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

Social Space Refurbishment - Phase3D

PLANNINGAPPLICATION

30.05.23

Site Address:
Keppel St,
London
WC1E 7HT

Rock Townsend

Contents

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Revision	Status	Description	Date	Issued	Checked
A	Planning App.	Planning App. Submission	30.05.23	TR	MG

1.0 Introduction

1.1 Project Overview

This Planning Application document has been prepared by Rock Townsend Architects on behalf of The London School of Hygiene & Tropical Medicine Estates Division (LSHTM). It represents a summary for the proposed basement refectory works at:

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 located at Keppel Street within the Bloomsbury Conservation Area. As part of their long term development strategy the LSHTM plan to implement phased internal refurbishment works and renovation of the ageing services infrastructure in order to support and enhance its leadership role for the next decades.

The submission of this document to Camden Planning is to seek planning consent from Camden LPA.

1.2 Client Brief

These works are part of Phase 3D of the LSHTM development masterplan. The works include a redesign of the outdated refectory and adjacent spaces. The 1168m2 of space will deliver catering and social space to serve the Keppel Street Campus. A new external fire escape is proposed in order to ensure the campus complies with current fire regulations (as part of the overall masterplan strategy).

The brief is to create a flexible multi-use cafe, working and meeting space which maximises potential access to external light for staff/ student areas while moving catering and back of house internally.

The primary functional requirements of the new space are to:
Support student catering, breakout and study, staff catering, communal spaces
To create spaces that can accommodate flexible working, including informal meeting, team spaces and solo working.

A secondary role of the space, is for large group gatherings, with the ability to open the space out to maximise footprint, and for a site student facing bar run several nights a week (as it does currently). This bar will be part of the kitchen design, but the main space needs to be designed to have a bright and light daytime feel, and more intimate student bar ambiance for evenings.

Meeting booths, an evening bar area and greater connectivity to the rest of the campus, make this central heart space such an exciting transformation of an underused and tired space. It will become a significant contribution the campuses social space and will improve informal learning, wellbeing and energy efficiency.

1.3 Key Objectives

Light, inviting and welcoming for visitors, staff and students

Hybrid social, catering & working hub

Easily reconfigured or subdivided

Clear access, circulation and servicing

Sustainable material and construction methods

2.0 Scope & Context

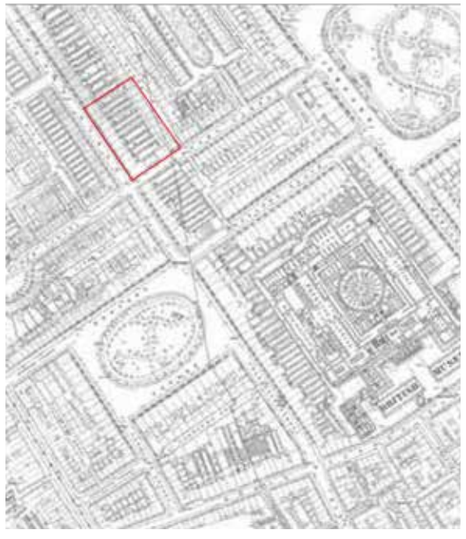
2.1 History and Heritage Overview: The Campus

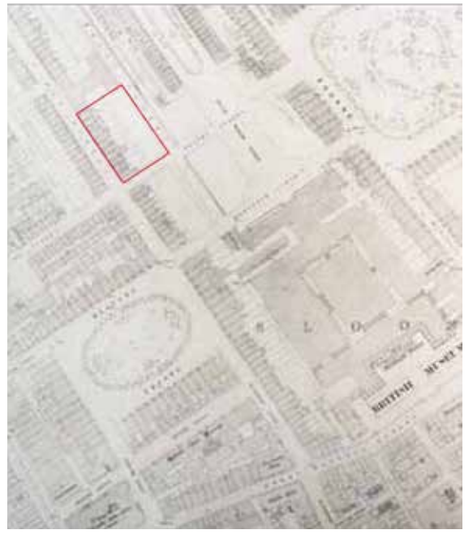
The London School of Hygiene and Tropical Medicine was established in 1924. It grew out of the London School of Tropical Medicine which, at the beginning of the twentieth century brought together teaching, research and clinical work in its specialist field. The School had been set up in 1899 as an adjunct to the Seaman's Hospital at the Albert Dock in east London, itself a Branch of the Dreadnought hospital at Greenwich, run by the Seamen's Hospital Society.

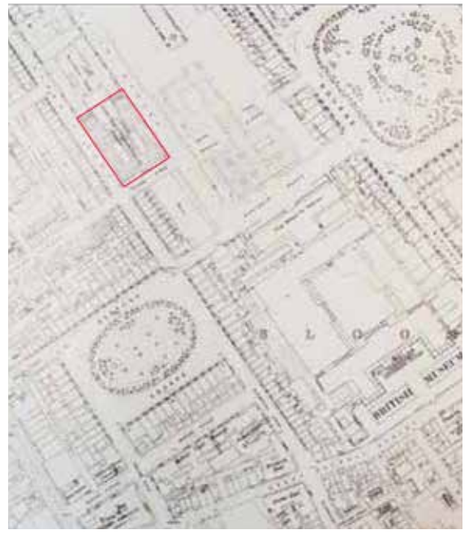
The site on which the LSHTM now stands was part of a developmentarea created by the Bedford Estate's demolition and redevelopment programme at the beginning of the twentieth century. This involved the clearance of the blocks of houses between Montague Place and the lower end of Torrington Square; the replacement of Keppel Mews North by Malet Street; and the replacement of some of the housing blocks that faced Gower Street. At the time such redevelopment programmes were a common feature in central London, as leases fell in for terraces of houses built in the early nineteenth century.

The process of design and building can be traced in the Minutes of the LSHTM Board of Management and its Building Committee. These records begin in the middle of 1924 However there is evidence in other records held by the School of preliminary design work taking place at an earlier stage.

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







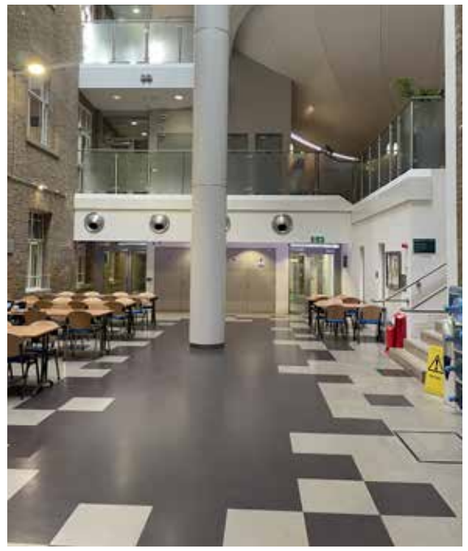
The site of LSHTM in 1873, 1911 and 1939

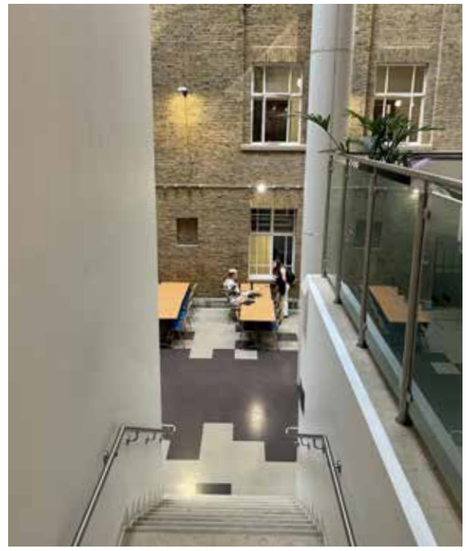
2.2 Keppel Street & Site boundary

The LSHTM Keppel street building is Grade II listed and is located within the Bloomsbury Conservation Area. 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 primarilly used as means of escape exits) located on Malet Street and Gower Street.

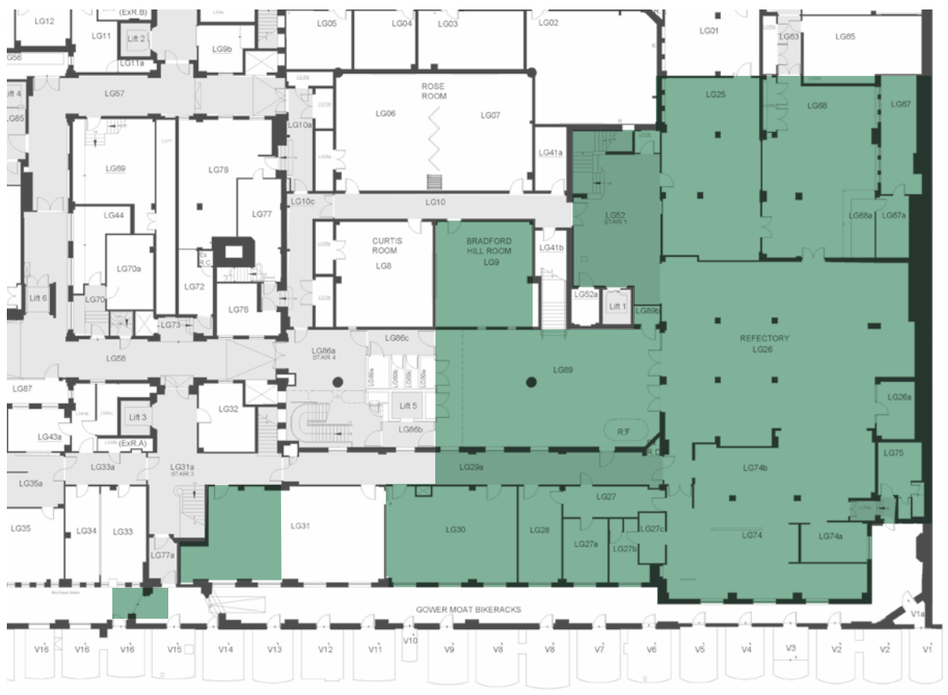
The scope area for the project includes the existing refectory, kitchen, bar, adjacent rooms, the south courtyard, Bradford Hill Room and a new escape stair within the Gower St moat.

Existing images of Keppel Street >

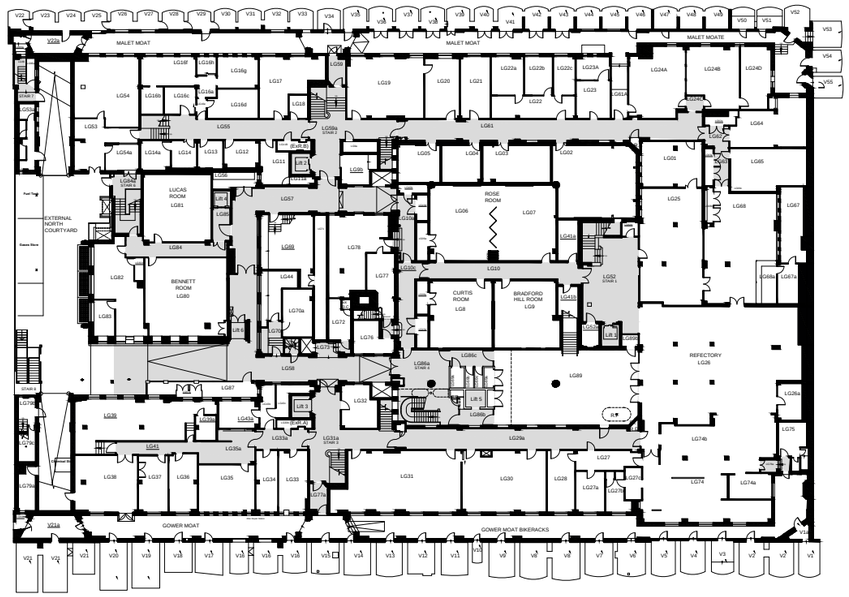




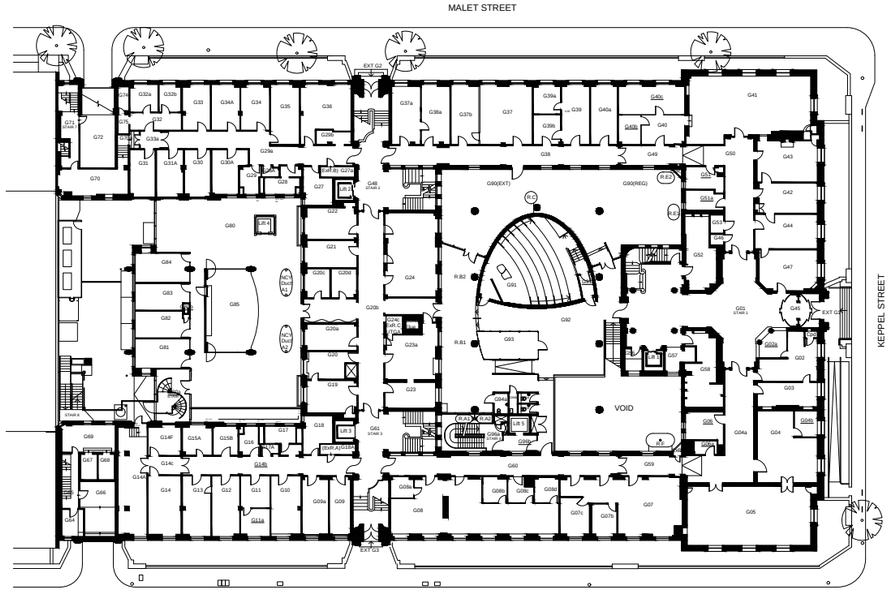
Lower Ground Floor - Scope area



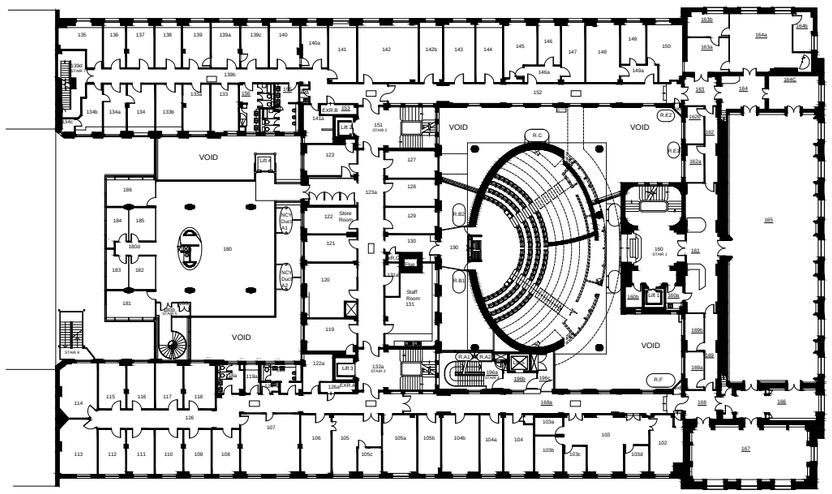
2.3 Existing Plans: The Campus



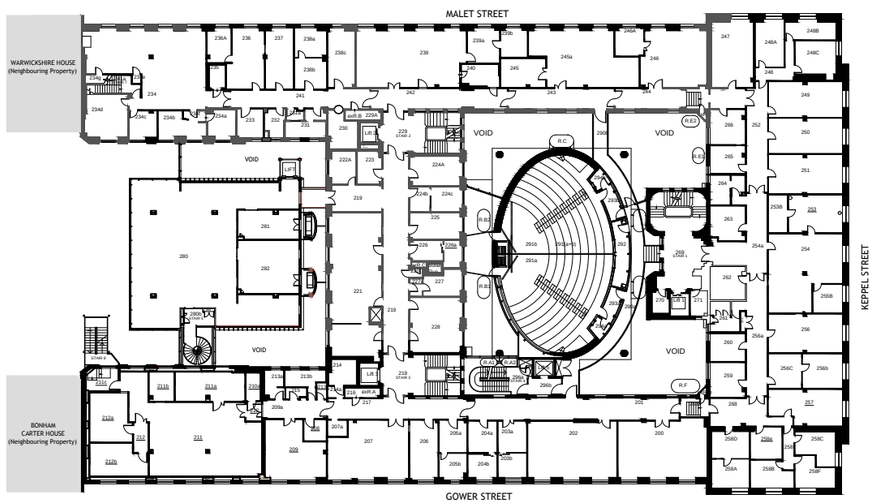
Existing Lower Ground Floor



Existing Level 00

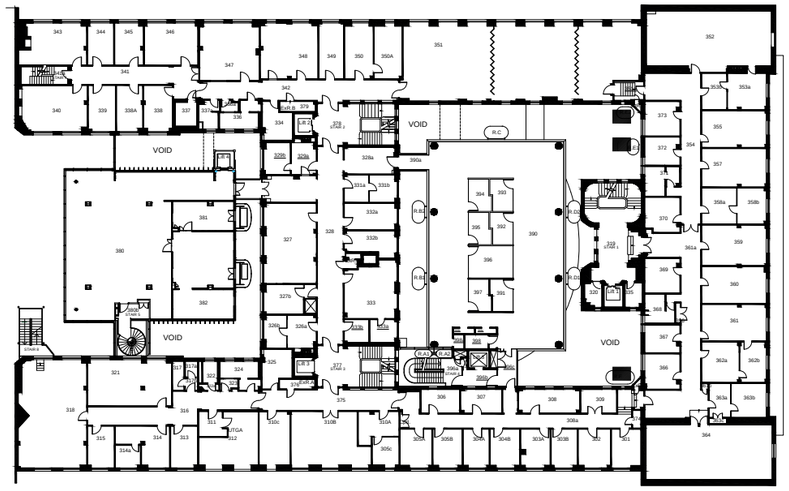


Existing Level 01

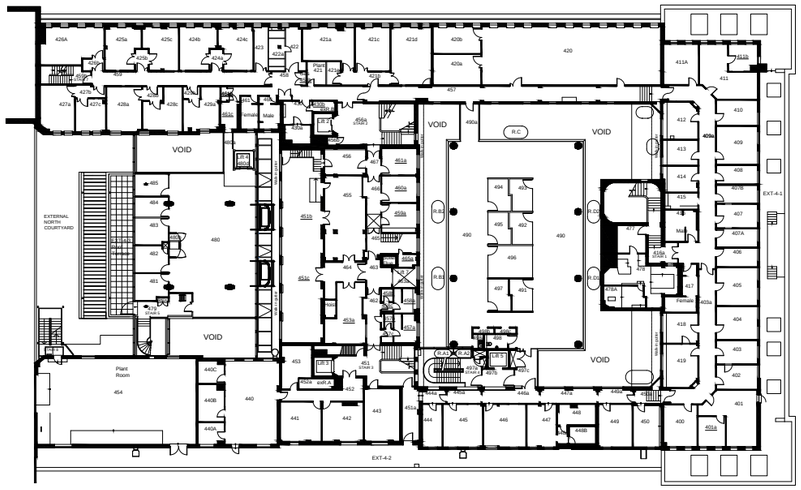


Existing Level 02

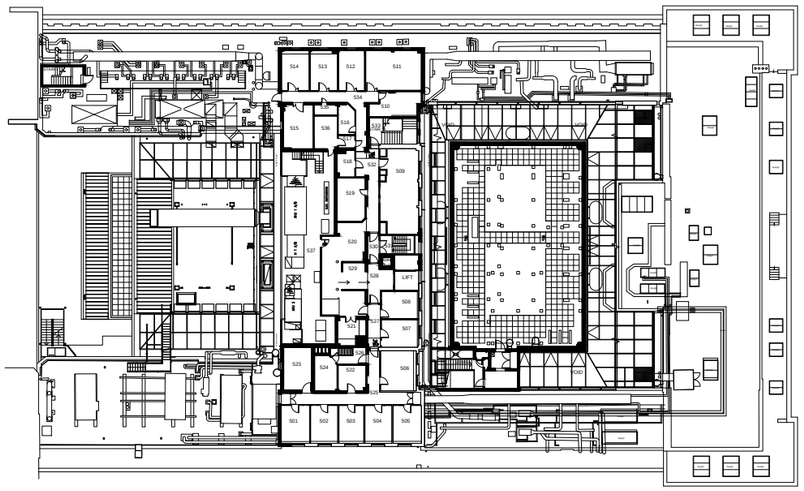
2.3 Existing Plans: The Campus



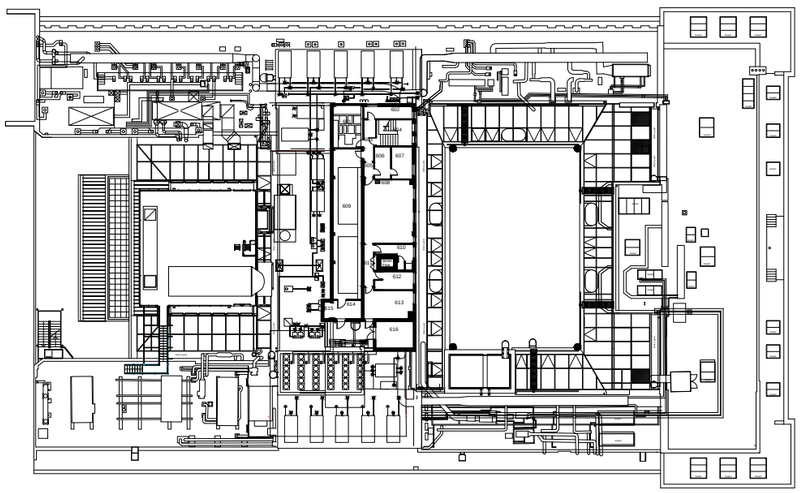
Existing Level 03



Existing Level 04



Existing Level 05



Existing Level 06

2.4 Masterplan

A Master Plan has been developed for the LSHTM premises at 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 health & safety to occupants, including upgrading the means of escape which is aligned with the revised fire strategy
- 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.

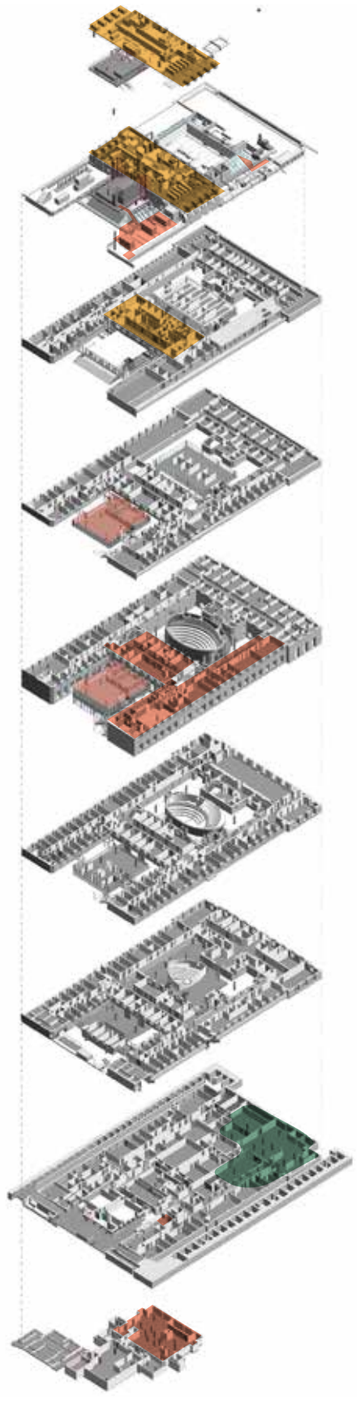
An important aspect of the Master Plan is to provide a central gathering hub for staff and student post Covid. Phase 3D will enhance and create a much needed social, meeting & eating space to assist with the world leading research being undertaken within the rest of the building.

KEY

Phase 3D

In progress

Completed phases

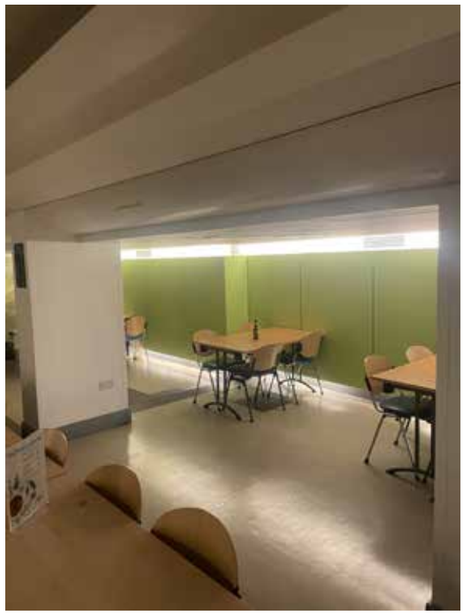


3.0 Existing Photos

3.1 Internal & External

Gower Stair Moat

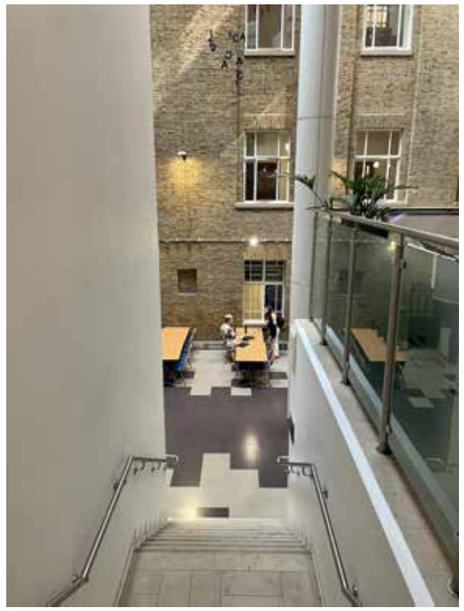
Keppel street roof to store room LG67



Refectory space (below entrance ramp)

Bar (LG68a)

South courtyard looking towards the existing refectory



Stairs down to south courtyard

Stair 1

Bar space

4.0 Building Critique

4.1 Lower Ground Floor Critique

The existing cafe, bar and social space within the basement of Keppel Street are not attractive, are dark, do not offer social learning or meeting areas and have little or no connection with the outside and nature.

The connection to the rest of the building is restricted, further contributing to the feeling of the place being tired and forgotten. The courtyard infill project in 2009 also does little to provide a central meeting / heart space to the building, and creates awkward and residual spaces around the large egg-form lecture theatre.

Specific issues as follows:

1. The atrium area is a great opportunity as a vibrant heart space however is largely underutilised

2. There is no visual or natural circulation connection to the cafe space from the ground floor enhancing it's feel of being hidden

3. There is a significant lack of natural light to the majority of the space, with a reliance on carbon and energy-hungry lighting (and 'feature' cove lighting in an attempt to make it interesting)

4. Ceiling heights are low

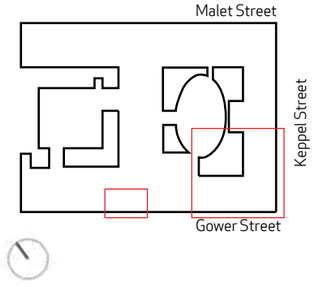
5. Existing kitchen dominates south facing windows on Keppel Street

6. Toilet numbers inadequate for size of cafe space (albeit others further away are available)

7. Spaces are difficult to subdivide for events

9. Bar is outdated and lacks natural light contributing to it being an evening facility only

10. The current escape strategy is outdated & does not comply with current regulations requiring improvement to means of escape.



Toilet quantity and location to be reviewed and improved.

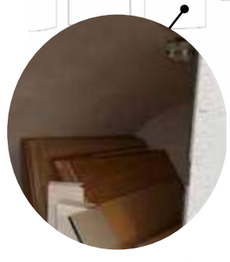
Lack of views and way finding to cafe space.

Slot windows provide low amounts of natural light to this space.

Historic bar out of date and lacks flexibility.

Lack of natural light & views to the outside. Low ceiling heights.

Large duct (kitchen extract and supply air) limits access and movement at this corner due to low head height and dominates the central atrium space.



Vaults restricted head height and used for storage.

Higher areas of ceiling and larger south facing windows are under utilised.

Existing services trench runs within floor. Shed - known asbestos.

4.2 Critique of Circulation

Circulation is confusing and non intuitive, particularly to the basement restaurant / cafe from the Ground Floor.

- For a basement facility to work, circulation & access must be evident & intuitive.

Uninspiring stairwell and low bulk head / ceiling.

Moat and vaults could provide a great opportunity to bring daylight into the building but are currently congested with bikes and storage.

Sharp right turn after door is not a natural route down to the cafe.

Stair to basement hidden behind column and rest of the rooms, toilets.

The main entrance has no connection to the cafe so it fees disconnected.

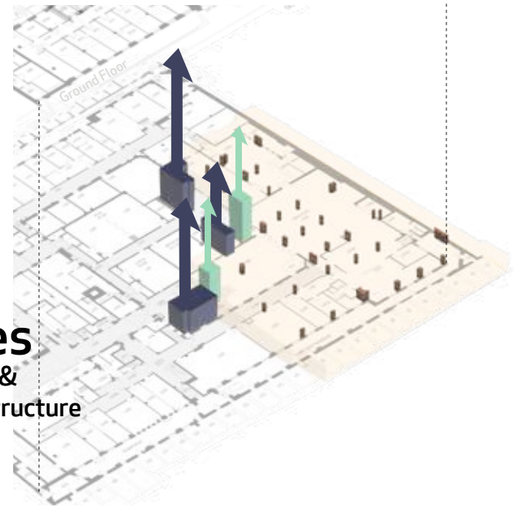
Confusing circulation and routes to cafe. Not visually obvious that the cafe is located there.

5.0 Proposal

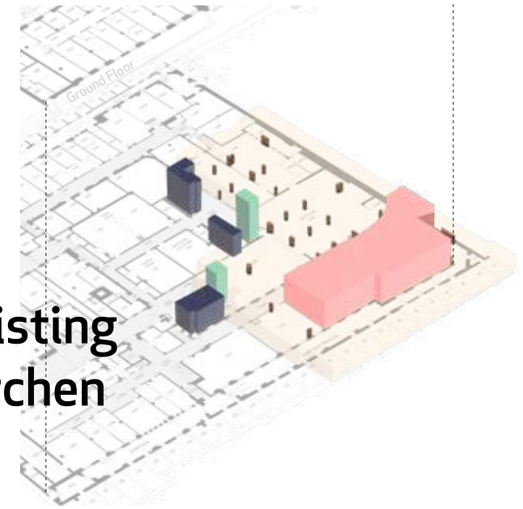
5.1 Design Evolution

The scheme has gone though a vigorous design & development stage through workshops with the various stakeholders and users. These many design options and iterations, helped refine the final extent & scope of the proposal.

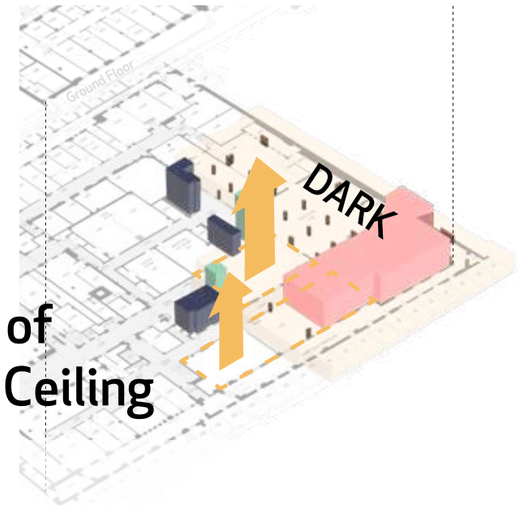
For each option we assessed the impact vs improvement to the wider campus while taking into consideration the listed status of the building. The scheme which is being presented within this Planning Application has been scaled back to be considerate and respectful of the historic fabric.



Fixes
- Cores & Main Structure

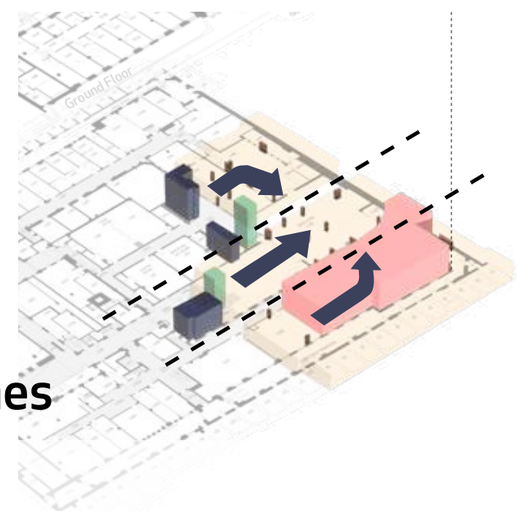


Existing Kitchen



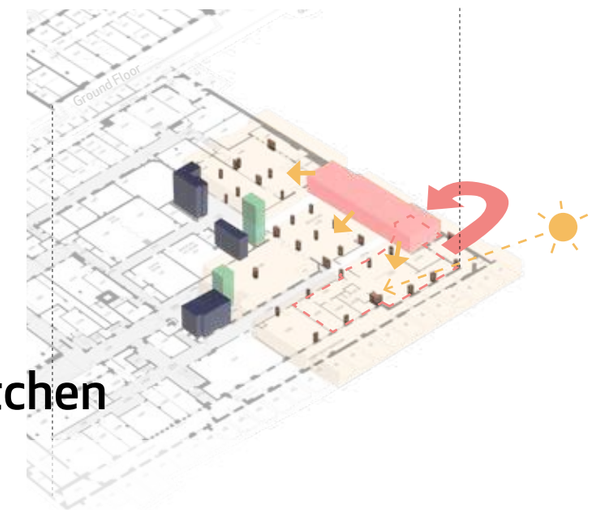
Area of High Ceiling

- These spaces are more inclined for social gathering spaces rather than 'back of house' areas
- The zone below the existing entrance ramp on Keppel street is dark with low ceiling heights



Zones

- The building arrangement naturally means the scope area can be notionally sub divided into 3 spaces

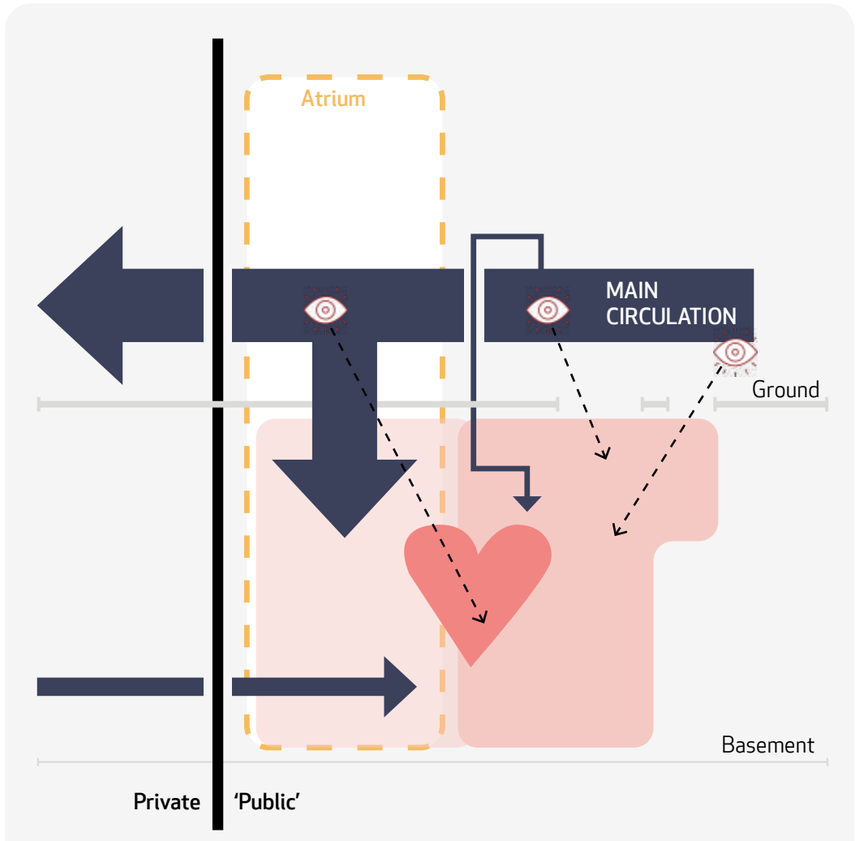


Kitchen

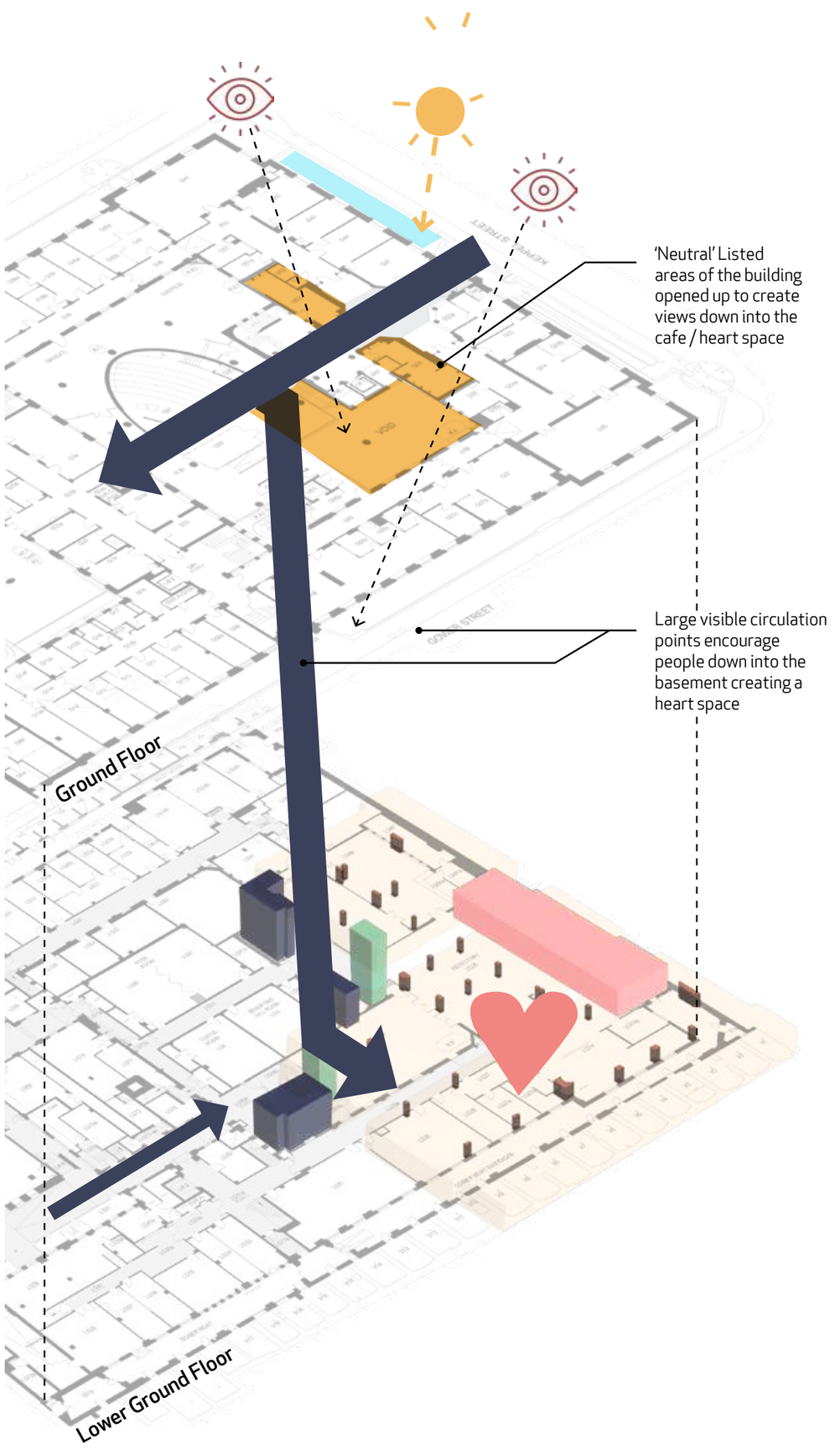
- Rotating the kitchen to the Keppel street elevation (below the existing ramp) allows for a greater area of the naturally lit spaces to be used for meeting / socialising / eating

5.2 Proposed Circulation diagram

The below schematics demonstrate the simple principle of widening the current restricted 'canyon' stairs to the basement to improve accessibility and connectivity.



Proposed movement diagram



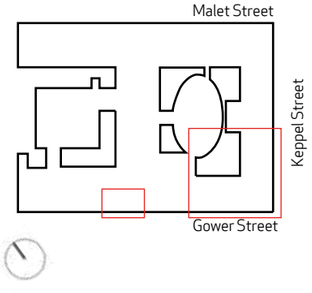
5.3 Proposed Lower Ground Floor GA

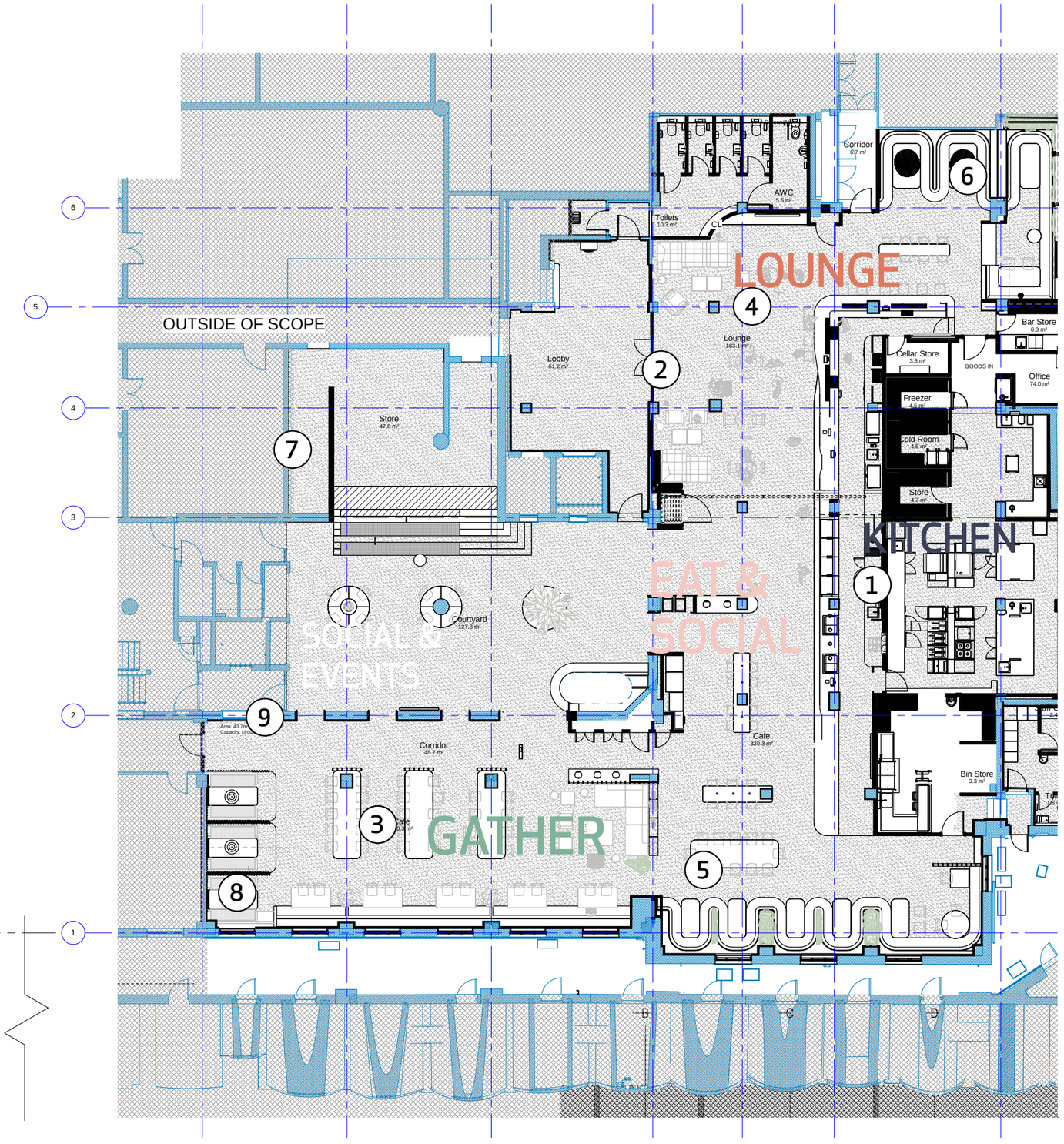
Key:

Existing

Proposed

1. The kitchen is relocated within the darker area of the lower ground floor to **maximise potential access to external light** for staff/student areas, as per the brief.
2. The 'Lounge' and 'Eat' areas are merged into one to allow flexibility when different events will take place.
3. A wide variety of different seating and furniture styles and configuration are incorporated into each of the zones in order to support **flexible working, informal meeting, team spaces** and **solo working** as per the brief.
4. The cafe bar with the high chairs becomes feature element for the social space.
5. Meeting booths line the perimeter of the space enjoying the natural light.
6. Rooflight incorporated into the Keppel St roof to allow natural light access as well as creating visual connections into the space, drawing people into the new lower **ground floor social space & caf**e
7. Big Steps - to **maximise the relationship between ground & lower ground floor,** create intuitive wayfinding, improve basement accessibility, provide additional fixed seating and enhance opportunities for events, lectures, talks and general social activities as per the brief
8. Windows along the Gower and Keppel street facade are upgraded (as per the previous window upgrade proposal) with Heritage style energy efficient double glazing.
9. Windows & Sill dropped to allow flow between the courtyard and 'Gather' Space
10. New security gate below stone 'bridge'





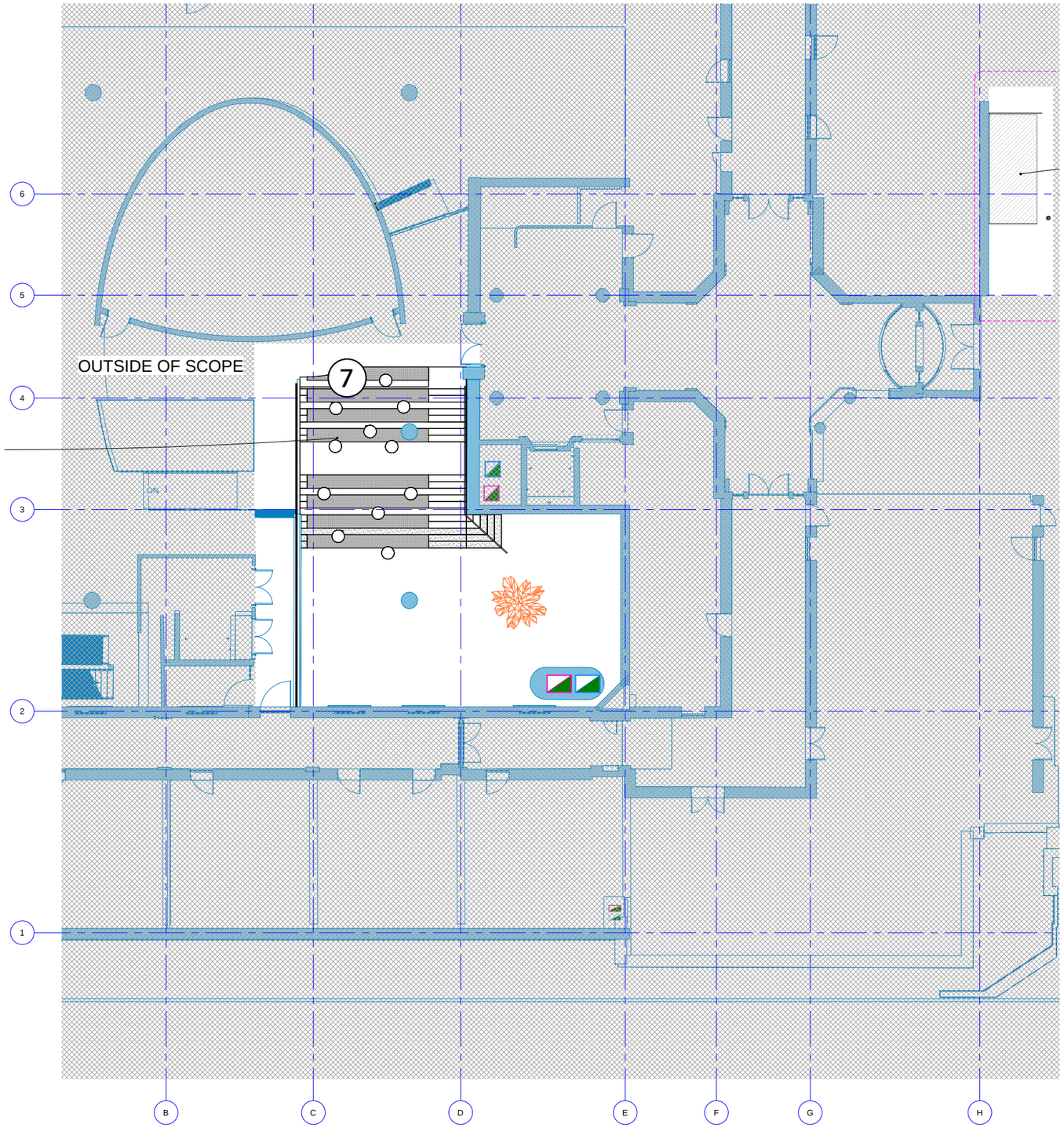
5.4 Proposed Ground Floor GA

The circulation becomes social space through the use of the BIG STEPS. The stairs allow **visual connection, ease circulation,** provide a casual social space for students and staff as well as becoming **a venue** for formal and informal lectures / talks / presentations.

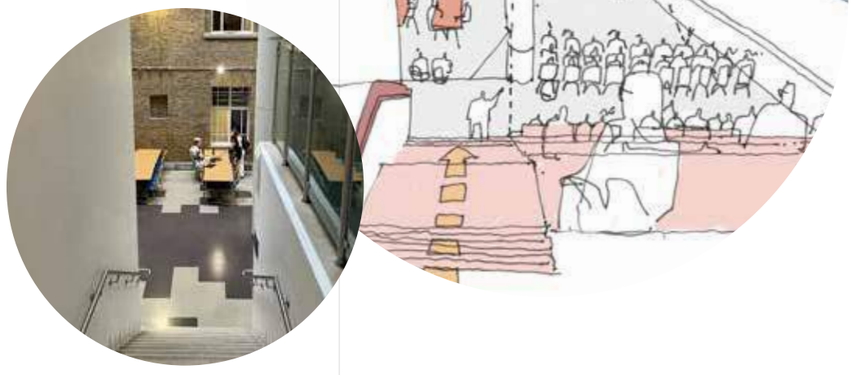
Key:

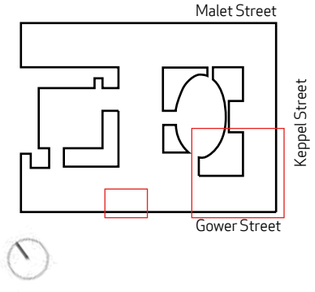
Existing

Proposed



Existing & proposed view from the ground floor looking down into the south courtyard.





5.5 MEP Overview

Words from TB&A

From a heritage perspective, the general approach for this project is one of reusing existing central plant located outside of the project area (including plant upgrades or replacement within the existing footprint) and to provide all new services within the project spaces.

Existing services infrastructure distribution routes from the central plant to the project area shall be reused without increasing their physical size (i.e. no change which would impact upon the building fabric).

New high level services installations will generally be exposed suspended from the soffit in the refectrory and flexible working spaces, and concealed within new ceiling voids in the kitchen area. Wall mounted services outlets shall be concealed within new partitions or where new finishes are proposed to existing walls. Where existing finishes are being retained on walls of significant interest, surface mounted outlets shall be used, however mounting of new outlets on walls of significant interest shall be avoided as far as possible.

See Appendix D for full report

5.6 Structural Overview

Words from Integral Engineering

In general, the proposed alterations involve very little removal of existing structure or loss of historic fabric. The aim is to assess and justify that the existing structure is suitable for the proposed use, with little structural intervention, to converse the historic fabric and minimise carbon expenditure.

The proposals show the alterations working with the grain of the existing building with few structural interventions and avoiding areas of high historical significance. Record drawings, a measured building survey and careful intrusive investigations have been undertaken to draw educated conclusions about the construction materials and load capacities.

The existing kitchen will be relocated to the Keppel Street elevation below the existing ramp and a new elongated bar is proposed to be used as a servery and for seating to subdivide the new social space. The existing refectory space will be redesigned and internal non load bearing partition walls will be removed to improve circulation and allow future flexibility. Existing columns and ground floor slab and the supporting downstand beams will be retained. Lintels will be installed to create new openings in the internal masonry walls to improve circulation at lower ground floor level. New structure may be required to support moveable partitions and roller shutters.

The new kitchen will be connected to the existing private drainage network and will retain an external entry point via the moat. The existing drainage serving the current kitchen will be capped off and made redundant. New drainage will connect into the existing network in the Keppel Street moat. Internal manholes will need to be relocated and replaced with double sealed covers.

Due to the existing restricted slab soffit height along Keppel Street the back of house spaces will be used for storage, as informed by the kitchen consultant's brief. Mechanical services will need to be carefully coordinated and routed to avoid existing structure. New lintels will be provided to create openings in existing masonry walls for service holes and new door openings into the back of house areas.

A new toilet core is proposed to cater for the size of the social space. This will be located below the existing upper-level toilet core and will connect into the existing below ground drainage network.

The existing stairs within the South Courtyard will be removed and a new feature staircase inserted to improve connection and circulation into the new social space. The existing ground floor slab will be partially demolished to create a new void for the feature stair, known as the Big Steps. The cut slab edge will be resupported by new structure spanning between columns built up off the existing lower ground floor RC ground bearing slab which will be used to support the new feature staircase. Steel framing will help to maximise the useable space underneath for storage. The existing columns supporting the South Courtyard lecture theatre over will be retained. New lintels will be provided to create enlarged openings in the south courtyard masonry walls and the existing window cills dropped along the west internal elevation to improve circulation and connectivity between the internal spaces.

Conservation Principles

In overall terms our approach to the repair and alteration of the structure will be in line with conservation principles which can be broadly summarised as:

Conserve as found
We will re-use the building for its original use as a purpose-built School for LSHTM.

Minimum intervention
Our objective is to retain as much of the original fabric as possible, balanced against making the buildings useable for the future. Minor alteration works are proposed to maximise potential access to external light for refectory user areas, moving catering to back of house internally where possible.

Sympathetic, reversible repairs
Appropriate repairs that tell the story of the building will be used in the listed building. The approach to repair will be considered and developed during the next stage as more of the original fabric is uncovered.

Retain load paths where possible
Structurally and economically, this make sense – if the loads can follow existing paths, then there is less opportunity to locally overload the structure. Structural columns will be retained, especially at lower ground floor level as the foundations then bear onto previously loaded soil reducing the likelihood of differential movement.

All structural alternations and repairs to the historic structure will need to be agreed with the conservation officer.

5.7 Fire

Buro Happold has been appointed to develop a fire strategy for Phase 3D works within the Keppel Street Building in London. The fire strategy assessment has calculated that an additional escape stair is required within the Gower Street moat.

5.8 Sustainability

The design team are helping the school on their journey to achieving net zero emissions by 2030, by making sure this project uses the correct materials, systems and strategies to help reduce operational, embodied and whole life carbon. These 3 elements of carbon reduction are; Operational energy, Embodied carbon and Whole life carbon.

Opportunities & Constraints

Opportunities being integrated into the proposal include:

- The potential light-well glazing and associated removal of external walls will significantly increase the amount of daylighting into the basement space, thus requiring less artificial lighting.
- **Lighting** - low energy, LED, motion absence detection, scene-setting and controls will reduce artificial lighting demand.
- **Surface finishes**, low embodied carbon impact, low VOC where possible
- **Water,** limiting water with water saving technology taps, aeration etc
- **Waste,** suitable disposal & recycling
- **Energy**, new kitchen equipment will be more efficient and rationalised to realise overall energy reductions.

We aim to achieve these goals for this project by using the SKA energy assessment tool (Silver as a minimum) to assess the embodied carbon impacts.

MEP Sustainability Statement

The proposed development will incorporate the following sustainability strategies all of which represent improvements over the existing MEP:

1. All lighting and small power distribution boards will be separately metered
2. Heat/Coolth reclaim will be provided between exhaust and discharge air streams
3. All domestic water outlets will be flow regulated to reduce water consumption
4. LED lighting will be used throughout with a minimum efficacy of 125 lumens/circuit watt
5. Lighting control systems incorporating movement detection and daylight compensation will be provided as appropriate
6. Motive drives will incorporate IE4 standard motors
7. EC drives will be incorporated where possible
8. Variable speed drives shall be provided for all pumps and motors