

BRIDGES
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Bridges Healthcare (Richmond) Limited



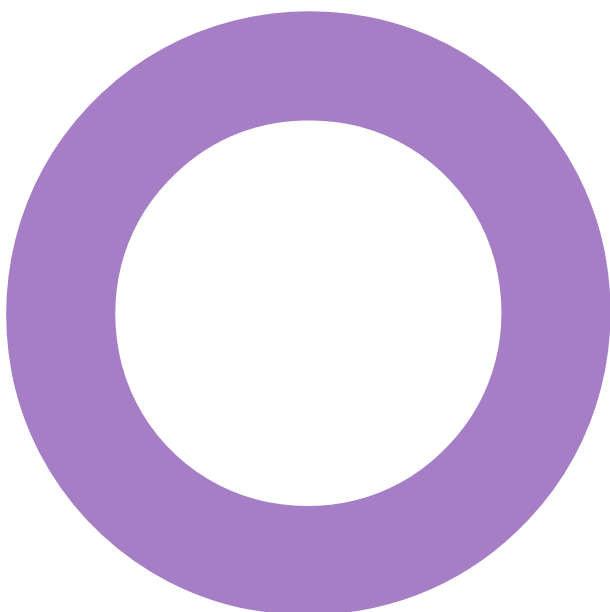
RICHMOND INN

Fire Statement & Fire Safety Strategy
Hoare Lea

**Richmond Inn.
London.**
**Bridges Healthcare
(Richmond) Limited.**

FIRE ENGINEERING
LONDON PLAN PLANNING STATEMENT

REVISION 01 – 05 MAY 2022



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	29/04/2022	The London Plan 2021 planning statement	AMM	IH	SB
01	05/05/2022	Minor update to include client comments	IH	IH	SB

This document has been prepared for Bridges Healthcare (Richmond) Limited only and solely for the purposes expressly defined herein. We owe no duty of care to any third parties in respect of its content. Therefore, unless expressly agreed by us in signed writing, we hereby exclude all liability to third parties, including liability for negligence, save only for liabilities that cannot be so excluded by operation of applicable law. The consequences of climate change and the effects of future changes in climatic conditions cannot be accurately predicted. This report has been based solely on the specific design assumptions and criteria stated herein.

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1. Introduction.

This planning statement has been prepared by Hoare Lea for Bridges Healthcare (Richmond) Limited to support the planning application for the Richmond Inn development. The proposed development will involve a partial demolition and extension of the existing Richmond Inn hotel into visitor accommodation providing care and physiotherapy-led rehabilitation, extending over four storeys (Lower Ground, Ground, First, and Second).

The purpose of this planning statement is to highlight the main fire safety principles that have been employed in the design of the development, and to provide an overview of the requirements and recommendations that the development will meet in relation to the relevant policies of The London Plan 2021. The development will be principally designed according to the guidance in Approved Document B Volume 2 – Buildings other than dwellings (2019 edition incorporating 2020 amendments), referred throughout this report as AD-B.

2. Competency statement.

All Hoare Lea design projects are headed by chartered engineers with proven experience in a wide range of fire safety consultancy projects. All work produced at Hoare Lea has been reviewed and approved by a chartered fire engineer.

Engineers at Hoare Lea have proven expertise and experience in fire safety design on a wide range of complex buildings, both in the UK and internationally. Whilst most work is conducted to satisfy statutory regulations within the UK (e.g. Building Regulations 2010 and other associated fire safety legislation), Hoare Lea has also been responsible for developing fire safety strategies based on international standards and regulations (e.g. NFPA).

This statement has been produced, reviewed, and approved by the following key individuals. The design and development of the fire safety strategy will be undertaken by the same individuals.

- Ian Hall BEng (Hons), MPhil, CEng, MIFireE – Associate Director – A chartered engineer by the IFE with 15 years of experience, Ian Hall has worked on multiple large-scale projects throughout the UK.
- Arcadio Martinez Madrid MEng (Hons), Affiliate Member of the IFE – Graduate Fire Engineer.

3. The London Plan 2021 – Policy D5 (Inclusive design).

Policy D5 of the London Plan states that boroughs, in preparing their Development Plans, should support the creation of inclusive neighbourhoods by embedding inclusive design, and collaborating with local communities in the development of planning policies that affect them.

The development proposal should achieve the highest standards of accessible and inclusive design. They should:

1. Be designed taking into account London's diverse population.
2. Provide high quality people-focused spaces that are designed to facilitate social interaction and inclusion.
3. Be convenient and welcoming with no disabling barriers, providing independent access without additional undue effort, separation or special treatment.
4. Be able to be entered, used and exited safely, easily and with dignity for all.
5. Be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.

Design and Access Statements, submitted as part of development proposals, should include an inclusive design statement.

4. The London Plan 2021 – Policy D12 (Fire safety).

Policy D12 of the London Plan states that in the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:

1. Identify suitably positioned unobstructed outside space:
 - a. For fire appliances to be positioned on.
 - b. Appropriate for use as an evacuation assembly point.
2. Are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures.
3. Are constructed in an appropriate way to minimise the risk of fire spread.
4. Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.
5. Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.
6. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor.

The statement should detail how the development proposal will function in terms of:

1. The building's construction: methods, products and materials used, including manufacturers' details.
2. The means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach.
3. Features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans.
4. Access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these.
5. How provision will be made within the curtilage of the site to enable fire appliances to gain access to the building.
6. Ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.

These items will be addressed in the following sections with respect to the proposed development.

5. Site & development description.

The proposed Richmond Inn development will be located on the corner of Sheen Road (to the south) and Church Road (to the west) in Richmond. Sydney Road is located to the north. The site extends to approximately 0.13ha in total and will comprise the main building as well as a central courtyard area. The main visitor entrance will be provided at Sheen Road.

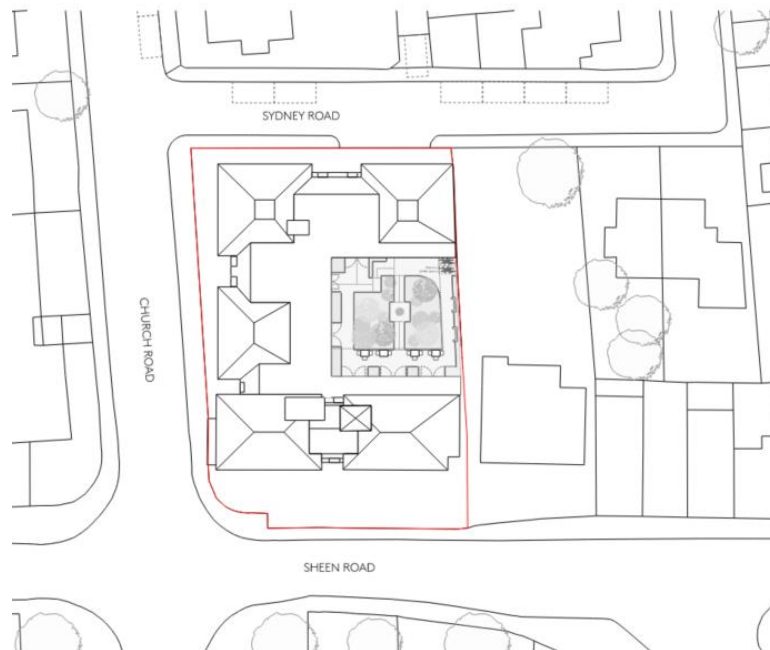


Figure 1: Site layout showing the location of the proposed Richmond Inn development. The site boundary is shown in red.

The Lower Ground floor will consist of a restaurant/bar, kitchen, BOH/service corridor, gym/pools, physiotherapy offices, consultation rooms, and a bike store. The Ground floor will consist of sleeping accommodation for occupants with en-suites, lifts, linen stores, salon, and entrance lobby lounge. The First – Second floors will consist of sleeping accommodation for occupants with en-suites, lifts, and linen stores.

5.1 Accommodation.

The proposed accommodation can be summarised as follows:

Lower Ground

- Restaurant/bar.
- Kitchen.
- BOH/service corridor.
- Gym/pools.
- Physiotherapy offices.
- Consultation rooms.
- Bike store.

Ground

- Sleeping accommodation.
- Lifts.
- Linen stores.
- Salon.
- Entrance lobby lounge.

First

- Sleeping accommodation.
- Lifts.
- Linen stores.

Second

- Sleeping accommodation.
- Lifts.
- Linen stores.

5.2 Building height.

The height of the building, from the lowest occupied Fire Service access level (i.e. Lower Ground) to the highest occupied storey (i.e. Second) is approximately 10.1m.

The Lower Ground floor is approximately 3.05m below Ground.

6. Fire safety overview.

6.1 Building construction.

- The majority of the structure will be constructed in reinforced concrete and brickwork. It is also understood that, following the refurbishment, there will be a proportionally small amount of steel and timber in the building.
- To limit the spread of fire within the buildings, all wall and ceiling linings will satisfy the appropriate classification requirements outlined in AD-B.
- At this stage, an initial space separation assessment has been conducted, and it is considered that there is no significant risk of spread of fire between buildings from the accommodation. This analysis will be updated at the detailed design stage.
- As the building does not have a storey that exceeds 18m in height, the external walls of the building should meet the performance criteria given in BRE report BR 135 for external walls using full-scale test data from BS 8414-1 or BS 8414-2. Alternatively, the external surfaces (i.e. outermost external material) of external walls should comply with the provisions in Table 12.1 of AD-B. The insulation and facade in the external walls system are expected to be either non-combustible (European Classification A1) or of limited combustibility (European Classification A2-s1, d0).

6.2 Construction, design, and management regulations.

- Design projects undertaken in the UK are subject to the requirements of the Construction (Design and Management) Regulations 2015, the objective of which is to ensure that health and safety issues are properly considered during a project's design and development so that the risk of harm to those who have to construct, use, or maintain the building is reduced.
- As a designer, in accordance with Regulation 9 of the CDM Regulations, Hoare Lea will take into account the general principles of prevention in the preparation of this report and where reasonably practicable, eliminate, minimise and/or control foreseeable hazards associated with the design. Where elimination is not reasonably practicable, Hoare Lea will be required to provide "pre-construction" information with respect to any significant and/or unusual project-specific hazards that remain.

6.3 Means of escape and evacuation strategy.

- The building will implement a "simultaneous" evacuation strategy, whereby all occupants will evacuate upon activation of the fire detection and alarm system.
- All sleeping accommodation will be accessed via a common corridor. This will be designed as a protected corridor and will achieve a minimum period of fire resistance of 30 minutes.
- The building will be provided with three protected stairs (i.e. Stair 1, Stair 2, and Stair 3). Stair 1 and Stair 2 will serve all floors, with final exits at the Lower Ground floor directly from the stair enclosures. Stair 3 will serve the Ground floor to the Second floor, with a final exit at the Ground floor directly from the stair enclosure.
- All stairs will be sized to provide a minimum clear width of 1000mm. Based on the assumed occupancy load of the development and the discounting of one escape stair in accordance with the methodology in AD-B, this is considered reasonable.
- Each stair discharge route will be at least as wide as the stair it serves. Therefore, the final exits from the protected stair enclosures will achieve a minimum clear width of 1000mm and open in the direction of escape.
- In accordance with the recommendations in AD-B for a purpose group 2(b) building, the maximum travel distance permitted within the common corridors serving the sleeping accommodation will be 9m for escape in one direction and 18m for escape in multiple directions. Within the sleeping accommodation itself, the maximum travel distance permitted will be 9m for escape in one direction. Elsewhere in the building, the maximum travel distance will be 18m for escape in one direction and 45m for escape in multiple directions.
- It is proposed to provide one of the lifts as an evacuation lift designed in accordance with the relevant provisions in BS EN 81-20 and BS EN 81-70. This may be used to assist evacuation if necessary to comply with the recommendations of policy D5 (inclusive design) of The London Plan.

6.4 Features which reduce the risk to life.

- In accordance with BS 5839-1:2017, the minimum level of detection permitted within a short-term sleeping facility is a Category L2 system designed in accordance with BS 5839-1:2018. Detection should be installed in circulation areas, rooms which open into circulation areas, and additional high-risk areas).
- All new structural frames, beams, columns, load-bearing elements, and floor structures will be provided with a minimum period of fire resistance of 60 minutes.
- As the building will contain sleeping occupants, all floors are required to be constructed as compartment floors and should achieve a minimum period of fire resistance of 60 minutes.
- Any shafts which penetrate the compartment floors (i.e. risers, lift shafts, stairs, etc.) will achieve the same period of fire resistance as the floor they pass through (i.e. 60 minutes).
- From the proposed layouts, it is noted that the final exit from Stair 2 requires occupants to pass within 1.8m of the external façade of the building. In accordance with AD-B, the external façade on this route should achieve a minimum of 30 minutes integrity and insulation, with a minimum height of 1.1m above the escape route level.
- In accordance with Section 18.2 of AD-B, whilst the Lower Ground floor is classified as a basement, given that this level contains doors and windows there is no requirement to provide dedicated openings at this level for ventilation.
- All protected stairs and evacuation lifts will have refuges associated with them. These should provide an area accessible to a wheelchair user of at least 900mm x 1400mm and should be provided with an EVC system complying with BS 5839-9:2021 along with Type B outstations.

6.5 Access for fire service personnel and equipment.

- As the building does not have a storey height greater than 18m, or a basement depth greater than 10m, there is no requirement to provide firefighting shafts throughout the development.
- Rising mains will not be provided on the basis that Fire Service vehicle access will be provided to the building in accordance with Table 15.1 of AD-B.
- As the building has a compartment greater than 280m² in area, if the building is being erected more than 100m from an existing hydrant, private hydrants may be required. The location of any existing hydrants is subject to confirmation.

6.6 Fire access to the building.

- As the building has a storey height less than 11m and a total building footprint between 2,000m² – 8,000m², a minimum of 15% of the perimeter will need to be provided for a pump appliance. Based on a building perimeter of approximately 180m, the minimum perimeter access required will be approximately 27m. This is achieved from the adjoining highways.
- All access routes for Fire Service vehicles will need to satisfy the specifications outlined in Table 15.2 of AD-B with respect to access for pump appliances.

6.7 Measures to protect the base build fire safety/protection strategy.

Any future modifications to the scheme or fit-out will be subject to Building Regulations approval and should consider the base build fire strategy, such that any fire safety measure provided to the development is not compromised.

7. Conclusion.

This fire safety statement has been prepared to outline the provisions relating to fire safety for the Richmond Inn development for compliance with The London Plan policies D5 and D12.

This statement demonstrates that the proposals have considered fire safety at the earliest stage, and the further development of the fire strategy will be based upon these principles. The fire strategy will be further developed for submission to the Approving Authority at the appropriate time and will meet the functional requirements of the Building Regulations (2010), taking recommendations from Approved Document B Volume 2, and following the requirements of Policy D5 and D12 of The London Plan.

Regulation 38 of the Building Regulations requires that fire safety information be given to the person responsible for the occupied building. Therefore, copies of the fire safety strategy, once agreed with the Approving Authority, and other relevant fire safety information should be issued to the responsible person. This will ensure publication of the proposed evacuation strategy and assist in evacuation of all building occupants.

Any future modifications to the scheme will be subject to the functional requirements of the Building Regulations and should consider the base build fire strategy.



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