Report

Project	Crescent Hotel
Report Title	Planning Fire Statement
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Issue Date. 30/01/2023

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Date	19/12/2022	23/12/2022	12/01/23	13/01/23	26/01/2023	30/01/2023
By	HK	CMC	CMC	CMC	CMC	CMC
Checked	BT	BT	HK	CMC	HK	HK
Approved	CMC	BT	CMC	BT	NH	NH

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1.0 THE PROJECT

1.1 Site Location and Description

The Site is located at 49-50 Cartwright Gardens, London, WC1H 9EL. The development involves the refurbishment of the former hotel for use as a shared living (short term let) accommodation. The property comprises two terraced townhouses which form part of a larger crescent which define the edges of Cartwright Gardens.

The Grade II Listed building comprises of 5 floors of residential accommodation, with shared living units from Lower Ground to Third Floor. The scheme includes general refurbishment works and the introduction of cooking facilities to some rooms. Plant and ancillary rooms will be located at the lower basement level.

The figure below shows the existing Crescent Hotel building.

Figure 1.1 – Crescent Hotel

1.2 Aim of Report

This fire statement describes the key fire strategy principles for the building and is intended to identify the main fire safety features, fire fighter access facilities and fire strategy principles in accordance with Policy D12(A) of the London Plan and is intended to accompany the Planning Application for the building.

1.3 Relevant Guidance

The fire strategy for the building has been prepared using guidance in Approved Document B Volume 2: Buildings other than dwellings 2019 (incorporating the 2020 & 2022 updates). The refurbished building will facilitate short term lets, however will remain classified under purpose group 2(b) i.e. Residential (other) following guidance in the Approved Document B.

1.4 Material Change of Use

From a Building Regulation's perspective, the proposed works to the Crescent Hotel are considered a material change of use of part of the building in accordance with Building Regulations 2010. The material change of use applies to the areas within the scope of refurbishment works i.e. where works are being carried out, however not to the building as a whole. This approach has been discussed and agreed with Stroma Building Control on the 12th January 2023.

On this basis, any new work carried out will comply with Building Regulation's guidance, and existing arrangements will be made no worse as part of the works.

1.5 London Plan

This fire statement has been developed to address compliance with D12(A) and D5 for dignified egress.

The project is not considered a "major development", and therefore policy D12(B) is not applicable.

As required by the London Plan, Chapter 3 Design, the following will be achieved:

London Plan D12 Fire Safety – A

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:* - See Section 6.0
   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.* – See Sections 4.0 and 5.0.
3) *are constructed in an appropriate way to minimise the risk of fire spread.* – See Section 7.0.
4) *provide suitable and convenient means of escape, and associated evacuation strategy for all building users.* – See Section 3.0
5) *develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.* – See Section 3.0
6) *provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.* – See Section 6.0

Policy D5 Inclusive design

A. *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.*
B. *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.* – See Section 3.0
C. *Design and Access Statements, submitted as part of development proposals, should include an inclusive design statement.*

1.6 Declaration

Provided that the design complies with the fire safety strategy and provisions mentioned in this statement, the fire safety of the proposed development and the fire safety information should satisfy the requirements of London Plan Policy D12A and the functional requirements of the Building Regulations. The draft Fire Safety London Plan guidance (Feb 2022) has also been considered when developing the fire strategy for these buildings.

Jensen Hughes (formerly JGA) have been employed to advise the design team in developing the fire strategy for the development. Jensen Hughes have extensive experience in developing residential buildings in the UK and the rest of the world.

The report has been approved by Nick Harvey, BEng (Hons) CEng MIFireE. Nick Harvey is a Chartered Engineer through the Institution of Fire Engineers. Nick is the Managing Director of Jensen Hughes (England) and has over 20 years of experience in developing building Fire Strategies. He has extensive experience in fire strategies for residential buildings ranging from Private residential, Private Rented Sector, co-living, and Student Residential buildings. He has extensive experience in developing fire engineering solutions including fire and smoke and evacuation modelling for all range of building types, including extensively in residential buildings.

As part of Jensen Hughes, Nick can draw from the experience of other fire engineers in the UK and around the world, which will ensure the quality and the robustness of the fire strategy developed for the project.

Report by	Calum McMenemin, Fire Engineer, MEng
Checked by	Humza Khan, AIFireE, GMICE
Approved by	Nick Harvey BEng (Hons), Managing Director, CEng, MIFireE

2.0 THE BUILDING'S CONSTRUCTION METHODS, PRODUCTS AND MATERIALS USED

As required by the London Plan D12, this section sets out the building's construction method and products and materials used.

The existing walls of the building are masonry. The proposed works will not change the existing construction products and materials used. New proposed partitions will be plasterboard.

No new external wall cladding is proposed as part of the works. There are no proposals to add insulation to the external walls.

Building materials will be required to achieve the minimum standard for fire resistance.

New internal linings will achieve the minimum requirements of Building Regulation guidance documents.

3.0 MEANS OF ESCAPE AND EVACUATION STRATEGY

3.1 Evacuation Strategy

As existing, the hotel operated on a simultaneous evacuation strategy. This is proposed to be retained with the use as a shared-living building. In the event of detection of a fire anywhere in the building, the entire building will be signalled to evacuate.

3.2 Means of Escape

3.2.1 Occupancy

The occupancy of the building will not exceed 60.

On this basis, doors on final escape routes need not swing outwards in the direction of escape.

3.2.2 Stair Layout

The building is served by two escape stairs that exit directly to outside at Ground Floor.

The shared living units at Level 0 and Level 3 will have access to both stairs as the stairs are connected via a living room at Level -1 and through a shared corridor at Level 0 and Level 3. The units at Level 1 and Level 2 are accessible by two separate stairs which are not connected, forming only one escape path. The existing stair arrangement will largely be maintained such that condition after refurbishment will be no worse than the existing situation.

3.2.3 Stair Lobbies

As existing, there are hotel rooms accessed directly from the stair. This results in an increased risk of fire and smoke spread via the stairs.

However, as part of the refurbishment works, it is proposed to introduce protected lobbies between the rooms and the stairs. This will be provided throughout, with the exception of the following existing situations:

- Rooms 19a to 24a at Level 2, and
- Rooms 2a and 3a at Level -1 i.e. Lower Ground.

It is not feasible to introduce lobbies to the above rooms due to historic constraints with the listed building. However, these are existing arrangements that will be retained. All new rooms will be separated from the escape stairs with protected lobbies.

Therefore, the arrangement is considered reasonable; the new work will meet current Building Regulations guidance, and the existing arrangement will be made no worse with the proposed works.

3.3 Evacuation of Mobility Impaired Occupants

3.3.1 Disabled Refuges

As existing, there are no refuge points provided in the building. The standard of safety regarding mobility impaired access/egress will not be altered as part of the refurbishment works. On this basis, it is not proposed to introduce refuge points to the building as part of the works.

The existing hotel is not accessible to wheelchair occupants. In the event that any mobility impaired occupants or wheelchair users patronise the building, the management strategy will include measured to assist in their escape e.g., Personal emergency evacuation plans (PEEPs). This will be further developed as the design progresses.

3.3.2 Evacuation Lifts

There are no lifts provided to the building as existing. As the proposed works do not include the addition of lifts to the development, there is no requirement to provide evacuation lifts in line with London Plan Policy D5(B5).

3.4 Cooking Facilities

Cooking facilities will be introduced to some of the shared living rooms, located as to not prejudice escape from the rooms. As a means to alleviate the increase in associated fire risk, the following fire safety measures will be provided:

- At least a Category L2 automatic fire alarm system provided throughout the building, including heat detectors above the cooking facilities.
- An automatic shut-off switch provided to the cooking facilities, linked to the alarm system within the apartment.
- An in-hood fire suppression system provided above the cooking facilities, to operate in the event of an uncontrolled hob fire.
- Fire rated construction provided to shield occupants making their escape.

Cooking facilities provided to the Lower Ground rooms are indicated in the figure below:

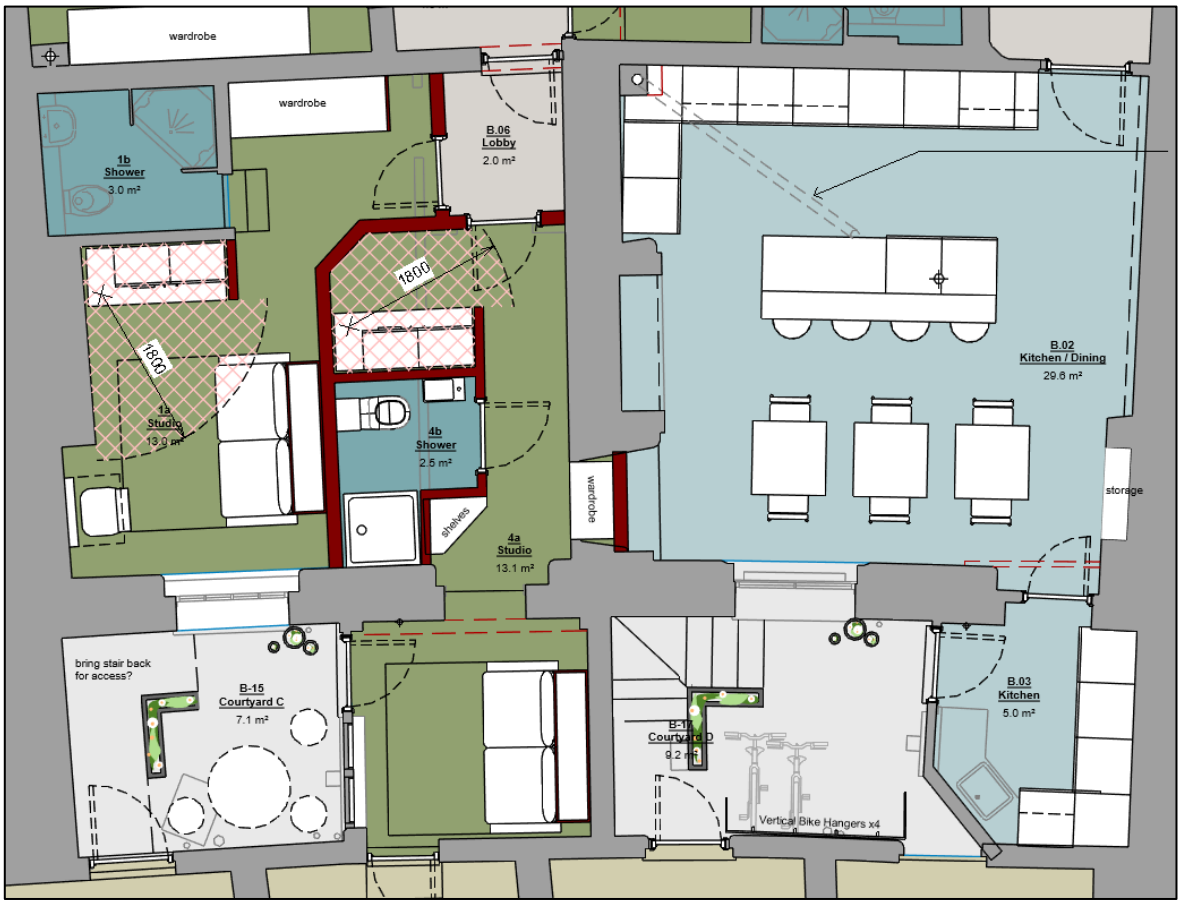

Figure 3.1 – Cooking facilities within Shared Living Units

4.0 ACTIVE FIRE SAFETY SYSTEMS

4.1 Sprinklers

Sprinklers are not provided as existing. Based on the top storey height of approximately 11m, Building Regulation's guidance would not require sprinklers to be provided to the hotel building. There is no Building Regulation's requirement to introduce sprinklers to the building as part of the works. On this basis, sprinklers are not proposed.

However, it is proposed to provide "in-hood" fire suppression systems to the cooking facilities introduced to shared living units. This will reduce fire risk associated with an uncontrolled hob fire.

4.2 Automatic Fire Detection

The building will be provided with an automatic fire detection and alarm system, designed in accordance with BS 5839-1 to at least a Category L2 standard. Coverage will include loft spaces/voids.

4.3 Emergency Lighting

Emergency lighting will be provided in accordance with relevant code guidance, including the Approved Document B, and BS 5266-1:2016.

4.4 Signage

Signage will be provided throughout the buildings and in accordance with the recommendations of relevant code guidance, including the Approved Document B, BS 9991, and BS ISO 3864-1:2011.

5.0 PASSIVE FIRE SAFETY MEASURES

5.1 Structure

The existing structural elements of the building should achieve 1 hour fire resistance.

The proposals will not significantly alter the existing floors of the building, with the exception of service penetrations e.g. for ventilation, and therefore the structural floors are considered outside the scope of the refurbishment works. However, if existing elements of structure are observed to be unsuitable during the proposed works; upgrade works will be carried out where feasible and practicable.

Any penetrations through the floors as part of the works will be suitably fire stopped.

There is no Building Regulations requirement to retrospectively upgrade elements of structure of the building.

5.2 Compartmentation

As a principle, any new interventions will be provided in line with current Building Regulation's guidance.

Each stair will be enclosed in 1 hour fire rated construction. This is expected to be achieved with the existing masonry construction of the stair cores.

Where new enclosures of stair lobbies/corridors giving access to shared living units are provided, they will achieve at least 30-minutes fire resistance.

Where new partitions are introduced to separate shared living units, it is proposed the new partitions will achieve 1 hour fire resistance. This is an enhancement over standard code guidance for hotels, where party walls between hotel, rooms need not be fire rated.

6.0 ACCESS AND FACILITIES FOR THE FIRE AND RESCUE SERVICE

6.1 Firefighting Facilities

The building is less than 18m, therefore a firefighting shaft is not required to the building to meet standard code guidance.

There is no requirement to introduce, or proposal to provide, additional firefighting facilities to the building as part of the works. The existing firefighting access arrangement will largely be maintained such that condition after refurbishment will be no worse than the existing situation.

6.2 Fire Vehicle Access

The top storey height of the building will be less than 11m; to meet code guidance, sufficient vehicle access is required to 15% of the perimeter. This is achieved with access from Cartwright Gardens.

6.3 Fire Hydrants

With the location in central London, it should not be necessary to introduce new fire hydrants to the building.

7.0 ELEVATIONS

7.1 External Wall Build-up

As discussed above, no new external wall cladding is proposed as part of the works.

Any insulation used in the external wall system will be mineral wool, achieving at least a Class A2-s1,d0 rating.

7.2 External Fire Spread

With the building opposing Cartwright Gardens on the south elevation, it is not necessary for the external wall to be fire rated to address external fire risk.

It is understood that the existing masonry external wall construction will provide an inherent fire resistance.

8.0 MANAGEMENT

Management procedures have not been developed at this stage of the project. However, any areas requiring a level of management and a management strategy will be provided as necessary. This will be developed at a later stage.

The building fire strategy document will form part of the building regulations application. This will also be used to inform any future alterations to the building to ensure that the fire safety measures, and strategy is not compromised.

The building owners will be responsible for implementing a management plan for the ongoing maintenance and provision of safe access routes to and within the buildings. These plans shall be in line with the requirements of the Regulatory Reform (Fire Safety) Order and relevant British Standards for the fire safety equipment.

9.0 FUTURE DEVELOPMENT OF THE ASSET AND THE 'GOLDEN THREAD' OF INFORMATION

In line with the recommendations for providing a 'golden thread' of information, digital records of core fire safety components during the design and construction phases. Records will be initiated by the relevant duty holders during the design and construction phase, on completion of work the records will be handed over to the building owners to maintain for the life of the building.

A Fire and Emergency File (FEF) will be established for this development to record prevalent information throughout the design, construction and life of the building. The FEF will include this fire statement and subsequent fire strategies as outlines of the key fire safety design provisions of the building, including assumptions of fire loads, occupant characteristics, evacuation strategies, passive fire safety measures, active fire safety systems, fire safety equipment, key fire properties of building materials, access for fire and rescue services. As the design develops relevant documents shall be recorded including technical specifications and product datasheets, detailing specific information on the building materials, safety systems and equipment. On completion of construction the commissioning documents and the operation and maintenance manuals shall be recorded. Throughout the life of the building regular inspections and maintenance are required to ensure the fire strategy is upheld and fire safety systems are operational. Records of inspections, fire risk assessments and maintenance work shall be recorded.

The details of the information retention systems will be determined by the client.

Modification of the following elements of the building may adversely affect the original fire safety strategy:

- Fire detection and alarm systems
- Fire suppression systems
- Smoke clearance and control systems
- Increasing population
- Changing the use of the areas
- Escape routes
- Number and dimension of escape stairs
- Refuge areas
- Wall and ceiling linings
- Fire protection of the building structures
- Changing fire and smoke doors
- Changing, penetrating fire compartments, cavity barriers
- Increasing fire load in certain areas
- Creating, changing openings on the external envelope
- Changes in the external envelope of the building
- Changes in the environment of the building related to the fire service access points and parking.

10.0 INFORMATION, LIMITATIONS AND ASSUMPTIONS

The information limitations and assumptions used in the preparation of this report are noted below:

Drawings

This report is based on drawings issued to us. Dimensions have been taken from these drawings. The following drawings were used:

- CRSH-HMA-XX-ZZ-D-A-00101 GA Plan Level -1, Level 0
- CRSH-HMA-XX-ZZ-D-A-00102 GA Plan Level 1, Level 2
- CRSH-HMA-XX-ZZ-D-A-00103 GA Plan Level 3

Building Regulations

This report considers building regulations, which deal with life safety. Property protection and insurance issues are not addressed in this report. Guidance on property protection and insurance requirements can be found in the document *Approved Document B: Fire Safety (Volume 1)*

Other Limitations

Complying with the recommendations of this report will not guarantee that a fire will not occur.

Unless otherwise described in this report, the fire strategy assumes that the building design, the mechanical and electrical systems, construction methods and materials specifications will comply with current Building Regulations guidance, and relevant British Standards and Codes of Practice. The design of mechanical and electrical systems such as fire alarm and sprinklers is a specialist area. Fire Strategy recommendations are given in this report, however, the design and specifications need to be developed at the appropriate stage in consultation with the specialist designers of these systems.

This report has been prepared for the sole benefit, use and information of the SLP Crescent Limited and the liability of Jeremy Gardner Associates Limited, its directors and employees in respect of the information contained in the report will not extend to any third party.

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