

157-159 Hornsey Park Road, Wood Green

Fire Statement

09th February 2024



DOCUMENT CONTROL

Issue	Date	Description	Author	Reviewed
1	30-Nov-2023	Initial issue	KD	GH
2	09-Feb-2024	Comments incorporated	KD	GH

FIRE STATEMENT

1. Scope

FDS Consult (UK) has been appointed by Stephen Davy Peter Smith Architects Ltd, on behalf of the applicant Trinity International Properties Limited, to prepare the Fire Statement for the development at 157-159 Hornsey Park Road, Wood Green.

The development consists of two blocks. Block A is a part four-storey and part five to six-storey residential building 15.7m in height, and Block B, a five-storey mixed-use building 12.6m in height, with commercial units at ground floor level. Each building is served by a single stair core.

The development is considered a major development by the definition in §2(1) of The Town and Country Planning (Development Management Procedure) (England) Order, 2015.

2. Requirements

The London Plan, March 2021, states that all major development proposals should be submitted with a Fire Statement, which should detail how the proposed development will mitigate fire risk by addressing the requirements of Policy D5(B5) and Policy D12(B) with respect to fire safety.

This document constitutes the Fire Statement and should be read in conjunction with the appended FDS Consult (UK) Ltd, Design Review Report.

The Design Review Report outlines the way the design of the building will meet the functional requirements of the Building Regulations with respect to fire safety.

The development will be designed to meet the functional requirements of the Building Regulations and follows the design principles from Approved Document B (ADB) - 2019. Other aspects (i.e., construction of external walls) will follow Regulation 7 and the guidance in ADB.

In keeping with the recommendations in ADB, residential areas of the building will be designed to support a “Stay-Put” evacuation policy on actuation of the fire alarm system.

Ancillary and commercial areas will be designed to support a “simultaneous” evacuation policy on actuation of the fire alarm system.

3. Form 3 as per Appendix A3.3 of London Plan Guidance Fire Safety 2022 Provision of evacuation lift (London Plan Policy D5(B5))

Site address.	157-159 Hornsey Park Road, Wood Green, N8 0JX
Description of the development.	Demolition of existing structures and erection of two buildings. Block A is a part four-storey and part five to six-storey residential building and Block B is a five-storey mixed-use building with Class E floorspace at ground floor level. Each building is served by a single stair core. The development includes for the provision of associated landscaping, a new pedestrian route, car and cycle parking, and refuse and recycling facilities.
Names, qualifications, professional memberships, and experience of author and reviewer.	Author Mr Kai Dumetz <i>BEng (Mech Eng), Fire Engineer at FDS Consult (UK) Ltd.</i> <u>Professional summary:</u> <i>Kai has about two years of experience as a fire engineering consultant dealing with residential and commercial development projects of a range of sizes.</i> Reviewer Mr Granville Harris <i>CEng, MSc, BEng (Hons), MIFireE Technical Director at FDS Consult (UK) Ltd.</i> <u>Professional summary:</u> <i>Granville has approximately ten years' experience in the commercial sector as a senior fire engineer, dealing with residential and commercial development projects of a range of sizes. He has previous experience of 30 years in the London Fire Brigade, which includes 8 years in the Fire Engineering Team, working on pan-London developments of large retail, educational and residential usage.</i>
London Plan Policy D12(B) considerations.	Refer to Section 4 (Form 1) of this Fire Statement.

Policy D5(B5) Considerations	Design Fire Statement Proposal
1 Details of the evacuation lift and shaft.	The provision of evacuation assistance within the blocks of flats will be facilitated using evacuation lifts. A safe waiting area will be located in front of the lift within the protected corridor to allow persons who require evacuation assistance to safely await the evacuation lift. The protected corridors are to be naturally ventilated with 1.5m² AOV windows and will be provided with sprinkler protection. Each safe waiting area will have an emergency voice communication (EVC) system to BS 5839-9, which will connect evacuees with an off-site supervisory station, which will be constantly staffed and initiate a management response to attend. Each block of flats will have a single evacuation lift. The lifts will serve as passenger lifts when not activated into evacuation mode. The evacuation lifts will be designed and installed in accordance with BS EN 81-20 and BS EN 81-70. The operation of evacuation lifts will require manual intervention by suitably trained and competent evacuation assistants.
2 Capacity assessment.	The blocks of flats will adopt a 'stay-put' evacuation strategy (see Policy D12(B)(2) Considerations of this Fire Statement). While there could potentially be a high number of disabled users in a building, it is not anticipated that a large group of disabled users will require evacuation assistance simultaneously. Therefore, the presence of a disabled occupant in the safe waiting space in the protected stair will not create an obstruction to other occupants. The lift car size will be at least a Type 2 as per BS EN 81-70 which can accommodate a single wheelchair user with an assistant. The evacuation lift will be designed to operate for at least 30 minutes. Given the height of the buildings, this will be adequate for multiple cycles if more than one occupant requires assisted evacuation. Therefore, a single evacuation lift per building is considered adequate.
3 Evacuation strategy.	The blocks of flats will adopt a 'stay-put' evacuation strategy (see Policy D12(B)(2) Considerations of this Fire Statement).

It is our opinion that the technical content produced for the application with respect to the provision of the evacuation lift follows the current applicable guidance documents, and the management of the evacuation for disabled occupants within the development's application represents a suitable and satisfactory management plan in compliance with all relevant legislation and the London Plan's Policy D5(B5).

4. Form 1 as per Appendix A3.1 of London Plan Guidance Fire Safety 2022 Fire Statement (London Plan Policy D12(B)) for a major development

Site address.	157-159 Hornsey Park Road, Wood Green, N8 0JX
Description of the development.	Demolition of existing structures and erection of two buildings. Block A is a part four-storey and part five to six-storey residential building and Block B is a five-storey mixed-use building with Class E floorspace at ground floor level. Each building is served by a single stair core. The development includes for the provision of associated landscaping, a new pedestrian route, car and cycle parking, and refuse and recycling facilities.
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Has a Gateway One Fire Statement been submitted for the development.	No. There is no requirement for a Gateway One Fire Statement since there are no buildings within the development which are over 18m in height.
Where a lift core is provided, at least one lift is an evacuation lift.	Refer to Section 3 (Form 3) of this Fire Statement.

Design Fire Statement Proposal

- 1 The buildings' construction: methods, products and materials used.

The buildings are not over 18m and are therefore not considered a 'relevant building' which is required to meet the criteria of Regulation 7(2) of the Building Regulations 2010.

However, as both blocks are over 11m in height, all materials used in the construction of the external walls will be required meet European Classification A1 or Class A2-s1, d0 in compliance with the guidance in Approved Document B, 2019, incorporating the 2020 and 2022 amendments.

The detailed list of products, materials and finishes proposed for the development will be provided by the Architect in the architectural design schedule during the Building Control Application process.

Where the use of proprietary products or building systems are proposed, a detailed product specification and installation method statement will be provided by the Architect.

- 2 The means of escape for all building users and the evacuation strategy.

The means of escape strategy for the buildings is summarised as follows:

- “Stay put” in accordance with the guidance in ADB for the residents where only the flat affected by fire will need to evacuate initially.
- Simultaneous evacuation of the non-residential areas (i.e., commercial units and ancillary accommodation) involving only the occupants in the fire-affected compartment.
- Access and circulation within the buildings shall be designed in accordance with Approved Document M.
- The width of common escape routes is sized to safely discharge the design population during simultaneous evacuation, should this be required.
- All escape routes will be designed for egress by wheelchair users and others who need level access.
- The travel distances within the apartments and the common areas are within the recommendations in ADB.
- An evacuation lift to assist with the evacuation of occupants who may require assistance will be provided for use by a trained and competent responsible person or the fire service on their arrival. See Section 3 (Form 3) of this Fire Statement.
- A safe waiting area is proposed to be located in the protected corridor.
- Emergency Voice Communication (EVC) system will be provided to enable the occupant requiring assistance to communicate to the entry point as part of the building fire safety management strategy.

Policy D12(B) Considerations	Design Fire Statement Proposal
3 Passive and active fire safety measures.	Passive fire protection features are inherent in the buildings' construction in accordance with ADB, and will include: ▪ 60 minutes fire resistant structural frame. ▪ 60 minutes fire resisting compartment walls and 60 minutes fire resisting compartment floors. ▪ Adequately sized escape stairs (minimum 1100mm wide). ▪ Provision of an adequate number of exits within travel distance limits from all locations. The installation of active fire protection systems will include: ▪ Automatic fire detection and alarm systems: - BS 5839-6 (minimum Category LD1 for Block A residential studio unit). - BS 5839-6 (minimum Category LD2 for residential units with a protected entrance hall). - BS 5839-1 (minimum Category L3 for residential ancillary areas and commercial units) - BS 5839-1 (Category L5 smoke detection in all residential common areas) ▪ Provision of adequate artificial lighting. ▪ Emergency lighting to BS 5266-1 in all communal areas. ▪ Natural smoke control within residential common escape routes, in accordance with ADB and the Smoke Control Association Guide (SCA). ▪ Sprinkler protection throughout the buildings. ▪ In the residential areas, the sprinkler protection will be in accordance with BS 9251: 2021. ▪ The residential sprinkler system will be extended to the commercial units at ground floor level as they have a floor area of less than 100m², in accordance with BS 9251:2021. The buildings' package of fire safety information for the management will include: ▪ A fire safety strategy report. ▪ Specifications for passive construction and proprietary building systems, as proposed during the design stage. ▪ Design, installation, commissioning, and handover certificates for all active fire protection systems. ▪ Operations manuals. ▪ Maintenance and inspection schedules. ▪ Test certificates for all fire safety systems. ▪ Final construction plans. ▪ Tenants and owners site rules and information manuals.

Policy D12(B) Considerations	Design Fire Statement Proposal
4 Facilities for the fire and rescue service.	The appended Site and Ground Floor plans indicate the following information: ▪ Building entry points (BEP's) ▪ Escape stair cores The locations of dry riser inlets should be adjacent to the Block entrance and be within 18m from the fire appliance parking location. Conspicuous signage in accordance with design guidance should indicate their locations. The length of the access road from Hornsey Park Road exceeds 20m. A swept path analysis has been provided to show that a fire appliance would have an adequate turning arrangement to be within 18m of the dry riser inlet at the building entrances. The existing hydrants on Hornsey Park Road are more than 90m from the entrances of both buildings. It is therefore proposed that a new hydrant is provided at the entrance to the site, as indicated on the Appended Site Plan. The locations of control panels which manage communal active fire protection systems will be finalised during the detailed design in consultation with the statutory authorities.
5 Access for the fire and rescue service.	Fire appliance access to both buildings will be via an access road from Hornsey Park Road as indicated on the Site Plan. Where bollards are installed to restrict general vehicle traffic, these should be removable to allow emergency vehicles access.
6 Modifications to the development and the 'golden thread' of information.	The design of all the buildings is in accordance with the current Building Regulations and design recommendations. The design change process for future modifications to the buildings should assess: ▪ The impact on the existing fire strategy. ▪ The requirements of the Building Regulations, design recommendations and industry best practice which are effective at the time. Minor modifications to the blocks of flats will be recorded in the Buildings Management Plan. Major modifications of the buildings under Regulation 12 of the Building Regulations will be subject to Local Authority approval and will remain on the permanent record for the buildings.

Declaration of compliance by a competent person.

It is our opinion that the technical content produced for the application incorporates appropriate fire safety measures, follows the current applicable guidance documents, and is in compliance with all relevant legislation and the London Plan's Policy D12(B).

5. Conclusion

- 5.1 The Fire Statement has been prepared to support the planning application for the 157-159 Hornsey Park Road development in accordance with the requirements of the London Plan.
- 5.2 The objective of the Fire Statement is to outline how the buildings will comply and function in terms of the fire safety requirements of Policy D5(B5) and Policy D12(B) of the London Plan.
- 5.3 The design of the buildings satisfies the functional requirements of the Building Regulations. A Fire Strategy Report will be submitted for Building Control approval as part of the future design process.



Figure 2: Ground Floor Plan