

# Welcome

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Thank you for your interest in the proposals for the new Life and Mind Building. This is the second of a series of two public consultation events on the plans for the redevelopment of the site currently occupied by the Tinbergen Building.

Due to the current situation surrounding COVID-19, we are required to take this second event online. We hope that you will find the following consultation boards informative and we invite you to ask questions to the project team via email: [lifeandmind@admin.ox.ac.uk](mailto:lifeandmind@admin.ox.ac.uk)

The Tinbergen Building is located in a prominent position in the Science Area on the junction of St Cross Road and South Parks Road. It was the University's largest teaching and research building, accommodating the Departments of Zoology and Experimental Psychology and also teaching laboratories for the Department of Biochemistry.

The building had to be closed in early 2017 due to the discovery of asbestos throughout the structure and in inaccessible areas. It was not possible to remove this while the building was occupied. A decision was taken to demolish the existing building and planning permission was granted for the demolition of the building in September 2019.

## Life and Mind Building

The University intends to create a new, world-class centre for Life and Mind Sciences on the site. The Life and Mind Building will be the largest building project the University has ever undertaken and will significantly improve the way psychological and biological science is undertaken in Oxford, helping scientists to solve some of our major global challenges. It will be home to the Department of Experimental Psychology and a new Department of Biology, combining the existing Departments of Plant Sciences and Zoology.

The following consultation boards, will show you:

The background to the project	Board 2
The site area and location	Board 3
The constraints and opportunities	Board 4
The vision for the new Life and Mind Building	Board 5
The design development of the proposed new building	Boards 6-11
View impact assessments	Boards 12-13
Public realm and landscaping	Boards 14-15
Transport and access	Board 16
Sustainability approach	Board 17
Construction and logistics considerations	Board 18
The proposed timeline	Board 19

## Your Views

We welcome your comments and feedback on the proposals. All comments will be reviewed and considered by the Design Team ahead of the submission of a planning application at the end of July. Please submit all comments through the online feedback form available on the website by 20 June 2020.

Thank you for your input.



Proposed new Life and Mind Building as seen from South Parks Road



Tinbergen Building from South Parks Road, 2017



Plan of Oxford University's Science Area and the Keble Triangle, highlighting the Tinbergen site



# Project Background

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In 2016, a planning application for the Chemistry Teaching Laboratories (CTL), as an extension to the Tinbergen Building, was approved as part of a wider planning permission for refurbishment and alterations.

In February 2017, during these refurbishment works, the University reluctantly, at short notice, closed the Tinbergen Building due to the discovery of asbestos-containing materials throughout the structure and in inaccessible areas. It was not possible to remove this while the building was occupied.

The Tinbergen Building accommodated nearly 2000 academic staff, postgraduate students, undergraduates and administrative staff and as a medium-term solution, modular buildings were erected at the Radcliffe Observatory Quarter site on Walton Street and at the University Club Sports Ground behind the Tinbergen Building. These temporary buildings will be in place until the opening of the new Life and Mind Building.

## Demolition

Due to the tight programme of the project with the aim of opening the new building for September 2024, a planning application was submitted for the demolition of the building and various enabling works, including:

- Temporary flues and plant room for CTL
- A temporary access to CTL
- A new entrance to the Peter Medawar Building
- Temporary substation

This application was approved in September 2019 (application reference 19/01636/FUL).

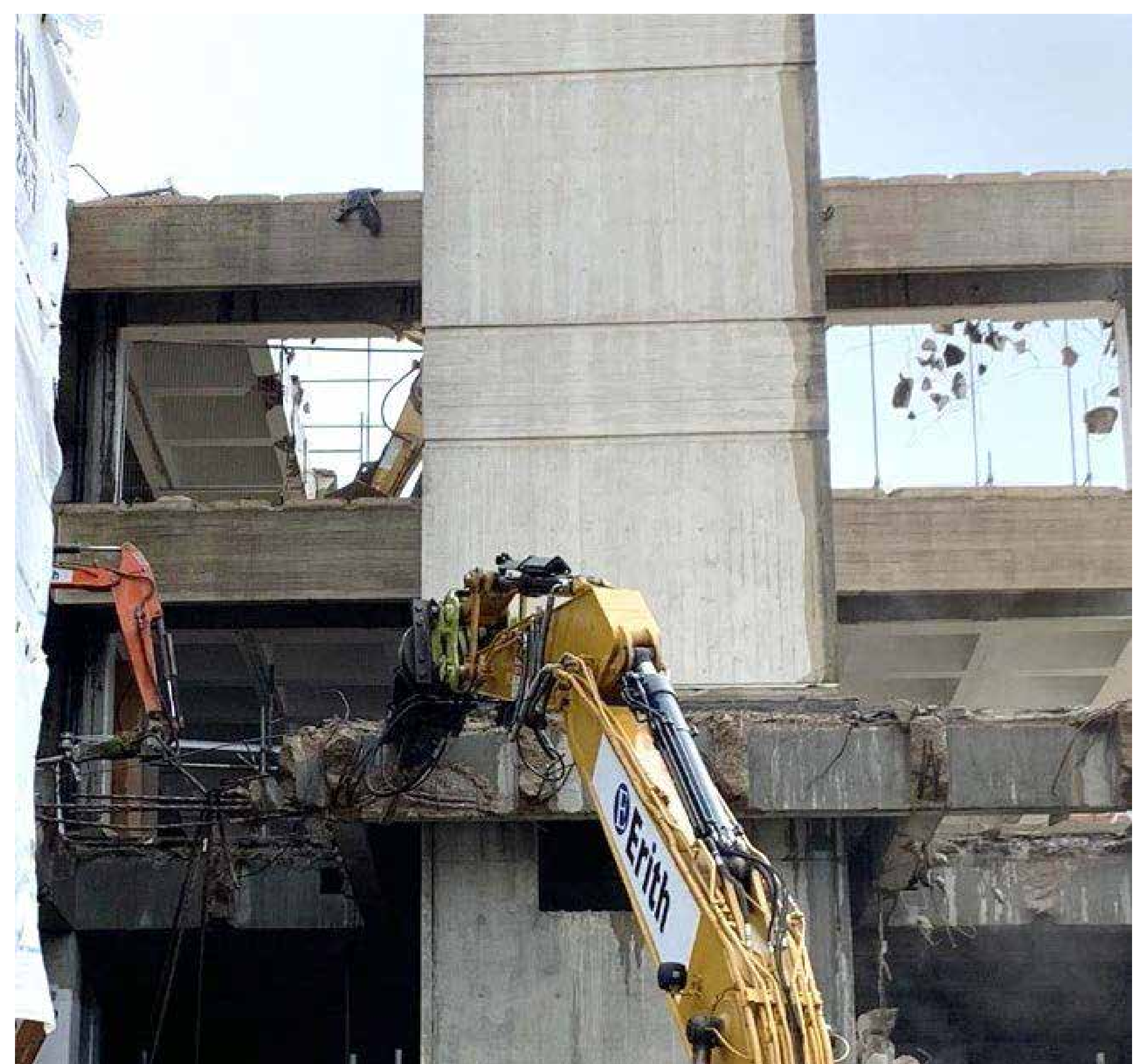
The demolition of the building has now commenced following the conclusion of nearly 18 months of asbestos removal. Demolition and the installation of the temporary plant room and flues has been largely unaffected by the restrictions imposed by COVID-19 and the demolition continues on programme.

## Planning Application

The project team are in the process of preparing a planning application to be submitted to Oxford City Council at the end of July 2020. This has followed extensive pre-application discussions with Oxford City Council, two sessions with the Oxford Design Review Panel and consultation with the end-users of the building.



Chemistry Teaching Laboratories



Demolition Progress, May 2020



# Site and Context

## Site Location

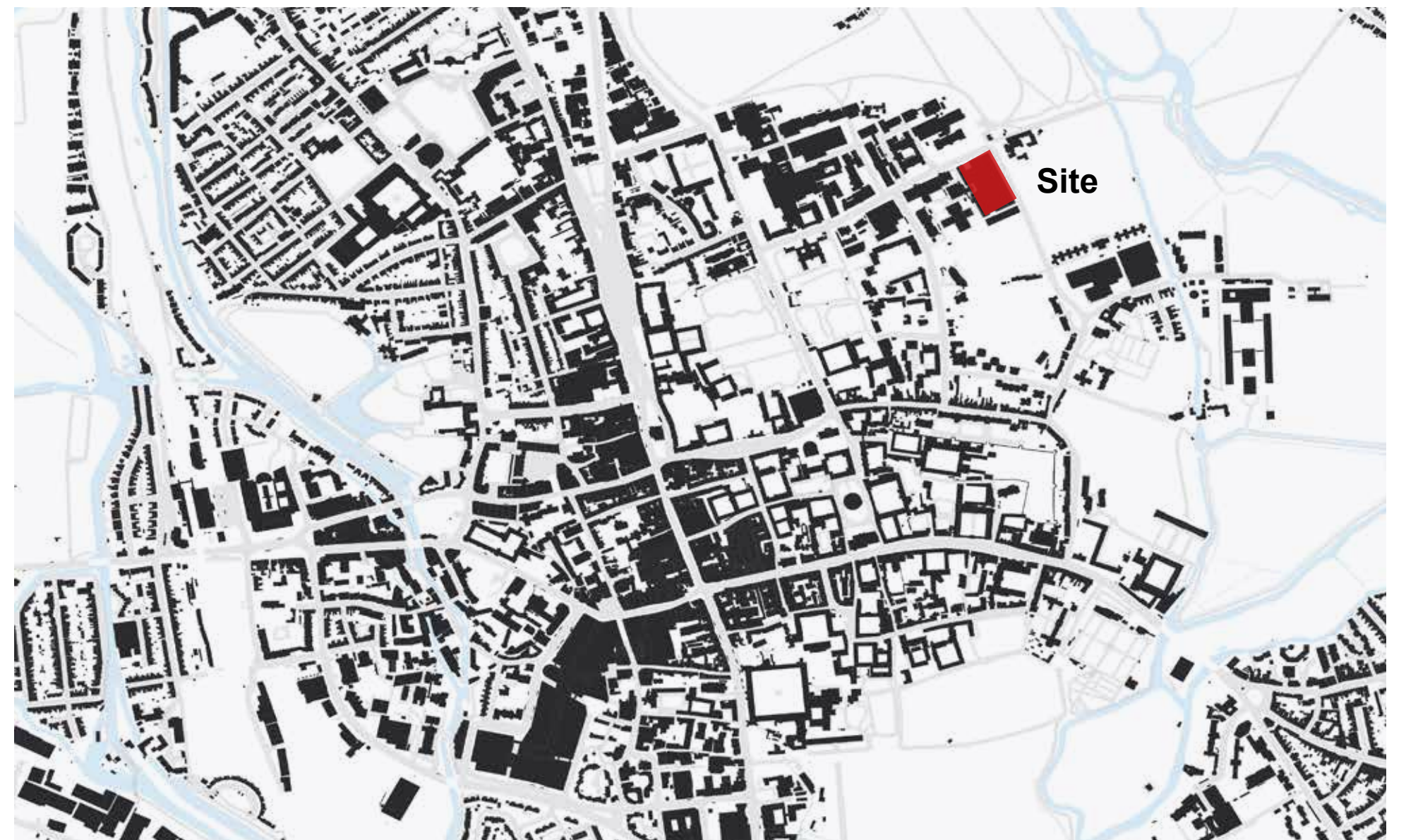
Careful analysis has been undertaken to review the site in context with the wider city and surrounding areas. This includes surveying potential risks that might impact the building, as well as the opportunities that the redevelopment of the site offers.

The site is located north east of the centre of Oxford, within Oxford University's internationally renowned Science Area which has recently been added to the Central Oxford Conservation Area. The Science Area is bounded to the north by the Grade II Listed University Parks, with various colleges and academic departments framing the southern fringes. Development is concentrated and dense, with many buildings built tight to the boundaries. There is minimal soft landscaping associated with the buildings. An exception to this is the north side of South Parks Road where mature trees and setback buildings provide some respite.

The new building will therefore be part of the Central Oxford Conservation Area and is in close proximity to the green belt, Grade II Listed University Parks and the River Cherwell. These important constraints are shown in the diagrams 1 to 4 to the right.

The new building will be designed to respect the setting of the Conservation Area and University Parks so that it makes a positive contribution to the streetscape of South Parks Road and St Cross Road.

At nearly 2 acres in size, the site occupies a large plot on the south east portion of the Science Area, at a prominent corner where South Parks Road intersects with St Cross Road. Its eastern perimeter faces University Parks and New College Sports Grounds, and its southern perimeter is bounded by a recent extension, the Chemistry Teaching Building, which in turn faces the University owned sports fields.



Area map showing the Tinbergen site location in relation to Oxford city centre



1. Central Oxford Conservation Area with recently added science area highlighted yellow



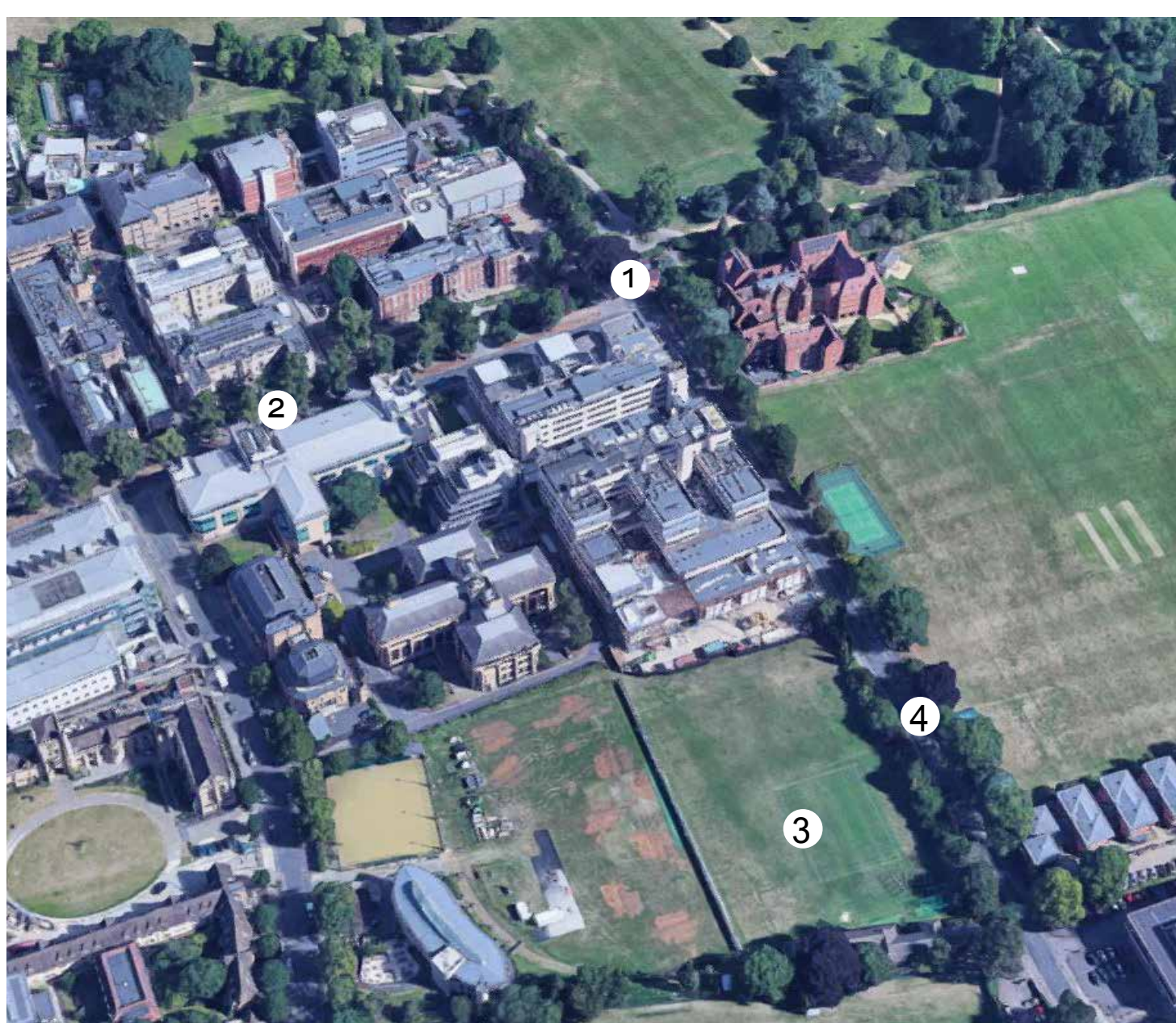
2. Grade II Listed University Parks (in yellow)



3. Green Belt



4. Flood Risk



Area map indicating view point locations of approach views shown on right





# Site and Context

## Opportunities and Constraints

Adjacent buildings west of the site form a block with a rare green space at its centre. Due to the inherent security requirements of some of those buildings, the block (which the Tinbergen site is part of) provides no through connections, with the green space serving predominantly the occupants of buildings within the block and providing discrete access to them. This space also provides secure service access away from public roads to the Peter Medawar, Biomedical Sciences and Pharmacology buildings. The Peter Medawar Building is in close proximity to the site and will be used by some of the future occupants of the new building.

An area south west of the site is currently providing service access to the Peter Medawar Building and the adjacent Pharmacology Building, currently overlapping unsatisfactorily with cycle and pedestrian routes, especially to the CTL, which is intended to work as a stand-alone building in the long-term.

St Cross Road, leading to South Parks Road is an important traffic route when arriving to the Science Area and is also busy during commuter times. Traffic is however expected to significantly reduce by the time the building is occupied following changes due to the wider Oxford Transport Strategy currently being under consideration by Oxfordshire County Council.

Linacre College sits north east of the site, differing in scale to buildings within the Science Area, being of smaller scale and grain, with animated pitched roof lines. North of Linacre College leading onwards along the north side of South Parks Road is an important cycle route, the Marston Cycle Path, crossing University Parks and serving the Science Area and Oxford centre.

While the site benefits from easy access to the University Parks the wider area offers limited opportunities to meet in a public space with amenities like cafés only available around the Natural History Museum. The site offers the opportunity to add such space at the eastern side of the science area.

Oxford has a Views Policy that was first introduced in 1962 to protect the character of the city's skyline not only within the city itself, but from surrounding viewpoints, villages and towns - known as the Oxford View Cones. When a new building is designed, city planners review the impact it may have on the view cones, assessing the benefits that the building may bring to the city, the local community, as well as Oxford's skyline. Computer generated models have been used to assess how the building sits within the city skyline. Further details can be found on Board 12.



Pedestrian Routes



Cycle Routes



Shared Amenity Spaces

Café

Area maps showing local cycle and pedestrian routes and lack of public amenity space

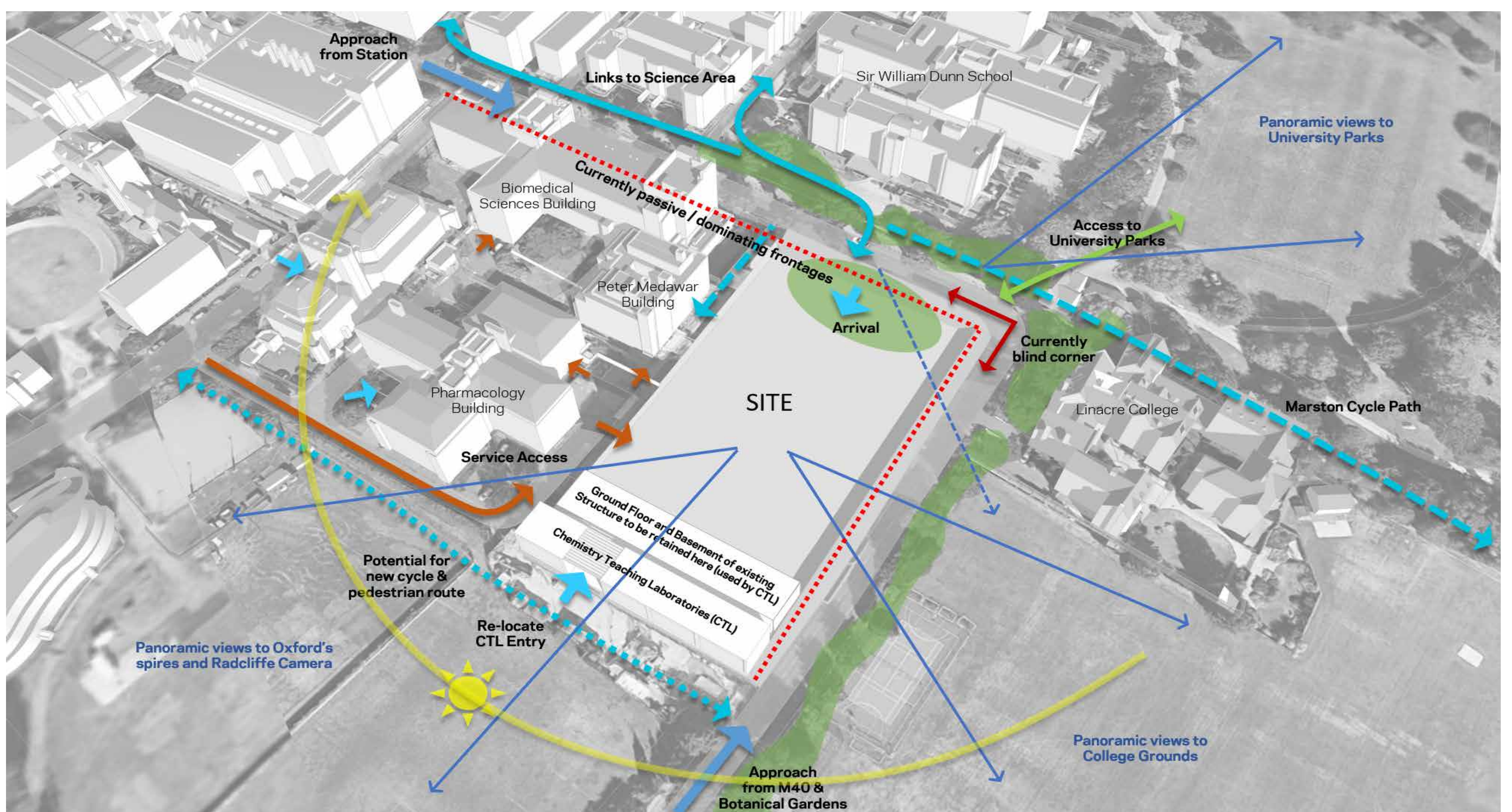


Illustration showing opportunities and constraints in connection with the development site for the Life and Mind Building



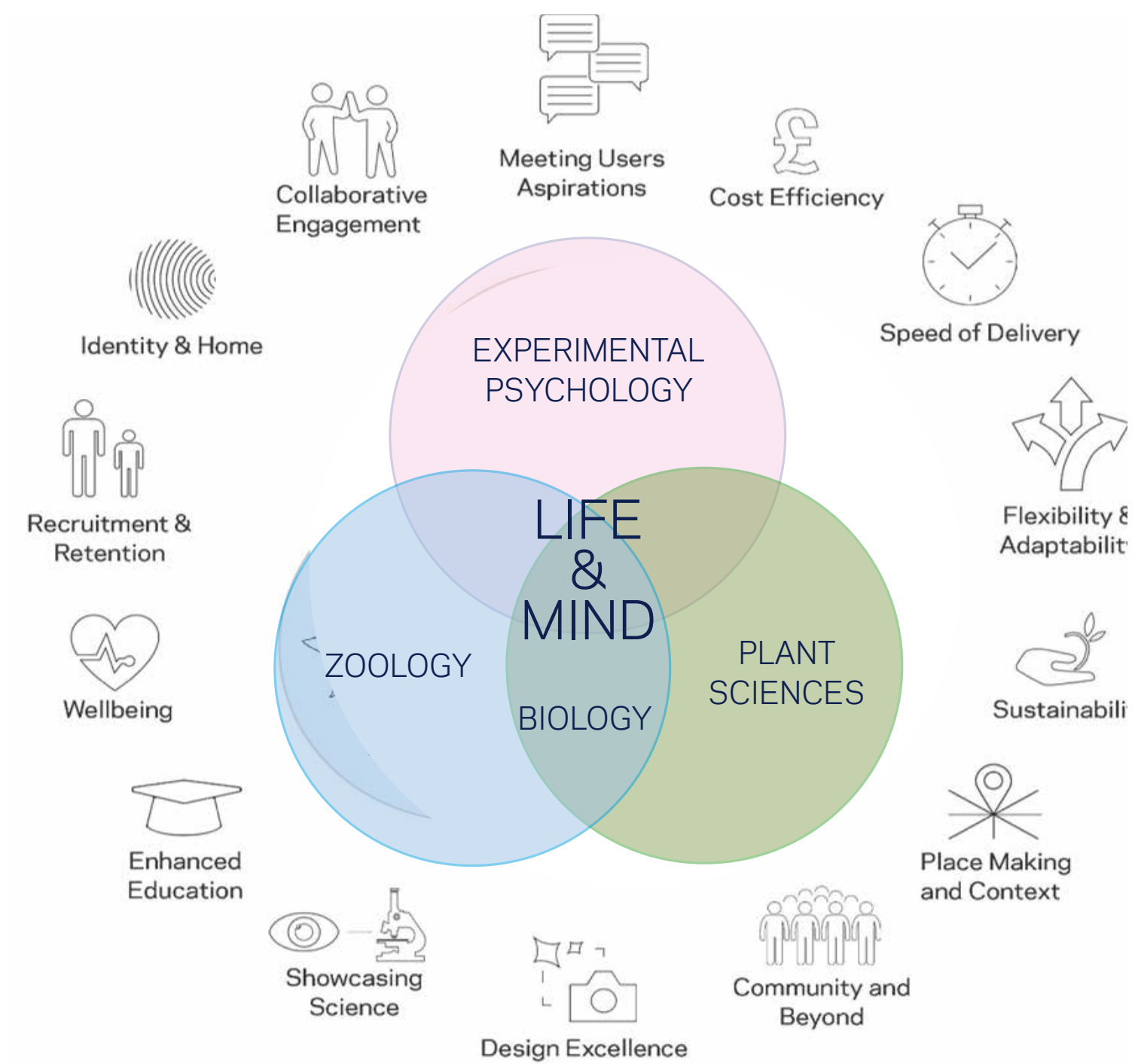
# Vision

## Shared Goals

The Life and Mind Building will become the new home for two University departments: Experimental Psychology and a new Department of Biology, combining Zoology and Plant Sciences.

The new Life and Mind Building will provide the opportunity to:

1. Provide an enhanced **home** for Experimental Psychology (EP) and Biology (Zoology & Plant Sciences)
2. Transform the relationships between the psychological and biological sciences, and their cognate disciplines, by enabling **co-location and collaboration** in emergent fields
3. Enhance the **educational experience**
4. Enable the positive **transformation of the South Parks Road estate** (the Science Area)
5. Enhance the ability to **attract and retain talent** (strongly influenced by the quality of facilities)
6. Strengthen the impact of the Science Area through **widening engagement** with the public, policy makers, and other end users of research.



Aspirations for the new Life and Mind Building

## Global Impact Themes

- Living with biodiversity
- Thriving on a healthy planet
- Conflict and cooperation
- Nature based solutions

## Size and Use

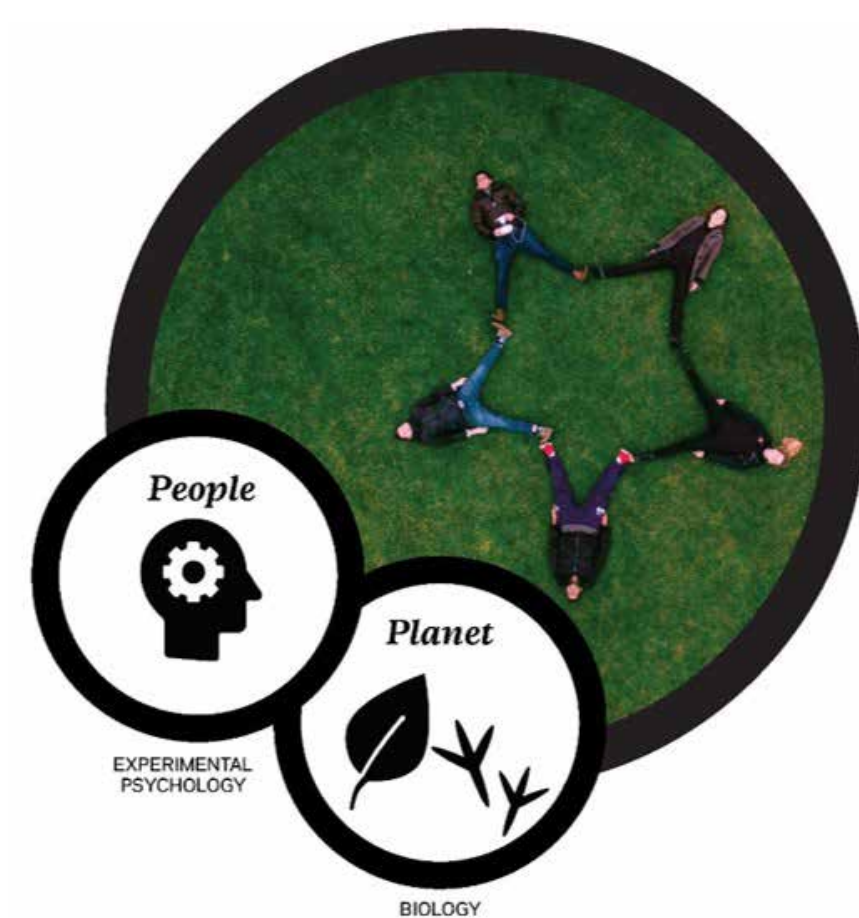
Each department has identified their requirements for the new building. They would like to share some spaces, invite the public into the building and create zones for separate research groups and teaching.

Through a series of workshops with all three departments, the design team has identified the areas they require and how much space this will take up within the building.

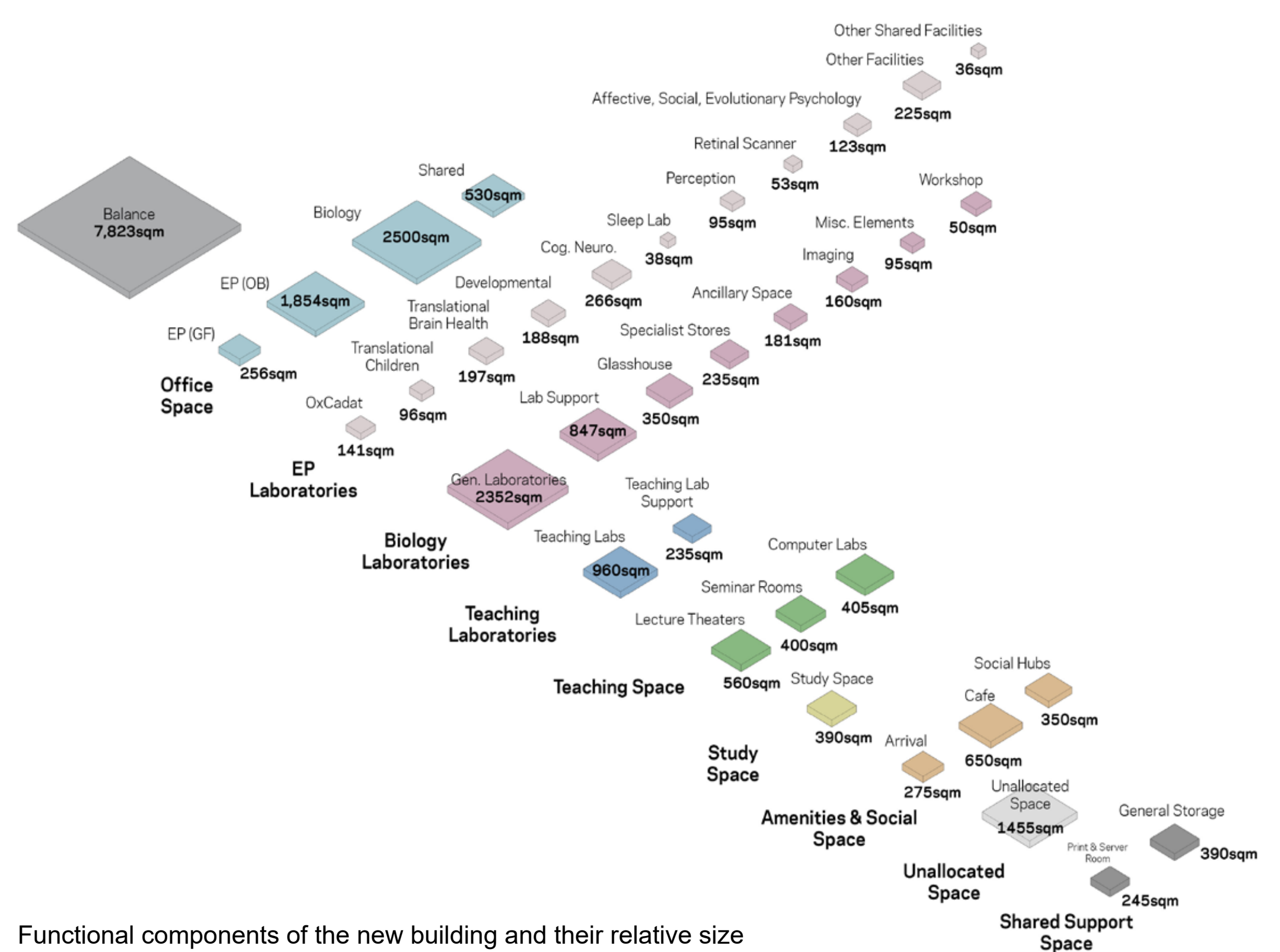
In total the University requires an internal area of 25,000 sqm. This will provide future proof space for a mix of science areas, office accommodation as well as teaching and public space.

The main elements of the brief to meet these strategic objectives are:

- Life science / biology laboratories, incl. green houses, containment level 2 spaces, herbarium, imaging and workshops
- EP research space comprising a variety of test and observation rooms for volunteers ranging from babies to the elderly.
- Offices and write up space for researchers, staff, PhD students
- Space for collaboration and engagement
- Teaching laboratories
- Lecture theatres, seminar spaces and computer laboratories
- Multifunctional break-out and event spaces suitable for outreach and conferences
- Study space (focused and interactive)
- Café and arrival spaces

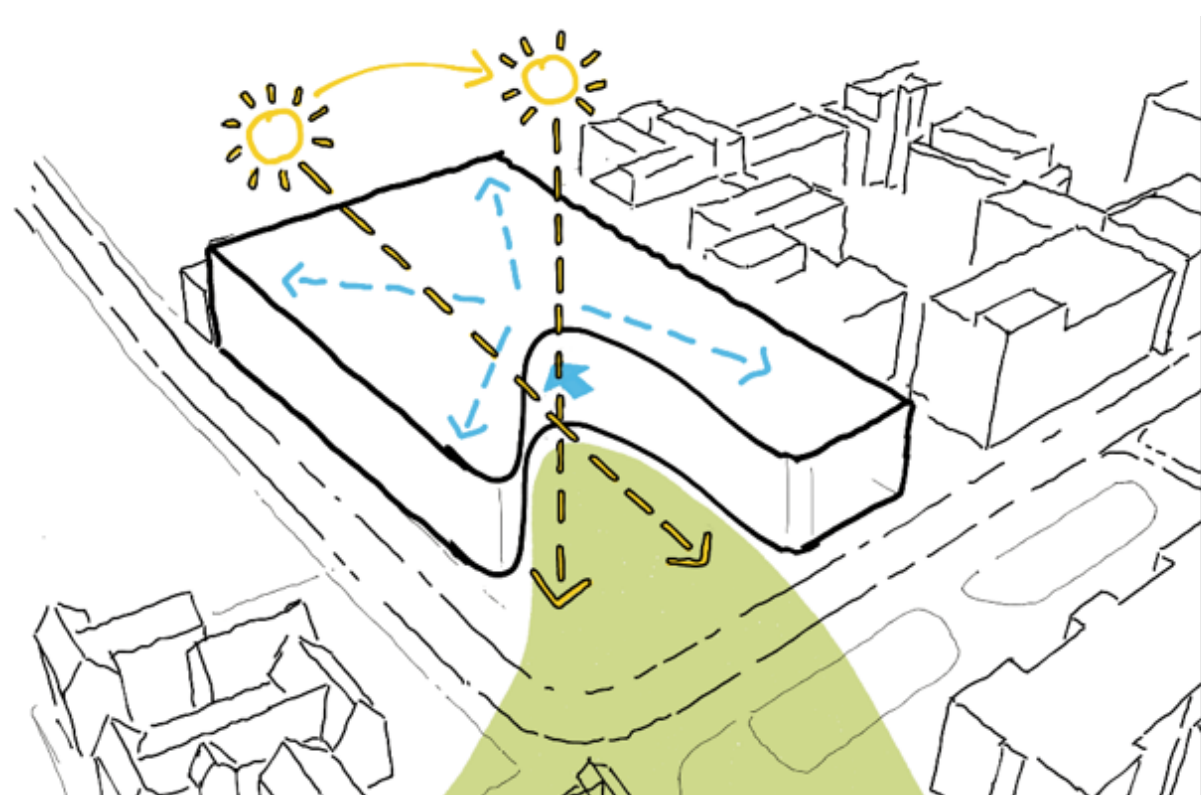


Shared Ecosystem – a major hub for people and planet

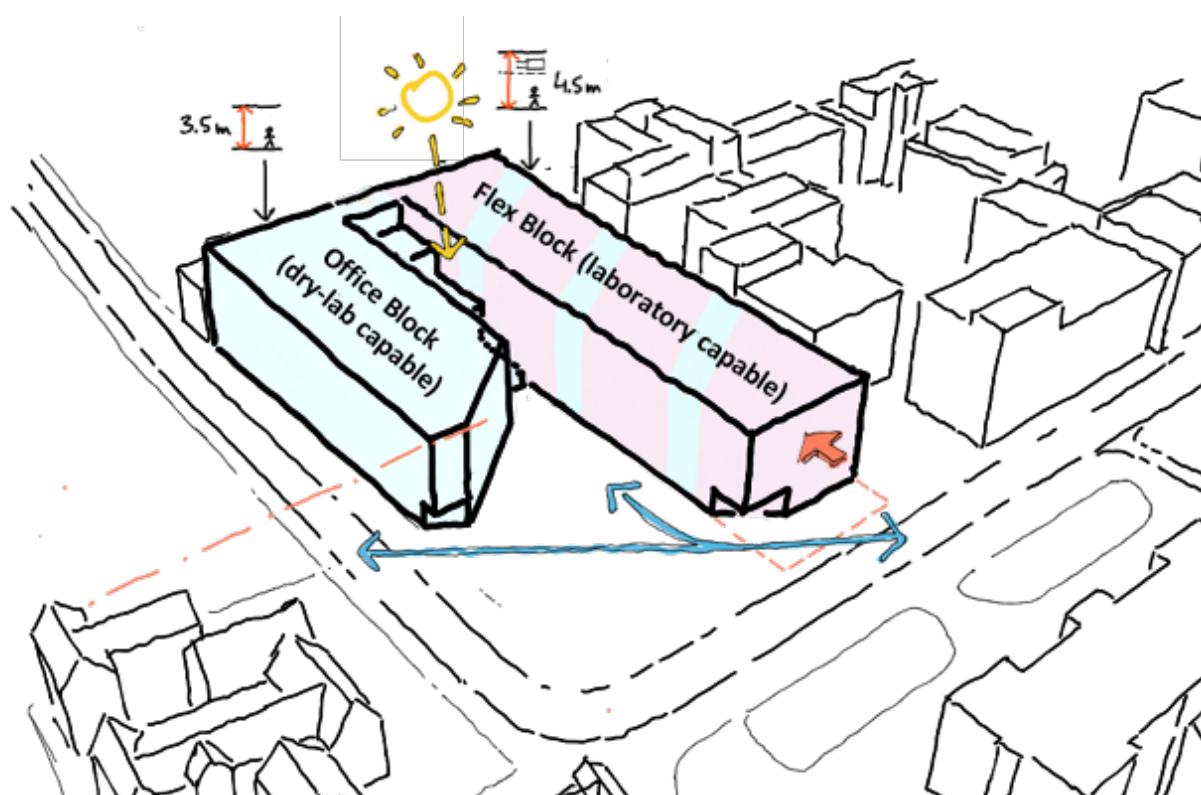


Functional components of the new building and their relative size

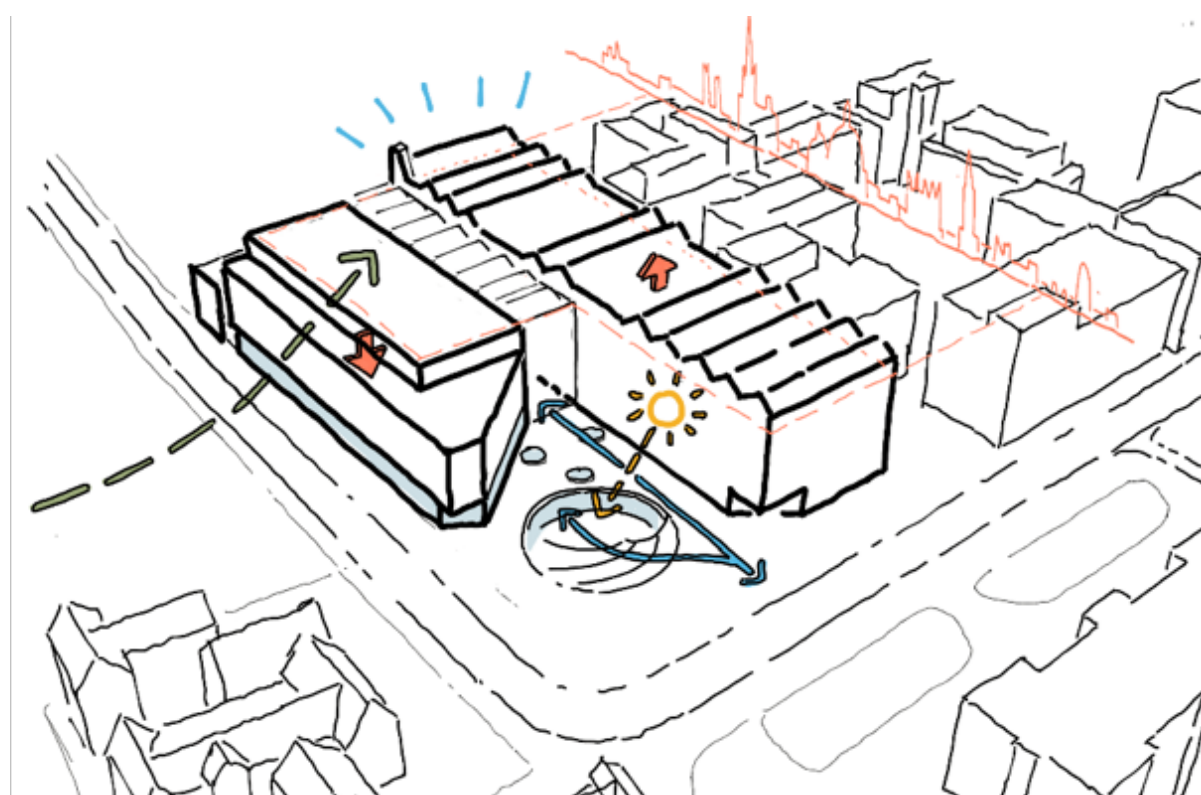




Engaging



Adaptable



Contextual

## Concept

The design concept aims to enhance the quality and opportunities of the surrounding area while relating to Oxford's historic and protected skyline and context. The creation of a new public realm and wider pavement areas enhance the connection with the community and opens a window into science and education.

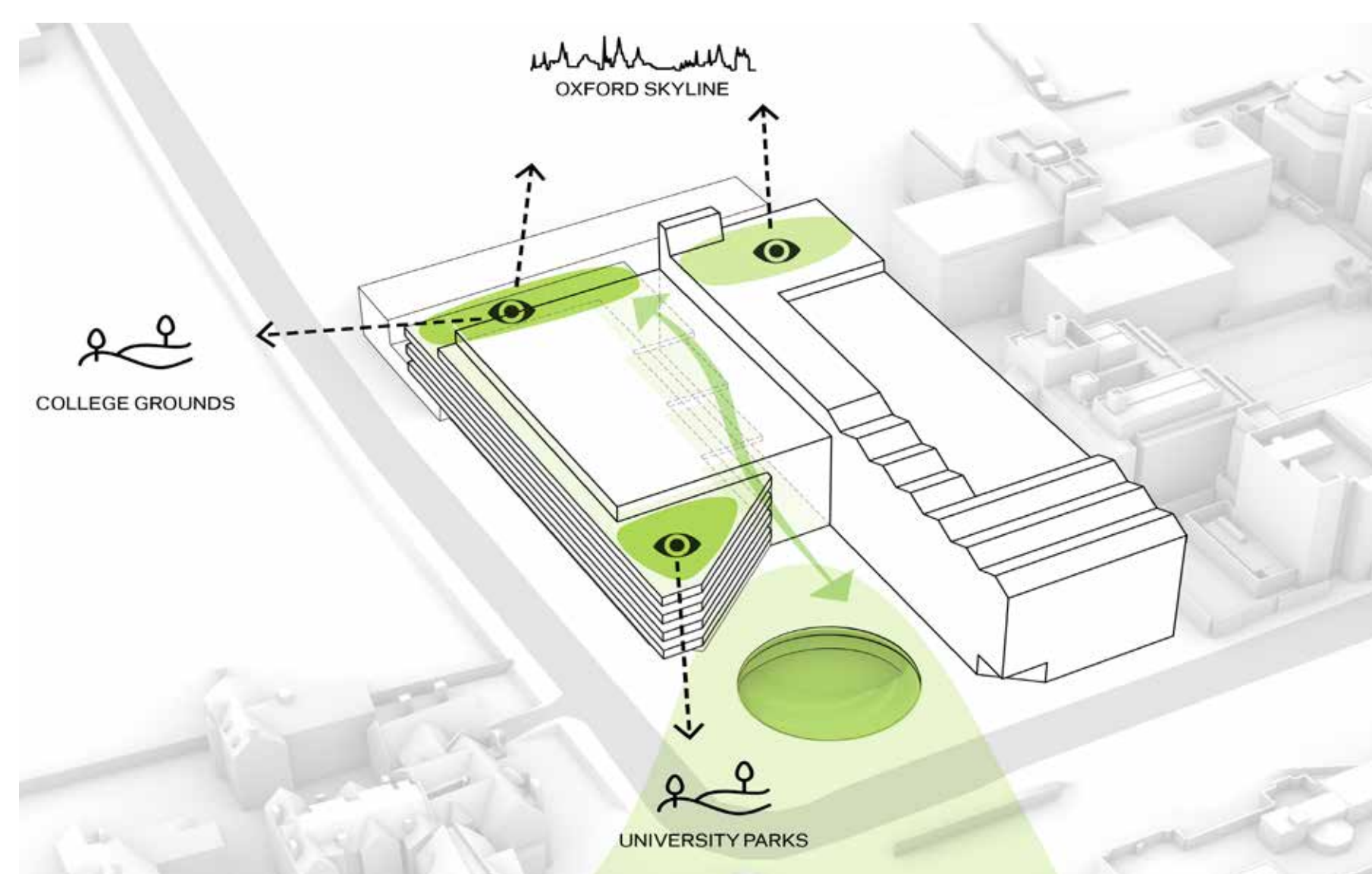
This public space extends University Parks and its diverse selection of trees into the site and allows visitors and occupants to enter the building at its centre shortening routes within and improving connectivity within the building.

A central terraced atrium space - a continuation of the public plaza flooded by natural light - will offer a place for working and collaborating. It links the public realm in the north with a south facing roof terrace, while continuing into the lower ground which in turn is connected to the new public plaza via a sunken stepped courtyard.

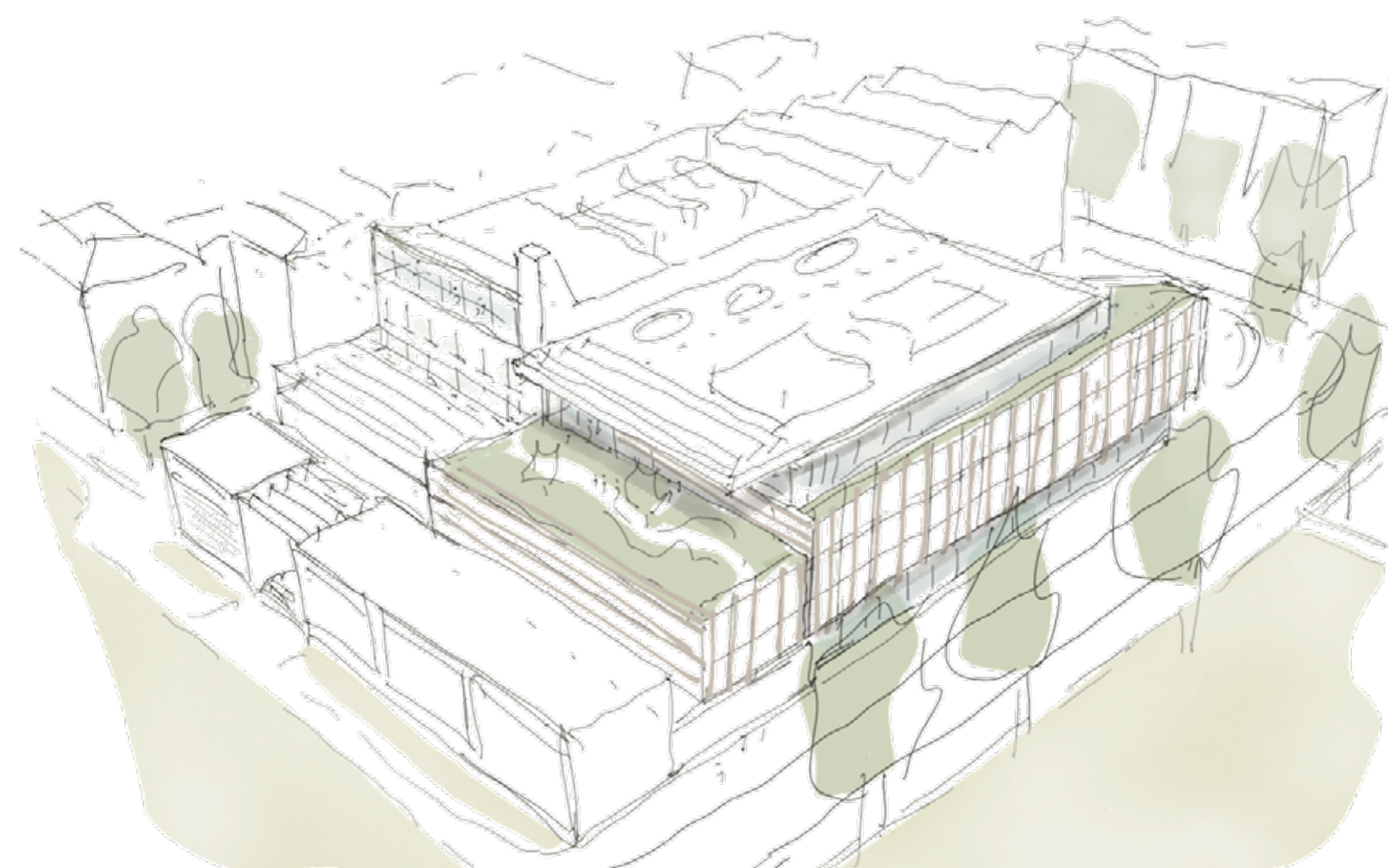
External space for building occupants is never more than one floor away. Those terraces combined with internal shared space like a roof top café activate the building on various sides and levels when viewed from its surrounding.

Two blocks with different floor to floor height help maximise efficiency: a modular concrete structure for laboratories and write-up offices (flexible and adaptable), is paired with a terraced steel structure office block focussed around workplace flexibility and is suitable for EP volunteer-facing observation spaces.

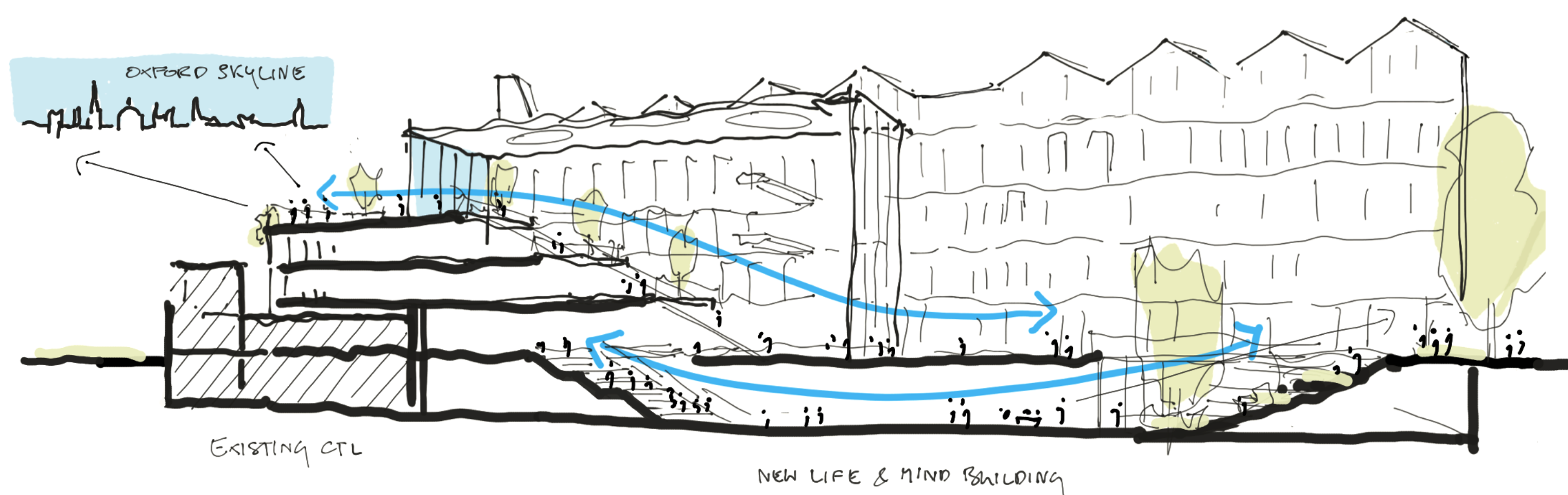
With a limited budget available, the design aims to carefully balance the functional needs of a world class research facility with occupant wellness, creation of public amenities, long-term adaptability, and sustainability goals build around a Passive House approach.



Occupants are never more than one level away from external space



Concept sketch illustrating the overall massing concept with green terraces along St Cross Road

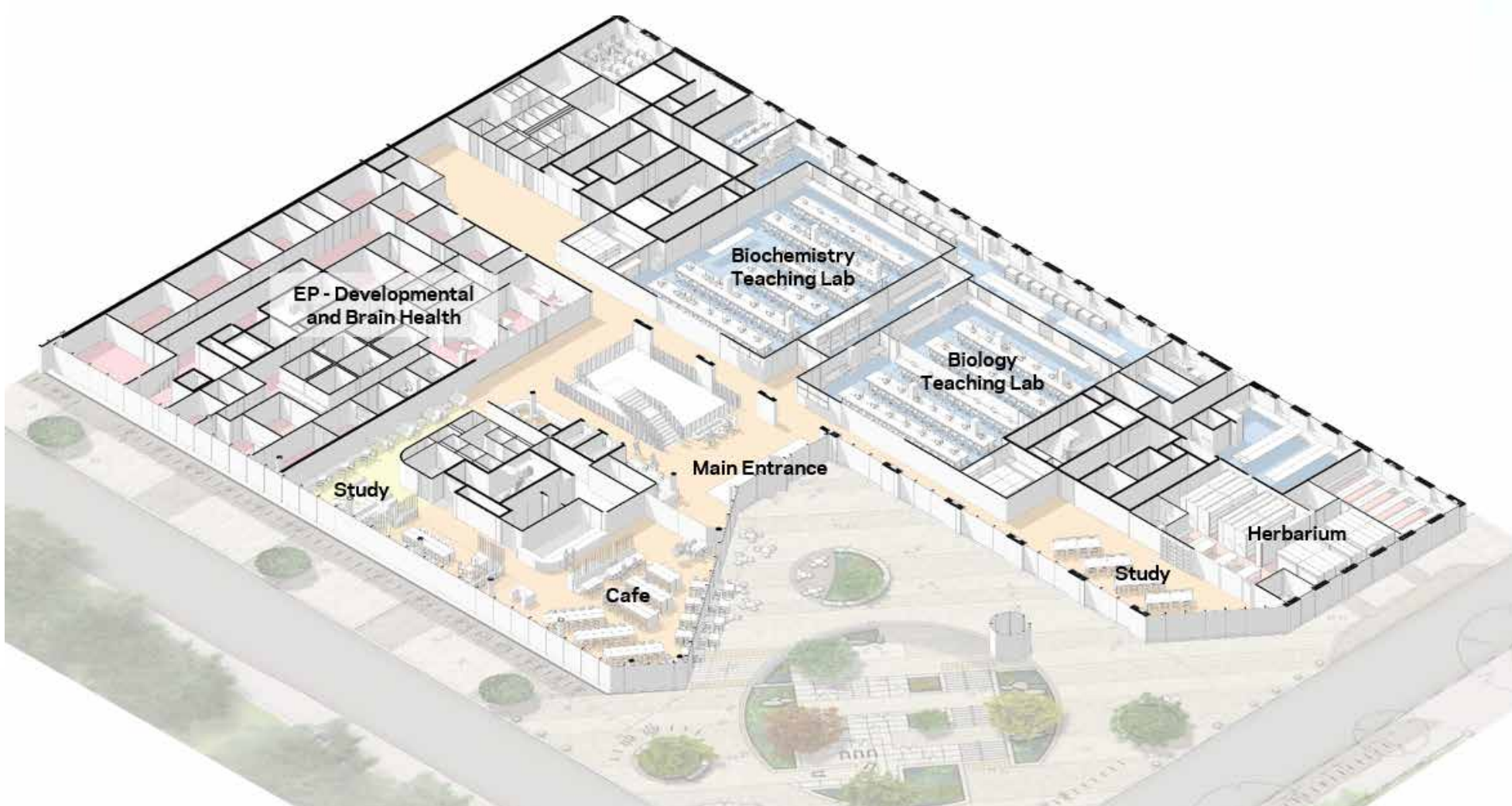


Concept sketch illustrating how the atrium and sunken courtyard connect inside and outside

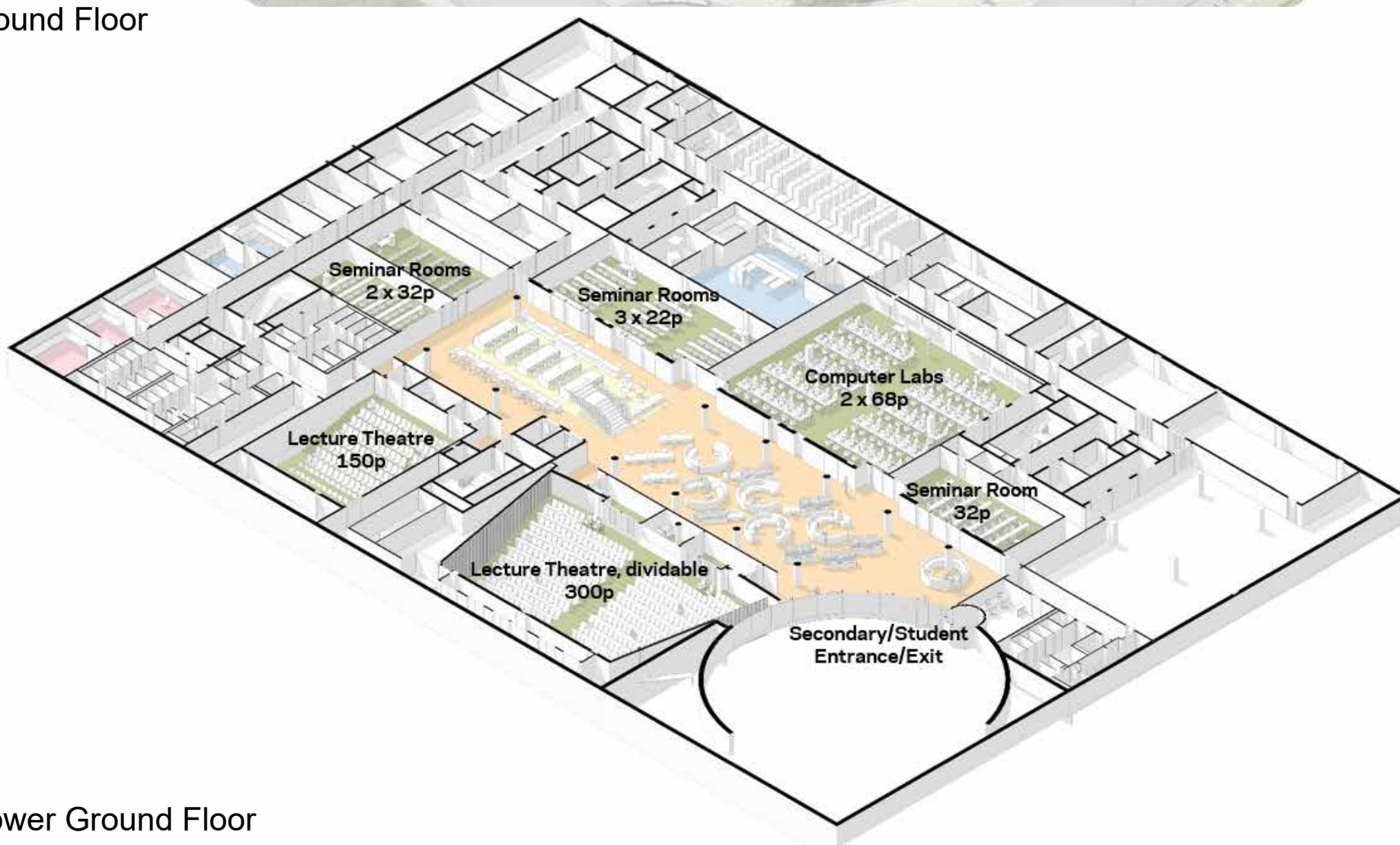




Section cutting through atrium



Ground Floor



Lower Ground Floor



Ground Floor - arrival view looking into atrium, with main reception on left and EP arrival in rear

## Functional Organisation

The building design balances limiting height and impact on the Oxford skyline with the provision of a public space within the site boundaries that draws in the public and extends the University Parks into the site.

### Lower Ground - Teaching

Key to managing the bulk of the building and to enabling this public space is the location of teaching facilities in a lower ground/basement and measures to provide good daylight and access to this area. A sunken courtyard provides access to the lower ground floor as well as allowing students to enter and exit the building at peak time without congesting the main entrance at ground level.

### Ground Floor - Engagement

At ground floor the main entrance, reception, a cafe, study spaces and exhibition and engagement zones animate the frontages facing the public plaza and St Cross Road. A Herbarium housing valuable collections of plants will be accessible by prior arrangement and exhibit items of its collection.

Also at ground level, accessible from the main entrance, volunteers who participate in research of the EP Department can reach one of two dedicated EP receptions - with the ground floor reception dedicated to young children and the elderly. Laboratories designed for teaching complete the programme at ground level. Windows into the teaching laboratories allow glimpses into the world of science.



Lower Ground Floor - view from below atrium towards external plaza access



# Design

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## Functional Organisation

### Upper Floors - Research and Collaboration

With teaching and public functions located at ground and lower ground, the upper floors are dedicated to research staff and their activities. Layered security arrangements allow limited access for visitors and students to the terraced levels in the atrium, the roof terrace at Level 3 and the Level 4 café.

Approximately 1450sqm of unallocated (shelled) space split between level 1 (suitable for laboratories and offices) and in the lower ground (suitable for high spec labs and/or teaching space) provide a sustainable strategy for future growth and variations in brief.

The atrium terrace at level 1 acts as arrival space for volunteers attending EP research space, while further terraces at Level 2 and 3, provide shared break-out, meeting and study space for all researchers.

Floors in the 'flex block' are designed to suit the performance requirements of a range of laboratory types and allow technical space and write-up offices to flex in size. This arrangement provides great flexibility to adapt to changing requirements over time.

Layouts in the office block are suitable for office environments as well as experimental research space.

In both blocks secondary functions like stairs, lifts and toilets have been placed in the centre of the floor plate, maximising occupied space near the perimeter and atrium.

At level 4 of the flex block, a cafe takes advantage of the panoramic views towards Oxford city centre and hills beyond. The rest of the floor is occupied by Greenhouses and associated research space as well as the required mechanical and electrical plant required to service a world class research facility.

### Health and Wellbeing

Access to nature, daylight and views are critical to enhance occupant's wellness as well as productivity and creativity. Wayfinding and the ability to quickly orientate and understand a space are also key to reducing stress, while generating a stimulating experience with a rich choice of environments have been shown to enhance wellbeing and alertness.

The design ensures constant presence and access to nature, external space, views and daylight. Further the design and layout of the Life and Mind Building aims to stimulate people's movement via stairs instead of lifts by providing walk-able routes along desire lines and by locating shared enjoyable facilities and amenities at various points throughout the building rather than in one place, adding physical activity to an occupant's day. At the same time the arrangement of lifts ensures that all building areas remain fully accessible and within easy reach to anyone who can not negotiate stairs.

Where functional requirements do stipulate a highly cellularised room layout, as with the windowless testing booth for EP, the design ensures as far as possible that circulation routes run along the building perimeter with windows and break-out pockets offering respite.



View showing shared offices in office block



View off shared break-out space looking towards atrium



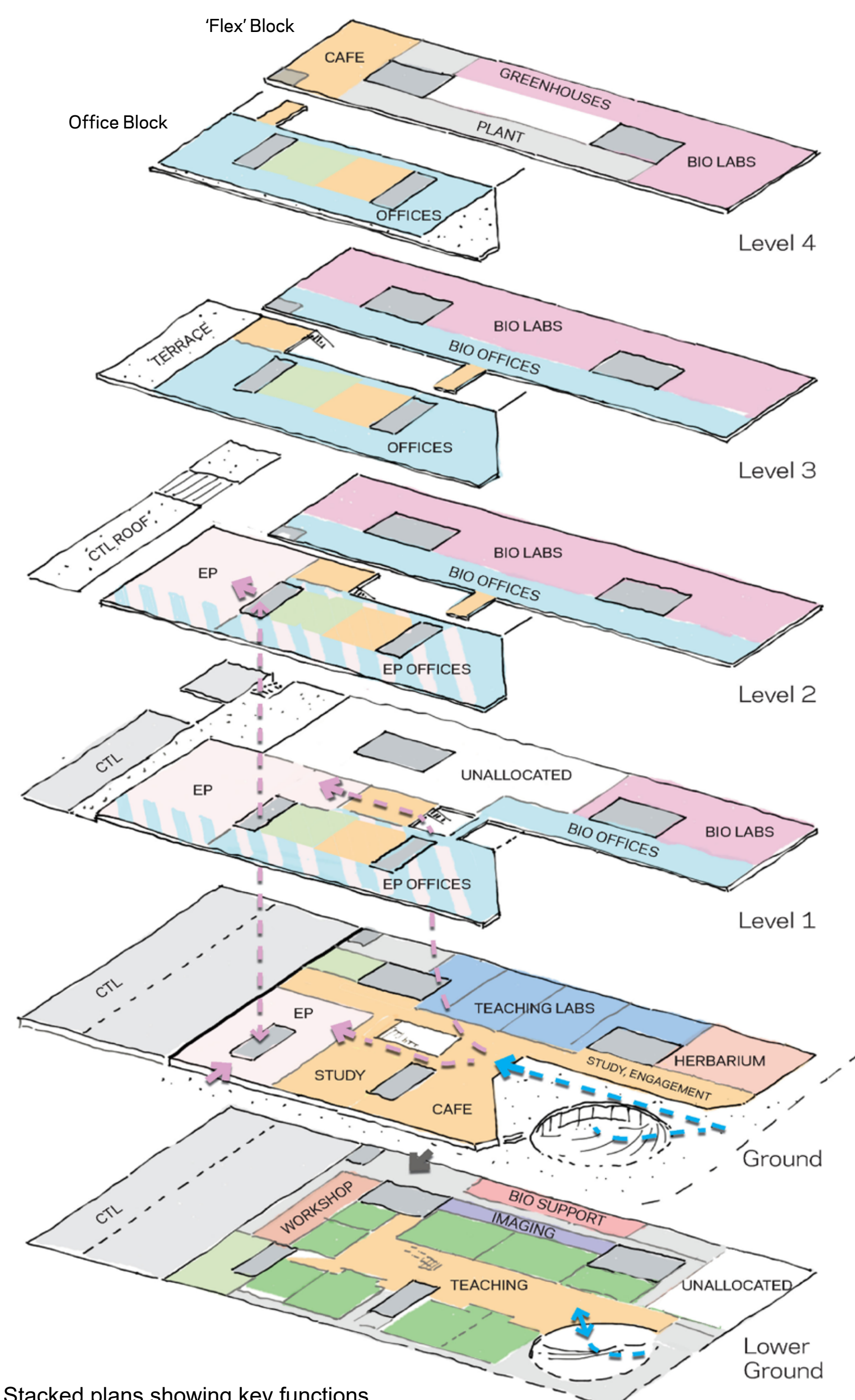
Level 3 - access from atrium space to roof terrace



Level 2 - shared atrium break-out space



Level 2/3 - 'meeting bridge' across atrium



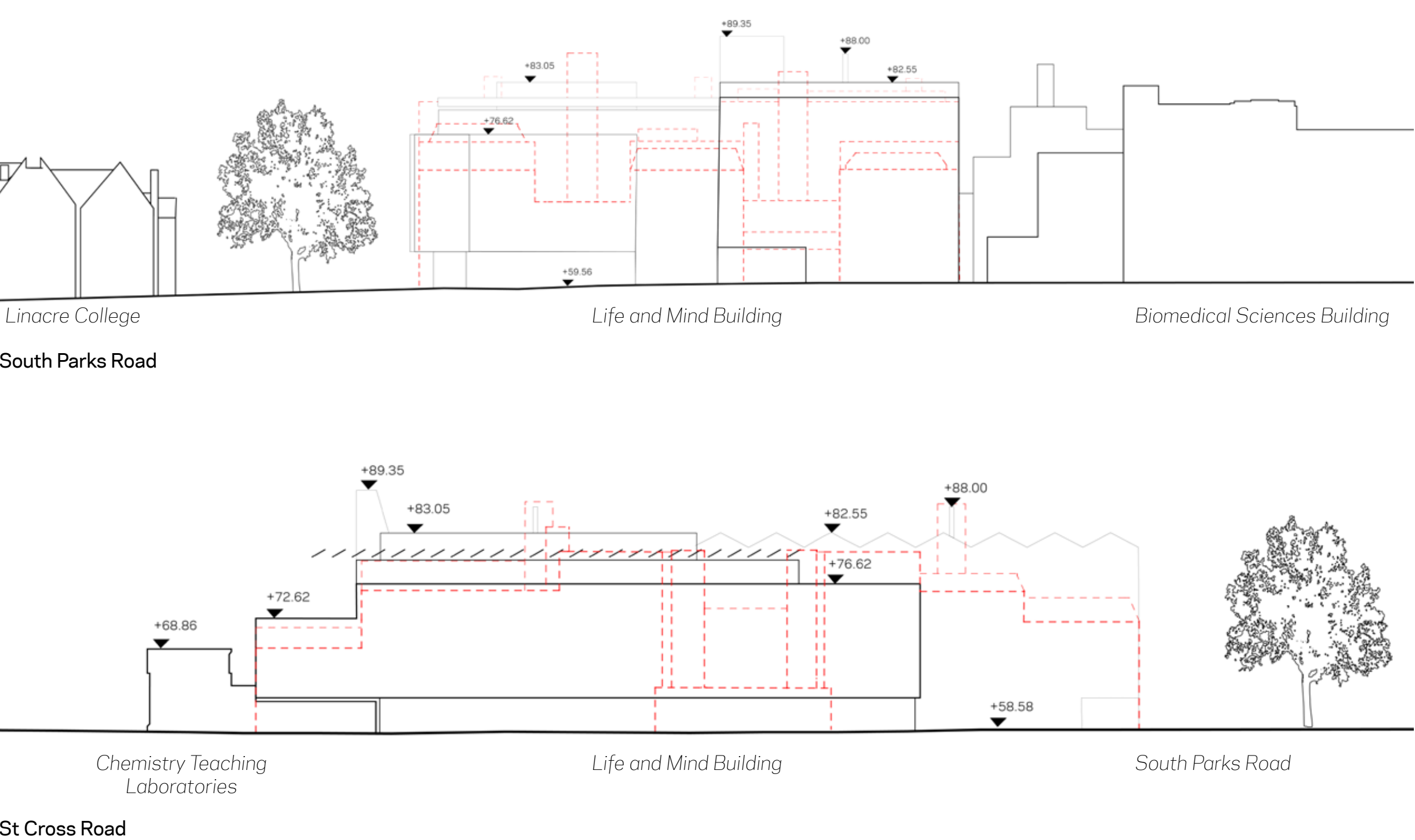
Stacked plans showing key functions



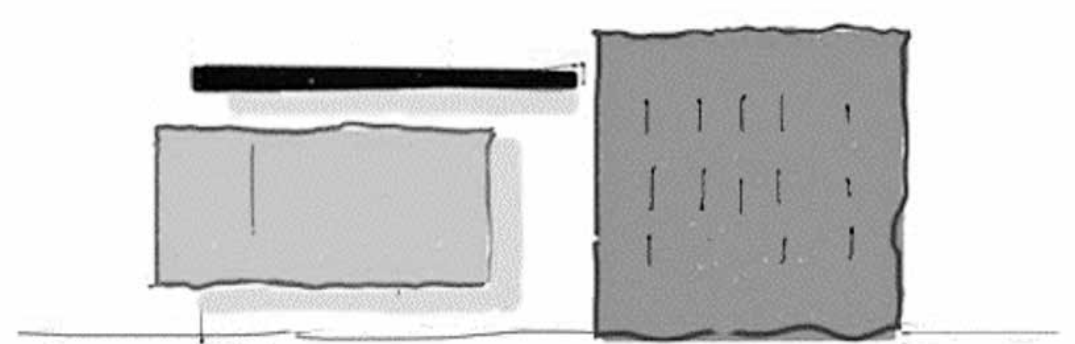
## Massing Concept

Above ground the massing articulates a grounded 'flex block' suitable for a variety of life sciences laboratories as well as office write up environments and teaching laboratories, with an adjacent office block that has been articulated as a volume lifted above ground, to enhance visual links with shared arrival, café, study and publicly accessible facilities at ground level.

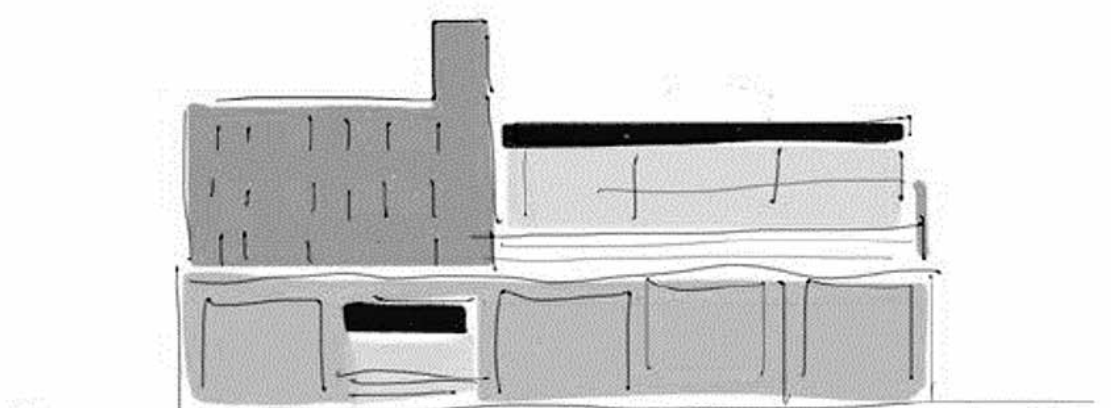
The office block steps down towards the south forming an expansive roof terrace at level 3, with the structure below being erected on top of the retained portion of the Tinbergen Building that is occupied by the Chemistry Teaching Laboratory's.



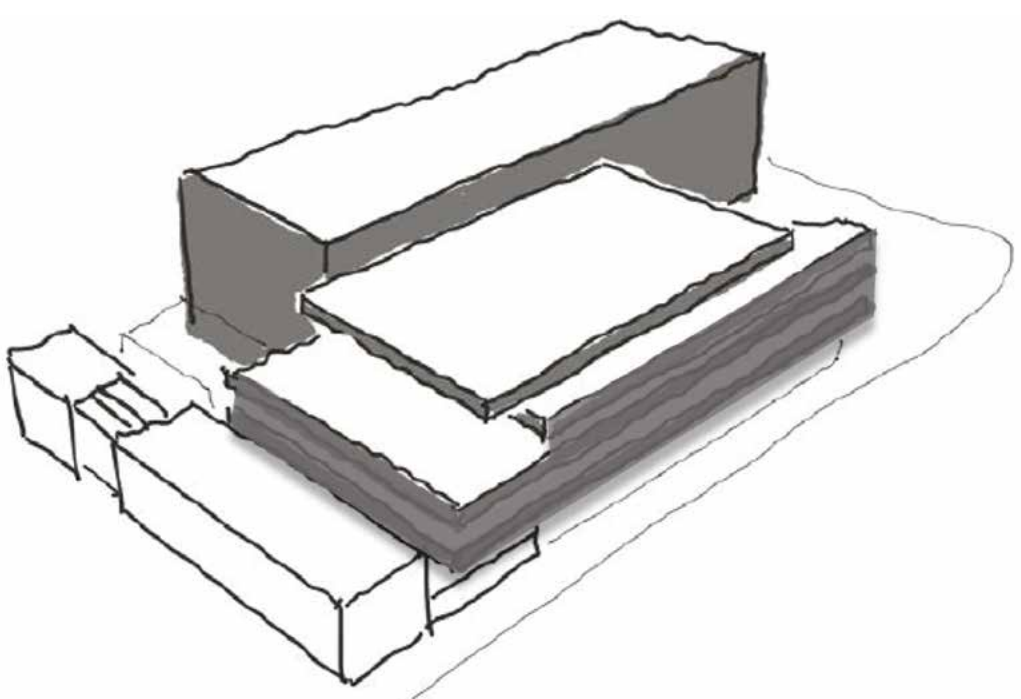
Massing elevations comparing proposed Life and Mind Building (black) with existing Tinbergen Building (red)



**South Parks Road / Approach**  
A grounded flex block relates to buildings and streetscape, while the 'elevated' office block articulates permeability and visual connectivity.



**South Elevation / CTL Interface**  
Massing and articulation subtly relate to the strong CTL façade module, while setting up a new 'tower' within the articulated roof scope.



**Volumetric**  
The tall volume of the flex block is set back from CTL avoiding dominating the adjacent Pharmacology Building, while a stepped profile of the office block echoes Tinbergen, forming a new roof terrace.

Massing principles





## Facade Concept

The envelope strikes a balance between reacting to differing internal and external drivers like space use and orientation, while retaining a consistent material palette and elements of articulation to ensure recognisability and identity.

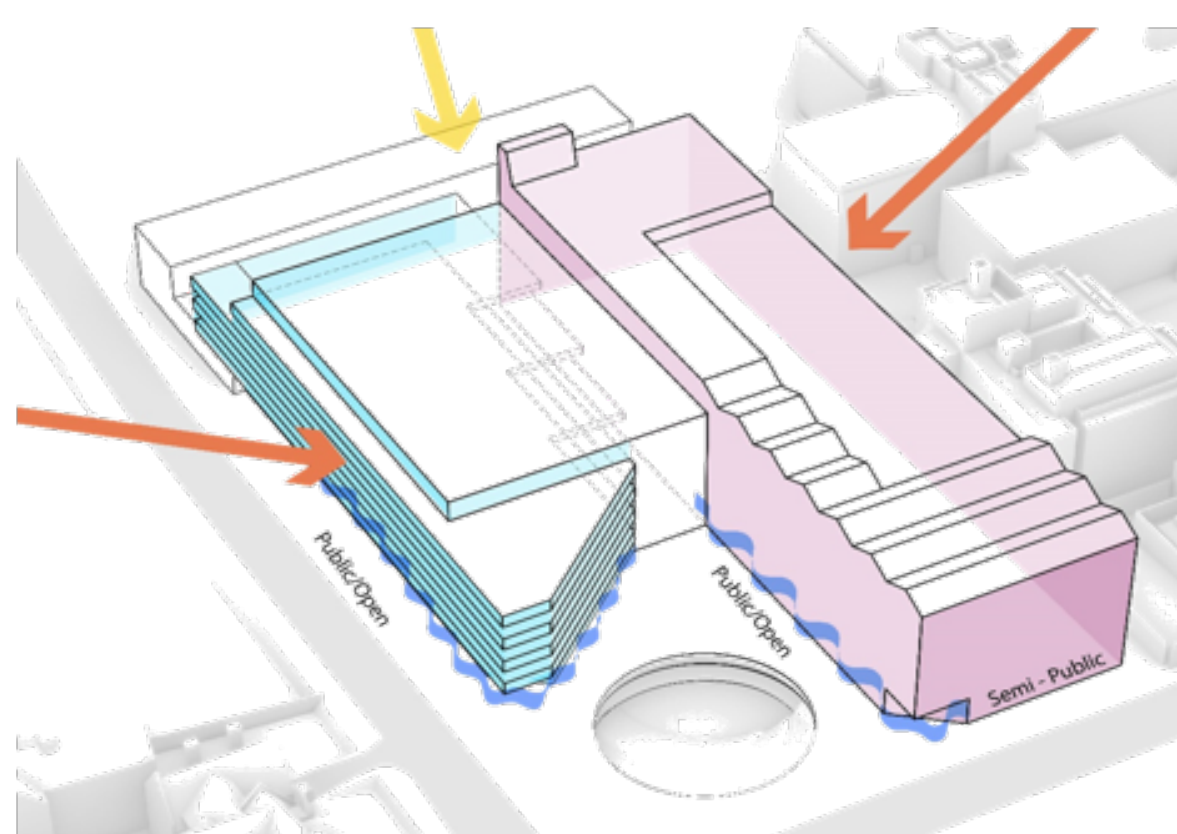
Punched windows for the 'flex block' contrast with vertical banding to the office and experimental psychology environments in the 'office block'. Deep stone fins along the east north/east façade manage glare during the morning avoiding the use of internal blinds, while subtly evoking the repetitive use of buttresses along many college's façades.

The roof profile of the flex block is articulated with gables and pitched roofs, terminating in a tall tower expressed on the city facing south façade containing the relocated extract flues of the existing chemistry teaching laboratory. The pitched roofs and fourth floor accommodation cradle a row of greenhouses along the west south/west façade that will be visible from occasional vantage points towards the west of the building. Shape and lighting of the greenhouses is strongly driven by the functional needs of the research and it will be considered if black-out blinds are required at night to manage impact on long distance views.

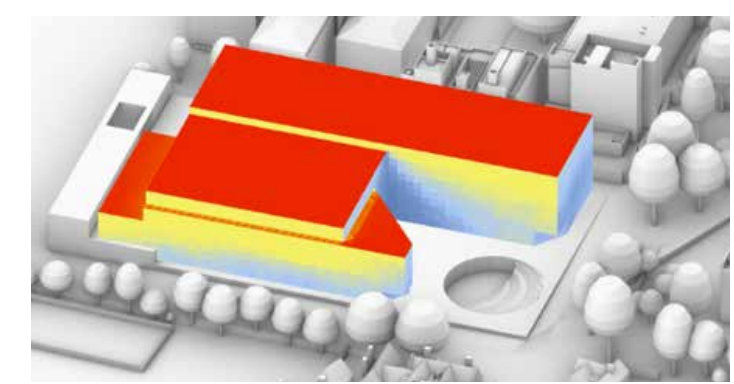
To manage the visual impact of screened external plant above the office block, and to simultaneously shade east and south facing office accommodation and to provide a base for day 1 (and future) photovoltaic panels, an expansive canopy formed of reconstituted stone planks (matching the façade) is proposed above level 4 and projecting towards the south.

Its manifestation above the building volume takes the viewers' attention away from the plant enclosure beyond and evokes parallels with the repetitive spires along many of the college's building edges.

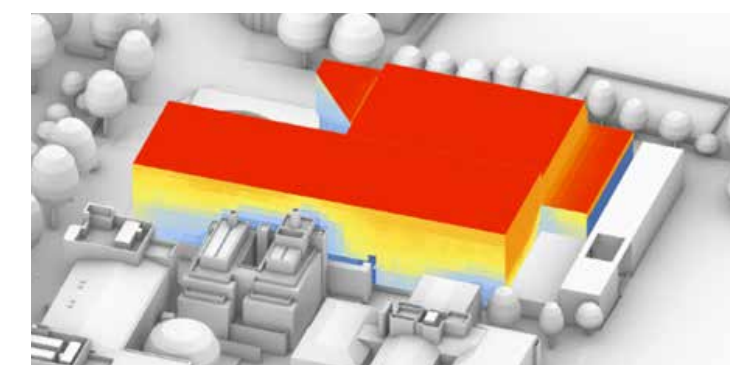
The south elevation continues the facade rhythm of the office and flex block at lower levels, while level 4 glazing to the cafe and atrium set-off a new stone tower, containing the relocated flues for the Chemistry Teaching Building.



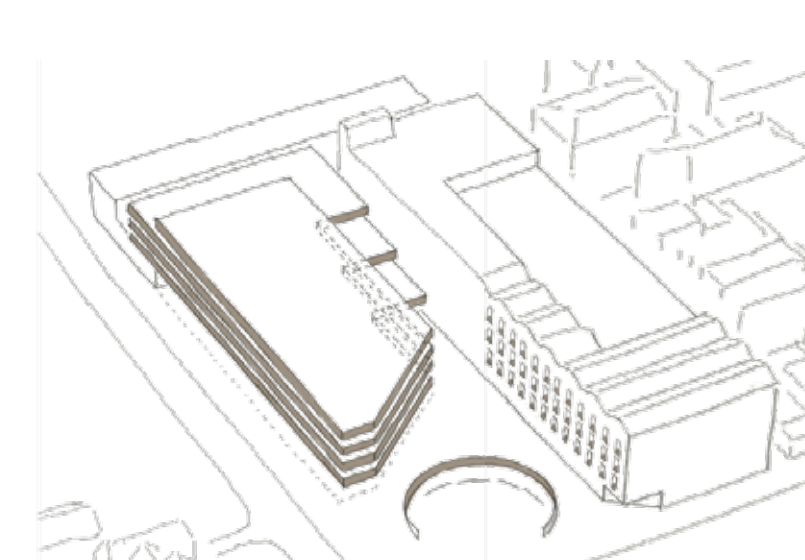
Internal and external facade drivers



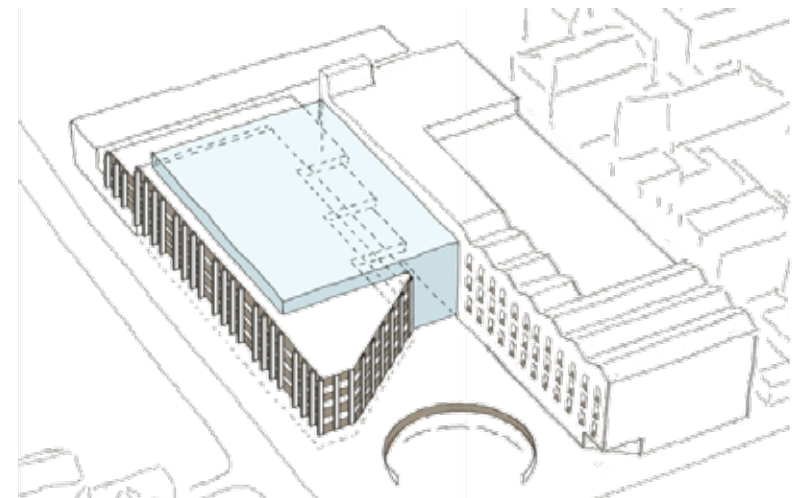
Elevations facing north east and north west



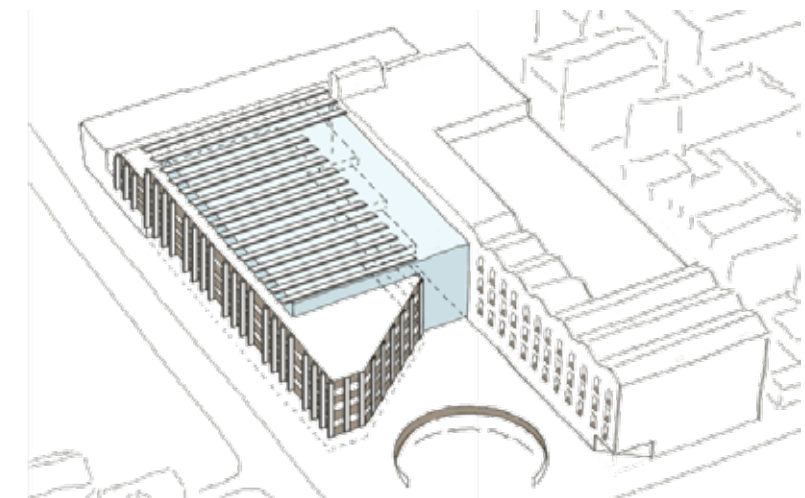
Elevations facing south east and south west  
Solar Exposure Analysis



Open layers framing office block and atrium terraces, punched windows in more solid flex block

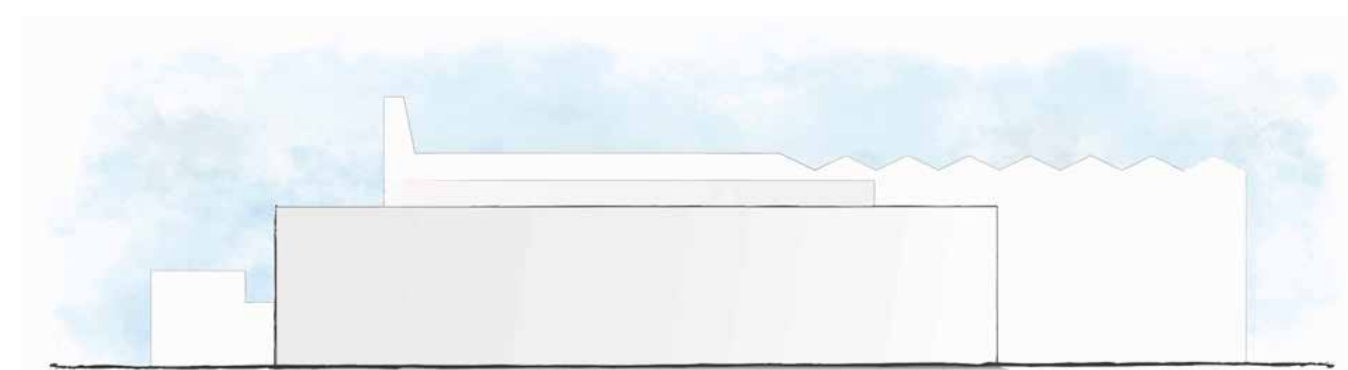


Stone fins to office floors and glazing to atrium/L4

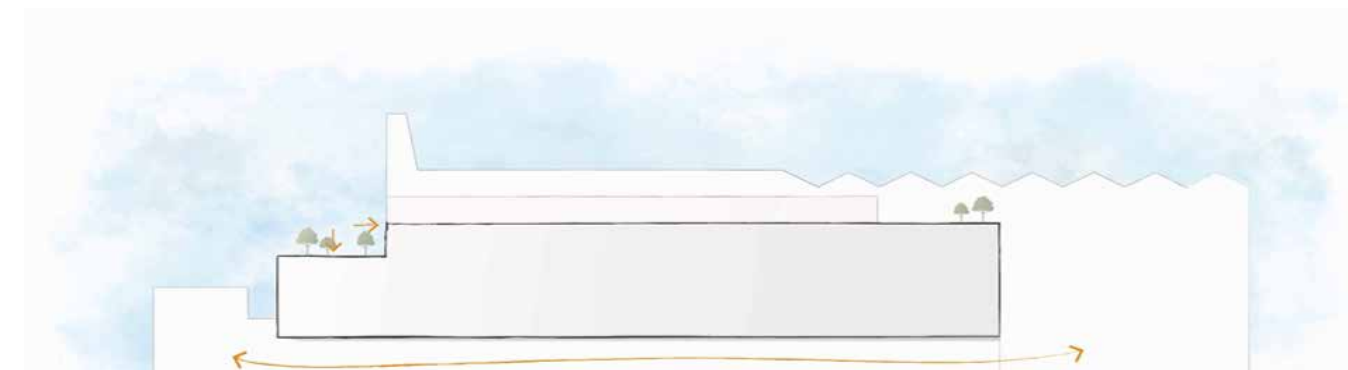


Solar canopy with PV array for shading

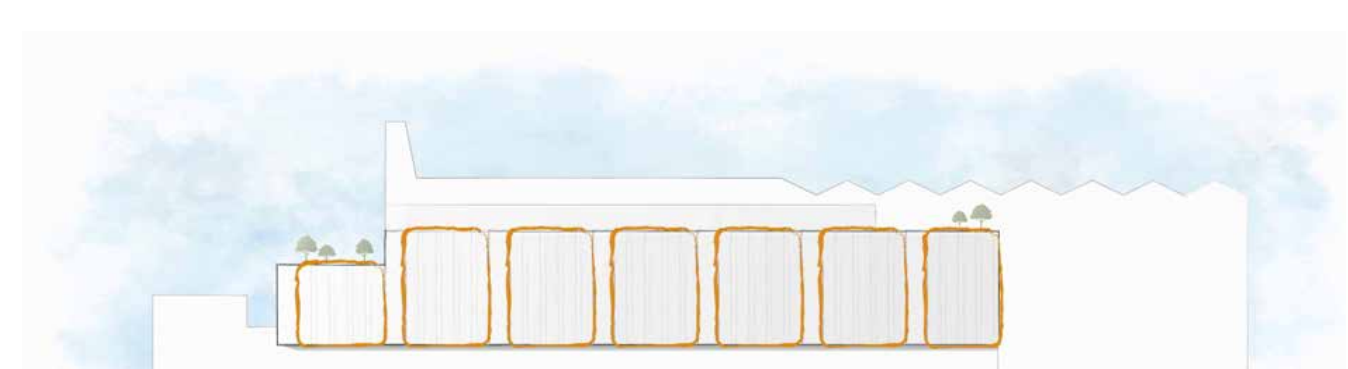
Fenestration and articulation principles



Extent of office block volume



Activated/glazed streetfront and stepping roof scape



Zoning of elevation to break down length



Shading fins and flush cladding panels articulate the zoning

Articulation concept for St Cross Road elevation facing east



View of proposal from sports field south of the site





Radcliffe Science Library,  
Ashlar Stone Dressing



Dept. of Earth Sciences,  
Clipsham Stone Dressing



Chemistry Research Laboratories,  
Glazing and Ashlar stone rain-screen



Biomedical Sciences Building,  
Yellow Brick, Concrete, Metal Cladding



Chemistry Lab.  
Buff Brick



Plant Sciences  
Rubble Stone



Sir William Dunn School  
Red Brick and Stone

Cladding Materials along South Parks Road

## Materiality

The new Life and Mind Building seeks to be recognisable as well as a positive contribution to Oxford's historic context. It's unique location places it at the edge of both the Science Area as well as the Oxford city centre, overlooking college grounds, University Parks and land surrounding the River Cherwell.

Relating to hues of Oxford's historic stone dressed façades as well as the wider material mix of stone dressing, brick, rubble stone and concrete finishes applied along South Parks Road, the project envisages the use of honed reconstituted stone with buff coarse aggregate for walls. In places the reconstituted stone will be cast with vertical fluting, waveform inspired by 'signal expression' common to all three departments which will occupy the building. Expressing subtly the scientific nature of their work these profiled panels will also add shadow play and further articulation to the elevations.

The resulting light coloured walls will be articulated with shades of bronze metal panels and frames. Seeking to limit glazed areas in line with the project's sustainability goals to limit heat loss and energy use, the facade concept applies the darker metal such that a larger degree of fenestration is apparent, avoiding an overly solid appearance.

Finer details of metal profiling and reconstituted stone finish will be subject to further development with the help of cladding mock-ups.

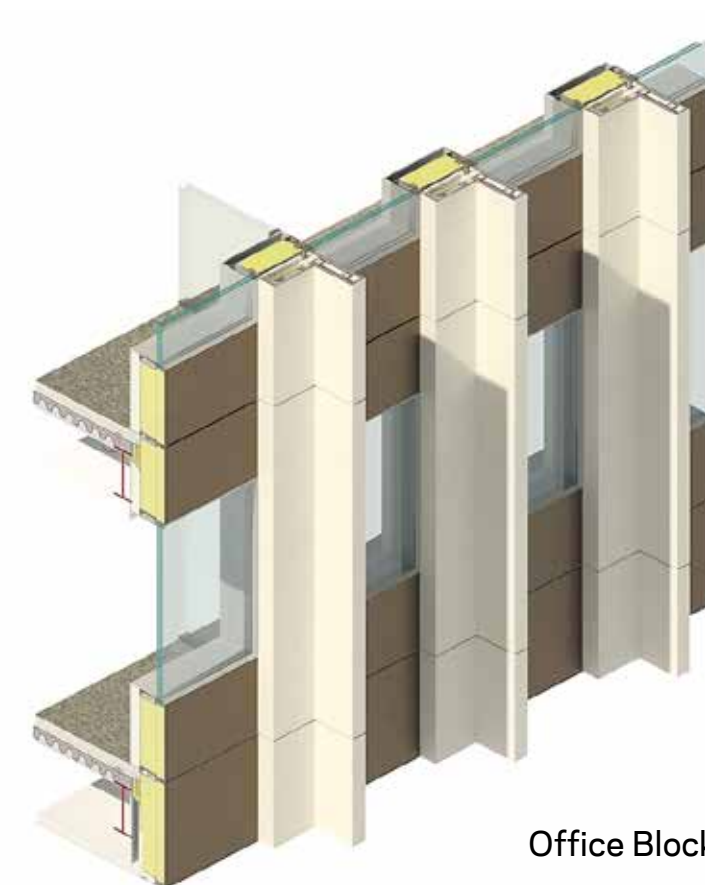


Profiled and plane bronze anodised metal

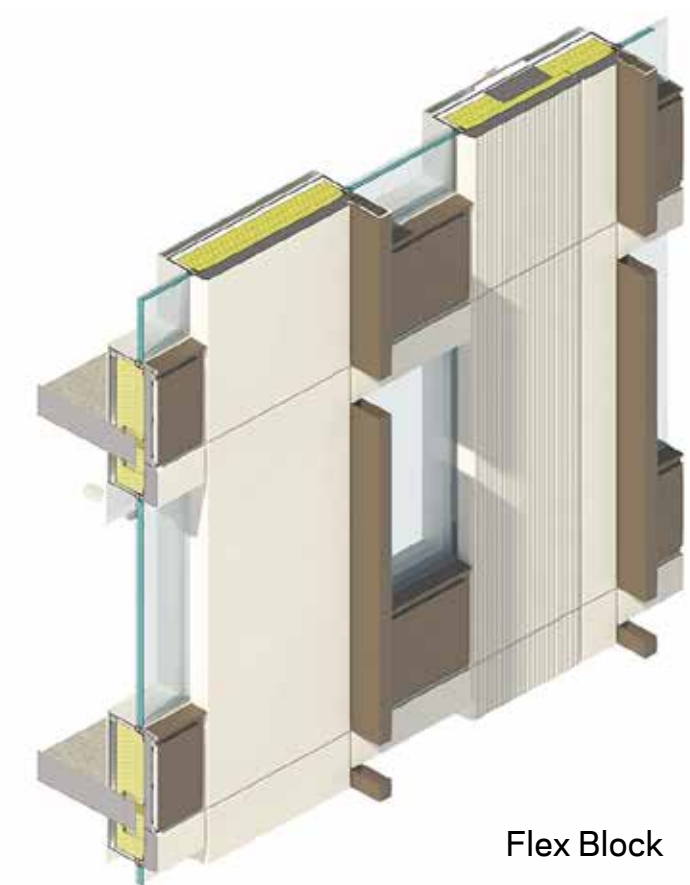


Reconstituted stone, flush and profiled

Proposed material range for Life and Mind Building



Office Block



Flex Block

Proposed facade build-up





# View Impact Assessment

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## Methodology

The Townscape and Visual Impact Assessment will describe the impact of the Life and Mind Building on the townscape and visual amenity of the area.

Local policy guidance is being considered in the preparation of the Assessment, including the Oxford High Buildings Technical Advice Note (October 2018) which sets out a framework to assess a site's or area's potential for change and its ability to accommodate high buildings.

In relation to views of the Oxford skyline, the Assessment is considering the potential for:

- Visual Obstruction
- Visual Competition/Complement
- Skylining
- Change of Character

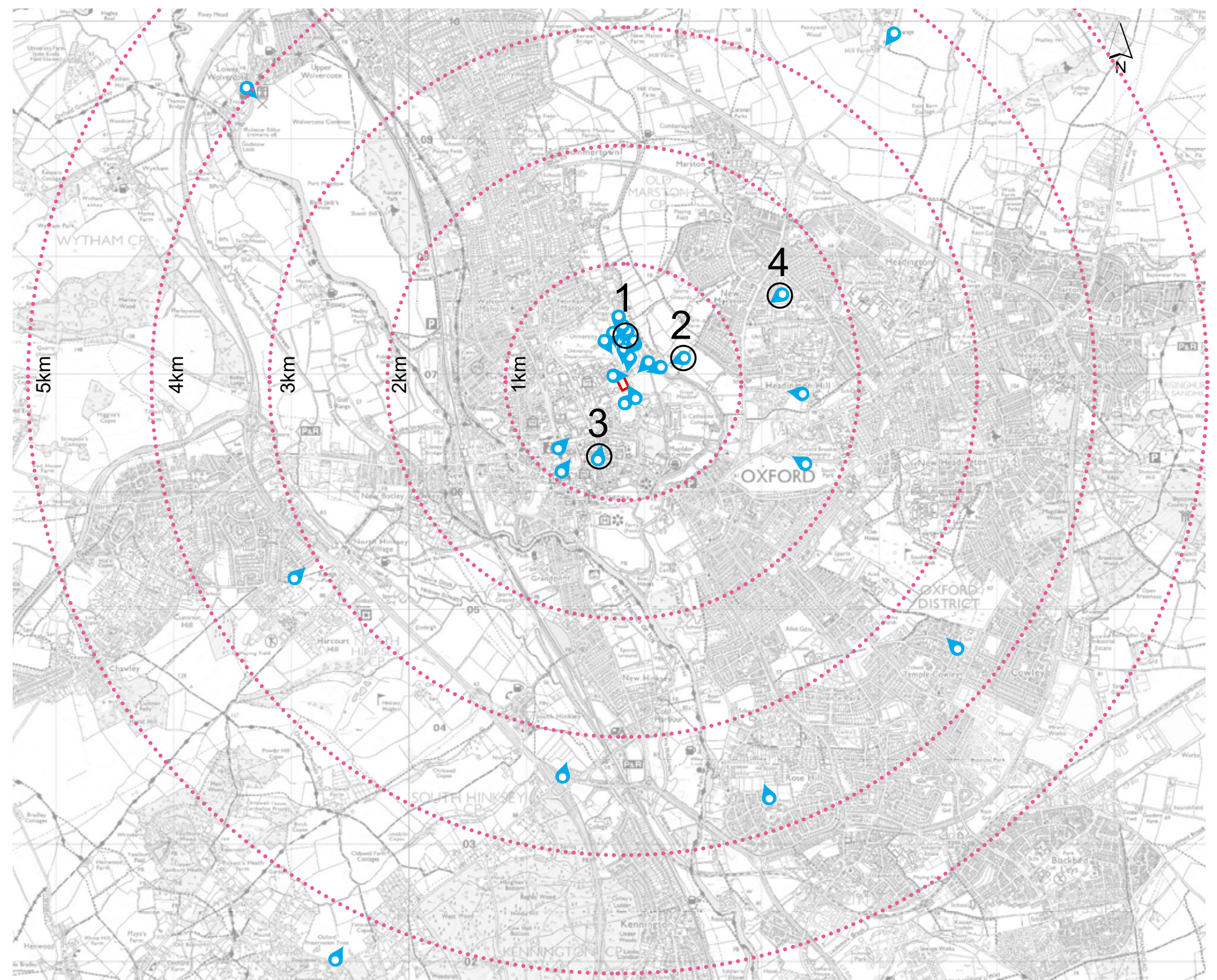
## Viewpoint Selection

A total of 28 representative locations for assessment have been agreed during pre-application discussions with Oxford City Council, including 18 in the vicinity of the site and 10 from Oxford View Cone locations, between them they cover:

- Views towards the city
- Views out from elevated viewpoints
- Views between the edge of the historic city centre and the floodplains

Photographs will be captured during winter and summer months to illustrate the impact of the changing seasons on visibility and context. Night time photography will also be undertaken from some locations.

Accurate Visual Representations (visualisations) are also being prepared from 12 viewpoint locations. A number of winter visualisations from locations circled on the map are presented on this panel, all viewpoint locations are shown as blue markers.



Map showing all view locations assessed and location of examples shown below and on board 13

The representative locations are listed below:

- |  |                                  |
|--|----------------------------------|
| • Mansfield Road                                   | • Raleigh Park                   |
| • South Parks Road                                 | • Boars Hill                     |
| • St Cross Road                                    | • Hinksey Hill / A34 Interchange |
| • University Parks x9                              | • Port Meadow                    |
| • Marston Cyclepath x2                             | • Elsfield                       |
| • Mesopotamia Walk                                 | • Doris Field Memorial Park      |
| • Tower at University Church of St Mary the Virgin | • Headington Hill                |
| • Carfax Tower                                     | • South Park                     |
| • The Saxon Tower at St Michael at the North Gate  | • Crescent Road                  |
|  | • Rose Hill                      |



1 - University Parks winter - Photograph



1 - University Parks winter - Accurate visual representation



# View Impact Assessment

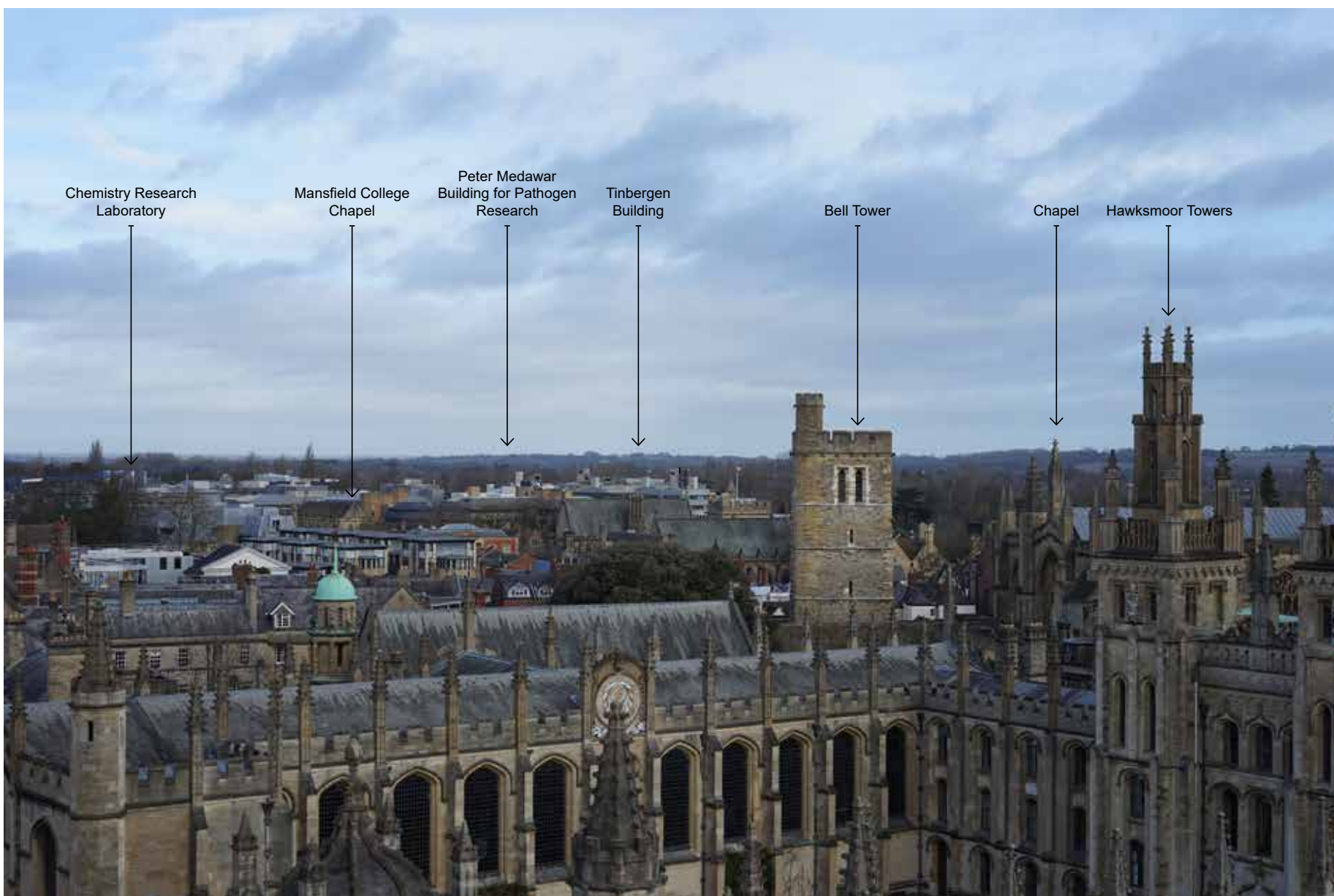
13



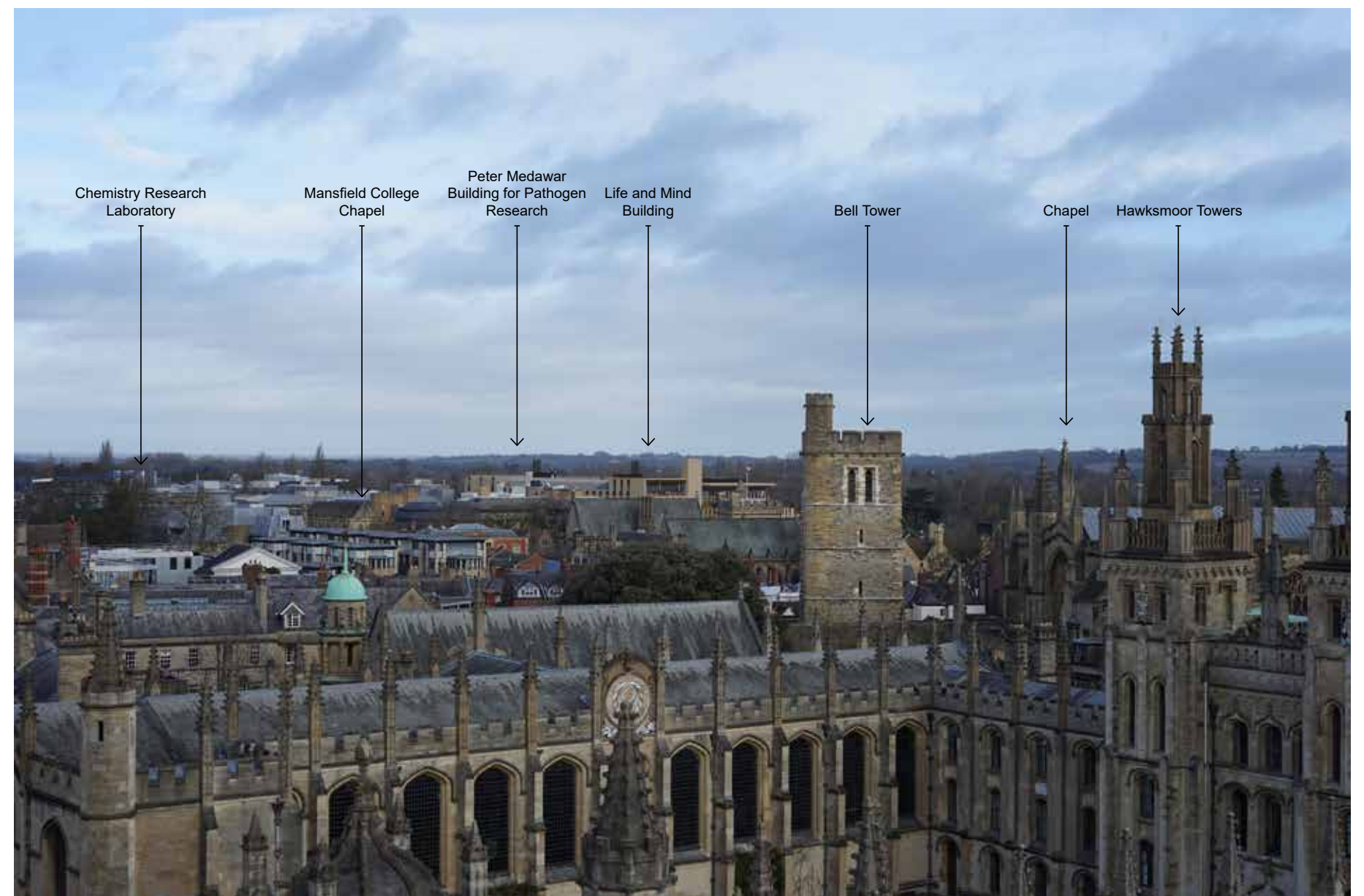
2 - Marston Cyclepath winter - Photograph



2 - Marston Cyclepath winter - Accurate visual representation



3 - University Church of St Mary the Virgin winter - Photograph



3 - University Church of St Mary the Virgin winter - Accurate visual representation

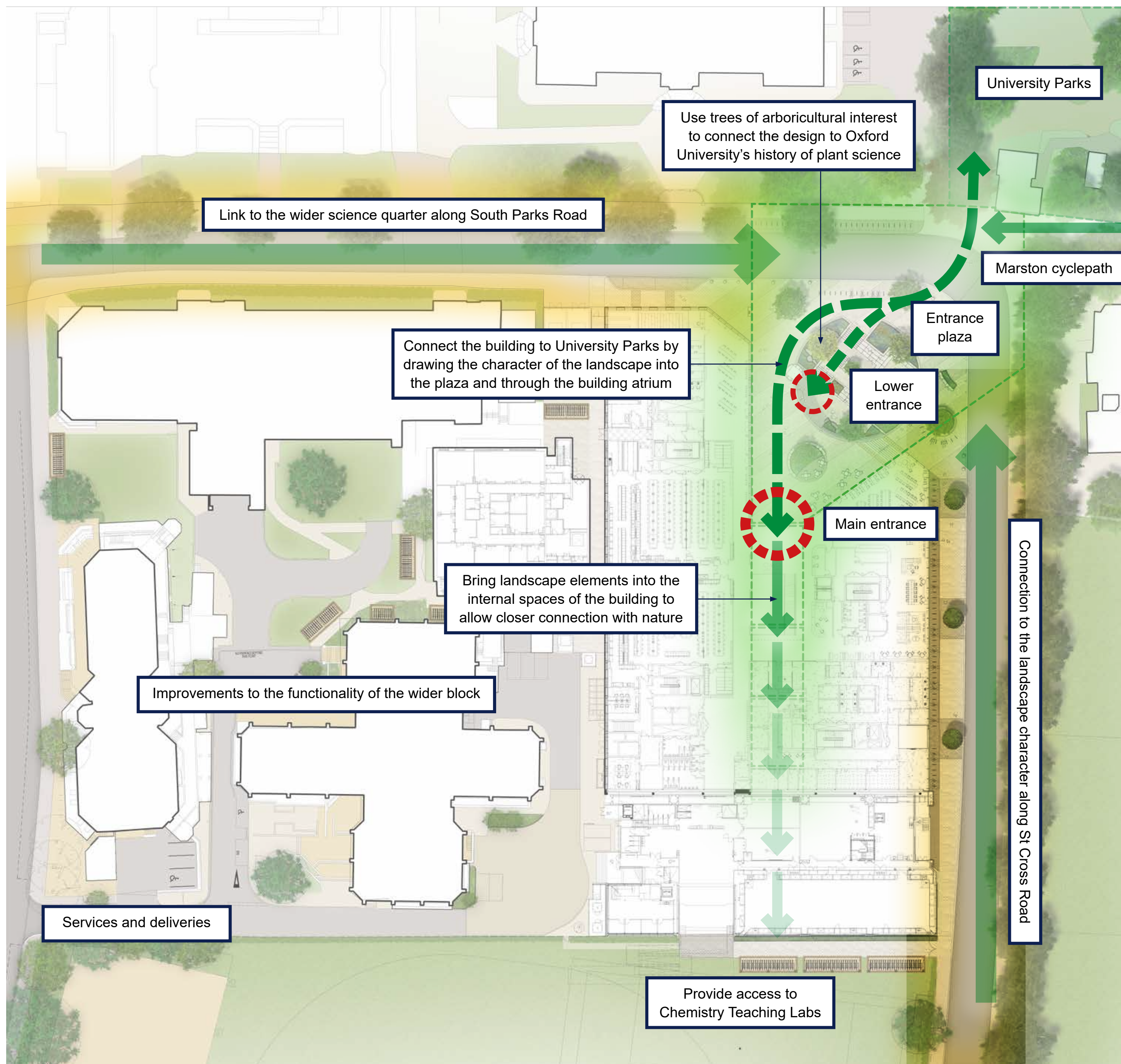


4 - Doris Field Memorial Park winter - Photograph



4 - Doris Field Memorial Park winter - Accurate visual representation





Plan illustrating key landscape objectives

## Key Landscape Principles

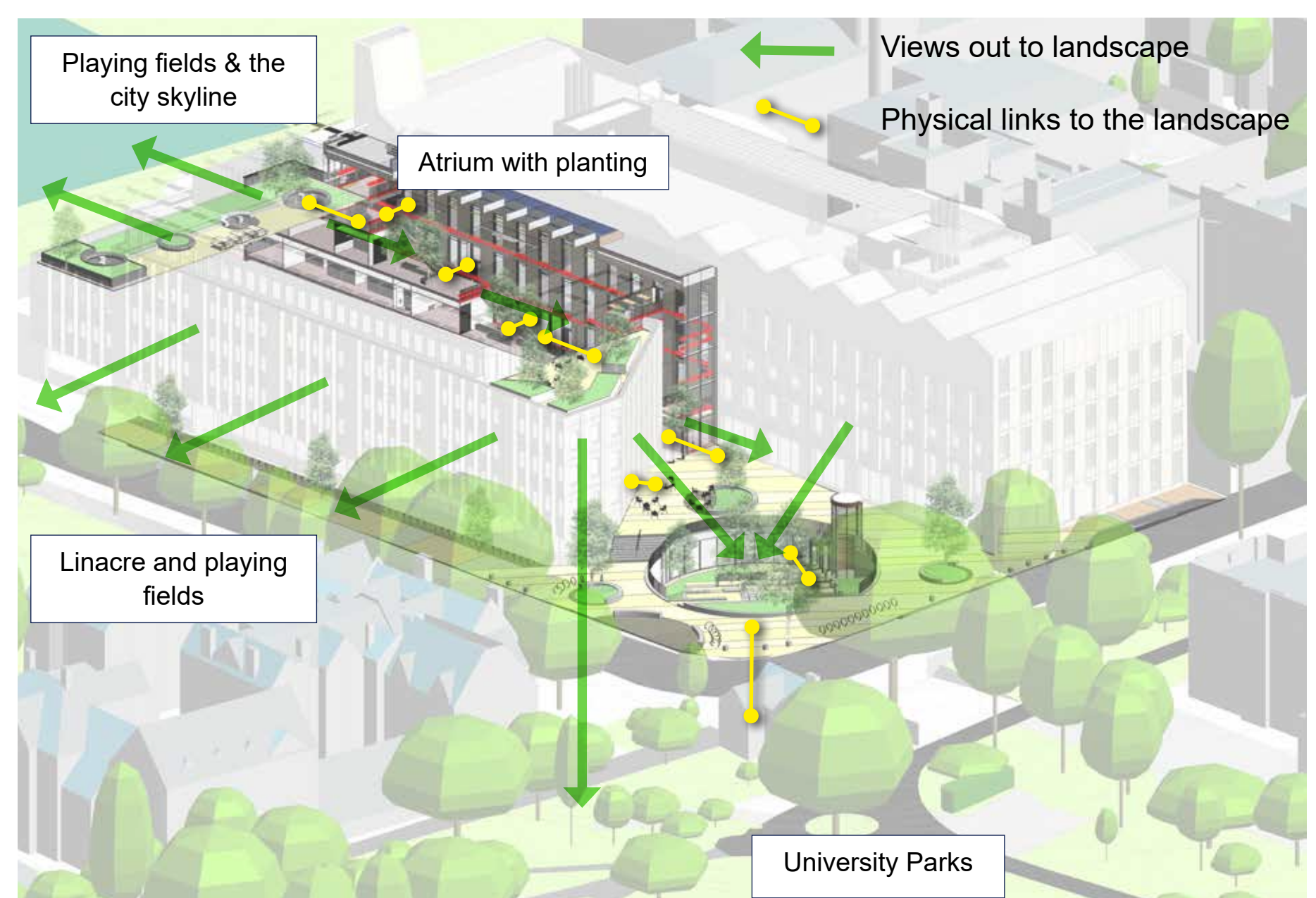
- Provide connection between people and nature
- Connect the new building to University Parks, Science Quarter and the wider city routes
- Provide a hierarchy of; public, semi private and private spaces for users and the public
- Provide multi-use spaces for collaboration and spaces showcase the work that is carried out in the building

## Key Functional Aspects

- Access for all to the building
- Cycle parking provision
- Service access including refuse and deliveries
- Operational parking requirements
- Safe pedestrian movement
- Ease of management and security



Landscape providing connection to University Parks, St Cross Road and South Parks Road



Linking users to nature using both internal and external planting in public and private spaces

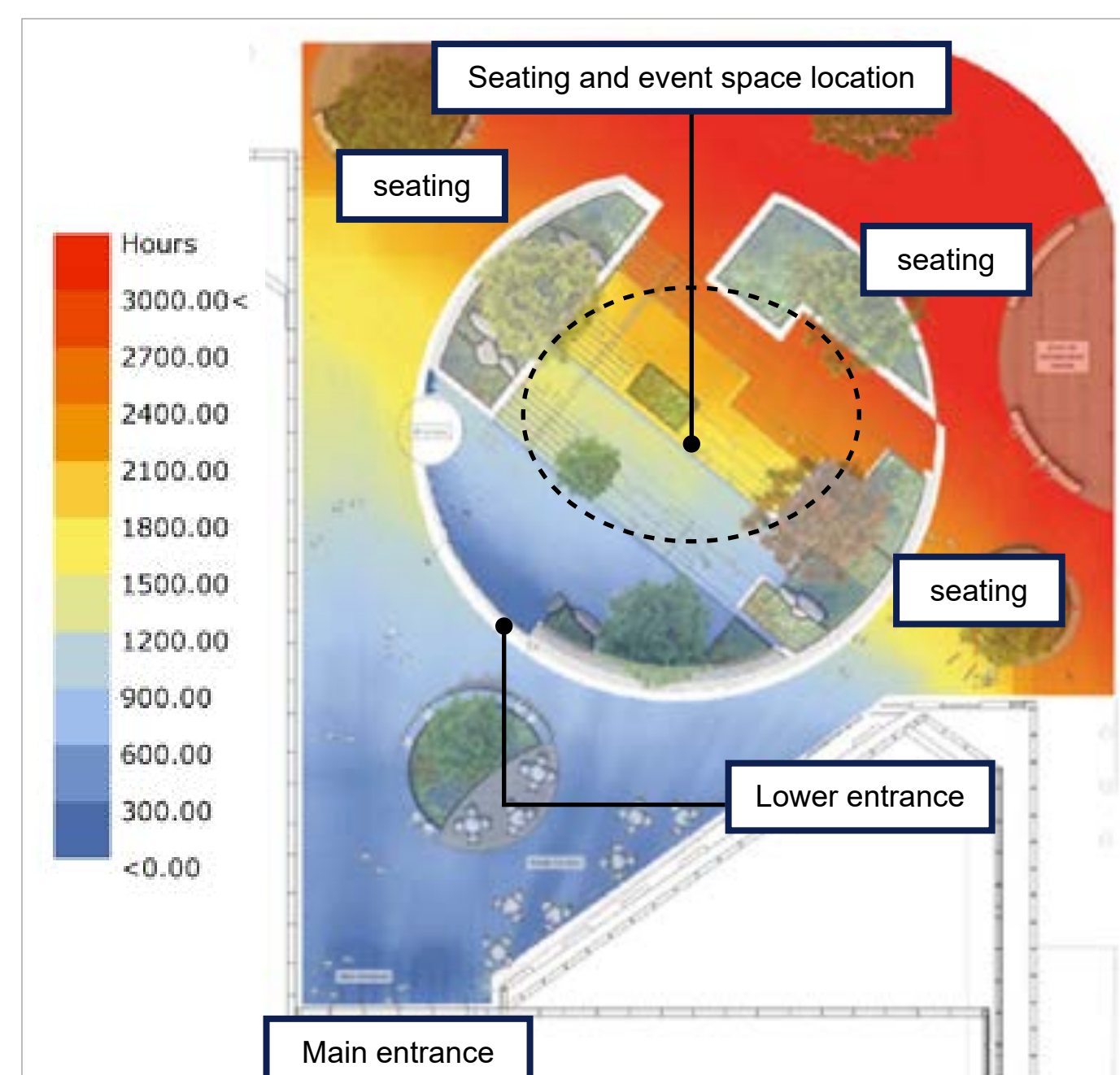


# Public Realm and Landscape

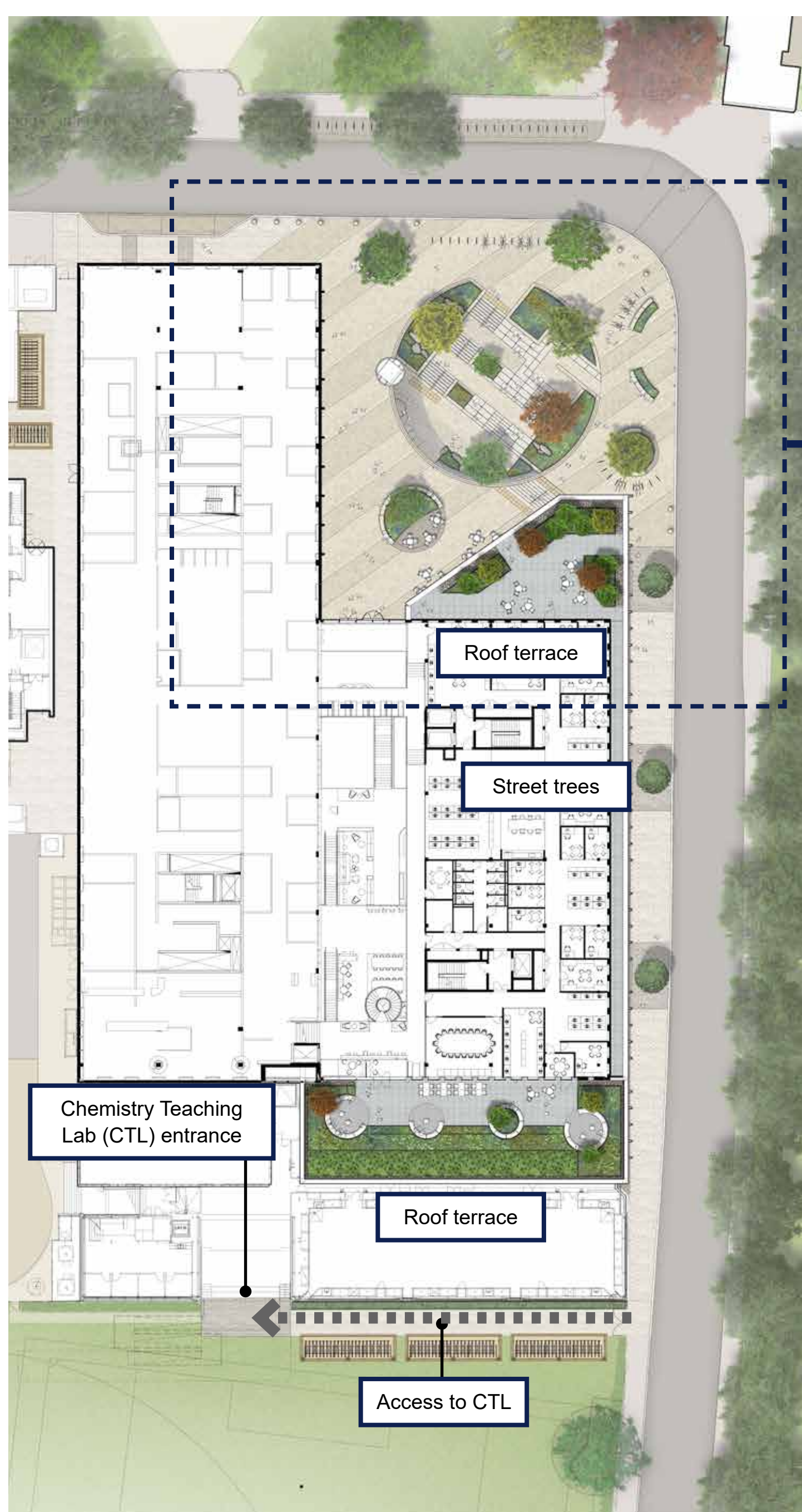
15



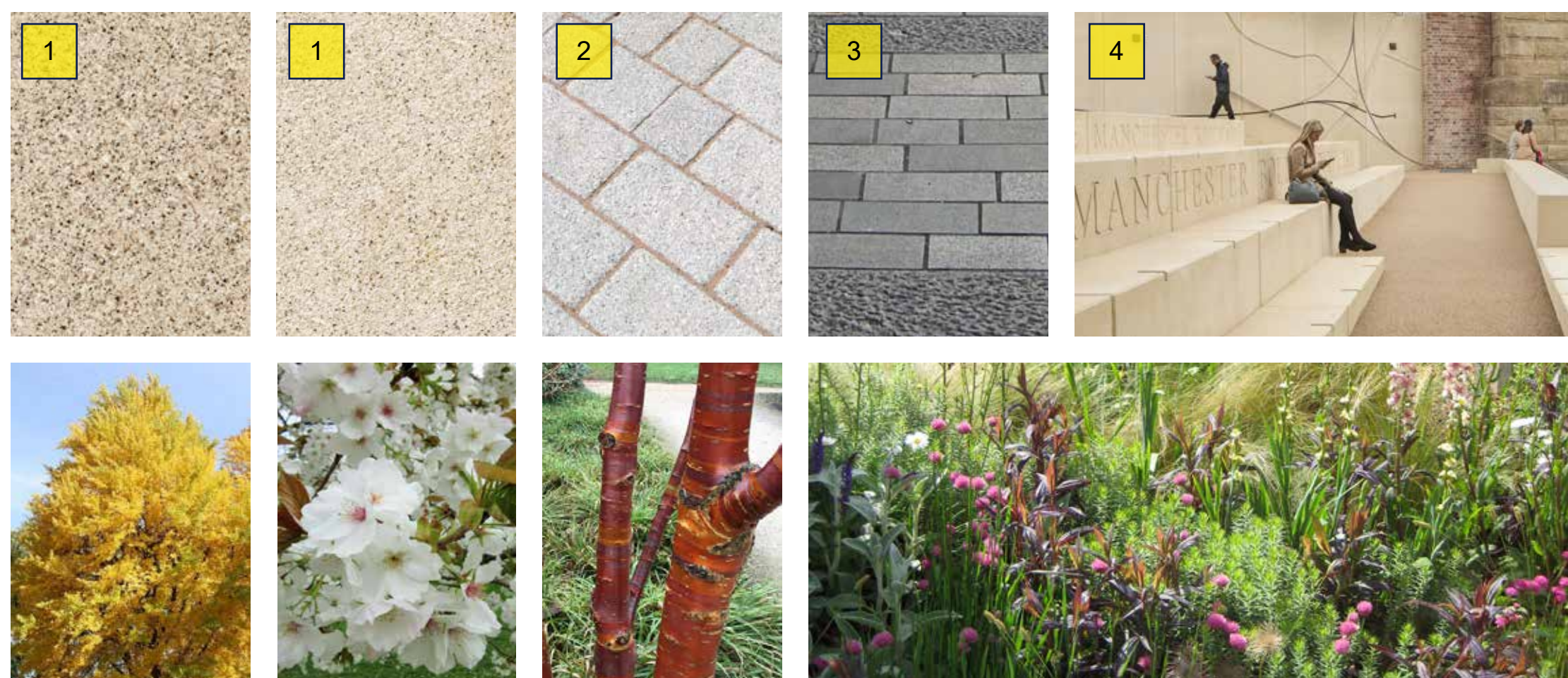
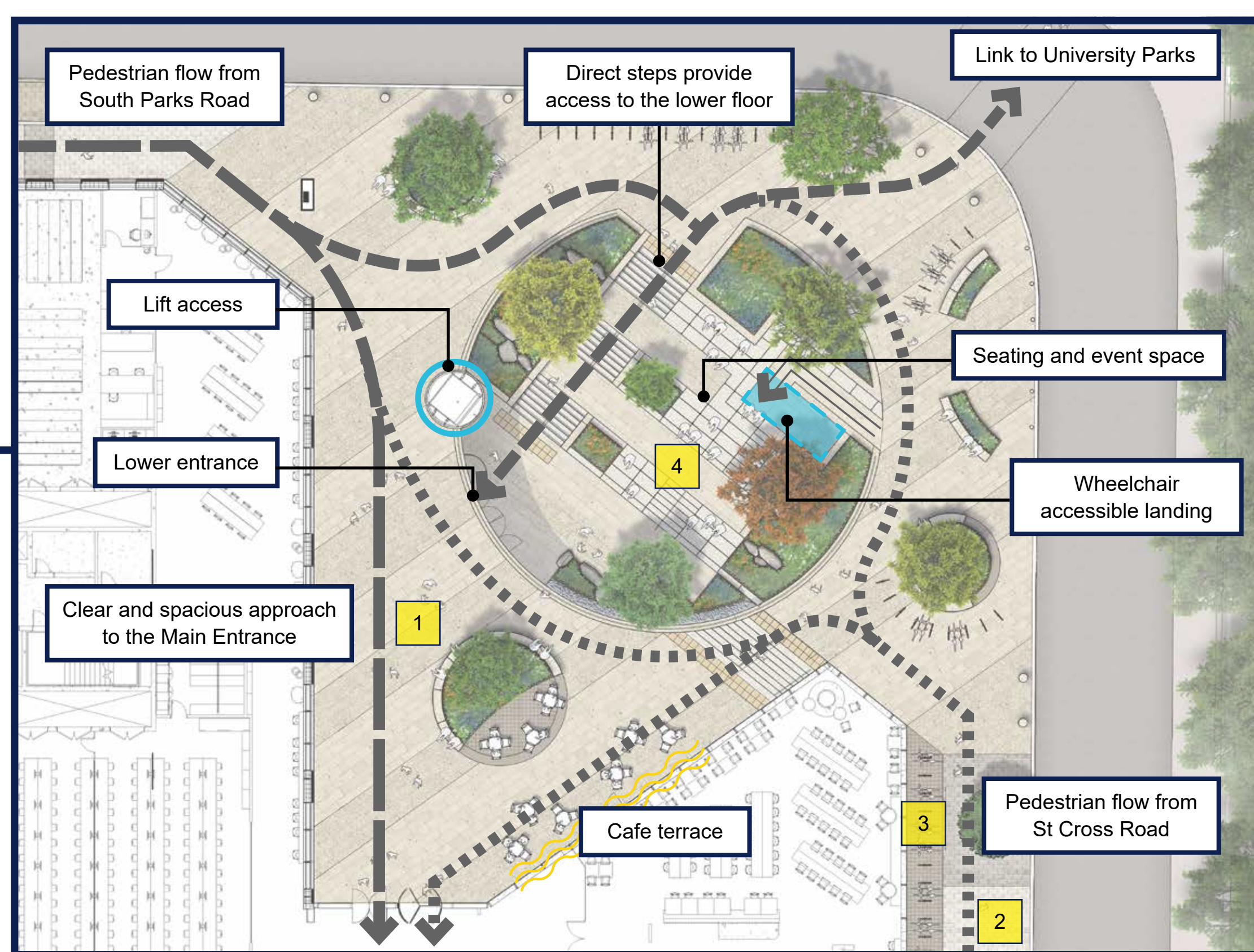
Creating high quality public realm and an entrance on the corner of South Parks Road and St Cross Road



Sunlight study influences the seating and amphitheatre locations



Plan illustrating creation of high quality public realm at street level and roof terraces at level 3 and 4



Material selection links the scheme to the wider Science Quarter. Trees and amenity shrub planting selection links the design proposals to the character of University Parks and to the University's research into life and plant science



# Transport and Access

## Oxford Vision

The new Life and Mind project supports the wider University Science Area Masterplan and Oxford City Council's Connecting Oxford planning vision.

For both organisations, their main policies relating to movement and access focus on pedestrianising the area, with existing car parking spaces phased out, bicycle parking opportunities increased and access to public transport facilities improved, including the potential introduction of a bus stop on South Parks Road.



## Access & Movement

The siting and massing of the building leads occupants and visitors via a public space at the corner of South Parks Road and St Cross Road towards a main entrance near the centre of the site.

A landscaped stepped portion of the plaza provides managed access to teaching and conference spaces at the lower ground.

A discrete entrance along St Cross Road provides occasional access by invite for vulnerable patients and their companions that visit the mental health research groups of Experimental Psychology.

A layby zone along South Parks Road allows vehicles to drop-off visitors.

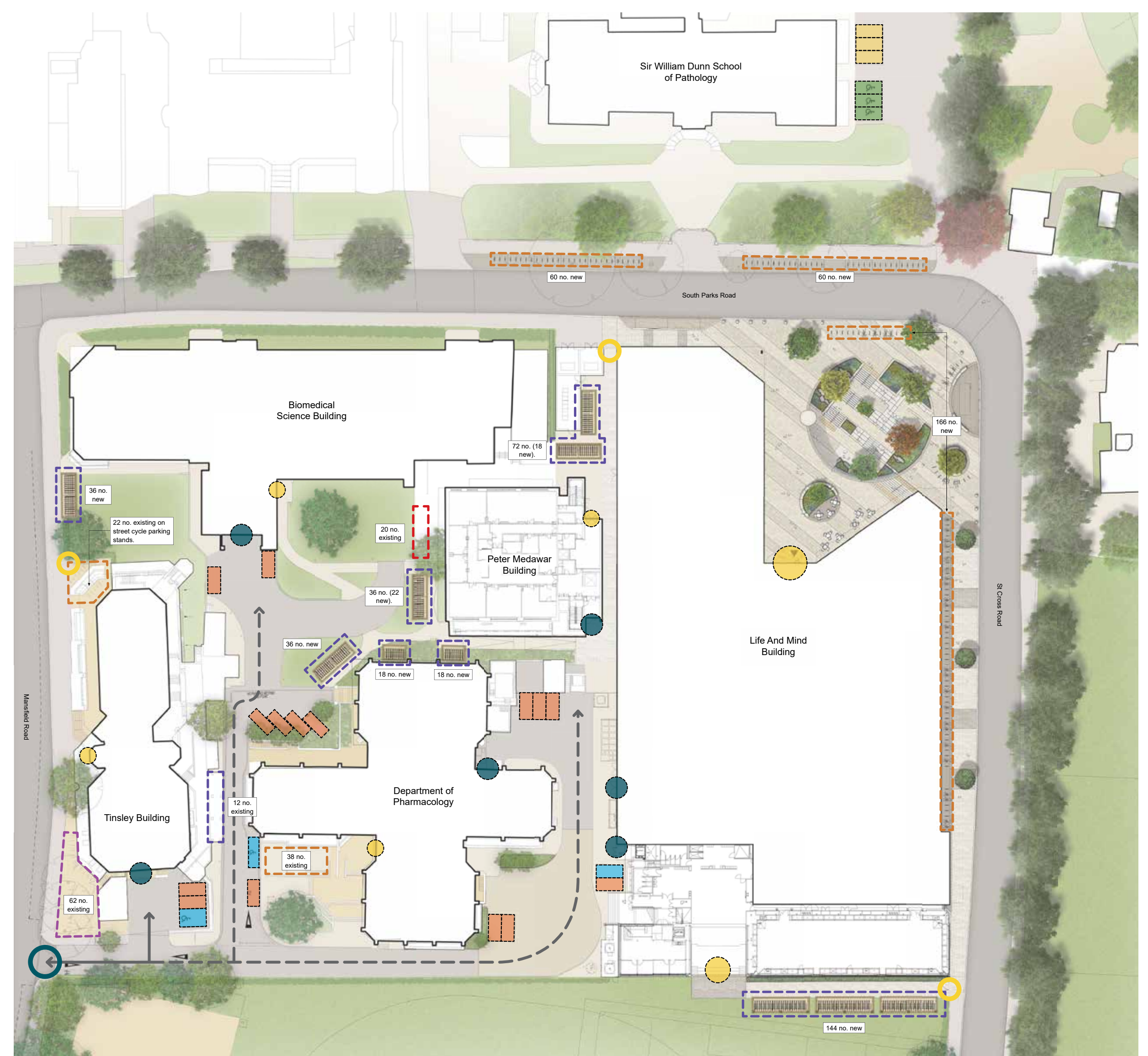
The plaza is designed to manage various directions of approach, from the Science Area, University Parks, cycle routes and cycle storage locations.

Cycle parking will be provided as a mix of street side hoops that are sheltered by the buildings overhang along St Cross Road, around the plaza and along the north side of South Parks Road. Further spaces are provided in new secure sheltered constructions south of the CTL building and between the new Life and Mind Building and the neighbouring Biological Sciences Building.

Parking within the block will be reorganised to omit staff parking, and better distribute operational and accessible (disabled) parking. Accessible parking as well as spaces for relatives of vulnerable EP volunteers will be provided at the William Dunn School across the road, the only available location within reasonable proximity of the Life and Mind Building entrances.

Service access will be via the existing service road from Mansfield Road.

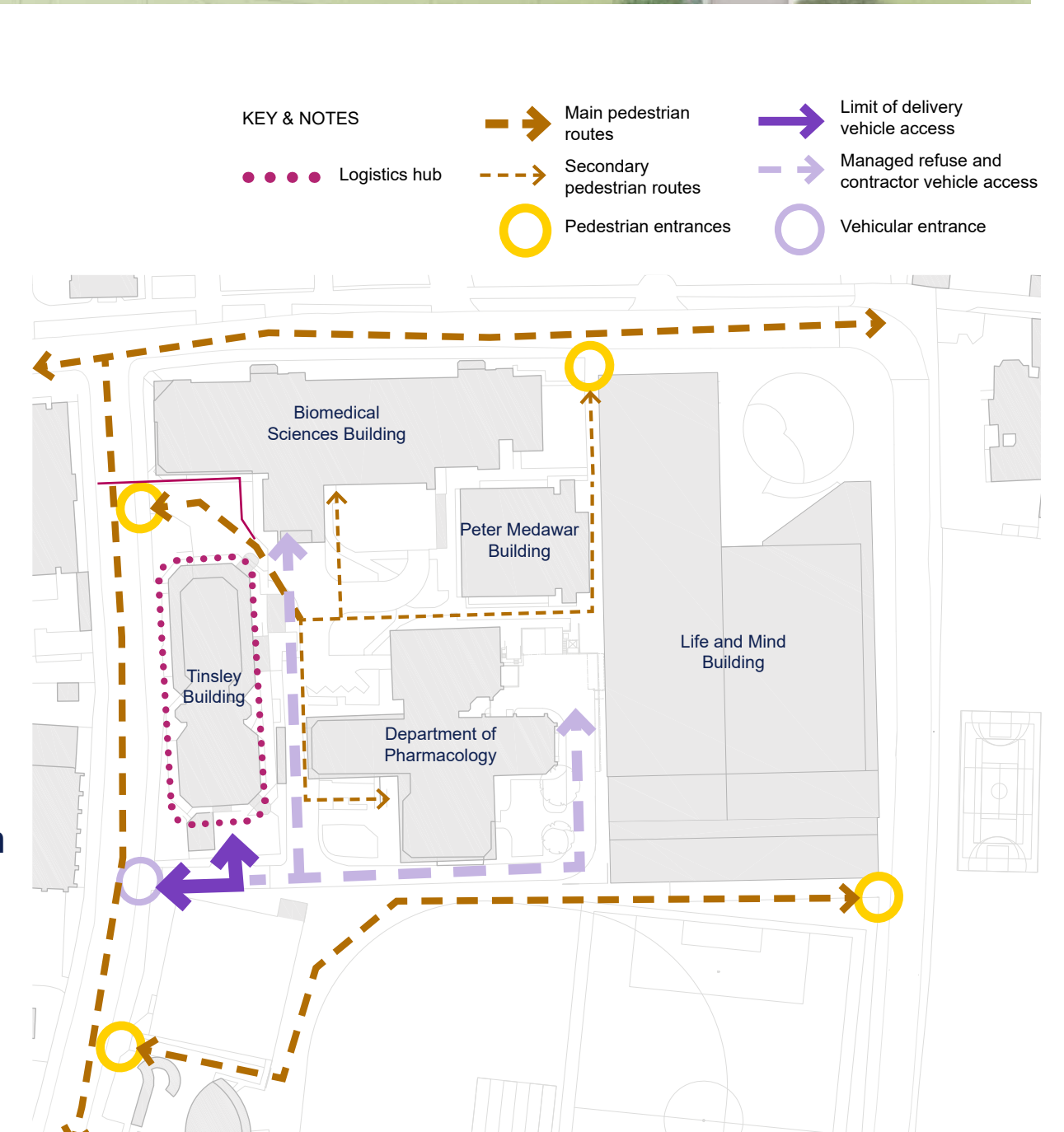
The diagrams below demonstrate the layout changes proposed within the area to allow for large vehicles to safely reverse, away from the main pedestrian flows.



## Mansfield Road Vision

Over three months a working group including all neighbours within the city block assessed current logistic and safety challenges and improvement opportunities for the wider area. The logistics strategy for the new Life and Mind Building shown above forms the first step of a developed vision to better manage deliveries and waste management, people flows and parking within the block.

Following further development the long term vision shown to the right foresees a logistics centre within Tinsley Building off Mansfield Road. This will further reduce vehicular traffic within the block, as well as establish a new cycle and pedestrian link between Mansfield Road and St Cross Road.





# Sustainability

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A **holistic, interdisciplinary approach** has been adopted to define the sustainability strategy for the development. The Strategy is based on:

- The Oxford University Estates Services Sustainability Design Guide
- Local Planning Policy, incl. a 40% reduction in regulated CO2 emissions compared to a Part L compliant baseline
- A selection of measures from best practice industry standards (such as WELL Building Standard)

The building and its environmental systems are being designed to follow **Passivhaus** principles to achieve a **highly sustainable and efficient** building, balancing the projects budget with the critical need to reduce operational energy use, emissions and embodied carbon.

A key focus is to **reduce energy demand** through optimised envelope design. Heat loss/gain as well as glare have been studied through computational analysis to optimise the glass to solid ratio and shading devices.

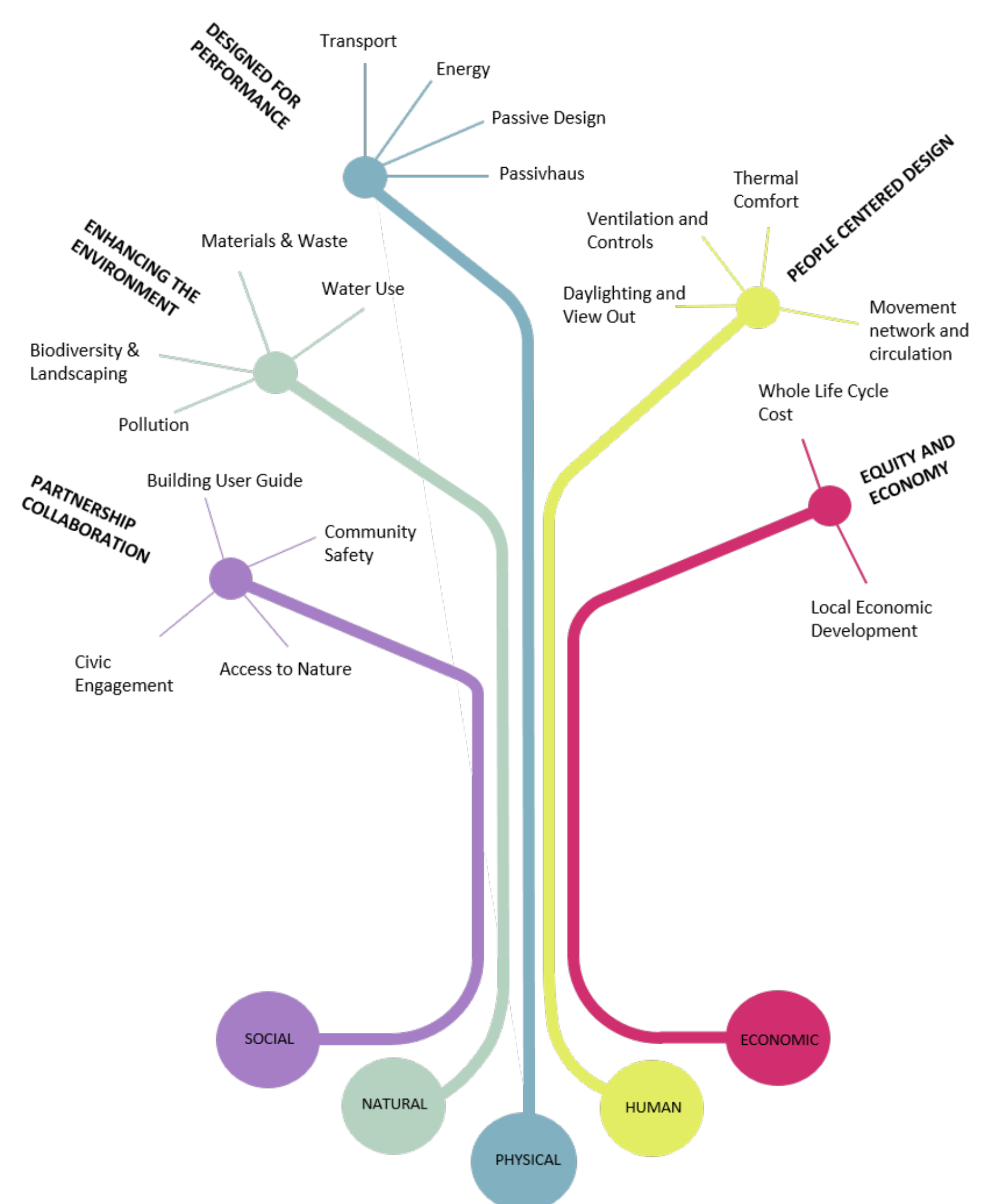
The design aims to **reduce embodied carbon** by limiting mass concrete structure to where required by research-space performance-criteria, and through ongoing consideration of the use of novel low carbon concrete.

Long term **adaptability** has been achieved through the creation of open regular floor plates, limiting structural spans (to ease future vertical links), a zoning approach to dropped and level slabs in laboratories avoiding bespoke localised structural changes, an envelope that provides regular windows and intervals to connect partitions, and by grouping functions with similar performance requirements into zones that can be adjusted within.

**Biodiversity** and **access to nature** of the site is being greatly enhanced through new landscaping at ground, on top of terraces, as well as inside the building.

**Water run-of** has been taken into account by adopting measures such as BlueRoof technology and **attenuation** tanks.

The various requirements have been divided among five sustainability capitals:



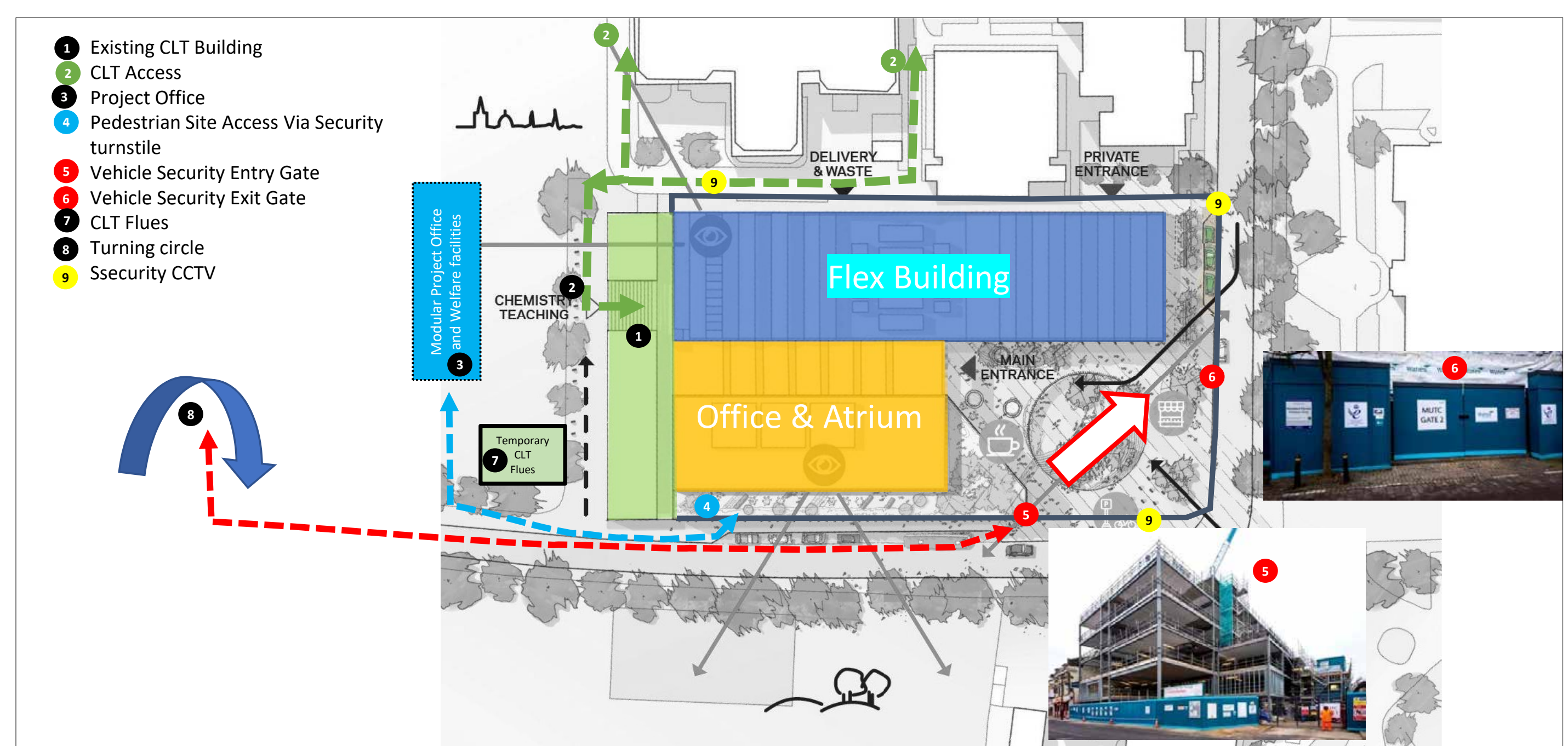
PHYSICAL	Designed for Performance	<ul style="list-style-type: none"> <li>• Apply the principles of the Passivhaus methodology to minimise energy consumption and promote user comfort.</li> <li>• Effectively monitor building performance and energy consumption to set operational targets and improve resource use.</li> <li>• Introduce Photovoltaic (PV) panels and Air Source Heat Pumps as the most appropriate low and zero carbon technologies.</li> <li>• Establish the building as an anchor load for the existing Science Area heat network to support wider decarbonisation.</li> <li>• Incorporate cycle storage, showers, and changing facilities to encourage building users to opt for active travel choices.</li> <li>• Utilise transport assessments to develop site specific travel plans and promote sustainable travel modes by implementing recommendations, including the provision of electric vehicle charging points and car club spaces.</li> <li>• Minimise the need to travel and to prioritise access to walking, cycling and public transport where travel is required.</li> <li>• Encourage properly planned handover and commissioning processes that reflect the needs of the building occupants.</li> <li>• Minimise impact of external lighting to wildlife and neighbouring properties through carefully selecting light fittings and appropriate controls.</li> </ul>
NATURAL	Enhancing the Environment	<ul style="list-style-type: none"> <li>• Reduce water use through the selection of low flow rate sanitaryware and installation of water monitoring and leak detection systems.</li> <li>• Reduce the environmental impact of the building through the use of ethically sourced materials with low embodied carbon.</li> <li>• Reduce construction waste by encouraging the reuse and recovery of materials, adopting best practice approaches to minimising waste to landfill.</li> <li>• Prevent pollution through the selection of products with insulants and refrigerants that are more environmentally friendly.</li> <li>• Enhance the habitat on Site by protecting the existing biodiversity and trees, and enhancing them wherever possible.</li> <li>• Ensure the efficient use of land by building on previously developed sites rather than greenfield.</li> <li>• Ensure no negative impact on surface water or groundwater quality by implementing pollution prevention guidelines through construction.</li> <li>• Minimise the risk and impact of localised flooding on and off-site by following the advice of drainage specialist.</li> </ul>
HUMAN	People Centered Design	<ul style="list-style-type: none"> <li>• Provide a comfortable thermal environment for staff and students through thermal modelling, control of drafts, and adequate, controllable ventilation.</li> <li>• Divide the building into individually controlled zones to enhance thermal comfort.</li> <li>• Maximise provision of natural daylight to create a comfortable working environment and reduce the need for electric lighting.</li> <li>• Provide occupants with an external view out wherever possible to create a variety of visual focal distances and an opportunity to connect with nature.</li> <li>• Reduce the likelihood of nuisance noise and vibrations to neighbours and local wildlife by completing an appropriate noise impact assessment.</li> <li>• Carefully consider and limit the potential negative effects of various noise and vibration sources within the building for buildings users and externally for neighbouring buildings, pedestrians, and wildlife.</li> <li>• Encourage healthy indoor environments with low VOC products, smoking restrictions, and indoor air quality monitors.</li> <li>• Promote healthy portion sizes, reduce unintended over-consumption, and provide optimal opportunities for drinking water.</li> </ul>
SOCIAL	Partnership and Collaboration	<ul style="list-style-type: none"> <li>• Ensure the building users have a full understanding of the building's design intent by producing building specific user guides.</li> <li>• Ensure an inclusive and flexible space that facilitates social cohesion.</li> <li>• Ensure the design creates a successful working environment and achieves high quality public spaces by providing spaces for social interaction, opportunities for sales kiosks, and appropriate street furniture.</li> <li>• Provide outdoor spaces that allow individuals to gather, socialise and relax.</li> <li>• Support access to nature by incorporating direct connection to plants, water, light and scenes of nature.</li> <li>• Put in place management programmes that identify and manage workplace stress.</li> </ul>
ECONOMIC	Equity and Economy	<ul style="list-style-type: none"> <li>• Ensure that a percentage of the construction workforce is at apprentice or trainee level.</li> <li>• Enable the creation of at least 5 full-time equivalent jobs during construction.</li> <li>• Promote the economic success of workers by aiming to have 100% paid at, or above, the living wage.</li> <li>• The principal contractor offers all temporary employees at least 1 standard benefit, such as health insurance or paid time off.</li> <li>• Minimise the embodied carbon of materials through sourcing a percentage from within 100 miles.</li> <li>• Spend a proportion of the procurement budget on local suppliers to enhance the economic success of the surrounding areas.</li> <li>• Put in place an anti-bribery policy to ensure all employees who are exposed to bribery related issues complete training.</li> </ul>



## How will we minimise disruption and ensure effective coordination across multiple projects in the Science Area?

In bringing forward these developments, the university is mindful of concerns around the potential cumulative effects on the level of disruption and congestion during site works across the Science Area. To address these we are implementing:

- Regular neighbourhood meetings supporting by bi-monthly Client newsletters with affected departments, divisions and building managers.
- A team of four programme managers in the University's Estates Services department work together to ensure the coordination of logistics across projects.
- All contractors working on University projects meet together with the Capital Projects team every six weeks to discuss site health and safety and logistics and ensure a coordinated approach.
- Construction traffic management plans are compiled by our contractors for approval by the City Council. These include keeping pedestrians safe, minimising vehicle movements and ensuring effective signage.
- DfMA methodologies supported as off-site manufacturing and construction techniques contribute to minimising disruption through reduced deliveries, traffic movements and workforce on sites.
- Project specific websites are hosted by the University and provide project information on all projects.



Indicative site logistics plan (by preferred main contractor Wates)



Indicative site compound layout (by preferred main contractor Wates)



# Timeline

The timeline below sets out the completed and next steps for the project.

Following this public consultation event and consideration of feedback received, it is planned to submit a planning application for the new building in July 2020.

