2.3 Activity, Flexibility and Adaptability

Test fit layouts

The proposed design has been reviewed by specialist laboratory designers at Buro Happold who have also developed test fit layouts to consider the viability of the design for potential life science tenants.

The initial design was based around two main parameters. The first is the structural grid that is set out at 6.6m along the length of each wing. This relates to a laboratory benching setting out dimension of 3.3m when placed back to back. The window module to the elevation works with this 3.3m gird to provide daylight between the benching layouts. The structural grid running parallel to the wings of the building are at 7.5m centres which works for a more optimum office desk layout, therefore suitable for these areas to be at the ends of each wing.

The plan illustrated is a potential layout solution where the laboratory areas are located to the western side of the building. The layouts have evolved from the original submission which were based on solution with dual corridors and split write up space.

The rationalisation of the cores now allows for a single central corridor solution which gives more efficient use of the area. It also allows for improved daylight into the rooms which was another concern with the initial design.

The test fit layouts have also evolved to ensure there is no cross over from the goods lift access and the write up and entrance area. This was also a potential concern when assessing the original design.

Upper Floor Plan

Key: Indicative Internal Uses

- Write up Space/ Office
- Laboratory
- Colloboration Space

01 Access stair and lifts
02 Central WCs
03 Goods lift and back of house stair
04 Feature lab space
05 Northern wing central service riser
06 Northern wing tenant space
07 Secondary access / escape stair
08 Southern wing tenant space
09 Southern wing central service riser

2.3 Activity, Flexibility and Adaptability

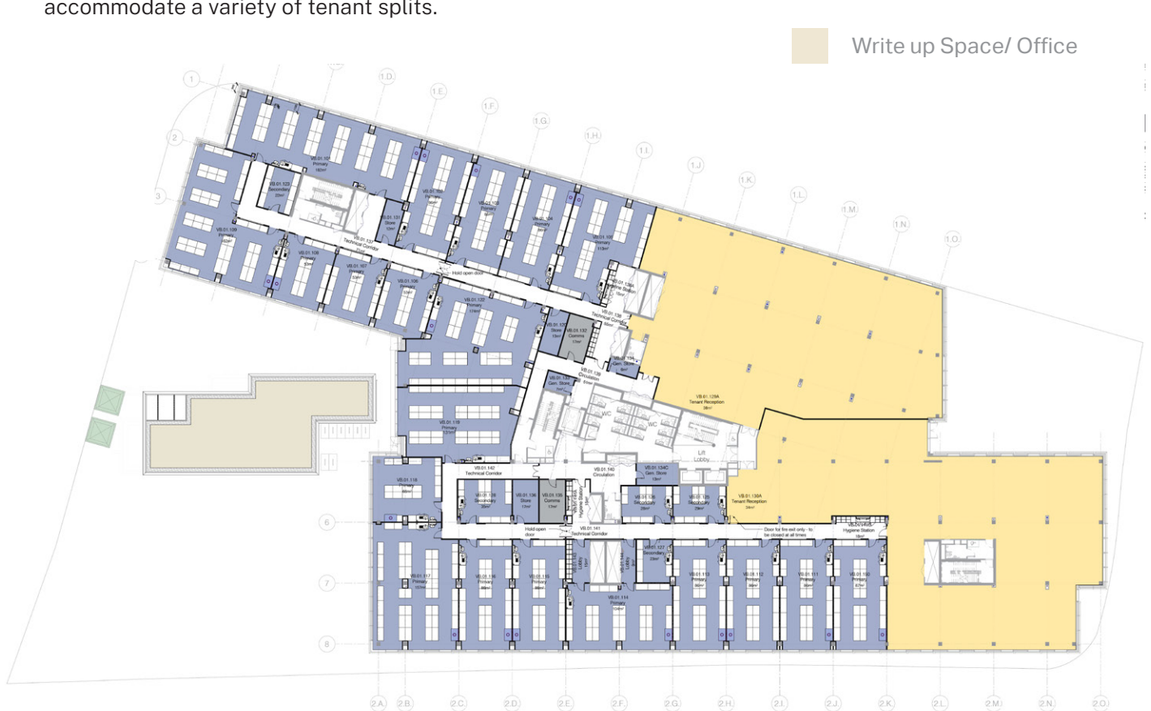
Flexibility and adaptability

Although test fit designs have been progressed to suit a preferred life sciences layout option, the scheme is proposed to be flexible to allow for a range of fit out solutions.

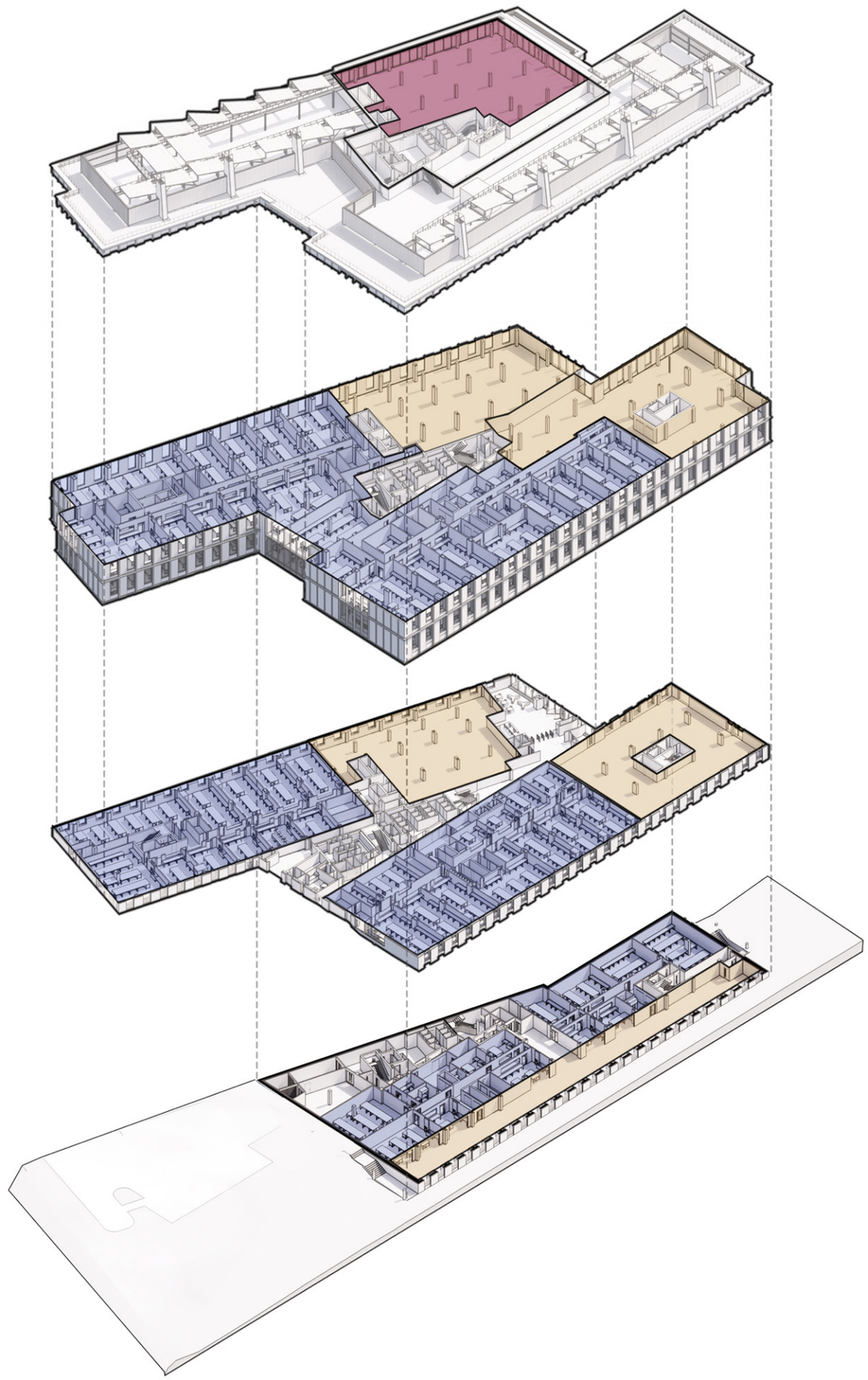
The rational structural grid and efficient rectangular form of the accommodation wings of the building allow for a variety of lab arrangements. This is supported by the services strategy with vertical distribution of services coming through the building from the plant areas above.

The adaptability of the building extends to the top floor and lower level where uses could vary from office use to various amenity, catering or gathering spaces.

While the proposed base case test-fit layout is shown with one tenancy per wing, the building is able to accommodate a variety of tenant splits.



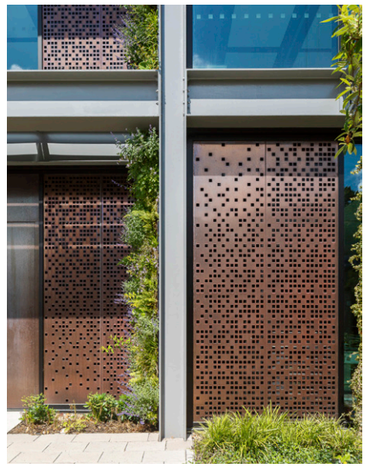
Lab Test fit detailed layout

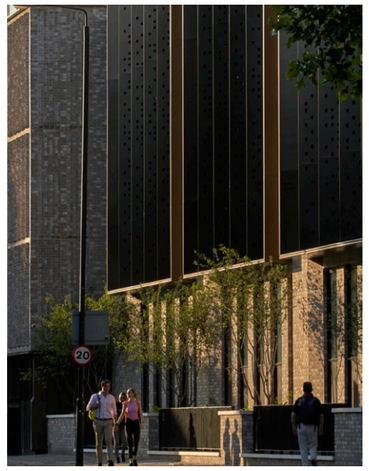


2.4 Facade, Materials and Finishes

The facade has been developed to create a strong sense of rhythm to the linear wings of the building. This is accentuated along the upper levels of the building by providing a depth and relief to the regular fenestration. Protruding vertical fins are proposed to the south side of the windows which provide solar shading to the glass whilst enhancing the facade depth. Protruding horizontal profile bands are also proposed to enhance the relief of the elevation and create bays that frame each window with an adjacent solid panel. These key concepts have been retained within the updated design.

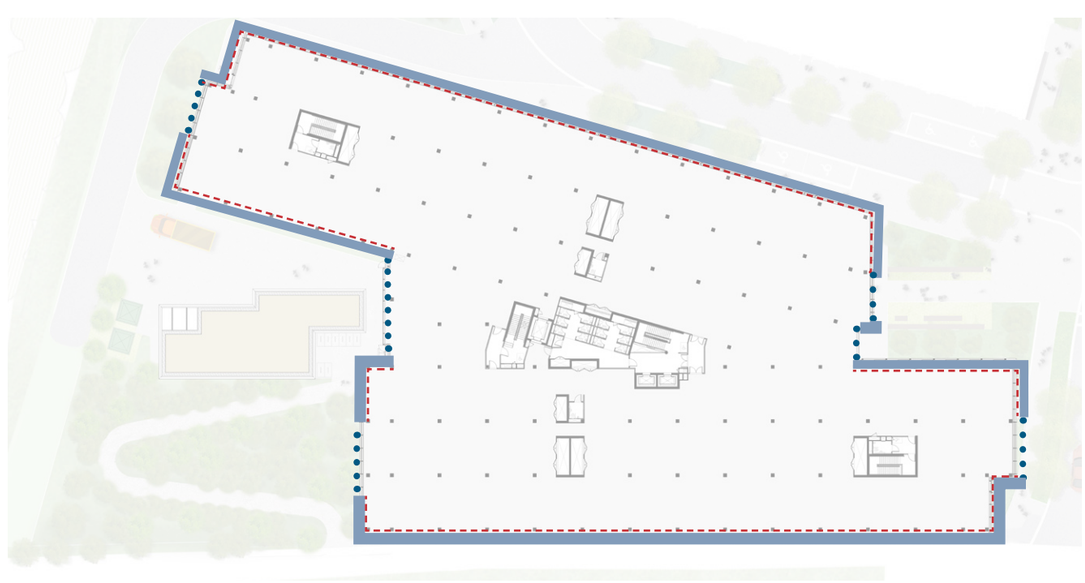
The facade is proposed as a curtain walling system with integrated metal spandrel panels to the upper volume with feature profiled spandrels in folded aluminium. The use of metal was selected to create an elegant and sophisticated facade. Metal enables refined detailing of the profiled fins and bands which are a prominent feature of the facade. Other advantages in using metal (as opposed to precast concrete) As well as detailing advantages over alternatives, such as precast concrete, there are also embodied carbon benefits in the use of metal cladding. The updated design looks to further improve on the embodied carbon to the facades.





Rhythms of metal, brick and glass with warm tones

Typical Levels 00/01



Typical Levels 02/03

- **01 Brick work Cladding System:**
- **02- Curtainwalling with metal spandrel panels**
- **02- Curtainwalling with metal spandrel panels** *(Above)*
- **03 Glazing Screen Systems**
- **04 Insulated SFS Wall System**

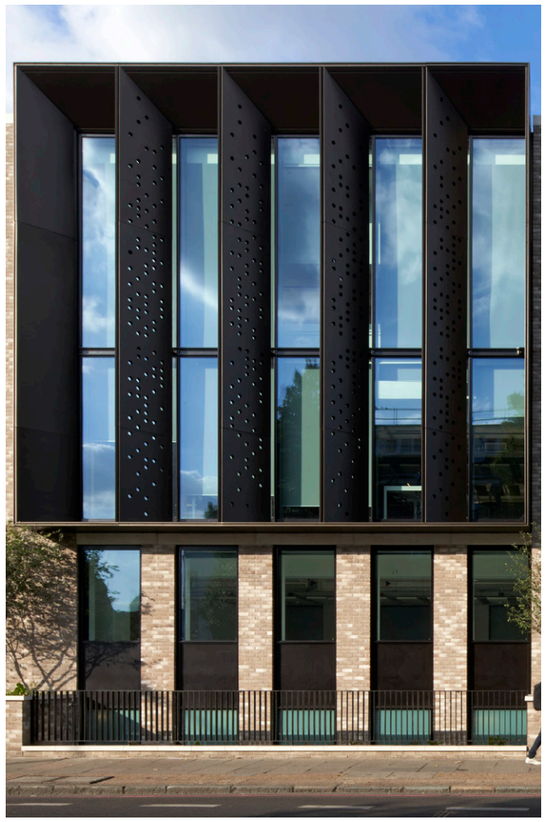
2.4 Facade, Materials and Finishes

In order highlight the intended elegance of the upper volume, a brickwork solution is proposed to the lower levels. This is proposed as a suitable robust finish for ground level but also to provide a contrasting textured and more natural material. This more natural material is intended to blend with the surrounding ground plane to highlight the contrasting qualities of the main volume above.

The tones of the facade are proposed to be slightly de-saturated yet with a gentle warmth and some stronger tones enhancing the sense of depth. A darker base and lighter upper volume is proposed to accentuate the character of the materials. The introduction of texture to elements such as spandrel panels above and below the glazing is intended to add further interest and refinement.

Metal soffit areas to the overhanging elements at the gable ends of each wing. It is proposed that the soffit colour is consistent with the upper cladding to highlight this volume. A warmer colour is proposed to the soffit of the extended roof edge to the top floor, visible within the forecourt which is also a metal soffit.

The pavilion building was planned to be constructed of a carbon neutral innovative material - to be developed as a solution to similar outbuildings across the development. Due to issues of reliability of this product, the initial concept to use a carbon neutral block in diagonal hit and miss configuration to allow light and air penetration has been amended to a perforated aluminium sheet cladding solution.



A rhythm of lower level brick with upper level metal profiles at London South Bank University.

2.4 Facade, Materials and Finishes

Levels 00 & 01 -

Brickwork

01

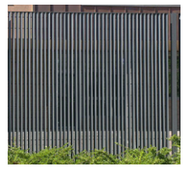
Levels 02 & 03 -

Metal Spandrel Panels & Aluminium facde panels

03 04 05

Screening, Soffits, Roof

Vertical Louvres



06

Metal soffit panel

07

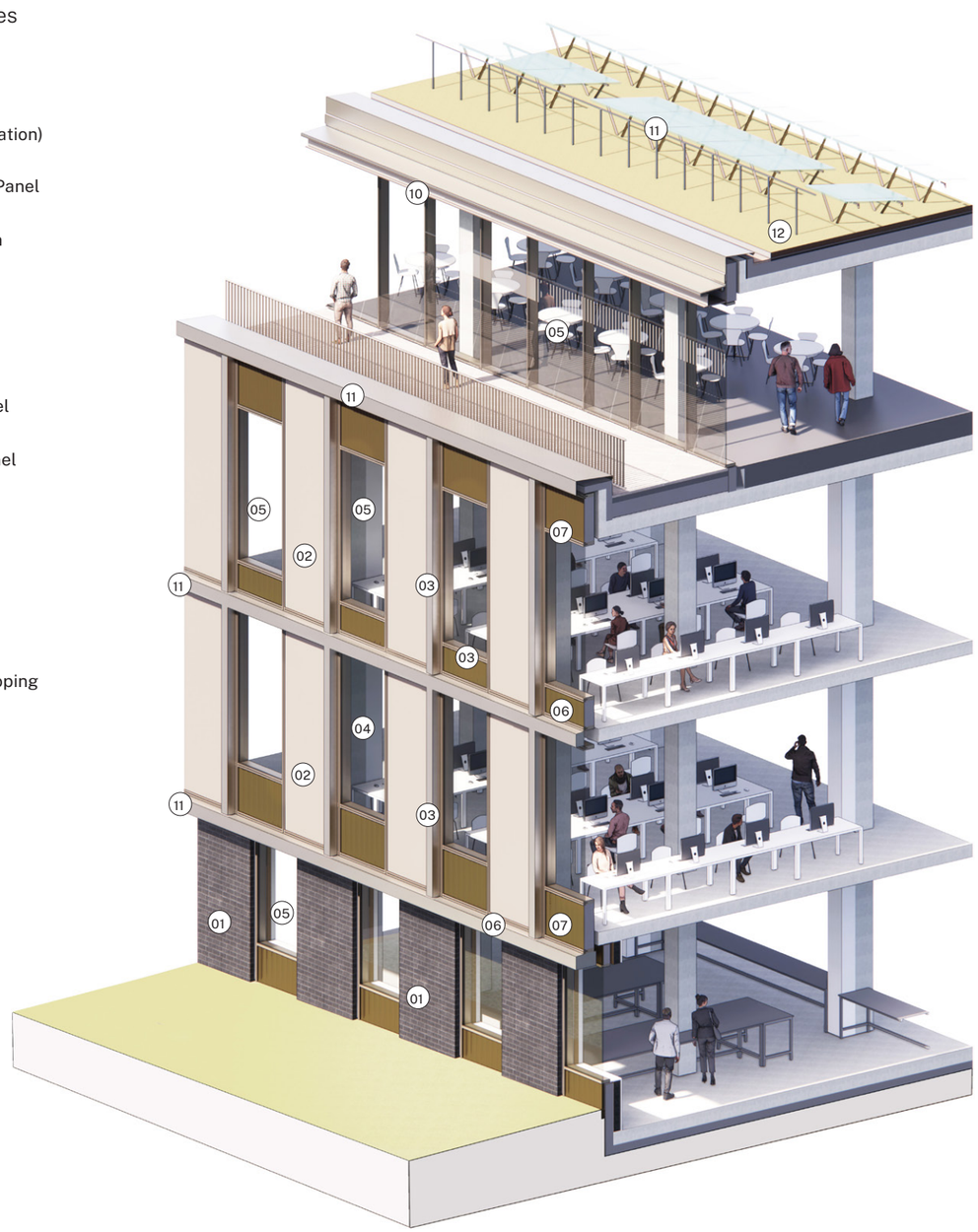
Green&Brown Roof

08

2.4 Facade, Materials and Finishes

Northern Wing Bay Studies

01 Brickwork (with insulation)
02 Flat Metal Spandrel Panel
03 Folded Aluminium Fin
04 Triple Glazing
05 Double Glazing
06 Ribbed spandrel panel
07 Profiled spandrel panel
08 Plant Screen
09 Profiled Mullion Cap
10 Metal Canopy
11 Profiled aluminium coping
12 Sedum Roof



Typical North Bay Study

Entrance Bay Study (northern wing)