

London School of Hygiene and Tropical Medicine - **Keppel St.**

Phase3B: Central wing - L4, L5 & L6 Design & Access Statement

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1.0 Introduction

1.1 Project Overview

This Design & Access statement has been prepared by Rock Townsend Architects on behalf of The London School of Hygiene & Tropical Medicine (LSHTM) for the proposed laboratory improvement project on the 4th, 5th, & 6th floors within:

London School of Hygiene & Tropical Medicine
Keppel Street
London
WC1E 7HT

The London School of Hygiene and Tropical Medicine (LSHTM) is a world leading research and higher education institution with its administrative research and teaching centre located at Keppel Street within the Bloomsbury Conservation Area. These proposals are a key part of their long term overall masterplan development strategy to significantly improve their research, learning and teaching facilities within the Keppel Street campus, through phased internal refurbishment works and renovation of the ageing building fabric and services infrastructure.

The design proposals for the Grade II listed building have been subject to a collaborative engagement process with Camden planning department through a Pre-Application in November 2021, a site visit & subsequent positive feedback (refer to Section 6).

1.2 Client Brief

LSHTM require additional and improved laboratories to enhance their ability to carry out specialised research, including their world class renowned malaria research and other supporting activities. Due to the specialist nature of their research, there is a requirement for some areas to provide containment level 2 and level 3 holding and research facilities in accordance with Home Office requirements and regulations.

All of the works are contained within the central block linking the Gower and Malet Street wings and separating the North and South courtyards on the 4th, 5th and 6th floors including enhancement to one of the two main staircases. The client and its consultant team, including (their heritage consultant) F&G, acknowledge the importance of the Keppel Street listing and heritage, and have developed proposals which balance the need to upgrade the facilities to improve accessibility and provide 21st Century research space within an important 19th Century heritage asset. All works proposed have been balanced against a careful consideration of the existing building and areas which have significant heritage value, including the staircases.

The proposals are summarised as follows:

- Circa 1320m² of internal reconfiguration and enhancement on the 4th, 5th and 6th floors to accommodate new research laboratories, holding and support spaces.
- 50sqm extension of the Gower Street (West) stairwell and lift core to improve building efficiency, functionality and access to the 5th and 6th floors.
- Enclosure of the existing 5th floor external louvered and covered plant space with new insulated roof and insulated external walls in order to provide much needed usable internal laboratory space and to improve the thermal performance of the building.
- Replacement of life-expired mechanical plant on the roof with a rationalised arrangement of new fit-for-purpose and more efficient mechanical plant
- Re-surfacing and re-insulating of the roof to improve building envelope and energy efficiency of the campus, and reduce client ongoing maintenance obligations, and to improve the Health and Safety for future maintenance operations.

1.3 Key Objectives:

- To create laboratory spaces that conform to contemporary and future operational and safety standards and which improve spatial quality and efficiency;
- To reconfigure building circulation to improve building efficiency, functionality and access, reactivate the underutilised Level 6 due to inaccessibility and improve the health and safety of occupants through improvements to the fire-strategy and removal of legacy asbestos;
- To upgrade the building envelope and services to improve energy efficiency to meet LSHTM's sustainable targets by 2030 and to future proof services and their infrastructure

2.0 Scope & Context

2.1 History and Heritage Overview: The Campus

Designed by P Morely Horder and V Rees, The London School of Hygiene and Tropical Medicine's Keppel Street building was completed in 1929 as a purpose-built educational and research facility. The building was Grade II listed in March 1982 and lies within the Bloomsbury Conservation Area within the London Borough of Camden.

It is a building of significant importance, of high quality and innovative for its time, continuing to enhance the suite of educational buildings within the Bloomsbury Conservation Area and the make up of the University of London Estates.

Similar to Senate House (by Charles Holden) and of the same age, the building is steel framed (one of the first ever erected in the United Kingdom) with a Portland stone faced façade designed in a stripped Classical style. A notable sculptural feature on the building is the carving of Apollo and Artemis riding a chariot (used as the School's logo) located above the main entrance. The first floor balconies are decorated with gilded bronze insects and animals involved in transmitting disease. A frieze surrounding the building displays the names of pioneers of public health and tropical medicine between laurel wreaths.

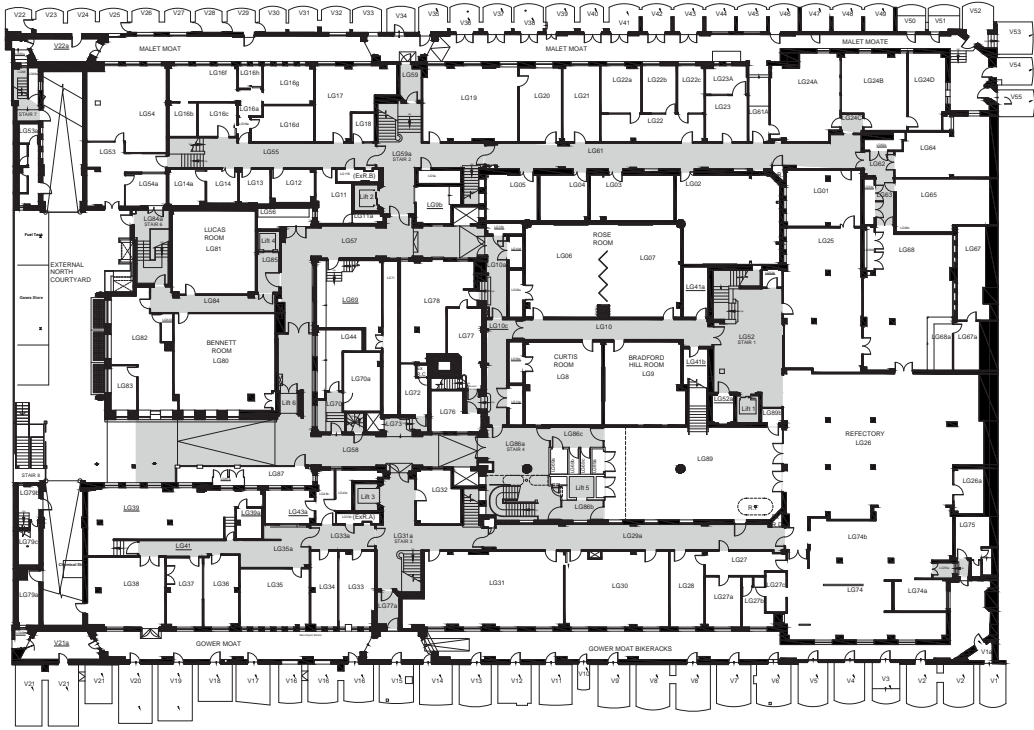
Over the years, and since completion of the original 1929 building, numerous major alterations and additions have taken place, most notably and recently, the infilling of the North and South Courtyards (completed in 2004 and 2009 respectively) as well as previous historic extensions at roof level which added technical accommodation as well as the installation of significant additional plant and equipment.

For further information please refer to **Appendix F** for the Heritage Statement supporting this proposal and **Appendix C** for the Conservation Management Plan for LSHTM.

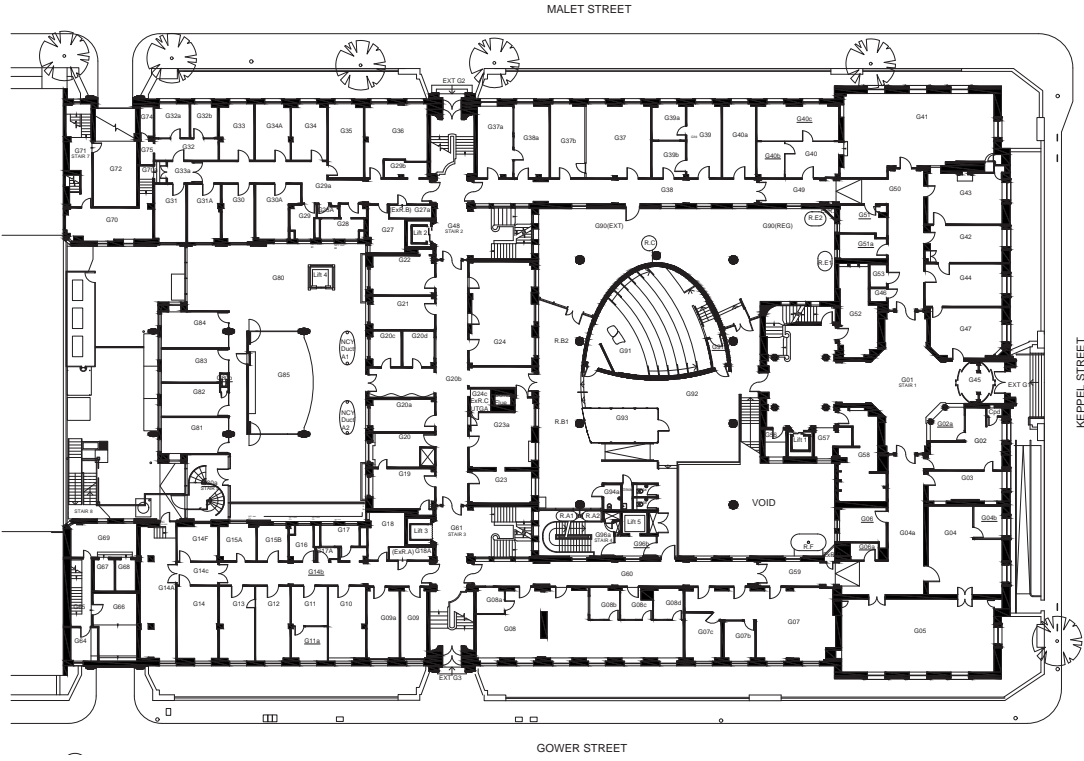


Gower Street Elevation 1926

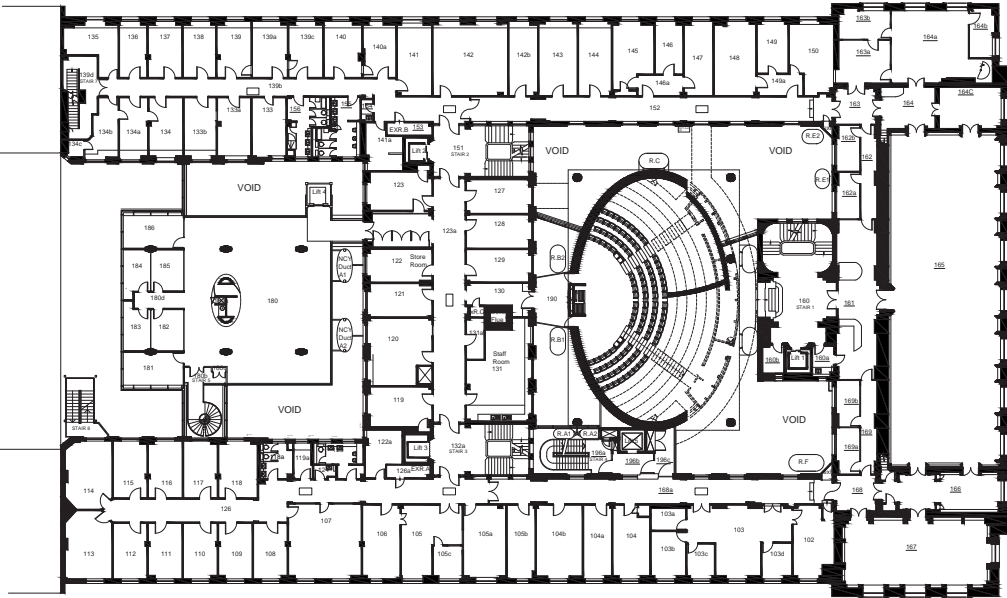
2.2 Existing Plans and Sections: The Campus



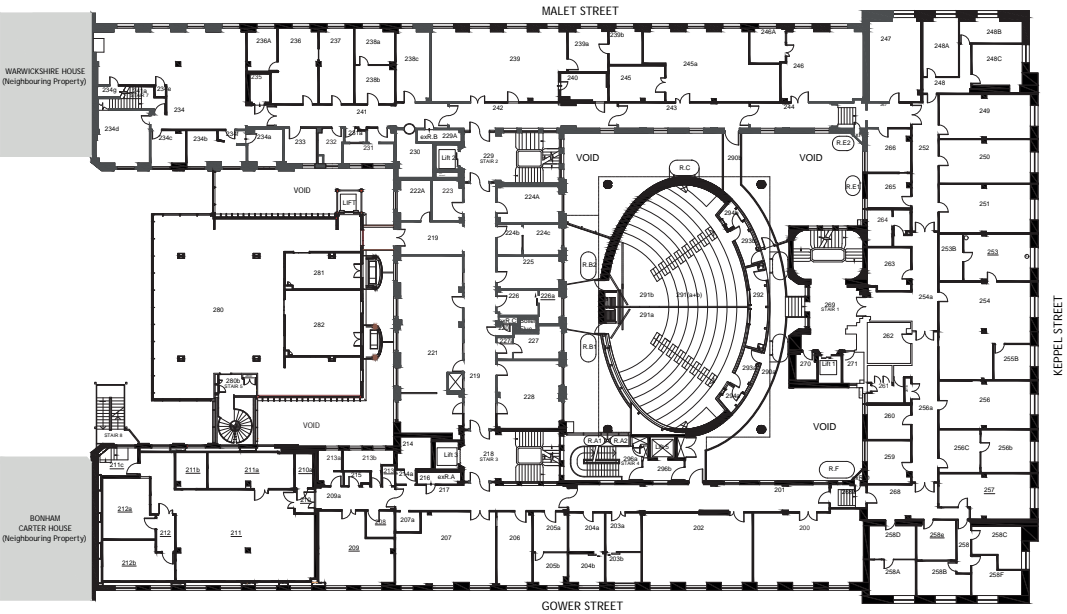
Existing Lower Ground Floor



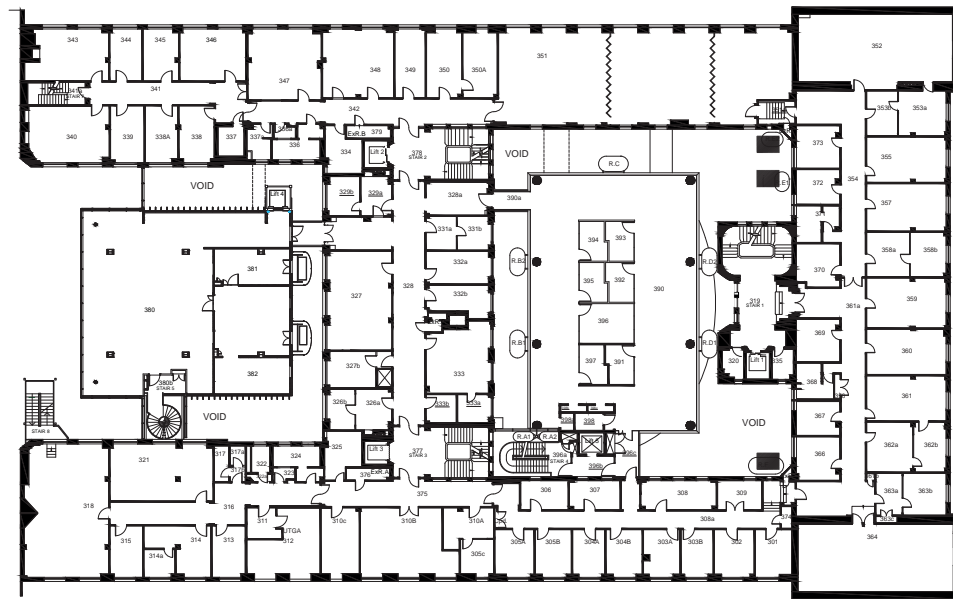
Existing Level 00



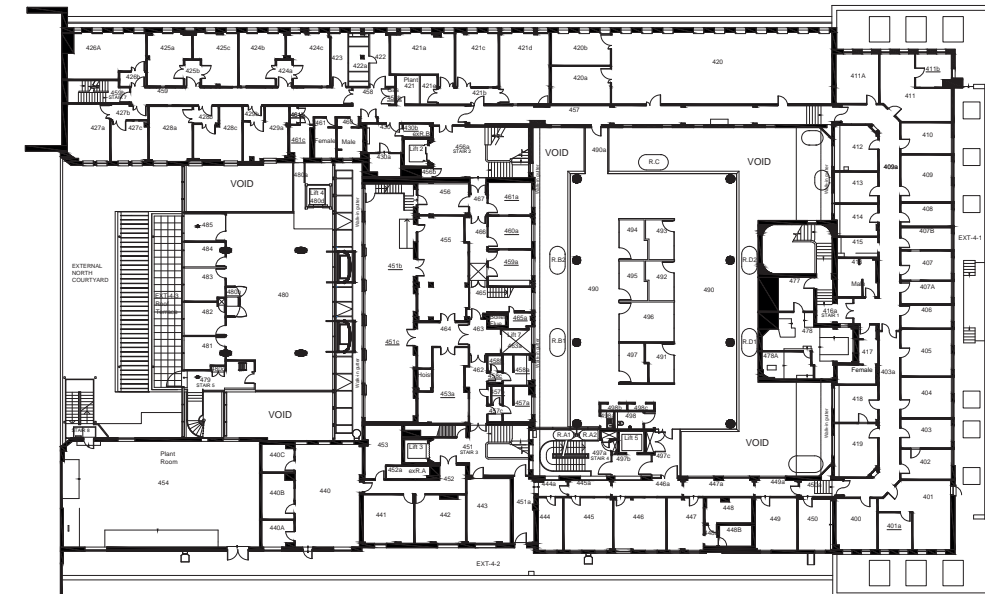
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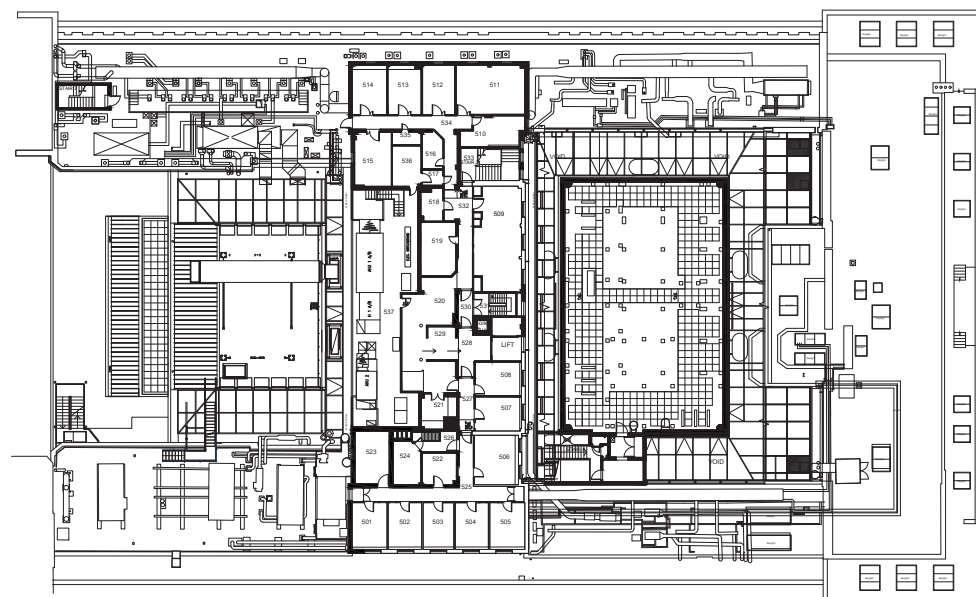
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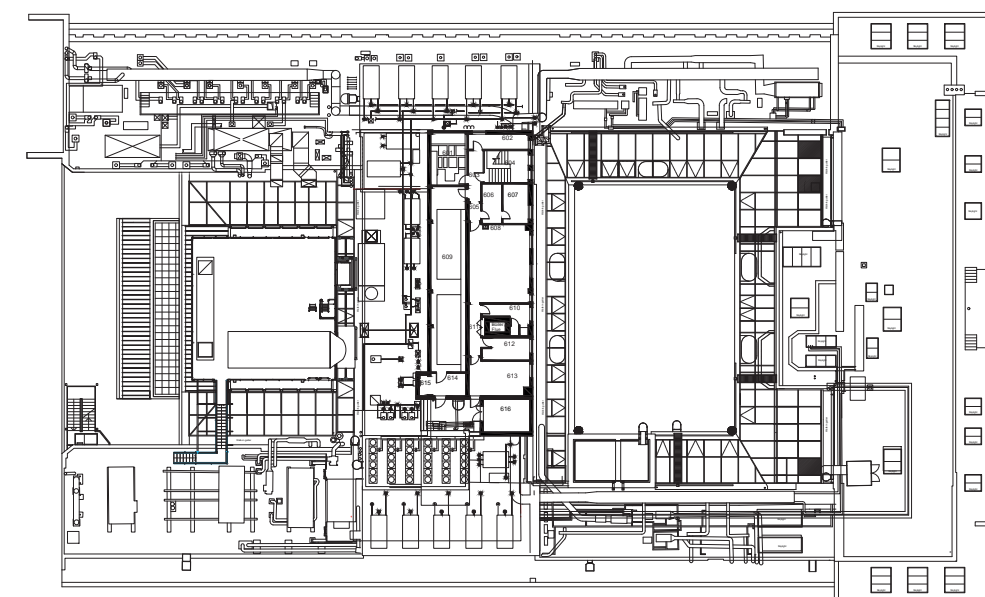
Existing Level 03



Existing Level 04



Existing Level 05



Existing Level 06

2.3 Masterplan

A Master Plan was developed for Keppel Street to guide future development and upgrading of the building fabric and infrastructure over the course of the next 15 to 20 years.

The Master Plan is informed by the following objectives which aim to support and enhance the LSHTM as a world leading institution in its field:

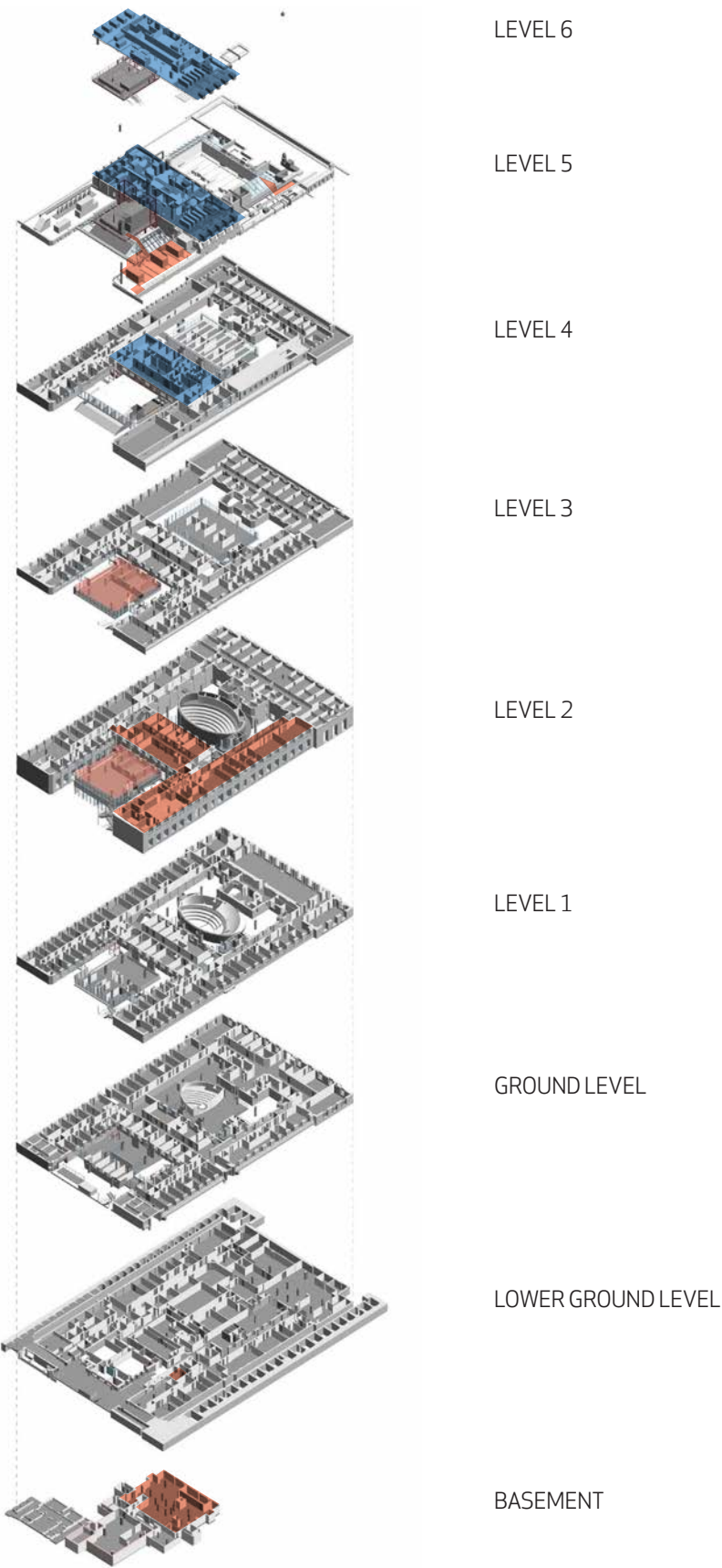
- Improve the operational efficiency by rationalising spatial organisation, adjacencies and circulation;
- Create laboratory spaces that conform to contemporary operational and safety standards;
- Improve security;
- Upgrade services infrastructure;
- Upgrade the building envelope where appropriate to improve energy efficiency;
- Improve spatial quality and provide better opportunities for social interaction;
- Establish priorities for improvement and phasing of future development works.
- The above objectives have been balanced against a careful consideration of those elements of the existing building that have significant heritage value.

An important aspect of the Master Plan objectives is the consolidation of the highly serviced BSF laboratory spaces, currently dispersed around the building, to the Central wing between Levels 4 - 6. In addition to an improved organisational distribution of space, this strategy will result in redundant equipment and ductwork installed across the roof to be removed and urgent roof repairs undertaken prior to new rationalised plant being installed.

KEY

Current Phase 3B submitted in this Application

Completed phases



2.4 Phase 3B: Laboratory Refurbishment Scope



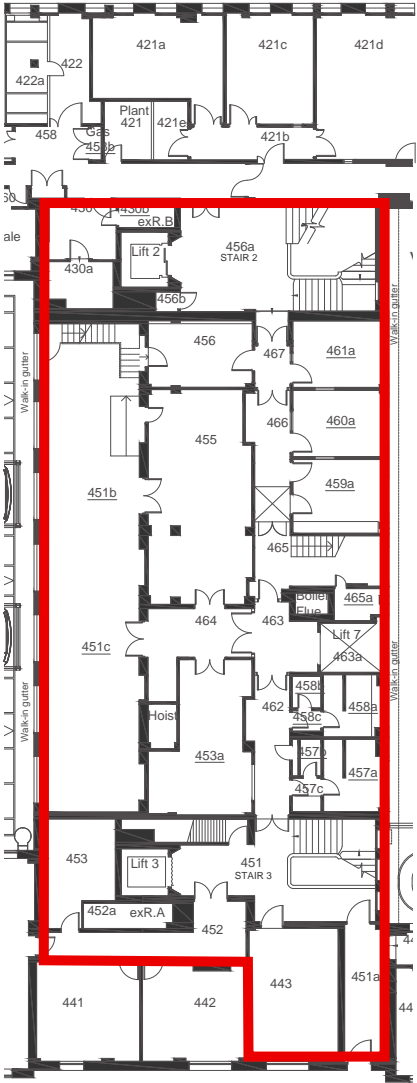
AA. Gower street - elevation



BB. - Long Section

For the Kepple Street building, the site boundaries are defined by Keppel Street to the South, Malet Street to the East, Gower Street to the West and Warwickshire House and Bonham Carter House to the North. The main entrance to the building is located on Keppel Street with secondary entrance/ exit points (now primarily used as means of escape exits) located on Malet Street and Gower Street.

The central wing on Levels 04 & 05 was extended and Level 06 was constructed subsequent to the original building, which has resulted in poor circulation, floor level changes and structural constraints.



2.5 Existing Photos

Internal



Goods Lift and Gower Stair (West) - Level 4



Gower Stair (West) - Level 4



Internal 'cold' Plant Room space - Level 5



Gower Stair (West) Looking down from Level 4



Malet Stair (East) Original and Extension connection point on Level 4



Rooms currently used for storage - Level 6

External



MEP Equipment on adjacent the roof over North courtyard



View from Gower Street looking at Central wing Level 5 mansard



MEP Equipment on the roof over Central Wing

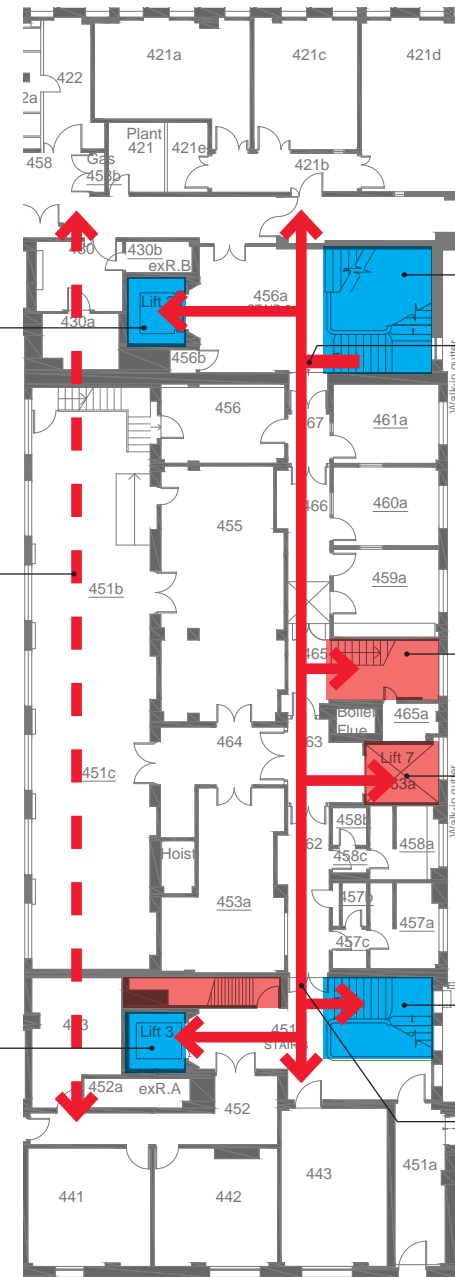


North facing louvered facade to Plant Room on Level 5

3.0 Critique

3.1 Central Wing: Existing Floor Plans

Level 4 floor plan



Malet Street passenger lift: LG - L4
No DDA compliant passenger lift or goods lift access to the 6th floor

No access between Gower & Malet Street sides of the building without going through protected central laboratory space. Independent North side corridor required to allow connection between the cores- while avoiding the central secure zone.

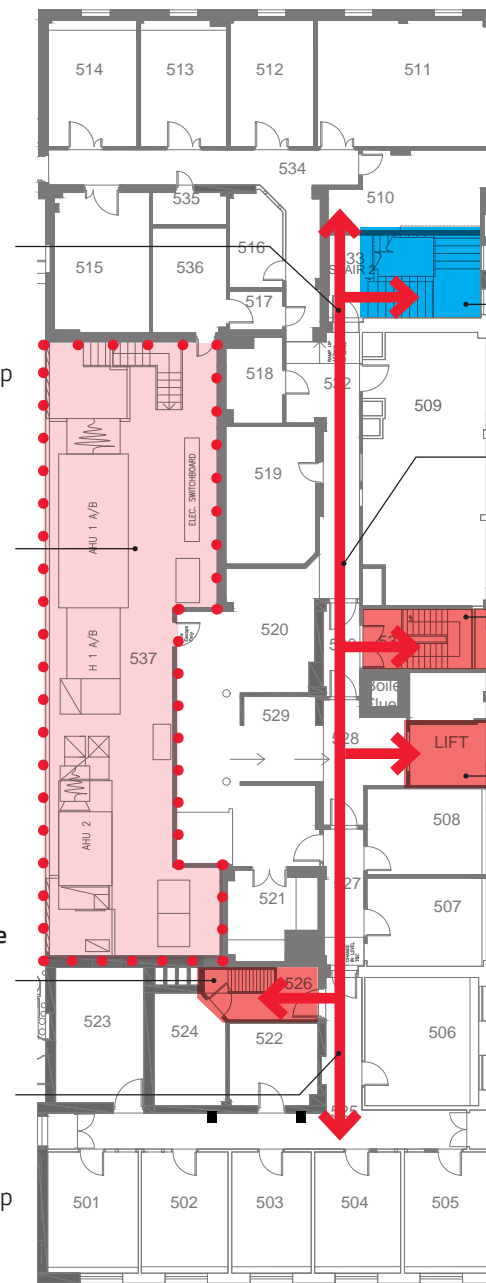
Gower Street goods lift: LG - L4
Gower Street side core goods lift and staircase stop at the 4th floor meaning deliveries need to transfer across to the central wing lift in order to reach Level 5 and no lift access to L6.

Malet Street Stairwell: LG to L6
Level change between the staircores and L4 floorplate with a step and no level access.

Central Wing stair: L4 - L5
No connection to L6
Central Wing lift: L4 - L5
No connection to L6

Gower Street stairwell: LG - L4
Level change between the staircores and L4 floorplate with a non compliant ramp.

Level 5 floor plan

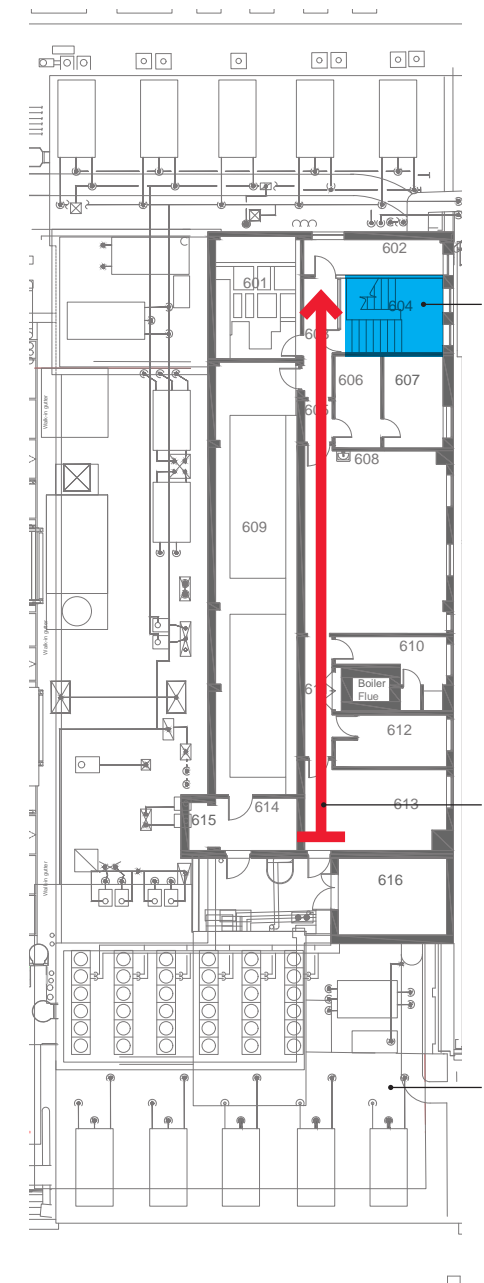


Level change between the staircores and L5 floorplate with a non compliant ramp / step.

Large uninsulated internal space occupied by M&E plant - potential to become warm and occupiable lab space

Non-compliant fire escape stair L4-5
No connection to L6
Level change between the staircores and L5 floorplate with a non compliant ramp / step.

Level 6 floor plan



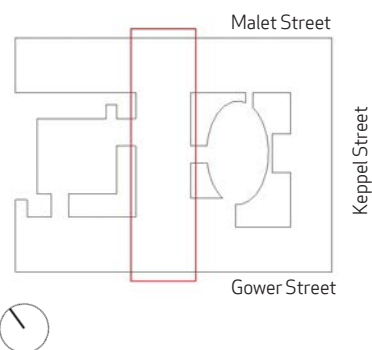
Malet Street Stairwell: LG to L6

Non-compliant access/escape on L6 prevents use of L6 by LSHTM

Inadequate access to roof for maintenance - roof in very poor condition and in need of replacement.

- Gower / Malet Street Cores (Lift & Stairwells)
- Additional circulation to accommodate Levels 5 & 6
- ↔ Existing circulation routes
- ↔ Missing circulation routes to improve functionality of building

Key Plan showing scope:



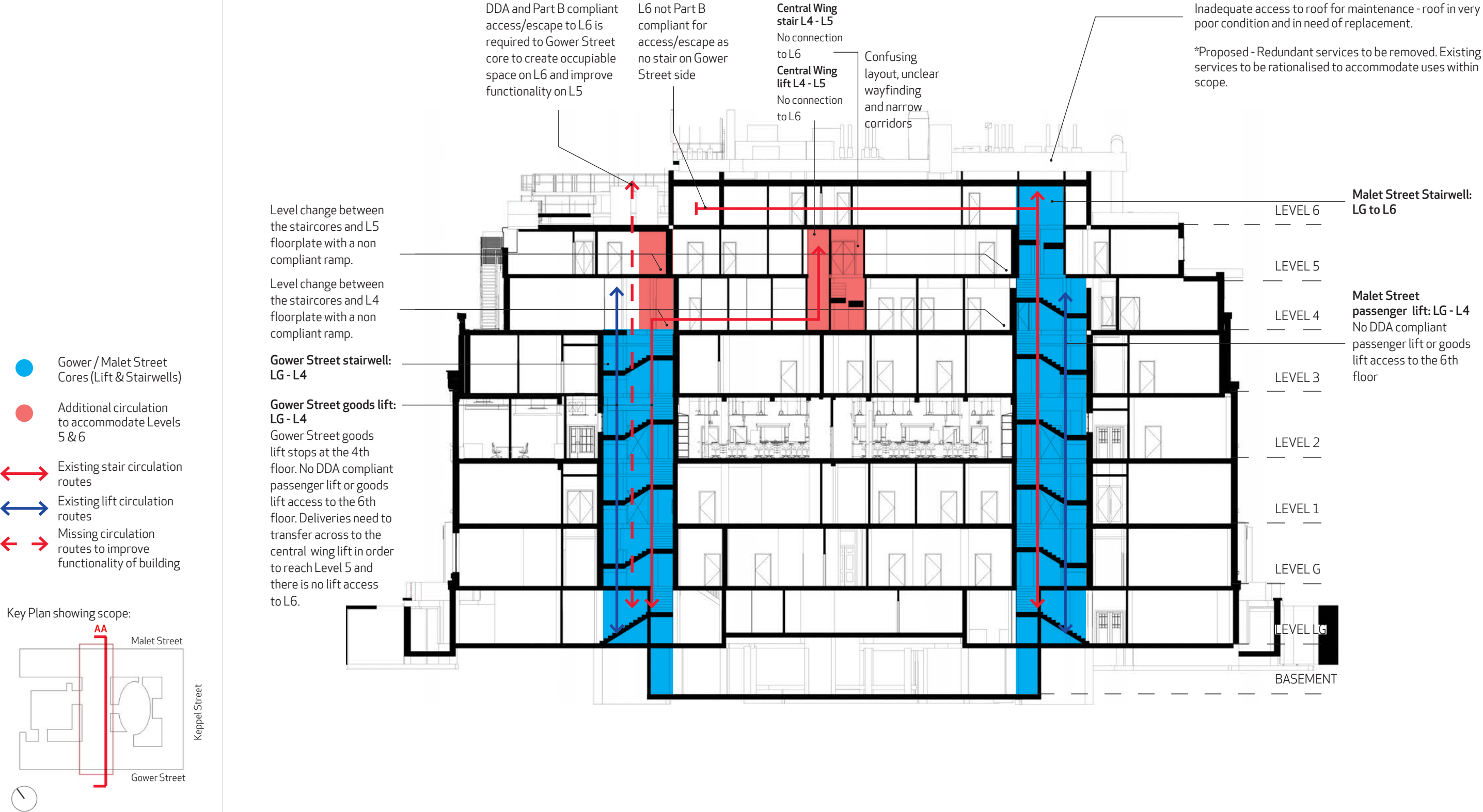
The areas within the development boundary have been refurbished and reconfigured piecemeal over time without the opportunity for a wholesale overview.

As the requirements and types of research have subsequently changed, this has led to areas of underutilisation.

Many spaces no longer work for the school and some have had to be decommissioned due to insufficient access and escape.

The above plans identify some of the issues relating to these floors.

3.2 Central Wing: Existing Section AA



4.0

The Proposal

4.1 Overview

Key:



Redundant services to be removed.
Existing / new services to be rationalised
to accomodate proposed uses within
scope.

Extension on L6 to accommodate proposed
Gower Street core extension to comply
with Building Regulations Part M access
requirements

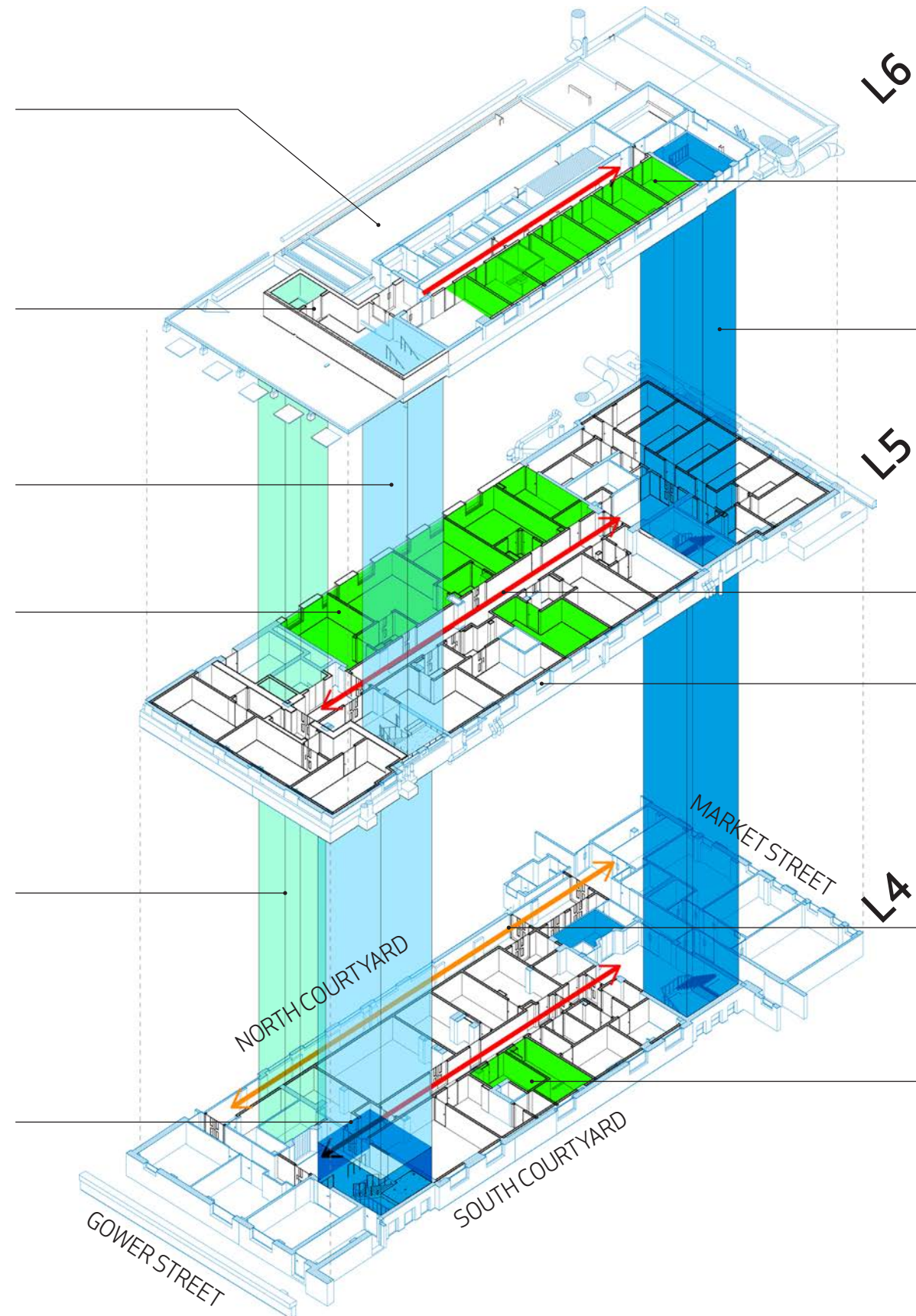
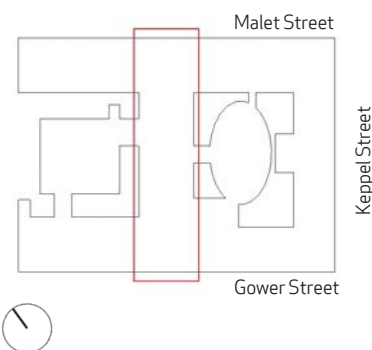
Gower Street stairwell extended to L6 and
reactivating use of L6 through compliant part
B stairwell and escape being introduced.

L5 covered 'external' space converted to
thermally improved internal occupiable rooms
suitable for laboratories

Goods and passenger lift in Gower Core
extended up to L6 to provide level access up
to L6 - Lift car and mechanism to be replaced
from LG level to L6. No demolition works are
expected to existing lift shaft from LG to
L3, only internal works to accommodate the
new car, with minimal impact on the visible
fabric and the decorative reveal of lift shaft
openings on LG to L3

Removal of non-compliant stairwell allows
corridor to be centralised and provide
deeper laboratory spaces for school offering
improved functionality

- Re-activated areas
- Proposed Gower street stairwell extension
- Existing Gower / Malet Street stairwells
- Lift and core propsoed extension to Level 6
- ↔ Proposed circulation and centralised corridors
- ↔ Proposed corridor to bypass secure BSF labs



Level 6 is reactivated with compliant Building
Regulations Part B escape routes to provide
occupiable lab spaces for school.

Malet Street stairwell has already extended
to Level 6 pre 1977 & pre-listing of building.

Corridors centralised to create functional
laboratory areas and efficient horizontal
connections between cores.

Windows required to be infilled in order
to provide optimum internal laboratory
conditions and improve thermal performance.

Proposed corridor to L4 allows non-
laboratory users to bypass laboratory
spaces on L4 maintaining safety and security
measures required for school and improving
horizontal functionality in building on Level 4

Stairwells and lifts rationalised to maximise
efficient use of space. The Gower Street
stairwell extension removes need for central
stair and lift as it only serves Levels 4 & 5.