

FIRE SAFETY STRATEGY

95 Avenue Road, St. John's Wood, London, NW8 6HY

95 Avenue Road (Freehold) Ltd
IFC Report FSS/23128/01

16.05.2022

Confidence in fire safety

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Project:	95 Avenue Road, St. John's Wood

ISSUE RECORD

REV	DATE	AUTHOR	REVIEW	SECTION	AMENDMENTS
-	22/04/2022	LM	TM		
00	16/05/2022	LM	TM	2.1, Fig 3-6, 7.1, App A	Updated following design team comments; re to gateway 1 added, Fig 7 added, roof plan added

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1. INTRODUCTION

International Fire Consultants Ltd (IFC) has been commissioned by 95 Avenue Road (Freehold) Ltd to advise on the fire safety strategy for the extension and alteration to 95 Avenue Road, St. John's Wood.

95 Avenue Road is an existing 8 storey apartment building over 18m to highest occupied floor level.

This report is based on compliance with the fire safety legislation listed in Section 2 below. It does not include for compliance with any other criteria (e.g. additional client requirements, insurance, etc.) unless specifically described in this report.

95 Avenue Road consists of the following:

- 8 storey apartment building (plus Lower Ground which is technically a basement) over 18m to top occupied storey but less than 30m.
- Lower Ground Floor has caretakers flat and ancillary accommodation
- Single stair building with no fire-fighting shaft
- Existing manually vented common stair and lobby

The proposed alterations include:

- Two new floors being added (8th and 9th floor)
- Provision of new dry riser serving all floors
- Automatic opening vents to top of stair and common lobbies on all floors

The report has been based on the drawings produced by Hub Architects, listed in Table 1. As the design of the project is an iterative process these drawings may not include all recommendations with this report.

Table 1 - Drawings reviewed

DRAWING NUMBER	REVISION	DRAWING DESCRIPTION
1289-PD-112	E	8 th Floor Plan
1289-PD-113	D	9 th Floor Plan
1289-PD-114	E	Roof Plan

IFC has also reviewed the current Fire Risk Assessment as below;

- Fire Risk Assessment and Action Plan; dated 9th March 2020 by Quantum Compliance

Due to the vagueness of some aspects of the Fire Risk Assessment, IFC (Tom Mason) carried out a site inspection on the 5th April 2022 to clarify and confirm existing fire safety measures affecting the common areas and therefore the impact of the extension, in particular aspects affecting Building Regulations B1 and B5.



Figure 1 – Existing common lobby manually opening vents

IFC site review found the existing stair doorsets and apartment entrance doorsets should be replaced as not to current standards (E60S doorset to stair and E30S to apartment entrance, both self-closing).

It may be possible to provide maintenance to the apartment entrance doors to ensure gaps do not exceed 3mm between door & frame.

Replace the existing redundant refuse chute with a dry riser system.

Provide enhanced smoke ventilation to the basement lobby to the stair as limited currently to a small vent duct through the plantroom.

Overall, IFC are of the opinion that the provisions recommended to be included in the building as part of the extension works will result in an increased level of safety for the building occupants over the current arrangement.

2. LEGISLATION AND GUIDANCE DOCUMENTS

2.1 Building Regulations

The building will be subject to approval under the Building Regulations 2010 as modified by the Building (Amendment) Regulations 2018.

The guidance states that, for works on existing buildings, only the new elements must comply with the current Regulations; there is not a requirement that the existing elements also meet the current standard. It must be shown, however, that the existing building parts are no more unsatisfactory than they were before the works were completed.

Building work

Regulation 3 of the Building Regulations defines 'building work'. Building work includes:

- a. the erection or extension of a building
- b. the provision or extension of a controlled service or fitting
- c. the material alteration of a building or a controlled service or fitting.

Regulation 4 states that building work should be carried out in such a way that, when work is complete:

- a. For new buildings or work on a building that complied with the applicable requirements of the Building Regulations: the building complies with the applicable requirements of the Building Regulations.
- b. For work on an existing building that did not comply with the applicable requirements of the Building Regulations:
 - i. the work itself must comply with the applicable requirements of the Building Regulations, and
 - ii. the building must be no more unsatisfactory in relation to the requirements than before the work was carried out.

Figure 2 – excerpt from Approved Document B 2020

That will require the design and construction to comply with the functional Requirements as shown below.

- B1 – Means of warning and escape
- B2 – Internal fire spread – linings
- B3 – Internal fire spread – structure
- B4 – External fire spread
- B5 – Access and facilities for fire service

In order to demonstrate compliance with functional Requirements B1 to B5, it is conventional to base the design on standard fire safety design documents. Variations to the guidance given in those documents is permitted, as long as it can be demonstrated to have still met the function Requirements shown above.

In addition, under changes introduced in the Building (Amendment) Regulations 2018, for buildings classified as "relevant buildings", Regulation 7(2) (and other modified Regulations) applies additional criteria on the combustibility of materials within the external walls.

The definition of a “relevant building” is a building with a storey that is 18m or more above ground level (excluding roof-top plant areas and storeys consisting solely of plant rooms) and contains one or more dwellings, an institution or a room for residential purposes (excluding rooms in hostels, hotels or boarding houses).

95 Avenue Road would already be classed as a relevant building, as the current top floor level is over 18m above external ground. The proposed additional floors therefore do not cause a building that was previously not “relevant” to become relevant.

As such, the additional requirements needed for “relevant buildings” under Regulation 7(2) will need to be applied to any new external wall materials that are added to any part of the building during the works but will not apply to the existing external walls.

This report has based the design of the building on BS9991 (2015).

In situations where the building design varies from the guidance in that document, that has been highlighted and justified in this report.

This report describes the main fire safety issues relating to the building. In any areas that are not mentioned in this report, the design should comply with the guidance of the relevant guidance documents mentioned above.

The report is therefore also suitable under planning legislation with providing sufficient information for Gateway 1 purposes and goes beyond the information required in the UK Government Fire Statement template.

2.2 Regulatory Reform (Fire Safety) Order 2005

Once completed, the building will be subject to the Fire Safety Order. That will require the Responsible Person for the building to ensure that a fire risk assessment has been carried out by a competent person.

This report (or subsequent updated versions of this report) could be used to assist that fire risk assessment.

2.3 Construction (Design and Management) Regulations 2015

The CDM Regulations require that the design of the building should ensure that it can be constructed and managed safely.

This report deals with the fire safety design of the building when completed and does not address fire safety during construction.

There are a number of standard guidance documents available giving guidance on managing fire safety within construction sites (such as HSG168 produced by the HSE) and so the relevant main contractor will need to ensure that the construction site complies with that guidance.

A key consideration should be the safety of the current occupants who we understand will remain living in the building during the new works. The escape route should remain protected and available for the building occupants at all times.

3. FIRE SAFETY SYSTEMS

The main fire safety systems that are to be provided within the building are summarised below.

Sections 4 to 8 of this report then demonstrate how these systems achieve compliance with the relevant requirements of the Building Regulations.

Any reference made to a British Standard or other technical specification (including any amendments) should be to the latest edition on the date of which this report was prepared. However, if a British Standard or technical specification has been subsequently revised or updated by the issuing body, then the new version may be used as a source of guidance provided that it has been approved by the relevant regulatory authorities for use and it continues to address the relevant functional requirements of the Building Regulations.

3.1 Fire Detection and Alarm System

Each new single storey flat will have a standalone LD2 Grade D1 smoke alarm system to BS 5839 Part 6, (note Section 4 regarding balconies and terraces). This will consist of smoke alarm(s) in the hallway, principle habitable room (lounge), interlinked to a heat detector in the kitchen.

There will be a Category L5 optical smoke detection in each residential stair lobby (new and existing) and the new stair main landings to activate the smoke ventilation system. There will be no sounders or manual call points in residential common lobbies or the stair.

It is understood the existing common lobbies have a wireless smoke detection system stated as Type F in the Fire Risk Assessment. This should be replaced by the L5 system but without any alarm function so as not to confuse residents on the evacuation protocol (which remains “defend in place”).

3.2 Sprinkler System

As the building is over 11m in height sprinkler systems will be provided as follows;

- Within new flats a Category 3 system to BS9251 2021 Edition (no sprinklers in circulation spaces due to natural smoke ventilation system)

The UK Government circular that was issued with the 2020 amendments to Approved Document B Volume 1 in support of the Building Regulations identified that consideration be given to the need to retro-fit sprinklers in any existing building which was being altered.

IFC consider the automatic smoke ventilation measures and dry riser provision being made increases the safety of the existing building (to current standards) and that the two new floors will have an escape route that satisfies Regulation B1 (the two new floors would not be expected to adversely affect the existing escape). It is not therefore considered reasonable to install sprinklers in the existing flats within the building.

With thoughtful design and installation, the provision to extend residential sprinkler protection into the existing flats in the future (for example if the resident chooses) may be made.

3.3 Smoke Ventilation System

There will be a 1m² geometric free area automatic opening vent (AOV) to the top of the common stair and a 1.5m² geometric free area external wall AOV to the common lobby.

This will apply to both new and existing common lobbies to provide adequate protection against smoke ingress to the single escape stair and represents a significant improvement over the existing arrangement (manual openable vents in the lobbies on restrictors and no vent in the stair).

Both lobby (floor of fire origin only) and stair AOV's will open simultaneously. AOV's on other floors will remain closed.

A control panel will be provided at access level to see the status of each AOV and allow fire service to open/close each vent.

As recommended by the Smoke Control Association, the installation of the smoke ventilation system should be carried out by a contractor that is covered by an appropriate UKAS accredited third party certification scheme, such as the IFC SDI 19 scheme that is provided by IFC Certification.

3.4 Emergency Lighting

Emergency lighting to BS 5266 Part 1 will be provided in the common circulation routes in residential areas.

3.5 Escape Route Signage

Fire exit signage to BS 5499 will be provided to storey and final exits and any lobby doors in residential areas.

IFC advise on residential signage being rear illuminated as this increases visibility by circa 2.5x in comparison with front illuminated exit signage.

3.6 Secondary Power Supplies

This will be required to the following.

- Smoke detection and alarm systems
- Emergency lighting
- Smoke ventilation system

This can often be provided by battery where a secondary supply from a generator (for example) is not available.

All cables for life safety systems are to comply with Table A of BS 8519.

BS9251 does not advise on the need for secondary pump or power supply to Category 3 systems.

4. B1 – MEANS OF WARNING AND ESCAPE

The building will have a defend-in-place evacuation policy for the apartments, and simultaneous evacuation for the existing ancillary accommodation.

Therefore, it is expected only the occupants in the apartment of fire origin need to evacuate. Others will do so if instructed by the fire service.

The building is a single stair building with automatic smoke ventilated common lobby proposed in front of each stair and automatic smoke ventilation proposed to the stair. Figures 3-6 show the proposed 7th- 9th Floor and roof, which each comprises a single flat.

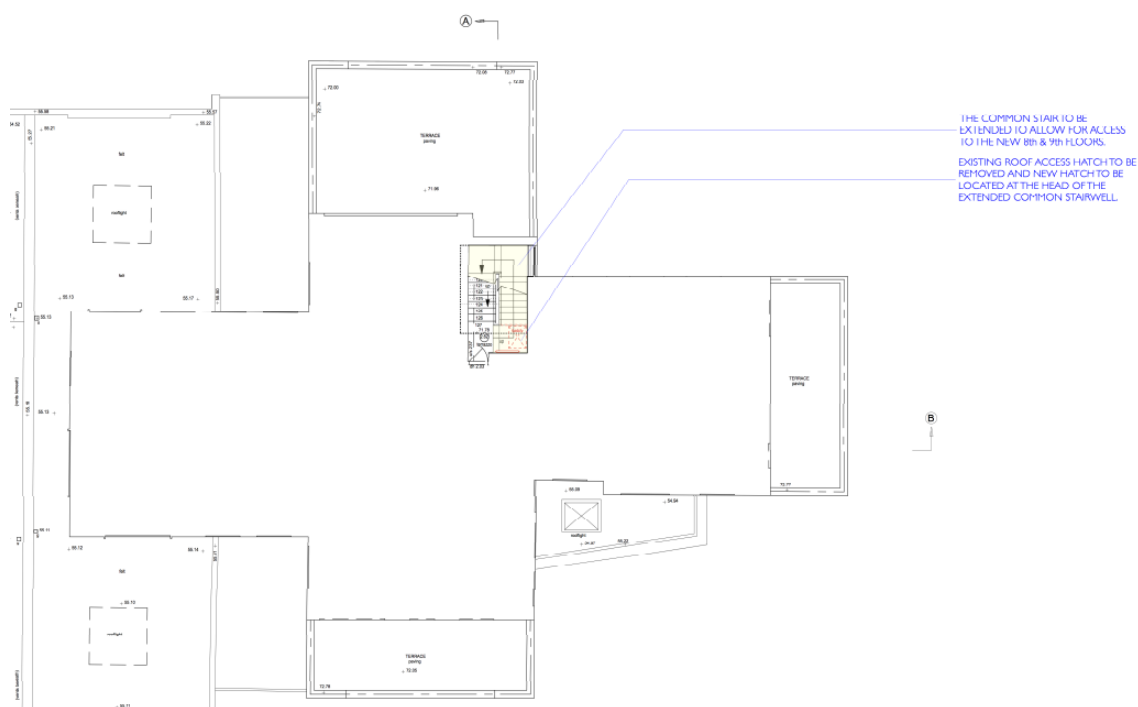


Figure 3 – Proposed Seventh Floor Plan

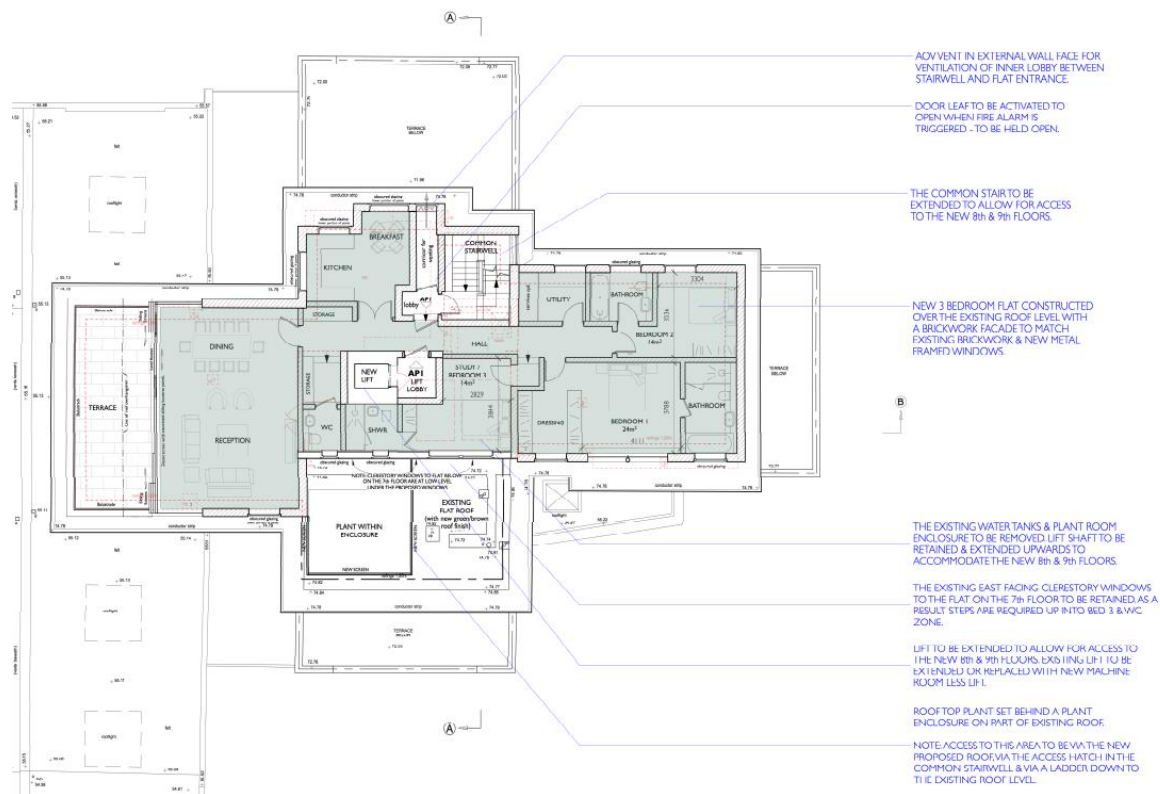


Figure 4 – Proposed Eighth Floor Plan

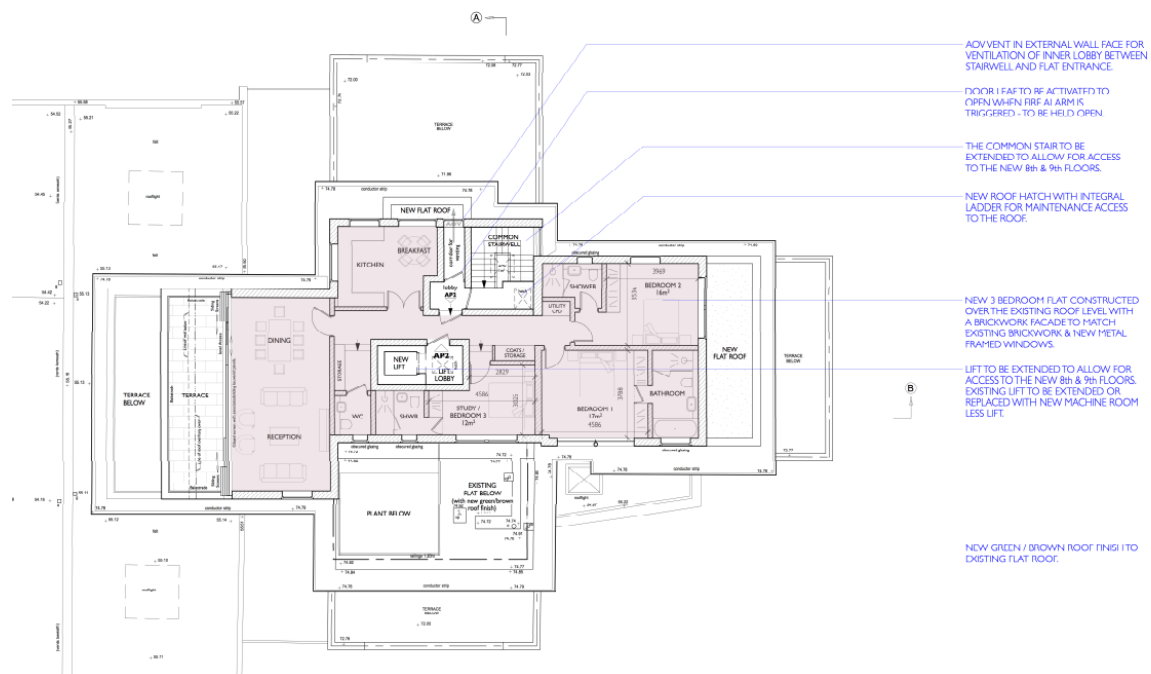


Figure 5 – Proposed Ninth Floor Plan

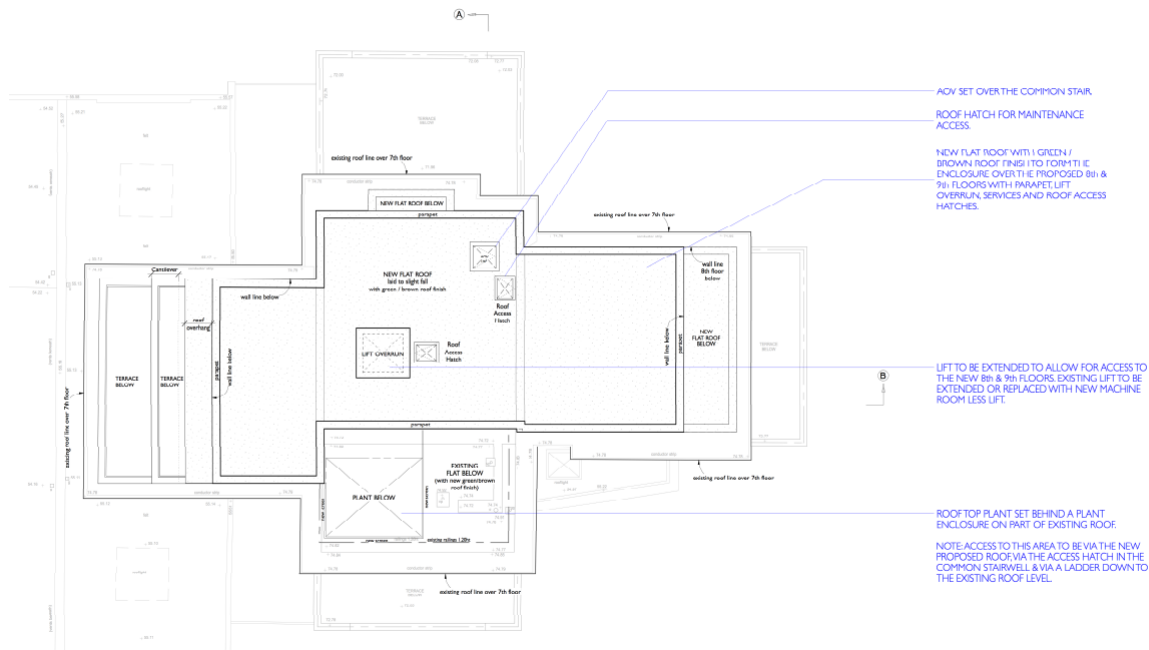


Figure 6 – Proposed Roof Plan

Each new apartment with a protected hallway will have walls of minimum 30-minute fire resistance with E30 doorsets to the hallway (E30S to apartment entrance and 60 minutes fire performance to the apartment walls).

The maximum travel distance from any internal door in the new apartment entrance halls to the apartment exit is within 9m and satisfactory to all such flats. It is noted BS9991 allows a 20m travel distance from any point to the apartment exit when sprinklered.

Where open private terraces are accessed from a room that room should be readily visible and escape only through one room, otherwise an automatic smoke alarm will be required in the access room. The new apartments both have roof terraces that are accessed from the dining / reception room. As principle habitable room, it is expected that automatic smoke alarms will be provided within these rooms. No enclosed balconies are proposed.

The maximum travel distance is less than 7.5m in a single direction in the common lobby (15m permitted). The design is compliant.

There is lift access in the building, but this is not a fire-fighting lift. Disabled persons stay in their flat or if in the flat of fire origin can move into the lobby or stair enclosure.

The existing stair serving the upper floors discharges direct to outside.

Any mechanical ventilation system within a new apartment must shut down on alarm unless serves a single room only with vent direct to outside. If the ductwork passes through the protected hallway inside the apartment it must be fitted with a minimum 30-minute ES rated damper which closes automatically on detection of smoke in the ductwork with fusible link back up. It must not serve the hallway itself.

The damper can be omitted if the ductwork passes through the hallway in a 30-minute fire resistant enclosure.

Any fire exit is to be usable without a key from the escape side. If secured, doors on escape routes must automatically unlock on alarm with local manual override (green call point).

There are a number of existing ancillary areas at Lower Ground Floor and have maximum 18m single direction escape which are all compliant.

The existing passenger lift shaft will be extended to open inside the new apartments on the 8th and 9th floor. A protected lobby is formed such that there is an E30S self-closing doorset to the lobby with E60 lift landing door.

5. B2 – INTERNAL FIRE SPREAD (LININGS)

5.1 Material Classifications

Although unlikely to be the first materials to ignite, wall and ceiling linings of an enclosure such as a room can have a dramatic effect on the development of a fire and, in particular, the time it takes for the room to become completely involved.

Surface finishes and floor coverings should not comprise of materials that might contribute to surface spread of flame and/or fire or adversely affect the means of preventing such propagation.

The recommendations in relation to surface spread of flame are shown in Table 2 below.

- European Class would relate to the material's classification under BS EN 13501-1:2018.

Table 2 - Classification of linings

LOCATION	EUROPEAN CLASS ^{b)}
Small rooms of area not more than 4m ² in residential accommodation and 30m ² in non-residential accommodation	D-s3,d2
Rooms, general	C-s3,d2
Circulations spaces within dwellings	C-s3,d2
Other circulation spaces including the common areas of blocks of flats	B-s3,d2

6. B3 – INTERNAL FIRE SPREAD (STRUCTURE)

6.1 Structural Fire Resistance

It is important that the structure and key construction elements of a building remain fully functional for a reasonable period of time during a fire. It is obviously beneficial if these elements remain in a serviceable condition after the fire for ease of reinstatement. In addition, a fire should be contained by fire resisting elements of the building to prevent it spreading to other parts of the building. This containment should include voids and cavities that could provide a path for fire.

Following Table 4 of BS 9991:2015, as the highest occupied floor level is more than 18m but less than 30m above ground level the structural fire resistance requirements for load bearing elements is R90 minutes.

However, as an existing building the fire resistance of the new structural elements does not need to be higher than the existing. It is understood the external wall is masonry and the floors are reinforced concrete.

Structure that only supports a roof only does not need any specific fire resistance unless it also supports a fire resisting wall or rooftop plant or functions as a floor for means of escape. Here the underside of the external terraces will need to be minimum EI30 fire resistance although as part of a compartment floor may attain REI90 by default.

6.2 Compartmentation

All new floors are REI90-minute compartment floors. Therefore, all new vertical shafts such as lift shaft and service risers are minimum EI90-minute compartment walls (or at least the same fire resistance as the existing).

The stair extension is recommended to be REI120-minutes to meet the recommendations for a fire-fighting stair enclosure.

The fire resistance performance of compartment walls and floors (or any other parts of the building which are required to prevent fire spread) should be not less than that specified below when tested in accordance with the relevant part of BS 476: Parts 20 to 24 or classified in accordance with BS EN 13501 Parts 2, 3 or 4.

This applies to:

- a. load-bearing walls, for load-bearing capacity, integrity and insulation from either side.
- b. non-load-bearing walls and partitions, for integrity and insulation from either side.
- c. fire doors for integrity from either side, with the exception of doors to lift wells where performance is in respect of exposure of the landing side only.
- d. floors, for load-bearing capacity, integrity and insulation with respect to exposure of the underside only.

The main elements of compartmentation and the relevant fire performance is summarised below. Any items not described below would be in accordance with Table 3 of BS 9991:2015

Table 3 - Fire compartmentation requirements

ELEMENT	FIRE RESISTANCE
Floors (new floors)	REI90 minutes
Walls separating apartments from other apartments (new apartments)	EI60 minutes
Walls separating apartments from common lobby (new apartments)	EI60 minutes (doors in walls to be E30S)
Protected hallway inside new apartment	EI30 minutes (doors to be E30)
Lobby doors	E60S
Enclosure of stairs (new stories)	EI120 minutes (doors to stairs to be E60S)
Enclosure of risers	EI90 minutes from either direction (doors to service risers to be E60S)
External walls	See Section 7 of this report

The compartments walls on the top storey must be taken up to the underside of the roof covering and suitably fire stopped. Thermoplastic insulation or timber substrate materials must not be carried over the wall.

The existing redundant refuse chute will be utilised for the new dry riser. It will need to attain EI90 fire resistance (or at least same fire resistance as existing).

New lift landing doors to 8th and 9th floor will be E60, with E30S self-closing protected lobby doorset as inside apartment.

Fire doors should be capable of demonstrating compliance with the relevant standard (as shown above) when tested as a complete installed assembly.

Any fire doors should be fitted with self-closing fire doors, so they return to the closed position, except for internal doors within dwellings, cupboards and doors into service risers which are kept locked shut.

All pipes, ductwork and services passing through fire-resisting barriers should be penetration sealed with an appropriate sealing system and/or fire/smoke damper which has been shown by an appropriate test or assessment to maintain the period of the fire resistance of the barrier. The penetration sealing system should be designed and installed in accordance with the recommendations contained within The Association for Specialist Fire Protection (ASFP) "Fire Stopping & Penetration Seals for the Consultation Industry" (commonly referred to as The Red Book).

Any fire and smoke control assemblies should be provided with an appropriate certificate from a recognised third-party accreditation body in order to demonstrate compliance with Regulation 38 of the Building Regulations 2010. Assessment and test evidence should also be available for inspection by the approving authorities and other interested parties.

6.3 Cavity Barriers

Cavity barriers should be provided in all areas in accordance with BS 9991:2015.

Within external walls, cavity barriers should be provided in line with any locations where fire rated walls or floors meet the façade. Where these are compartment floors these barriers must be minimum EI90 fire resistant, EI60 to compartment walls between apartments, EI120 where fire-fighting stair meets external wall, rather than the reduced E30/I15 rating permitted for cavity barriers used elsewhere. Note; this applies to the new two floors only.

Cavity barriers should also be provided around all new openings in the external walls, such as windows, doors and service penetrations giving minimum E30/I15 fire resistance. Cavity barriers should be provided around service penetrations through the external walls in accordance with Building Control Alliance (BCA) Technical Guidance Note 26¹.

Cavity barriers in external walls should pass through all insulation and other materials within the external wall, forming a seal between the edge of the fire rated wall/floor and the inner face of the external cladding. If the external cladding comprises composite panels which contain materials that are not of limited combustibility, the cavity barrier should be extended to continue through the core of the external panel as well (to prevent the combustible core of the panel bypassing the cavity barrier).

Cavity barriers should achieve a fire resistance of at least 30 minutes for integrity and 15 minutes for insulation. Alternatively, if located in a stud wall or partition, or provided around openings in the external wall, they may be formed of:

- a. steel at least 0.5mm thick
- b. mineral wool slab, in either case under compression when installed in the cavity; or
- c. calcium silicate, cement-based or gypsum-based boards at least 12mm thick.

Fire stopping (the seal between the fire rated wall/floor and the external wall) should be of the same fire resistance as the fire rated wall/floor.

¹ Building Control Alliance: *BCA Technical Guidance Note 26 Service Penetrations through External Wall Constructions of Residential Buildings*, Issue 0, April 2017

7. B4– EXTERNAL FIRE SPREAD

7.1 Unprotected Areas

When a building is on fire, heat will radiate through non fire-resisting openings in the non-load bearing parts of the external walls. This heat can be intense enough to set fire to adjoining buildings. In order to reduce the chance of this occurring, the Building Regulations place limits on the area of external elevation with no fire resistance. This area is known as the ‘unprotected area’ and is affected by such factors as distance from the boundary, use of the building and compartment size.

The existing stories are not changing unprotected area and therefore excluded from any assessment. The analysis therefore applies only to the two new stories.

For relevant boundaries over 1m the non-load bearing parts of the external wall will be E90/I15 from inside only subject to the unprotected area assessment. BRE Report BR187 *External fire spread: building separation and boundary distances* has been applied as a suitable method for calculating minimum boundary distances or maximum unprotected areas, as referenced in BS 9991:2015. This approach assumes that:

- a fire has spread throughout the full extent of any fire compartment (i.e. full flashover fire throughout the compartment);
- any non-fire rated parts of the external wall have failed; and
- the heat and flames are radiating from the entire façade.

Boundary locations are taken as the centre of a public highway or the boundary of the site if no public highway beyond.

Apartment buildings are highly compartmented and for a 24m wide by 3m high enclosing rectangle a minimum of 4.5m relevant boundary is required for 100% unprotected area. The 8th and 9th Floors are set back on some elevations from storeys below.

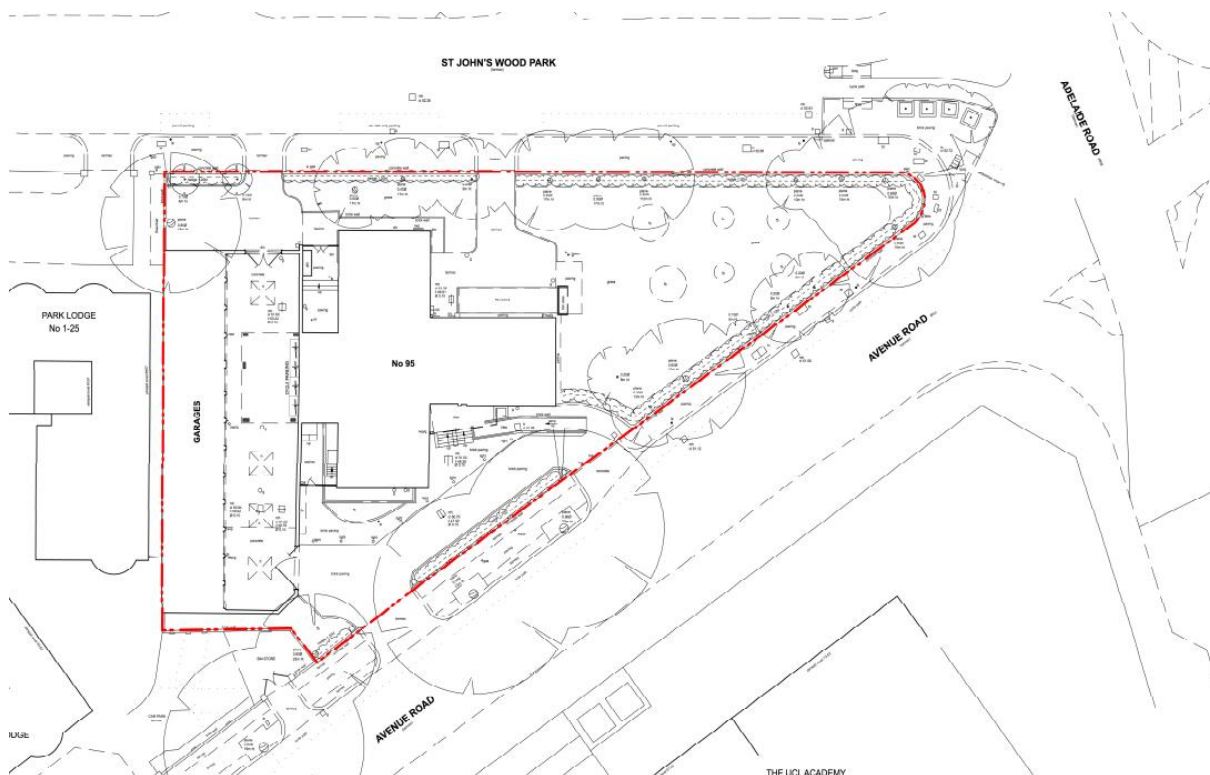


Figure 7: Site Plan



Figure 8 – Site Plan



Figure 9 – Elevational aspect between the two existing buildings (95 Avenue Rd on the right)

It can be seen that for all four elevations the proposed unprotected area to non-load bearing parts on the two new floors is satisfactory as relevant boundary would exceed 4.5m at proposed 8th Floor level.

The existing Ground Floor ancillary area is not affected (see Figure 10).



Figure 10 – Existing Ground Floor ancillary area

7.2 External Walls

7.2.1 External Wall Materials

As the existing building is over 18m high and meets the criteria of a “relevant building” (as described in Section 2.1 of this report) then Building (Amendment) Regulations 2018 would apply to this building with regard to any new materials introduced to the building external walls.

Therefore, all materials in the external wall of the two new floors, LG Floor works, and any other new materials introduced, unless exempt under Regulation 7(3), must be A1 or A2-s1-d0 against BS EN 13501 Part 1.

Membranes, such as breather membranes, must still be classified as at least B-s3, d0 against BS EN 13501 Part 1.

The existing building has brick as the external surface (A1 under BS EN 13501 Part 1) and building work would be a Material Alteration thereby the extension cannot make compliance with Regulation B4(1) more unsatisfactory than before and the existing wall construction is not controllable as not a change of use.

Given the Fire Safety Act 2021 will come into force in England in due course the new Fire Risk Assessment required under the Fire Safety Order will assess the risk from the existing external wall and it would be advisable to determine if any cavity & combustible insulation exists in the existing wall.

7.3 Other external surfaces

Roof coverings (including external private terraces) should comply with $B_{\text{roof}}(t_4)$ against BS EN 13501 Part 5.

Plastic insulation or timber substrate must not be taken over any compartment wall.

There is no specific guidance in BS 9991 regarding the fire performance of any exposed soffits (i.e. downward facing external building surfaces such as may occur in building overhangs). However, IFC would recommend that for good practice, any insulation and any exposed surfaces used in those situations should be of at least A2-s1, d0 reaction to fire classification.

8. B5 – ACCESS AND FACILITIES FOR THE FIRE SERVICE

In order to extinguish a fire within this building it is important that the fire service can gain access to the premises, and from there, into the building. This section deals with the various facilities intended to aid the fire service access to the building and in fighting a fire in the building.

The access to the building is via existing public highways on two sides (Avenue Rd and St. John's Wood Park) and therefore deemed compliant for fire service access to the building.

Although over 18m from lowest ground level to top occupied floor the existing building does not have a fire-fighting shaft.

Given the height with the two new floors will remain below 30m IFC does not regard it as reasonable to alter the building to provide a fire-fighting shaft, particularly as it would require a fire-fighting lift to be provided including a new secondary power supply as no such lift exists currently.

IFC does however note there is an ability to provide a dry riser in the existing redundant refuse chute location so it opens into each existing common lobby (it should be investigated if it is practical to install one in the existing stair). For the two new floors it would be expected the dry riser outlets open into the new stair.

The existing stair has manually openable vents on each floor although they are provided with restrictors. The extended stair will have a 1m² geometric free area automatic opening vent at its head.

The common lobby currently has two manually opening vents (with restrictors). Given the single stair design it is proposed to replace this with a 1.5m² geometric free area AOV linked to an L5 optical smoke detection system to allow both lobby AOV and stair AOV to open simultaneously and assist the fire service.

A control panel will be required to confirm the status of each vent (open/closed/in-fault) and allow remote opening/closing of each vent by the fire service. This should ideally be at the base of the stair.

The two new floors will have the stair designed as 120 minute fire resistant enclosure (or the same as the supporting construction if less than 120 minutes) with FD60S self-closing door to ventilated common lobby via a 1.5m² external wall vent on each new floor.

All parts of the flats will within 45m using hose as laid from the new dry riser outlet on each floor.

The dry riser will be to BS9990 with the inlet in the external wall within 18m of and visible from the pump appliance parking location.

A public hydrant is to be confirmed as being within 90m of the dry riser inlet. IFC understand that there is an existing hydrant on Avenue Road, close to the main access gate with a second hydrant on St John's Wood Road (outside Mancroft Court).

Signage will be provided in the stair on each floor (new and existing) identifying the floor level plus apartment numbers on that floor. ADB 2020 Edition has further guidance on signage location, height, font, etc.

Overall IFC are of the opinion that the fire safety provisions to be included as part of the extension works represent a significant improvement over the existing arrangement.

9. LIMITATIONS

Our advice is strictly limited to the scope of our current brief, i.e. to provide a fire safety strategy report for the extension and alteration to 95 Avenue Road, St. John's Wood.

International Fire Consultants Ltd have not reviewed any other issues within the project other than those identified in our report. We offer no comment on the adequacy or otherwise of any other aspects of the development (whether related to fire safety or any other issue) and any absence of comment on such issues should not be regarded as any form of approval. The advice should not be used for buildings other than that named in the title.

Prepared by:



Lee Morgan

BEng (Hons) MRICS MSFPE CFPS

Associate Director

International Fire Consultants Ltd. (IFC)

Reviewed by:



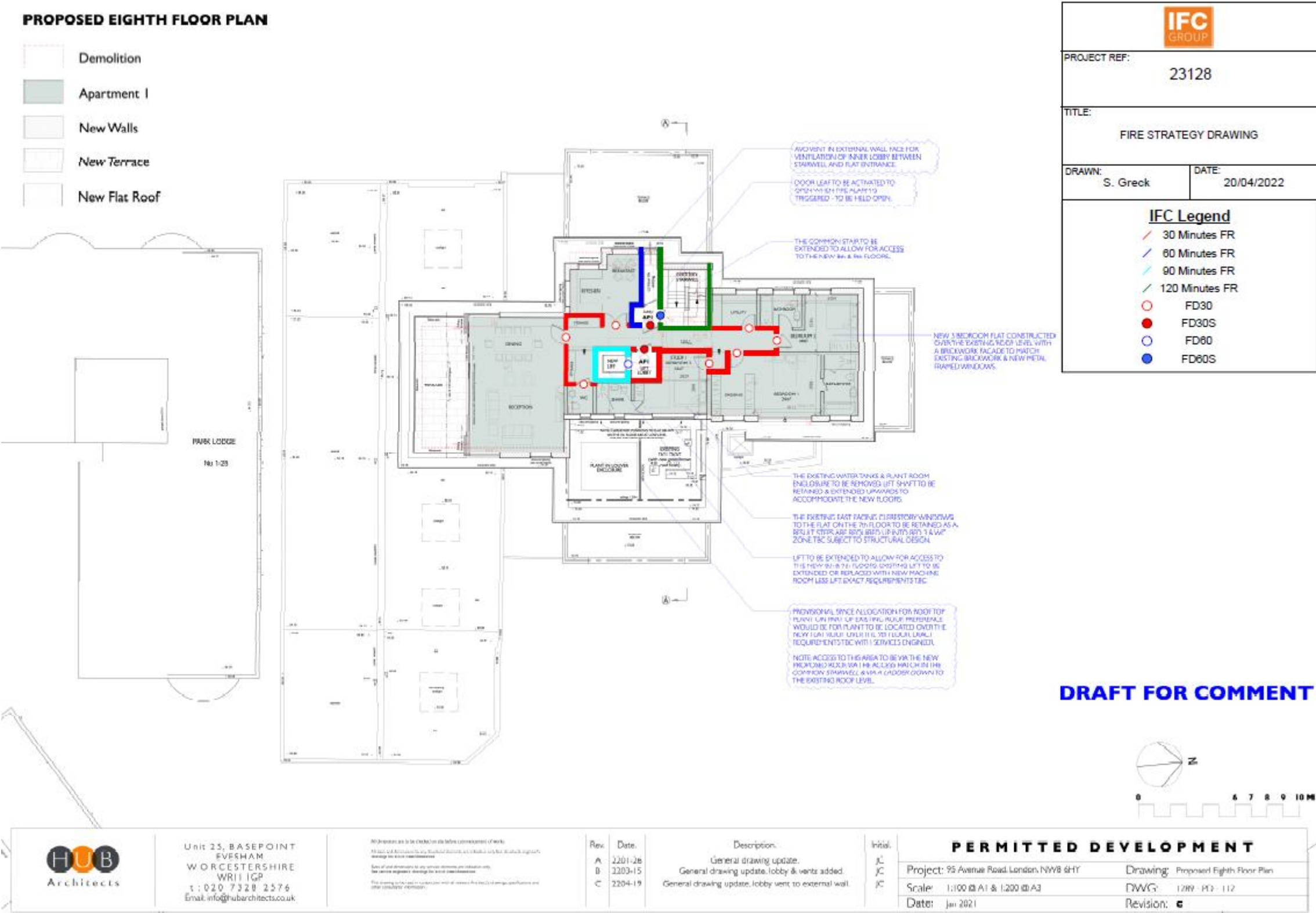
Tom Mason

BSc (Hons) MSc AIFireE

Director of Fire Engineering

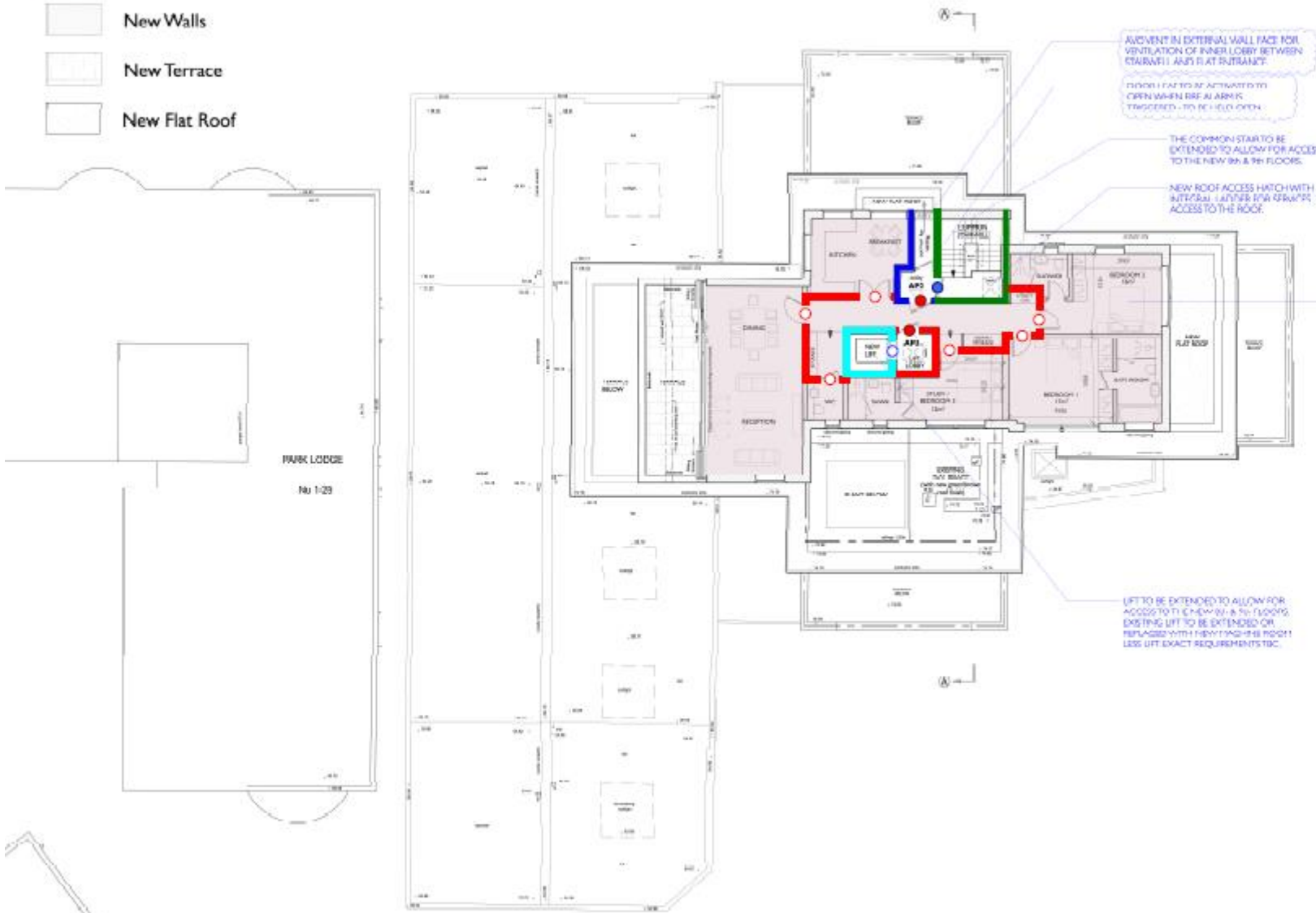
International Fire Consultants Ltd. (IFC)

APPENDIX A – FIRE STRATEGY PLANS



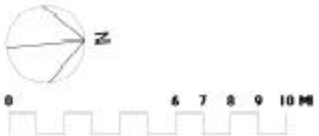
PROPOSED NINTH FLOOR PLAN

- Apartment 2
- New Walls
- New Terrace
- New Flat Roof



IFC GROUP	
PROJECT REF: 23128	
TITLE: FIRE STRATEGY DRAWING	
DRAWN: S. Greck	DATE: 20/04/2022
IFC Legend 30 Minutes FR 60 Minutes FR 90 Minutes FR 120 Minutes FR - FD30 - FD30S - FD60 - FD60S	

DRAFT FOR COMMENT



 Unit 25, BASEPOINT EVEHAM WORCESTERSHIRE WR11 1GP t: 020 7328 2576 Email: info@hubarchitects.co.uk	All drawings are to be checked on the day before commencement of work. If any of the drawings are not checked on the day before commencement of work, the drawings are not valid. The drawings are not to be used for any other purpose without the written consent of the architect. Scale of and dimensions to be given dimensions are indicated only. The drawings are not to be used for any other purpose without the written consent of the architect. The drawings are not to be used for any other purpose without the written consent of the architect.	Rev.	Date	Description	Initial	PERMITTED DEVELOPMENT	
		A	2201-26	General drawing update.	JC	Project: 95 Avenue Road, London, NW8 6HT	Drawing: Proposed Ninth Floor Plan
		D	2203-15	General drawing update, lobby & vents added.	JC	Scale: 1:100 @ A1 & 1:200 @ A3	DWG: 1289 - PD - 113
		C	2204-19	General drawing update, lobby vent to external wall.	JC	Date: Jan 2021	Revision: c

