## Welcome

The Stirling Building is in need of urgent repairs to ensure the longer term future of this Grade II\* listed 20th Century icon. The project presents a once in a generation opportunity to improve the building's accessibility, safety and comfort and provide a new range of learning and working environments at the heart of the Sidgwick site.

At this exhibition

You can find out more about the current proposals and the likely timelines for the refurbishment.

The design team will be on hand over the two days of the exhibition to answer any questions. The information presented here can also be found online:

https://www.em.admin.cam.ac.uk/stirling-exhibition



## Background

#### The need for refurbishment

The building is difficult to maintain due it's Grade II\* listed status and complicated geometry. After almost 60 years of use, the building is showing significant signs of wear and a comprehensive refurbishment is required to provide a comfortable environment and safeguard the building for future generations. This presents a huge opportunity to upgrade the building to improve thermal comfort and provide a range of learning and working environments to benefit both students and staff. "The project is true to James Stirling's vision in that it looks to the future. It will enable all those who use the building to work together in new and exciting ways."

Professor Tim Harper, Head of the School of the Humanities and Social Sciences and cochair of the Stirling Project Board



#### Where we are

We have recently concluded the spatial design of the project, following a feasibility study in 2022 and concept design throughout 2023. The project is currently being presented to the University governance bodies in anticipation of a Planning Submission in Summer 2024. The next stage will involve the technical design of the proposals.

Strategic Preparation Definition and Brief We are here

Concept

Design

Spatial Technical Coordination Design

Manufacturing and Construction Handover

Use







## History & significance

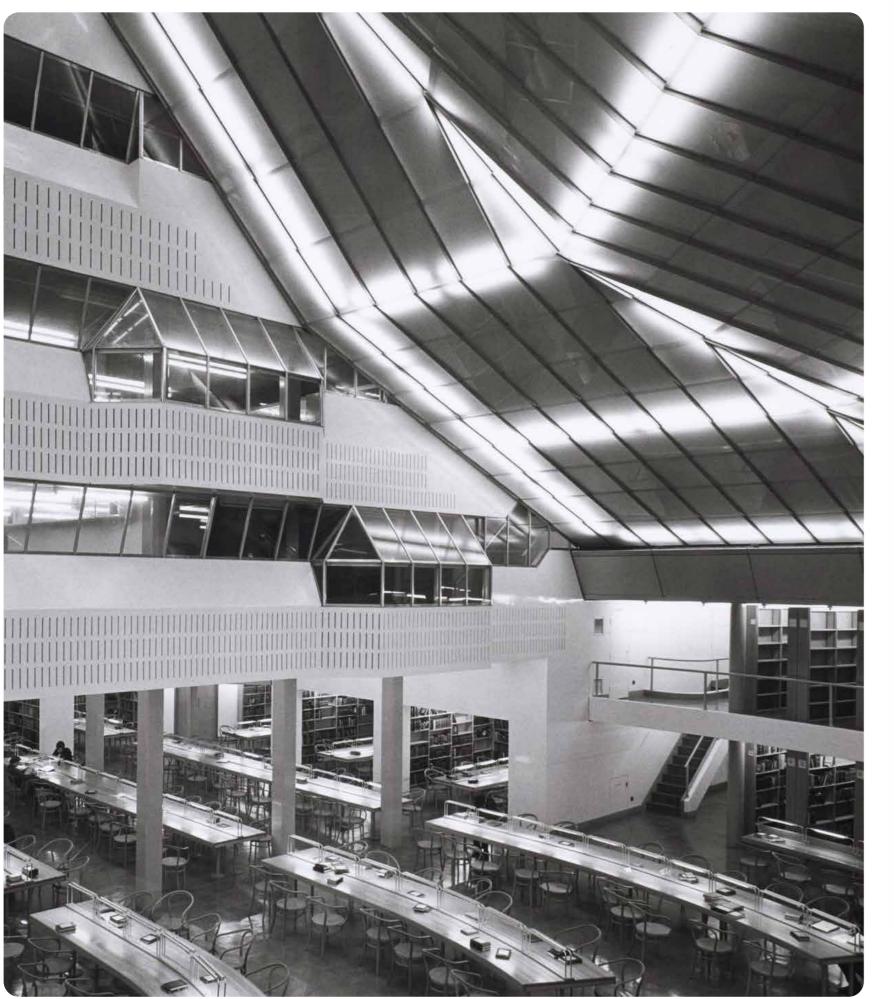
#### A 20th Century icon

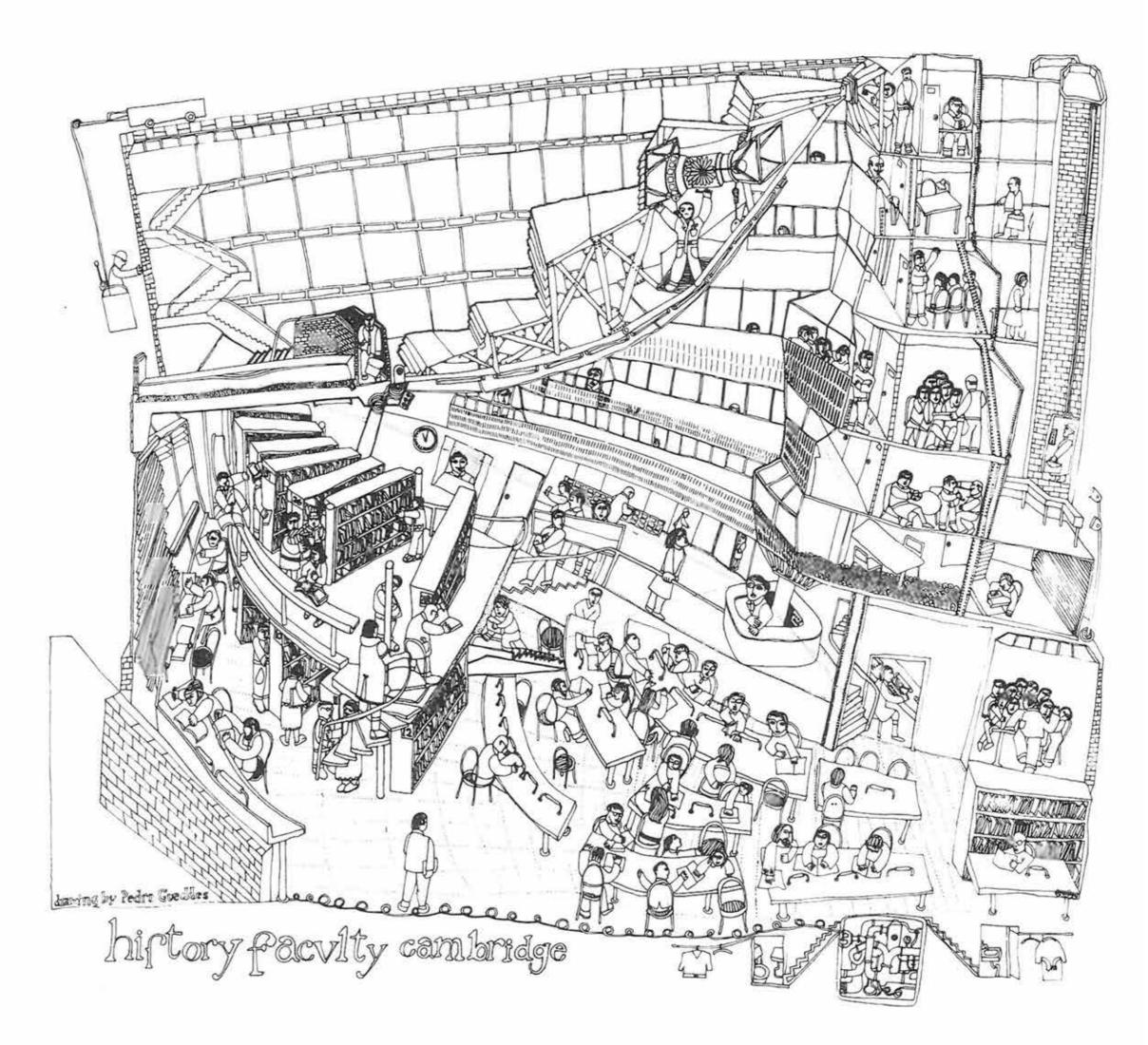
The building is a landmark in the history and development of architecture. It is one of three similar works by James Stirling, along with those at Leicester and Oxford, which have had an enormous influence on architecture worldwide and engendered a vast body of literature.

It has a remarkable formal inventiveness, synthesising strands of British architectural traditions with the visual culture of the early twentieth century. Beyond aesthetics, Stirling understood that buildings can carry a philosophical meaning: the design for History symbolises a community of students and teachers with knowledge, represented by the library, at its physical and symbolic heart.

The Faculty of History has always divided opinion and sown controversy: it is the best of buildings and the worst of buildings. Objections to its unusual appearance serve to reinforce prejudices fuelled by stories of its technical weaknesses. Like almost all historic buildings it fails to meet contemporary needs; it requires work to bring it up to today's technical and standards in order to safeguard the building for the future.







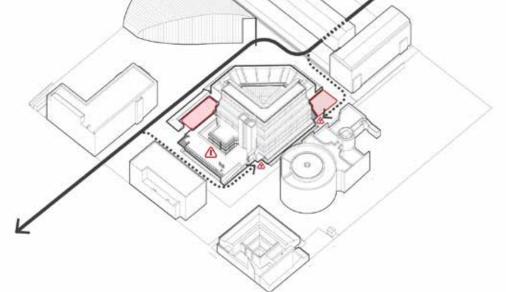


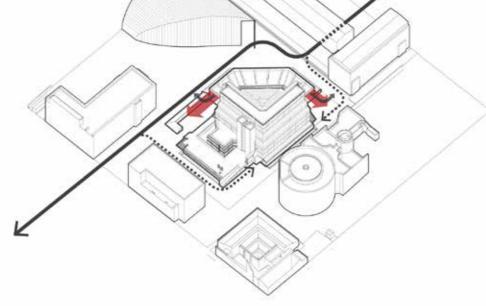


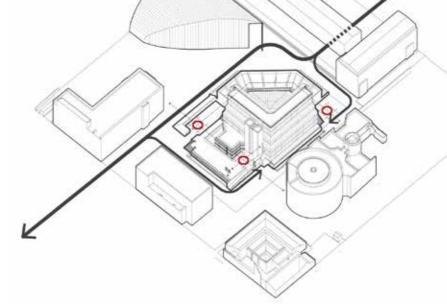
## Vision

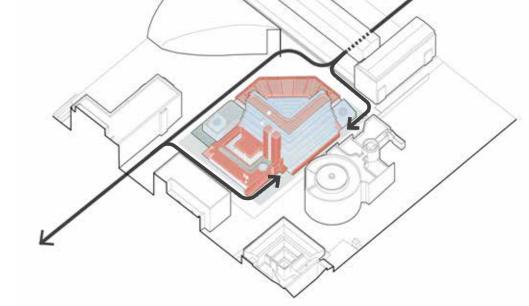
"The project aims to repair and enhance an iconic 20<sup>th</sup> Century building. It will create a flexible and inspiring space, responsive to the University's ever-changing requirements, that breathes new life into the building and its academic community, for the next 100 years."











Preserving existing routes and entrances

Opportunities to address space need and egress

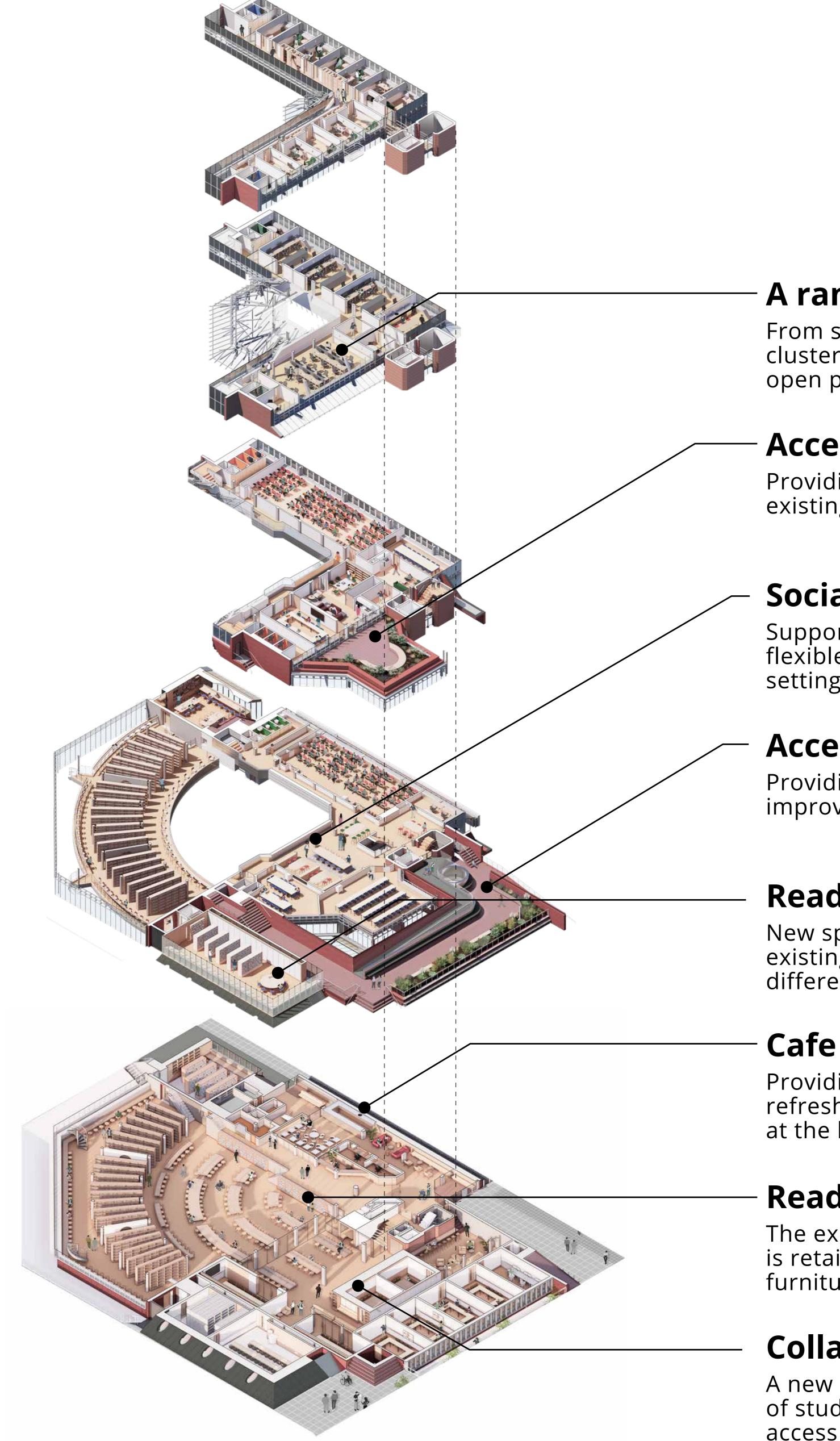
Anchoring interventions

Emerging proposals





## A 21st Century facility



#### A range of space types

From small cellular offices and clustered research spaces to open plan areas

#### **Accessible terrace**

Providing safe access to the existing terrace

#### **Social space**

Supporting seminar spaces with flexible work areas and social settings

#### Accessible podium

Providing safe access to all and improved outdoor amenity space

#### **Reading rooms**

New space to support the existing library and offer different environments for study

Providing a space for refreshments and a social setting at the heart of the Sidgwick Site

#### **Reading room**

The existing reading room is retained with refurbished furniture and lighting

#### **Collaborative Library**

A new space providing a range of study environments and level access to seminar rooms





## A range of learning environments

#### A facility fit for the 21st Century

Interior upgrades will create a range of learning and work environments from vibrant social spaces to individual quiet study areas. Lighting and acoustic performance will be improved and new furniture selected to provide comfort. The use of design classics and a muted palette of materials will allow the architecture to remain the focal point of the restored building.





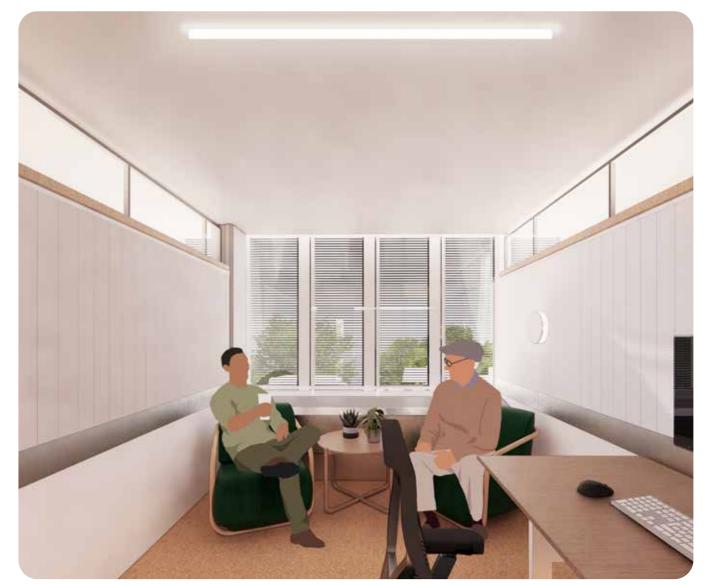






















## A low carbon approach

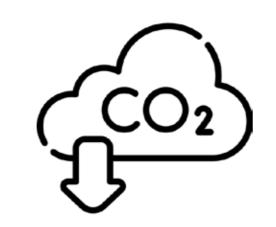


Fabric first

-Glazing upgrades

-Shading considerations

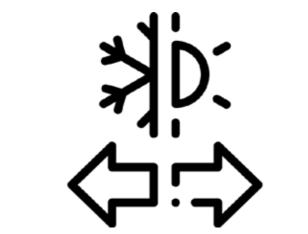
-Internal wall insulation



Zero gas

-Electric pumps -Heat recovery

-Potential renewables opportunities



**Climate control** 

-Active heating & cooling

-Passive summer purging

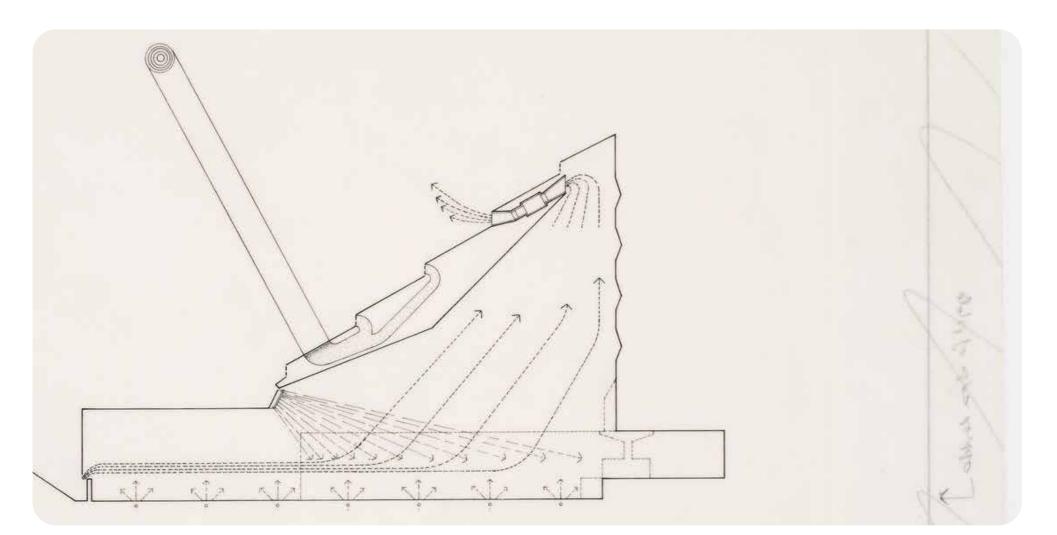
-Night purging via louvres



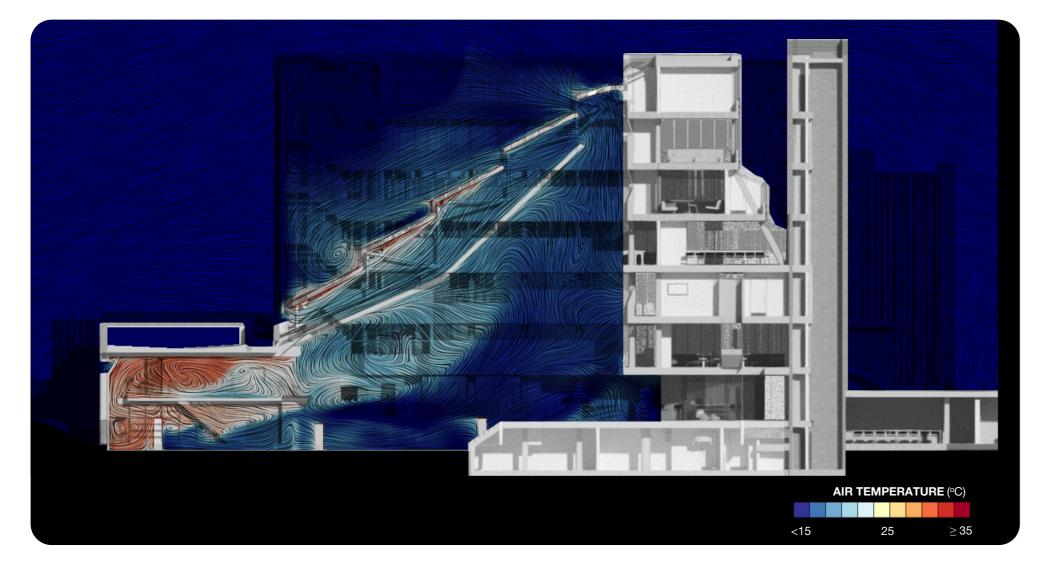
-Fresh air via louvres

-Existing stair utilised to extract stale air

-User operable louvres



## An evidence led, whole building approach

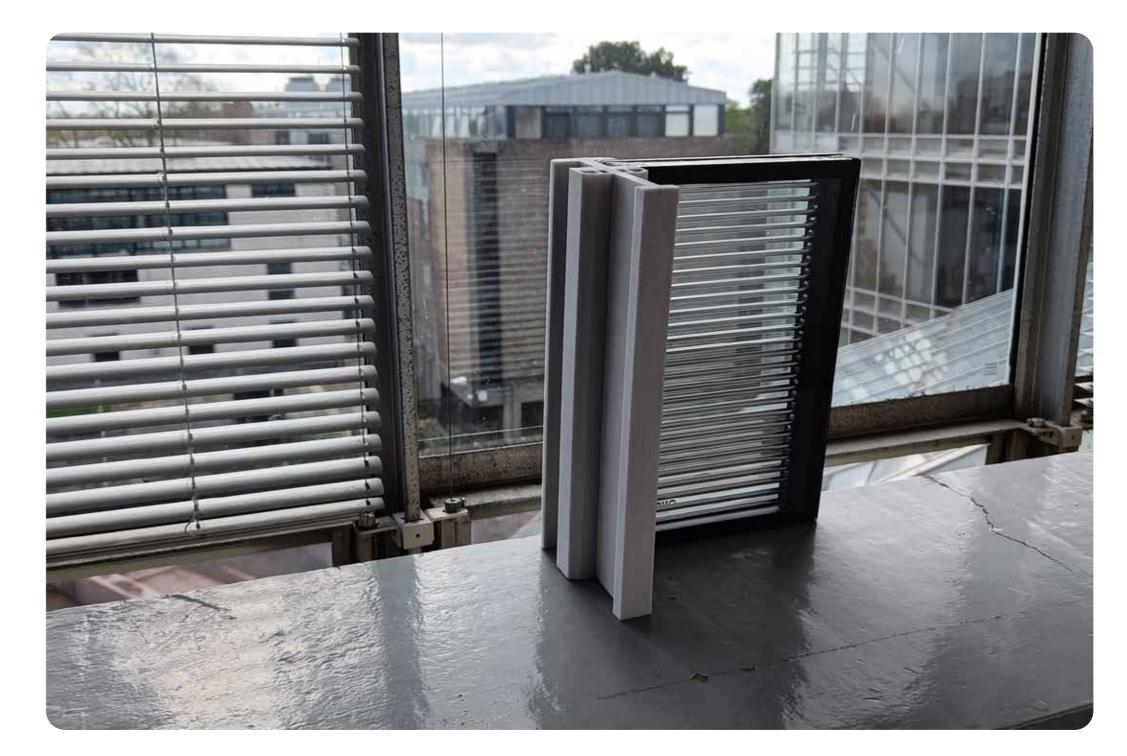


James Stirling had ambitious proposals to harness the twin layers of glass making up the reading room roof to draw hot air up and out of the building, but the fans installed at high level were too noisy for the sensitive library below.

Using modern digital simulation tools, proposed improvements to both the facades and heating and cooling systems have been studied extensively to ensure the refurbished building will provide a comfortable environment for occupants.

#### A heritage appropriate approach

A significant design challenge is how to retain the crystalline form of the building whilst significantly improving the performance. The current proposals seek to retain similar framing to the existing building with upgrades to double glazing. Due to the building's orientation, there is a need to provide further shading which will take the form of fixed horizontal blinds between the glass layers, mimicing the existing venetian blinds.







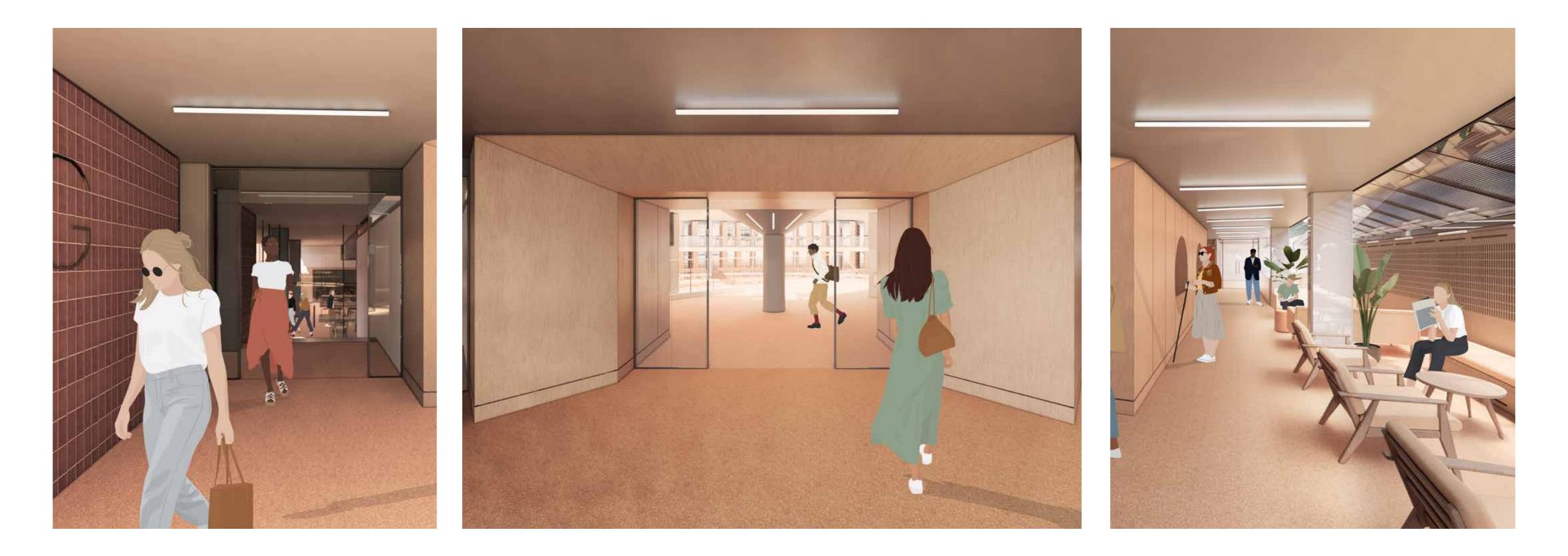
## Improving accessibility

#### Access for all

The proposals will resolve access for all users to all areas of the building. The current building is split across many levels which makes access difficult, with existing stairs, ramps and lifts not fit for purpose. By upgrading existing lifts and providing new lifts and ramps, access to the building is equitable for all users.

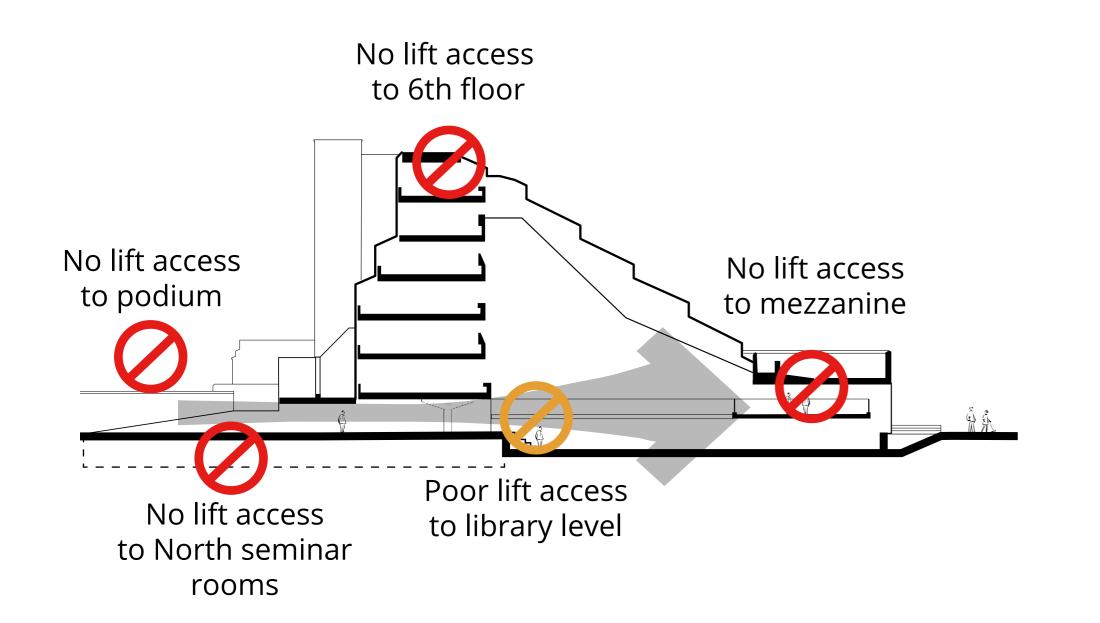
#### Providing an environment for all

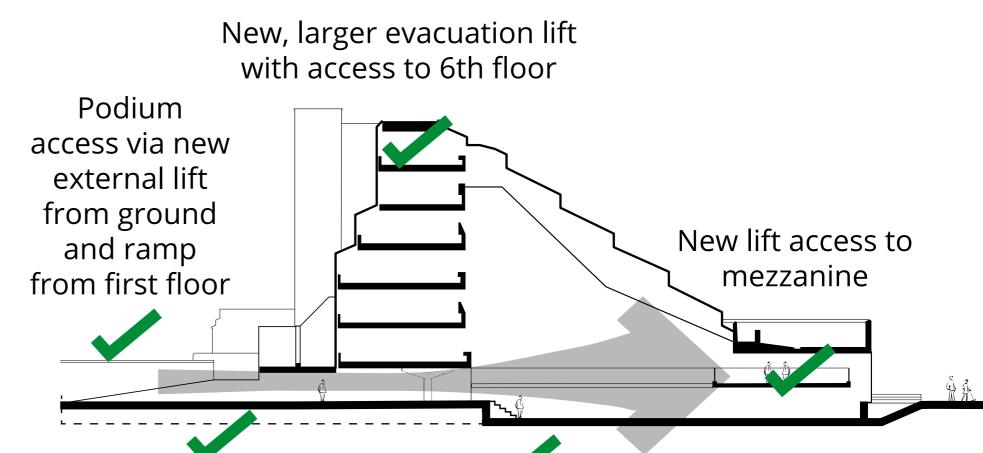
The refurbishment will provide a range of learning environments suited to the needs of all, from quiet, private study spaces to vibrant social spaces. Considerations of users' physical and mental needs through the use of acoustics, lighting, ergonomics and colour will ensure all users are able to find a place that works for them.



#### **Current access**

#### **Refurbished access**





Seminar room floors raised to provide level access

New lift access to both library and collaborative space





# Supporting the future of the Sidgwick site





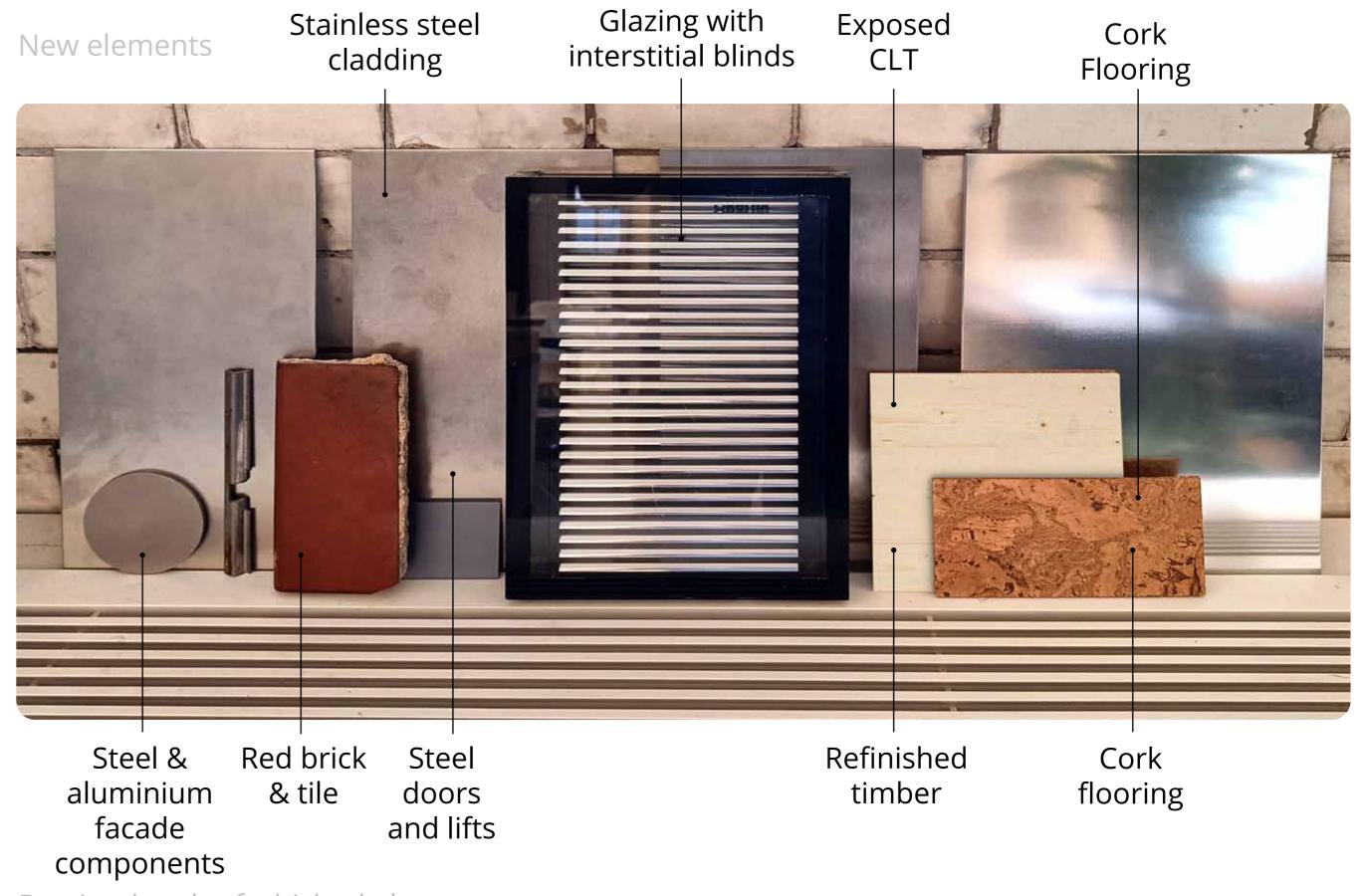






#### New elements

To support the area displaced by the provision of new ventilation and heat recovery systems within the basement, two new pavilions are proposed at either end of the 'bookstack'. These high value additions will provide new library and reading spaces, support enhanced escape and accessibility whilst supporting the servicing of the existing building. Their massing, form and materiality take their cues from the existing building whilst utilising low carbon construction. Materials have been selected for their whole life cycle carbon, robustness and end of life recyclability.



Retained and refurbished elements





## Planning

#### **Consultation to date**

The project team have worked with external heritage stakeholders to ensure that the proposals are an appropriate, conservationled approach to the Grade II\* listed building. Further consultations have taken place with sustainability and accessibility officers to ensure the proposals are in line with current planning policies.



#### Sustainability

The building will meet BREEAM Excellent, a certification ensuring the building meets key sustainability criteria. The zero-gas approach will help to meet the University's own absolute zero targets and additional consultation has been undertaken to improve the wellbeing of occupants by incorporating key sections of the WELL standard. A pre-refurbishment audit has been undertaken to identify potential reuse or recycle opportunities for any fabric to be removed.



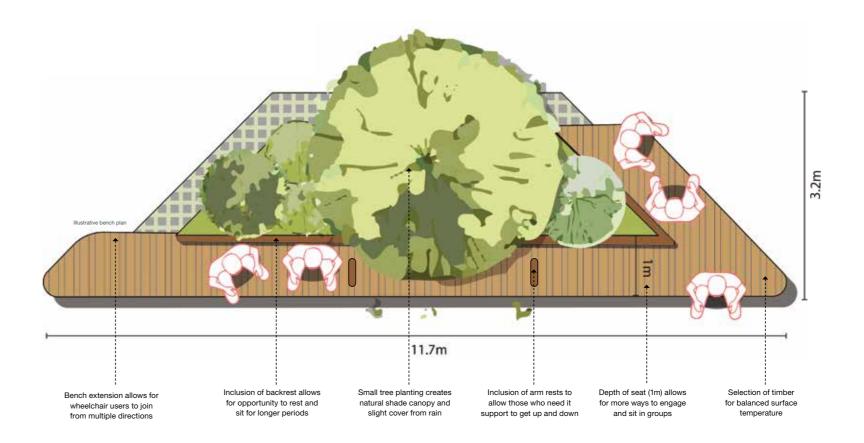
#### Landscape & biodiversity

The project will improve biodiversity through the introduction of sedum roofs where feasible. The perimeter landscaping will form part of a wider Sidgwick site strategy with an ambition to improve the setting of the building and increase soft landscaping.



#### Cycle parking

The project team understand the importance of cycle parking and it's proximity to the Stirling building entrances. A transport assessment has been undertaken to ensure that proposals provide a sufficient uplift in cycle parking to cater to the enhancement in occupancy numbers.







## Planning



#### Noise

An initial noise survey has been undertaken to understand the current noise levels around the site and how the proposals may contribute to this. The refurbishment requires the installation of some mechanical equipment and this has been assessed to ensure any noise generated by this sits within prescribed limits.



#### Water use

The proposals will utilise existing sewer connections for both surface water and foul water. Whilst rainwater harvesting isn't viable due to the limitations of the existing building, new, efficient santiary fittings will be installed throughout to reduce water usage. The installation of a sedum roof to the bookstack will help to attenuate rainwater.

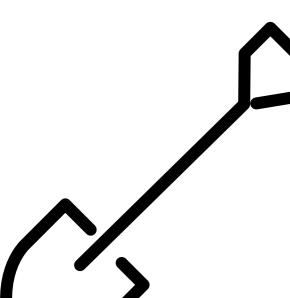


#### Transport

As the building sits within a pedestrianised zone, vehicular parking is not affected by the proposals. There is a significant impact to cycle parking due to upgrades to the existing railings and the siting of the new pavilions. A transport assessment has been undertaken to identify the required number of cycle spaces and further work is being undertaken to identify suitable location for these in proximity to the building.

### Lighting

Proposals for new lighting specifically avoid contribution to light pollution and focus on targeted lighting. New controls will be installed to reduce energy usage. Existing task lighting within the main library will be relamped with LEDs to ensure a conservation-led approach.



#### Archaeology

An archaeology assessment will be undertaken to manage the risk to the project and ensure contractors undertake the work in a compliant manner. As a refurbishment project, the extent of excavation required is very limited to support the new build elements and connect back into the main building.

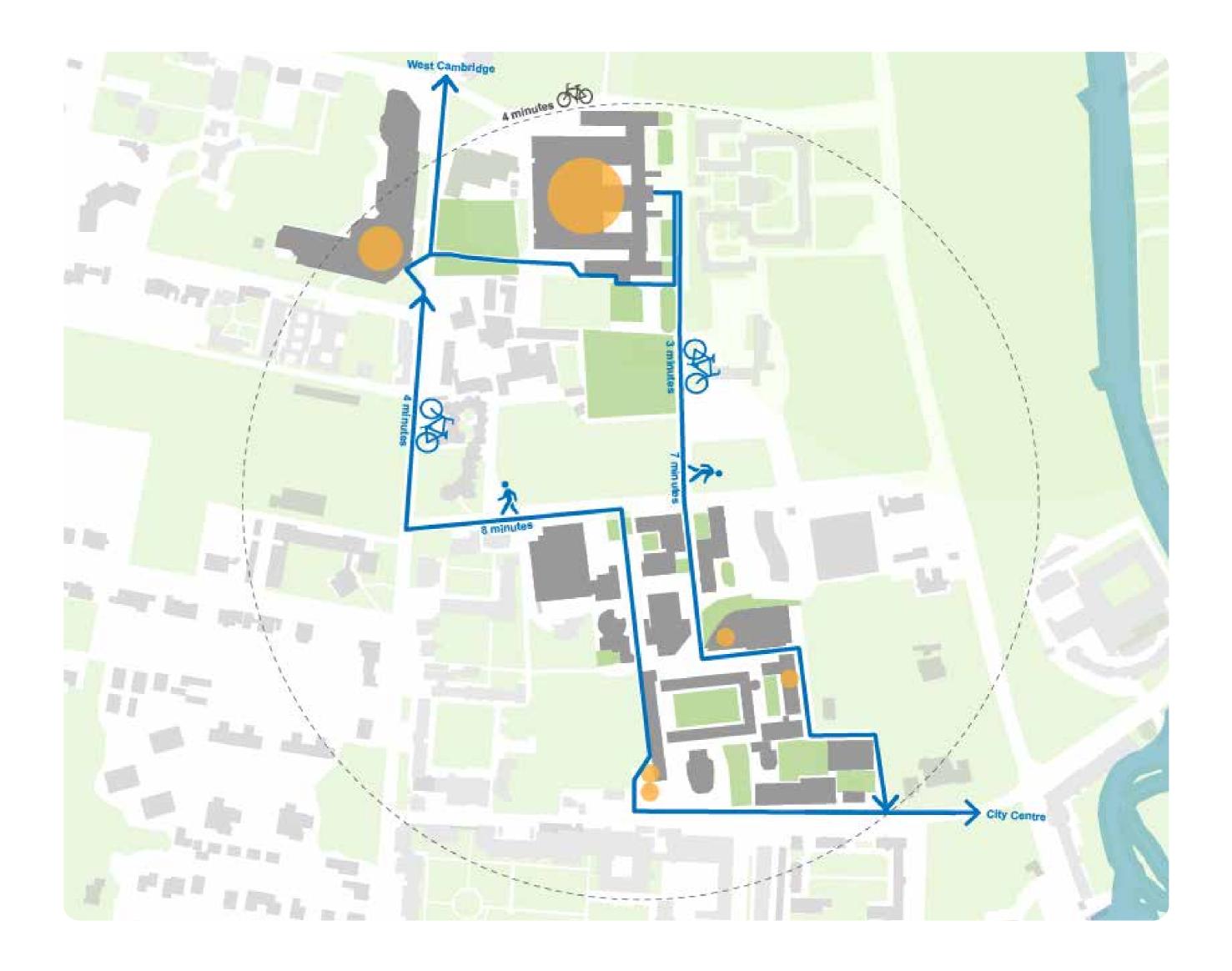




## During refurbishment

#### A connected experience

To ensure a high quality student and staff experience during the refurbishment works, a number of sites have been identified in proximity to the Stirling building to provide library, seminar, study and work space. These spaces are primarily within Criminology, Law as well as in other temporary facilities on the Sidgwick site, with some activities a short walk or cycle from the Sidgwick site. Sidgwick Lodge will be repurposed as an identity space for History to ensure there is a single point of contact on the Sidgwick site.



Existing spaces will be reconfigured or redecorated to ensure high quality spaces are maintained throughout the refurbishment period.

#### **The Seeley Library**

An area within the University Library has been earmarked to house the existing collections, with browsable bookstacks and areas to read, situated in proximity to the Reading Room in a similar sized space.









## Your feedback

#### Submitting your feedback to us

We have engaged with key stakeholders and representatives throughout the design process and are now seeking views from the wider academic community on the current proposals to ensure the design reflects the needs and aspirations of a diverse audience.

The feedback from the exhibition will be fed into our future design work ahead of the planning submission in Summer 2024.

Please share your thoughts using the QR code.



scan here for survey link

