SURETY FIRE SOLUTIONS

Proposed Development Howson Terrace

Richmond Hill, London.

Planning Fire Safety Strategy

London Plan Policy D12(A)

November 18th 2021

Version A Issued 18th November 2021

Version B Issued 19th November 2021

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Introduction

This planning fire strategy has been prepared by Surety Fire Solutions Ltd on behalf of the client, Pegasus Group, in in response to Policy D12 (Fire Safety) of the London Plan and in support of the planning application for *'a building comprising 28 one and two bedroom affordable retirement apartments and communal facilities.'*

The Strategy addresses the main fire safety items and principles and provides an overview of the requirements and recommendations that the premises will meet or exceed with regard to the functions set out within the London Plan.

Subject to approval, the Fire Safety Strategy document will be utilised to ensure the premises are constructed and used in accordance with the relevant regulations and is fit for purpose on occupation under the Regulatory Reform (Fire Safety) Regulations 2005, and the 'Golden Thread' is maintained.

Proposed Development

The proposed development utilises land adjacent to Bromwich House off Richmond Hill.

Site Location

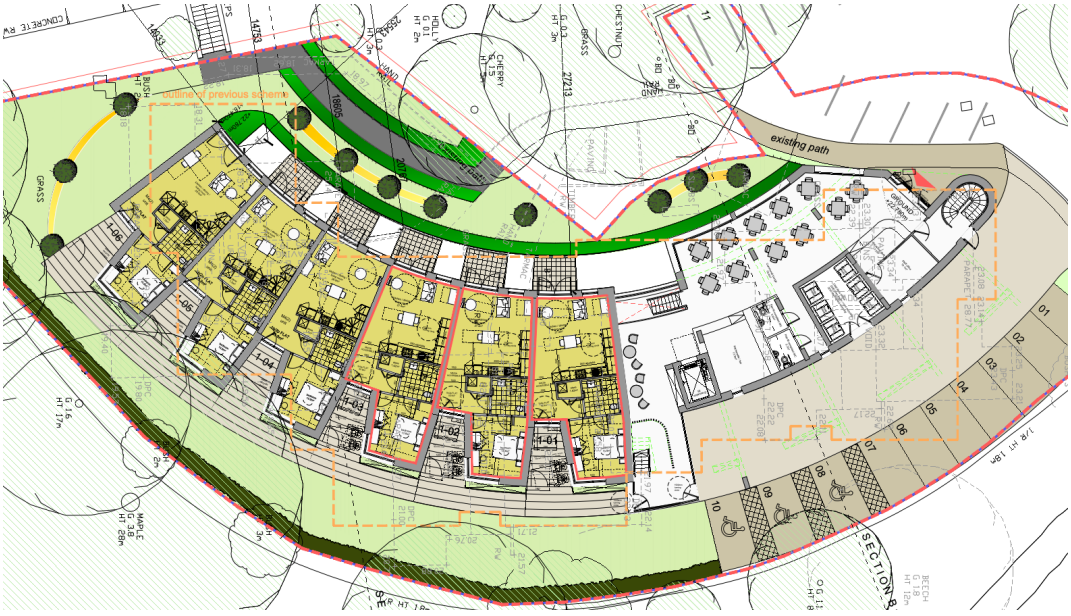
The premises are designed to provide *28 one and two bedroom affordable retirement apartments and communal facilities*, (Purpose Group 1a of the Building Regulations) arranged over up to 5 storeys, but due to the sloping site, the top storey is a maximum of three floors above firefighter access level, at 9.275 metres. The building is provided with two staircases and a communal evacuation lift.

The design of Fire Safety for the intended use is generally achieved by compliance with the functional requirements of the Building Regulations via the guidance document Approved Document B Fire Safety Volume 1. This guidance, with regards to the design of deck access flats, directs users to also take reference to *BS9991:2015 Fire safety in the design, management and use of residential buildings – Code of practice*. The Fire Strategy for this application will aim to achieve compliance with the relevant guidance. As the premises are designed for older persons, mobility issues will be considered over and above the general requirements of ADB.

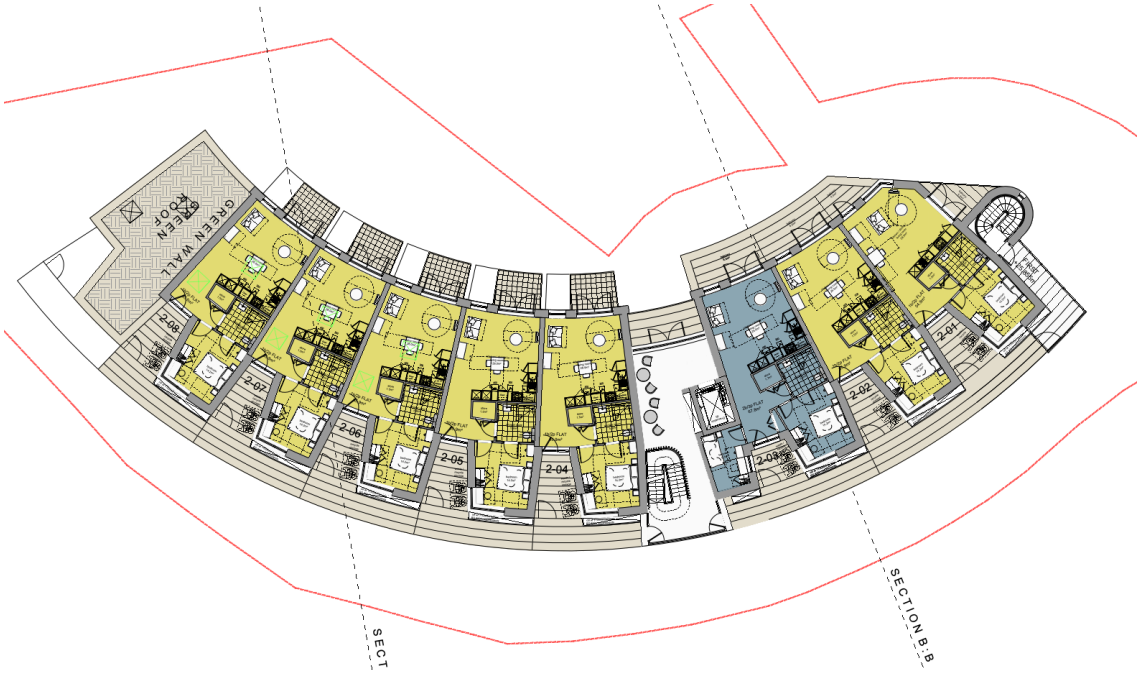
The premises are arranged as follows:

Lower Ground Floor:

Ground Floor:

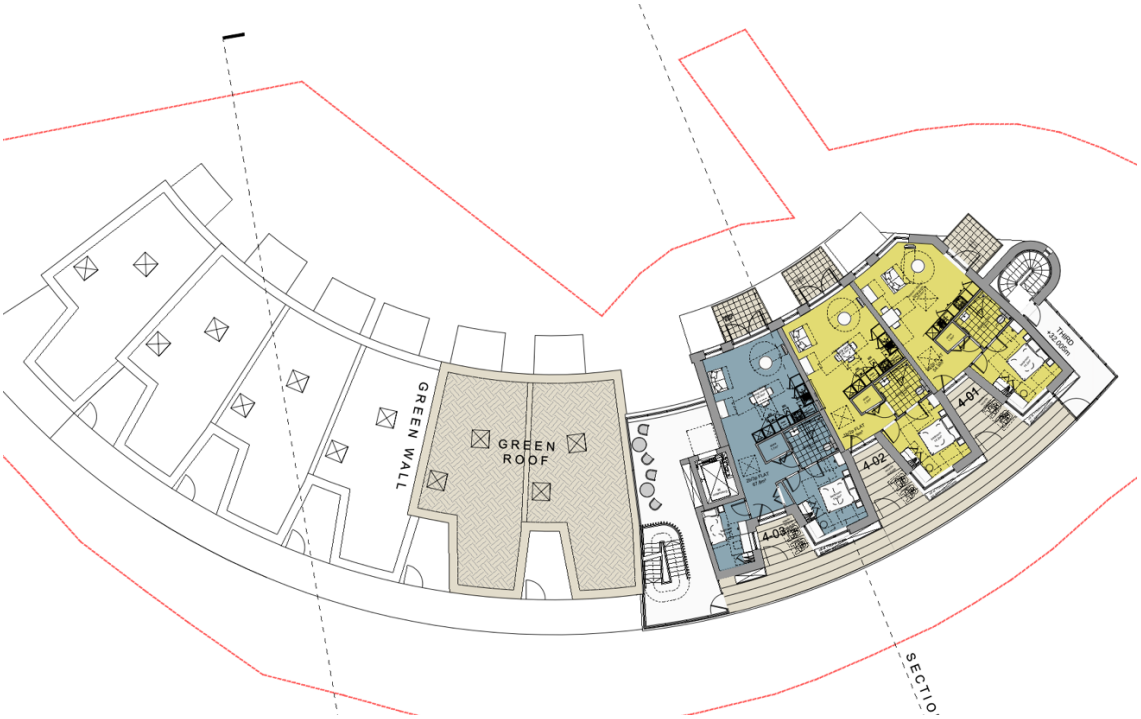


First Floor:



Second Floor:

Third Floor:



London Plan Policy D12

Policy D12 states:

In the interests of fire safety and to ensure the safety of all building users, 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, which all building users can have confidence in; and*
6. *Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.*

These items will be addressed in the following sections.

Competency Statement

Surety Fire Solutions Limited are a Fire Risk Assessment and Fire Engineering Company established in 2014, with significant experience in fire safety and are competent in the development of fire strategies for a wide-range of premises, including schools.

Fire Safety strategies are written and reviewed by qualified Fire Engineers, who are Fellows of the Institution of Fire Engineers and either FRACS or IFE Life Safety registered assessors.

This statement has been produced and reviewed by the following individuals:

Richard Stott BEng (Hons) FIFireE
James Fowler BEng (Hons) FIFireE

General Fire Safety Overview

The premises are well-served in terms of means of escape – there is a central staircase (which is effectively a single staircase serving the 'south side' of the building) and a second staircase serving the 'north side'. The sloping site means that there are only 2 floors above ground on the south and 3 on the north side. The height of the top floor plate above Fire Service access level is 9.275 metres. The central staircase will be fitted with an AOV linked to the fire alarm system. There are some communal facilities, such as a lounge and bar – all of which will be assessed against the functional requirements to ensure the necessary fire precautions are put in place.

Travel distances, exit widths and stair capacity are to be considered against the functional requirements of ADB V1. There is one evacuation lift situated within the central protected staircase. The staircase containing the lift does discharge direct to outside at both ground and lower ground levels.

The construction of the building is expected to be a combination of steel frame, reinforced concrete, block and traditional brick.

The premises footprint varies for each level but is a maximum of approximately 800m^2.

No significant risks are identified in the premises, other than the potential for combustible materials and ignition sources on the balconies or affecting the deck access. Wheelchair charging facilities are indicated on the plans – this will be considered from a means of escape and risk perspective.

Any cladding will be of a type considered safe and acceptable for this type of premises i.e. no ACM, HPL or MCM will be utilised.

Apartment front doors will be of a REI30 standard and it is planned to install a minimum of an BS 5839 Pt6 LD3 fire alarm system for the apartments, along with a Pt 1 L3 system in the staircases where smoke ventilation is installed, and in any communal areas. Fire-rated glazing will be installed where necessary e.g. below 1100mm on deck access doors/windows.

Access for Fire Appliances is to be benchmarked against ADB, and water supplies/rising mains are to be utilised where difficulties exist.

London Plan Policy D12 Specific Requirements

1 Identify suitably positioned unobstructed outside space:

a) *For fire appliances to be positioned on*

Hard standing is provided at the north end of the building, via the car park, and it is believed that there is suitable provision for Fire Appliances to turn on the property. This matter will be considered against the functional requirements to ensure compliance.

A fire hydrant is located in the entrance to Howson Terrace so it is expected that suitable water from towns mains will be available to ensure suitable firefighting water.

b) *Appropriate for use as an evacuation assembly point.*

A Fire Evacuation Assembly Point will be identified in a safe location, clear of the building, allows for accurate role call and will not hamper any Fire Brigade access or operations. Access to the assembly point will be available from all exits from the building – likely to be adjacent to parking space 11 see below:

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;

The building is to be installed with a minimum of a BS 5839 Pt 6 LD3 type fire alarm and detection system, along with an L4 system in the staircases where smoke ventilation is installed, and in any communal areas. Due to the provision of a communal lounge and bar etc, it may be necessary to link the detection system to the apartments. This matter will be considered in the full Fire Safety strategy.

A system of Emergency Lighting is to be provided to cover both internal and external escape routes.

The building's escape routes are protected by fire resisting and self-closing fire doors, fitted with intumescent strips and cold smoke seals.

A fire suppression system is not mandatory for this building, however, will be considered as part of the design process.

Refuse Storage is identified and is to be secure access from outside of the building – see below:

3 Are constructed in an appropriate way to minimise the risk of fire spread;

- Frame – expected to be non-combustible load bearing concrete and brick and block infill, with lightweight steel frame for upper floors.
- Floors -- reinforced concrete deck to upper floors, ground floor is ground bearing concrete slab.
- Roof insulated flat roof with green roof sections.
- Walls – brick and block, cavity insulation, internal plasterboard and fire board where required, plaster skim finish in accordance with requirements for internal fire spread.
- Two suitably sized stair cores are in place, which are constructed of fire resistant materials, lobby doors and relevant fire precautions.
- Windows, balconies and doors are made of materials of limited combustibility.
- External wall systems – traditional masonry/brick walls are planned. (the building is <18m).
- Any cladding will be of a type considered safe and acceptable for this type of premises i.e. no ACM, HPL or MCM will be utilised.
- Fire compartmentation and separation is provided by fire-rated passive and active methods in accordance with Approved Document B Fire Safety.

- All wall and ceiling linings satisfy the appropriate classifications in accordance with Approved Document B Fire Safety.
- Compartment floors and compartment walls where necessary should be a minimum of 60 minutes fire resistance. Internal partitions forming the escape routes and protecting staircases will have 30-minutes fire resistance.
- Cavity Barriers and fire-stopping measures are believed to be installed relative to the above fire resistance standards in order to ensure the integrity of the building.
- All doors protecting the escape routes are 30 minutes fire resisting and fitted with self-closing devices.

4 Provide suitable and convenient means of escape, and associated evacuation strategy for all building users;

The overarching Evacuation Strategy for the building is 'Stay Put'. To facilitate this, BS 5839 Pt 6 Grade D LD3 type fire alarm and detection system is to be provided.

The building will be designed to comply with the requirements of Approved Document B Fire Safety Volume 1 2019 Edition and BS9991:2015 in terms of means of escape and as such meet the guidance with regards to the protection of the escape routes and maximum travel distances.

One evacuation lift is provided, and is situated within the main entrance lobby/protected stair core. This matter will be assessed against London Plan Policy D5(B5).

The escape routes/stairs will be protected by self-closing fire doors, and are fitted with self-closing devices.

Stair capacity is considered within acceptable limits and stair widths are not less than 1100mm.

Internal room travel distances are considered to be within the limits allocated in Approved Document B for this Purpose Group and use. Any inappropriate inner rooms will be considered and addressed.

5 Develop a robust strategy for evacuation which can be periodically updated and published, which all building users can have confidence in;

The evacuation strategy for the building will be based upon a 'stay put' approach, with a simultaneous evacuation approach for the communal areas.

The strategy for evacuation will be documented and be part of the Regulation 38 Manual. A copy of the evacuation strategy can be supplied if required.

'Fire Action' plans will be placed in appropriate locations.

6 Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

Approved Document B requires that Access for Fire Pumping Appliances Approved Document B requires that Access for Fire Pumping Appliances Provide access for a pumping appliance to within 45m of all points inside each flat of a block, measured along the route of the hose. Where this is exceeded, dry-rising mains will be installed.

A fire hydrant is located in the entrance to Howson Terrace. It will be ensured that suitable water from towns mains is available to ensure suitable firefighting water, where this is not the case an additional private hydrant will need to be installed.

The building will be provided with suitable portable firefighting equipment, and suitable emergency signage is installed.

Due to the height of the building no specific additional firefighter access is considered necessary.

Conclusion

This planning fire safety strategy has been prepared to demonstrate the commitment to ensure the highest level of fire safety for this development in accordance the requirements of the London Plan D12 (A).

This strategy demonstrates that the proposals have considered fire safety at the planning stage, and subject to approval the full fire strategy will ensure that the building is both safe and compliant. The fire strategy will be part of the submission to the relevant Authorities at the appropriate time and will meet the functional requirements of the Building Regulations 2010, and other appropriate guidance and regulations.

Regulation 38 of the Building Regulations requires that fire safety information be given to the person responsible for the occupied building. The fire safety strategy, will be issued to the responsible person and will allow them to:

a. Understand and implement the fire safety strategy of the building.
b. Maintain any fire safety system provided in the building.
c. Carry out an effective fire risk assessment of the building.

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