



Highgate Studios Fire Statement

25 April 2023

Kentish Town UK Office Propco Limited

Fire Statement – London Plan – 142



BB7

Revision History

Version	Date	Author	Comments
Issue 01	06/04/2023	Niall McGuinness	Issue 1
Issue 02	18/04/2023	Niall McGuinness	Updated following DT comments
Issue 03	21/04/2023	Niall McGuinness	Updated following DT comments
Issue 04	25/04/2023	Niall McGuinness	Updated following DT comments

Document reference

Fire Statement – London Plan – 14209BC

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1. Introduction

With the introduction of the London Plan 2021, and more specifically, policy D12, it is a requirement for the planning application of specific building types to include a Planning Fire Safety Statement (PFSS). This report relates to the planning submission for the extension and alterations of the existing office development, including the demolition of existing buildings and construction of 2no. new blocks at Highgate Studios.

This report sets out the fire precautions to meet the requirements of the PFSS for the proposed development works at Highgate Studios.

1.1 Limitations

This document has been produced to address compliance with the London Plan 2021.

The London Plan 2021 requires that the design and construction of specific building types achieve the highest fire safety standards, considered at an early stage of the project development. This report aims to provide the Planning Fire Safety Statement for the Highgate Studios development and inform the design team of the recommended measures to support a planning application. Whilst fire safety measures introduced are primarily for life safety, they will also have a beneficial effect on reducing potential fire losses and the extent of any consequential damage. It cannot be guaranteed, however, that a fire will not start on the premises. Given this, the opinion of the nominated insurance company and any other interested stakeholders should be sought.

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Systems and measures described establishing a principle on which reliance may be placed by other parts of the fire strategy. This is done on the assumption that all work will be done using appropriate materials and in a workmanlike manner, as per Building Regulations 2010.

Whilst this document details the fundamental strategy for a safe building, there is an ongoing management obligation to ensure that the active and passive fire protection facilities are correctly maintained and that there are appropriate management procedures in place to facilitate a safe evacuation in the event of a fire. This is a fundamental life safety requirement and is enforceable under the Regulatory Reform (Fire Safety) Order 2005.

1.2 The Objective of this Fire Statement

The objective of this Fire Statement is to summarise the fire strategy proposals for the planning application.

Policy D12(B) of the London Plan states that:

All major development proposals should be submitted with a Fire Statement, 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 that reduce the risk to life include 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 the equipment, firefighting lifts, stairs and lobbies, fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these.
5. How provisions 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.

Policy D5 Inclusive design requires the development to incorporate safe and dignified emergency evacuation for all building users as independently as possible. In all developments where lifts are installed, Policy D5 Inclusive design requires at least one lift per core to be suitable as an evacuation lift for people who require level access from the building.

1.3 Guidance

This fire statement has been based on the recommendations given in BS 9999:2017, incorporating the functional objectives set out in Approved Document B, Volume 1 2019 incorporating amendments of 2020. However, as is the case with many complex buildings, the architectural features mean that it is not possible to apply all the prescriptive recommendations of fire safety guidance to satisfy the requirements of the applicable legislation.

Therefore, this report may propose some additional fire engineered solutions that offer an alternative method of meeting the legislative requirements. With all fire engineered solutions, the importance of early discussion and agreement with the approving body must be emphasised.

Responsibility for deciding if the planning requirements have been met rests with the planning authority. A major development is defined by reference to part 1 of the Town and Country Planning Order 2015 as having ten or more dwellings or occupying an area of 0.5 ha or more. For non-residential sites the definition is based on a minimum area of 1000 m² (1 ha).

As such the proposed Highgate Studios development will be classified as a major development.

1.4 Qualifications of the Author & Reviewer

Niall McGuinness (Author) is an Associate for BB7 and has approximately 10 years of experience in the construction industry working in fire safety and regulatory compliance.

This report has been reviewed by Paul McLaughlin who is a Director for BB7 and has over 20 years' experience in the construction industry working in fire safety and regulatory compliance. Paul has an MSc in Fire Engineering. He has experience in working on a significant number of similar projects over the 20+ year career.

1.5 Drawings

This report is based on the drawings provided by Piercy & Company Architects. The drawings are listed in the table below.

Drawing Title	Drawing Number	Revision	Date
Plot A			
Proposed Lower Ground Floor Plan	13683-A-A-L99-07-200	C	06.04.23
Proposed Ground Floor Plan	13683-A-A-L00-07-300	C	06.04.23
Proposed First Floor Plan	13683-A-A-L01-07-301	C	06.04.23
Proposed Second Floor Plan	13683-A-A-L02-07-302	C	06.04.23
Proposed Third Floor Plan	13683-A-A-L03-07-303	C	06.04.23
Proposed Fourth Floor Plan	13683-A-A-L04-07-304	C	06.04.23
Proposed Fifth Floor Plan	13683-A-A-L05-07-305	C	06.04.23
Proposed Sixth Floor Plan	13683-A-A-L06-07-306	C	06.04.23
Proposed Seventh Floor Plan	13683-A-A-L07-07-307	C	06.04.23
Proposed Roof Plan Plan	13683-A-A-L08-07-308	C	06.04.23
Plot B			
Proposed Lower Ground Floor Plan	13683-A-B-L01-07-299	C	06.04.23
Proposed Ground Floor Plan	13683-A-B-L00-07-300	C	06.04.23
Proposed First Floor Plan	13683-A-B-L01-07-301	C	06.04.23
Proposed Second Floor Plan	13683-A-B-L02-07-302	C	06.04.23
Proposed Third Floor Plan	13683-A-B-L03-07-303	C	06.04.23
Proposed Fourth Floor Plan	13683-A-B-L04-07-304	C	06.04.23
Proposed Roof Plan	13683-A-B-LRF-07-305	C	06.04.23
Plot E			
Proposed Lower Ground Floor Plan	13683-A-ZE-L99-07-399	C	06.04.23
Proposed Ground Floor Plan	13683-A-ZE-L00-07-300	C	06.04.23
Proposed First Floor Plan	13683-A-ZE-L01-07-301	C	06.04.23
Proposed Second Floor Plan	13683-A-ZE-L02-07-302	C	06.04.23
Proposed Third Floor Plan	13683-A-ZE-L03-07-303	C	06.04.23
Proposed Fourth Floor Plan	13683-A-ZE-L04-07-304	C	06.04.23
Proposed Fifth Floor Plan	13683-A-ZE-L05-07-305	C	06.04.23
Proposed Sixth Floor Plan	13683-A-ZE-L06-07-306	C	06.04.23
Proposed Roof Plan	13683-A-ZE-L07-07-307	C	06.04.23
Plot F			
Proposed Lower Ground Floor	13683-A-F-L-1-07-399	C	06.04.23

Drawing Title	Drawing Number	Revision	Date
Proposed Ground Floor Plan	13683-A-F-L00-07-300	C	06.04.23
Proposed First Floor Plan	13683-A-F-L01-07-301	C	06.04.23
Proposed Second Floor Plan	13683-A-F-L02-07-302	C	06.04.23
Proposed Third Floor Plan	13683-A-F-L03-07-303	C	06.04.23
Proposed Plant Level Plan	13683-A-F-L04-07-304	C	06.04.23
Proposed Roof Plan	13683-A-F-L05-07-305	C	06.04.23
Plot J			
Proposed Ground Floor Plan	13683-A-J-L00-07-100	C	31.03.23
Proposed First Floor Plan	13683-A-J-L01-07-301	C	06.04.23
Proposed Second Floor Plan	13683-A-J-L02-07-302	C	06.04.23
Proposed Third Floor Plan	13683-A-J-L03-07-303	C	06.04.23
Proposed Plant Level Plan	13683-A-J-L04-07-304	C	06.04.23
Proposed Roof Plan	13683-A-J-LR-07-305	C	06.04.23
Plot P			
Proposed Ground Floor Plan	13683-A-P-L00-07-300	C	31.03.23
Proposed First Floor & Roof Plan	13683-A-P-L01-07-301	C	31.03.23

2. Building Description

2.1 Project Location

Highgate Studios is located at 53-79 Highgate Road, London NW15 1TL, United Kingdom.

Vehicular and pedestrian access is provided to the various plots via Highgate Road, Sanderson Close and Carkers Lane.

The indicative location of the site is highlighted in red in Figure 1 below.



Figure 1. Site Location & Layout Plan

2.2 Project Description

Existing Building

The existing site comprises 10no. blocks which are arranged as follows:

- Plot A - comprises 2no. stories, Lower Ground (basement) level which houses office and Ground floor which is used as an open top car park.
- Plot B – comprises 3no. stories (Ground +2) over a Lower Ground (basement) level. The upper levels are predominantly office use with the lower ground level accommodating office, car parking and plant use.
- Plot C – comprises a single storey over a Lower Ground (basement) level. Ground level provides office accommodation and lower ground floor level accommodates car parking and plant use.
- Plot D - comprises a single storey over a Lower Ground (basement) level. Ground level provides office accommodation and lower ground floor level accommodates car parking and plant use.
- Plot E – comprises 4no. stories (Ground +3) over a Lower Ground (basement) level. The upper levels are predominantly office use with the lower ground level accommodating a gym and other ancillary accommodation.

- Plot F - comprises 2no. stories, Lower Ground (basement) level, which is currently two separate basements, one which is part of the gym accommodation noted for Plot E and the other is part of the Public House at Plot G.
- Plot G – comprises 5no. stories (Ground +4) over a Lower Ground (basement) level. Lower ground and Ground levels are in use as a public house. The upper levels are predominantly office use.
- Plot H – comprises 3no. stores (Ground +2). Ground level is in use as retail and office use. The upper levels are predominantly office use.
- Plot I – comprises 6no. stories, (Ground +5). The upper levels are predominantly office use.
- Plot J – comprises 5no. stories, (Ground +4). Ground level is in use as a creche and office use. The upper levels are predominantly office use.

Refer to Figure 2 below for the locations of each Plot.



Figure 2. Plot Nomenclature

Proposed Works

Demolition of existing buildings and structures at Plot A and Plot F and erection of a 7-storey building at Plot A and 4-storey building at Plot F; part demolition of the basement at Plot G in connection with erection of a new building at Plot F and part demolition of the basement at Plot D in connection with the extension to Plot E; erection of extensions at Plot B, E and J on the existing buildings; roof extension of Plot I; external refurbishment of the existing buildings at Plot C and D; demolition of existing security structure and replacement with a new entrance pavilion, with cycle parking, hard and soft landscaping and associated works and plant.

The proposed works will involve the retention of as many buildings as possible in order to preserve the heritage and character of the site as well as minimising the embodied carbon proposal.

Plots A & F will be demolished and replaced with modern 7 storey (Ground +6 over a lower ground level) and 4 storey (Ground +3 over a lower ground level) buildings respectively.

Plots B, E, J & I will be extended as follows:

- Plot B will be extended over the existing building footprint at 2nd Floor and extended vertically at 3rd and 4th floor level to provide additional office accommodation.
- Plot E will be extended vertically to provide accommodation at 3rd, 4th and 5th floor level providing additional office accommodation along with an open plant area at roof level.
- Plot J will be extended at 1st to 3rd floor level via the infill of an existing lightwell, in addition, a new level of accommodation will be provided at 4th floor.
- Plot I will remain largely unchanged with the exception of modification of the mansard roof which will be raised by circa. 1m to improve the quality of the office space at the existing 5th floor.

A new two storey (ground +mezz) Pavilion building will be provided adjoining Plot I, opening onto Carker's Lane. This building only, will adopt a CLT construction build up.

The proposed new build works and extension works are depicted in Figure 3 and Figure 4 below.

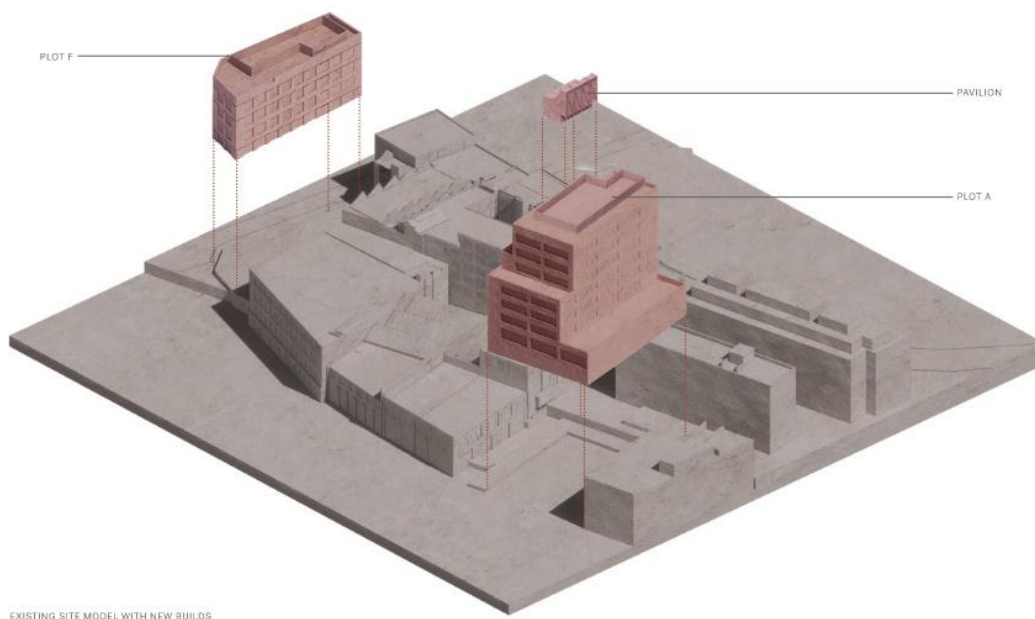
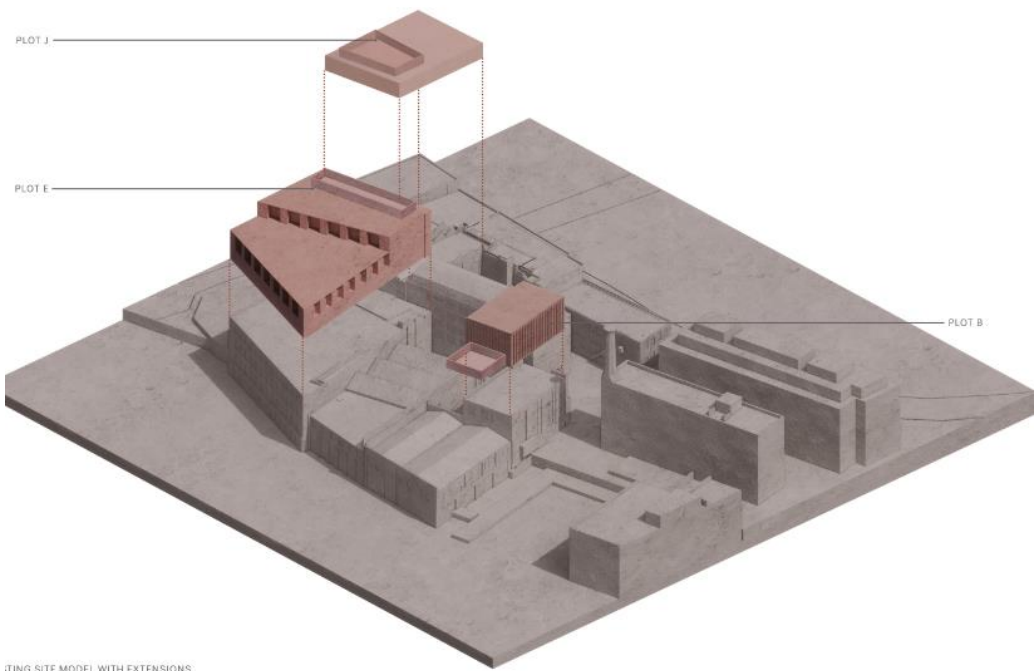


Figure 3. Proposed New Build Works



EXISTING SITE MODEL WITH EXTENSIONS

Figure 4. Proposed Extension Works

3. Policy D12 B1 - Building Construction Methods

This section details how the development proposal will function in terms of the building's construction: methods, products and materials used, including manufacturers' details.

3.1 Elements of Structure

Test standards

Fire resisting elements selected should meet the performance standards recommended by the relevant part of BS 476, BS EN 1363, BS EN 1364, BS EN 1365 or BS EN 1366.

Overview of Elements of Structure

There is a threefold purpose to providing the structure of a building with a quantified period of fire resistance:

- Protection for occupants during their evacuation and for people who may remain in the building for an extended period while duties are completed;
- Protection of firefighters who may be called upon to enter the building sometime after the first ignition to complete search and rescue or firefighting operations; and
- Reduce the danger to people outside and neighbouring buildings through premature collapse.

An analysis of the existing building heights vs. those proposed is set out below:

Table 3.1 Fire Resistance of Elements of Structure

Plot	Existing Top Storey Height (m)	Proposed Top Storey Height (m) ⁽⁶⁾	Existing Fire Resistance Period (minutes)	Proposed Fire Resistance Period (minutes)
A	N/A ¹	25m	N/A ¹	90
B	7.7	17.3	60	60
C	N/A ²	N/A ²	-	-
D	N/A ²	N/A ²	-	-
E	8.3	20.4	60	90
F	N/A ¹	12.8	N/A ¹	60
G	N/A ³	N/A ³	-	-
H	N/A ³	N/A ³	-	-
I	N/A ⁴	N/A ⁴	-	-
J	12.3	15.6	60	60
P	N/A ⁵	3.9	N/A ⁵	30

Notes

1. Existing building to be demolished and replaced with new building.
2. No additional stories being provided as part of these works.
3. Existing block, no works proposed.
4. Existing block, roof height being extended upwards circa. 1m to accommodate improved floor to ceiling height at 5th Floor. No proposed fire resistance to structure changes.
5. New construction, no existing building.
6. Height of top occupied storey as per Table 23 of BS 9999.

In the existing blocks which are being extended vertically, a survey should be carried out on the existing structure to determine what fire resistance is in place and what works if any is required to provide the requisite level of fire resistance as set out above.

3.2 Compartmentation

Passive fire safety measures in terms of compartmentation will be provided throughout the buildings to the fire resistances set out in Table 3.1 above.

Plots A & E have a top storey height which exceeds 18m. In terms of relevant floors (above 18m), Plot A has a floor area of less than 900m² (at fourth floor and above) and Plot E has a floor area of more than 900m² at fourth floor and less than 900m² at fifth floor level.

A single firefighting shaft will be required to Plot A and 2no. firefighting shafts will be required to Plot E (two shafts serving Level 4 and one serving Level 5). The enclosure to these shafts will achieve 120 minutes fire resistance in both cases. The door between the firefighting shaft and the accommodation will be 60 minutes fire resistance rated complete with self-closers. The fire resistance detailed above will be provided in accordance with testing to relevant parts of BS 476 or European standards such as EN 13501. The fire resistance should be for integrity and insulation. The method of exposure for the fire resistance should be from each side separately for walls from the underside for the floor unless specifically discussed below.

Where walls and floors are provided for fire compartmentation and act as elements of structure, the higher fire rating out of the two will be provided.

3.3 Building Construction Methods

It is not possible at this stage to ascertain what all construction materials will be. This shall be confirmed by the design team in due course, however a summary of the proposals are set out below.

Existing Plots

- The existing elements of Plot B comprises of a solid masonry façade build-up. The existing floor build ups are concrete and the structure is a mixture of steel and concrete.

The proposed extension will comprise:

- concrete floors with a lightweight steel structure;
- internal walls will be a mixture of concrete/masonry and metal framed stud partitions;
- biodiverse green and blue roofs complete with PV panel arrays;
- the proposed façade detailing is set out in Section 3.4 below.

- The existing elements of Plot E comprises of predominantly masonry façade build-up. The existing floor build ups are concrete and the structure is a mixture of steel and concrete.

The proposed extension will comprise:

- concrete floors with a lightweight steel structure;
- internal walls will be a mixture of concrete/masonry and metal framed stud partitions;
- biodiverse green and blue roofs complete with PV panel arrays generally. Terraces will be clad with timber decking to a later detail;
- the proposed façade detailing is set out in Section 3.4 below.

- The existing elements of Plot J comprises a predominantly masonry façade build-up. The existing floor build ups are concrete and the structure is a mixture of steel and concrete. The proposed extension will comprise concrete floors with a lightweight steel structure.

The proposed extension will comprise:

- concrete floors with a lightweight steel structure;
- internal walls will be a mixture of concrete/masonry and metal framed stud partitions;
- biodiverse green and blue roofs complete with PV panel arrays generally. Terraces will be clad with timber decking to a later detail;
- the proposed façade detailing is set out in Section 3.4 below.

New Build Plots

- Plot A will comprise:
 - a concrete and steel frame with concrete floors;
 - internal walls will be a mixture of concrete/masonry and metal framed stud partitions;
 - biodiverse green and blue roofs;
 - the proposed façade detailing is set out in Section 3.4 below.
- Plot F will comprise:
 - a concrete and steel frame with concrete floors;
 - internal walls will be a mixture of concrete/masonry and metal framed stud partitions;
 - biodiverse green and blue roofs;
 - the proposed façade detailing is set out in Section 3.4 below.
- Plot P will comprise:
 - a CLT structure with a timber mezzanine floor build up;
 - internal walls will be a mixture of concrete/masonry and timber/metal framed stud partitions;
 - timber roof deck;
 - the proposed façade detailing is set out in Section 3.4 below.

3.4 Construction of External Walls

Not all components of the external walls and specified attachments are known at this stage of the project, however a high level summary is set out below.

Existing Plots

- Plot B comprises a solid masonry façade build-up currently which will be retained. The proposed façade detailing will generally consist of a metal frame inner leaf insulated lightweight stud system, complete with plasterboard and cement particle board linings. Externally, a perforated mesh rainscreen cladding system will be provided. Windows are provided via a glazed curtain walling system.
- Plot E comprises a predominantly masonry façade build-up currently which will be retained. The proposed extension façade will fall under 3no. main façade types, each have will generally consist of a metal frame inner leaf insulated lightweight stud system, complete with plasterboard and cement particle board linings. Externally a metal clad curtain walling system, reconstituted brick or Reglit glazing will be provided.
- Plot J comprises a predominantly masonry façade build-up which will be retained. The proposed extension will fall under 2no. main façade types, each have will generally consist of a metal frame inner leaf insulated lightweight stud system, complete with plasterboard and cement particle board linings. Externally, either a metal clad curtain walling system or reconstituted brick will be provided.

New Build Plots

- Plot A will comprise a metal frame inner leaf insulated lightweight stud system, complete with plasterboard and cement particle board linings. Externally, a brick outer leaf will be provided which includes large, recessed window openings translucent glass brick detailing are also proposed.
- Plot F will comprise of a metal frame inner leaf lightweight stud system with insulated cavity and brick outer leaf, complete with reconstituted stone cills and lintels. Dark tone metal frame windows will also be provided.
- Plot P façade detailing will consist of thermally treated expressed timber frame cladding complete with thermally treated timber panelling and curtain walling comprising metal panels and glazing.

General

New façade build ups for buildings greater than 18m to the stop storey height, the surfaces of the external walls which are less than 1m from the relevant boundary will achieve Class 0 (or Class B-s3,d2). Surfaces more than 1m from the boundary will achieve Class 1 (or Class C-s3,d2) or better up to 18m in height and Class 0 (or Class B-s3,d2) above 18m. Any insulation product, filler material (not including gaskets, sealants and similar), etc. used in the external wall build up should be of limited combustibility.

Regulation 7(2) is not relevant in this case as the buildings do not fall under the criteria set out.

New façade build ups for buildings less than 18m to the stop storey height, the surfaces of the external walls which are less than 1m from the relevant boundary will achieve Class 0 (or Class B-s3,d2). There is no restriction on buildings greater than 1m from the boundary.

4. Policy D12 B2 - Means of Escape

This section details how 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.

4.1 Evacuation Strategy

The main objective of an evacuation strategy is to ensure all occupants can reach a place of safety in the event of a fire. The buildings will adopt an independent single-stage simultaneous evacuation whereby all occupants of the plot of fire origin (along with any plots relying on shared escape stairs) are expected to evacuate simultaneously on the sounding of the fire alarm, independently of any other plots.

Phased evacuation can be explored also as an alternative as the design develops if deemed desirable.

4.2 Projected Occupancy Levels

For a typical open-plan office of normal density, BS 9999 stipulates a floor space factor of 6m² per person, however, in this case, the expected occupancy is likely to be closer to 8m² per person. The higher load space factor is likely to be adopted to allow for future flexibility.

4.3 Escape Routes

Escape routes available to occupants of the ground floor area are illustrated by arrows in Figure 5 below:



Figure 5. Ground Floor Final Exits

4.4 Travel Distances

Using BS 9999:2017, travel distances may be longer where the occupants are familiar with the building in comparison to a building where the occupants are not familiar.

The below table details the travel distance for all areas of the office where occupants are familiar.

Description	Risk Profile	Single Direction Travel Distance (m)	Multi-Direction Travel Distance (m)
Open-plan office	A2	22	55

The typical escape routes from each plot (or extension to each plot is set out in the following figures.

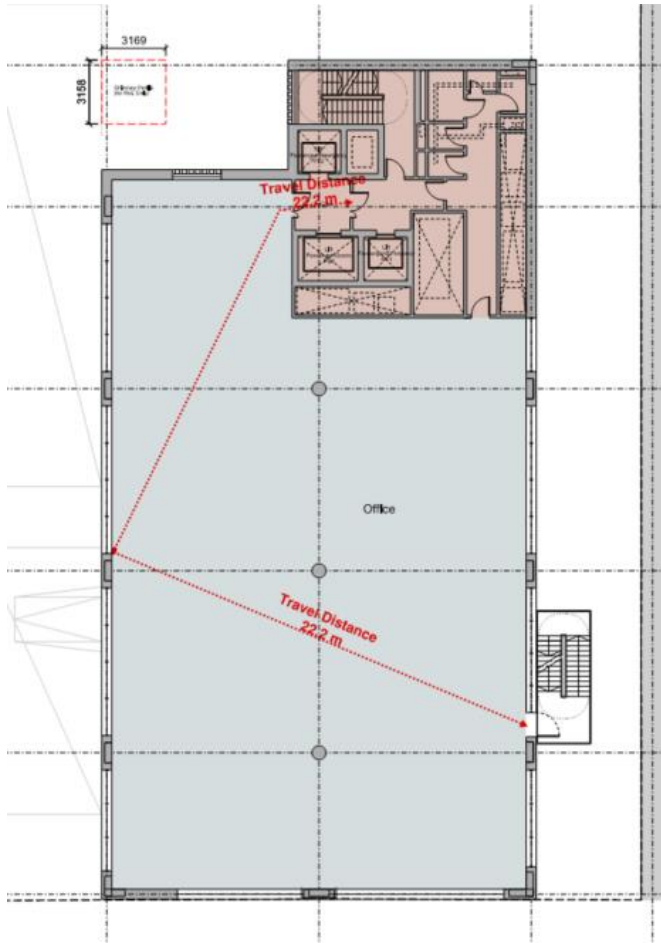


Figure 6. Plot A – Typical Escape Routes from the Upper Levels

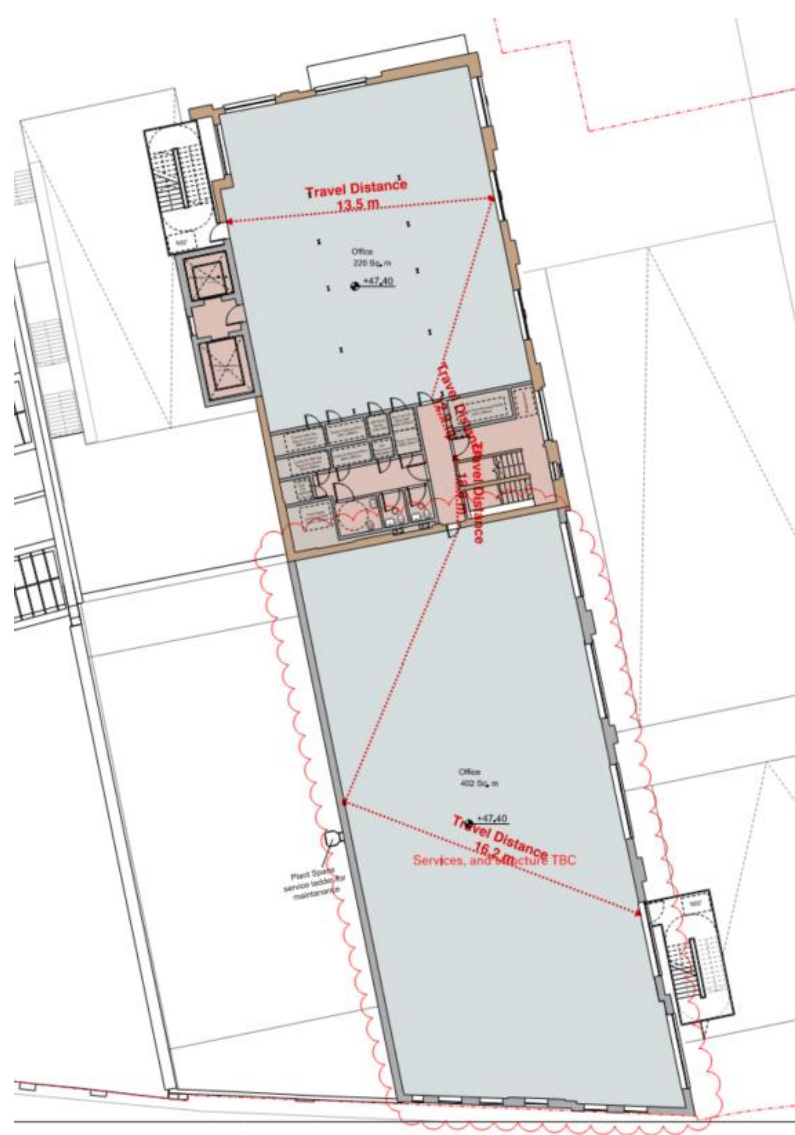


Figure 7. Plot B – Typical Escape Routes from the Upper Levels

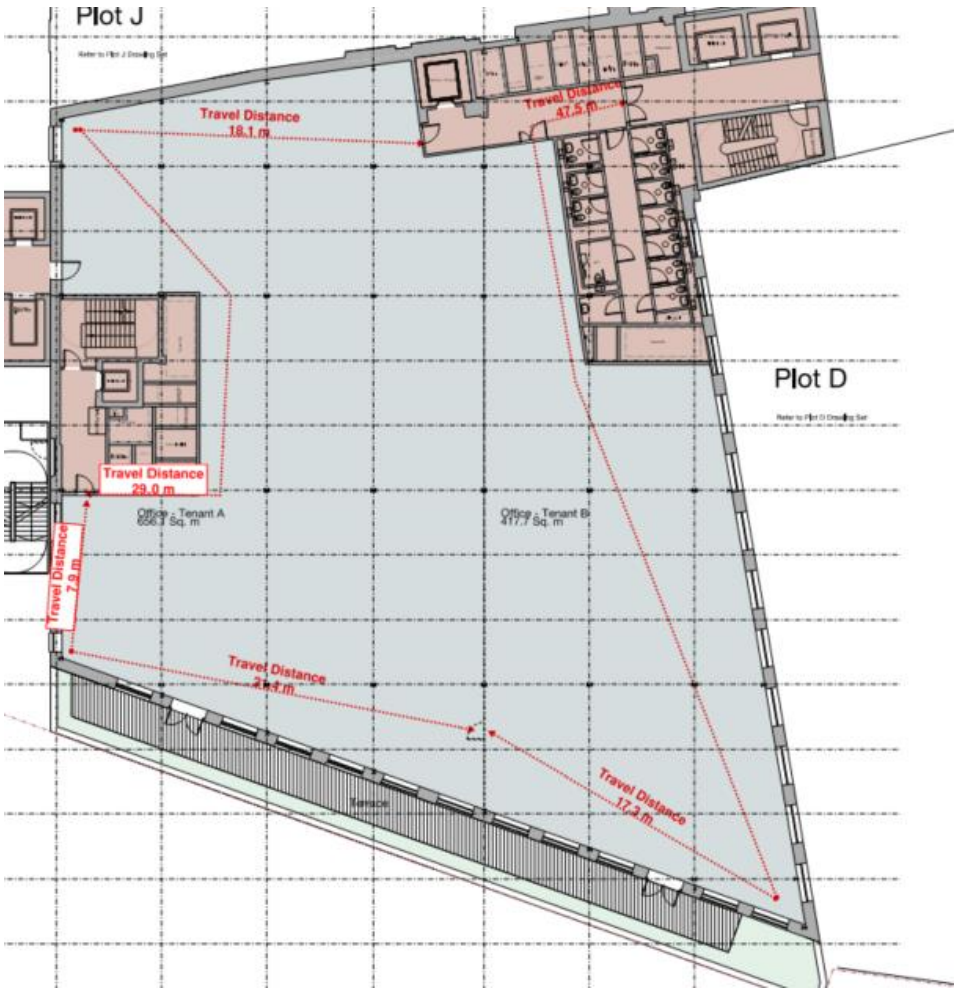


Figure 8. Plot E – Typical Escape Routes from the Upper Levels

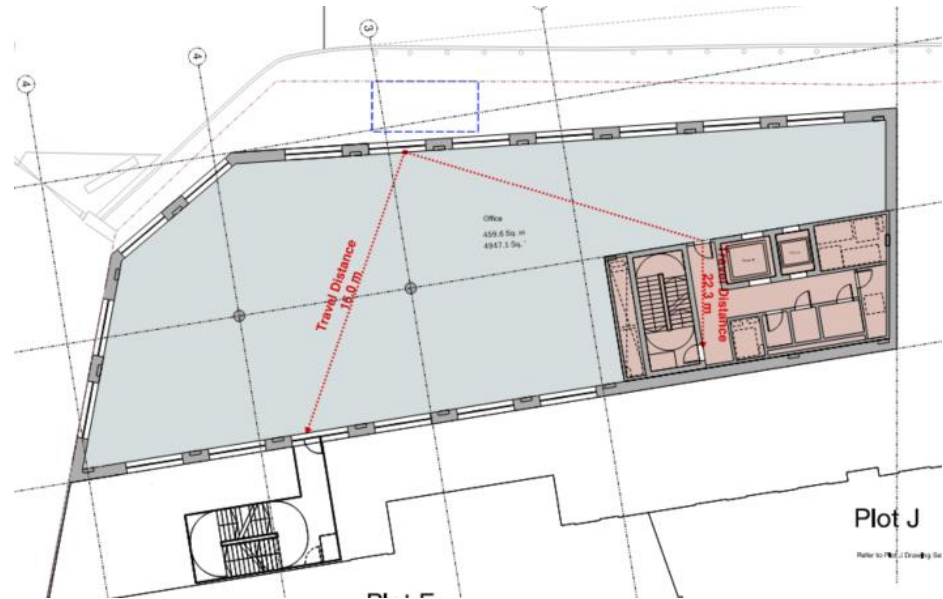


Figure 9. Plot F – Typical Escape Routes from the Upper Levels

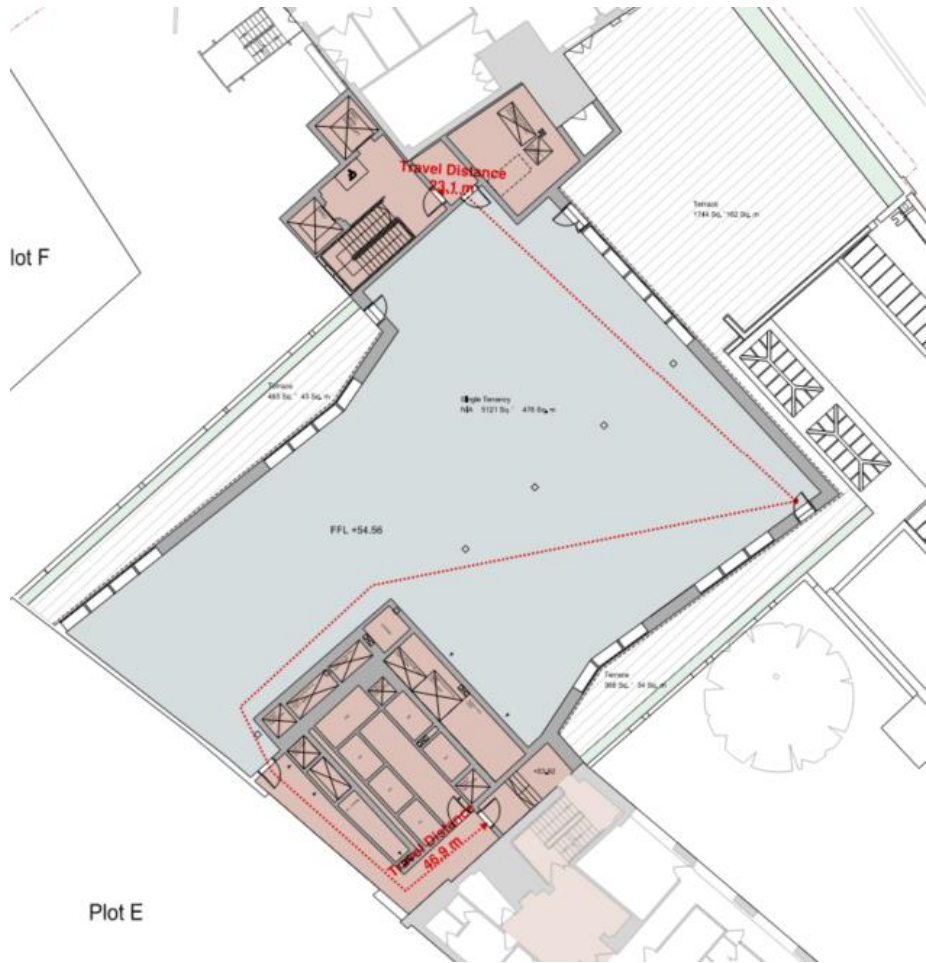


Figure 10. Plot J – Escape Routes from the 4th Floor

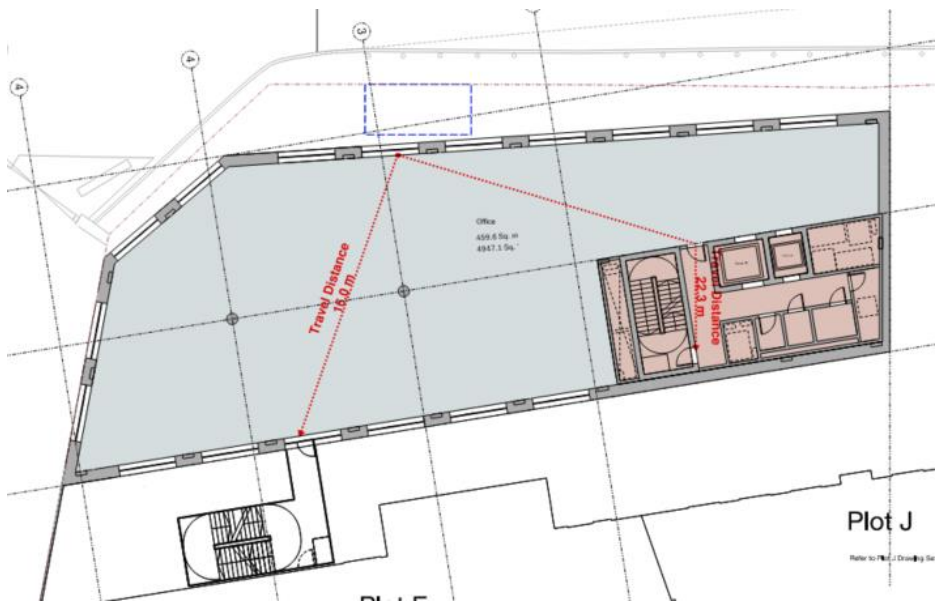


Figure 11. Plot F – Typical Escape Routes from the Upper Levels

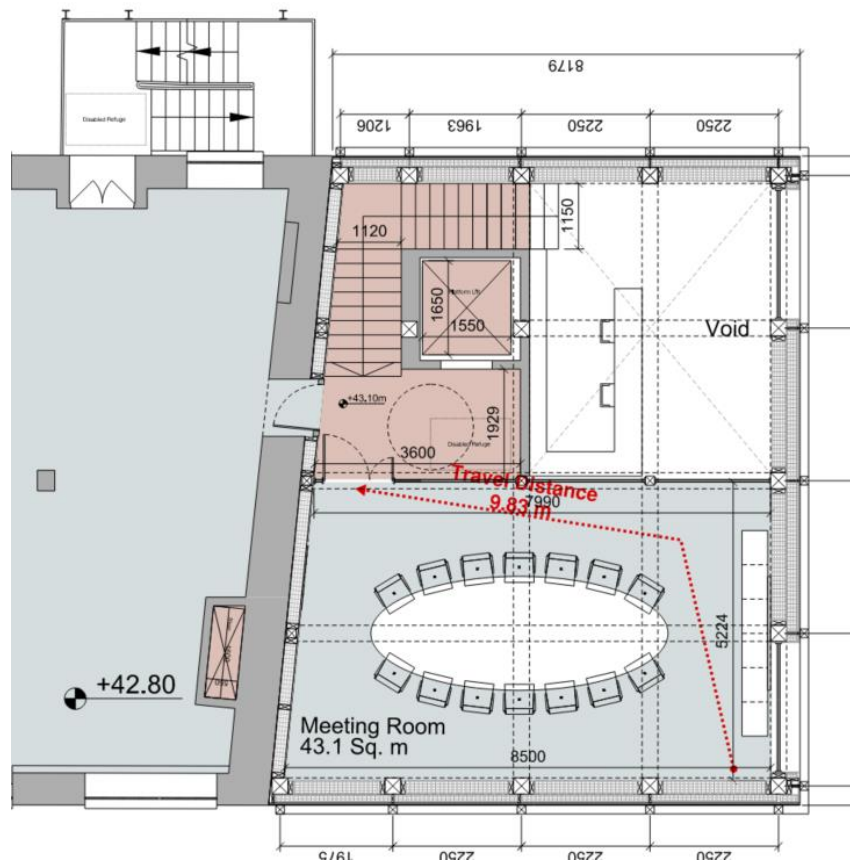


Figure 12. Plot P – Escape Route from Mezzanine Floor Level

4.5 Escape from Terraces

The following terraces are proposed on the building:

- Plot A – Fourth, Fifth & Seventh Floor Level.
- Plot B – Third Floor Level.
- Plot E – Third & Fifth Floor Level.
- Plot F – Fourth Floor Level.
- Plot J – Fourth Floor Level.

It must be ensured that the occupants of these terraces are fully aware of a fire situation occurring within the overall building. An evacuation alert will be sent to the terraces on first knock regardless of if phased or simultaneous evacuation is adopted.

4.6 Provisions for Disabled Means of Escape.

To comply with policies D5(B5) of the London Plan 2021, incorporating a safe and dignified emergency evacuation for all building users. In the interests of fire safety and to ensure the safety of all building users, the highest standards of fire safety will be provided.

To comply with the above policy, evacuation lifts (which will be used as passenger lifts during normal operation) will be provided as part of the proposed works as follows:

Plot A

Plot A is provided with a single internal core with a fire resistance of 90 minutes, as such, an evacuation lift has been provided to this core as depicted in Figure 13. A separate goods lift and firefighting lift are also provided within the core.

The evacuation lift opens into a protected lobby which will offer a place to reside during an emergency evacuation for a disabled user.

No lift is proposed to the external escape stair as the external stair is not considered a core.

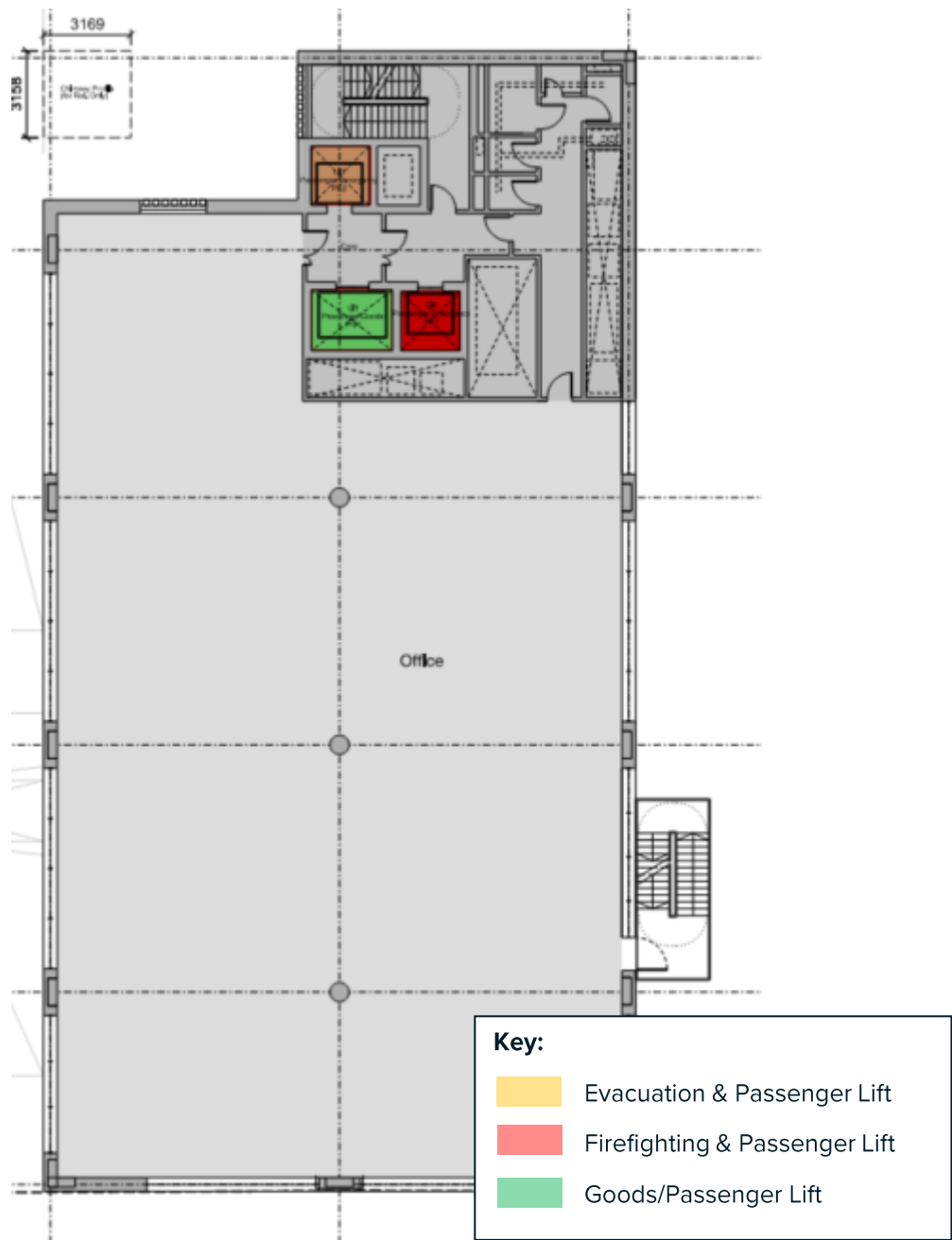


Figure 13. Plot A Lift Provisions

Plot B

Plot B, is an existing building which is extended vertically, with an additional two storeys being added to the northern end of the plot and an additional storey being added to the southern end. The building features a central internal core and an external escape stair. As part of the proposed works, the internal and external stair will be extended to serve the additional levels. An additional external stair shall be provided to the southeast end of the plot to aid exit capacity.

The existing Plot does not benefit from lift access, however a new bolt on core complete with 2no. lifts is being provided which will serve Ground to fourth floor level. A dedicated passenger/evacuation lift is being provided as part of these works as depicted in Figure 14. This core will be enclosed in 60 minutes fire resistance and will be accessed via a protected lobby achieving 30 minutes fire resistance.

No passenger lift access is proposed to Lower Ground Floor level as it is submitted that users of this space will access this level via the existing ramped access via Carker's Lane. It is noted that the office space to the northern end of the lower ground floor level is existing office space which is not subject to any change of use as part of the proposed works.

Considering the above, it is submitted that due to the existing nature of the site and construction constraints, the proposed evacuation lift provision is all that is possible. As such, this project is meeting the evacuation lift criteria within the London Plan as much as practically possible due to the issues mentioned above.

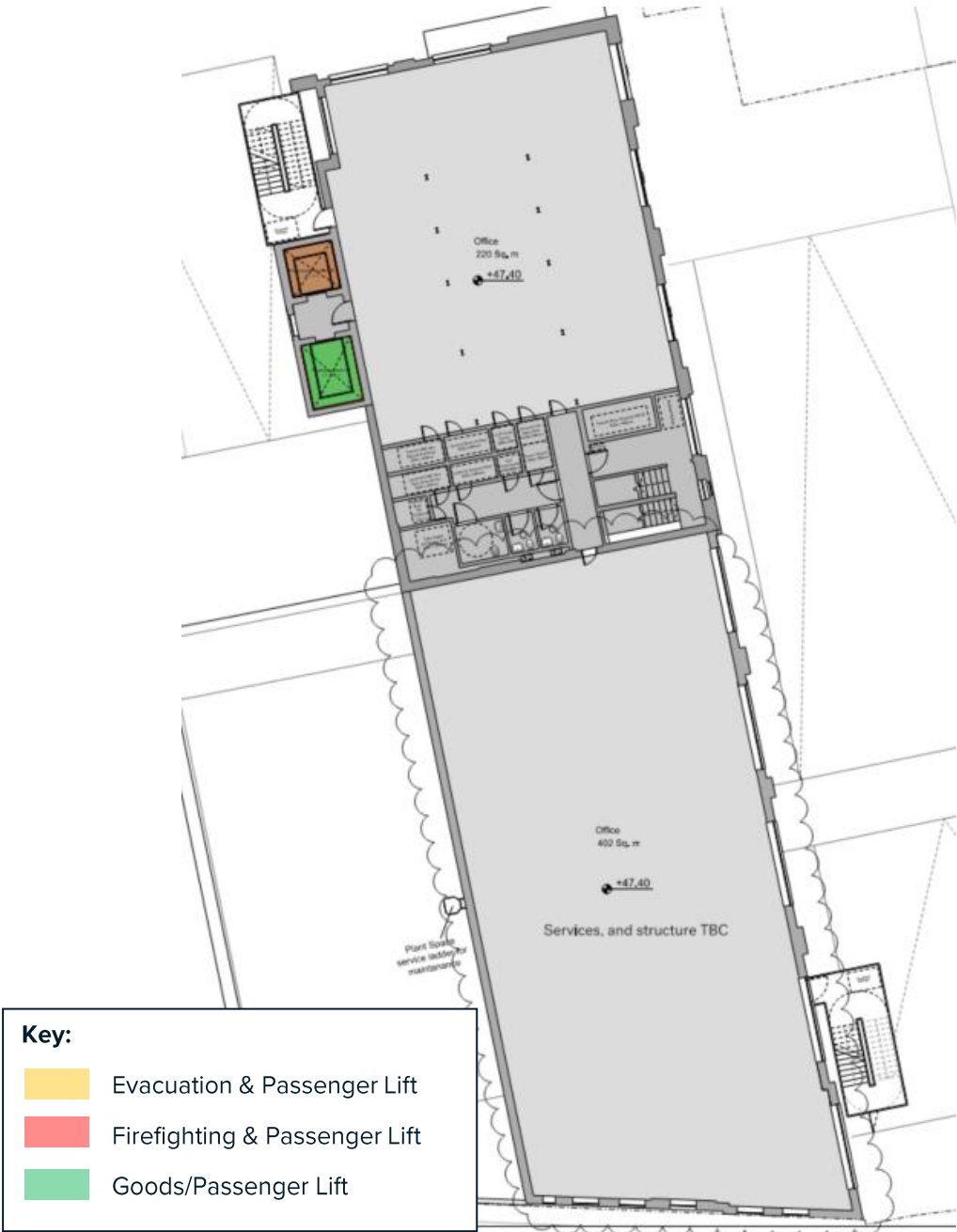


Figure 14. Plot B Lift Provisions

Plot E

Plot E is provided with two main internal cores, as such, each core will be provided with an evacuation lift as depicted in Figure 15. A separate goods and firefighting lift are also provided within each core.

In the northeastern core, the evac lift opens into the ventilated firefighting shaft and as such shall achieve 120 minutes fire resistance. In the western core, the evac lift opens into a protected lobby, the core itself will achieve 90 minutes fire resistance with the adjoining lobby achieving 30 minutes fire resistance. These lobbies will offer a place to reside during an emergency evacuation for a disabled user.

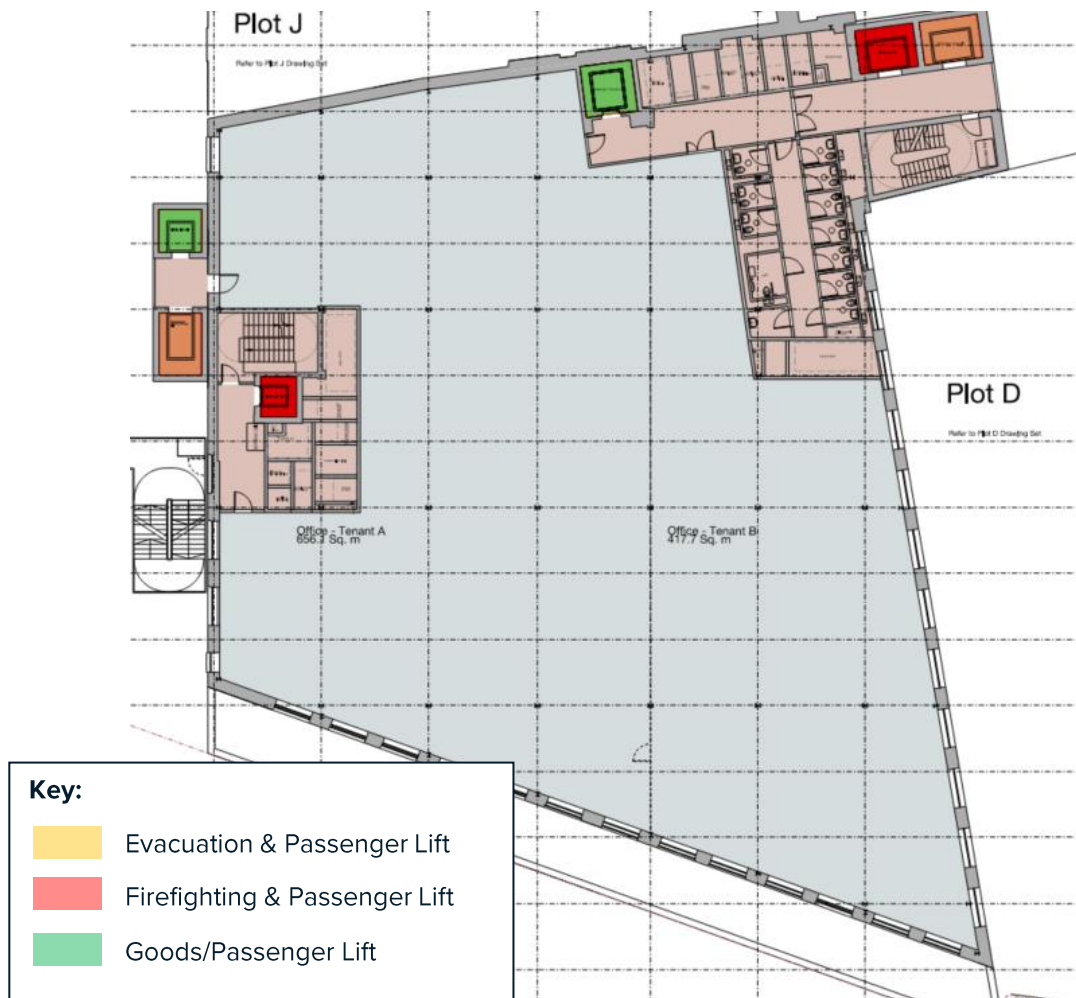


Figure 15. Plot E Lift Provisions

Plot F

Plot F is provided with a single internal core achieving 60 minutes fire resistance, as such, an evacuation lift has been provided to this core as depicted in Figure 16. A separate goods lift is also provided within the core.

The lift is dual access and opens into a protected lobby which will offer a place to reside during an emergency evacuation for a disabled user. The access to the evacuation lift on the office floor plate will be provided with a fire curtain which will activate on localised activation of the fire detection and alarm system to ensure that the lift remains in use in a fire scenario.

No lift is proposed to the external escape stair as the external stair is not considered a core.

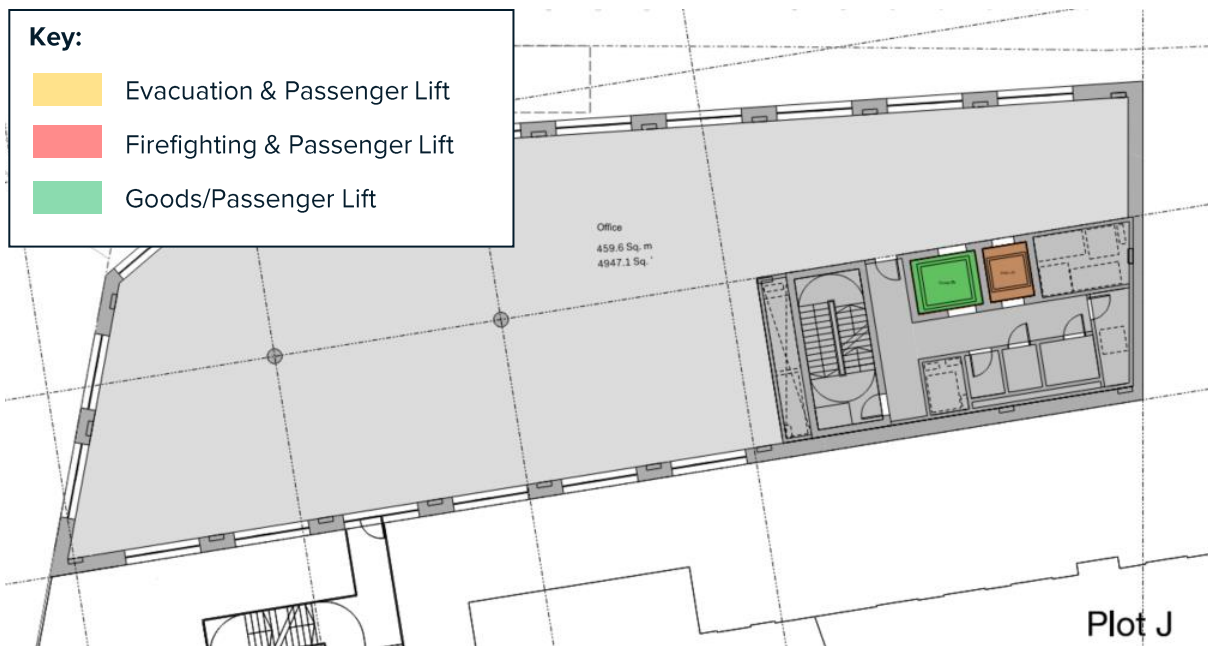


Figure 16. Plot F Lift Provisions

Plot J

Plot J is an existing building which is extended internally via infill of an existing void at Levels 1, 2 & 3 and vertically with a new floor space at Level 4. Means of the escape from the upper levels relies on the internal core adjacent to Plot G, an internal core adjacent to Plot H and an internal core in plot I.

As part of the proposed works, the internal core adjacent to Plot G will be extended vertically to serve the additional levels. In addition, a connection back to the internal core at Plot I will also be provided. New evacuation lifts will be provided to the cores adjacent to Plot G and Plot H as depicted in Figure 17. Each of these cores will achieve 60 minutes fire resistance. The lift at Plot G opens into the protected stair enclosure at each level and the lift at Plot H opens into a protected lobby at each level.

The core at Plot I is existing and is unaffected by the proposed works, considering this, it is submitted that due to the existing nature of the site and construction constraints, the proposed evacuation lift provisions at the Plot G and H cores are all that is possible. As such, this project is meeting the evacuation lift criteria within the London Plan as much as practically possible due to the issues mentioned above.



Figure 17. Plot J Lift Provisions

Plot P

Plot P comprises Ground and mezzanine level and a platform lift and stairs are proposed to provide access to mezzanine level. It is not proposed to provide an evacuation lift in this building considering:

- The physical constraints of providing an evacuation lift, i.e., lift pits, lift overruns etc. and as such a platform lift is being proposed.
- The accommodation at mezzanine level comprises a meeting room with a capacity for 14 persons, on this basis, the requirement to provide a platform lift to this space is considered unduly onerous.
- In the event of a fire at mezzanine level within Plot P, a disabled refuge has been provided at the head of the open stair for wheelchair and other mobility impaired occupants.
- In the event of a fire at Ground level (or spread of the fire in the meeting room at mezzanine level), wheelchair occupants will be able to escape into the adjoining Plot I which will be separated from Plot P by a compartment wall achieving 60 minutes fire resistance. From here, occupants will be able to use the means of escape from Plot I to evacuate the building.

General

An evacuation lift will not reduce the width of the escape route or obstruct the flow of people escaping.

An evacuation lift is a lift that has been specifically designed to be used in an evacuation situation. In non-emergency situations, evacuation lifts operate as normal passenger lifts allowing everyday use, but they have additional functions and capabilities which allow them to shift into an emergency state, if required.

The evacuation lift will be user operated and function with the capabilities of being able to automatically function in an emergency where the affected fire floor has a 'priority' capacity to enable mobility impaired occupants to evacuate. Emphasis should be captured within the management strategy to only use the lift in an emergency for occupiers that are mobility impaired only.

To facilitate the effective evacuation of people from refuges, an emergency voice communication system will be provided. It should be possible for the occupants of each refuge to alert other people that they need assistance, and for them to be reassured that this assistance will be forthcoming. It is currently unknown at this stage how this provision will be managed owing to the preliminary planning stage.

The emergency voice communication system should conform to BS 5839-9:2011 and consist of type B outstations which communicate with a master station located in the building control room (where one exists) or some other suitable control point at fire and rescue service access level. It is also currently unknown at this stage how this provision will be managed owing to the preliminary planning stage.

4.7 Assembly Points

Assembly points must be provided at a distance 1.5 times the height of the building. The building management team is to confirm the existing assembly points in due course. This will form part of the fire safety management plan for the building.



5. Policy D12 B3 - Fire Safety Measures

This section details how features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans

The following table outlines all key active and passive fire safety features that will be provided in the development.

Fire safety feature item	Description
Fire Detection & Alarm	BS 5839-1, Category M system, if simultaneous evacuation is proposed.
Sprinkler Protection	Not required to the upper levels. Required to meet BS EN 12845: 2015+A1: 2019, to basement levels if mechanical ventilation is proposed.
Smoke Ventilation	1m ² AOV at the top of firefighting stairs Ventilation required to the fire-fighting lobby. Mechanical smoke ventilation will be provided to Plots A, B, E & F at Lower Ground/basement level. Natural ventilation may be incorporated in localised locations where deemed feasible.
Evacuation Lift	Evacuation lifts to be provided as set out in Section 4.6. Evacuation lifts to comply with BS 9999 Annex G and should be designed and installed in accordance BS EN 81-20 and BS EN 81-70.
Emergency Voice Communication	BS 5839-9: 2011. Emergency voice communication to all disabled refuge areas BS 5839-9: 2011. Fire telephones to fire-fighting stair.
Exit Signage & Emergency Lighting	Exit signage to all exits leading to escape routes in accordance with BS ISO 3864-1 and BS 5499-4. BS 5266-1: 2016 Emergency lighting to all escape routes and normal lighting to be maintained in fire-fighting shaft
Emergency Power Supply	Life safety generator or independent HV supply from independent substation (TBC by electrical engineer as design progresses)
Structural Fire Protection	Fire resistance periods of the various plots as set out in Table 3.1 of this report. 120mins to the fire-fighting shaft.
Compartmentation	Floors: As set out in Table 3.1 for each respective plot Escape stairs: As set out in Table 3.1 for each respective plot Fire-fighting stair: 120 min perimeter and 60 min internal walls Lift / riser shafts: As set out in Table 3.1 for each respective plot External wall within 1m from boundary: As set out in Table 3.1 for each respective plot
Access & Provisions for the Fire Service	Refer to Section 6 of this report for further information
Fire/Smoke Curtains	Fire curtains are proposed to enclose the open void between Lower Ground and Ground Floor Level in Plot B. Fire and smoke curtains are proposed to enclose the evacuation lift from the floorplate at each level in Plot F.
Management	Level 2 as defined by BS 9999: 2017 ^[1]

[1]: The management company will be required to develop management plans for the building that will ensure that the fire safety systems are adequately maintained in accordance with the appropriate design guidance. This will be monitored and reviewed as a part of their obligations under the Regulatory Reform (Fire Safety) Order 2005

5.1 Maintenance

Inspection, maintenance and testing procedures will be established to ensure that all fire protection systems can operate effectively when required. Arrangements will be made for all fire safety equipment installations and systems to be inspected and tested on a regular basis by competent persons. Any material alterations, additions, repairs or modifications to services and equipment will be carried out only by competent persons.

The following British Standards will be used for routine maintenance, inspection and testing of particular systems:

- BS 5839 part 1 for fire detection and fire alarm systems;
- BS 5266-1 for emergency escape lighting systems;
- BS EN 12845 for automatic sprinkler systems;
- BS 8214 for fire doors;
- BS 9990 for fire hydrants and fire mains;
- BS 5499-4 – Safety Signs, Including Fire Safety Signs.

6. Policy D12 B4 - Fire Service Personnel Access and Equipment

This section details how 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

Building Plot	Description
Plot A	Fire-fighting shaft to north of floor plate. Firefighters lift Fire-fighting lobby complete with natural smoke ventilation Fire telephones in accordance with BS 5839-9: 2011 Maintained normal lighting levels Hose coverage within 60m to all areas from dry rising main outlet.
Plot B	Central protected stair enclosure complete with dry rising main Hose coverage within 45m to all areas from dry rising main outlet. Maintained normal lighting levels
Plot E	Fire-fighting shafts to northeast and west of the floor plate. Firefighting lifts Fire-fighting lobbies complete with natural smoke ventilation Fire telephones in accordance with BS 5839-9: 2011 Maintained normal lighting levels Hose coverage within 60m to all areas from dry rising main outlet.
Plot F	Central protected stair enclosure complete with dry rising main Hose coverage within 45m to all areas from dry rising main outlet. Maintained normal lighting levels
Plot J	Access to 3no. protected stair enclosures, 2no. of which are complete with dry rising mains Hose coverage within 45m to all areas from dry rising main outlet. Maintained normal lighting levels
Plot P	Hose coverage within 45m to all areas from the fire tender. Maintained normal lighting levels

Figure 18 below illustrates the key Fire Service provisions.



Figure 18. Plot E Lift Provisions

Water supplies for firefighting purposes will be provided by local fire hydrants, provided such that they will be within 90m to an entry point to all buildings in the development. The existing locations of the fire hydrants shall be confirmed by the design team in due course.

Smoke ventilation systems discussed previously will be provided within the development.

The development's management company will be required to develop management plans for the building that will ensure that the fire safety systems are adequately maintained in accordance with the appropriate referenced design guidance. This will be monitored and reviewed as a part of their obligations under The Regulatory Reform (Fire Safety) Order 2005.

7. Policy D12 B5 – Fire Appliance Access

This section details how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building.

The existing highway infrastructure via Highgate Street, Sanderson Close and Carker's Lane along with specific strategic access points to the service routes surrounding the development will be used to provide access to the building.

In most cases fire appliance vehicle access will be provided adjacent to the main entrances to the building and the various dry rising main inlet points are within 18m from the fire appliance access zone. The distance from the fire service entry point to the dry riser outlet on the ground floor is within 18m.

In the case of the courtyard between Plots H&I, the distance which the fire tender needs to drive into the dead end to achieve the 18m distance criterion to the dry riser is approximately 32m. Whilst this is greater than the 20m figure noted for dead end access, it is noted that this is an existing situation and that the proposed works will improve the existing fire service access facilities as dry riser coverage will be provided to a number of the existing blocks as part of the proposed works.

The proposed fire tender access routes have been subject to a positive swept path analysis for a pumped appliance as part of the planning works using the tender parameters set out below:

Parameter	Limit (m)
Overall Length (m)	7.9
Overall Width (m)	2.5
Overall Body Height (m)	3.3
Ground Clearance (m)	0.14
Track Width (m)	2.5
Lock to Lock Time (s)	4.0
Kerb to Kerb Turning Radius (m)	7.75

Figure 19 outlines the proposed fire appliance access strategy for the development.



Figure 19. Fire Service Vehicle Access Routes Shown in Green Hatch

These proposals do not adversely impact on neighbouring sites utilising the existing highway infrastructure.

7.1 Policy D12 B6 – Future Modifications

This section details how ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.

A requirement of the Building Regulations 2010 (Regulation 38) is that the fire safety information is compiled and handed over to the building user upon completion. This would include the fire safety strategy reports and Operations & Maintenance manuals for the fire safety systems in the buildings. It is anticipated that the relevant principal contractor will take on the task of collecting and compiling all the information from all the relevant consultants and subcontractors and arrange for the handover process of passing all the compiled information to the development owner and any relevant development management team at practical completion. The information should be presented in a categorised, intuitive manner and be stored in appropriate digital copies for future storage and reference. The owner and management team should ensure that this information remains available and accessible on site throughout the lifetime of the development.

Further to this, the Regulatory Reform (Fire Safety) Order 2005 will be applicable when the building is occupied, and a requirement of this legislation is the management of fire risks and the requirement to document a fire risk assessment for the premises. The duties under this order extend to the maintenance of fire safety equipment. The building fire strategy is relevant to the proposed design at the time in which the strategy was produced.

Any future development within the site that proposed to make material changes to the use of the building, or any life safety measure or provisions should consider the complete package of fire protection measures prior to doing so. The fire strategy needs to be considered holistically and alterations to any aspect of the design requires careful validation by a suitably qualified fire engineer.

8. Requirements of London Plan Policy D5 Inclusive Design (B5)

Policy D5 Inclusive Design states that the “*development proposal should achieve the highest standards of accessible and inclusive design*”. Amongst others, this is defined in D5 (B5) as:

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.

As noted in Section 4.6 of this report, a number of the buildings are existing, with existing site constraints. Therefore, the proposed evacuation lift strategy is considered all that is feasibly possible without additional demolition and major structural interventions to the existing buildings. Considering this, the project is meeting the evacuation lift criteria within the London Plan as much as practically possible due to the issues mentioned above.

The proposed arrangement complies with BS9999 as evacuation lifts are not mandatory to meet compliance in this regard.

In accordance with London Plan Policy D5 (B5) a separate and dedicated evacuation lift should be provided in each core. Evacuation lifts are being provided as set out in Section 4.6 of this report.

The evacuation lifts will be provided with the measures required by the London Plan Policy D5 (B5), as noted in the *London Plan Guidance sheet D5 (B5) Evacuation lifts* document. The evacuation lift installations will generally comply with the recommendations of BS 9999 Annex G and should be designed and installed in accordance with the relevant provisions in BS EN 81-20 and BS EN 81-70.

These include resilience measures, such as suitable back-up power supply (via generator or second separate utility supply), fire protection of lift equipment (60 min or 90 min enclosure) and power/control cabling in accordance with BS 8519, as well as the cause-and-effect interface between the lift control system and the fire detection and alarm system. The evacuation lifts should discharge directly to outside via a protected space such as the entrance lobby. In the unlikely scenario where smoke is detected in the evacuation lift final exit, the evacuation lift should return to an alternative level (i.e., Level 1)

8.1 Building Management Plan

With the building being offices, there is expected to be suitably competent persons on site at all times to manage the evacuation using evacuation lifts, as is typically required.

Emergency intercoms / communication system should be provided between the refuges (i.e., protected lobbies) and the remote assistance operator. On the operation of the “Evacuation Lift” switch, or on a signal from the fire detection system, the evacuation lift should isolate all car and landing call controls and return to the final exit level and park with its doors open. Once at the final exit level and once the “Evacuation Lift” switch has been operated, the remote assisted controls should be enabled; the evacuation lift should then operate only in response to the remote assisted controls and the communication system provided should be in operation.

During maintenance of an evacuation lift, building management will be required to be in attendance and in the unlikely event of a fire at the same time they can support the evacuation of occupancies using the alternative fire fighters lift or manual means, such as an evacuation chair.

This will require the building management representative to attend relevant training on the evacuation procedures for the specific lift installations or manual evacuation aids.

9. Declaration of Compliance

Given the content of this Fire Statement, it is our professional opinion that the scheme proposals meet or exceed the minimum requirements of the London Plan Policies D12 and D5 (B5) and the Part B (B1 – B5) Requirements of the Building Regulations.

This Fire Statement demonstrates that the requirements of the London Plan Policy D12 and D5 (B5) have been considered and addressed as an integral part of the proposals.

This Fire Statement should be included in the suite of documents that will be submitted as part of the development's full planning application.

If there are any changes to the scheme which require subsequent Section 96a or Section 73 applications, this Fire Statement will need to be reviewed and amended, as required, and the revised Fire Statement will need to be submitted as part of the revised application. This is necessary in order to ensure that the proposed scheme amendments are appropriately captured, and the content of the Fire Statement always remains consistent with the latest scheme proposals.

Niall McGuinness, BSc(Hons).

Associate

We create safe spaces
where people, businesses
and communities thrive.