



# Kathleen Lonsdale Building Planning Statement

Kathleen Lonsdale Building Planning Statement / November 2014

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# 1 Introduction

- 1.1 This Planning Statement has been prepared by Deloitte LLP in support of a planning and listed building consent application, submitted on behalf of University College London (UCL) ("The Applicant"), for the refurbishment of the Kathleen Lonsdale Building.
- 1.2 UCL is seeking full planning permission for:

Internal and external refurbishment of the Kathleen Lonsdale Building for academic use (Use Class D1).

1.3 This Planning Statement sets out the planning justification for the proposed development and assesses the development against the Development Plan for the area and relevant material considerations.

### **Structure of the Planning Statement**

- 1.4 The remainder of this Statement is structured as follows:
  - Section 2 sets out the background to the project;
  - Section 3 explains the proposed development;
  - Section 4 assesses the scheme against planning policy and relevant material considerations; and
  - Section 5 summarises the key planning considerations and explains why planning and listed building consent should be granted.

# 2 Background

# **UCL Bloomsbury Masterplan**

- 2.1 University College London (UCL) is embarking on an ambitious programme of renovation and redevelopment of its Bloomsbury campus. The Bloomsbury Masterplan (2011) sets out a vision for the long term development and improvement of the campus over the next ten to fifteen years, with expected investment of well over £500 million. It identifies a range of projects to implement this vision and deliver the best possible teaching, learning and research environment for staff and students.
- 2.2 The Bloomsbury Masterplan identifies the refurbishment of the Kathleen Lonsdale Building (KLB) as a priority project. It will facilitate the relocation and rationalisation of the university departments that form part of the Faculty of Maths and Physical Sciences (MAPS) and Earth Sciences within KLB, as part of the ongoing 'consolidation and co-location' strategy to encourage collaboration and greater synergies between departments. It will also improve the University and building's sustainability credentials and generally improve the internal circulation and legibility of the building.
- 2.3 The KLB proposals will help to deliver the following UCL Bloomsbury Masterplan strategic objectives:
  - To improve the student and the staff experience through the refurbishment and provision of teaching and studying spaces.
  - To create modern, flexible laboratory accommodation.
  - To improve the sustainability of the building through the refurbishment of the building fabric and the upgrade of the mechanical and electrical services.
- 2.4 The KLB refurbishment project has been informed by extensive pre-application consultation with Camden planning and design officers. This included:
  - Pre-application Meeting 1 with LB Camden- 22<sup>nd</sup> April 2013
  - Pre-application Meeting 2 with LB Camden- 18<sup>th</sup> January 2014
  - Pre-application Meeting 3 with LB Camden- 17<sup>th</sup> September 2014
  - Various email correspondence regarding detailed design issues.
- 2.5 English Heritage has also been informed of the proposals. It declined a site visit but acknowledged that the proposals had successfully responded to feedback received from LB Camden. English Heritage indicated that it was content for the Local Planning Authority to determine the application.

### The Site

2.6 The Kathleen Lonsdale Building is a five storey building located at the heart of the UCL Bloomsbury campus. It is bounded by Gower Place to the North, Gower Street to the West, Gower Court to the South and the Physics Building to the East.

- 2.7 The building currently provides 7,218 sqm of academic floorspace (GIA) (Use Class D1). The existing number of staff and students that operate within the building varies throughout the year depending on demand from the different academic departments. The approximate range of use is 400 420 people.
- 2.8 The KLB is a Grade II listed building (LB Camden Ref: 798-1-60291) and located in the Bloomsbury Conservation Area (sub-area 3). It is in close proximity to a number of other listed buildings, notably the Grade I listed Wilkins Building.
- 2.9 The building was designed by FM Simpson and constructed in 1912-1915. It was constructed as UCL's first purpose-built Chemistry building and named the Kathleen Lonsdale Building after an Irish Crystallographer who proved that the benzene ring was flat, amongst other firsts for female scientists. Over the years the requirements and use of the building have changed and alterations to the building have been made.
- 2.10 Since its construction, the KLB has been adapted to suit different UCL departments and as a result has become somewhat fragmented, with complex circulation routes on upper levels.

## **The Project**

- 2.11 KLB is located at the heart of the Bloomsbury Campus and is emblematic of UCL's rich academic and medical history.
- 2.12 The building is outdated and needs to be upgraded to meet modern academic standards and the changing demands of staff and students. The working environment and type of spaces provided at KLB no longer meet the needs of the academic departments. The building has very poor circulation and a number of disparate spaces. The building also performs poorly in terms of energy use, with high levels of carbon consumption and operating costs.
- 2.13 The KLB refurbishment is one of the most significant projects proposed as part of the UCL Bloomsbury Masterplan. The project brief includes:
  - The consolidation of the Department of Earth Sciences;
  - The provision of accommodation for the Departments of Physics and Astronomy and Chemistry;
  - Improved accessibility;
  - Increased utilisation; and
  - Improved environmental performance.
- 2.14 The proposed occupancy of the refurbished KLB is as follows:

Department	Staff/ Students
Earth Sciences	175
Physics and Astronomy	130
Chemistry	59
Radiochemistry	6
Information Systems	75
LF90	8
Total	453

# 3 The Proposals

3.1 This planning and listed building application seeks permission for:

"Internal and external refurbishment of the Kathleen Lonsdale Building for academic use (Use Class D1)".

- 3.2 The application seeks to refurbish the KLB and provide flexible, modern facilities whilst preserving and enhancing the heritage significance of the building.
- 3.3 The application does not seek to increase the level of floorspace or change the use of the building. A detailed description and illustration of the proposed interventions is set out in the Design and Access Statement, and a summary of the works is provided below:

#### **Entrance Hall**

 The creation of a new security desk inside the main entrance to KLB is proposed. This will be created through a new floor mounted counter that will be simple in form to ensure is does not distract from the ornate features of the interior. The security desk is required to ensure that KLB meets UCL security and accessibility requirements.

#### Staircase/ Student hub

 The creation of a new 'student hub' space is proposed for informal/group study around the existing central staircase. New glazed doors are proposed to replace the non-original existing doors to create a visual link between this important circulation space and a key social area and also to maximise daylight.

#### Internal Layouts

- Reconfiguration of the internal layout through the removal of a number of partition walls to create a range of flexible working environments and provide modern teaching and research facilities. A large student hub space is proposed at ground level adjacent to the entrance hall.
- Internal alterations to a number of floors, which are fully indicated in the supporting drawings and Design and Access Statement.
- The proposals have been developed through extensive consultation with LB Camden conservation
  officers and UCL user groups to ensure that the proposals will create a suitable working environment
  without harming the significance of the listed building. The most sensitive works are at Ground and
  First Floor, as the Second floor upwards is largely made up of more recent partition layouts which have
  undermined the original plan form and significance of the building.

#### **Internal Doors**

- Retaining and overhauling original doors and joinery in areas with historic significance (where possible).
- Replacing doors where the finishes are predominantly non-original with new glazed doors or reused original doors. The proposed approach to retaining and replacing doors is illustrated in detail in the Design and Access Statement.

#### Rake Theatre

• Removal of the rake from the former lecture theatres, which have already undergone significant alterations. This will allow the original lecture theatre to revert to its former use.

• A full survey of the rake and void will be undertaken to determine whether there is any existing fabric that can be retained or re-used.

#### **Rear Elevation**

- Consolidated servicing strategy to ensure that the office and laboratory spaces are sufficiently and
  efficiently ventilated. The application includes the removal of redundant ductwork; the replacement of
  the existing plant machinery with modern equipment; and the provision of new flues and louvers where
  required to service the new laboratory and teaching space.
- Replacement doors within the two external entrances to improve accessibility and security. A metal canopy is proposed above the central set of doors.

#### **External Windows**

- The application includes the installation of secondary glazing on the more significant front elevation and the installation of double glazing on the rear elevation. This aspect of the proposal is discussed in further detail below and within the supporting documents.
- 3.4 Please note that a number of areas within the building are not included within the scope of this application (see Design and Access Statement). A connection to 3 Gower Place forms part of the application, but the refurbishment (and change of use) of 3 Gower Place does not.

#### Summary of the proposals

- 3.5 The proposals will create high quality, flexible learning spaces which will enhance the student experience and facilitate the co-location of academic departments. New student hub space will be provided at Ground and First floor levels adjacent to the central staircase, which will provide a focal point for the building and highlight retained features.
- 3.6 The proposals will improve the circulation and accessibility of the building and will rationalise the external plant ducts. Improvements to the environmental performance of the building are also proposed.

# 4 Planning Policy Assessment

- 4.1 Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the development plan, unless material considerations indicate otherwise.
- 4.2 In this instance the development plan comprises the London Plan (2011), the LB Camden Core Strategy (2010) and the LB Camden Development Management Policies (2010). The following documents are relevant 'material considerations':
  - The National Planning Policy Framework (NPPF)
  - CPG 1: Design
  - CPG 3: Sustainability
- 4.3 The main planning considerations in relation to this application are summarised below:

### **Principle of Development**

- 4.4 The provision of improved facilities for Higher Education institutions is supported by Policy CS10. The sensitive refurbishment of KLB will create high quality and bespoke, modern working environments for staff and students that are fitting to UCL's world class reputation.
- 4.5 The refurbishment will facilitate the optimum use of the building for world class teaching and research and encourage greater collaboration and synergies between academic departments.

### **Design and Heritage**

- 4.6 Policy DP25 and Policy CS14 require development to preserve and enhance heritage assets and their settings. Development that would cause harm to the setting of the listed building will be resisted.
- 4.7 The NPPF states that in determining planning applications, local planning authorities should take account of:
  - the desirability of enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
  - the positive contribution that conservation of heritage assets can make to sustainable communities; and
  - the desirability of new development making a positive contribution to local character and distinctiveness.
- 4.8 The proposals include the internal re-organisation and refurbishment of the KLB. This includes the removal of a number of partition walls and alterations to the historic fabric of the building. At an early design stage, Alan Baxter Associates undertook a heritage assessment of the building to help inform the proposals and ensure areas of significance are preserved or enhanced where possible.
- 4.9 The design of the proposal and its relationship to the significance of the listed building has been carefully considered by the design team. Extensive consultation has taken place with LB Camden conservation

officers. The feedback from this consultation has helped shape the final design of the proposals, with significant changes being made including omitting alterations to Kathleen Lonsdale's office and the removal of more significant internal walls.

- 4.10 A Heritage Statement, prepared by Alan Baxter Associates, supports this planning and listed building consent application. The report assesses the impact of the proposals and should be read alongside this Planning Statement and the Design and Access Statement. The Heritage Statement assesses each aspect of the proposals in detail.
- 4.11 Large areas of the building contain recent, unsympathetic partitions which have sub-divided the original room layouts. This makes the spatial organisation of the building more difficult to discern.
- 4.12 The proposal to reconfigure the layout through the removal of recent partitions is identified as having a beneficial impact. It will allow the partial reinstatement of the historic plan form and create improved teaching and learning spaces. A summary of the assessment is outlined below.

Area of Building	Details of proposal	Impact Assessment	Comments
Front elevation	Introduction of secondary glazing	Less than substantial	Secondary glazing will have a minimal impact on the visual qualities of the windows and will be reversible. The secondary glazing will greatly improve the energy efficiency of the building overall.
Rear Elevation	Rationalise existing servicing and installation of new flues where required. Installation of double glazed windows.	Neutral impact	Rationalising the existing plant machinery will better reveal elements of significance, such as the tripartite windows. The proposals preserve the appearance of the principal frontage.
Main entrance hall	Installation of reception desk.	Neutral impact	The retention of historic features in this area has been a key part of the design (following discussions with LB Camden).
Ground floor- east wing	Removal of non-original partitions and removal of main wall facing the corridor.	Less than substantial harm	The later subdivisions in this area detract from the significance of the original volume. The Professor's office will be retained with its historic fixtures and fittings and will become a quiet study space accessible to the staff and students. The proposal will create a much needed social engagement space within an area that has already undergone significant modification.

#### **Summary of ABA Impact Assessment**

Ground floor-west wing	Removal of non-original partitions and opening up of the space.	Beneficial impact on significance.	The proposals will restore the original layouts.
Lecture Theatre	Removal of lecture theatre rake	Beneficial impact on significance.	The proposals will restore the original layouts and return the space to its original use. Original fabric will be retained and re-used where possible.
Offices at far end of each wing	Removal of partitions to maximise space.	Neutral impact	One opening in a partition of moderate significance is required.
Rooms adjacent to central staircase (Ground)	Door relocated to provide access to a service rider.	Neutral impact	The proposals support the most efficient use of the building.
First Floor- new link to 3 Gower Place	New doorway in the party wall.	Less than substantial harm	The proposal will allow improved circulation and enhanced teaching and learning facilities.
First floor- hub space	Removal of partition and door of neutral significance.	Less than substantial harm.	The door opening will be retained, allowing a sense of free movement between the staircase hall and the new hub.
Floors 2-4	These floors have undergone significant alterations with more recent partitions and modifications that have undermined their significance (see paragraphs 4.11-4.12)		

- 4.13 The proposals have been designed with the intention of preserving and enhancing the significance of KLB. The majority of works are considered to have a neutral or beneficial impact on the significance of the building and will return the layout of the upper floors of the building to their original form by removing a number of later partition walls. Important features such as Kathleen Lonsdale's office have been retained.
- 4.14 Only a small number of works cause any harm to the significance of the listed building. In each case the harm is considered to be less than substantial and outweighed by the public benefits of the scheme. It is proposed that secondary glazing is installed on the front elevation and double glazing is carefully inserted in the less significant rear elevation (within the original window frames). KLB currently performs very poorly in terms of heat loss/gain, which can create an uncomfortable working environment for staff and students. This re-glazing and ventilation approach will significantly improve the working environment and the energy efficiency of the building by providing greater acoustic and thermal insulation that will reduce the carbon footprint of the building. It will also allow enhanced usability of the building as ventilation will be regulated by the automatic opening of windows.
- 4.15 Double-glazing has been omitted from the front elevation windows following close consultation with LB Camden. It is considered that the rear elevation is better suited to double glazing because of its less significant utilitarian nature and because it was never intended to be seen by the public. The use of secondary glazing to the front elevation will be reversible and will have a minimal impact on the significance of the listed building.
- 4.16 The first floor hub, the link to 3 Gower Place, the Ground Floor east wing and the use of secondary glazing will cause 'less than substantial' harm. These works are essential components to improve the usability and circulation of the building. They will provide essential new social engagement space, which is currently

significantly underprovided within the building. This harm is outweighed by the enhancements to the significance of the building and significant public benefits (as outlined below).

#### Benefits of the proposal

- 4.17 The proposals will provide significant public benefits, which are material considerations when assessing the impact of the proposals. These are summarised below:
- 4.18 The KLB was UCL's first purpose-built Chemistry building. Refurbishing and upgrading the KLB is identified as a priority project in the Bloomsbury Masterplan to enable the building's continued and long-term use for the teaching of Chemistry and related Sciences. The continuation of the use which the building was designed for and has been used for since construction sustains the significance of the Designated Heritage Asset, and is considered to be a significant public benefit.
- 4.19 UCL is a world-class university. The Bloomsbury Masterplan sets out a long term vision for the development and improvement of its core campus. This will significantly enhance its teaching and research facilities to ensure that the University maintains and improves its international standing. The KLB refurbishment is an essential part of the Masterplan strategy and will significantly improve the student experience as well as providing opportunities for collaboration and greater synergies between departments.
- 4.20 It is essential that KLB evolves to respond to the changing demands of staff and students and modern academic standards. The proposals will create more flexible, open-plan working areas and will create a new focal point with a student hub and social learning space around the central staircase. New state of the art laboratory facilities and learning spaces will be provided, which will enable UCL to continue to deliver world class teaching and research. Improvements to circulation, access and ventilation are also proposed.
- 4.21 Important historical and original features are being retained where possible. Kathleen Lonsdale's original office will become more accessible, raising awareness of the research undertaken by her and other renowned scientists at the KLB. The office will be designated as a quiet study space and not allocated to any specific department. This will allow staff and students to access the historic office and view material relating to Kathleen Lonsdale's achievements, which will be displayed there.
- 4.22 The KLB currently has a very poor environmental performance, which significantly reduces the quality of the teaching and research environment. The proposals will significantly improve the building's energy efficiency and carbon footprint. This will create a more sustainable building with lower maintenance costs and a better working environment, which is considered to be a significant benefit. Further details of the sustainability improvements are outlined in the supporting Sustainability Statement and summarised in the section below.
- 4.23 In summary, the proposals will significantly enhance the setting of the building. The Heritage Statement states that some of the proposals cause harm to the designated heritage asset. However, this harm is less than substantial, and the proposed works are required to enable the continued use of the building for its original purpose and meet the strategic objectives for KLB (increased utilisation; enhanced accessibility; and circulation and consolidation of academic departments). It is considered that any harm is significantly outweighed by the significant public benefits of the proposal. The proposals are therefore considered to be in accordance with national and local policy.

### **Sustainability**

4.24 Currently the KLB is a highly inefficient and energy intensive building. An energy audit has been undertaken as part of this project. This identified that KLB consumes on average 332 kWh/m2/year for heating and 613 kWh/m2/year for electricity (excluding server consumption). This consumption level is twice as intensive as benchmarks for typical university science buildings. It equates to an annual energy cost of approximately £400,000.

- 4.25 Policy CS13 encourages all development to meet the highest environmental standards that are feasible and viable during construction and occupation. Policy DP22 expects all non-domestic developments to achieve a BREEAM rating of at least "Very Good".
- 4.26 Camden Planning Guidance 3: Sustainability states that for refurbishment projects, at least 10% of the project cost should be spent on environmental improvements. The supporting text states that special consideration will be given to buildings that are protected e.g. listed buildings, to ensure that their historic and architectural features are preserved.
- 4.27 The energy performance of the building has been considered as an integral part of the design and improvements have been sought in line with the London Plan energy hierarchy. As detailed in the supporting Sustainability Statement, the proposals include a number of interventions to significantly improve the energy performance of the building. These are outlined below.
  - Improved insulation to the walls and roof;
  - Replacement of existing glazing (where appropriate) to improve thermal and solar performance;
  - Openable windows for natural ventilation of office spaces (where considered appropriate);
  - Improvements to cooling and ventilation plant at roof level and the rear of the building;
  - Connection of the whole building to the UCL district heating network (previously only the basement and 1<sup>st</sup> floor was served); and
  - Energy efficiency improvements including the use of energy efficient light bulbs, lighting occupancy sensors; replacement energy efficient computers; and enhanced cooling controls.
- 4.28 These sustainability measures are expected to reduce carbon emissions by up to 23%, which is a significant improvement taking into account the constraints of the building and its listing.
- 4.29 BREEAM 'Excellent' is not achievable as the potential for fabric upgrade is limited by the listed building designation. However, the BREEAM pre-assessment suggests that the project will easily achieve BREEAM 'Very Good' and could achieve a score of 70.8% (which exceeds the BREEAM 'Excellent' threshold, despite not achieving the mandatory Energy Credits).

## **Transport**

- 4.30 A full Transport Statement is not required as the application is for the refurbishment of the building. However, a Transport Note has been prepared to support the planning and listed building consent application to summarise the proposed servicing and use of the building. A summary of the transport consideration is set out below.
  - The site has the highest Public Transport Accessibility Level (PTAL) of 6b.
  - The primary pedestrian and vehicular entrances will remain as existing.
  - All servicing, including refuse, will be undertaken from Gower Place, off the public highway. This is in accordance with the existing arrangements. The number of deliveries is not expected to increase as a result of the proposals.
  - No car parking provision is proposed.
  - There is no change of use and no uplift in floorspace and therefore no additional cycle parking provision is required. UCL are reviewing the demand and opportunities for additional cycle parking provision across the campus. Where possible, any future cycle parking provision will be provided in accordance with the design principles for cycle parking as outlined in 'Camden Planning Guidance 7'.

# **5** Conclusions

- 5.1 This planning and listed building application seeks permission for the refurbishment of the KLB including external alterations to the rear elevation to facilitate a consolidated servicing strategy.
- 5.2 The proposals have carefully considered the significance of the listed building and have been informed by a Heritage Assessment prepared by Alan Baxter Associates and also close consultation with LB Camden Conservation officers.
- 5.3 The supporting Heritage Statement states that the majority of works will have a neutral or beneficial impact on the significance of the building and that all works will be carried out to a standard and quality that is commensurate with the quality of the building and in sympathetic materials and finishes.
- 5.4 The proposals will ensure the continued and long-term use of the building for its original purpose. The KLB proposals have been sensitively designed to respond to the character and appearance of the listed building and include the removal of many non-original partition walls to return parts of the building back to their original layout and intended use.
- 5.5 Less than substantial harm has been identified to four areas of the building. This is required to meet the strategic objectives for KLB (increased utilisation; enhanced accessibility and circulation and consolidation of academic departments). The harm that has been identified is considered to be outweighed by the significant public benefits of the proposal.
- 5.6 The public benefits of the KLB proposals are summarised below:
  - Ensuring the continued and long-term use of the building for the teaching of Chemistry and related sciences (for which the building was designed for and has been used for since its construction).
  - The KLB proposals are closely aligned with the strategic objectives of the UCL Bloomsbury Masterplan including the co-location of related departments to encourage greater collaboration.
  - It is essential that KLB evolves to respond to the changing demands of staff and students and meet modern academic standards. New state of the art laboratory facilities and learning spaces will be provided, which will enable UCL to continue to provide world-class teaching and research.
  - Important historical and original features will be retained where possible. Kathleen Lonsdale's original office will become more accessible and display material to raise awareness of the research undertaken by her and other renowned scientists at KLB.
  - The proposals will significantly improve the building's energy efficiency and carbon footprint. More than 10% of project costs will be spent on environmental improvements and the project will achieve BREEAM 'Very Good'.
- 5.7 For the reasons set out in this statement, we consider that planning and listed building consent should be granted for this application.

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