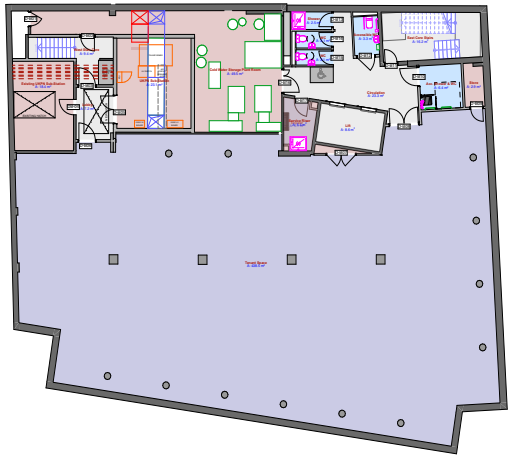
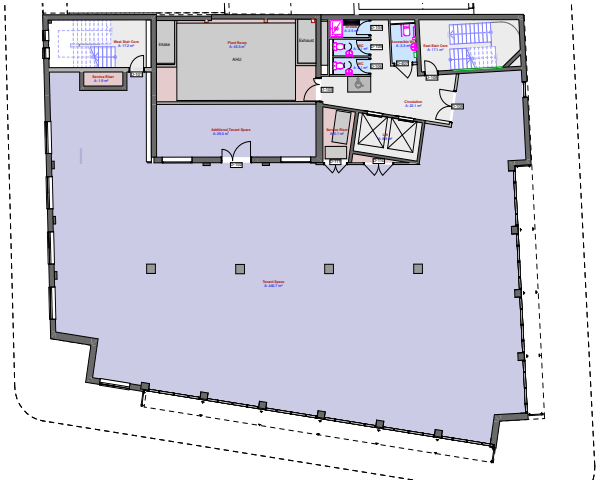
Proposed Layouts



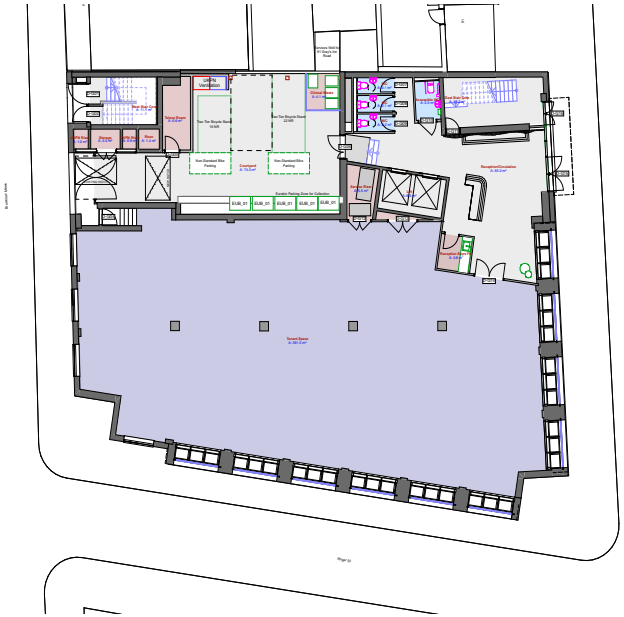
Basement: GEA 687m²

- Tenant area suitable for laboratory and office use.
- New second UKPN Substation with reconfiguration of lobby for hatch access.
- Reconfiguration of core area to provide sanitary accommodation.



First Floor: GEA 548m²

- Reconfiguration of core area to provide sanitary accommodation.
- Tenant area suitable for laboratory and office use.
- Infill of rear courtyard to provide plant space and additional tenant space.



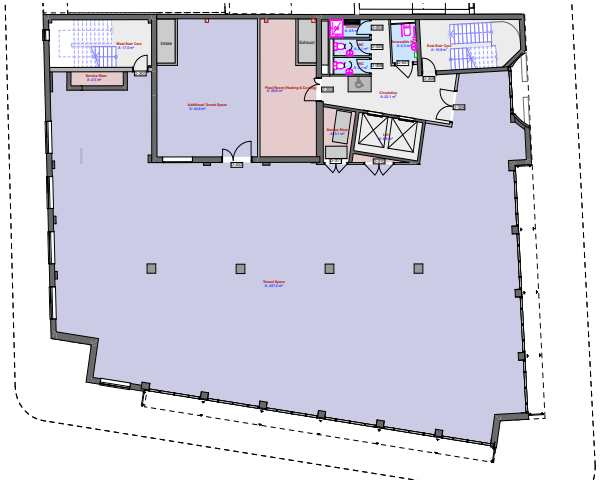
Ground Floor: GEA 676m²

- Reception & Collaboration space at Main Entrance.
- Reconfiguration of core area to provide sanitary accommodation.
- Tenant area suitable for laboratory and office use.
- Courtyard to provide secure cycle storage and waste storage.
- Telco Room and UKPN Ventilation ducts accommodated within Courtyard.

Second Floor: GEA 548m²

- Reconfiguration of core area to provide sanitary accommodation.
- Tenant area suitable for laboratory and office use.
- Infill of rear courtyard to provide plant space and additional tenant space.

Proposed Layouts

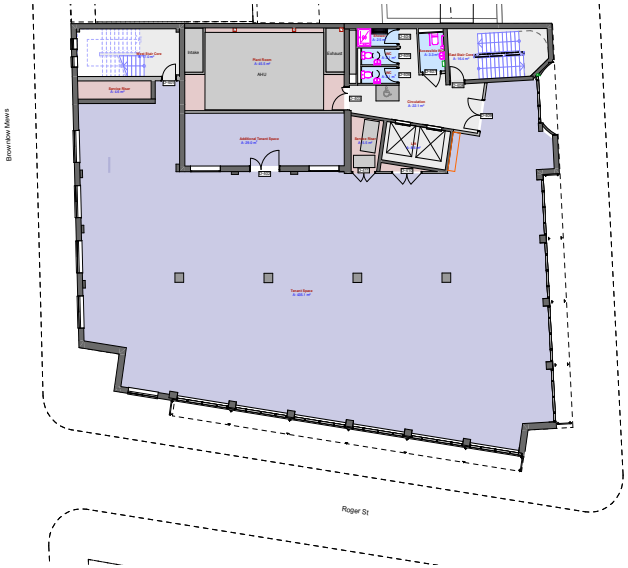


Third Floor: GEA 646m²

- Reconfiguration of core area to provide sanitary accommodation.
- Tenant area suitable for laboratory and office use.
- Infill of rear courtyard to provide plant space and additional tenant space.

Roof: GEA 159m²

- Extension of East Core stairs and passenger lift to provide inclusive access to roof level.
- Lobby with WC and Store facilities.
- External Roof Terrace
- Reconfigured Plant Enclosure with flue enclosure on West side exhausting at high level.



Fourth Floor: GEA 646m²

- Reconfiguration of core area to provide sanitary accommodation.
- Tenant area suitable for laboratory and office use.
- Infill of rear courtyard to provide plant space and additional tenant space.

4.4 Specialist Consultants

The following specialist consultations have taken place during design development and their recommendations have inputted into the proposals.

Daylight/Sunlight Analysis:
Gordon Ingram Associates gave preliminary advice to the design team as to the parameters for extending the building so as not to negatively impact on neighbours amount of daylight/sunlight. In their initial studies for the building they advised a 'bubble', using their vu-city software, looking at the container for which an extension should sit.

This initial assessment indicated a rear courtyard infill should be acceptable in terms of daylight/sunlight analysis.

GIA have subsequently carried out testing of the proposals the output report of which is part of this planning application.

Background Noise Levels:
Hann Tucker have carried out background noise tests for the building, reviewed preliminary plant proposals and prepared guidance for location of plant and mitigation measures to ensure the proposals are in line with London Borough of Camden standards.

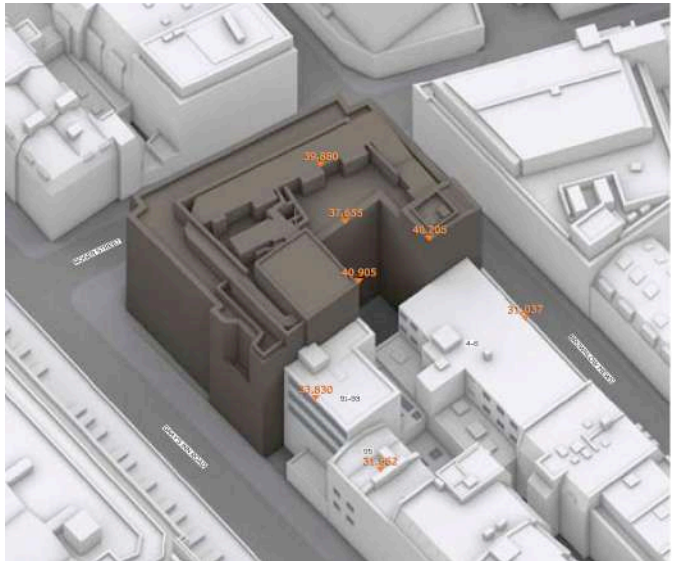
The most sensitive locations for background noise is the rear courtyard and those areas within close proximity to residential.

Following their advice a solid wall is proposed to the rear courtyard infill and an acoustic louvre screen is proposed for the plant enclosure at roof level.

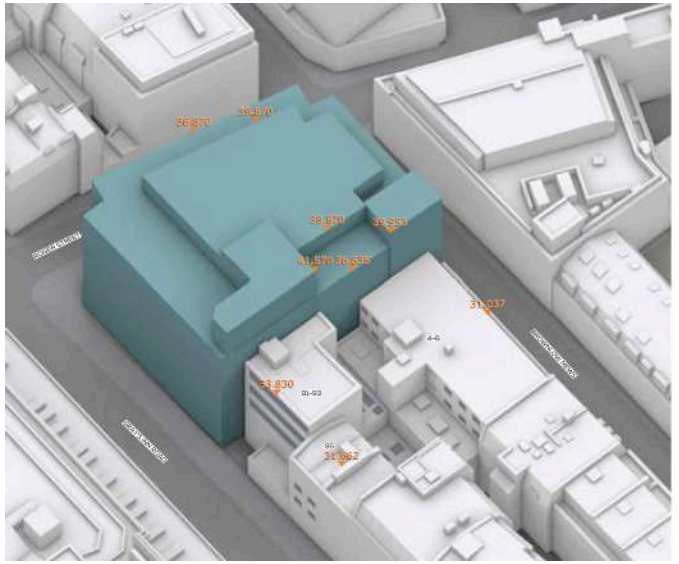
Sizing of acoustic attenuation and location of the exhaust flues has been considered in the rooftop plant enclosure proposals.

Flue Dispersal Analysis:
KJ Tait and their specialist adviser, RWDI, have carried out Desktop studies for location and height of the fume extract flues to ensure standards will be met. Their recommendations have been followed.

Due to the multi-tenancy proposal for the building individual fume extract flues per floor are proposed.

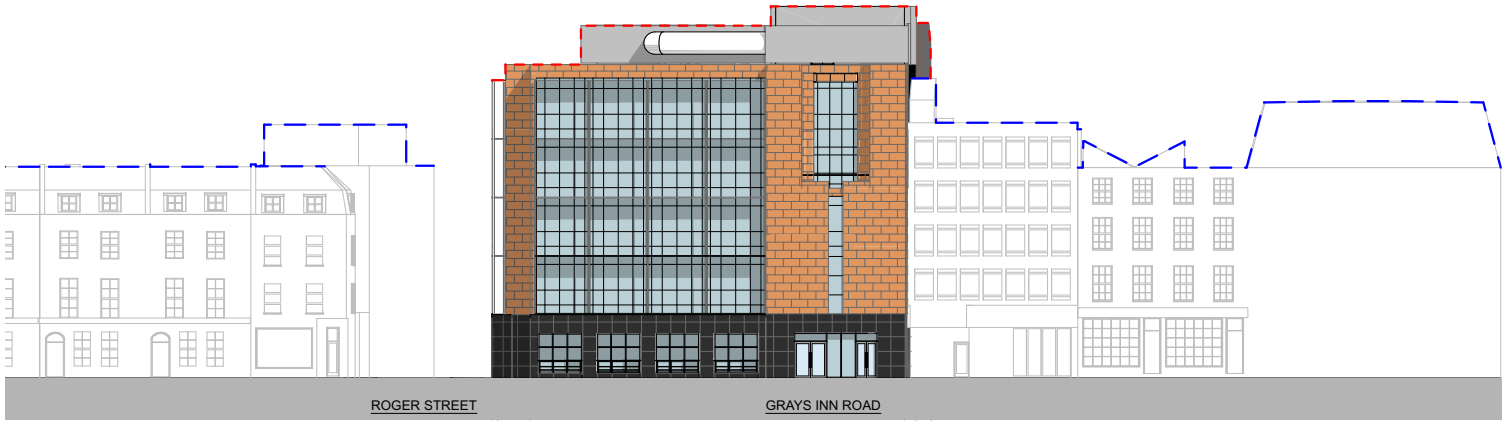


Vu-City review of existing

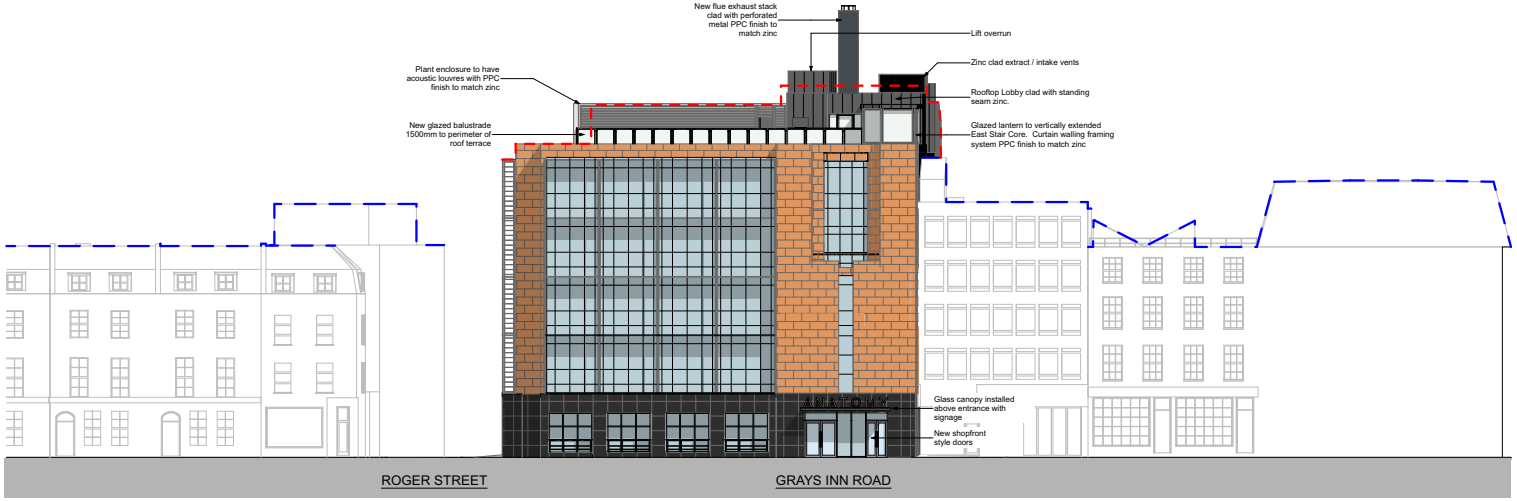


Vu-City review of proposed

4.5 Scale & Appearance



Existing Front Elevation of Gray's Inn Road

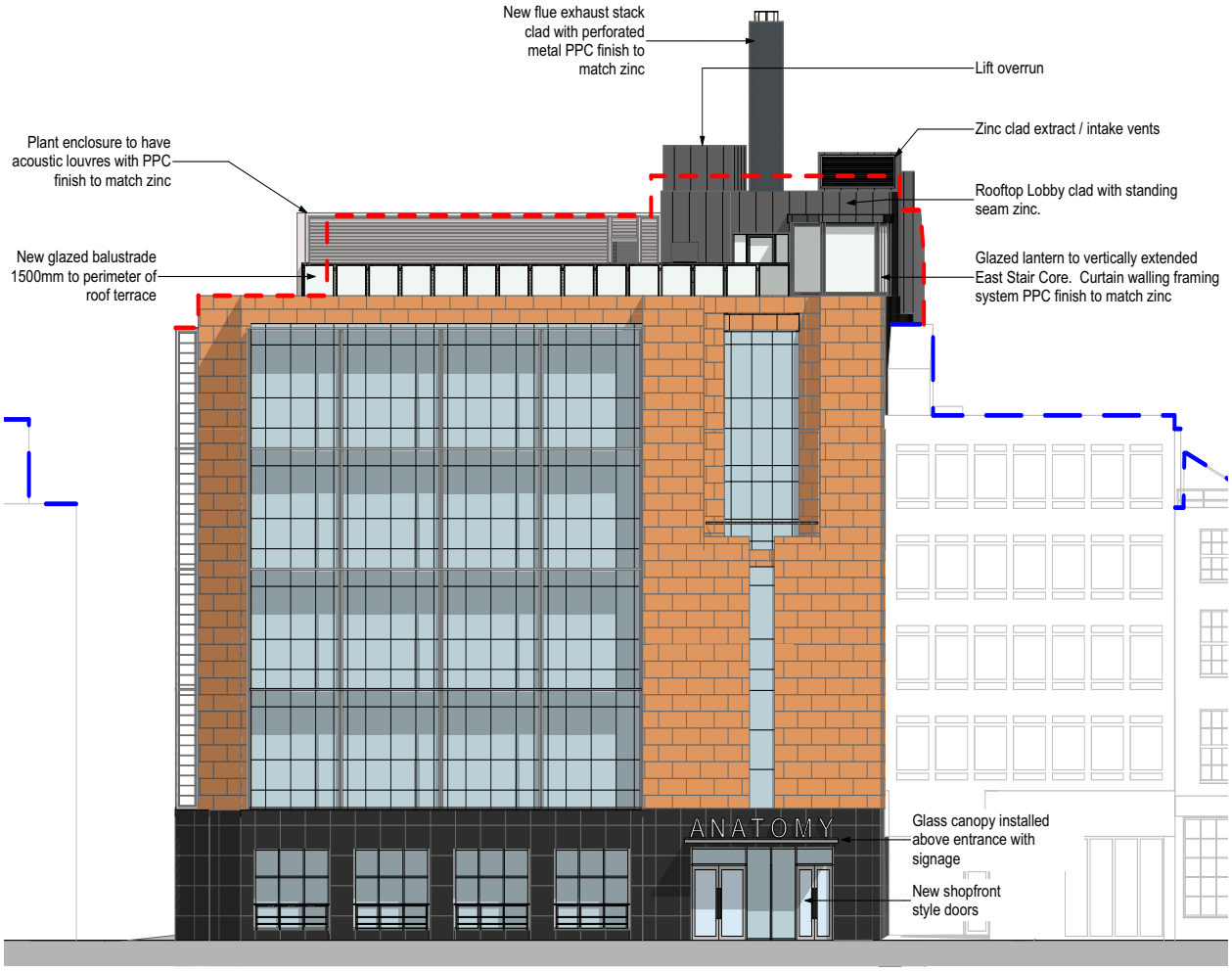


Proposed Front Elevation of Gray's Inn Road

Roof Terrace Example

Zinc Cladding Example

Glazed Canopy Example



Proposed Front Elevation of Gray's Inn Road

Front Elevation

Proposals:

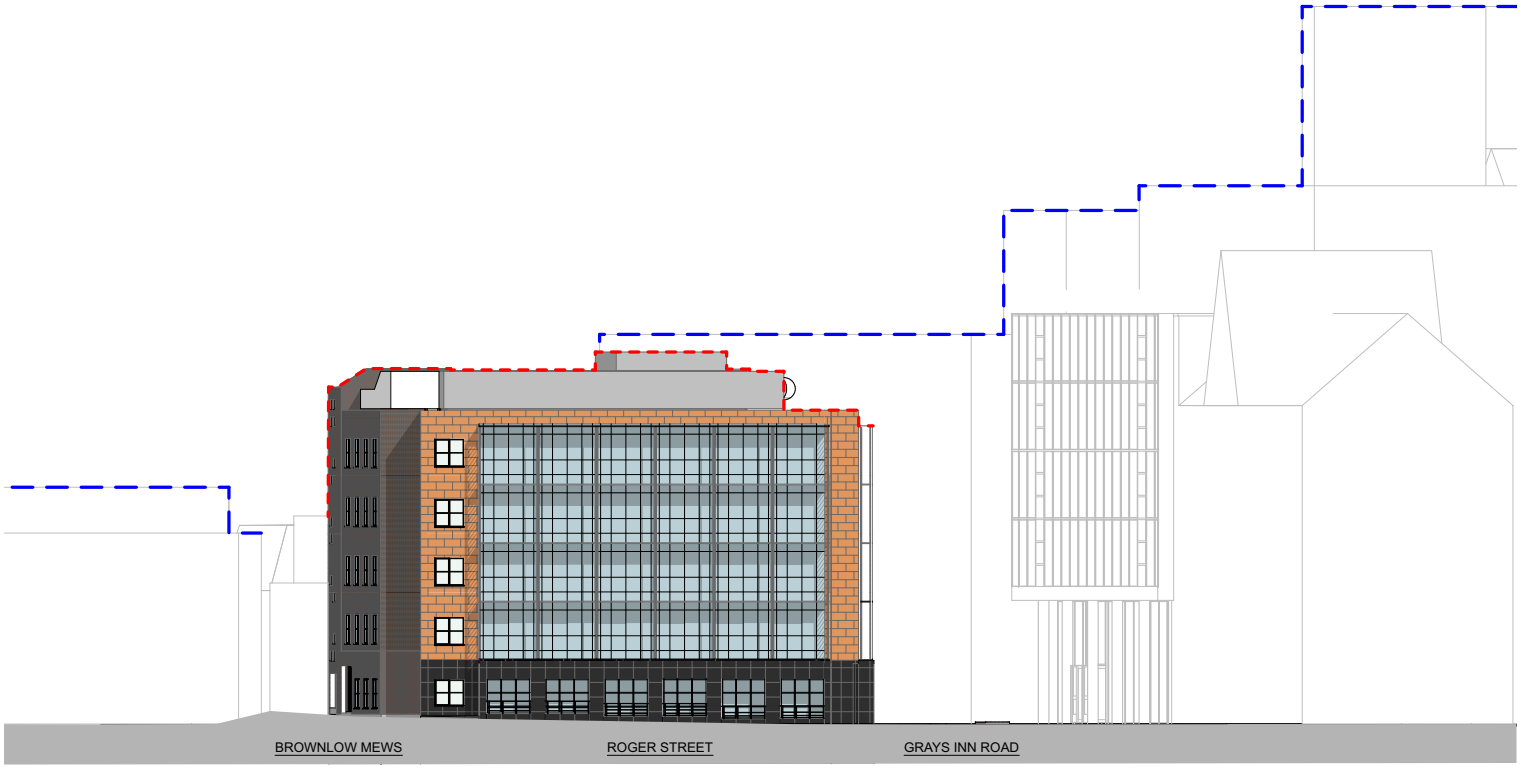
- Uplift of Entrance: New shopfront glazing and entrance doors; signage and glass canopy.

- Roof Terrace:
  - To enhance the amenity and wellbeing for the buidling occupiers a roof terrace is proposed on the East side of the building overlooking Gray's Inn Road.
  - The Terrace has been located on the east facade to minimise overlooking of residential properties and is also set back from the Roger Street Facade for this reason.
  - The terrace will have seating and tables, and mobile planters
  - A 1500mm high glazed balustrade is proposed around the terrace.

- East Stair Core Extended to roof level - to have glazed curtain walling and zinc roof.

- Roof Level lobby, lift core and ventilation risers to be clad in standing seam pre-patinated zinc reminiscent of the traditional rolled lead of the conservation area.

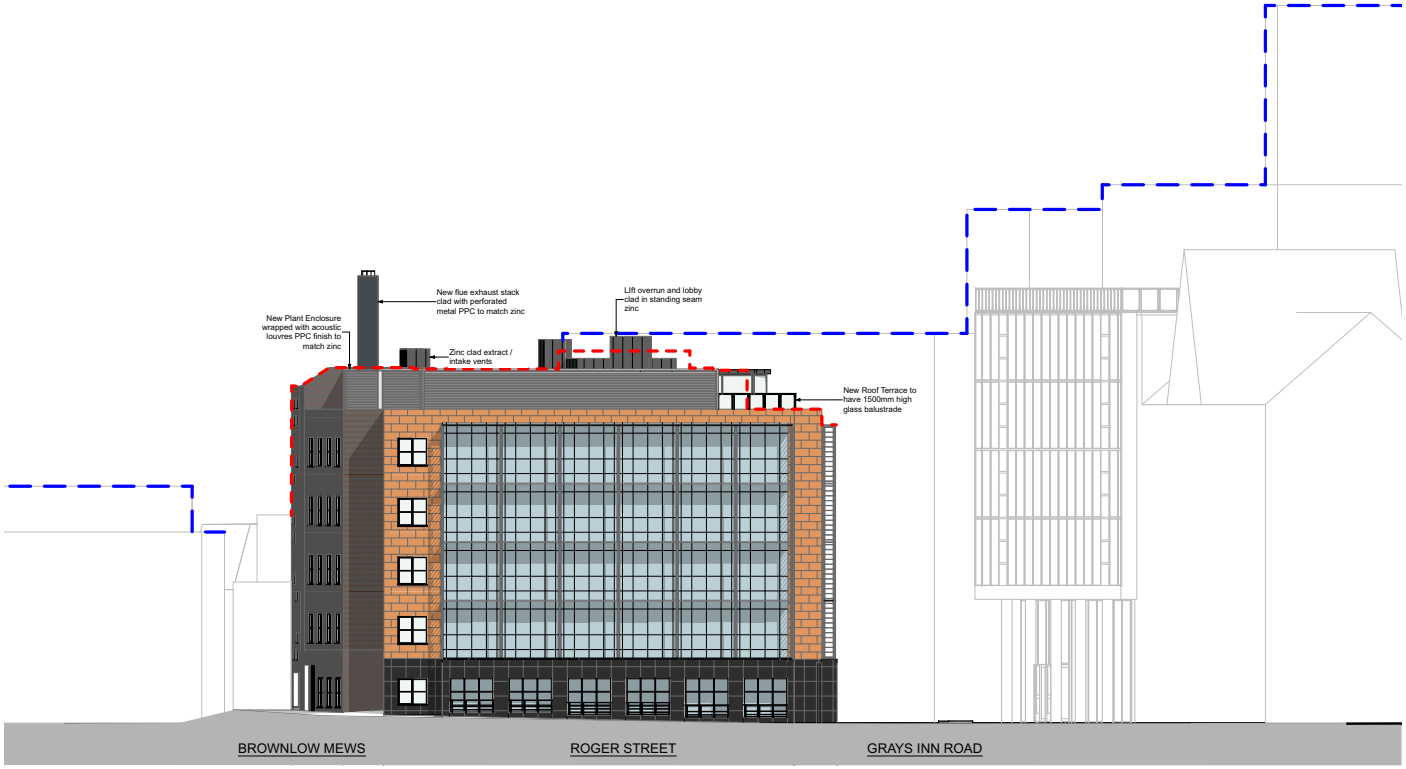
- The plant enclosure is to have acoustic louvres around the perimeter with PPC finish to match the zinc.



Existing South Elevation - Roger Street

Birds Eye View - increasing scale to ITN Building

Acoustic Louvres Example



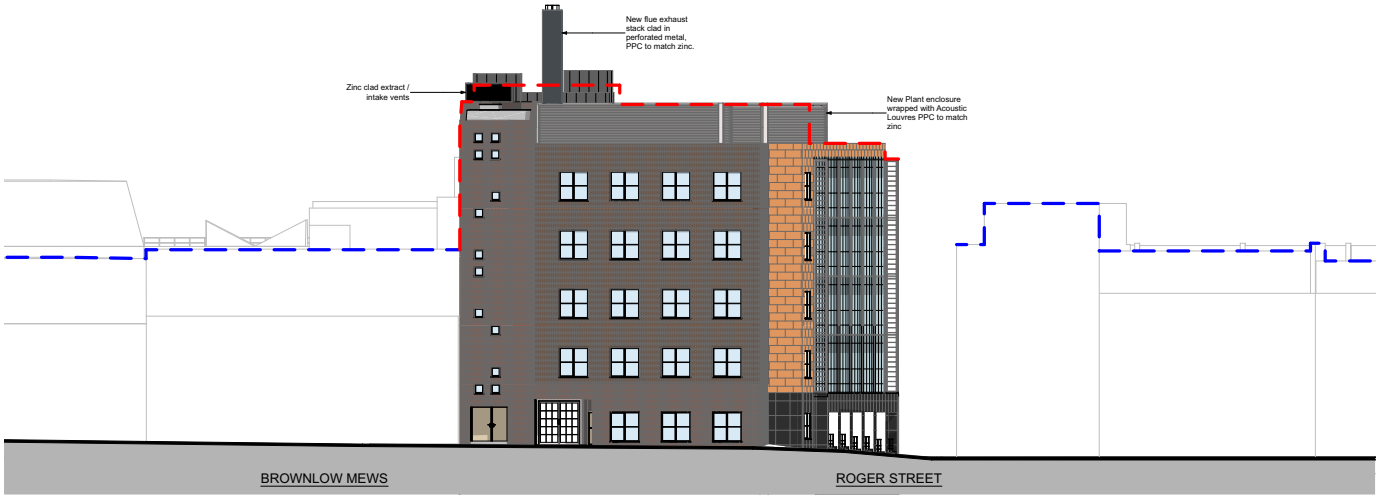
Proposed South Elevation - Roger Street

South Elevation - Roger Street

Proposals:

- Roof Terrace
- Roof Level lobby, lift core and ventilation risers to be clad in standing seam pre-patinated zinc. The pop-ups for the ventilation ducts and lift overrun have been kept to a minimum and are generally well set back from the visible elevations.
- Fume Hood Exhaust Flue Stack:
  - Recommended location on west side of building to improve dispersal performance. This is due to the proximity and height of the ITN building directly across Gray's Inn Road.
  - The 6Nr flues are grouped together in a circular configuration and taken up to the required height for dispersal performance.
  - An extruded aluminium cladding PPC finish to match the zinc cladding will shroud the flue enclosure. The perforated nature of the material improves air flow.
- The new plant enclosure is completely contained with acoustic louvre panels. This is an improvement on the existing condition considering the level of exposed ductwork and roof clutter.

Existing West Elevation - Brownlow Mews



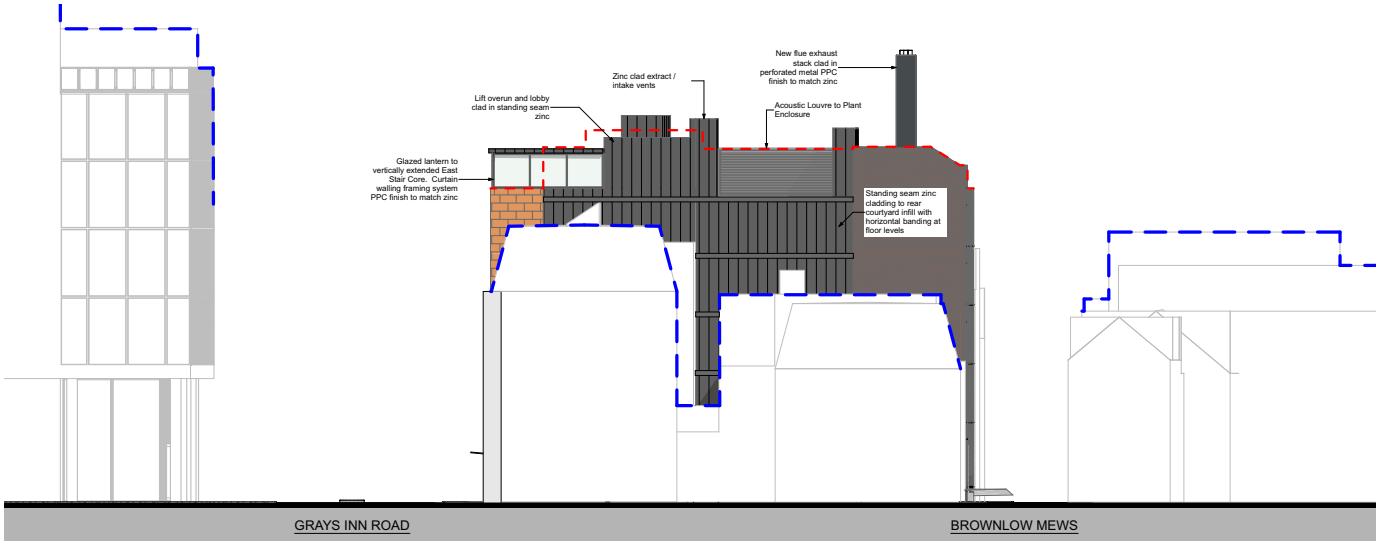
Proposed West Elevation - Brownlow Mews

West Elevation - Brownlow Mews

Proposals:

- Amendments to this facade are only at roof level as described previously.

Existing North Elevation



Proposed North Elevation

North Elevation - Courtyard Infill

Proposals:

- Courtyard Infill:
  - It is proposed to infill the rear courtyard from 1st to 4th floors.
  - At roof level the intake and exhaust ventilation shafts are required to extend above the parapet of the adjacent roof to enable the louvre openings to face away from each other to ensure no mixing of air takes place.
  - A glazed curtain walling lantern is proposed on top of the East Core Stair that has been extended to roof level.
  - The courtyard infill and East Circulation Lobby is to be clad in standing seam zinc. Recessed horizontal banding at slab level is proposed to give detail and interest to this facade.
  - The infill wall is solid to prevent break out noise from plant areas.
  - There is limited access to this facade therefore no fenestration is proposed.

Google Earth View of existing North Facade

4.6 Courtyard Infill

The main driver for the courtyard infill is to accommodate a significant proportion of MEP Plant required to transform 85 Gray's Inn Road into a serviced laboratory building.

Proposals:

Ground Floor:

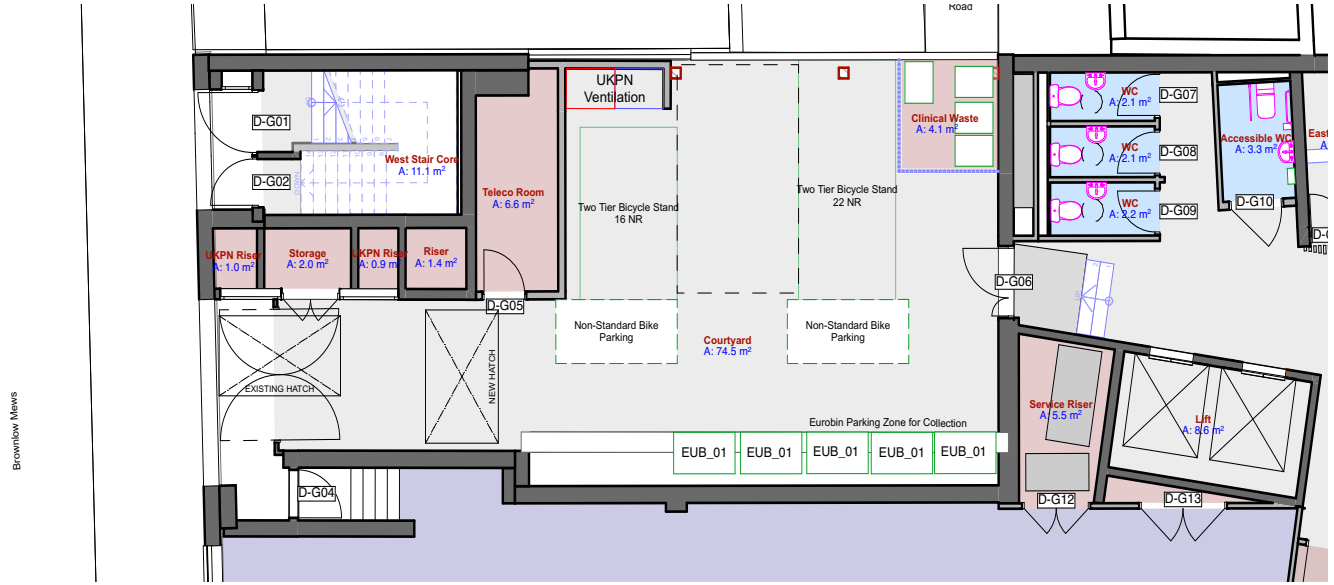
- At Ground Level the courtyard is to remain an external space for bicycle parking and general servicing including: waste management; clinical waste store and deliveries. There is to be a direct access to the reception area. A telecommunications services room will also be housed in this area to meet the sustainable connectivity aspirations for the 'Wired' criteria. There are also ventilation shafts and an access hatch to serve the new UKPN substation.

- Provision of 38Nr two tier cycle racks and 2Nr cycle stands for non-standard bikes. Given the projected occupancy of approximately 265 persons this number is below the number required in the London Plan for offices however is above that required for Research & Development. It exceeds the BREEAM requirement.

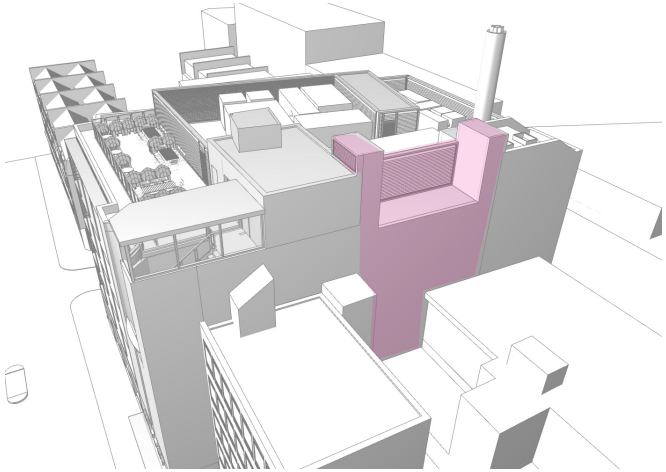
First to Fourth Floors

- The proposal is to infill the rear courtyard to the site boundary from first to fourth floor. The majority of the accommodation will be used for MEP Plant spaces including AHU's on two of the floors. Intake and exhaust ducts will be taken down from roof level to serve these AHU's.

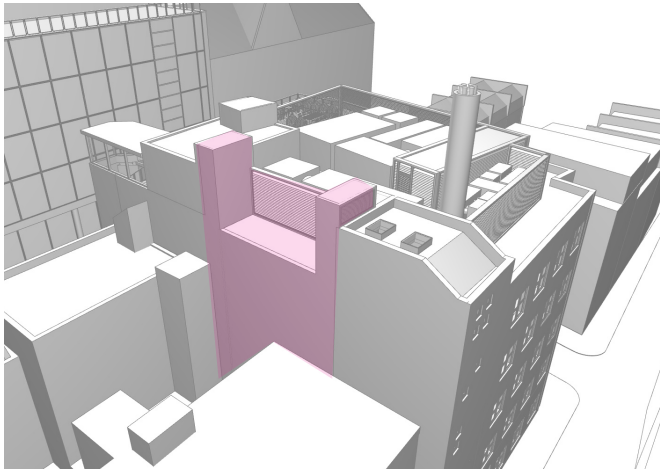
- A small amount of net area is provided within this proposal that serves to complement the laboratory accommodation. This may be used for tenant plant.



Ground Level Courtyard layout



View of rear courtyard infill



View of rear courtyard infill

4.7 Plant Strategy

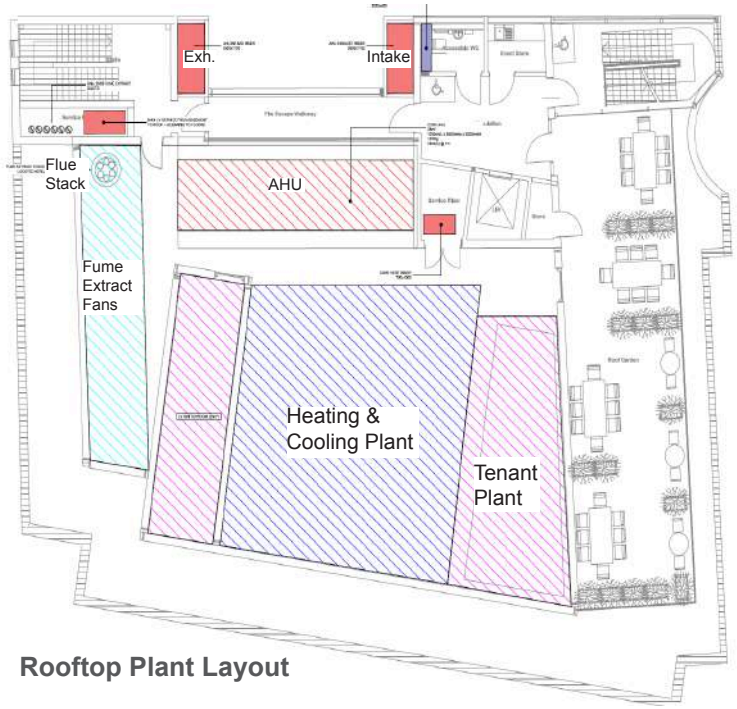
The creation of space fit for state of the art laboratories places high demands on servicing and air handling plant.

Modern laboratories are highly serviced and environmentally controlled spaces driven by the science which requires significant air change rates to provide the safety levels required and protection to the scientists and building users as well as dealing with the often high cooling loads associated with specialist equipment. This requires large amounts of plant and area allocation to provide the following:

- Dedicated AHU plant for laboratory spaces
- Fume extract plant for the safe discharge of exhaust air from specialist laboratory containment devices, e.g, fume cupboards
- Heat rejection plant
- Good access for regular maintenance

For efficiency of installation and ongoing operation, it would be preferable to have all the plant required to be centrally provided at roof level however there is not enough space at roof level and to do so would be detrimental to the massing of the building and noise criteria. An approach has therefore been made to locate the majority of the plant at roof level and also have additional plant located in each level of the courtyard infill.

To limit the size of individual air handling units (AHU), the strategy is to provide multiple AHUs to serve discrete areas of the building, with Tenant area AHUs located on multiple levels of the infill and the Common area AHU located at roof level.



Rooftop Plant Layout

A small portion of the roof plant enclosure extends over the courtyard infill roof.

No additional plant can be located within the building, as a reduction in floorspace will have a detrimental impact on the commercial viability of the re-purposing of this building for the Bioscience Sector.

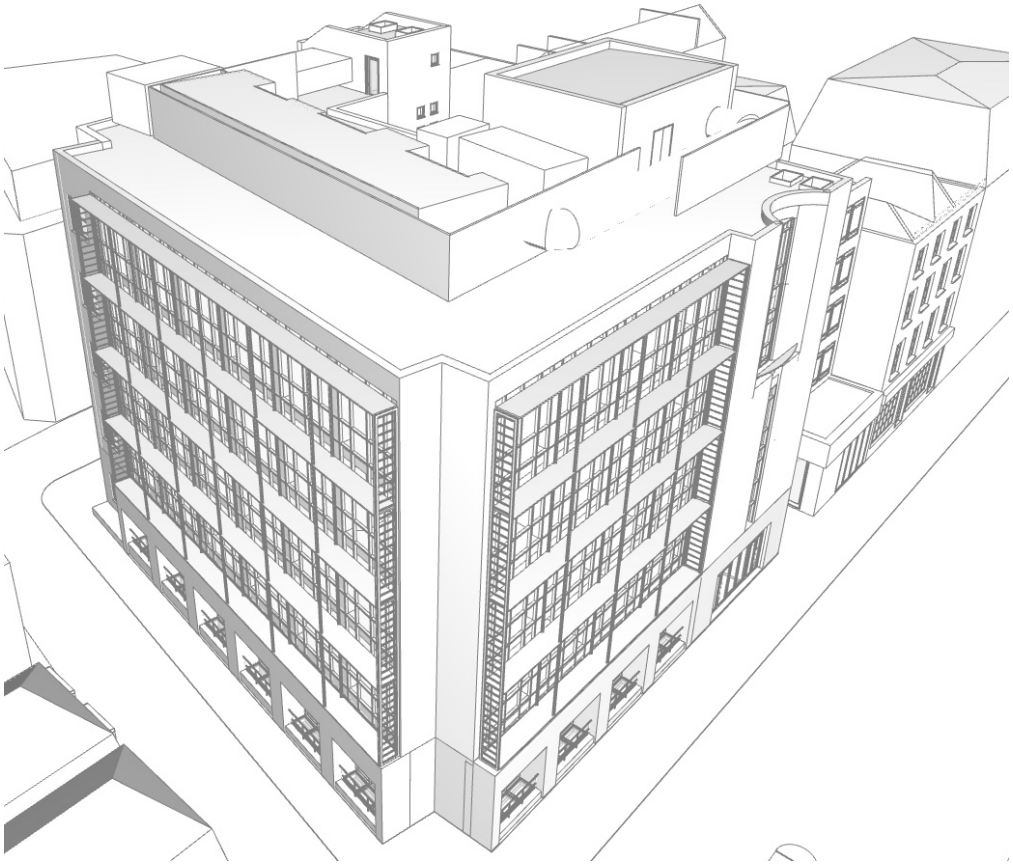
The plant enclosure is reasonably similar in terms of height and extent to the existing enclosure. It will remain set back from the building edge to minimise impact and the new acoustic louvre system will improve the external appearance.

To meet likely capability demands for prospective tenants individual fume cupboard extract is to be provided for each floor which will be required to exhaust at high level to atmosphere and meet requirements for dispersion. We are currently estimating the height of these flues to be circa 9-10m above plant enclosure roof level.

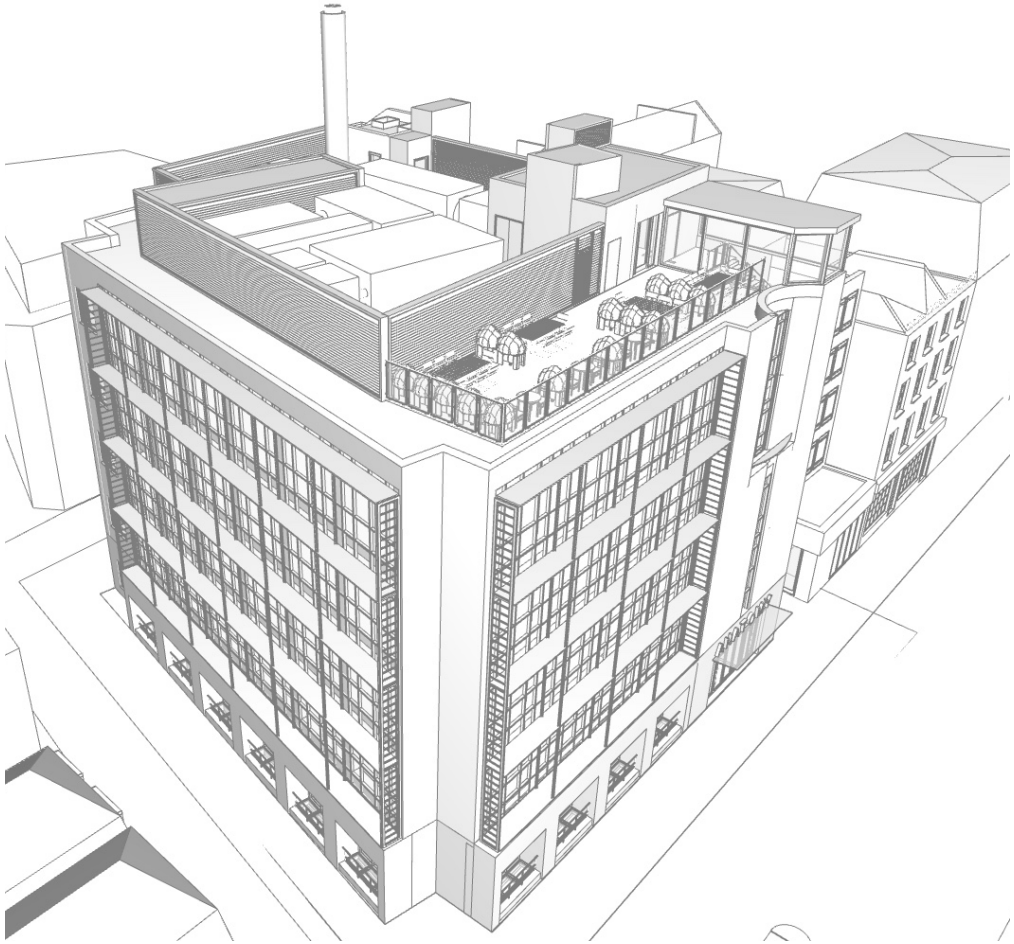
An architectural housing for a combined flue enclosure is proposed to be in the West section of the Plant Enclosure. The height of the flues is indicative at this stage based on desktop analysis by a fume dispersal specialist. Further analysis will be carried out at a later design stage that will determine the required heights and performance of the flues. The recommendation to have the new fume exhaust to the west to avoid interference with air flows around the ITN Building (200 Gray's Inn Road).

4.8 Perspective & Street Views

South East Views



Existing



Proposed

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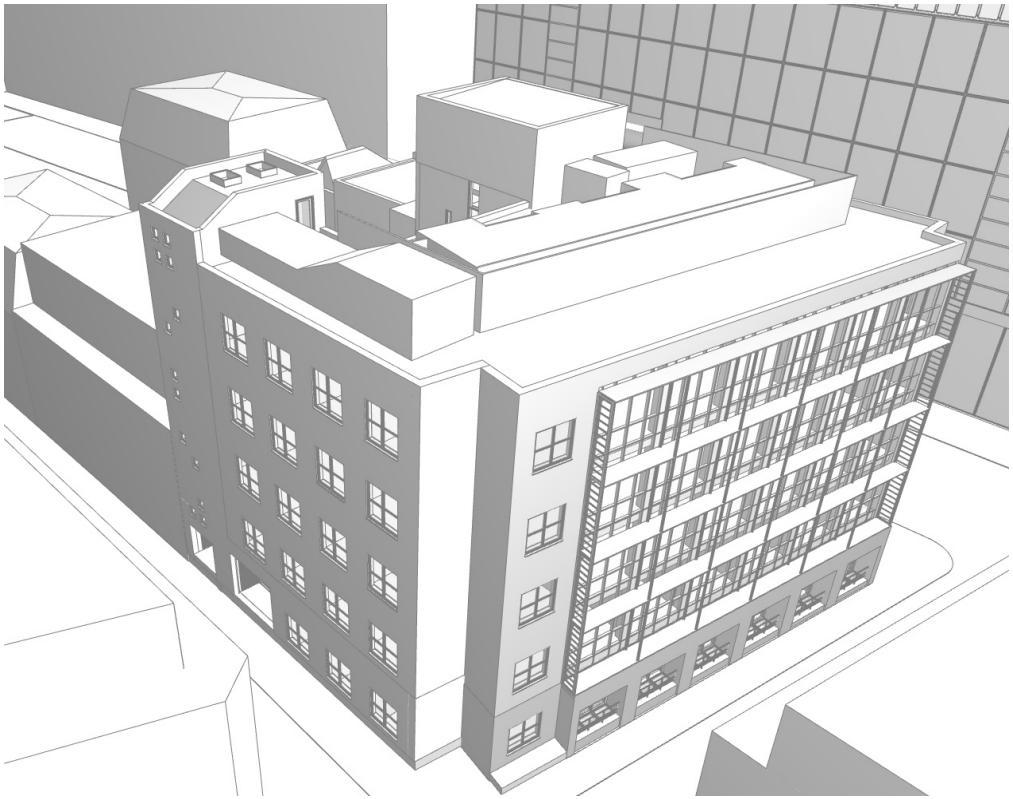
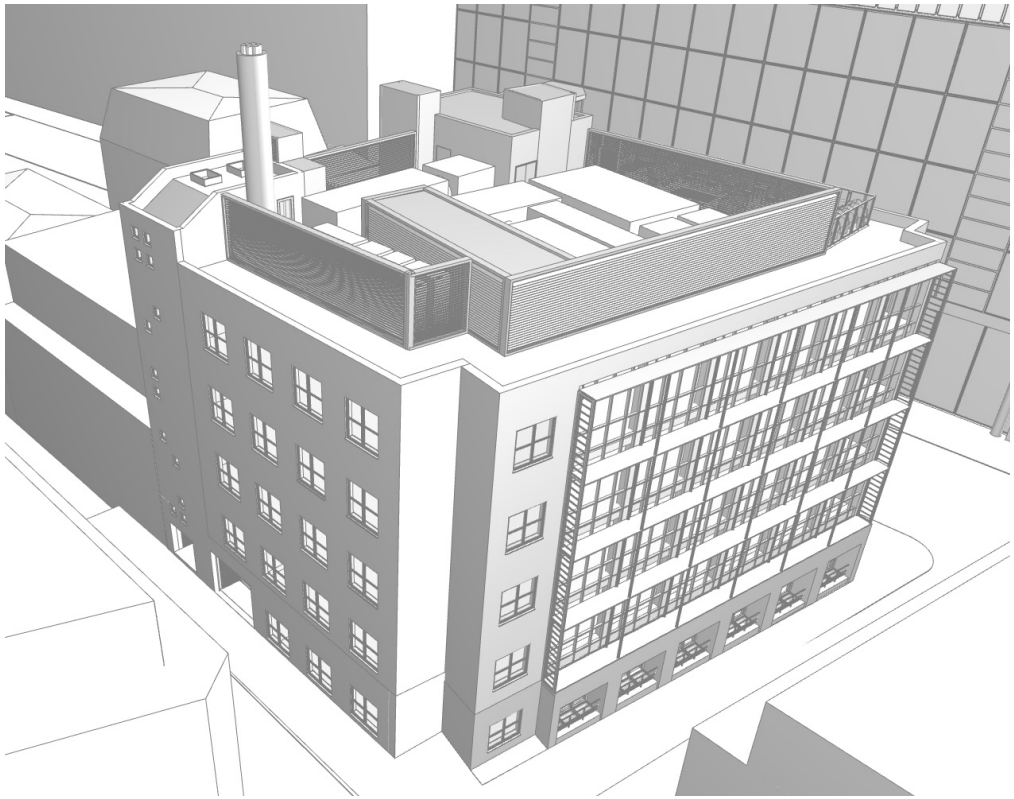
South West Views



Existing



Proposed

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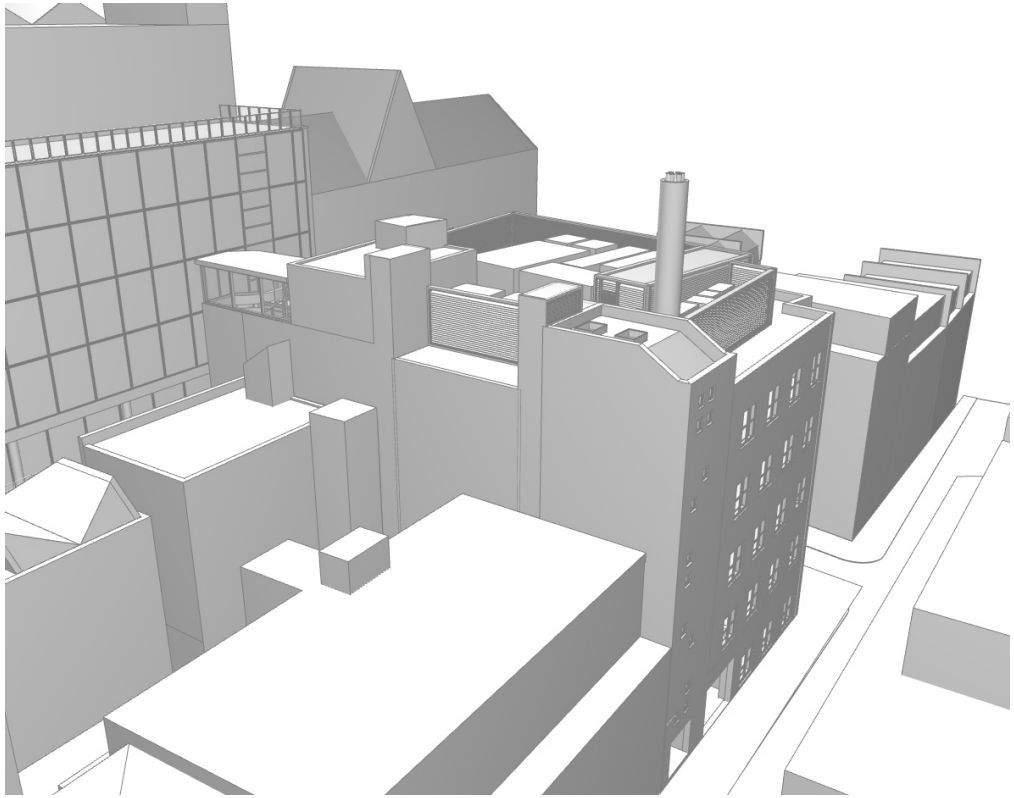
North West Views

Existing



Proposed

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Street Views

Existing - Gray's Inn Rd looking North

Proposed - Gray's Inn Rd looking North

Existing - Gray's Inn Rd looking South

Proposed - Gray's Inn Rd looking South

5.0 Access

5.0 Access

5.1 Vehicle & Transport Links

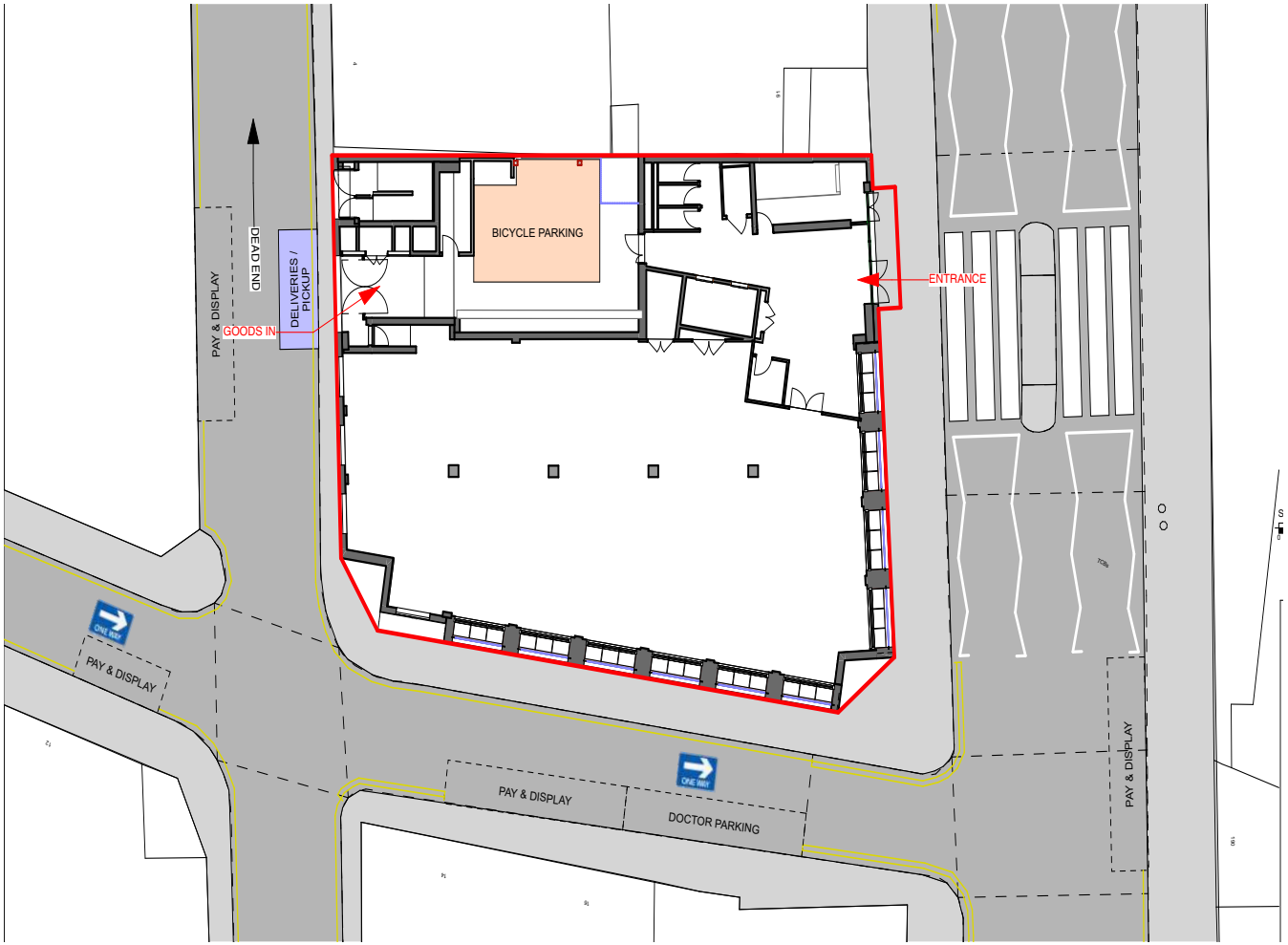
Routes & Access
The 85 Gray's Inn building comes right to the extreme edges of the red line boundary therefore minimal improvements to the surrounding site can be made.

The existing main entrance is on Gray's Inn Road and will remain the main entry point with the reception and main public face of the building.

The services entry from Brownlow Mews will also be retained as access for cyclists and also services, deliveries & waste. A new access door from the courtyard into the reception area is proposed with a platform lift to negotiate the level difference for bulky deliveries and also less able persons.

There are four fire exits directly onto the street from the building - 1nr from the East Stair Core onto Gray's Inn Road, 2nr from the West Start Core onto Brownlow Mews and 1nr from the Ground Floor tenant space onto Brownlow Mews. A new dry riser inlet is proposed on Gray's Inn Road at the base of the East Stair Core.

UKPN Access for personnel is agreed via the West Stair Core down to the basement. There is an existing access hatch for UKPN plant replacement through the courtyard slab to the basement substation. A new hatch is proposed adjacent to this to serve the new basement substation. Access to these requires to be maintained.



Site Layout with transport proposals

Transport Plan

The site is situated in a busy part of London with it's principle face and entry of Gray's Inn Road. Gray's Inn Road is a very busy route in Camden, for all forms of travel, including cyclists and pedestrians. It is also identified as a primary route for improving cycling. Roger Street is a relatively quiet one way road feeding onto Gray's Inn Road. Brownlow Mews is a single access mews with no route through with vehicles entering and exiting it from Roger Street. It has restricted parking times.

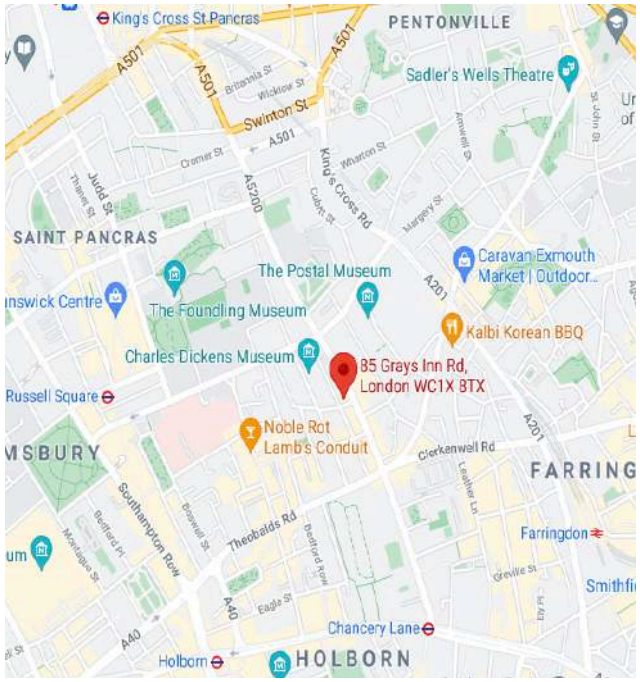
There are several tube stations within walking distance: Chancery Lane; Russell Square; Holborn; Farringdon; Kings Cross. From any of these stations you can be connected to the rest of London and further afield with Kings Cross Main Line and St Pancras close by and also Farringdon will have the Cross Rail station & Thameslink.

Two bus routes go directly along Gray's Inn Road and there are also major bus routes along Theobalds Road and Rosebery Avenue.

There are numerous cycle lanes adjacent and near the site. There are also several of TFL's Cycle Hire locations within a few minutes walk.

The use of public transport, cycle routes and active commuting is key to this scheme.

There is an existing undercroft to access the rear courtyard however it is not considered adequate for vehicular access. Therefore it is considered there is no vehicular access onto the site. The existing building has pedestrian access from Gray's Inn Road. Deliveries are also currently via the main entrance doors too. It is understood the refuse collection point is from Brownlow Mews.



Area map with tube stations

Waste management and deliveries are proposed to take place at the Brownlow Mews access. It is noted that there are restricted parking in Brownlow Mews with no waiting Mon-Fri 8.30am-6.30pm and Saturday 8.30am-1.30pm. Deliveries will have to managed to adhere to these requirements.

There is no existing dedicated provision for cars or motorcycle parking at the building however there are existing cycle parking hoops in the rear courtyard. There is public on street parking including pay & display in the immediate area.

5.2 Inclusive Access

A key design principle is Inclusive Design for all building users. Best practice in relation to Building Regulations AD Part M, BS8300 and the London Plan for this development type will be followed.

The existing entrance on Gray's Inn Road provides level access from street level to the building.

A new access door from the courtyard to the reception is proposed. Internally it will have a platform lift to negotiate the level change for less mobile building users and bulky deliveries.

Level access is provided from the reception area to all floors by passenger lifts. 1Nr of these lifts will extend to roof level to serve the proposed roof terrace. In line with recommendations in the London Plan this lift will also serve as an evacuation lift in event of fire (please refer to the Fire Statement that is part of this application).

Part M compliant Accessible WC's will be provided on all floors. Semi-Ambulant WC's will also be provided where multiple WC's are located. An accessible shower is located in the basement.

Finishes and colour contrast will be incorporated into the design to meet the needs of those with sensory impairments.

5.3 Security

85 Gray's Inn Road is surrounded on 3 sides by public pavement and the North facade bounds onto mixed use/residential buildings therefore the facades will act as the primary barrier.

It is envisaged that the security will be managed at the building envelope and further to the tenant zones. The majority of the facade is existing. Secure treatment to the minor alterations of the external envelope include:

- The new main entrance doors and shop front curtain walling will be of a standard to meet best practice 'Secure by Design' standards as will new gates to the rear courtyard area.

External CCTV will provide an enhanced degree of security for building users. This will be supported by good levels of illuminance for night time working.

5.4 Cycle & Active Commute Provision

Secure and covered cycle storage is proposed to be located at Ground Level in the courtyard. This will be accessed via a secure gate from Brownlow Mews and will be predominantly for building users.

There will be 38Nr double tier cycle stands set out with adequate space around them for safe access in line with Camden Planning's recommendations. There will also be 2Nr non-standard cycle hoops adjacent.

These numbers exceed the BREEAM requirement which is based on the occupancy number of 260 persons. BREEAM requires 10% provision equating to 26Nr cycle parking.

Example of double tier cycle stands

The number of cycle parking also exceeds the London Plan requirements for Research & Development use however it is below the number required for Office use. The project team therefore feel this is appropriate.

It should also be noted that the courtyard is restricted in capacity due to various waste streams that will be stored within this area and also the requirement for UKPN ventilation shafts. To maximise functionality of the courtyard and maximise the provision of cycle parking raised low level rooflights serving the basement will be replaced with flush luxcrete units.

To support cycling and active commuting such as walking and jogging 7Nr showers are distributed across the floors as a core facility. This includes a wheelchair accessible shower in the basement. Suitably sized lockers will also be provided in core areas in close proximity to the showers.

It is also proposed to fix 'butterfly' style wall mounted hoops near to the main entrance for courier or visitor bikes.

5.5 Services, Deliveries & Waste

Deliveries
Ad-hoc small deliveries and post will be via the main entrance and managed by reception.

Larger deliveries of consumables and equipment will require to be managed with access gained through the Brownlow Mews gate, the rear courtyard and access door. Timings of these deliveries will also have to be factored in to take account of parking restrictions on Brownlow Mews.

Waste
General Waste and Recycling will be managed by the Building Manager FM team with storage of designated Eurobins in the courtyard. These will then be managed to meet the refuse collection vehicles on Brownlow Mews.

The Clinical Waste stream and any other specialist waste streams such as sharps will be managed by the tenants and an area for locked storage of this has been designated in the courtyard. The tenants will manage arrangements with their collection companies.

Gases
Gas deliveries will be managed by the tenants. Any external refilling of gas storage vessels will need to take place at a time outside parking restriction times.

6.0 Sustainability

6.0 Sustainability

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Sustainability

This project is seeking to refurbish and reinvigorate an existing building, to upgrade the finishes and infrastructure and extend the life of the building via the following measures:

- We are targeting BREEAM Very Good and a significant EPC improvement to B. It is noted that achieving higher targets refurbishing a building of this era for laboratory purposes is onerous.
- Efficient plant and lifts will be selected.
- Fabric upgrades will take place.
- Cycle parking and facilities for cyclists and joggers will be provided to assist the 'green' commute.
- A Rooftop Terrace to improve the amenity and wellbeing of the building occupiers. It is intended planters will be located in this area.
- Rainwater harvesting from the new roofs will be used to water the planters.
- Responsible sourcing of materials and waste reduction will take place.

Please refer to the comprehensive Sustainability Report that is part of this application for additional information.

7.0 Conclusion

7.0 Conclusion

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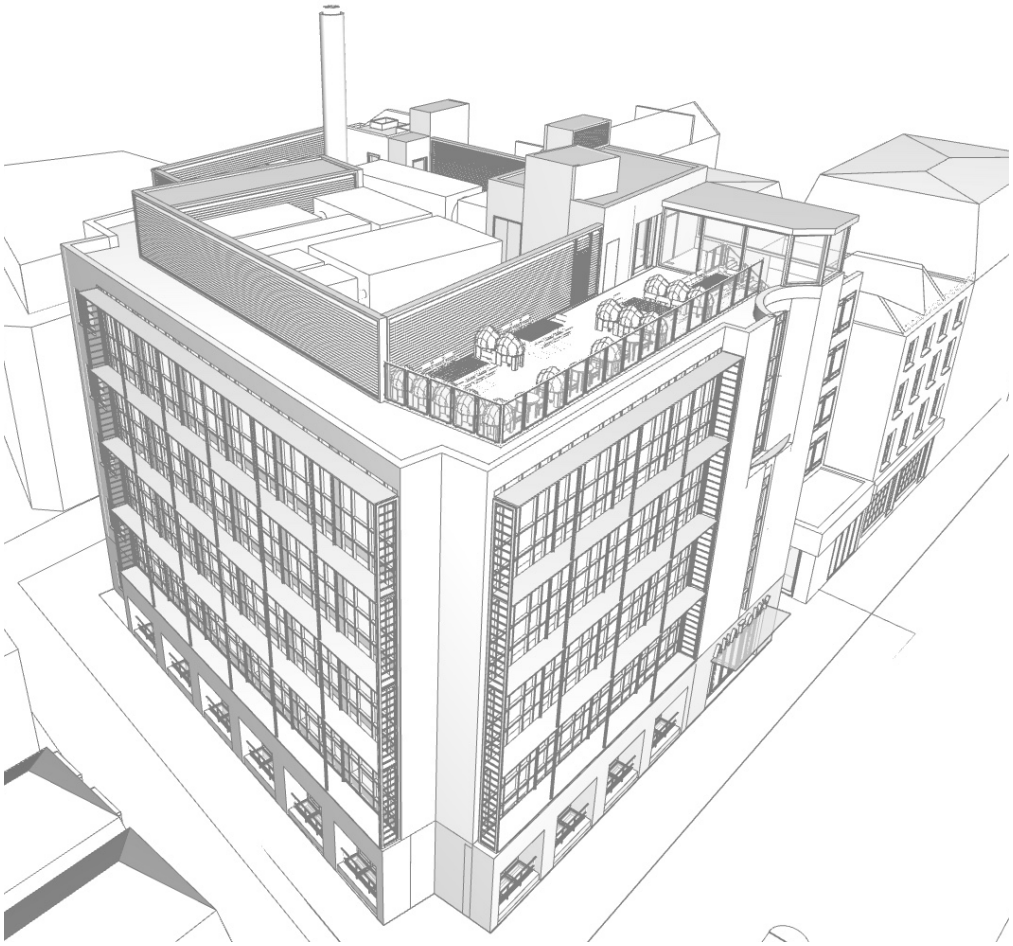

Project Anatomy at 85 Gray's Inn Road seeks to rejuvenate and repurpose this existing building for the Biosciences Sector.

There is currently significant demand for high quality speculative laboratory accommodation in the Kings Cross Bioscience cluster.

The refurbishment proposals and facade interventions deliver efficient, high quality interior spaces and put wellbeing of the occupants at the forefront offering generous core facilities such as a roof terrace, reception and cycling facilities.

Laboratory buildings are highly serviced and additional MEP (Mechanical, Electrical & Plumbing) plant is required. The proposals seek to replace and augment the existing plant spaces at roof level with a new enclosure and add plant accommodation in the courtyard infill. At roof level the plant arrangement and location of the flue stack has been guided by specialist consultants in relation to performance and required standards.

Inclusion is at the forefront of the design with improved facilities and level access to all levels including the roof terrace provided.