# SOAS Philips Building

## Sample Testing Listed Building Consent Application

## Design and Heritage Statement

School of Oriental and African Studies – University of London

**December 2016**

# Notice

This document and its contents have been prepared and are intended solely for the University of London – SOAS's information and use in relation to the development of the Philips Building.

Atkins assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 40 pages including the cover.

## Document history

| **Job number: 5151003.004/5150627.005** | | | **Document ref:** | | | |
|---|---|---|---|---|---|---|
| Revision | Purpose description | Originated | Checked | Reviewed | Authorised | Date |
| Rev 1.0 | Draft | LA | KS | KS | | 05-12-16 |
| Rev 2.0 | Application | LA | KS | KS | DB | 06-12-16 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

## Client signoff

| | |
|---|---|
| Client | School of Oriental and African Studies – University of London |
| Project | SOAS Philips Building |
| Document title | Sample Testing Listed Building Consent Application Design and Heritage Statement |
| Job no. | 5151003.004/5150627.005 |
| Copy no. | |
| Document reference | |

# Table of contents

# Executive Summary

This Design and Heritage Statement forms part of the Listed Building Consent application for works to install samples and undertake investigations at the grade II* Philips Building at SOAS. The proposal is to test the emerging designs in a single bay (currently divided into two rooms) on the building's 5th floor. This will provide the opportunity to fine tune the designs in advance of the main Listed Building Consent application for the refurbishment. With the test samples on place, London Borough of Camden and Historic England will be invited to view the sample windows and discuss the detail of the design for the refurbishment of the building's external fenestration, the second to fifth floor peripheral office areas, and the link bridge between the Philips Building and the grade II listed Holden Building.

This Design and Heritage Statement provides an overview of the building's historic development, provides an assessment of the heritage significance of the Philips Building, especially focussing on the elements affected by the works, and weighs this against the effects of the alterations to the building proposed in this test scheme, in line with current legislation and policy tests. Mitigating factors are considered and a conclusion summarises the effect of the proposed works on the heritage significance of the Philips Building and link.

The existing proposal seeks permission to carry out test intrusive investigations to the first floor of the link bridge and to two half-bay offices on the fifth floor of the grade II* listed Philips Building in the inner ring of offices, which face onto the library roof. These test alterations are comprised of:

- Replacement windows;
- Investigations of the heads of the partitions to determine how they are attached to the concrete slab above; and
- Investigations in the area of two recently replaced bricks on the first floor of the link bridge, as well as mortar joints on the lower ground level on the northeast side.

These alterations have minimal impact on the historic fabric of the Philips Building, which results in minimal impact upon the building's architectural and historic interest. Any risk of negative impact upon the Philips Building's historic and architectural interest is mitigated by the reversible nature of the replacement sample windows and the intention to reinstate the original wall finishes where disturbed by partition investigations. In addition, risk to the architectural and historic interest of the link bridge is mitigated by proposing the borescope investigations being proposed where two bricks have previously been replaced. Therefore the impacts of the sample test windows, the investigations of the heads of the partitions and the borescope investigations into the link bridge would result in considerably less than substantial harm to the architectural and historic interest of the Philips Building and link bridge.

# 1. Introduction

This Design and Heritage Statement forms part of the Listed Building Consent application for works to install samples and undertake investigations at the grade II* Philips Building at the School of Oriental and African Studies (SOAS). The proposal is to test the emerging designs in a single bay (currently divided into two rooms) on the building's 5th floor. This will provide the opportunity to fine tune the designs in advance of the main Listed Building Consent application for the refurbishment. With the test samples on place, London Borough of Camden and Historic England will be invited to view the sample windows and discuss the detail of the design for the refurbishment of the building's external fenestration, the second to fifth floor peripheral office areas, and the link bridge between the Philips Building and the grade II listed Holden Building.

This Design and Heritage Statement sets out the rationale for the testing proposals and assesses their impacts on the building's significance.

Visits to the buildings have been, during which access to both the exteriors and interiors was provided. The test rooms were confirmed in November 2016.

The heritage assessment within this application has been constructed using professional judgement. The assessment of the significance of the Philips Building has been based on physical assessment of the building and archival research. It takes into account the established criteria for assessing significance identified in English Heritage (now Historic England) *Conservation Principles* (2008), as well as current legislation and policy including the Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended), the National Planning Policy Framework and the Local Plan.

# 2. Description of the Scheme

The Philips Building has served as a dynamic library, office location and teaching space at the heart of the University of London SOAS for over four decades. While the building continues to be actively used, changes in teaching practices and academic needs over time have meant that building is facing new demands for its educational spaces. The current peripheral office areas on the 2nd to 5th floors are designed to segregate staff and students and are not fit for modern teaching methods and the need for flexible integration between staff and students. In addition, the building's low energy efficiency places a strain upon the university due to high running costs. A larger application for a sensitive scheme, which seeks to enhance the Philips Building whilst respecting Lasdun's original design, will be submitted at a later date.

SOAS has therefore commissioned a programme for refurbishment of the peripheral 2nd to 5th floor office areas and new more energy efficient fenestration throughout the building. The energy efficient fenestration proposed has been selected as it appears externally as the same as the current window system.

This application for the sample testing scheme is proposed to allow minor investigation and testing works, to form solid knowledge on which the final proposals for the larger scheme, to be the subject of a further Listed Building Consent application, will be based.

## 2.1. Previous Consultations

The developing proposals have been discussed with Alfie Stroud of London Borough of Camden, and Michael Dunn, of Historic England at a number of meetings, the most recent of which took place on 22 September 2016. At the most recent meeting the emerging proposals were discussed, as was the fact that we planned to apply to test the window samples and other elements in a test room to inform the final design. The general proposals discussed were received favourably at the meeting. These included:

- the replacement of the windows with a system that looks the same externally;
- the refurbishment the peripheral office areas on the 2nd to 5th floors of the Philips Building by opening up the corner offices, removing partitions to create larger offices, introducing slots to bring light into the

staircases, raising the ceilings in the corridors and introducing viewing panels in doorways where doors are to be removed; and

- rebuilding the currently poor bridge link structure between the Philips Building and the Holden Building, to better reveal the exterior of the Philips building and increase legibility.

The need to test the proposed alterations in a sample room was also discussed.

This proposal is for the sample testing, which will be undertaken in rooms 539 and 541, two adjacent rooms on the 5th Floor of the Philips building, overlooking the Library roof. Room 535 has been vacated, but will not be subject to any works, and will be set aside to facilitate comparison between an existing room and the testing rooms.

An email was sent by Ken Sabel to Alfie Stroud on 6th December 2016 explaining that we are proposing to remove and replace two bricks within the link bridge structure on the first and second floors for a borescope survey, and that we are intending to remove and replace the windows in rooms 539 and 541 to take measurements of for the testing window frame. This email was seeking confirmation that the London Borough of Camden agreed that these works were 'like for like' and would therefore not require consent.

The temporary brick removal referred to in the email as well as some additional brick removal on the link structure is also proposed in this application, in case the email response disagrees with our interpretation that the brick removal and reinstatement does not need consent. If the London Borough of Camden is agreed that this work does not need consent, we request that this element of the application (described in **Pick Everard's "SOAS Schedule of Structural investigations for proposed works to the Philips Building and Link Bridge, SOAS, University of London"** which accompanies this application), is ignored.

## 2.2. Proposed works

This sample testing scheme comprises three main types of alterations. These are shown on the drawings listed in the table below:

**Table of Drawings showing testing proposals**

| Drawing | Drawing Number | Notes |
|---|---|---|
| **Site location Plan (1:1250)** | **SOAS-5150627-11** | **Location plan at 1:1250-A3 size** |
| **Level 5 Rooms 539 and 541 sample window locations and 535 existing comparison** | **SOAS-5150627-09** | **Building plan at 1:250 showing location of test rooms 539 and 541 on the 5th floor, and the location of comparison room 535, where no works are proposed-A3 size** |
| **Existing Elevation SE elevation of the NW range (1:100)** | **SOAS-5150627-002** | **SOAS as existing SE elevation of the NW range, at 1:100, above the level of the library roof, with windows to be replaced highlighted-A3 size** |
| **Existing Elevation SE elevation of the NW range (1:20)** | **SOAS-5150627-004** | **SOAS as existing large scale elevation, at 1:20, showing windows in rooms 539 and 541-A3 size** |
| **SOAS Sample Window Replacement - Proposed SE elevation of the NW range (1:100)** | **SOAS-5150627-006** | **SOAS, proposed window sample SE elevation of the NW range, at 1:100, above the level of the library roof-A3 size** |
| **SOAS Sample Window Replacement - Proposed SE elevation of the NW range (1:20)** | **SOAS-5150627-008** | **SOAS proposed window sample SE elevation of the NW range at 1:20-A3 size** |

| | | |
|---|---|---|
| **Window Type 8- Existing Original Windows** | **20085-T-080** | **Detailed as existing drawing showing plan, section and elevation of clerestory windows at 1:20 with 1:2 detail-A1 size** |
| **Window Type 8- SAPA Window as Replacement- CROWN WINDOW SYSTEM** | **20085-T-084** | **Detailed of window system proposed for test sample of clerestory windows at 1:20 with 1:2 detail –A1 size.** |
| **Window Type 12 - Sample Window as Existing** | **20085-T-010** | **Detailed as existing drawing showing plan, section and elevation of main lower windows at 1:20 with 1:2 detail-A1 size** |
| **Window Type 12 - Sample** | **20085-T-015** | **Detailed of window system proposed for test sample of the lower main windows at 1:20 with 1:2 detail –A1 size.** |

The sample testing and investigations include the following:

1) replacing windows in two test rooms (539 and 541, located in the inner ring of offices on the fifth floor) as a sample of proposed window replacements (See Drawing Ref. SOAS-515627-009 for a plan showing the location of the test rooms).

2) removing the finish to the heads of the partitions in the test rooms to identify how they interact with the concrete slab above, in rooms 539 and 541; and

3) a borescope survey to be carried out on the link bridge to understand its structure, which will involve the temporary removal of two bricks, which appear to have been removed and replaced previously (see last paragraph of Section 2.1 above). It is also proposed to drill a hole in the mortar joints for a borescope survey in the lower ground level of the link bridge structure's north east wall.

A description of the investigations is set out below. Further information on items 2) and 3) above, is included in the **Pick Everard's "SOAS Schedule of Structural investigations for proposed works to the Philips Building and Link Bridge, SOAS, University of London"** which accompanies this application. The items therein are included within this application except for the item mentioned in paragraph 3.1.3 of that report, which will not need intrusive works and does not require consent.

### 2.2.1. Sample windows

The existing single glazing presents a major opportunity to increase the energy efficiency of the Philips Building, given the quantity of external envelope that is formed of glazing. Heating the building carries a major ongoing cost, and reducing this ongoing expense will ensure that the university has the resources to continue maintaining the building and using it for its original purpose. At present, the windows form an important element of the external appearance of the structure, and extensive research has been carried out to develop a proposal for replacement windows that can both achieve the desired energy improvements and avoid any negative impact on the building's architectural interest.

This proposal seeks to remove the existing single-glazed 'Type 8' top-hung and fixed clerestory windows and the 'Type 12' sliding sash, lower main windows in rooms 539 and 541, and it seeks to replace them with new SAPA double-glazed windows.

The proposed SAPA replacement windows have been designed to match the original windows as far as possible in terms of material selection (anodised aluminium) and finish, as well as overall size, opening configuration and glazing bar thickness. (For existing elevations, see Drawing Refs. SOAS-5150627-002 and SOAS-5150627-004. For proposed elevations, see Drawing Refs. SOAS-5150627-006 and SOAS-5150627-008.)

The new SAPA windows will be double-glazed, but they will be situated in the openings so that the external plane of the new windows does not extend further than the plane of the original windows. The additional depth of the windows to accommodate double glazing will be taken up by the window projecting slightly

further forward on the internal sill (i.e. into the rooms). (See Drawing Ref. 20085-T-080 for the clerestory Type 8 window existing detail drawings and Drawing Ref. 20085-T-084 for Type 8 proposed SAPA Crown Casement window detail drawings. See Drawing Ref. 20085-T-010 for the main lower Type 12 window existing detail drawings and Drawing Ref. 20085-T-015 for Type 12 proposed SAPA Crown Casement window detail drawings.)

Carrying out the replacement of the Type 8 and Type 12 windows in these test rooms will allow investigation of how the existing windows are currently fitted and what fixings are used, which cannot be ascertained at present by visual investigation. Fitting these sample windows will allow an opportunity to trial different colour sealants in situ and discuss the selection of certain materials and fixing methodologies collectively with Historic England and London Borough of Camden, prior to the application for the full scheme in the future. The proposed SAPA double glazing presents an opportunity to enhance the usability of the building through reduced energy costs and increased comfort, whilst reducing the impact on the appearance of the building due to the sensitive design and appearance of the replacement windows.

The original windows will be removed carefully and stored in a safe location with adequate protection for the duration of the test period, so that the original windows could be refitted in future if the full window replacement scheme does not go ahead in the future.

The removal of the windows and the installation of the new windows will be undertaken from a localised area of scaffolding and a crane will be used to assist the lifting of the windows and the installation of the test windows. The base plates of the scaffolding and the feet of the crane will be set on pads to spread their weight and to protect the felt of the roof surface.

We propose to:

- Cut out the mastic pointing externally
- Lift out the sliding sashes from the frames and unscrew all fixings.
- Carefully take the frame out of the aperture and remove for storage.

The sample windows will be fitted using sealant at the junction of the sample windows and the building structure, which will be a gun-applied one part low modulus silicone to comply with current BS/BS EN standards. Sealants will be supplied and applied according to manufacturer's instructions to comply with current BS/BS EN Standards. The sealant will be supplied by Dow Corning and the colours tested will be varied and the choice to take forward for the main application will be discussed with Camden and Historic England on site.

### 2.2.2. Removing finishes from heads of partitions in test rooms

The Philips Building faces increasing pressure on its existing compartmentalised corridors and office spaces to provide more flexible teaching rooms and social learning spaces. A future application will be submitted to seek permission to remove some existing partitions, in order to provide larger teaching spaces.

This current application seeks to remove a sample area of the wall finish at the heads of the internal partitions in the test rooms (539 and 541) in order to determine the details of the connections between the internal partitions and the reinforced concrete slab structure above. This investigation work will inform the methodology of the future scheme proposing the removal of select partitions. At this stage, the partitions would be left in situ and would not be removed.

Once the connection between the internal partition and the reinforced concrete slab is investigated and understood, the area of damage at the heads of the partitions would be made good with gypsum plaster and redecorated to match the existing colour scheme.

### 2.2.3. Borescope investigations to the link bridge

The testing scheme also proposes borescope investigations to the link bridge, to understand its structure in order to inform proposals for its replacement at a later date. This application seeks permission to cut out two bricks on the first floor of the link bridge, on its south west side to insert the borescope. The bricks in the area proposed have been replaced at some point in recent years, and have been replaced poorly. There are two bricks currently almost completely covered in cementitious mortar with recessed joints (the surrounding

brickwork has flush joints), and the pointing mortar surrounding them does not match the original in either colour or texture. In addition, during the process of replacing the bricks, cement mortar has been smeared onto the surrounding original brickwork (see photograph at the end of Appendix B in this document). The fact that there have been intrusive works here before is the reason for the selection of this location for the borescope investigation. The mortar will be cut out around the bricks using hand held chisels, and the bricks removed.

Once the investigations are complete, it is proposed to reinstate with the same bricks, and, if broken during removal, with new brick matching that in the surrounding area as closely as possible. It is proposed to repoint the area around these bricks with mortar matching the original in terms of composition, colour, aggregate and joint finish.

The forthcoming proposals for the main works will include altering this brickwork, and the reinstatement is intended to be temporary.

### 2.2.4. Borescope investigations to the external lower ground floor or ground floor of the link bridge.

To determine the system by which the external cladding of the link bridge is supported a borescope survey is proposed via holes drilled through the mortar joints in its external masonry at lower ground floor level on its north east side. On completion the mortar points will be made good with mortar to match that in the surrounding joints in colour texture and joint profile. For the location of this investigation please see Pick Everard Report, last plan.

# 3. Heritage Legislation and Policy

The following heritage legislation and policy tests must be taken into account when considering the effect of the testing proposal on the significance of the, the Philips Building and its link bridge.

## 3.1. National Planning Policy Framework (NPPF)

Paragraph 129 of the NPPF states: 'Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal'.

Paragraph 131 of the NPPF states: 'In determining planning applications, local planning authorities should take account of:

- the desirability of sustaining and 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 including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness'.

Paragraph 132 of the NPPF states: 'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional'.

Paragraph 134 of the NPPF states: 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use'.

## 3.2. Planning (Listed Buildings and Conservation Areas) Act 1990

Chapter 2, Section 16(2) states: 'In considering whether to grant listed building consent for any works the local planning authority or the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.'

Part 1, Chapter 6, Section 66 (1) states: 'In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses'.

Part 1, Chapter 6, Section 66 (2) states: 'Without prejudice to section 72, in the exercise of the powers of appropriation, disposal and development (including redevelopment) conferred by the provisions of sections 232, 233 and 235(1) of the principal Act, a local authority shall have regard to the desirability of preserving features of special architectural or historic interest, and in particular, listed buildings'.

Part 2, Section 72 (1), states that 'in the exercise, with respect to any buildings or other land in a conservation area … special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area'.

In relations to what type of work requires Listed Building Consent, Section 7 of the Act specifies that Listed Building Consent is required for 'works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest.'

## 3.3. The London Plan 2011

The London Plan sets out policies regarding London's historic environment, with the main relevant policy being 'Policy 7.8: Heritage Assets and Archaeology'. Key paragraphs include the following:

'C – Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.

D - Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail'.

Supporting text also states the following:

'7.31A – Substantial harm to or loss of a designated heritage asset should be exceptional, with substantial harm to or loss of those assets designated of the highest significance being wholly exceptional. Where a development proposal will lead to less than substantial harm to the significance of a designated asset, this harm should be weighed against the public benefits of the proposal, including securing its optimal viable use…'

'7.31B – When considering re-use or refurbishment of heritage assets, opportunities should be explored to identify potential modifications to reduce carbon emissions and secure sustainable development. In doing this a balanced approach should be taken, weighing the extent of the mitigation of climate change involved against potential harm to the heritage asset or its setting'

## 3.4. Camden Local Plan

Policy D2 of the Camden Local Plan notes that the council will 'resist proposals for a change of use or alterations and extensions to a listed building where it considers this would cause harm to the special architectural and historic interest of the building'.

## 3.5. Camden Development Plan 2010 - 2025 – Local Development Framework and Core Strategy

Policy 'DP25: Conserving Camden's Heritage' contains two particularly relevant paragraphs:

25.13 – In order to protect listed buildings, the Council will control external and internal works that affect their special architectural or historic interest. Consent is required for any alterations, including some repairs, which would affect the special interest of a listed building.

25.16 - Proposals that reduce the energy consumption of listed buildings will be welcomed provided that they do not cause harm to the special architectural and historic interest of the building or group.

In addition, the Core Strategy 14.11 in 'CS14 – Promoting high quality places and conserving our heritage' identifies that 'we have a responsibility to preserve and, where possible, enhance our heritage of important areas and buildings'.

## 3.6. Bloomsbury Conservation Area Appraisal and Management Strategy

The Bloomsbury Conservation Area Appraisal and Management Plan identifies the following:

'5.32 The appearance of all buildings of historic interest (listed and unlisted) within the Conservation Area is harmed by the removal or loss of original architectural features and the use of inappropriate materials. For example, the loss of original joinery, sash windows, porches and front doors, can have considerable negative

impact on the appearance of a historic building and the area. Insensitive re-pointing, painting or inappropriate render will harm the appearance and the long-term durability of historic brickwork.

5.33 In all cases the Council will expect original architectural features and detailing to be retained, repaired, protected, or refurbished in the appropriate manner, and only replaced where it can be demonstrated that they are beyond repair'.

# 4. Background and Historic Development

The Philips Building is a Grade II* listed brutalist building which was designed by Denys Lasdun, a nationally renowned post-war architect. The Philips Building comprises one of a collection of inter-war and post-war buildings designed for the School of Oriental and African Studies in the heart of Bloomsbury in London. It was completed in 1973 and continues to serve as a library, teaching space and offices for the SOAS, University of London. The building is included in the Bloomsbury Conservation Area (Sub-area 3) and was listed on 20 May 2011.

## 4.1. Location and Setting

The Philips Building is located in the University Precinct in Bloomsbury within the London Borough of Camden. The building is contained between Torrington Square to the southwest, Charles Holden's original SOAS building (to which it is linked) immediately to the southeast, the Institute of Education to the northeast and Woburn Square to the northwest. The north-east face of the Philips Building forms its principal elevation. Further afield, the Philips Building is located to the north-west of Senate House and west of Russell Square. The surrounding area contains a number of squares lined with Georgian terraced houses, including Russell Square. The Philips Building's National Grid Reference is TQ2988582061.

Torrington Square, on the southwest side of the Philips Building, is comprised of a wide plaza with a narrow strip of grassy squares containing mature trees, and paved pedestrian walkways. The square is bordered by university buildings on all sides, with vehicular access and parking on either side of the access road limited to the side of the square nearest to the Philips Building. A strip of grass runs between the Philips Building and the access road, and is enclosed with a brick retaining wall as the ground slopes down toward the service access to the building. On this side, the stepped-in corner and area between the Philips Building and the Holden Building is a glazed infill development. Behind and above this modern glazed infill, one can see the red brick link structure currently linking the Philips Building to the Holden Building, which extends to the south. Torrington Square forms a busy pedestrian traffic area with students traversing the square to access different university buildings. There is another extension to the Holden Building on the other, north west side of the link bridge structure, with a poor façade facing the Philips building, with limited fenestration.

The southeast side of the Philips Building is largely concealed behind the earlier Holden Building, though a corner of the Philips Building can be seen at the east end of the walkway that runs between the Holden Building and the Brunei Gallery.

Nestled behind mature planting, the Philips Building is barely visible from the cabmen's shelter that stands at the east corner of Russell Square, where a short section of road turns into a pedestrian path that leads north from Russell Square to the truncated southern end of Woburn Square. From this path on the northeast side of the Philips Building, its principal elevation can be seen, with Lasdun's Institute of Education located opposite on the eastern side of the path.

The northwest elevation of the Philips Building can be seen from Woburn Square, which is comprised of Georgian terraced houses and the interwar Warburg Institute arranged around a formal central area of grass and mature planting enclosed by iron railings. The Philips Building fronts onto the square, with a vehicular access road and parking ringing the square on the other three sides. The Philips Building's imposition upon and truncation of the original Georgian Square is evident in views from the centre of the square, as the Philips Building's style provides a distinctive modern contrast to the adjacent Georgian terraces.

This sample testing proposal will not affect the setting of the Philips Building, as the test rooms are located in the inner ring of offices on the fifth floor, facing inwards towards the sunken north-lit roof.

## 4.2. Historic Development

The area in which the Philips Building and adjacent University of London buildings were constructed was primarily an area of Georgian development of formal squares Georgian terraced houses before the expansion of the university. In the inter-war period, LCC architects Sir Leslie Martin and Trevor Dannatt

created a masterplan for the area in which the Philips Building would be constructed. The plan laid out future linear development carved through the existing street pattern in Bloomsbury. However this plan was never fully realised, as the subsequent war, conservation movements and financial restraints brought the construction plans to a halt in the middle of the scheme. It was in 1960 that Martin recommended Lasdun as architect for the new buildings for the School of Oriental and African Studies in Bloomsbury, adjacent to Charles Holden's building for SOAS completed around 1940 and his Senate House for the university's headquarters. Lasdun designed the Institute of Education (situated to the northeast of the Philips Building), following the linear masterplan set out by Martin and Dannatt. However the Philips Building, designed between 1960 and 1968, diverges from the original spinal plan conceived for the university's expansion. In response to being tasked with creating more pedestrian areas and addressing the truncation of the spinal masterplan, Lasdun designed the Philips Building as a square pavilion.

The construction of the Philips Building was not achieved without controversy: its creation necessitated the demolition of a set of Georgian terraced houses located on Woburn Square. As conservation movements rippled through London in the wake of post-war master-planning and rebuilding, objections to the Philips Building's construction were voiced by students, faculty and community members. A narrow vote by the London University Special Committee gave permission for the Philips Building to go ahead, and the Georgian terraced houses were demolished to make way for the new development, which commenced in 1970 and was completed in 1973.

Lasdun designed the new building for the School of Oriental and African Studies in contemporary materials and methods, including reinforced concrete and precast concrete panels, in a brutalist style. Lasdun designed numerous nationally significant post-war buildings, including the National Theatre, Royal College of Physicians and Ziggurat Buildings at the University of East Anglia. However despite having designed the Philips Building in a modern style, Lasdun sought to integrate it with the surrounding Georgian and interwar built environment by utilising the scale and rhythm of the existing structures to influence his design.

## 4.3. Usage

The Philips Building was originally built as a library, with a lecture theatre and ancillary offices and teaching spaces on the upper floors. The offices dominate the periphery of the building, with single cell offices reflecting the working environment of the period. The library forms the centrepiece to the building, around which the teaching spaces and academic offices are arranged in peripheral corridors.

While the central library has remained largely unchanged with the exception of the ground floor being given over to workstations rather than bookstacks, the peripheral offices have been altered to suit changing needs. Many of the single-bay width offices or teaching spaces have been divided into two rooms. At present the upper floors contain a mix of offices and small classrooms.

# 5. Building Description

## 5.1. Exterior

The Philips Building was designed as a pavilion structure ranging nine storeys high (including a basement and lower ground floor) and contains a service moat around the perimeter of the building to provide light to the basement and lower ground levels. External balconies feature on one of the lower levels and have been subsequently glazed on the north and east elevations in 2007, with permission from Denys Lasdun. The corners of the building are set back on the levels beneath the second floor, and the top floor is square in plan but stepped back on all sides from the external face of the building, forming a parapet with a concealed concrete gutter to each bay. On the top level, the corners are also set back, with the bays on each corner exposed as external balconies which at are inaccessible at present. A flat asphalt roof runs around the perimeter of the building at the top of the fifth floor, with the central sunken asphalt roof located at floor level of the fourth floor. The sunken north lit roof contains bronzed rooflights projecting upward and set diagonally with a corrugated surface on the south face and glazed top-hung casements on the north face. Concrete service stacks project upward beyond the top floor. Lasdun designed the Philips Building as a link-detached structure, with a north-western, brick clad link bridge providing the main entrance via the earlier Holden Building. The design of this linking structure appears to have been an afterthought, as it contrasts with both of the buildings it links, and its enclosed design largely obscures the fact that the building user is passing between two different buildings. On the southwest side of the Philips Building, the space between the Holden Building and the Philips Building has been infilled with a structure with a grid of glazed panels at the lower levels.

The Philips Building is constructed of nine external bays on each façade, with the corner bays stepped in at the lower levels. Bays are delineated by narrow concrete structural supports, joining the bays in a subtle vertical unit across all of the floors. Thick bands of concrete ‘plinths’ run horizontally at the base of each level on the second to fifth floors, with a narrow horizontal line of windows and a further narrow band of concrete below forming a visual unit with the plinths. The larger horizontally sliding windows above the plinths divide each bay visually into four dark panels, except on the corner bays, which feature a corner window of two panes of glass intersecting at 90 degree angles, a pair of horizontally sliding sashes, and a fourth vertical division framed visually by concrete partitions on either side. These concrete partitions are the external expression of the internal end-of-corridor windows which were designed to light the corridors.

The fifth floor corner bays are open roof spaces.

The Philips Building was constructed of a reinforced concrete frame cast in-situ with interlocking structural precast concrete panels. White cement and a Ballidon aggregate were used with a grit-basted finish, giving the building its distinctive external appearance. Generally, the windows are single-glazed and formed of four units of horizontally sliding single-glazed sashes constructed of aluminium with a bronze anodised finish, set back from the external concrete wall. Above these sliding sashes, on each floor, sit a row of narrow windows with two top-hung lights on either side of two fixed lights. The corner windows on the second to fourth floors have no visible glazing bar on the corner, with two planes of glass intersecting each other at right angles.

## 5.2. Interior

### 5.2.1. Library

The library forms the centrepiece of the Philips Building, spread between three floors of internal concrete balconies overlooking the ground floor. Natural light filters through the north lit roof and is mediated by a concrete diagrid ceiling. Reading and teaching spaces (including the recently glazed external balconies) lead off from the library on its lower levels. Concrete partitions act as structural supports throughout the library. Exposed concrete in varying textures—with exposed aggregate, close-boarded finishes and smooth surfaces—is showcased throughout the library. Distinctive concrete detailing is visible in the recessed skirtings at the base of the concrete walls and chamfered edges to the smooth concrete surfaces. Eight windows placed at the ends of corridors (one located at either end of each elevation) were designed to flood the building with light, although many of these have since been obscured.

### 5.2.2. Offices and teaching rooms

On the upper floors of the building, separate peripheral corridors of offices and small teaching spaces wrap around the library core. On the second and third floors a single ring of offices face outward to the external faces of the building, and on the fourth and fifth floors, a second inner ring of offices is wrapped inside the corridor.

Internally, each principal bay is marked by a narrow 'fin' of the structural concrete support projecting into the room. On the fifth floor, these concrete fins project inwards from the internal window sills by approximately 750mm, while on the lower floors, they project inwards from the internal windows sills by approximately 200mm. The fins display exposed aggregate in their finish and bring the design of the exterior concrete into the building. Original partition walls were constructed of plastered blockwork; modern partitions are of stud and plasterboard construction. The plastered walls are generally painted white.

In the teaching rooms and offices, the glazed walls feature an upper exposed concrete beam, a narrow row of windows below (feature two top-hung sashes with two fixed lights placed between them), a further concrete beam below the windows, and larger glazed sashes below, with concrete sills, below which are white plastered finishes running to floor level and finally plain skirtings at the base of the wall. Other partition walls in the offices and teaching rooms are plastered and painted white, and are presumed to be composed of either reinforced concrete, blockwork, brickwork or studwork, finished with gypsum plaster. The offices in the inner ring on the top two floors have views of the sunken north lit roof.

### 5.2.3. Link Bridge

The interior corridors of the link bridge are faced in reddish-brown machine-made bricks bedded and pointed in cement. No windows exist within the link bridge, except for narrow vertical glazed slots adjacent to the Holden Building. Otherwise the link bridge is completely faced in brickwork, both inside and out and the brickwork extends into the Philips building. The corridors of the bridge structure are therefore dark and it is not obvious that the user is passing between two distinct buildings when walking over the bridge. The architecture and significance of the exterior of the Philips Building is therefore obscured from its main access point.

## 5.3. Plan Form

The building is arranged across a series of nine floors, including a basement level, lower ground floor, ground floor, first floor, mezzanine and second through fifth floors. Spaces are arranged around a square pavilion plan, with the lower ground floor to the second floor having the corners of the building stepped in. The library forms the heart of the building arranged around the central void, with enclosed spaces and rooms arranged around the perimeter of the library. Access to the Philips Building is through the link bridge on its southwestern side, which connects it to the adjacent Holden Building, up to the top of the fourth floor.

The lower ground floor served as home to the a central lecture theatre, with bookstacks surrounding it on two sides and other labs, lecture rooms and seminar spaces leading off from this space on the other two sides. Similarly the ground floor was dominated by central bookstacks, surrounded by lecture and seminar rooms, as well as other offices and library support services.

The main library occupied the first to third floors, with a central void running through up through to the sunken ceiling and rooflights. On the first floor and mezzanine level above, small carrels (reading rooms), typing rooms and occasional seminar spaces led off from the bookstacks, which were arranged in a linear pattern around the central void. The second and third floors provided space for bookstacks around the perimeter of the void, with a separate corridor separating the bookstacks from a ring of offices arranged around the perimeter of the building.

The fourth floor was given over to offices spanning primarily one-half (and occasionally one) bay, arranged in outer and inner rings, which were separated by a central corridor running around all four sides of the building. The fifth floor's plan was arranged in a similar plan form, though with a greater number of rooms the width of a single bay to provide occasional classrooms.

Originally the teaching and office spaces around the perimeter of the building were arranged generally in half-bay or single-bay widths. As previously noted, alterations to Lasdun's original design resulted in some of the single-bay rooms being divided into two with new stud and plasterboard partitions.

# 6. Assessment of Significance

There is much guidance on how to assess the significance of a heritage asset, including the English Heritage (now Historic England) *Conservation Principles* (2008) and the British Standard document *BSI 7913:2013 Guide to the Conservation of Historic Buildings.* Heritage significance can be derived from evidential, historical, aesthetic and communal values, as well as architectural value, townscape value, symbolic value and economic value, among many others. Listed buildings are designated particularly for their architectural or historic interest, from which their primary significance is usually derived. Indeed it is their special architectural and historic interest that is protected.

Historic England highlights in the *Designation: Listing Selection Guide – Education Buildings* (2011) certain considerations that are particularly relevant when assessing the heritage values of post-war educational buildings:

- 'Early twentieth century university buildings will be judged largely on their architectural quality, and intactness may be a factor'
- 'Early example[s] of certain sorts of buildings will have an extra claim to recognition'
- 'Intactness, group value and internal factors will be key determinants'
- 'Architectural interest will be determined sometimes by questions of successful functionality, as well as by consideration of design quality'

## 6.1. Significance of the Philips Building

The Philips Building's primary significance relates to its architectural and historic interest including the fact that it is an important example of Lasdun's work. Its exterior represents a particularly fine example of the late modern 'brutalist' style. It displays 'strata' which Lasdun often designed into his structures, representing the 'visual organisation of social spaces in geometrical terms' (*The Guardian* Obituary). Lasdun created visual intrigue by regulating the contrasting horizontal bands of pale concrete, shadowed recesses and dark windows with evenly spaced vertical concrete structural panels. The internal library space is the central element of the building and the principal and most significant element of its internal design. The sunken north lit roof floods the library's central space and its terraces with natural light, mediated by the concrete diagrid ceiling. The listing description notes that the Philips Building is 'one of the most powerful library designs of the post-war period'. The peripheral offices on the second to fifth floors, where the interior refurbishment is focussed, were designed to be peripheral and ancillary to the main library space and were designed at a time when staff were segregated from students in individual offices. In both the library and the upper office levels, windows positioned at the end of the each corridor channel light into the building. Both the exterior and interior demonstrate Lasdun's talent for manipulating light, shade and geometry to create visual interest in a monumental structure. The quality of the finishes also contribute to the 'dramatic and memorable learning environment'.

The Philips Building also exhibits group value. It was designed by Lasdun as a pavilion echoing the style and elements of his university building (now the Institute of Education) to the east and creating a themed space between and in the vicinity of these two buildings. The Philips Building is also a successful design within the context of a truncated grand redevelopment scheme in Georgian Bloomsbury. Lasdun designed the Philips Building in response to the existing adjacent Georgian and interwar structures, yet in a distinctly late modern style. Lasdun believed in 'architecture as urban landscape' and felt that horizontal strata 'recall the streets and squares of the city and contour lines of the hills', according to his obituary in *The Guardian*. The horizontal strata of the Philips Building's concrete terraces help to link it visually to the continuous horizontal bands of windows in the Georgian terraces and the adjacent link-attached interwar Holden Building.

The Philips Building is a good example of Lasdun's work and there are common elements and themes that can be seen in his other major works, such as UEA and the 1976 National Theatre. Prior to the Second World War, he worked with Wells Coates, one of the founders of the Modern Architecture Research Group. He was then employed by Tecton and established his own practice in 1959. Lasdun is known for his influential work in establishing his own version of post-war modernism, which displays the influence of architects such as Frank Lloyd Wright. He was awarded the Royal Gold Medal in 1977, and many of his works have been listed on the National Heritage List for England.

The use of concrete as a structural and decorative building material was developed throughout the course of the twentieth century, and the Philips Building is significant for the range of concrete and its use in a themed manner. The Philips Building is an early example of Lasdun's experimentation with cast in-situ and precast concrete structures and finishes. Internal concrete features such as recessed skirtings, chamfered edges and varied finishes (close-boarded, exposed aggregate and smooth) demonstrate high quality concrete design and craftsmanship, with different finishes used in different ways. For example external concrete around the offices largely exposes the aggregate, and its use in the fins between the structural bays helps bring the outside into the building, while the close boarded finish (sometimes utilising large timber sheets for concrete shuttering) enhances the character of the long internal walls, creating a sense of intimacy and enclosure within expanses of concrete.

The Philips Building also exhibits communal value. It forms a major focus within the life of SOAS. The Philips Building was originally an experiment in 'continuous teaching'. When designing the Royal College of Physicians building, Lasdun is known to have asked the physicians 'what do you do?' rather than 'what do you want?' Throughout his career, Lasdun placed emphasis not just on a building's style, but also how it would be used. The Philips Building maintains its communal value through its continued use as an educational space, although the peripheral offices are no longer fit for purpose and do not address the functionality needed by the users.

## 6.2. Elements that Detract from Significance

Lasdun's original interior library remains largely unaltered, thereby preserving the main element of the Philip's Building's architectural and historic interest. However, many elements of the second through fifth floor corridors and perimeter offices have been altered in ways that detract from the building's significance. These elements represent opportunities for enhancement to better reveal the significance and interest of the Philips Building.

The segregation of staff in individual offices, excluding students and precluding more integrated working through the original design of the building, does not accord with current teaching methods and needs, and the changing nature of university life. This has meant that the many small offices impede effective use of the building and thus threaten the future of the building and its significance. Although the peripheral upper floor rooms were meant to be adaptable, there has been further subdivision of offices in a number of cases over time, additional to that shown on Lasdun's design drawings. The endless rows of closed office doors give the appearance of impenetrable walls accentuating the division between staff and students. Whilst SOAS is renowned for its integration between students and staff, in the current format, the communal value of the Philips Building is undermined by the lack of space for informal learning and a barriers to easy engagement between the students and academic staff and between the academic staff. This separation is evidenced by students sitting on the floor of the narrow corridors while waiting to enter offices or conversing with fellow students.

The brick link corridor is generally recognised as the least successful element of Lasdun's design, being plain and contrasting with the adjacent buildings. The lack of visibility within the link corridor reduces the legibility the Philips Building, making it difficult to determine that one is leaving Holden's building and entering Lasdun's building. Furthermore, the architectural character of the Philips Building cannot be appreciated when moving between the two buildings as views are very limited. The red brickwork contrasts with both the cladding of the Holden Building and that of the Philips Building.

The staircases, which provide the fire escape, are also not readily legible until one is at their doors, as there is no visibility into them from the corridors, except through their doors.

The low corridor ceilings also darken the corridors, despite being an original feature. This is less acceptable now that there is more teaching on the peripheral corridor offices and therefore more movement within the corridors.

# 7. Impact of Scheme on Significance

## 7.1. Effects of Proposal

Considerable attention has been given in the current developing scheme to the desirability of sustaining and enhancing the architectural and historic significance of the Philips Building, as well as the desirability of keeping the building viable for its original use. The most significant architectural element of the Philips Building, its iconic central library, will remain unaltered throughout this proposal for the test scheme. The analysis of the impact on significance of each element of the proposal follows below.

### 7.1.1. Sample windows

The existing windows in rooms 539 and 541 are of architectural interest, as they are original to Lasdun's design and preserve the external appearance of the building. Whilst the proposal to remove the existing windows in the sample rooms and replace them with the SAPA sample windows would alter the character of the rooms affected and would remove Lasdun's original window, the external appearance of the chosen windows is the same as Lasdun's windows, with the mullions in the same places and with a similar proportion of frame to window, in the same configuration. Any visual impact would only be seen within the two test rooms.

The proposed replacements have been designed to match the originals insofar as possible in terms of material and finish, as well as size, method of opening, glazing bar thickness and position in relation to the reveals. Drawing no. 20085-T-084 shows details of the Type 8 proposed SAPA windows, which can be compared with drawing no. 20085-T-080, showing the detail of the existing narrow windows. Likewise, drawing no. 20085-T-015 shows the Type 12 Proposed SAPA windows, which can be compared with drawing no. 20085-T-010, showing the existing Type 12 windows.

Given the reversible nature of the removal of existing windows in rooms 539 and 541, and the limited visual impact, the trial replacement windows would have a slight negative effect on the rooms affected. Overall, the sample windows would have a negligible effect on the significance of the building as a whole.

### 7.1.2. Removing finishes from heads of partitions in test rooms

Rooms 539 and 541 have been selected as the 'test' rooms where the heads of the partitions will be investigated to determine how they interact with the reinforced concrete slab above.

The southwest partition of room 539 is an original wall, typical of Lasdun's original principal bay divisions. These principal bay divisions are of significance as they preserve Lasdun's original plan form. However, the proposed investigations are limited to the heads of the walls, and the walls are finished with a modern gypsum plaster painted white, which is of limited interest. In addition, the wall finishes (plaster and paint) will be reinstated to match the existing wall finishes and colours, so there will be no lasting impact on significance.

The northeast partition of rooms 539, as well as both partitions of room 541, did not exist in Lasdun's original design: they are modern partition walls, inserted after the building's original construction (See Lasdun's fifth floor plan below). Therefore they have no significance, as they are later features and are not of intrinsic interest for their fabric. Their finishes (plaster and paint) will be reinstated to match the existing finishes once the investigation works are complete, reducing any lasting impact on the appearance of the partitions. Overall, the effect of investigations on the significance of the modern partitions will be neutral.

### 7.1.3. Borescope investigations to the link bridge

The testing scheme proposes that the borescope investigations to the link bridge be carried out in the location of two bricks which have been replaced since the link bridge was constructed. These two bricks are modern replacements and detract from the significance of the link bridge. Their replacement will not affect the significance of the building. Holes drilled into the mortar joints to aid the borescope investigations will be made good with matching cement mortar, with a flush finish, to match the existing pointing. There will therefore be no impact on reinstatement. The main works proposals (which do not form part of this application) will alter the link bridge and the brick walls.

# 8. Mitigation Measures

## 8.1. Mitigation for Window Replacements

The existing windows will be removed carefully and stored securely so that if the future proposal to replace windows throughout the Philips Building is not forthcoming (this is highly unlikely, as the design is relatively advanced), the original windows could be replaced within the test rooms.

Risks associated with scaffolding in relation to the test window replacements will be mitigated by the localised nature of the scaffolding and the use of pads beneath the base plates to cushion the roof surface.

## 8.2. Mitigation for Partition Investigations

Following the partition investigations, the areas of investigation will be made good with gypsum plaster and paint to match the original wall finishes, so that there is no long-term impact upon the internal appearance of the Philips Building's offices in rooms 539 and 541.

## 8.3. Mitigation for Borescope Investigations to the Link Bridge

Following the borescope investigations, the two affected bricks in the link bridge will be replaced and damaged mortar joints will be repointed with mortar matching the original in terms of composition, colour, aggregate and joint finish.

# 9. Conclusion

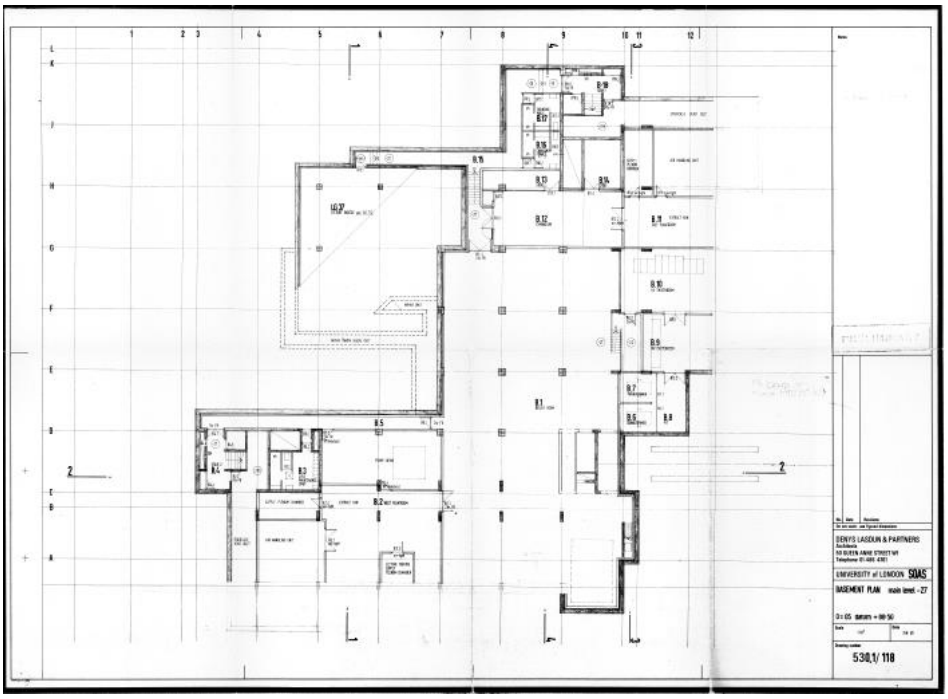
The Philips Building is a Grade II* listed building, and as such, substantial harm to or loss of the building should be wholly exceptional, as stated within the National Planning Policy Framework. The impact of the sample testing proposals has been assessed against the significance of the building and its constituent elements, and the effect of the proposals is deemed to be minimal, and considerably less than substantial harm. Considerable attention has been made in the design to the building's conservation, which relies upon the building's continued use as a library and teaching space for SOAS. These tests aim to provide clarity to a future design proposal that will preserve and enhance the architectural and historic interest of the building and ensure its continued optimum viable use by SOAS. Regardless of whether the future larger scheme alters any of the fabric affected by the test samples, the proposals for the test scheme have been designed to have minimal negative impact on the building's architectural and historic interest by sensitively repairing any areas disturbed by the investigation works.

The proposal is aligned with the Camden Development Plan 2010-2025 – Local Development and Framework and Core Strategy, which identify that proposals that reduce the energy consumption of listed buildings will be welcomed, provided that they do not cause harm to the special architectural and historic interest of the building. The proposed sample windows have been chosen after extensive research into options for improved thermal efficiency, and they provide the closest match to the existing windows in terms of all aspects of visual appearance, whilst reducing energy consumption. They are also of the same material as the original windows. The impact upon the appearance and character of the building caused by the potential replacement of these sample windows is further mitigated by the reversible nature of this alteration allowing the original windows to be refitted, and the negligible change in appearance of the replacement windows while they remain in situ.

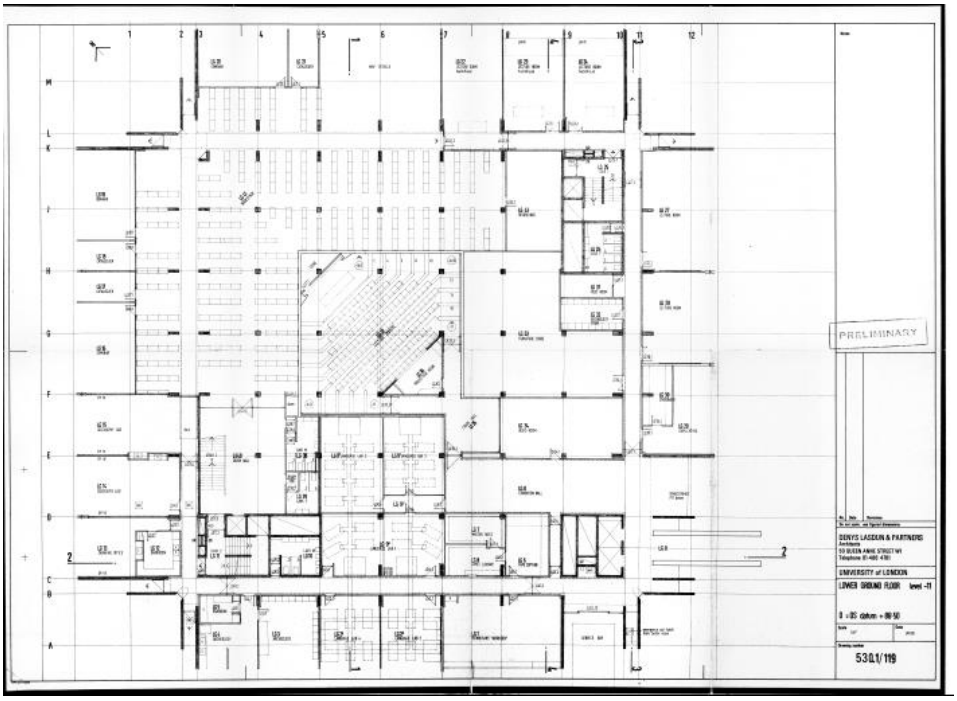
The proposed sample testing scheme has been designed to address any unknown design risks by proposing selective investigation prior to a major design proposal being finalised. This aims to ensure that there are no unforeseen risks to the architectural or historic significance of the building in the future design proposal. By identifying these issues and providing an opportunity for input by Camden Council and Historic England prior to the main design proposal submission, the risk of harm to the architectural and historic significance of the Philips Building will be minimised, and its special interest can be better preserved and enhanced.

# Appendix A. Historic Plans

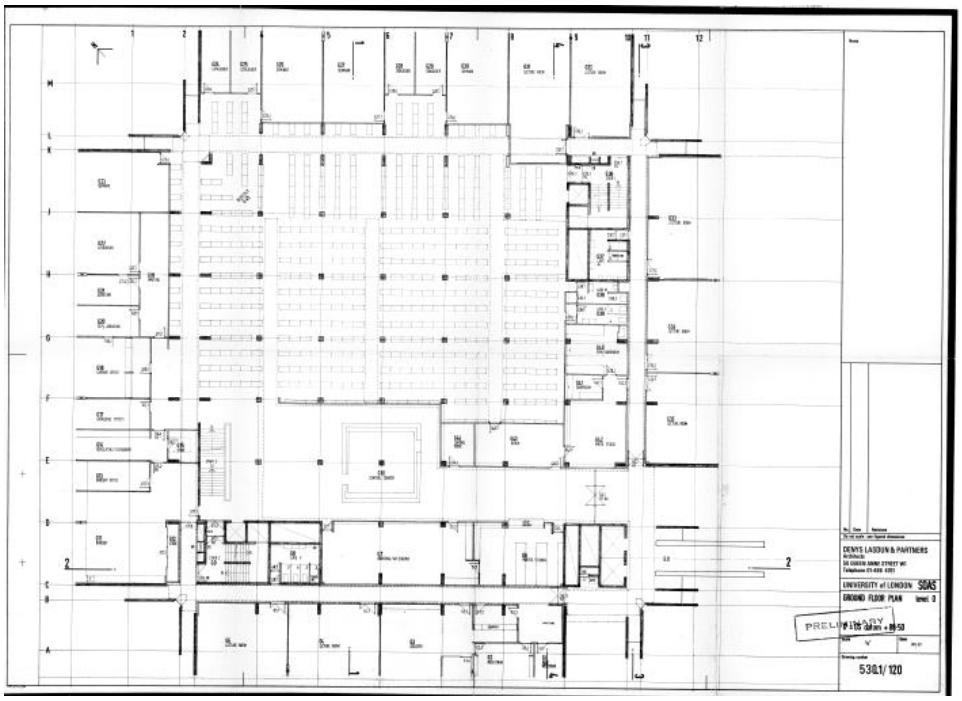
Lasdun's original drawings of the building are included below.



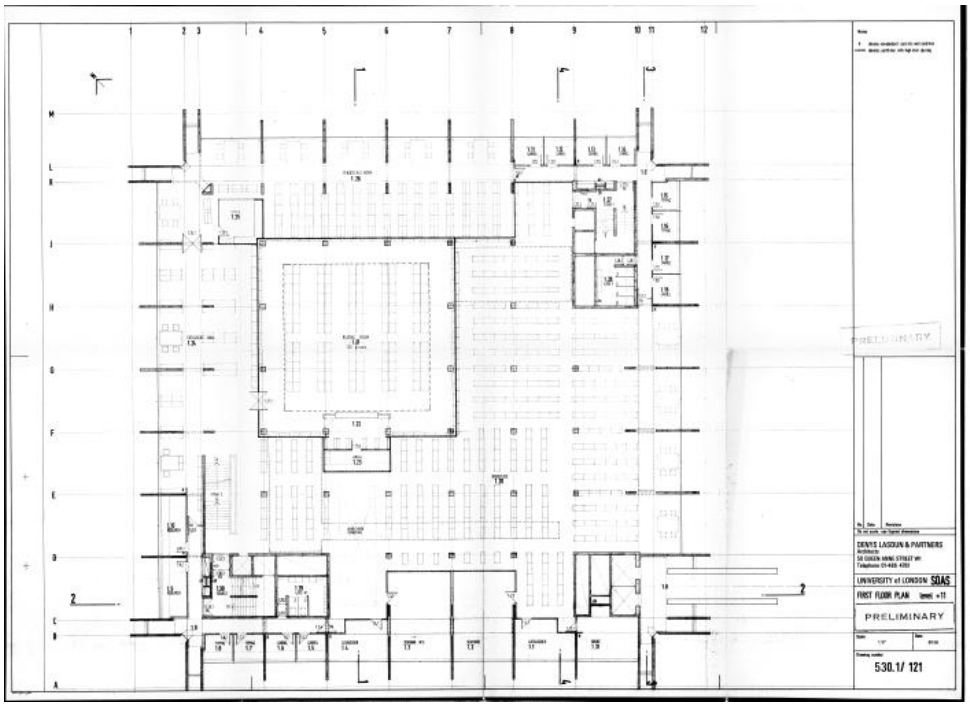

Basement Floor



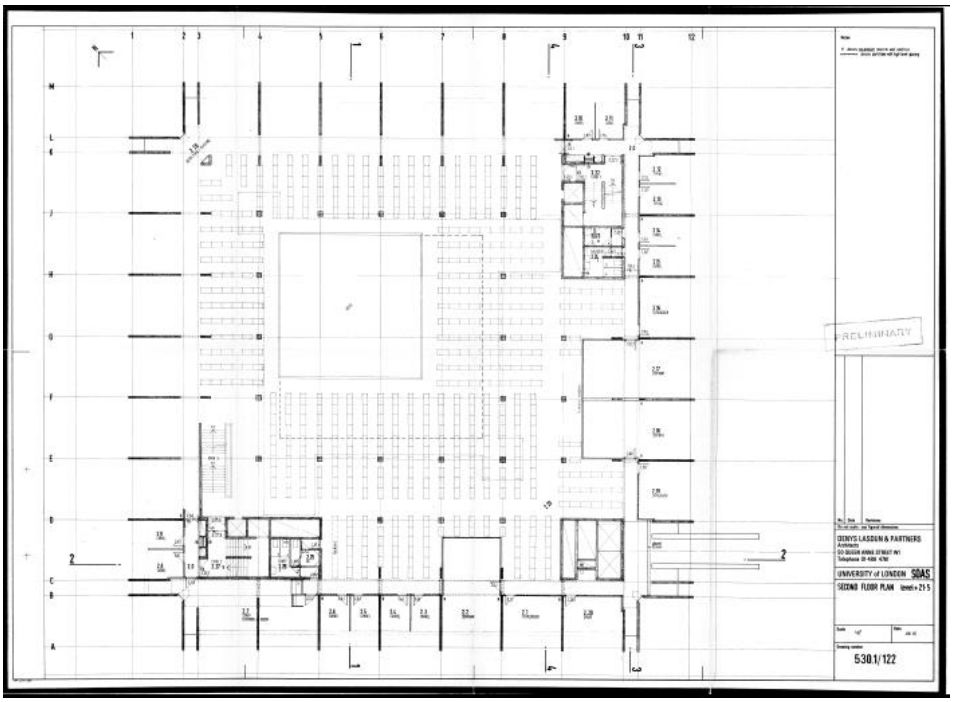

Lower Ground Floor



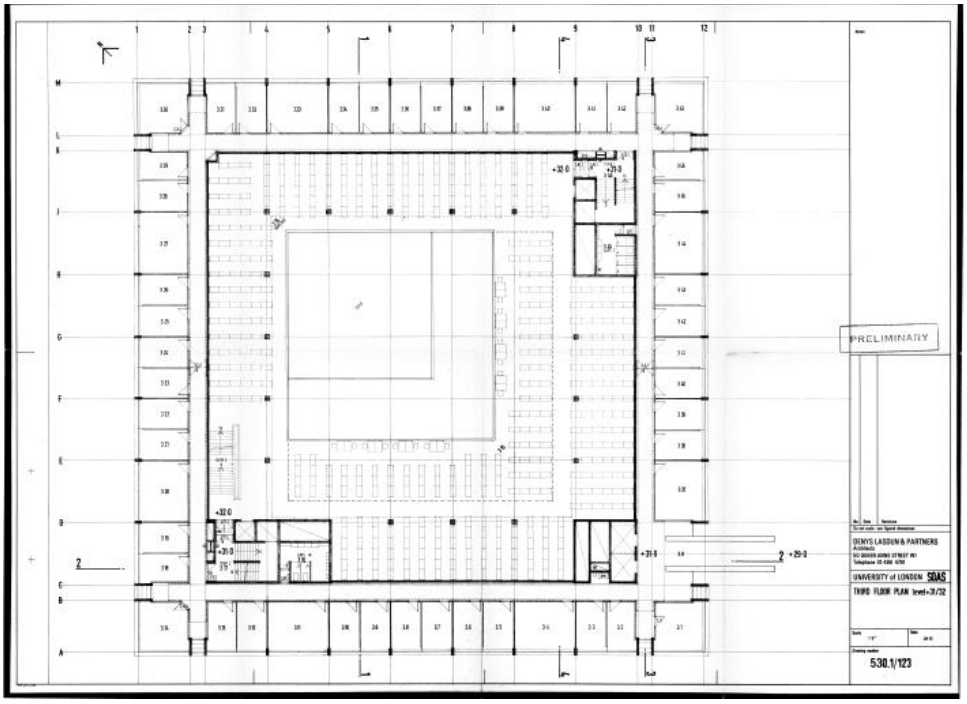

Ground Floor



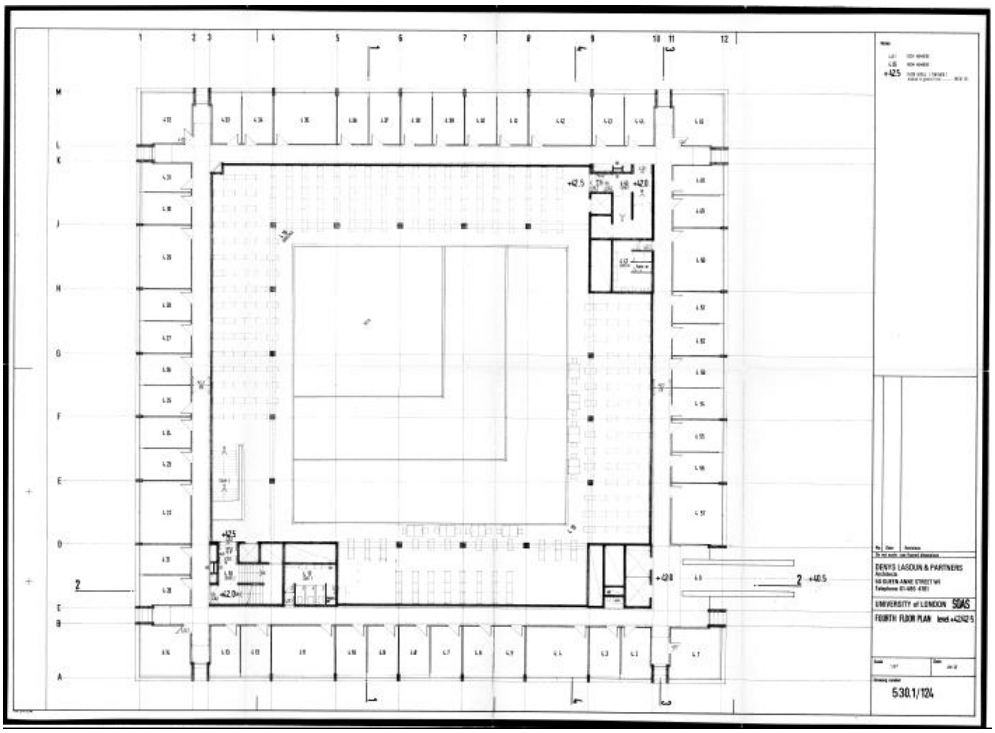

First Floor



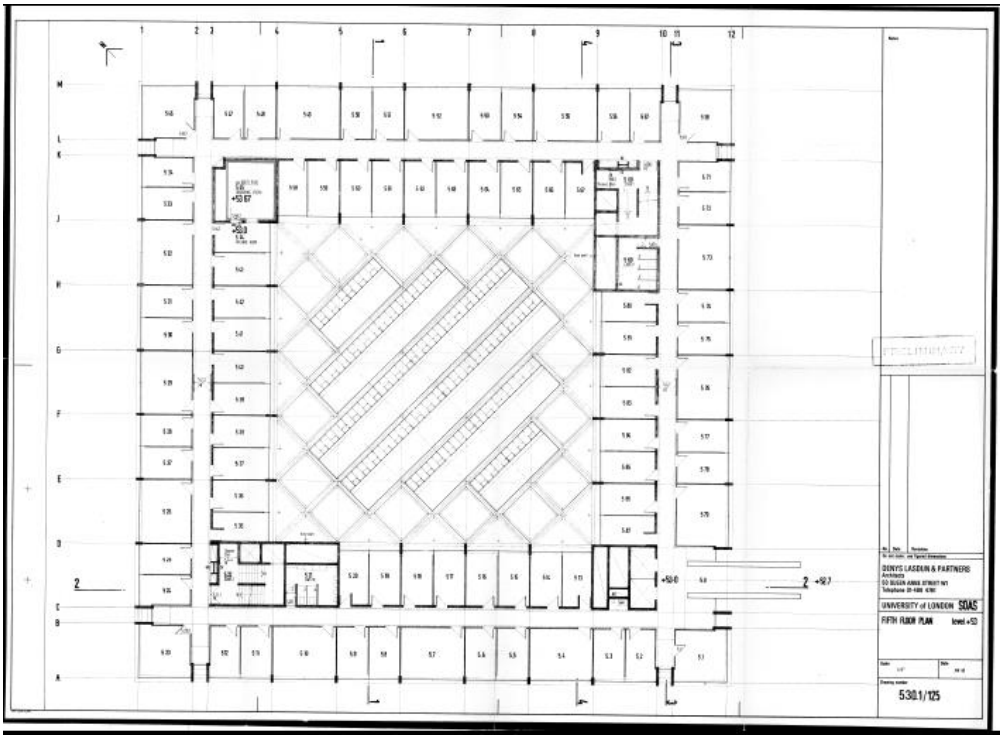

Mezzanine Floor



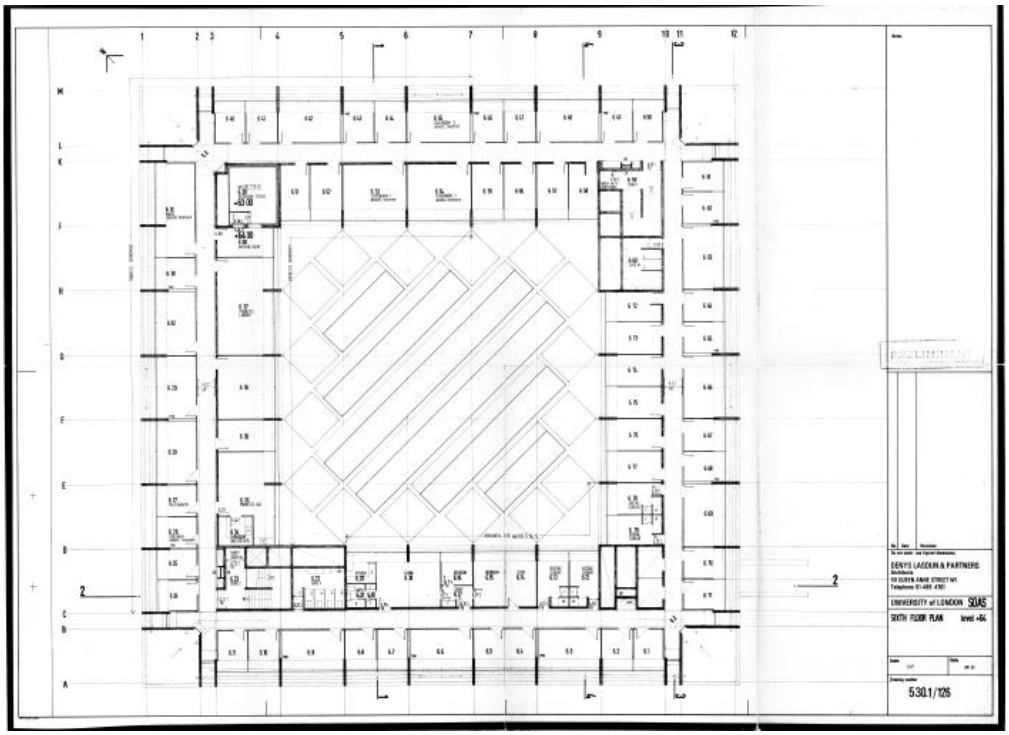

Second Floor



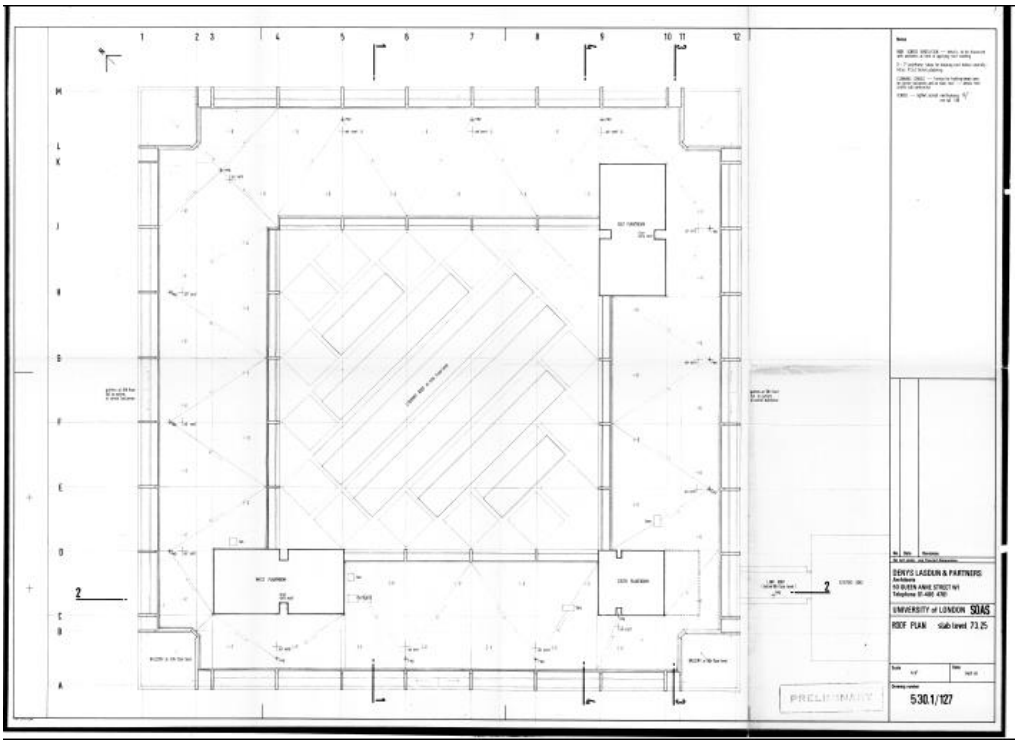

Third Floor




Fourth Floor




Fifth Floor




Roof

# Appendix B. Current Photographs


Exterior of Philips Building viewed from Torrington Square


Exterior view of Philips Building


SOAS

Rooms 535, 539 and 541 viewed from across the north lit roof

Rooms 535, 539 and 541 (identified with signage), as seen from across the north lit roof

Room 535-no works are proposed in this room

Room 539


Room 539

Room 539

Room 539

Room 539


Room 539


Room 539

Room 541

Room 541

Room 541

Room 541

Poorly replaced bricks on the first floor of the link bridge

**Lauren Ayers**
Senior Heritage Consultant, Atkins

Euston Tower
286 Euston Road
London
NW1 3AT
United Kingdom

**Email: lauren.ayers@atkinsglobal.com**
**Tel: 01207 121 2691**