTION OF CHANGE	CHKD	DATE											
SCALE 1 : 1000 @ A1		CHECKED AM	DATE 15.08.2016	CONTRACT NUMBER TBC										
		DRAWING NUMBER HDR-AR-DWG-DA19	ISSUE C	THIS DOCUMENT IS THE COPYRIGHT OF THE RICE DAUBNEY GROUP (RICE DAUBNEY PTY LTD). ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE. IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK. DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY.										

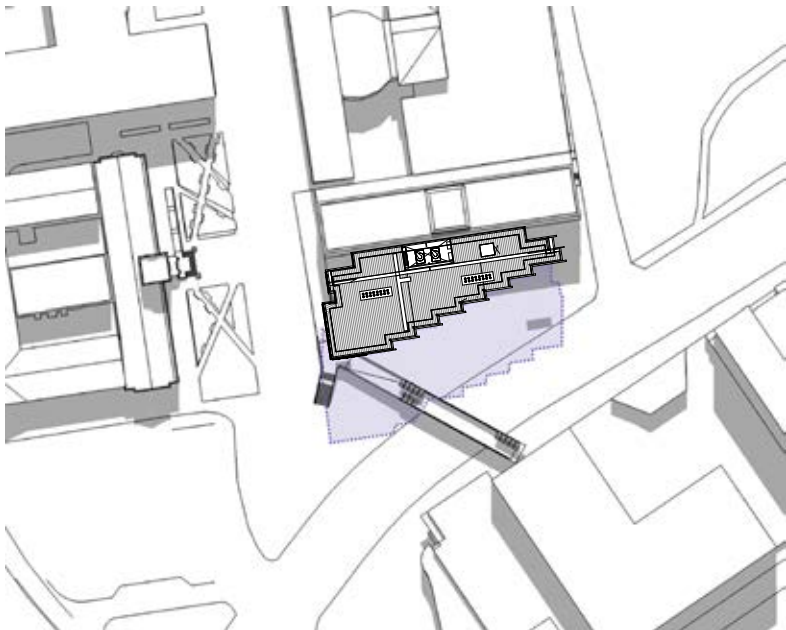
C:\v\16\1615H LEES 1\_BASE BUILDING\_chao.zheng@hdrinc.com

C:\w\2016\1SH\LEES1\_BASE BUILDING\_chloe.zheng@hdrinc.com.nrt

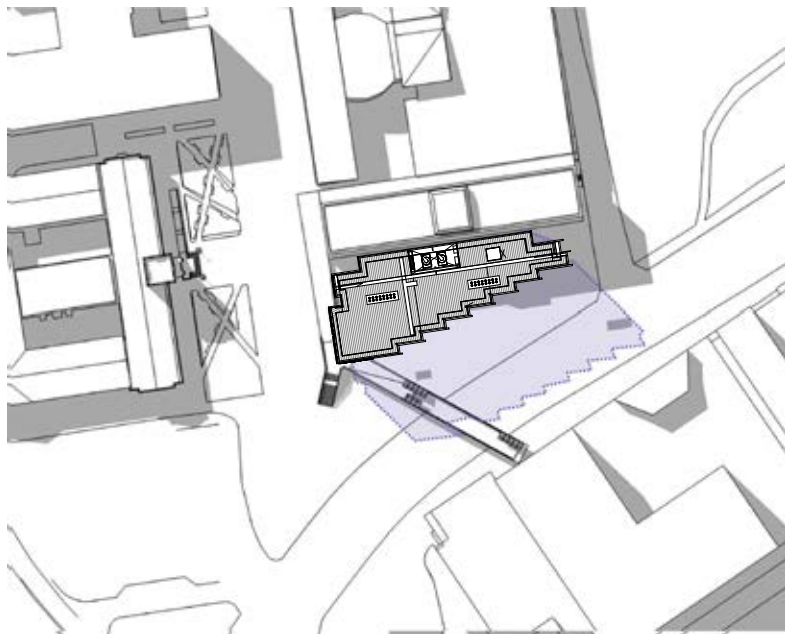




9AM- 21 MARCH

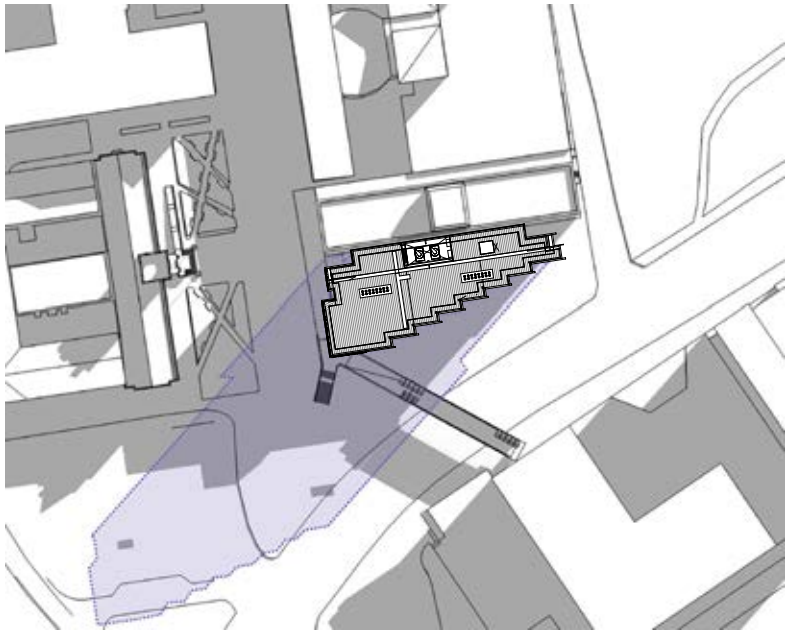


12PM- 21 MARCH

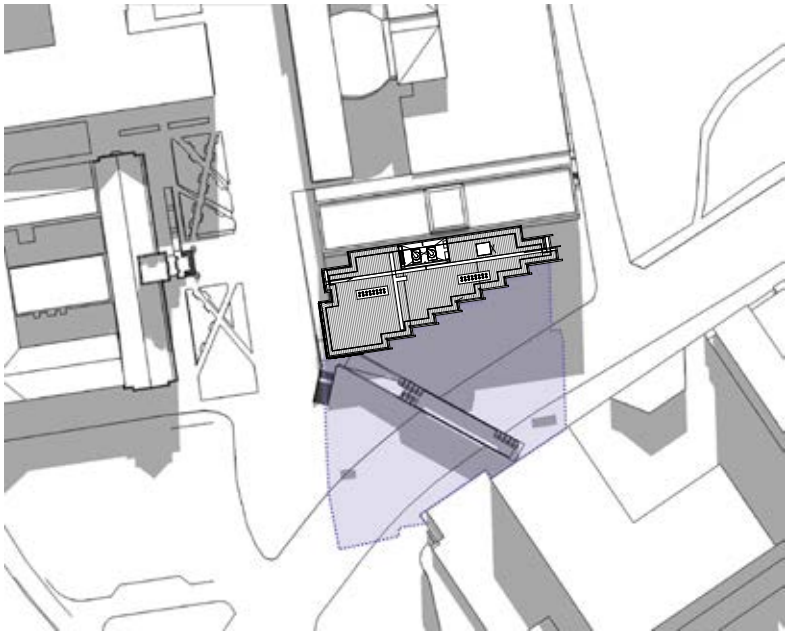


2PM- 21 MARCH

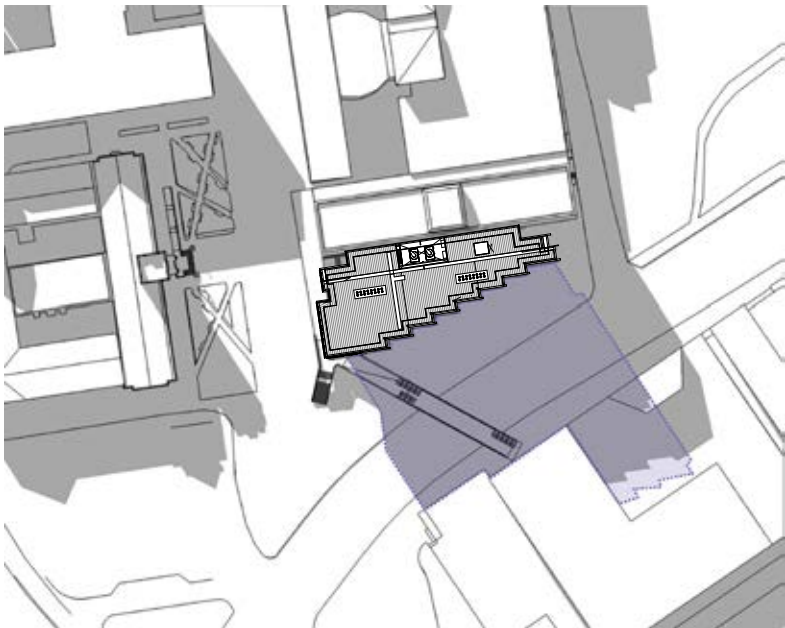
FOR INFORMATION									
8/15/2016 5:00:32 PM REV C FOR INFORMATION ISSUED FOR DA ISSUED FOR DA DESCRIPTION OF CHANGE	KEY PLAN			CONSULTANT	CLIENT	ARCHITECTS	PROJECT	DRAWING TITLE	SCALE
									1: 1000 @ A1
	AM								CHECKED
	15.08.2016								AM
GO			DATE	17.05.2016			ISSUE		
AM			14.04.2016	TBC			HDR-AR-DWG-DA20	C	
CHKD				RICHARD CROOKES CONSTRUCTIONS			THE UNIVERSITY OF SYDNEY	HDR   RICE DAUBNEY	LEES1 BUILDING (F07) THE UNIVERSITY OF SYDNEY CITY ROAD, CAMPERDOWN
5m A1			Level 1, 110 Walker Street, North Sydney NSW 2060, Australia +61 2 9956 2646   hdr@riceanddaubney.com   hdrinc.com			PROJECT NUMBER 271821_1SH			
						SHADOW DIAGRAMS - AUTUMN EQUINOX			
						C:\n\2016\15H LEES 1_BASE BUILDING_chao.zhang@hdrinc.com.nv			



9AM- 21 JUNE



12PM- 21 JUNE



2PM- 21 JUNE

FOR INFORMATION																						
8/15/2016 5:00:38 PM REV C A	FOR INFORMATION	AM	15.08.2016	 	A1	CONSULTANT			 	 	PROJECT LEES1 BUILDING (F07) THE UNIVERSITY OF SYDNEY CITY ROAD, CAMPERDOWN  PROJECT NUMBER 271821_1SH	DRAWING TITLE SHADOW DIAGRAMS - WINTER SOLSTICE	SCALE 1: 1000 @ A1  CONTRACT NUMBER TBC	CHECKED AM  DRAWING NUMBER HDR-AR-DWG-DA21	DATE 15.08.2016  ISSUE C							
	ISSUED FOR DA	GG	17.05.2016			Access Consultant Cheung Access Code Compliance B M + G Pty Ltd Comma/Security Engineer JHA Consulting Engineers Electrical Engineer JHA Consulting Engineers																
	ISSUED FOR DA	AM	14.04.2016																			
	DESCRIPTION OF CHANGE	CHKD	DATE																			
						ESD Consultant JHA Consulting Engineers Facade Engineer Surface Design Consult. Pty Ltd Fire Engineer Defire Pty Limited Landscape Architects OCULUS Pty Ltd			MECHANICAL ENGINEER JHA Consulting Engineers PLUMBING ENGINEER JHA Consulting Engineers STRUCTURAL ENGINEER Northrop Engineers Pty Ltd			THIS DOCUMENT IS THE COPYRIGHT OF THE RICE DAUBNEY GROUP (RICE DAUBNEY PTY LTD). ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE CHECKED AND VERIFIED ON SITE. IN THE EVENT OF DISCREPANCIES REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK. DO NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY.										

C:\w\2016\15H\LEES1\_BASE BUILDING\_chloe.zheng@hdrinc.com.nz