



**BISSET  
ADAMS**

# LH005 - London School of Hygiene & Tropical Medicine, Keppel Street

Proposed improvements to Library lighting Design & Access Statement  
September 2016 Rev C

# CONTENTS

- 01 INTRODUCTION
- 02 CONSERVATION
- 03 DESIGN PROPOSAL
- 04 ACCESS

- 05 APPENDIX
  - I. Drawing: Site Location
  - II. Drawing: LSHTM First Floor
  - III. Drawing: LSHTM Library Existing RCP
  - IV. Drawing: LSHTM Main Library Proposed RCP
  - V. Drawing: LSHTM Library Annexe Rooms  
Proposed RCP
  - VI. Drawing: LSHTM Library Entrance Door &  
Stucco Freeze
  - VII. Photographs: Library Entrance &  
typical annexe
  - VIII. Photographs: Main Library
  - IX. 3d Sketch Visuals:  
Existing Library Lighting Scheme
  - X. 3d Sketch Visuals:  
Proposed Library Lighting Scheme
  - XI. Drawing: Radiator Cabinet Elevations
  - XII. Lighting Calculations (attached separately)
  - XIII. Report: Richard Griffiths Architects  
Conservation Management Plan  
(attached separately)
  - XIV. Wifi Access Points: Aruba 220 Series Access  
Points Data Sheet (attached separately)

## 01 INTRODUCTION

The London School of Hygiene and Tropical Medicine was established in 1924. It grew out of the London School of Tropical Medicine which had been set up in 1899 by Sir Patrick Manson. The main building of the school is a purpose designed facility located in Keppel Street in Bloomsbury. It was built between 1926 and 1929 following an architectural competition won by Percy Morley Horder with the likely assistance of Verner O Rees. The building was Grade II listed in March, 1982 and now lies within the Bloomsbury Conservation Area within the London Borough of Camden.

The creation of the London School of Hygiene and Tropical Medicine and the design of the Keppel Street building were two aspects of a single process and this link between the institution and its building continues today. The building contains laboratories, technical facilities, teaching spaces and offices as well as grand spaces which reflect the international eminence of the LSHTM within its field. The location of the building in the centre of Bloomsbury and its continuing attractiveness, are key aspects of the School's identity and its ability to attract students, researchers and funding from all over the world. Maintaining the character of the building into the future is therefore a key issue for the School's corporate direction.

*The above introduction has been taken from Richard Griffiths Architects, The London School of Hygiene & Tropical Medicine Conservation Management Plan (CMP), Draft 4: August 2013.*



## 02 CONSERVATION

### 02 CONSERVATION

The building is Grade II\* Listed and lies within the Bloomsbury Conservation area within the London Borough of Camden.

The CMP states that the building was completed in 1929 on page 20:

*The library, including both the main space and its subsidiary rooms, was carefully detailed in oak, with a wrought-iron gallery balustrade of geometrical design. The original clock remains today, as does some of the library furniture. However the lighting – originally large glazed pendant fittings – has been replaced by fluorescent fittings at ceiling level. The original board room and staff room on the south-west corner of the ground floor were also fitted with high-quality oak panelling and door joinery, which remains.*

The CMP Statement of Significance states on page 34:

*2. The building contains laboratories, technical facilities, teaching spaces and offices, as would be expected for a major academic building. However it also contains grand spaces (including the library, board room, director's suite and staff common room) which reflect the fact that LSHTM was an international institution eminent in its field, and which express its pride and confidence.*

and

*Geometrical patterns are highly developed in the library gallery and employed in simpler forms elsewhere in the building, for example on stair balustrades.*



Above, black and white photograph showing the LSHTM Library in its original form.

### 03 DESIGN PROPOSAL

Bisset Adams has been appointed by the London School of Hygiene and Tropical Medicine to look at improvement and restoration to the library lighting in their central London building at Keppel Street.

The library is of high historical architectural importance and our scheme recognises and understands this. All work that is to be done to the historic fabric will be done sensitively and be done so as to as closely match the original work as possible. We propose to feed the lighting power from above, as discreetly as possible to the main library and to the library annexes rooms.

#### Main Library

The main library is of great architectural importance. The 20th century strip lights, and downlights to the mezzanine, although functional, are unsatisfactory and do not show the library in its full grandeur. We want to restore the library lighting to its original splendour, whilst offering a practical design suitable for a functioning library. Lighting levels to desks have been carefully considered to ensure they are appropriate and the result is a successful work and study space.

We propose to remove the 20th century strip lights, and replace them with Art Deco chandeliers to match the original ones, (see image on page 4, of 02 Conservation). The proposed chandeliers are to be approximately 1100mm square; made from metalwork with

an aged brass finish. We propose opal glass which diffuses the light well, and that the glass panels would be either sandblasted or acid etched.

We also propose to restore the ceiling coffers back into their original state. New LED up-lighting in the coffers will light and further enhance the original restored ceiling coffers. The coffered ceiling detail allows for discreetly mounted linear led light to ‘frame’ each recess.

We propose recessed white anodised aluminium LED continuous strip lights to enable the necessary light levels at the desks. We have chosen white to match the existing ceiling. If recessing the lights is not feasible, then these lights can be surface mounted. We need further investigation to establish whether recessing the downlights will be possible. We propose to restore the plaster coffer detail to the ceiling above the mezzanine level, by casting from the original plaster ceiling coffers. This will ensure quality is maintained and will conceal the proposed new LED lighting details.

The Bookcases are the raison d’etre for this space and therefore deserve significant light on to the vertical plane. The original scheme had individual bookcase lights. We feel a more discreet approach is required whereby the books can be lit from remote linear sources. On the first floor this could be located within a discreet dark grey

aluminium coving mounted to the underside of the walkway. We have chosen dark grey, to complement the timber bookcases and surrounding timber. At high level there is the long run of bookcases which will already have spill light from the coffers. This would be augmented by addition direct linear lighting discreetly positioned within the coffers. The shorter run at the bookcases at one end has no significant spill light. We propose linear led light mounted off the bookcases or within the ceiling.

#### Library Annexe Rooms

We are also proposing to replace the dated existing 20th Century lighting in the adjacent four library annexe rooms, the rooms which are of high historic significance. We are proposing replacement chandeliers in the adjacent main reading room. This room is to be largely similar to the main library, with up lighters to the ceiling coffer, and strip downlights - which we are proposing to angle to best light the room. We are proposing to hang modern 1.8m long aluminium direct pendant, powder coated in a dark grey, to be in the other library annexe rooms. Again we have chosen dark grey, to complement the timber bookcases and surrounding timber. The lights will provide sufficient down light to meet the current library lighting requirements and will also provide an up-light component to help make the room feel spacious and light and to also make the most of the existing ceilings.

03 DESIGN PROPOSAL continued.

### Stucco Freeze

An additional improvement is the proposed specialist lighting to the stucco freeze above the library entrance door in the Stair Lobby K/159.

We are proposing using angled downlighters hidden behind down-stands that match the existing. This lighting designed specially for the stucco freeze will help light it in a uniform and constant way. We also propose similar a solution to improve lighting the door below the stucco freeze.

### Conclusion

So in conclusion, most of the main library features are to the architect's original vision, but the 20th century strip lighting in the ceiling are an unsightly and unsuccessful modern intervention in architectural terms.

The library is a working one, and the new lighting needs to light the desks below to an acceptable level for users studying. The new Art Deco chandeliers, together with restoration of the ceiling coffers, will bring back the library ceiling to life. These enhancements not only conserve the library interior, but will restore the library in keeping with the original architects vision. Our proposal to the library annexe rooms, will also significantly improve the existing dated 20th lighting, in a similar fashion as the main library. The new proposals will be functionally and aesthetically far superior to the existing lighting. The

propose specialist lighting to library entrance door stucco freeze, and entrance door below will complete the redevelopment.

### Main Library Radiators

We are also proposing radiator cabinets to the six radiators in the main library. The radiator cabinet casing will be fitted on split battens so that the casing can be easiliy removed for servicing. We aim to ensure that the existing timber paneling behind radiator unit is preserved.

We have chosen dark grey to match the adjacent bookcase lighting downlighters, and to complement the timber bookcases and surrounding timber. Refer to 05 Appendix X. Radiator Cabinet Elevations.

### Main Library Wifi Upgrade

We are also proposing a Wifi upgrade to the main library. Two Aruba 220 Series Access Points are to be located discreetly as possible in two of the ceiling smaller coffers above the mezzanine walkway. The Access Points are to be mounted directly to the ceiling with power & data via surface mounted Cat-6 cables. Refer to 05 Appendix, IV. Drawing: LSHTM Main Library Proposed RCP, and XIV. Wifi Access Points: Aruba 220 Series Access Points Data Sheet (attached separately).

### 04 ACCESS

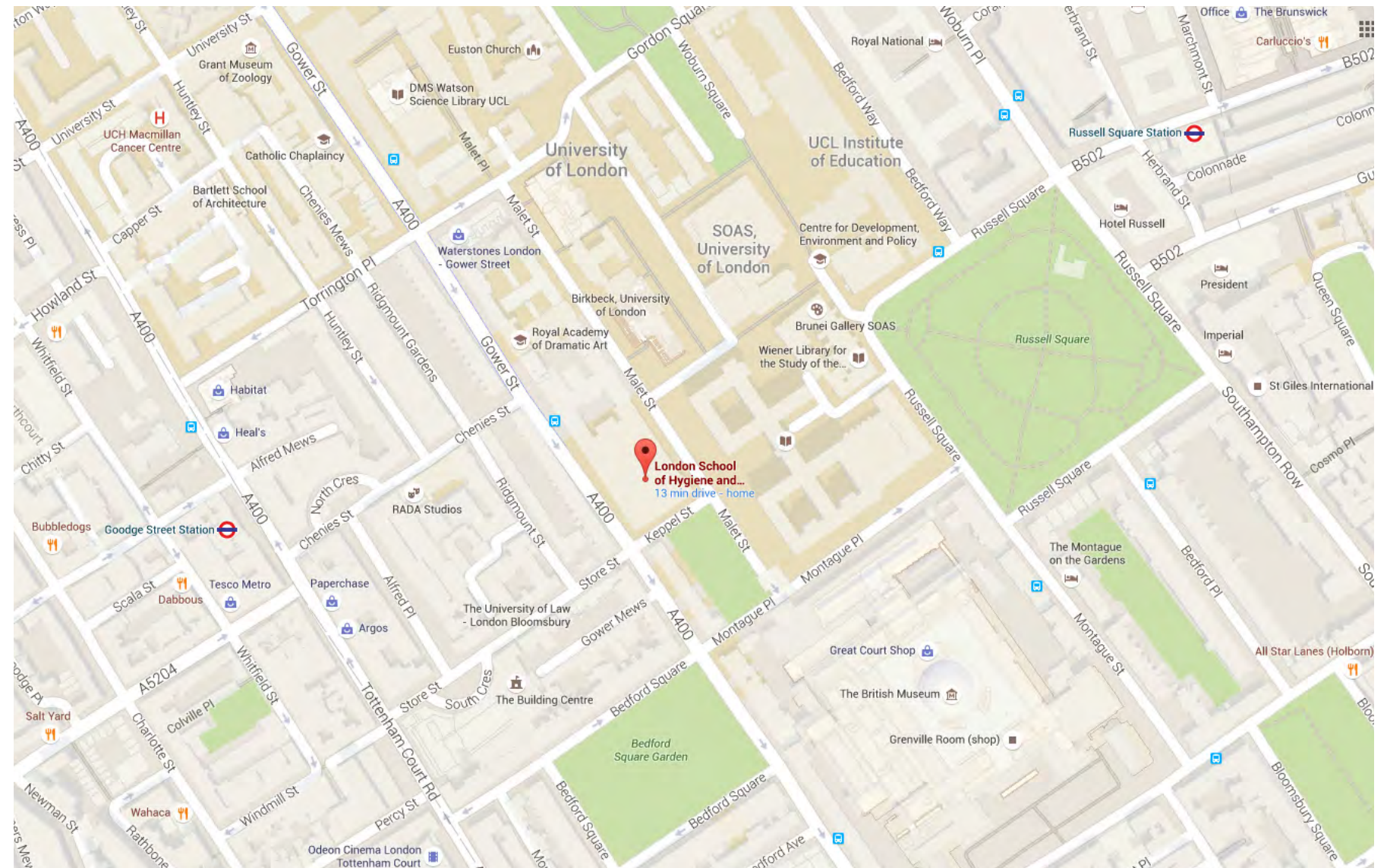
We are not changing the access to the area of refurbishment, we will be refurbishing only the lighting and ceiling, as well as the library entrance door in the Stair Lobby K/159. The resultant improved lighting will enhance the space and improve the situation for the visually impaired.

As this is an existing Listed building there are limitation to what can be done with regards to access. However, within these constraints the following best practice guidelines (with regard to accessibility at the third floor of Senate House) have been considered and adhered to wherever possible.

- Disability and Discrimination Act 1995
- Building Regulations—Approved document M (access to use of buildings).
- Building Regulations—Approved document K (protection from falling, collision and Impact).
- BS 8300:2001 - Design of buildings and their approaches to meet the needs of disabled people Code of Practice.



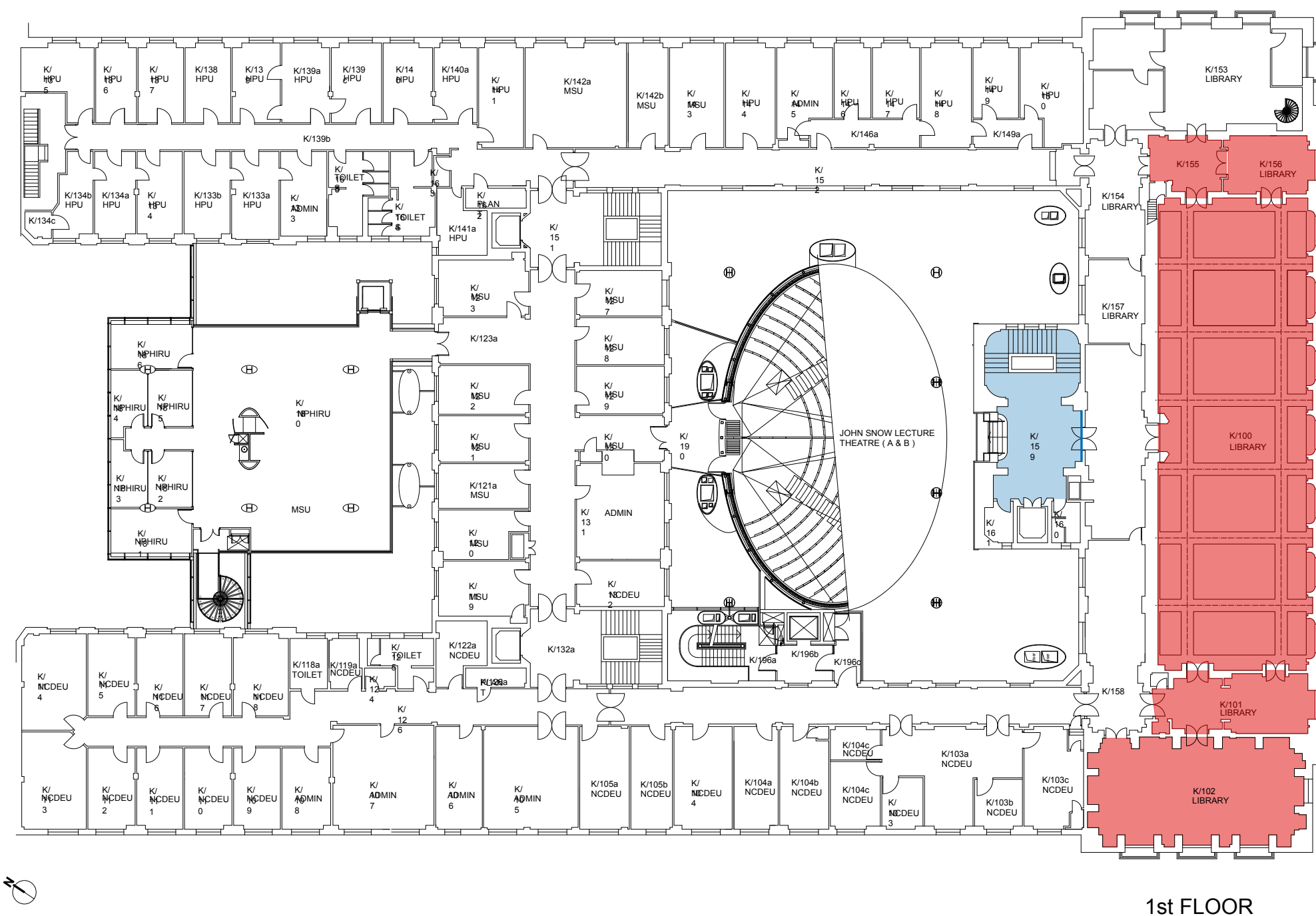
## I. Drawing: Site Location



Above, site is located in Bloomsbury between Goodge Street and Russell Square Underground stations, (Google Maps).  
For the history of the site refer to page 6 of the CMP.

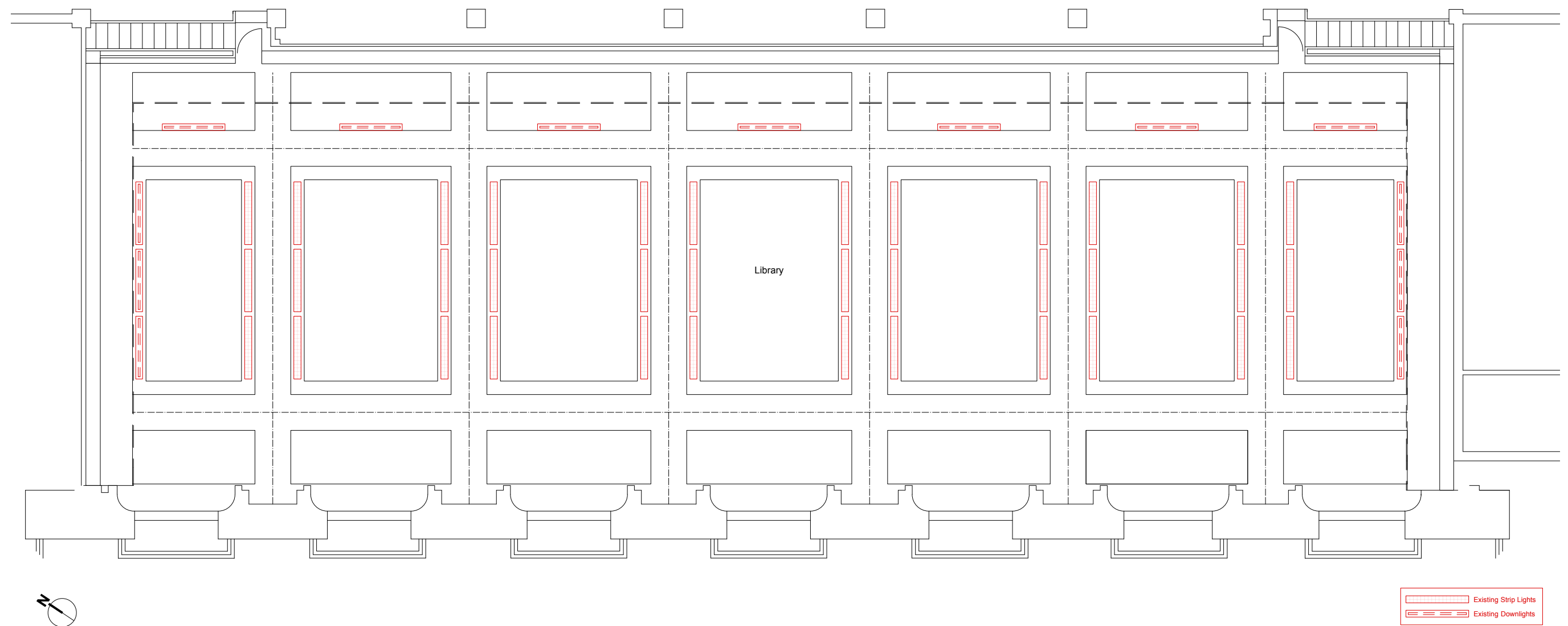


## II. Drawing: LSHTM First Floor



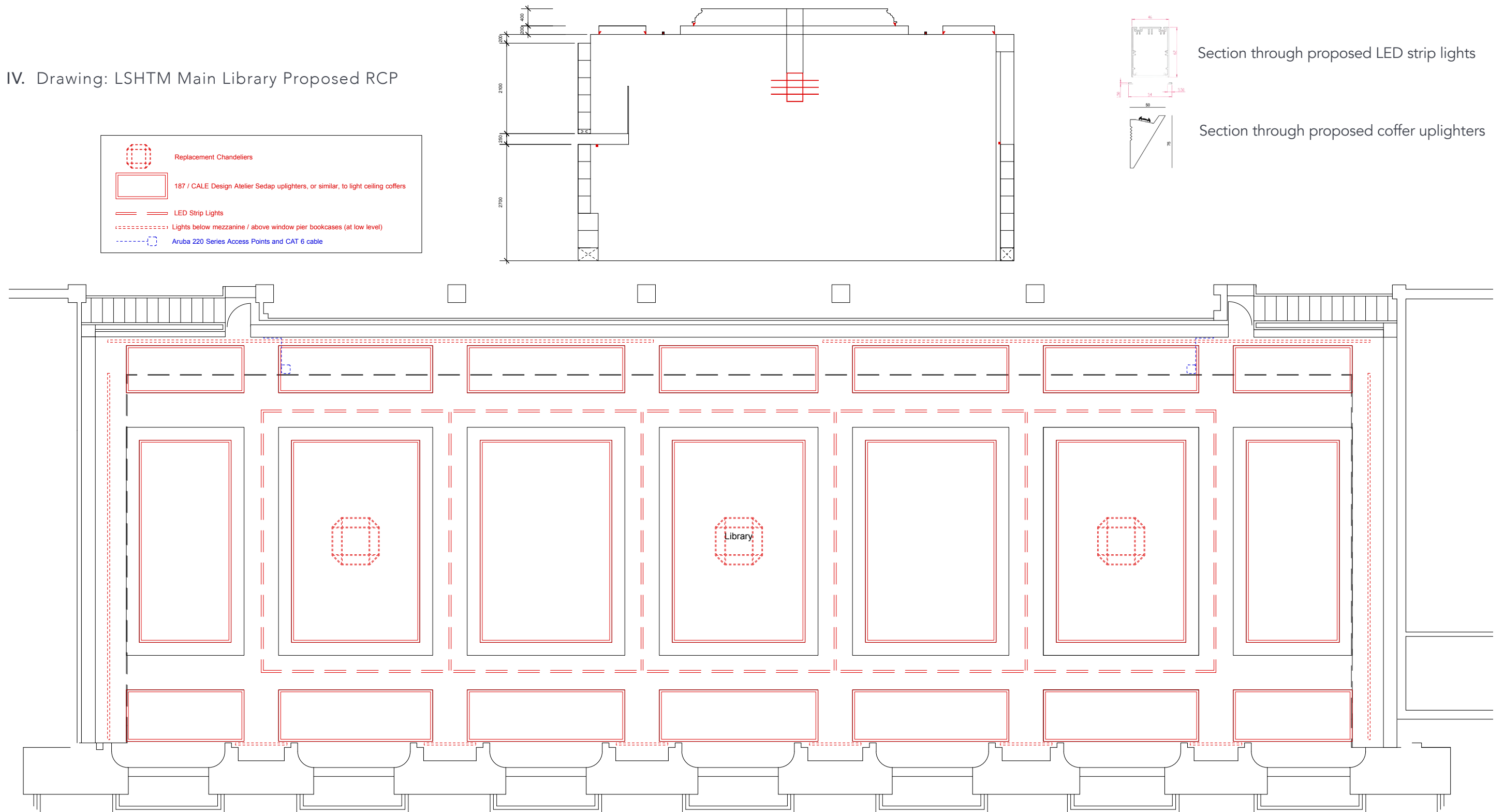
*Above, First Floor Plan showing the highly significant areas - the main library and annexes as stated throughout the CMP and indicated on pages 45, 59 to 62.*

## III. Drawing: LSHTM Library Existing RCP



Above, Existing reflected ceiling plan of the main library, located on the first floor. For the history of the building refer to page 4 & 5 of the CMP.

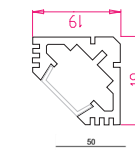
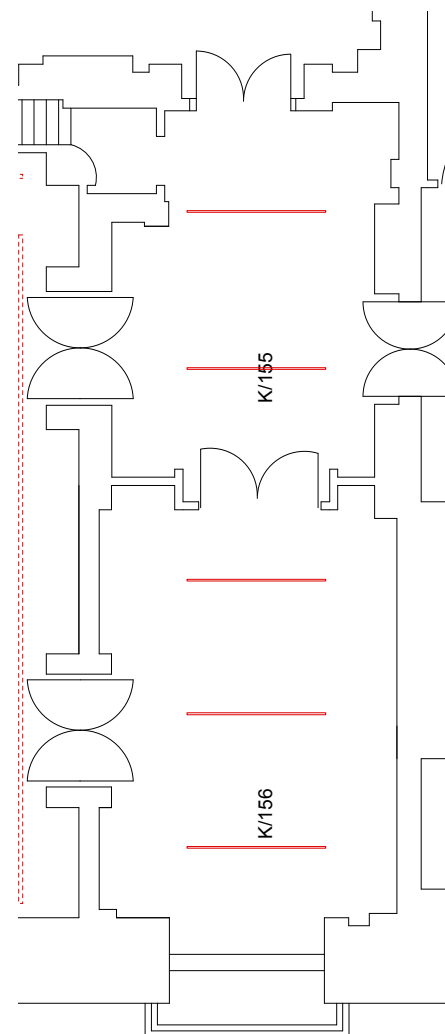
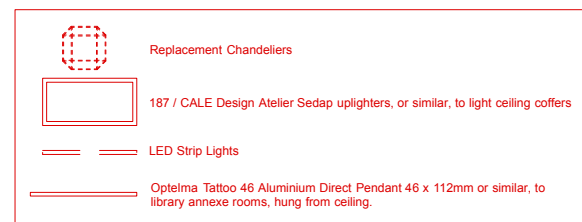
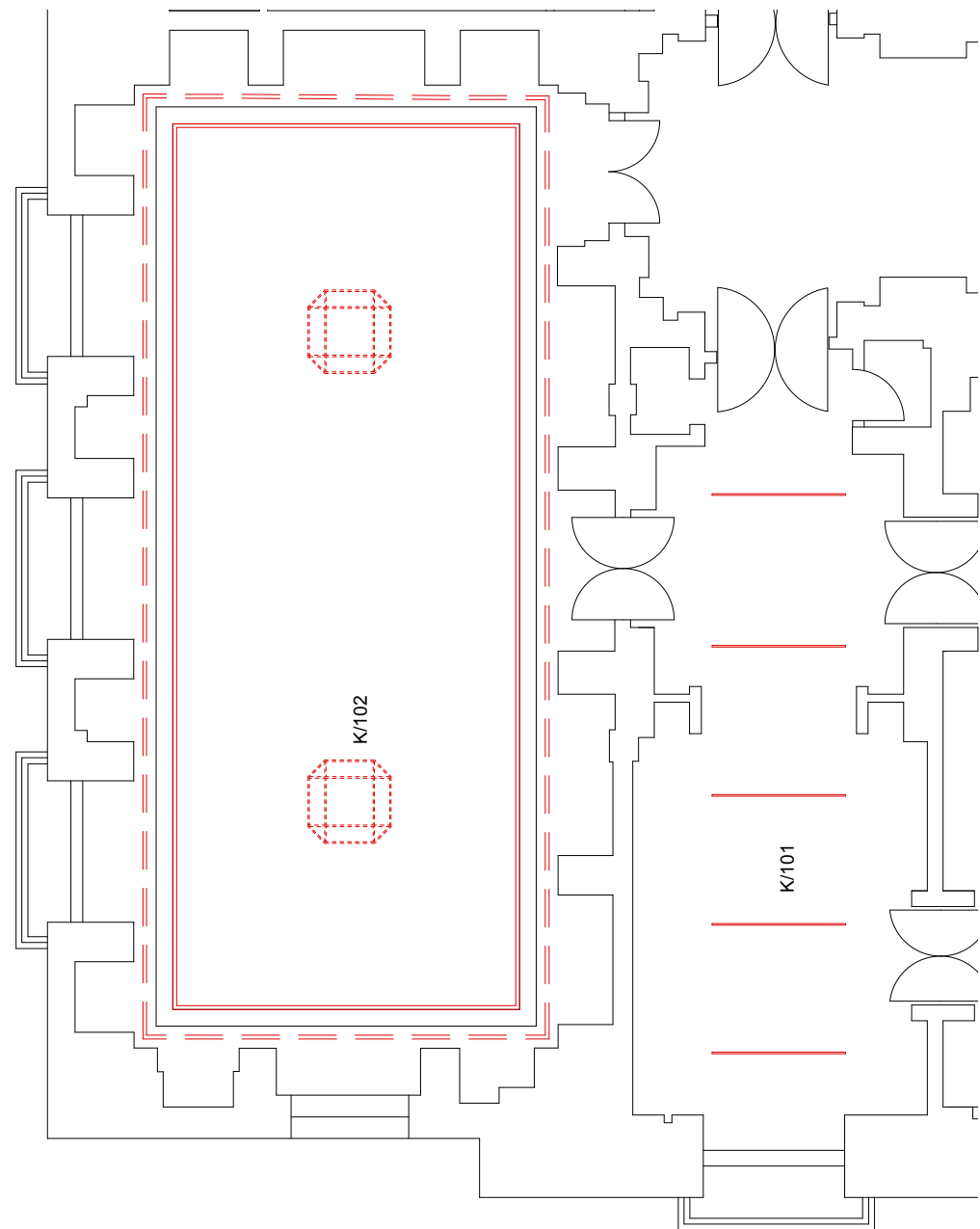
## IV. Drawing: LSHTM Main Library Proposed RCP



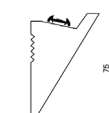
Above, Proposed reflected ceiling plan and sketch section of the main library, located on the first floor.



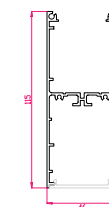
## V. Drawing: LSHTM Library Annexe Rooms Proposed RCP



Section through proposed LED strip lights



Section through proposed coffer uplighters



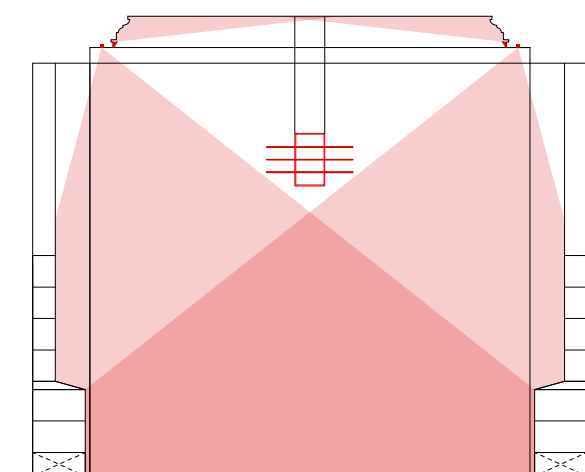
Section through proposed Tattoo 46 hanging lights



Proposed LED strip lights



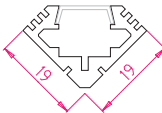
Proposed Tattoo 46 hanging lights



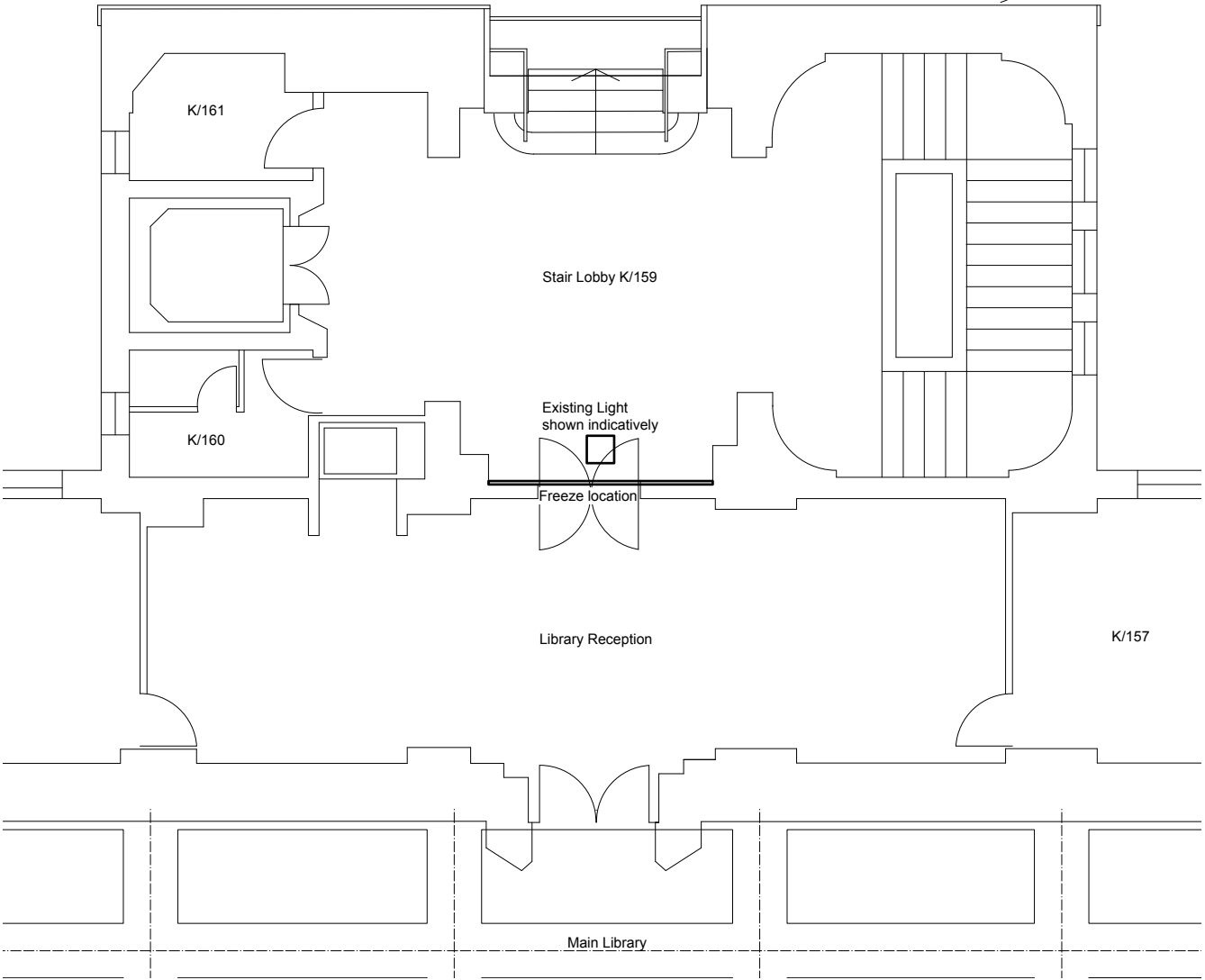
Above, Proposed reflected ceiling plan of the library annexe rooms, including the main reading room, located on the first floor. Above right section through main reading room.

05 APPENDIX

VI. Drawing: LSHTM Library Entrance Door & Stucco Freeze



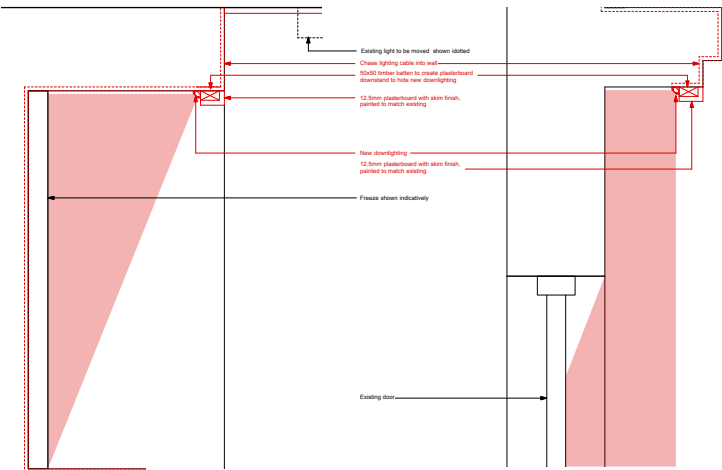
Section through proposed LED strip lights



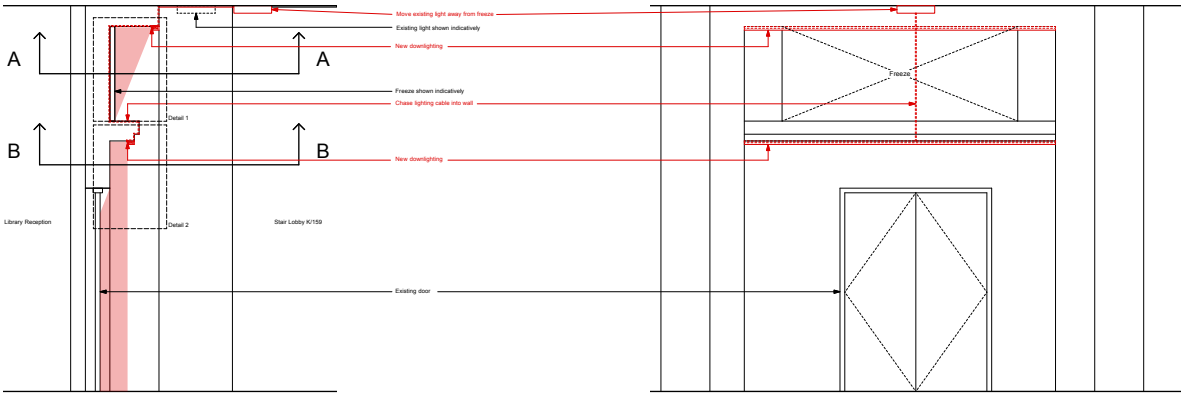
Above, Photographs of library entrance door and stucco freeze above. Right, plan showing location of stucco freeze above library entrance door.

05 APPENDIX

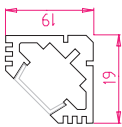
VI. Drawing: LSHTM Library Entrance Door & Stucco Freeze



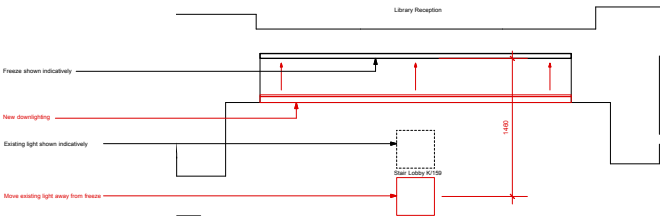
Above, library entrance door and stucco freeze lighting detail 1 left and detail 2 right.



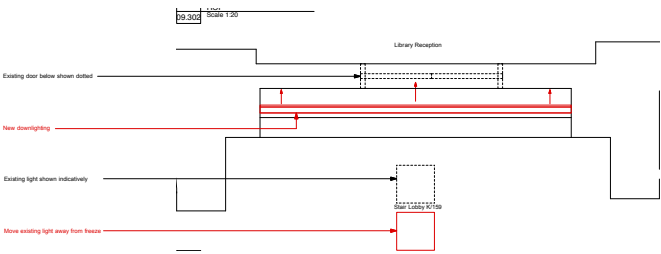
Above, library entrance door and stucco freeze lighting above section and elevation.



Section through proposed LED downlighting



Above, library entrance stucco freeze lighting RCP.



Above, library entrance door lighting RCP.



## VII. Photographs: Library Entrance & typical annexe

Photos 1 to 4 to the right show the entrance doors to the library, doors to through to the library, main reading room, and the one of the typical annexe rooms as existing.

1.



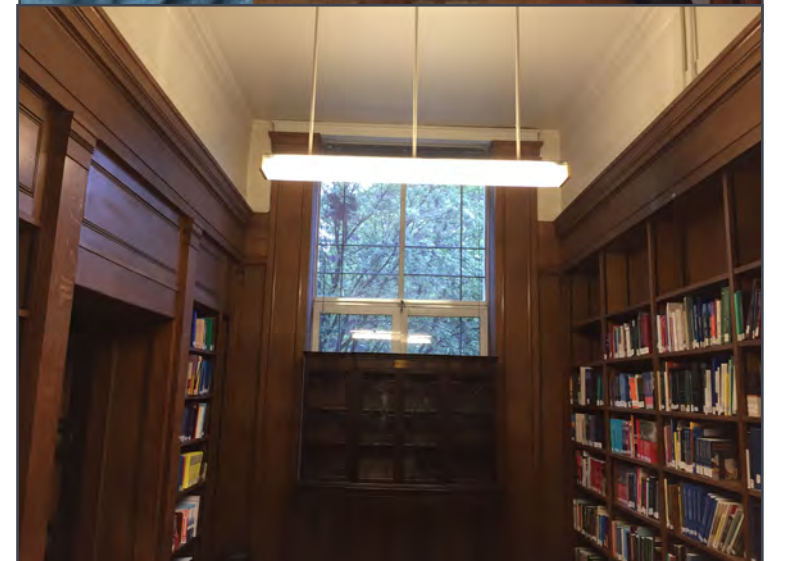
2.



3.



4.





## VIII. Photographs: Main Library

Photos 5 to 10 to the right, photos of the Library as existing.

5.



6.



7.



8.



9.



10.





## IX. 3d Sketch Visuals: Proposed Library Lighting Scheme

All ceiling coffers are to be restored, and LED lighting is to be added to bring the coffers to their original grandeur.



Proposed LED strip lights



Proposed coffer uplighters

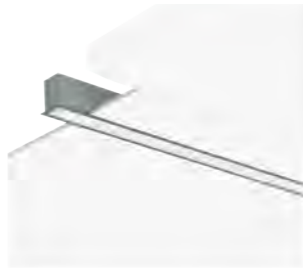
*Below, 3d sketch visual showing our proposal for the LSHTM Library, view from the library*





## X. 3d Sketch Visuals: Proposed Library Lighting Scheme

Books on the mezzanine level are to be lit by coffer LED lighting



Proposed LED strip lights

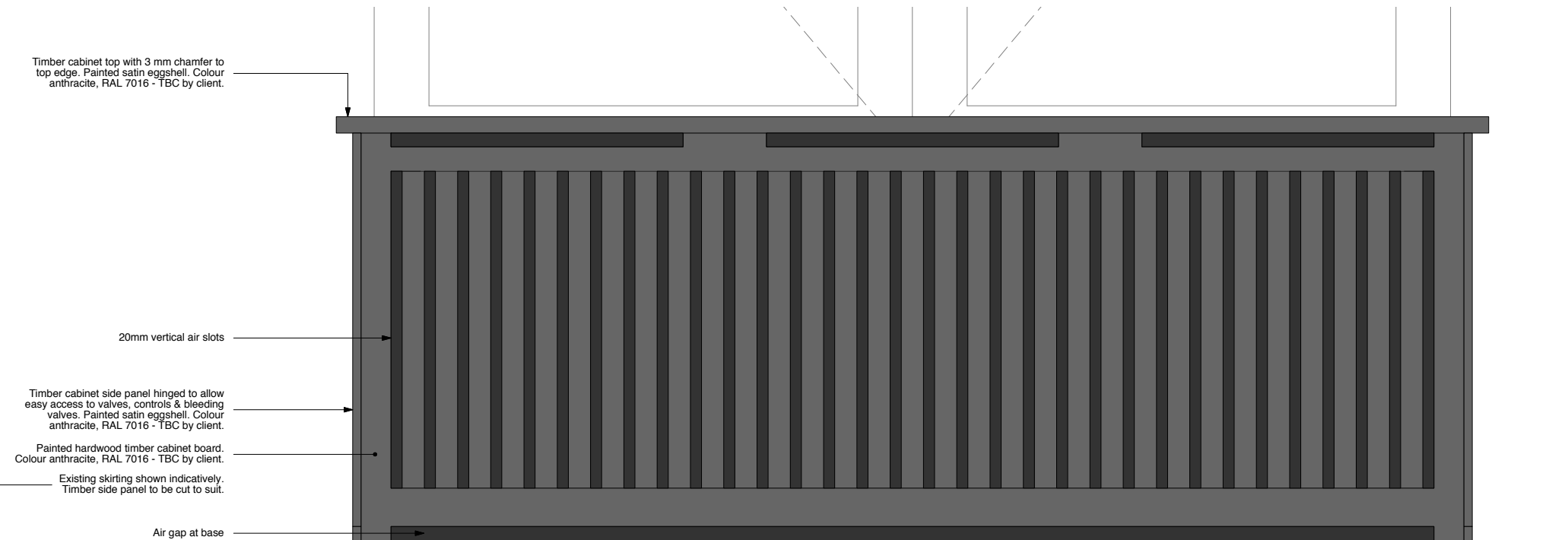
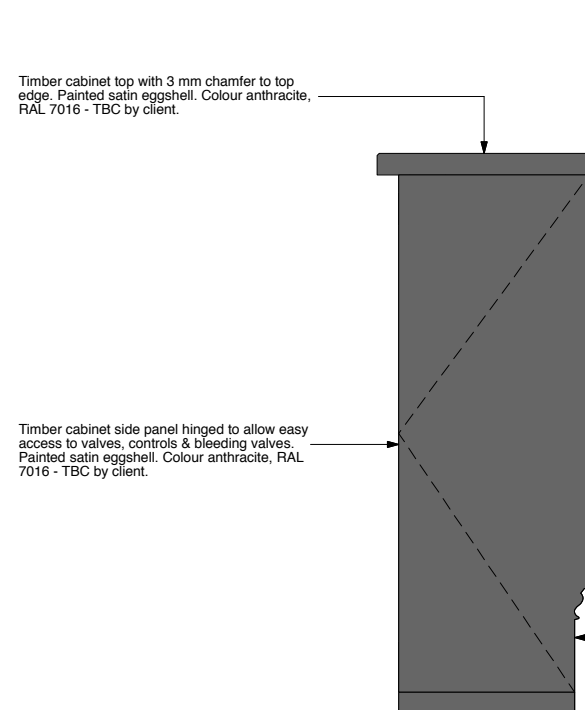
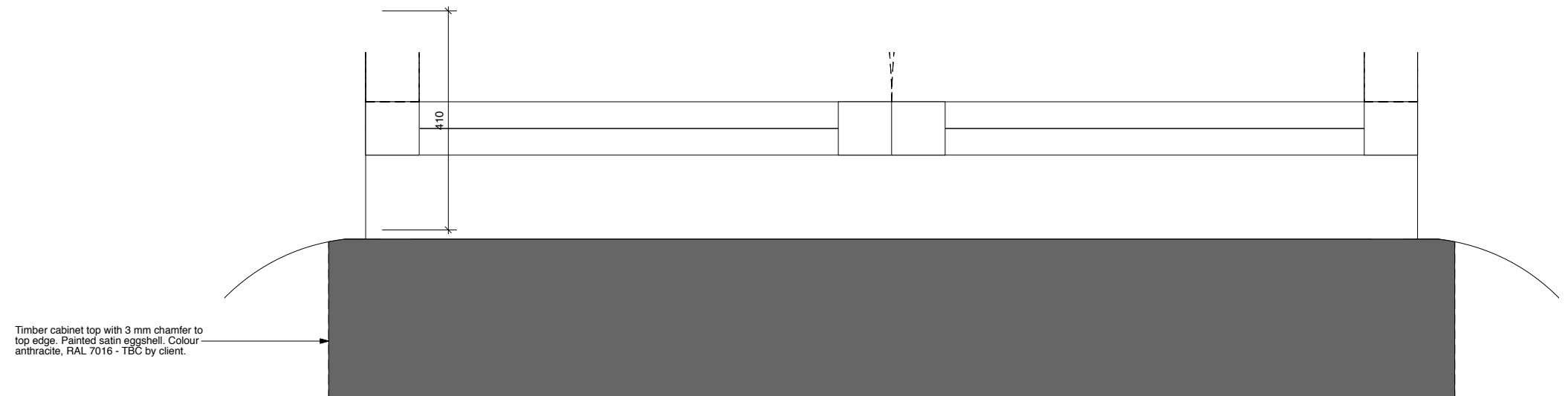


Proposed coffer uplighters

*Below, 3d sketch visual showing our proposal for the LSHTM Library, view from the mezzanine.*



## XI. Drawing: Radiator Cabinet Elevations



Above, Proposed radiator cabinet elevations

### XII. Lighting Calculations (attached separately)

The lighting calculations to the main library, and library annexe rooms show the light levels at the critical desk height, it is important that the lighting levels are reasonably high and consistent, and our scheme achieves this.



### XIII. Report: Richard Griffiths Architects

Conservation Management Plan (attached separately)

The Richard Griffiths Architects Conservation Management Plan outlines the history of the school and building, the school today, statement of significance, risks and opportunities, and conservation policies.

XIV. Wifi Access Points: Aruba 220 Series Access  
Points Data Sheet (attached separately)

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