

3. Consultation and Pre-Application

3.1. Pre-Application

ritchie*studio on behalf of SWC made a submission requesting Pre-Application advice from L.B Camden on 10.11.2020. The submission included a summary document titled *780 iRAL Stage 3 Pre-Application: 5th Quad Support Building 10.11.2020* that provided a description and drawings of the proposed building at RIBA Stage 2. The assigned case officer was Josh Lawlor and the planning reference 2020/5221/PRE. 25.01.2021.

L.B Camden requested a copy of the MES Daylight and Sunlight report referenced in the Pre-Application document. This was forwarded to L.B Camden with ritchie*studio email 27.01.2021. A virtual Pre-Application meeting with L.B Camden, MES and ritchie*studio took place on 15.03.2021. ritchie*studio issued notes of the meeting 19.03.2021.

L.B Camden raised a series of questions in relation to the MES Daylight and Sunlight report at the Pre-Application meeting and these were answered in a revised version of the MES report issued to L.B Camden 18.05.2021.

A detailed response to the Pre-App submission and Pre-App meeting was received from L.B Camden 03.06.2021. The response was positive about the proposal, seeking some areas of clarification in the formal planning application, and outlining the supporting reports that should be submitted, whilst identifying a set of process issues to be taken into account in relation to the detailed planning application.

The detailed planning application addresses the points raised in the advice provided in the L.B. Camden report 03.06.2021

3.2. Summary of Updates to the Design Since the Pre-App

The Pre-App information was based on Stage 2 and early Stage 3 information. Since the Pre-Application was made, the design team has carried out overall coordination of the design and fine tuned the internal accommodation and external space. This has been in response to functional and design issues, as well as client comments. The approach to sustainability, particularity in relation to the façade, has also been developed as a clearer expression of the approach to the internal climate.

The buildings form has been simplified. The design at Pre-App featured stepped east and west façades, including external terraces. During Stage 3, the decision was made to enclose these spaces with inclined glazing to increase the internal floorspace. This reflects end user considerations over the relative importance of space available for research and supporting functions over external terraces. SWC is already well provided with external social space by the 5th floor roof terrace. By enclosing the small 5th Quad roof terraces with inclined glazing, the tapering form of the 5th Quad is retained. The MES daylight report shows there is little difference between Pre-App and Planning stages of the 5th Quad on the neighbouring properties access to daylight.

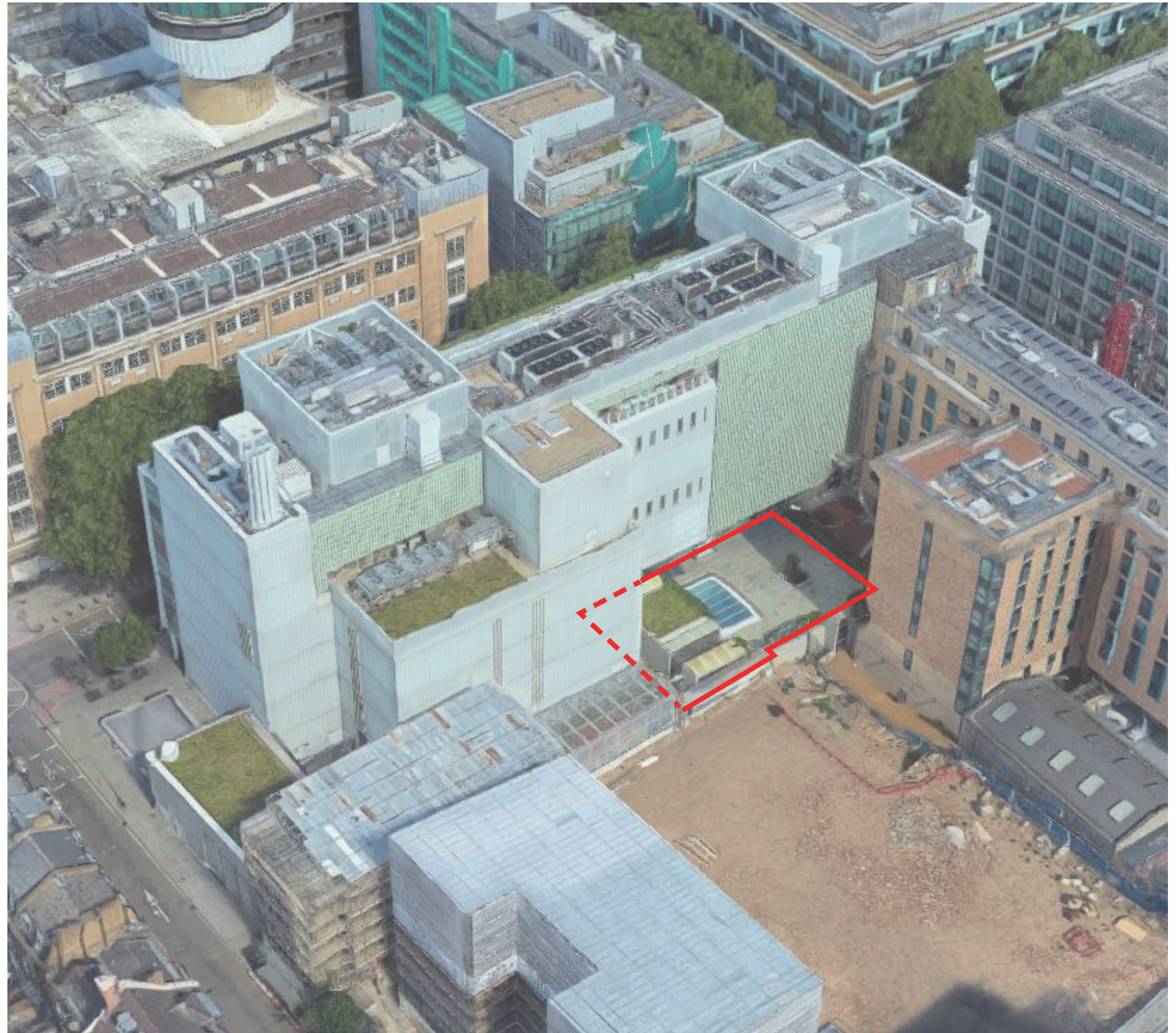
The location of the north-south bridge link has been shifted east since the Pre-App design. The primary reason for this is to achieve Part B compliant escape distances to the existing escape stair in SWC from the 5th Quad. An additional benefit is that it avoids interfacing with the active lab areas and associated services on levels 1 & 3, and places the connection in a more comfortable position in relation to existing circulation.

The planning Pre-Application report, section 5.1 (issued 10.11.2020) makes reference to stainless steel woven rainscreen to the exterior of the 5th Quad. The design has since moved away from this approach to the envelope. The building has developed a particular approach to sustainability that departs from a traditional mechanical ventilation system with heating and cooling, to a system based on a combination of openable windows and wall mounted fan coil units. The proposed design approach to integrate these elements can be seen in section 4.8.

4. Evaluation and design Response

4.1. Location (of Development)

A number of possibilities for provision of additional space for SWC have been considered. Off-site solutions were discounted early in the process due to the integrated nature of the functions the new extension will provide, the operations it will support in the main building, and the vital collaboration between the different groups in each part of the building. Interaction between theoretical and experimental scientists is considered to be key to fostering collaborations which may facilitate the next breakthrough in neuroscience. Extending the floorspace at each level will provide new support space close to the existing labs (where it is most needed) increasing the opportunities for "chance" interaction between science groups and individuals thereby helping the science to flourish.



Aerial view of SWC identifying the south courtyard location for 5th Quad in red.

4.2. Scale & Massing

The 5th Quad is 27.5m high measured from the south courtyard at ground floor level to the roof parapet. This equates to 5 storeys (one less than the current SWC building).

The building footprint (at L1) measures approximately 27.0m by 8.9m.

The building proportions are in the same order, or just below, that of neighbouring buildings and extensions.

The east and west façades are inclined, a design decision made in order to optimise internal floor area, while maximising daylight and sunlight to neighbouring properties the courtyard below and the proposed internal spaces.

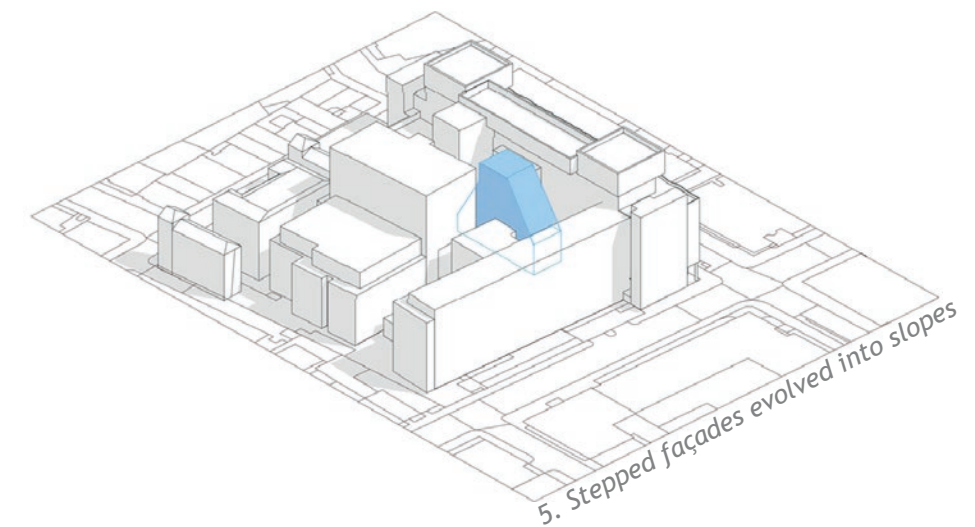
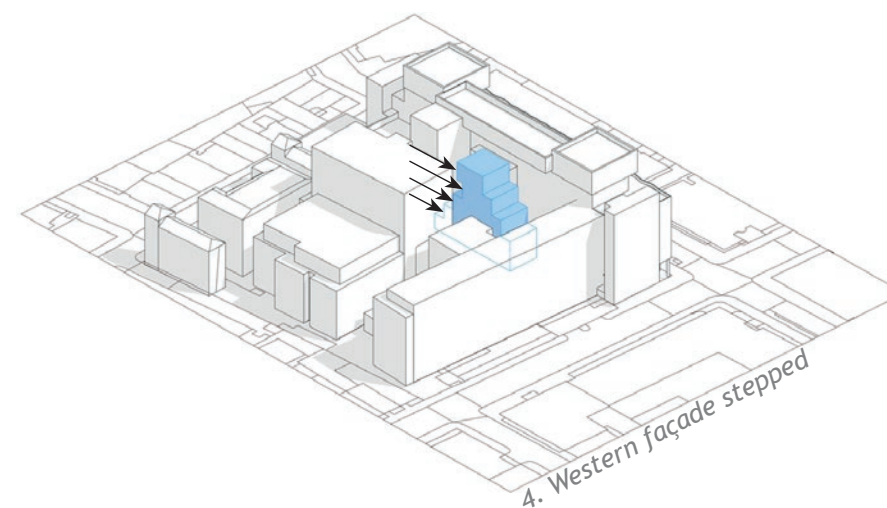
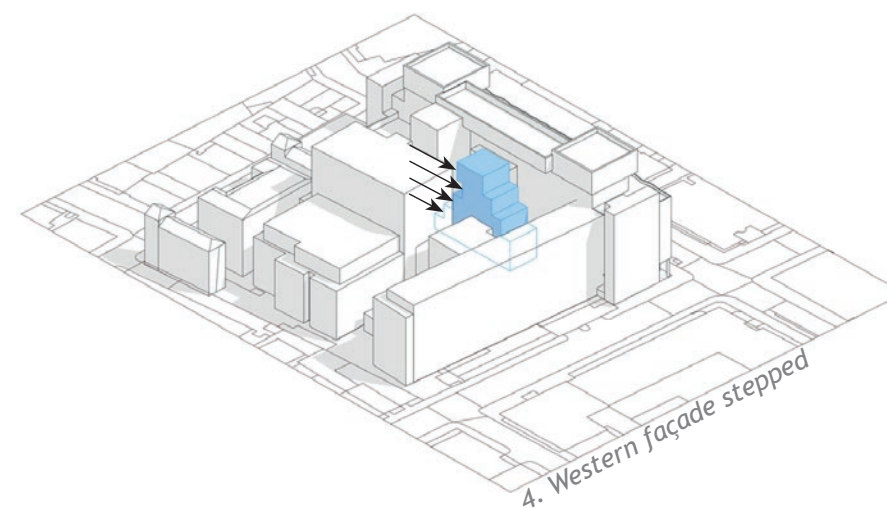
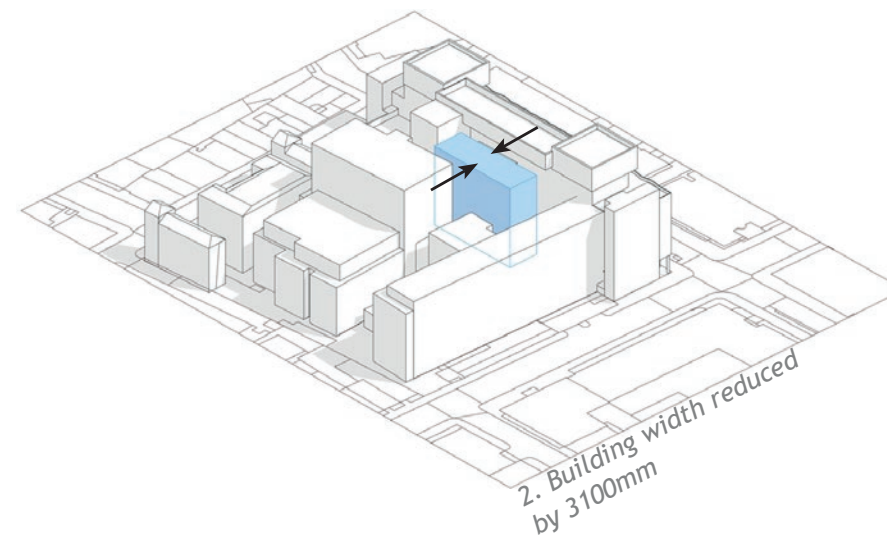
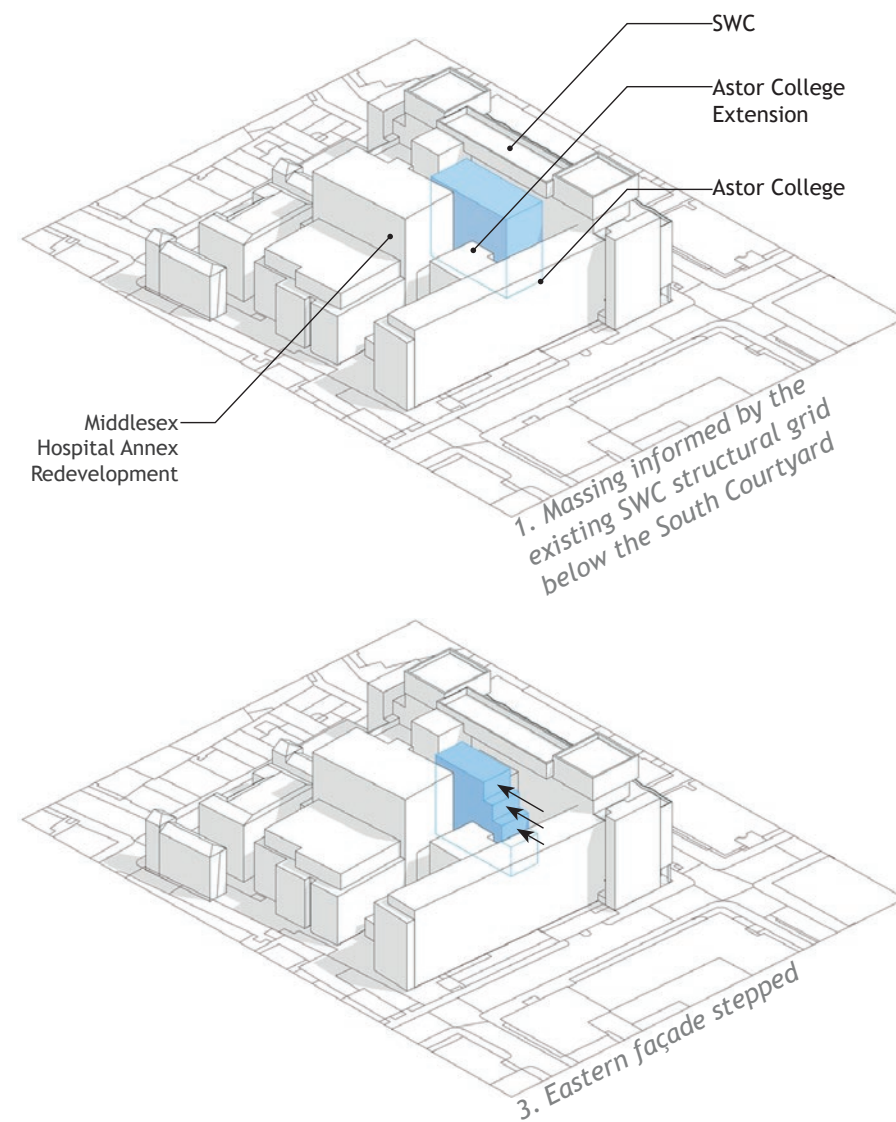
The impact of the 5th Quad on daylight to both the existing SWC building, Astor College (student accommodation), and new residential and business occupants within the Middlesex Hospital Annexe has been considered from the earliest stage in the design process, with daylight modelling studies forming a basis for the proposed form of the building. This has resulted in a distinctive form shaped by the context within which it sits.

By separating the 5th Quad from the existing building, a gap of approximately 3m is created between the most southerly projection of the SWC façade and the proposed 5th Quad. This maintains natural light to the existing windows and translucent façade in the south elevation of SWC and the proposed windows in the north façade of the 5th Quad.

This space also provides an opening for sunlight to pass through to Astor College to the east.

The building's narrow plan depth increases the vertical sky component by reducing the profile of the building when viewed from Astor College to the east and moves it away from the boundary to the south, reducing the building's profile when viewed from the south benefiting Astor College extension and Middlesex Hospital Annexe.

The east and west inclined façades of the 5th Quad help increase the daylight to Astor College (to the east) and also reduce the proposals impact upon the Astor College extension and Middlesex Hospital Annexe to the south.



4.3. Amount of Development

Currently SWC has a building population of 210. There are two basement levels (B1 and B2), a ground floor (L0) and five accommodation levels L01 to L05 and a roof plant level (L6).

Current building GEA = 14,394m²

The 5th Quad is proposed to have a building population of 70. However, 40 of these already work in the existing building giving a total building population increase of 30.

Proposed 5th Quad Approx. GEA = 1040 m²

Proposed 5th Quad Approx. GIA = 905m²

The quantum of floorspace provided by the proposal is a balance between achieving the area necessary to fulfil the strategic functionality improvements desired by SWC to develop the science, and the limitations of the existing foundations and structure to carry a new building load, whilst ensuring that an acceptable level of daylight and sunlight is provided to the adjacent buildings and their recent additions.

Analysis of the SWC floor space requirements and the earlier RIBA Stage 2 reviews of the daylight and sunlight conditions have enabled the design team to arrive at an optimised proposal for the 5th Quad. As well as providing the essential facilities necessary to support the research programmes at SWC, the 5th Quad has been designed to provide an adaptable asset for the future. Neuroscience research is a quickly changing field, and it is important that the SWC is able to accommodate this. Ensuring there is adequate space to adapt, or decant into, as other building functions change, is an important part of establishing the resilience of the new building.

Using the existing piled foundations and the structure of the basements below the south courtyard has a number of construction, logistical and sustainability benefits. The existing structure has been assessed by Arup structural engineers to establish the capacity available and calculate the theoretical limits of the increased building area for various types of construction. The current design is based on a lightweight structure and envelope that addresses fire, thermal and CO₂ reduction considerations. The floor area is identified in the tables that follow.

GEA - Gross External Area is the area of a building measured externally at each floor level

Level	GEA
Level 1	261.68m ²
Level 2	251.35m ²
Level 3	226.28m ²
Level 4	177.08m ²
Level 5	122.99m ²
Total	1039.38m ²

GIA - Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level

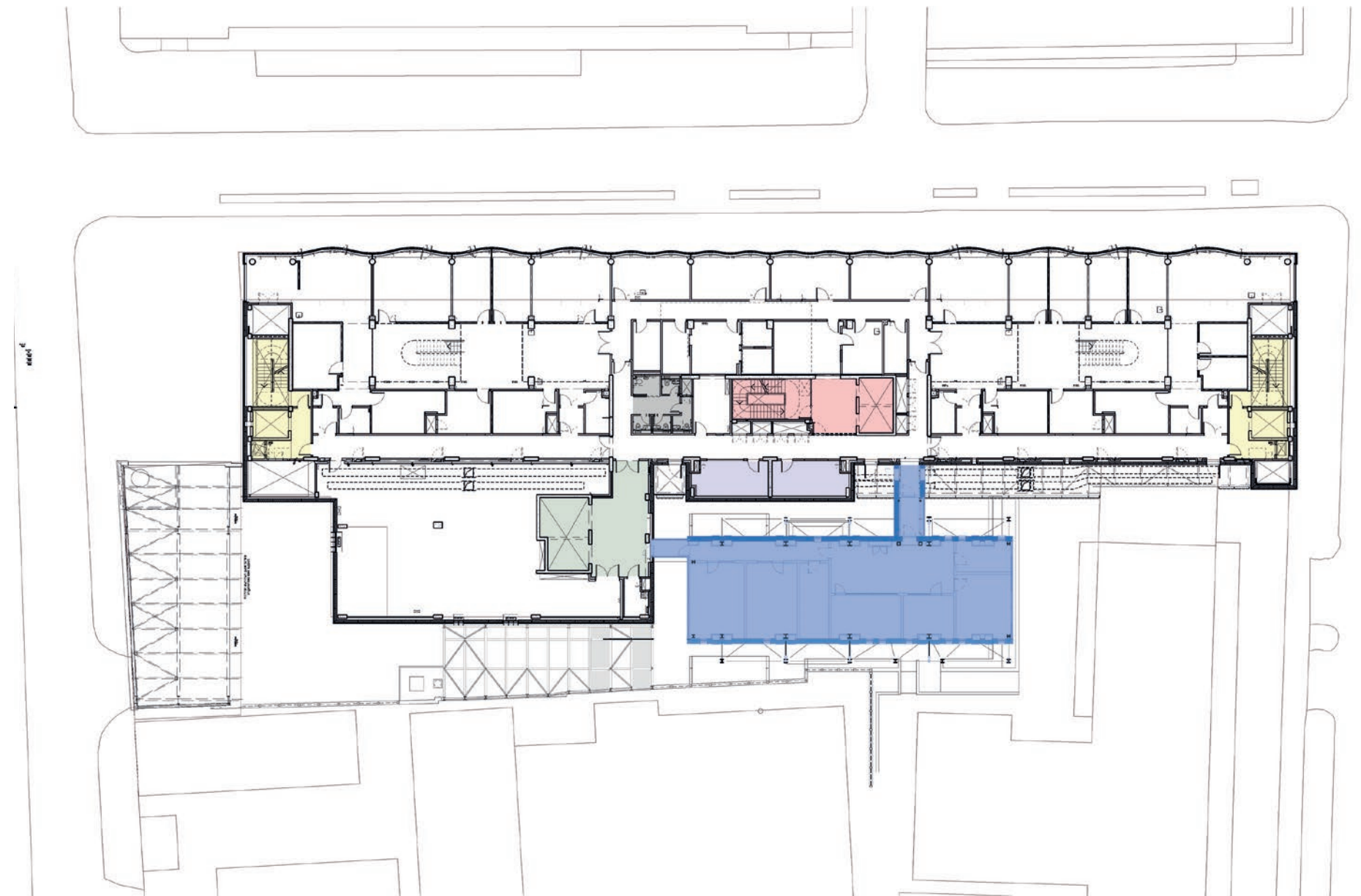
Level	GIA
Level 1	232.48m ²
Level 2	221.71m ²
Level 3	197.54m ²
Level 4	150.58m ²
Level 5	102.26m ²
Total	904.56m ²

4.4. Use and Layout

The proposed location for the 5th Quad is within the south courtyard of the SWC building. The main objective, by addition of new floor space to the existing building, is “connectivity” between the new space and the existing building functions. The location of the 5th Quad within the south courtyard places it in close proximity to stair 1. Stair 1 is the main vertical communication core containing lifts and a stair, and is the heart of the existing building, drawing the SWC community into chance interaction at the tea points and break-out spaces close to the core.

The 5th Quad support building has been designed to fulfil the functions set out in the client brief and allow for adaptability. The arrangement of the accommodation on the individual floors of the 5th Quad has been developed to respond to the demands in the adjacent accommodation functions in the main SWC building.

- Goods Lift & Lobby
- Breakout / Lab Space
- WCs
- Core 1
- Fire Fighting Cores
- Proposed 5th Quad Support Building



Typical floorplan of the 5th Quad Support Building in relation to the existing SWC

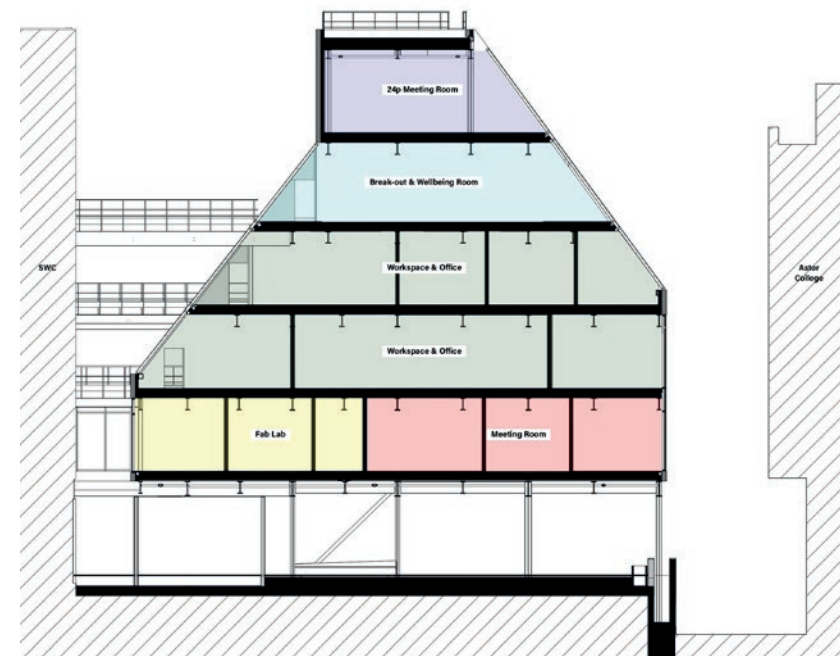
Level 1 provides core services of Fabrication Lab and IT support, and these are located to be easily accessible from the main building with an enclosed west link to the goods lifts.

Levels 2-3 provide open-plan workspace for around 52 people including meeting spaces, break-out areas for informal discussions and private workspace.

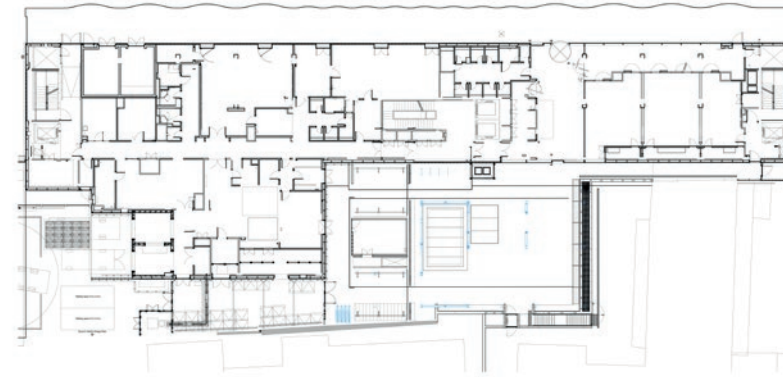
Level 4 is centred around wellbeing and staff facilities. There are two wellbeing rooms, space for taking breaks and an accessible washroom shower, baby change and WC.

The 5th floor provides a meeting space for 24/25 people complete with the necessary audio-visual equipment and storage. This is designed to provide an additional resource for activities that currently exist on that level and as an extension of the Brasserie & Seminar spaces, allowing for smaller break-out meetings.

The green roof at Level 6 will be accessed by a maintenance bridge from the SWC Level 6 plant area, above the main N-S bridge link. No plant is to be mounted on the 5th Quad roof and the bridge is to only be used for maintenance of the green roof and abseiling access to the inclined façades.



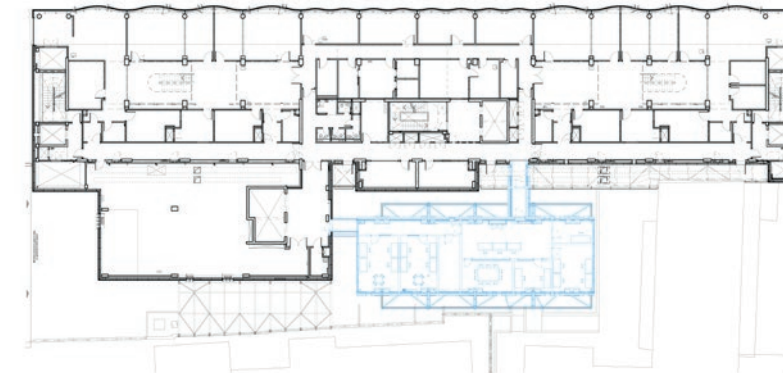
Floor plans for 5th Quad in context of SWC: 5th Quad in blue



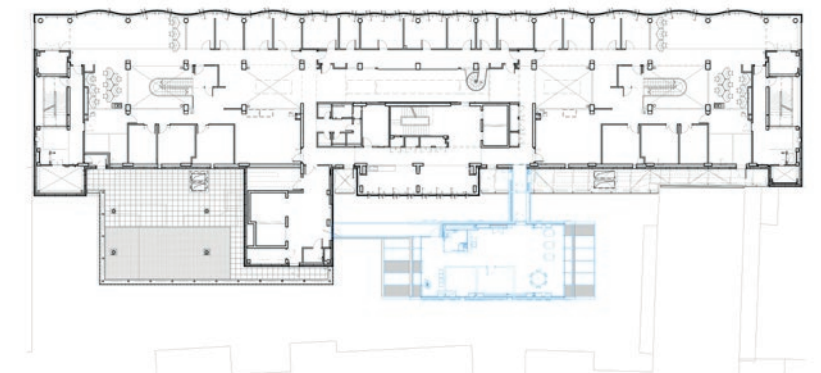
Ground Floor



Level 3



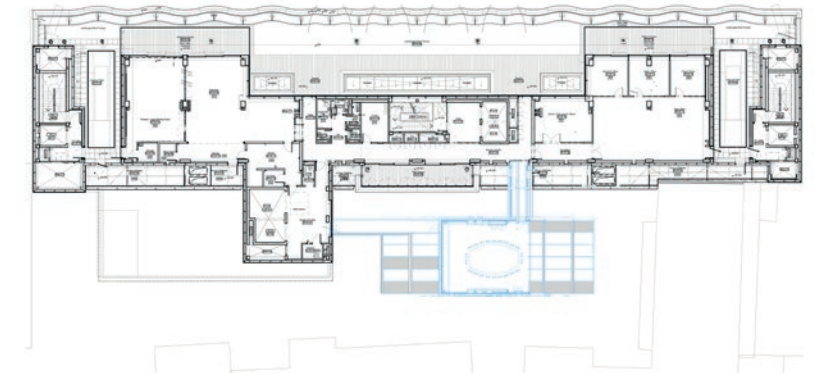
Level 1



Level 4



Level 2



Level 5

4.5. Bridge Links

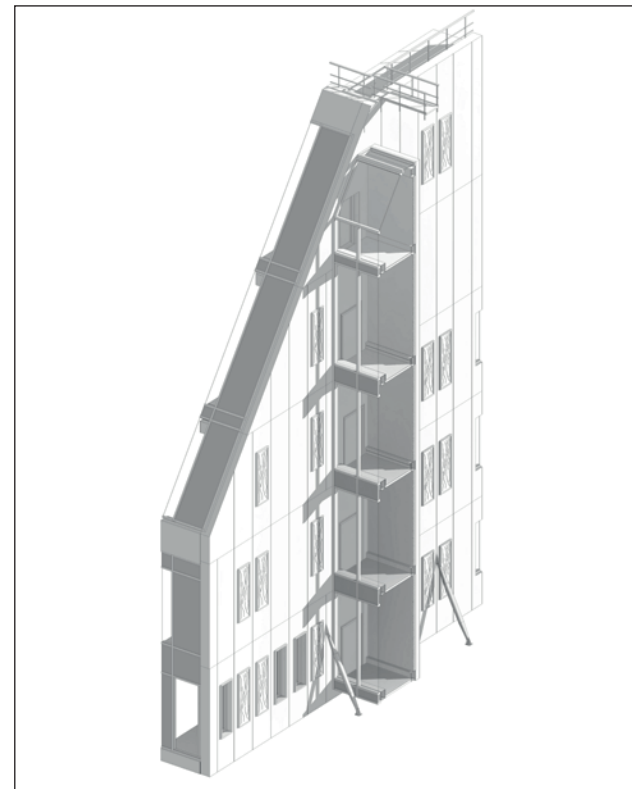
The 5th Quad exploits the spare capacity available within the existing building's building services, systems, WC provision and vertical circulation. Consequently, the bridge links form a critical part of the new building.

Levels 1-4 each have two bridge links providing two directions of escape back to the escape cores in SWC. L5 does not require a second bridge link, due to the reduced area of this level and the choice of escape routes being made available at the main building. The location of the bridge links has been designed to ensure the escape distances from the 5th Quad to the existing escape stair comply with Part B of the Building Regulations.

The links have been positioned carefully in order to cater for a number of key purposes. Each bridge provides the best connection between the existing and proposed building functions by creation of a clear and logical circulation route.

The north bridge link is a fully enclosed space linking levels 1-5. It can be seen as the primary link between the 5th Quad and the existing building. The north bridge link connects to the existing building via a circulation space close to Stair 1 and the social break-out areas at the centre of the existing building. It is also the route by which services are brought into the 5th Quad. As the 5th Quad has no plant of its own it will be reliant on SWC for low temperature hot water, chilled water, power supply, data and sprinklers. These services will be transferred at high level in each floor of the bridge link, before being distributed within the 5th Quad.

The west bridge link can be seen as a secondary access to the 5th Quad. Interfacing with the goods lift lobby of the SWC. At Level 1 the west bridge link is enclosed as it will provide a key route for deliveries to the new Fabrication Laboratories. Levels 2-3 are foreseen to receive less frequent use and are therefore open-air spaces. Each bridge will receive a degree of weather protection from the bridge above with the exception of the uppermost L4 bridge.



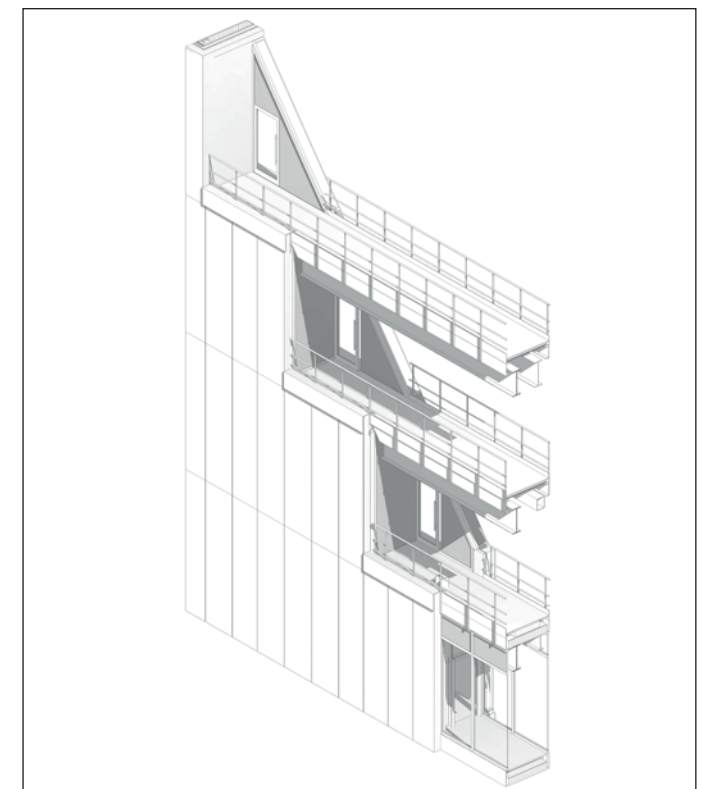
North-South Bridge Links



Goods Lift Lobby - Typical proposed connection point in SWC of West Bridge Link



Circulation - Typical proposed connection point in SWC of North Bridge



East-West Bridge Links

4.6. Adaptability

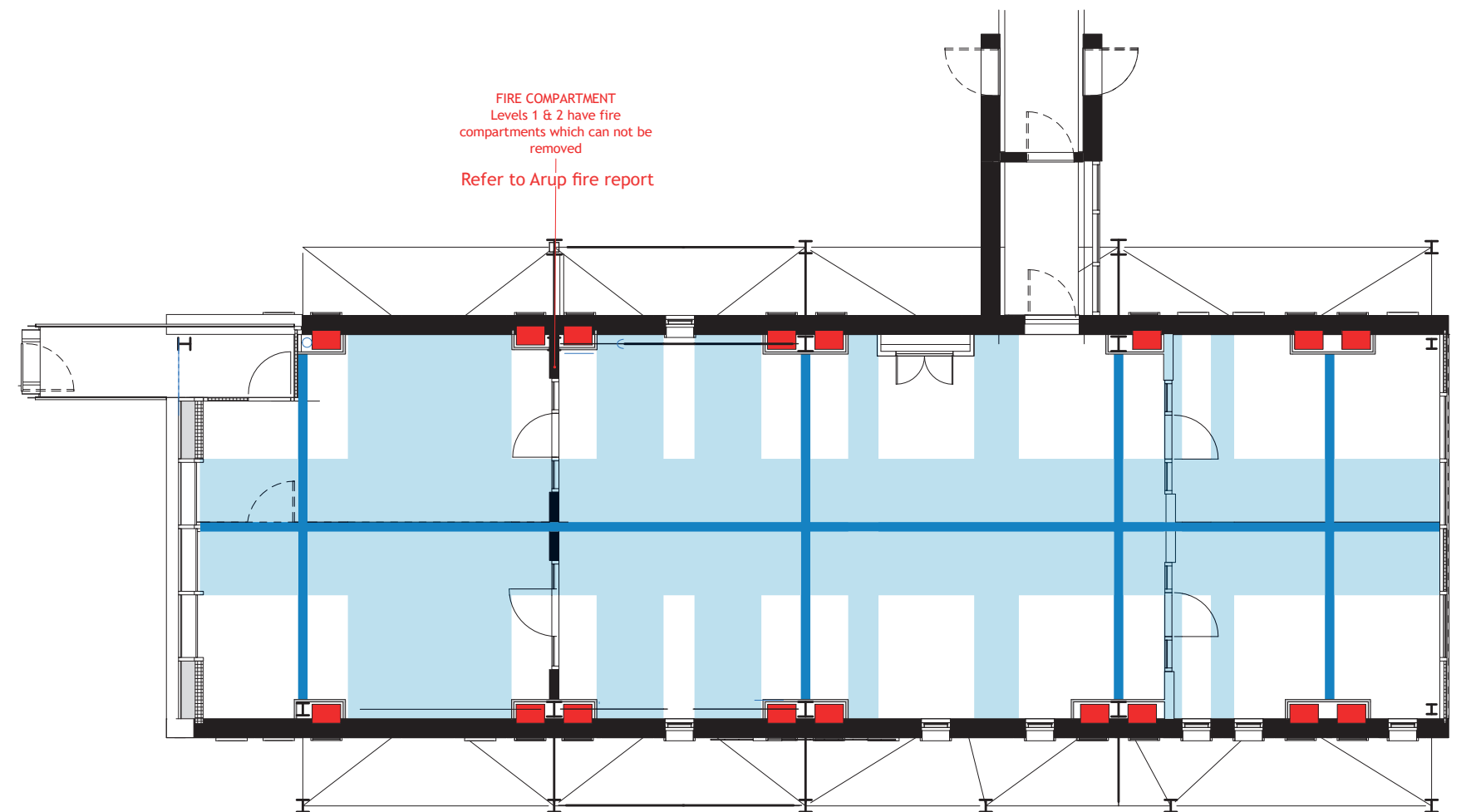
The existing SWC building is designed to provide a very high level of adaptability for the internal spaces to meet the evolving user requirements. Open spaces can be reconfigured, and a ‘plug and play’ design approach to the multitude of services is an essential part of the buildings adaptability. This approach will also be applied to the 5th Quad.

Adaptability has been designed into the 5th Quad for both the short, medium and long term.

Long term opportunities are made available if the new building is seen as a support building with the possibility of the existing SWC 5th floor administrative functions being relocated to the 2nd floor of the 5th Quad, thereby releasing the existing SWC 5th floor admin space for future lab space. In this location it is likely that the floor plates can be modified to accept wet lab loadings.

In the medium term, the 5th Quad floor plates have been designed to allow partitions to be removed, added or replaced with minimum disruption. This enables the spaces to respond to varying working methods or changes in research groups and practices. This has been achieved through the careful zoning of services, windows and structure to provide, without major modification, for multiple layouts.

Individual adaptability (user control) is provided by allowing a high degree of personal control over their environment. This includes local fan coil units (FCUs) providing heating, cooling and ventilation linked to openable windows, the ability to change the internal lighting and having blinds that can be individually adjusted to suit users preferences. The white boards which line many of the walls in the main SWC building have proved a popular and effective way for researchers to spontaneously discuss ideas and modify their workspace. This idea will continue as part of the internal fit-out of the 5th Quad.



Plan at Level 2: subdivision of floor plate

- | | | |
|--|---|---|
| <div style="display: inline-block; width: 10px; height: 15px; background-color: #0070C0; margin-right: 5px;"></div> Primary Division Location
Partitions can be installed in these locations with the minimum alteration to services | <div style="display: inline-block; width: 10px; height: 15px; background-color: #ADD8E6; margin-right: 5px;"></div> Secondary Division Location
These zones have minimal physical restrictions on partitions, but may require service alterations | <div style="display: inline-block; width: 10px; height: 15px; background-color: #FF0000; margin-right: 5px;"></div> FCU housings
These allow different configurations of ventilation units to be installed to support various layouts |
|--|---|---|

4.7. Open Space and Landscaping

The south courtyard is to remain an open space at ground level, with the 5th Quad supported on a transfer structure at first floor that negotiates between the column grid for the 5th Quad at levels L01 to L05 and the column grid at courtyard level that relates to the existing basement structure.

Consultation has also been held with Ecology Planning and Research Ltd (EPR) ecologists as to how the planting and biodiversity measures can be addressed to respond to the change in conditions the new building will bring to the courtyard.

The small area of roof above the level 5 meeting room is to be a green roof. This is to offset the area of green roof being displaced from the workshop at ground level.

In addition to the green roof there are several planters and the landscaped wall which are likely to be impacted by the 5th Quad. Consultation with EPR indicates that there are a number of potential solutions available ranging from supporting the existing species to enhancing the space with additional plant varieties suited to the new conditions presented by the proposed extension. At this stage it is not thought that the bird boxes to the east wall of the workshop will be affected. A further, more detailed assessment of the proposed ecology measures and mitigation strategies is in progress with EPR.

The role of the south courtyard as a social space has recently been eroded by an increased emphasis being placed on the Level 5 roof terrace and the impact of the Astor College extension. It is believed this will continue to be the case as the Middlesex Hospital Annex further shades the area. The construction of the 5th Quad will further shade the south courtyard, while this will not affect cycle storage of workshop uses, it is important that the use of the space as a social area is maintained. As mentioned above the plant species will be evaluated to assess their suitability for the shaded environment, and where necessary will be enhanced by shade tolerant varieties to retain an outdoor feeling to the space. Artificial lighting will be introduced to help create an engaging external environment while avoiding adding to night sky pollution. Early consultation has been held with Arup Lighting in order to develop solutions for this space.

Existing South Courtyard Images:



GRC planter with Acer



GRC planters with Bamboo



Access to reception and benches



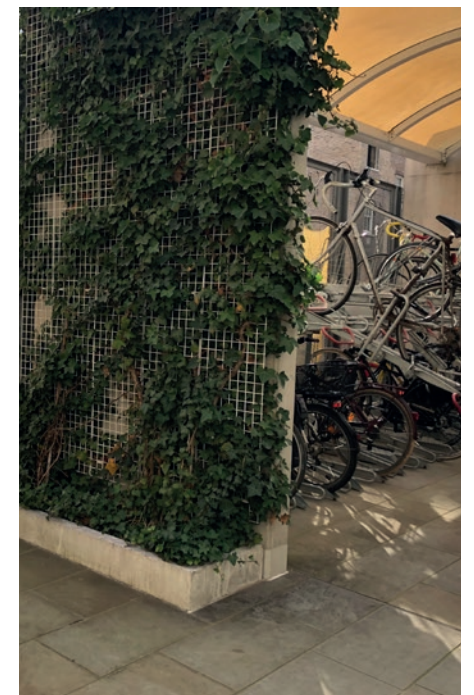
Refuse store and route to service area



Cycle store



Lumium to B2 with integral benches



Green wall with cycle store beyond

Proposed Arup lighting design idea references:



Lighting integrated in planters



Ground level soffit uplighting

4.8. Appearance/ Materiality

The servicing, access and use of the new floor space provided by the 5th Quad is defined by the existing SWC building. The physical relationship of the 5th Quad to SWC can be seen as a stand-alone entity within the setting of the South Courtyard, informed by the daylight, sunlight and spacial distance necessary to achieve compatibility. The development of the façades extends this idea, by looking to lighter, neutral surfaces, avoiding direct overlooking, whilst at the same time providing an engaging building form and surface appearance.

The north and south façades have been coordinated with structure, ventilation, thermal requirements and respond to fire engineering requirements. This has refined the pattern of windows and ventilation openings to the north and south façades, particularly limiting openings which could lead to overlooking of the neighbouring properties to the south.

The inclined façades are less affected by overlooking and can therefore be more open. The resulting inclined glazing to the east and west provides interesting spaces to the interior for both workspace and break-out spaces, while also providing natural daylight.

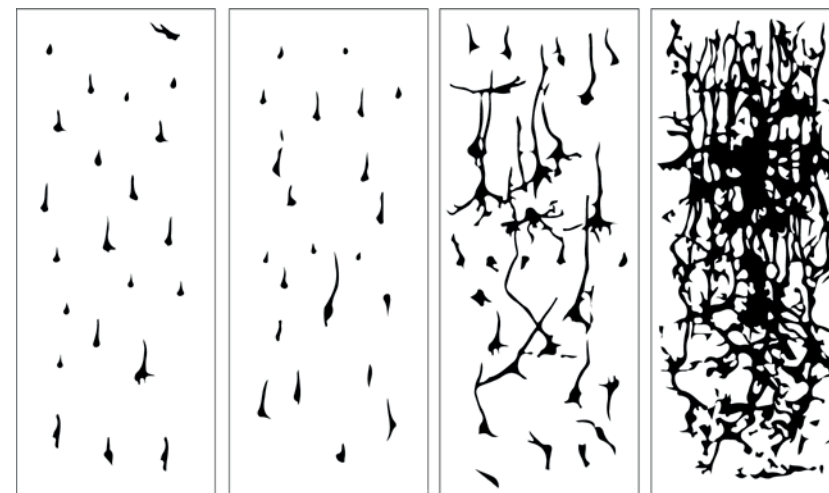
The north and south façades are to be constructed from insulated sandwich panels, finished with a white PPC steel surface. The use of a white surface finish increases the light entering the courtyard through reflection and maintains a light and clean finish to the south courtyard, consistent with the architectural style of SWC.

The planning Pre-Application report section 5.1 (issued 10.11.2020) makes reference to stainless steel woven rainscreen to the exterior of the 5th Quad. The design has since moved away from this approach to the envelope.

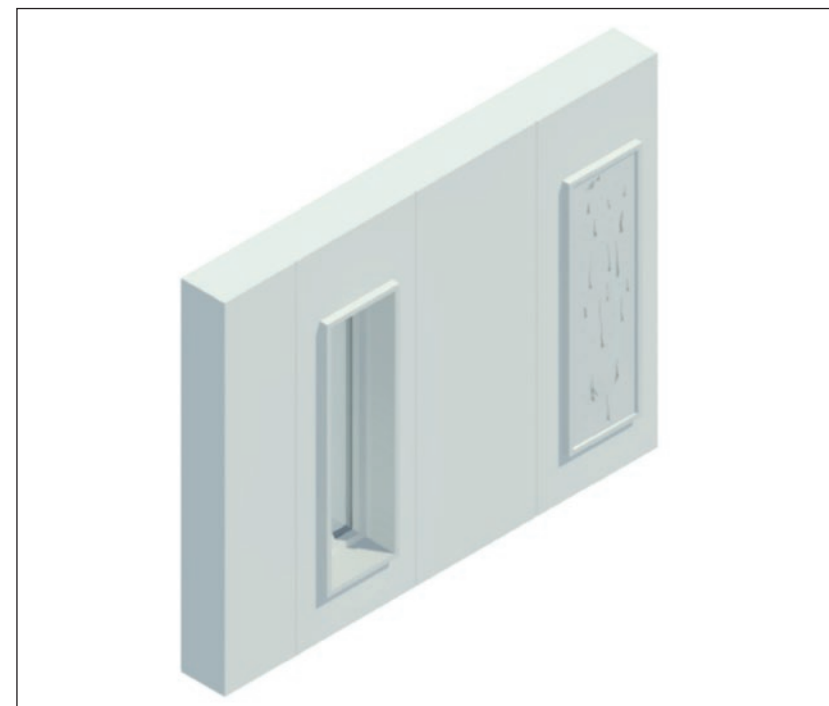
The building has developed a particular approach to sustainability that departs from a traditional ducted mechanical ventilation system with heating and cooling to a system based on a combination of openable windows and wall mounted fan coil units.

The window openings and fan coil air intakes and extracts become important visual components of both façades. This can be seen in the 5th Quad north and south elevations. The window openings and the fan coil air intake and extract openings will follow the same design approach, expressed as framed recesses/protrusions punctuating the façade.

The fan coil extract and intake openings will be protected by panels perforated by laser cut abstract patterns, derived from an aspect of the SWC neuroscience work. The panel pattern will vary slightly between openings creating a "gallery". The expressed metal window frames and the plenum frame surface finish colour is not yet decided. We are considering neutral white (RAL9003) to match the modular cladding and all white SWC building, stainless steel or a colour contrasting with the modular cladding and to reinforce the idea of a neuro-image gallery.



Indicative neurone images to form basis of air intake/extract perforations



Projecting window and air intake/extract surrounds



5th Quad Support Building South Facade

4.9. Sustainability and Energy

Guidance and Targets

SWC achieved BREEAM Excellent, and in order to maintain this level of environmental performance, the 5th Quad support building will also aim to achieve a similar rating of BREEAM Excellent.

In addition to this, the design process is currently taking account of guidance provided by the London Energy Transformation Initiative (LETI). This is an initiative supported by over 1,000 built environment professionals, the GLA and London Boroughs (including Camden) with the aim of supporting the transition of London's built environment to net zero carbon. The guidance sets targets for operational energy, embodied carbon, heating, and energy demand which exceeds the level expected in the Building Regulations Part L. While the design may not be able to achieve all these targets in full due to existing site and plant constraints, pursuit of these aims will lead to a highly sustainable and efficient building.

Passive Sustainable Design

The building form makes use of a number of passive environmental techniques. The relatively narrow (8m) internal width optimises both daylight and natural ventilation. While harsher sunlight and daylight from the south is controlled through smaller windows located in the south façade to provide daylight to where it is required while minimising summer heat gains.

Refer to the Energy Statement for further information produced by Arup MEP.

Sustainable Use of Materials

The building is to make use of Cross Laminated Timber (CLT) floor-construction. This has structural weight reduction and fabrication benefits. The use of mass timber decks represents a significant reduction in carbon emissions over an equivalent lightweight concrete deck constructed on profiled steel decking.

As referred to above, the roof and façade build-ups are to be insulated above the levels required by Building Regulations Part L. The external walls achieve this through the use of prefabricated sandwich panels. The insulated sandwich panels bring the advantage of providing self-structure, insulation, air tightness and a pre-finished façade surface. As a single system they are quick to install, arriving to site in standard panel sizes with pre-formed openings for windows and ventilation intake/exhaust. The benefits of such a system were made apparent with their use on the south façade of SWC. Fewer elements are required to construct the façade, reducing resources and deliveries to site.

5. Access

5.1. Vehicle and Transport Access

Public transport

The Howland Street site has an excellent relationship to the urban UCL campus, within a vibrant and stimulating area close to London's cultural and educational heartland and with exceptional local, national and international public transport connections. These connections will be further enhanced by the opening of Crossrail in 2022.

The Arup Transport Statement explains that the site achieves a Public Transport Accessibility Level of 6B. This means that the level of accessibility of the site to the public transport network is excellent, being well served by local bus routes and the Underground.

Cars Parking

The site is car-free with no on-site car parking provided and occupants are not issued with on-street parking permits. This will remain the case with the introduction of the new building. Members of staff or visitors with disabilities will be encouraged to make use of L.B Camden's "Green Badge Scheme" which is operational in the Fitzrovia area. Arup Transport have reviewed SWC's original transport report including the Green Badge Scheme and concluded that the existing designated bays will be sufficient.

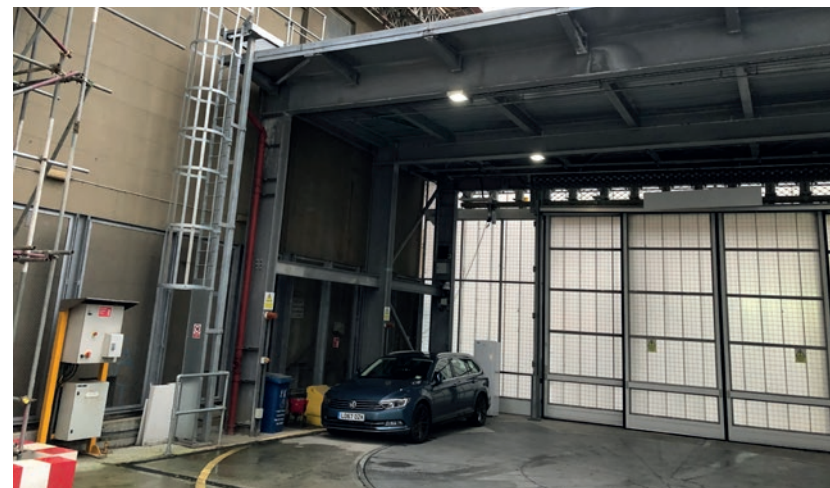
Servicing

Delivery and servicing activity is to continue via the existing service yard accessed from Cleveland Street. The Arup Transport statement identifies that the current servicing arrangement is sufficient to handle any uplifts associated with the new building.

Refer to the Arup Transport Statement and Travel Plan Statement for further information.



Servicing and delivery plan



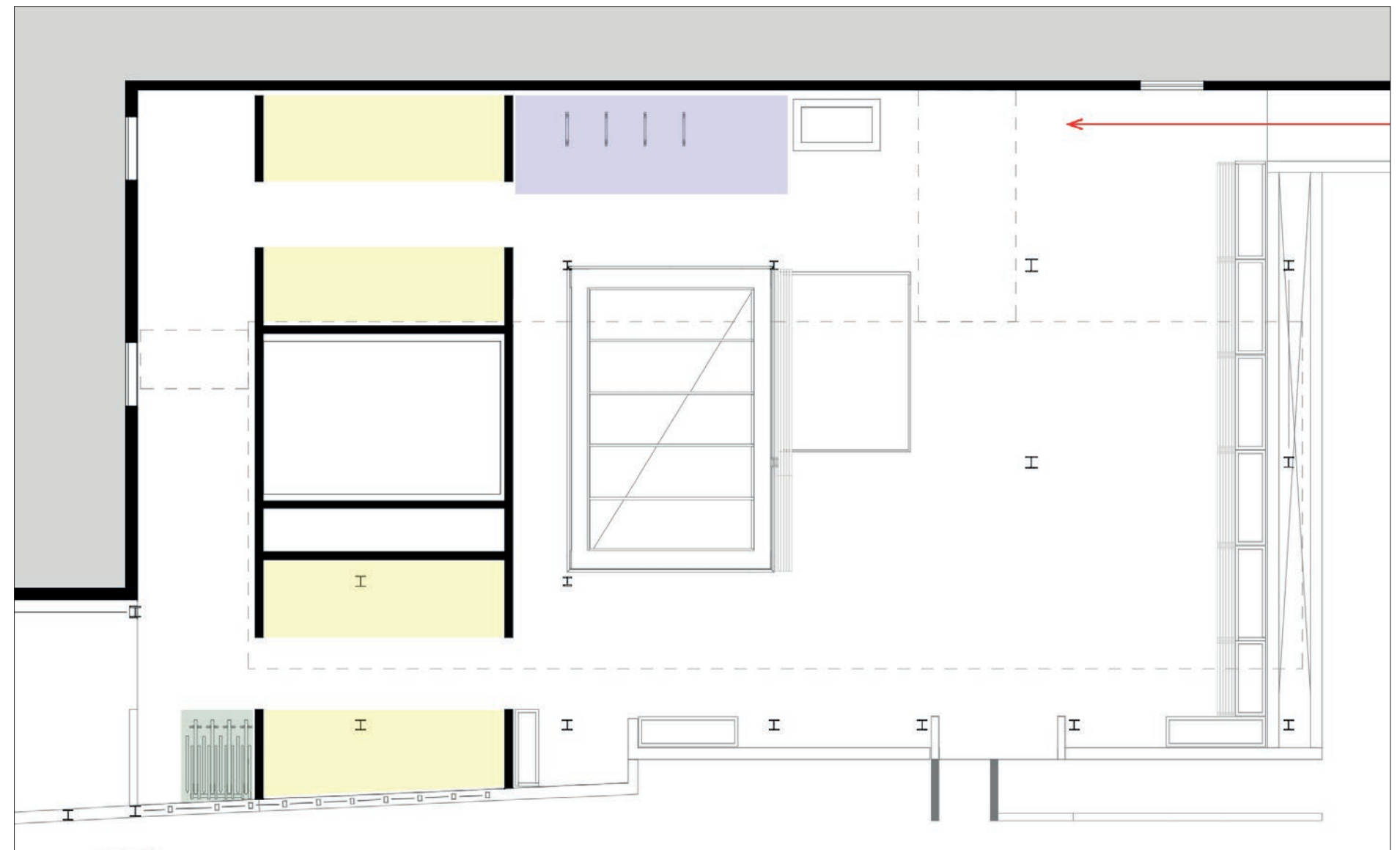
Service area looking towards Cleveland Street access gates.

Cycles

The site is close to major north / south and east / west cycle routes and a Mayor's cycle-hire station is placed immediately opposite the site on Howland Street. Visitor and staff cycle parking for SWC is located in the south courtyard upper level, accessed from Charlotte Street via a secured gate between the existing Astor College building and the proposed new building. There are 60 staff cycle spaces and 60 spaces for visitors. These cycle spaces are to be maintained, or replaced like-for-like within the south courtyard where they are displaced by the new structure.

To support the uplift in building population attributable to the 5th Quad, additional cycle parking will be provided in accordance with the London Plan 2021 standards, as requested in the L.B Camden Pre-Application report. The cycle parking is to be provided in the form of 4 Sheffield stands located within the south courtyard. Provision of cycle parking in this format provides an alternative to the existing two-tier "Josta" type cycle parking currently available. The space at the end of the Sheffield stands (i.e. 1 cycle parking space) is to be marked for non-standard cycles. This equates to 12.5% of new provision and is in excess of the 5% required by London Cycle Design Standards.

Refer to the Arup Transport Statement and Travel Plan Statement for further details of the cycle parking/ storage and facilities within SWC.

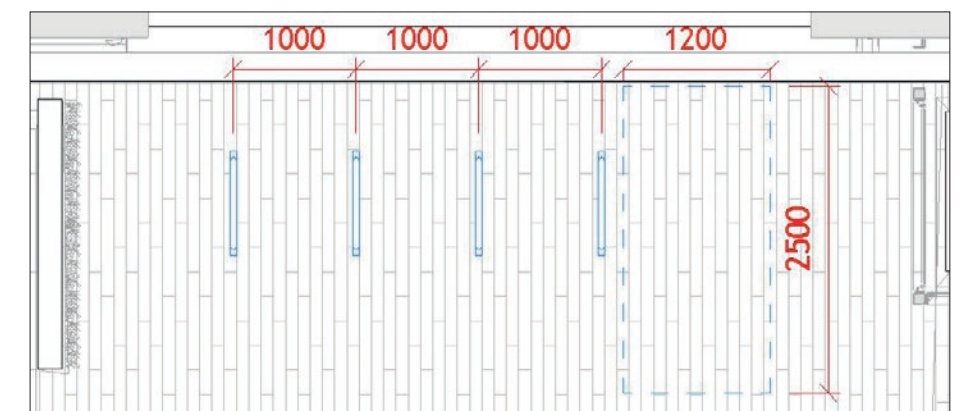


Existing and proposed cycle parking in the south courtyard

- Existing cycle racks
- Proposed stacking racks to offset spaces disrupted by new structure
- Proposed Sheffield stand spaces
- Access route from Charlotte Street



Existing two tier racks



Proposed sheffield stand layout with dedicated non-standard cycle space

5.2. Inclusive Access

Level Access & Circulation

The existing SWC building, through which the 5th Quad will be accessed, is fully compliant with step free access available to all floors. Also refer to the original buildings Inclusive Access Statement (2011/1944/P, March 2011)

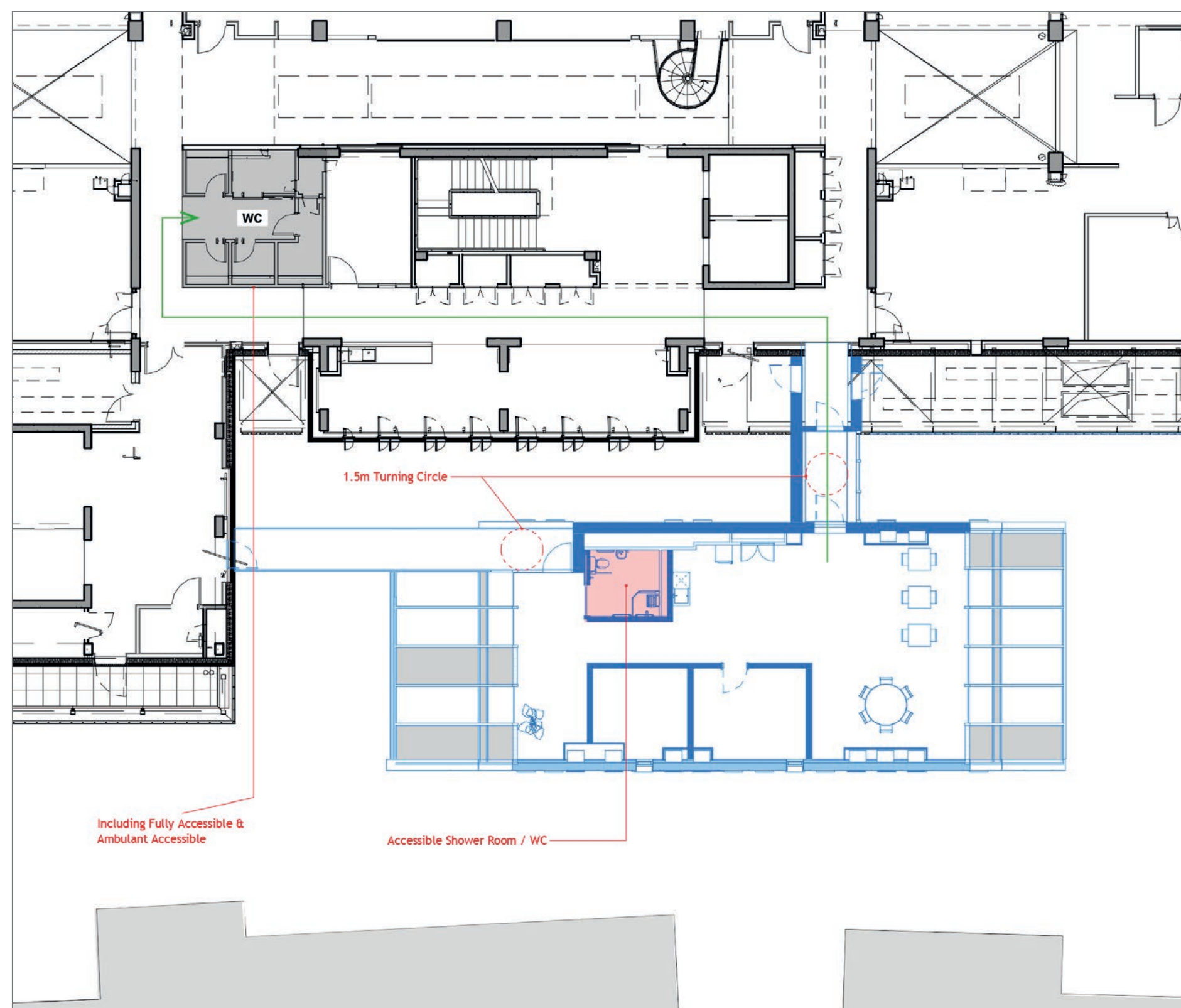
Level access is achieved at every level between SWC and the proposed 5th Quad via the link bridges. The link bridges are of a minimum 1500mm clear width to ensure that wheelchairs are able to turn and manoeuvre in front of doors, and that two people or a single person and a wheelchair can comfortably pass each other on the link bridge. The closest vertical circulation core is stair 1 in the main building, where 2no. lifts are available.

It is proposed that the door sets at each end of every enclosed bridge link are provided with a hold-open mechanism that is released in the event of a fire alarm or press button release by the users if it is preferred to have one or both doors closed. Stage 4 will include a check of the interaction of the doors in an open position in relation to ventilation and openable windows in 5th Quad. The doors include the necessary 300mm setback required by Building Regulations Part M Volume 2 3.10c/ BS 8300.Part 2 8.3.2

WC Provision

Level 4 of the 5th Quad is to be provided with a fully accessible WC and shower room including baby change facilities. Other WC groups with accessible WC can be found on each floor of the main building, adjacent to the main staircase, approximately 20m from the north-south bridge link.

This is further discussed in the Inclusive Access Statement.



4th Floor WC & Typical route to SWC WC cluster on each floor

6. Conclusion

The realisation of the 5th Quad is essential to maintaining the Sainsbury Wellcome Centre's scientific mission, international reputation and address the new and emerging demands placed on the educational/ research community

The additional floor space for educational research functions that support the original building includes new computational neuroscience research groups. This closely matches the policy ambitions of both the London Borough of Camden and the GLA New London Plan confirmed in March 2021. This is particularly the case in respect of Camden policy E1 and the London Plan Policy GG5. See extracts below:

L.B.Camden Local Plan (2017)

2.52 support the concentration of medical, educational, cultural and research institutions within Central London that form an integral part of the Knowledge Quarter;

5.23 Camden has a thriving knowledge economy with world-class institutions in science and creative industries. We will support the development of these industries and promote the development of the Knowledge Quarter around Euston and King's Cross.

New London Plan (2021)

Extract from GG5:

ensure that London continues to provide leadership in innovation, research, policy and ideas, supporting its role as an international incubator and centre for learning

Extract from E8 D and E

D Innovation, including London's role as a location for research and development should be supported, and collaboration between businesses, higher education providers and other relevant research and innovation organisations should be encouraged.

E London's higher and further education providers and their development across all parts of London should be promoted. Their integration into regeneration and development opportunities to support social mobility and the growth of emerging sectors should be encouraged.

The need for the new facilities have been carefully analysed by the Sainsbury Wellcome Centre and the School of Life and Medical Sciences. It has been separately reviewed by the Funders and UCL to precisely verify the requirements. The initial brief has been developed by ritchie*studio and the engineering design team in close collaboration with all parties resulting in the proposal presented in the Pre-Application document submitted to L.B Camden in November 2020, and the subsequent minor design development that has been undertaken consistent with the Pre-Application advice received from L.B.Camden, and set out in this detailed planning application.

The 5th Quad Support Building is the subject of an internal UCL dialogue in relation to Astor College, and UCL are also in discussions with UCLH with regard to the Middlesex Hospital Annex, wherein the two organisations have been engaged in a longer term dialogue to facilitate the redevelopment of the Middlesex Hospital Annex redevelopment.

The Sainsbury Wellcome Centre has proved itself to be a positive contributor to the Fitzrovia neighbourhood through the widely appreciated pocket park on the corner of Howland Street and Cleveland street, the public artworks and the access to (virtual and live) events in the lecture theatre and pre-covid participation by the Sainsbury Wellcome Centre in events such as Big Bang and Open House.

The realisation of the new 5th Quad support building will help SWC to continue to develop the core educational research functions and further contribute to the vibrancy of Fitzrovia post-Covid.

The new 5th Quad, although largely invisible from the surrounding streets, is consistent with the approach to infilling space taken by neighbouring redevelopments, whilst at the same time remaining respectful of the detail concerning daylight, sunlight and surface finishes that allow buildings to co-exist in close proximity in a denser urban setting.

The internal and external spaces produced by the 5th quad have been carefully considered, modelled and designed to ensure that they will produce a high quality of spatial experience and delight.

The finishes to the 5th Quad Support Building are an expression of the sustainability functions that relate to the building as well as an abstracted set of references of the neuroscience work underway by the Sainsbury Wellcome Centre science teams, woven into a wider expression of human sustainability.

We look forward to realising a building that will make a positive contribution to the functionality of the Sainsbury Wellcome Centre and the south courtyard setting within which the 5th Quad will be located.