London School of Hygiene and Tropical Medicine

Planning and Listed Building Application

Design and Access Statement

Keppel Street LG43a - Showers Refurbishment

March 2021

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For: London School of Hygiene and Tropical Medicine

Design Team:

Project Manager: PMP Consultants

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MEP: MG Partnership

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Contents

1. Introduction and Summary

The London School of Hygiene and Tropical (LSHTM) Medicine 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 aging services infrastructure in order to support and enhance its leadership role for the next decades.

Phase 1 of the development strategy was granted planning and listed building consent on the 07.03.2018 (Application Ref 2017/7010/P and 2018/0033/L) and comprised approximately 560m^2 of new laboratory spaces located within the existing North Courtyard Building (NCB) at levels 2 and 3 with a new plant deck and external services installations above roof level. These works were completed in October 2018.

Phase 2 of the development strategy was granted planning and listed building consent on the 18.02.2020 (Application Ref 2019/3391/P and 2019/3918/L) and comprise new containment level 3 (CL3) lab in the NW wing at level 2, a new teaching lab in the Central wing level 2, write-up space in the West wing level 2 and the upgrade of services infrastructure internally and externally.

The enclosure of Level 1 of the North Courtyard Building (to the same design / detail as the Phase 1 works) and the addition of a dry riser to the Malet Street side of the building were added to the Phase 2 works and listed building consent was granted on 23.09.20 (Ref 2020/2373/L)

This application is to add to the phase 2 works the renovation of an existing WC and teapoint to form new staff showering facilities. These works will double the number of showers available in the building for cyclists, and will provide an accessible shower in the building.

As these works are minor internal works, we are not submitting a planning application.

The LSHTM building at Keppel Street is a Grade 2 listed building and consequently these building modifications require listed building consent.

2. Description of the LSHTM Keppel Street Building

The original LSHTM building is listed Grade II and is located within the Bloomsbury Conservation Area, with site boundaries 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 LSHTM 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.

A service area containing plant and equipment, waste storage and delivery access is located at the north end of the site with main pedestrian and vehicular ramped access off Malet Street. The access route to the service area from Gower Street is not currently in daily use but does serve as an alternative means of escape.

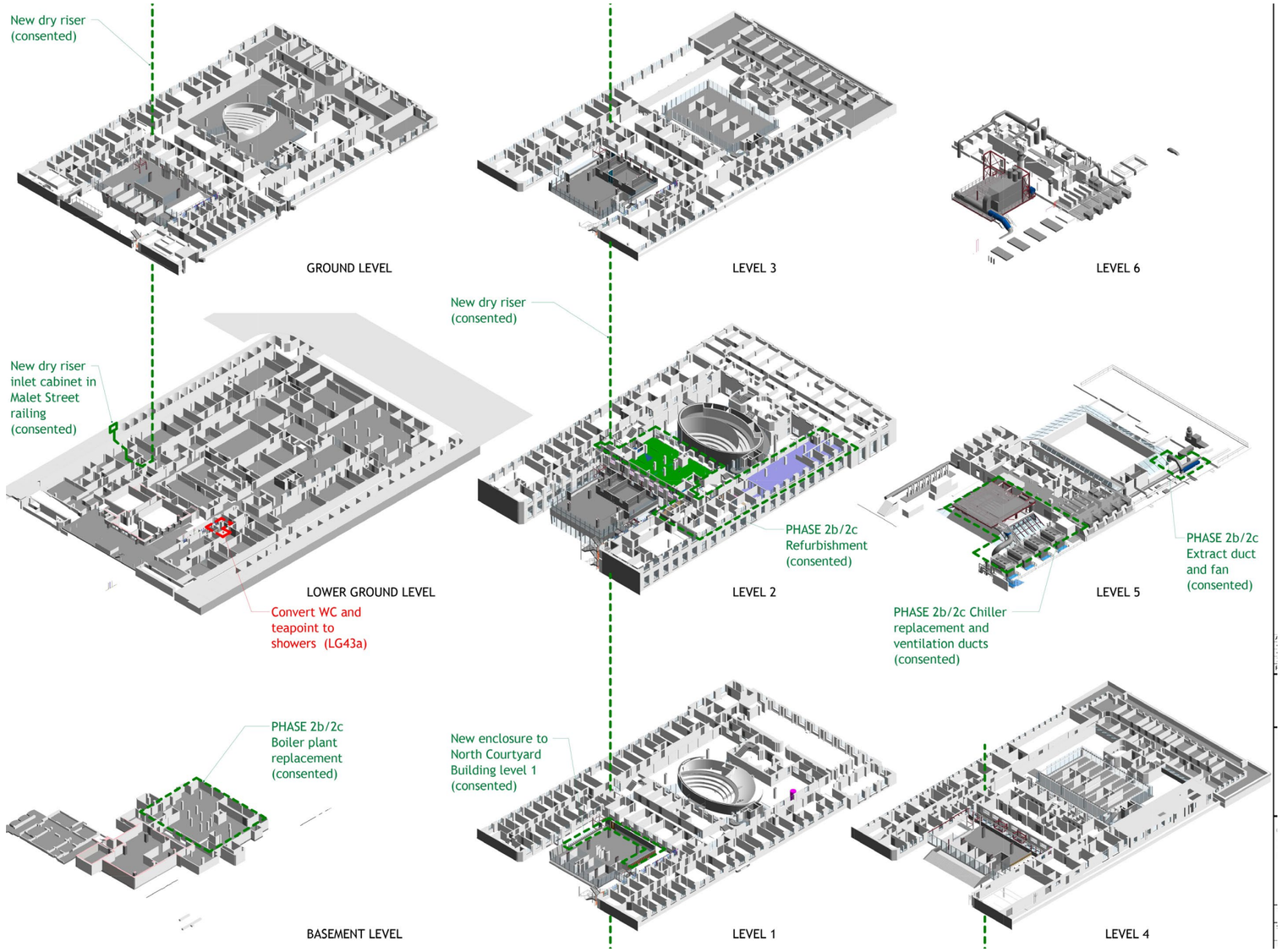
The Phase 1 works were located within the 2004 North Courtyard Building (NCB) thus avoiding any significant interfaces with the 1929 building. The process of developing the design for the Phase 1 works within the relatively non-contentious heritage context of the NCB provided an opportunity to gather knowledge about the 1929 building in relation to its structural capacity, services infrastructure, location of asbestos containing materials (ACMs), and importantly to review and test the LSHTM spatial and operational requirements and priorities against the constraints of the existing building and in the context of heritage values.

Phase 2 works have received planning and listed building consent, and will be mainly carried out within the 1929 building and are to be located in the NW, Central and West wings at Level 2.

This listed building application is for one additional area of work:

Conversion of a disused WC into additional shower facilities, including an accessible shower. This will support an expected increase in the number of staff cycling to the building rather than taking public transportation in response to the COVID19 pandemic.

The axonometric plans to the right show the affected area.



Proposed works (in red) in the context of the whole building

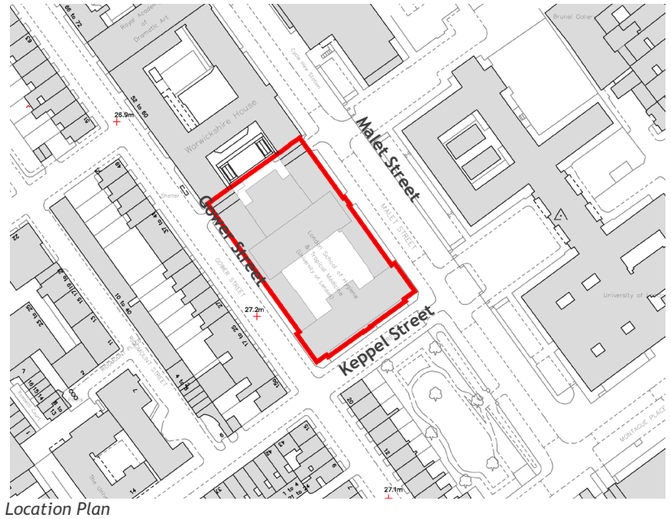
3. Master Plan

Ian Ritchie Architects were appointed to develop a Master Plan 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 security;
- Upgrade services infrastructure;
- Upgrade the building envelope were 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.



Location Plan

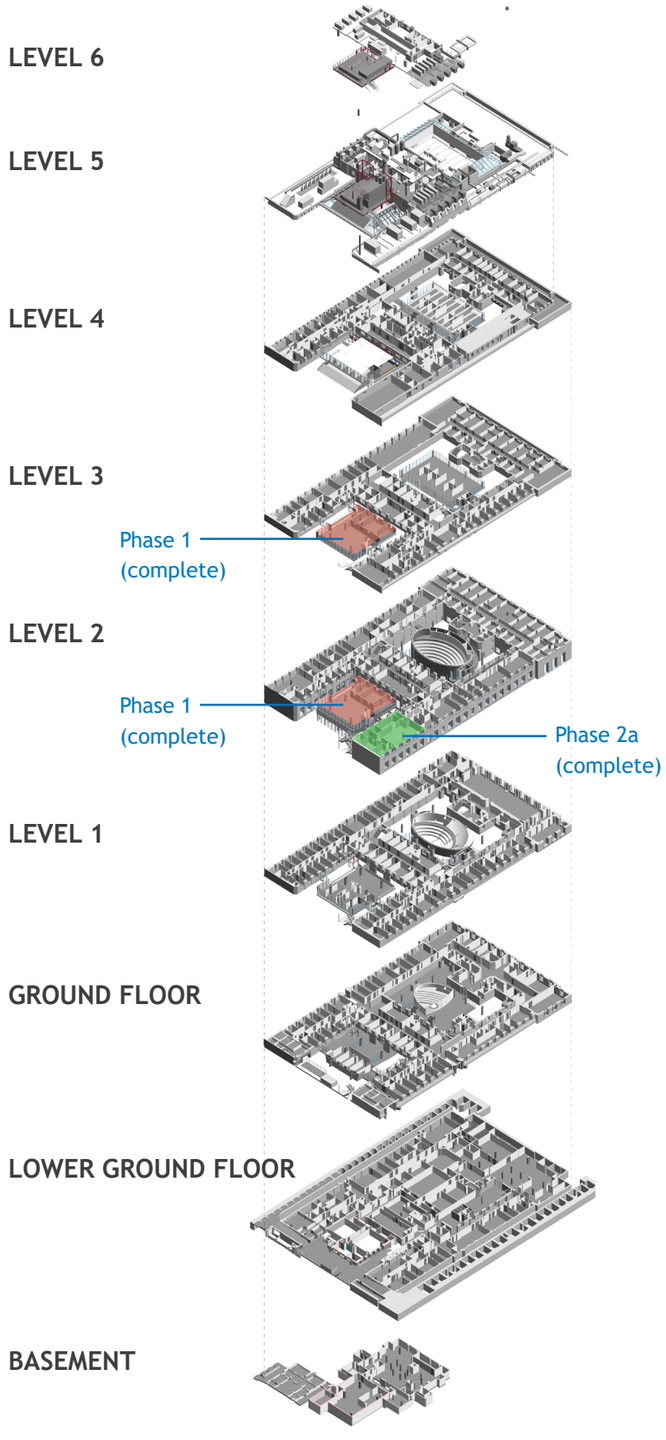
View to Keppel Street main entrance from the SE

View Along Gower Street facing South

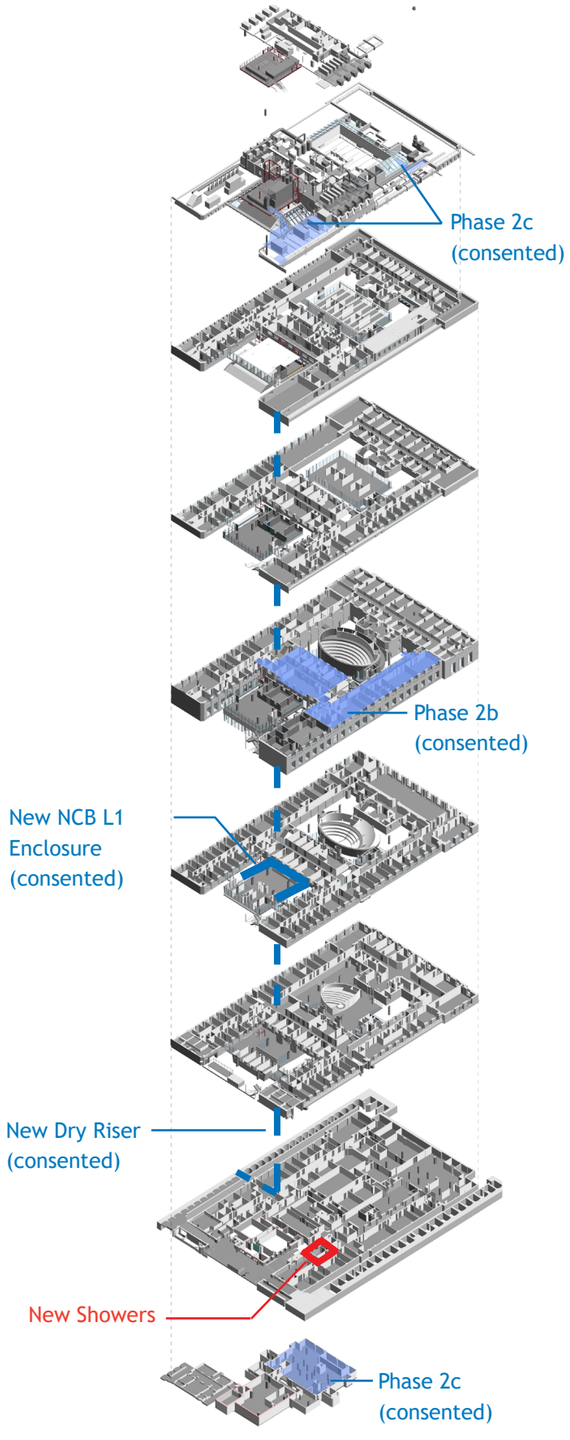
View Along Malet Street from the SE

An important aspect of the Master Plan objectives outlined above is the consolidation of the highly serviced research laboratory spaces, currently dispersed around the building, to the North Courtyard Building and adjacent NE and NW wings of the existing 1929 building between Levels 1 to Level 4. The Central wing is to be redeveloped as teaching labs.

The remainder of the building will be organised for office, non-lab teaching, library and other communal activities. In addition to an improved organisational distribution of space, this strategy will result in new roof level plant and equipment migrating towards the north end of the building where service infrastructure requirements relating to lab use will be more demanding. This will allow redundant equipment and ductwork installed across the roof of the Keppel Street building, and currently serving dispersed lab spaces, to be removed and urgent roof repairs undertaken.



Axonometric Plans showing Phase 1 and 2a completed works



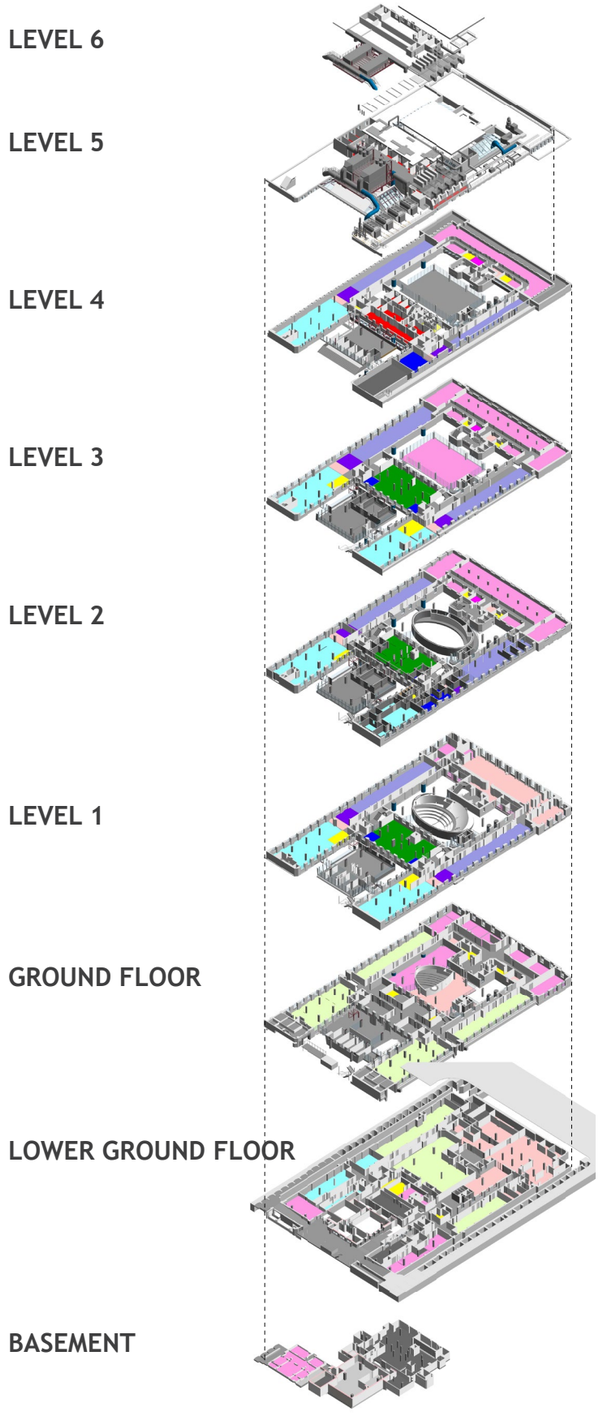
Axonometric Plans showing the Phase 2b/2c consented works plus the additional works in this application in red

4. Heritage Context

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. (above text courtesy of Conservation Management plan Richard Griffiths Architects August 2013).

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.



Master Plan Spatial Organisation (lab space in blue)

5. Project Description

5.1 Conversion of WC LG43a into Showers

Overview

Room LG43a on the lower ground floor is currently a men's WC currently used by the cleaning staff.

In response to the expectation that an increased number of staff will cycle to work in place of taking public transportation (due to Covid19), this WC and the small adjacent teapoint is proposed to be converted into an accessible shower room and two self-contained showers with a shared lobby.

The proposed shower conversion will double the number of showers available to staff, and will provide a wheelchair accessible shower which isn't currently provided in the building.

The existing WC facilities are located in a wing of the lower ground floor in a location where there is not a significant requirement for WCs as there are few staff based in this part of the building.

Room LG43a sits above the building's paper archives, and has suffered leaks in the past. The porcelian urinals, toilet pans and sinks is in poor condition, beyond serviceable use.

WC Stalls

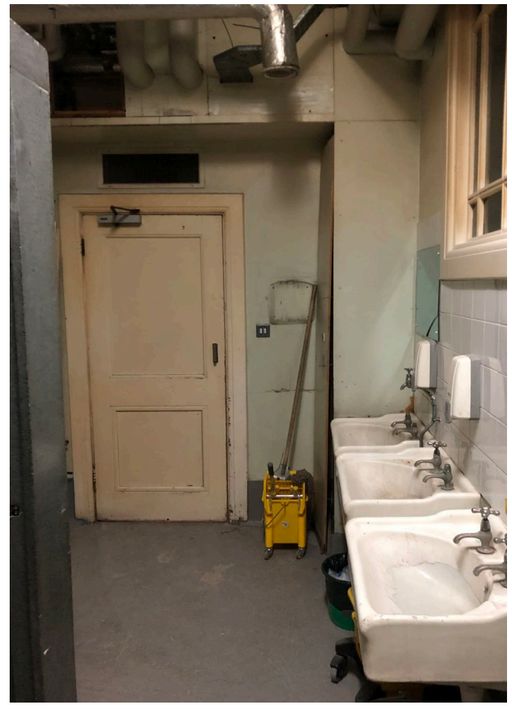
We have reviewed the opportunity to keep the stone WC dividers and doors for use as the new shower room enclosures, but this has not proved possible for a few reasons:
1. One stall is too narrow for a 900mm x 900mm shower tray, which is considered the minimum usable dimension for a shower used by staff.
2. both stalls would be too shallow to allow a dry changing space in front of a 900 x 900 shower.
3. the existing dividers have a gap at the bottom and are not tall enough to provide full separation. The existing timber stall doors are also not full height, with a 300mm gap at the bottom. These issues would also be difficult to mitigate in forming non-gender assigned shower rooms.

Non-structural internal partition wall with timber window and existing door

As the Part M accessible shower should be entered directly from the corridor rather than from the cleaner's store, we are proposing to remove the existing door and infill the structural opening and providing a door directly onto the corridor.

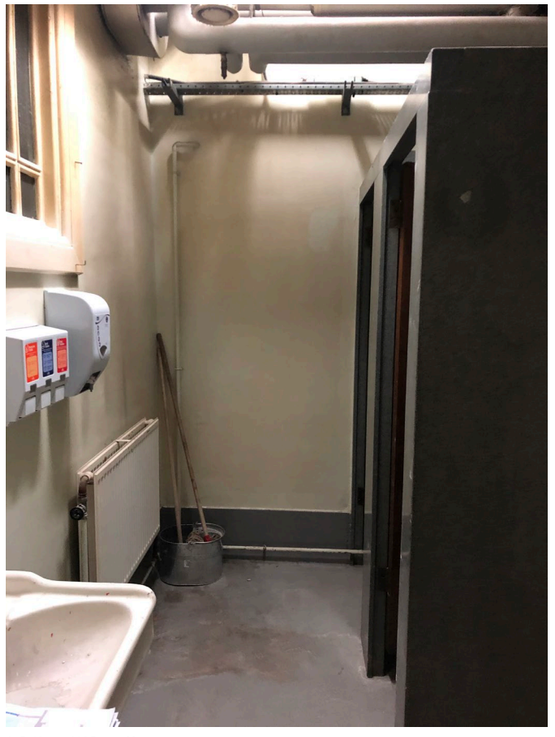
As the location of the new accessible shower door needs to open outward and is in close proximity to a dividing door in the corridor, we are proposing to dismantle this non-structural partition wall to the corridor (at the current sinks location) and rebuild it further into the existing room, which will allow the new door swing to be clear of the corridor circulation route.

The suite of two small individual shower rooms sharing a lobby with communal sink will also require the removal of this non-structural partition wall to the corridor and the modern teapoint in the corridor in order to provide sufficient depth for the shower rooms and lobby. There is an original internal timber window in this wall which is currently visible from inside of the WC but has previously been plasterboarded over on the corridor side.



LG43a - Sinks and internal timber window

LG35a - Teapoint and parttion gwall in circulation to be dismantled



LG43a - WC stalls

Window removal

Existing Metal Windows
There are currently two replacement aluminium-framed windows on the east side of LG43a and one replacement aluminium-framed window on the north side of LG43b which face into an internal well, which is part of the internal north courtyard that was formed when the North Courtyard Building was built in 2003. This internal make-up air well is one of the two locations where fresh air is drawn into the internal north courtyard to assist in smoke venting when the fire alarm is triggered. The make-up air well is a back-of-house area which is only accessed by maintenance staff. The louvres between the lower ground floor circulation route and this well are typically closed and only open on fire alarn.

A fire risk assessment has identified that these windows should be a fire rated separation.

Our proposal for these windows is to fully remove the glass and frames and infill the structural opening with a brick panel flush to the surrounding brick wall. This would allow us to leave the steel window frame elements in situ while improving the fire separation of the fire escape / fire fighter's access corridor.

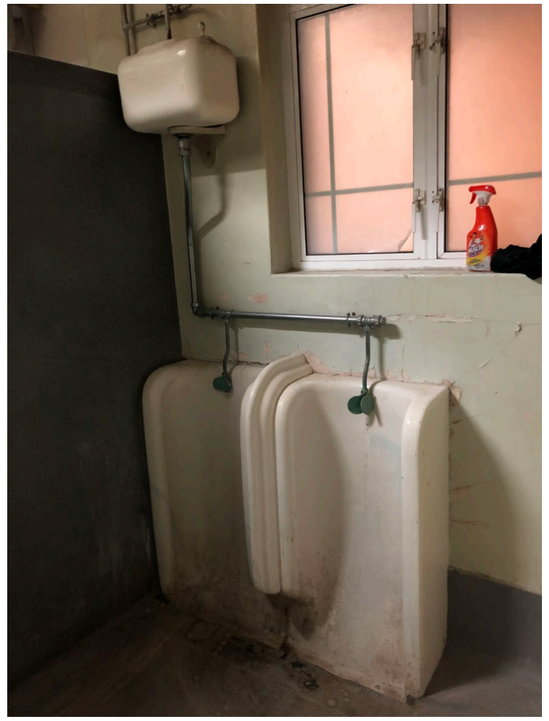
The infill to the smaller window to the cleaners' store LG43b will incorporate a galvanised air intake louvre at the top.

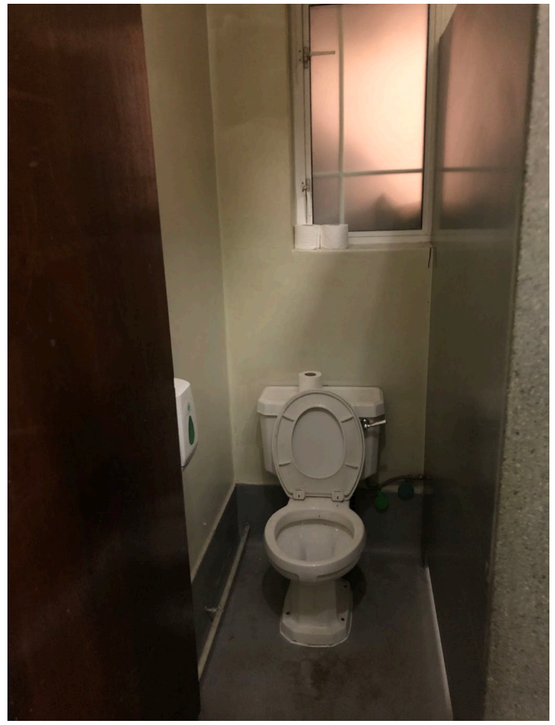
One original 1929 steel-framed windows on the east side of LG43b (cleaner's cupboard) was originally an external window in 1929, but now faces the service corridor formed in 2003 with the introduction of the North Courtyard Building.

The service corridor is the primary 'goods in' and bicyclist route into the building from the service area, and also acts as the primary fire-fighter's entry to the building and a fire escape route. A fire risk assessment has identified that the windows onto this escape route should form part of a protected enclosure, and should therefore be fire rated construction.

Our proposal for this window is to remove all of the glass from the frames, install a fire rated plasterboard shaftwall within the structural opening to the inside of the steel window frame, and to infill the structural opening to the outside of the steel window frame with a brick panel flush to the surrounding brick wall. This would maintain the steel window frame elements in situ while improving the fire separation of the fire escape / fire fighter's access corridor.

End





LG43a - WC stall with courtyard well facing aluminium window

LG43b - courtyard well facing aluminium window

Appendix A: Drawing List

Drawing List

Dwg No	Rev	Dwg Name	Scale
739-IRAL-02-DR-08-1000	4A	Site Location Plan	1:1250@A4
739-IRAL-02-DR-08-1207	4A	GA Plan – Lower Ground Level - Existing	1:100@A0
739-IRAL-02-DR-18-0702	4A	LG43a Shower Room - Existing Plan	1:20@A1
739-IRAL-02-DR-19-2701	4A	LG43a Shower Room - Existing Sections	1:20@A1
739-IRAL-02-DR-19-2702	4A	LG43a Shower Room - Existing Elevations	1:20@A1
739-IRAL-02-DR-23-0702	4A	LG43a Shower Room - Proposed Plan	1:20@A1
739-IRAL-02-DR-25-2701	4A	LG43a Shower Room - Proposed Sections	1:20@A1
739-IRAL-02-DR-25-2702	4A	LG43a Shower Room - Proposed Elevations	1:20@A1