

Title: 105 Judd Street - Planning Fire Statement

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105 Judd Street - Planning Fire Statement

| Revision | Description                                     | Author        | Approver       | Date          |
|----------|---|---------------|----------------|---------------|
| 00       | Initial issue                                   | Robert Clarke | Tony Hamilton  | 03 April 2025 |
| 01       | Updated based on comments from the design team. | Robert Clarke | Tony Hamilton  | 11 April 2025 |
| 02       | Updated overview                                | Robert Clarke | [Minor Change] | 14 April 2025 |

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## 1. Introduction

#### 1.1 Overview

Marshall Fire have been appointed by McLaughlin & Harvey to provide a planning fire statement for the proposed development at 105 Judd Street, London. It was previously an office building of four storeys, including basement, ground floor, first floor to third floor. As part of application reference 2022/1817/P there is planning permission in place to extend this by two storeys. This will therefore consist of a new 4th and 5th floor with a new roof with a new plant area. It is proposed that the building will be used by a life science company as offices and associated labs, which is consistent with the planning permission in place. This statement has been prepared so that it is consistent with the updated proposals and would supersede the document dated 3 March 2022 which is currently secured by condition 20 of the planning permission.

The existing building is less than 18m in building height. With the new vertical extension, the building height will be over 18m. There are two stairs serving the existing building from basement to the third floor. Both stairs will be continued up to the new 5<sup>th</sup> floor, with the central stair core forming a firefighting shaft complete with firefighting lift and evacuation lift while the other will form a protected stair with lobby protection and refuge area on each floor.

The proposed tenant has shared plans of their intended alterations. Furthermore, the tenant's structural alterations and ventilation strategy has been incorporated into the base build works and informed the following fire statement.

This Fire Statement will consider the evolution of the development and the principles of the golden thread concept and will form the basis of the developing Fire Strategy.

The 'Golden Thread' refers to a concept where the fire safety information of a building is to be updated and maintained through the whole life cycle of the building. The fire safety information should be maintained and updated as the development evolves in line with the principles of the golden thread. The fire safety information provided at planning application stage should be developed to inform the overall fire strategy for the development. When passing fire safety information to subsequent development stages, consideration should be given to the accessibility, accuracy and relevance of the information to ensure the development is constructed as it has been designed and originally specified.

Table 1 below details the plans reviewed to enable the commentary within this Fire Statement.

Table 1: Building key parameters

| Title                   | Drawing No:                  | Revision | Date     |
|-------------------------|------------------------------|----------|----------|
| Basement Floor AFL Plan | 4608-STA-XX-099L-DR-A-03099L | D        | 10.03.25 |
| Ground Floor AFL Plan   | 4608-STA-XX-100L-DR-A-03100L | D        | 10.03.25 |
| First Floor AFL Plan    | 4608-STA-XX-101L-DR-A-03101L | D        | 10.03.25 |
| Second Floor AFL Plan   | 4608-STA-XX-102L-DR-A-03102L | D        | 10.03.25 |
| Third Floor AFL Plan    | 4608-STA-XX-103L-DR-A-03103L | D        | 10.03.25 |
| Fourth Floor AFL Plan   | 4608-STA-XX-104L-DR-A-03104L | D        | 10.03.25 |
| Fifth Floor AFL Plan    | 4608-STA-XX-105L-DR-A-03105L | D        | 10.03.25 |
| Roof AFL Plan           | 4608-STA-XX-106L-DR-A-03106L | D        | 10.03.25 |
|                         |                              |          |          |

## 1.2 Purpose of this report

The purpose of this report is to review the proposals in terms of the Planning and the London Plan requirements and to demonstrate the development meets the highest standards of fire safety, proportionate to the size and nature of the development.

It is considered a planning requirement to provide a fire statement and best practice is to follow the structure of the digital Planning Gateway One template which also covers the London Plan requirements for Fire Safety.

It should be noted that the project will still need to comply with the requirements of the Building Regulations and therefore the information presented herein may be developed further such that compliance with the requirements of the Building Regulations is demonstrated.

The contents of this report should therefore not be considered sufficient to form a part of the Building Regulations submission for the project and Building Regulation approval should be considered a risk until such time that approval in principle has been granted by the appointed Building Control Body.

The findings of this statement are based on the information available at the time of review. Marshall Fire cannot be held responsible for any subsequent changes to the design that we are not made aware of.

## 2. Fire Statement

#### 2.1 Section 1: Site address

The development is located at 105 Judd Street, London, WC1H 9RN.

#### 2.2 Section 2: Description of proposed development

The building key parameters are summarised in table format below using BS 9999:

Table 2: Building key parameters

| Building     | Risk<br>Profile                                | Topmost<br>Storey Height      | Number of<br>Storeys | Sprinklers | Firefighting<br>Shaft | Elements of structure |
|--------------|--|-------------------------------|----------------------|------------|-----------------------|-----------------------|
| Basement     | A2(reduced from A3 due to sprinklers)          | 4m below<br>ground floor      | 1                    | Yes        | Yes                   | 60 minutes            |
| Other Floors | A1(reduced<br>from A2<br>due to<br>sprinklers) | 19.5m (Roof<br>level 23.25 m) | 6(G+5+ Roof)         | Yes        | Yes                   | 60 minutes            |

# 2.3 Section 3: Name of person completing the fire statement and relevant qualifications and experience

This document was completed by Robert Clarke. Robert is an Incorporated Engineer registered with the Engineering Council by the Institution of Fire Engineers, of which he is a full member (membership number 00053966). He is a Senior Fire Engineer at Marshall Fire and has over 15 years' experience in the industry.

Robert has an in depth understanding of the functional requirements of the Building Regulations 2010 and has applied fire safety standards to a wide range of commercial, industrial and residential buildings across England and Scotland. Having reviewed the proposals, I believe that they achieve the minimum requirements of Part B of the Building Regulations and the London Plan.

This document was reviewed by Tony Hamilton. Tony is a chartered building engineer with the Chartered Association of Building Engineers of which he is a fellow member. He holds a bachelor's degree in building surveying and a master's degree in Fire Safety Engineering.

Tony has been involved in fire safety for over twenty-five years, with the majority of his experience gained from his time in building control, where he was responsible for the assessment and approval of fire safety features for numerous building projects, including high rise residential accommodation, commercial buildings and complex mixed-use developments.

# 2.4 Section 4: State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this:

A preliminary fire strategy report has been reviewed by the London Fire Brigade with amendments made to the design based on their comments.

# 2.5 Section 5: Site layout plan as per building schedule referred to in section 6:

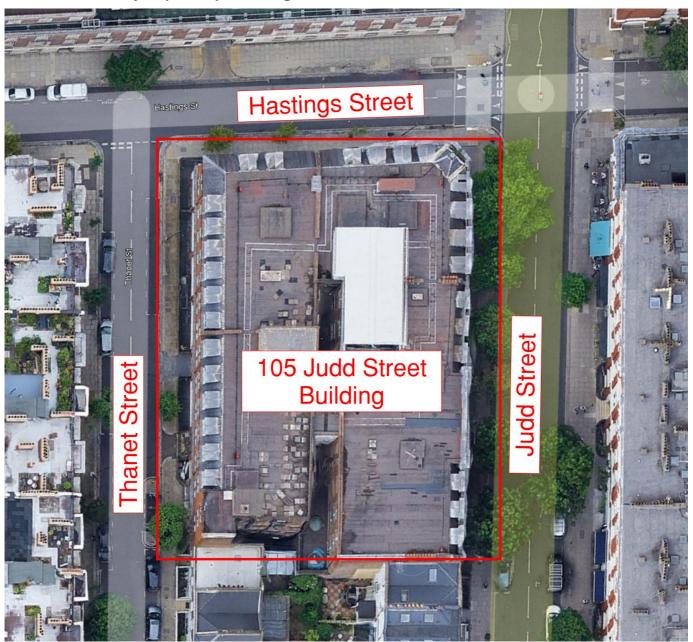


Figure 1: Location plan.

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2.6 Section 6: Building schedule.

Table 3: Buildings Schedule Table

Note: BS 9999:2017 has been applied

|     | Site Information                 |   |  | Building Info   | ormation  | Occupant Safety I   | nformation |
|-----|----------------------------------|---|--|---|---|---------------------|------------|
| No. | Building<br>height               | No. of Storeys                            | Proposed use<br>(Risk profile)   | Balconies   | External surface of walls   | Evacuation approach | Sprinklers |
| 1   | 19.5m (Roof<br>level 23.25<br>m) | 6 (G+5+ Roof)<br>with 1 basement<br>level | Laboratory use -<br>Risk profile A2 &<br>A3 reduced to A1<br>& A2 due to<br>sprinklers | Roof<br>terraces on<br>4 <sup>th</sup> & 5 <sup>th</sup><br>floor | Class A2-s1, d0 or better.<br>Existing external walls are<br>of brick construction. | Simultaneous        | Yes        |

### 2.7 Section 7: Specific technical complexities

As part of the fire strategy, guidance will be taken from BS 9999:2017

#### **BS 9999 Risk Profiles**

Rather than band buildings by broad occupancy type, BS 9999 uses the principle of risk profiles when prescribing an appropriate package of fire safety measures. This varies depending on the type of occupancy and inherent fire risk within the building. Where suitable separation is afforded between different uses then the appropriate risk profile can be applied to the applicable area.

For the proposed building, an A2 risk profile having occupants that are awake and familiar with their surroundings and a medium fire growth rate has been adopted. This is based on the building primarily being used as offices. Due to the installation of BS 12845 compliant sprinkler system allows this risk profile to be reduced to an A1.

Where tenant areas have not been fitted out they will be kept fire sterile until sprinklers have been installed and therefore will be considered as achieving an A1 risk profile.

For plant rooms an A3 risk profile having occupants that are awake and familiar with their surroundings and a fast fire growth rate has been adopted. Due to the installation of BS 12845 compliant sprinkler system allows this risk profile to be reduced to an A2.

For unoccupied office spaces which will be managed by the accountable person of the building as fire sterile areas they will be considered as having an A1 risk profile. This is due to the lack of combustible materials therefore a slow fire growth rate is considered reasonable and equating to the same risk as a sprinkler protected office area.

#### **Provisions for Fire Detection and Alarm Systems:**

BS 9999 specifies that for A1 and A2 risk profile a M category is system is sufficient to meet building regulation requirements. However, for this building it is proposed that an L1 category fire detection and alarm system is installed as an enhancement.

#### **Provisions for Travel Distance are as follows:**

Travel distances will be in accordance with BS 9999 for buildings with an enhanced fire alarm system

|   | Risk Profiles            |                               |              | Proposed      | Travel distance with enhanced fire alarm system |                |                |                |
|---|--------------------------|-------------------------------|--------------|---------------|---|----------------|----------------|----------------|
|   |                          |                               |              | category fire | Dir   | ect            | Actual         |                |
| Area  | Risk profile             | Reason                        | alarm system | alarm system  | One way travel                                  | Two way travel | One way travel | Two way travel |
| Offices, meeting rooms, rooms, reception, comm areas, kitchenettes for food preparation | unal A2 reduced to A1 du | I awake and familiar with the | М            | L1            | 19.55   | 50.6           | 29.9           | 74.75          |
| Plant rooms, stores, kitc<br>for hot food preparat                                      | I to the installation of | awake and familiar with the   | М            | L1            | 17.25   | 42.55          | 25.3           | 63.25          |

This building is not primarily for disabled people nor is there any proposed areas with seating in rows.

## **Provisions for Horizontal Means of Escape:**

Storey exit widths have been calculated using BS 9999:2017 Table 12 for an A1 risk profile building which specifies the minimum storey exit width per person is 3.3mm which can be reduce by 15% due to the enhanced fire detection system which would equate to 2.81mm.

Where a door is calculated to be less than 1050mm clear width, the number of persons safely accommodated by that exit width is calculated using equation (1) (Clause 16.6.1 BS 9999:2017):

$$n = 500 / m$$

Where:

n = number of persons safely accommodated by the door width.

M = minimum door width per person, as defined in table 12.

N = 500 / 2.81 = 178 people max.

The number of persons safely accommodated by a door 1050mm wide or more is calculated by dividing the total width of the door by the per person factor, therefore for a door that is 1050mm wide the equation would be as follows.

#### 1050/2.81 = 374 people

When calculating the aggregate of the exit widths, the largest exit width should be discounted as per Clause 16.6.1 BS 9999:2017. All storey widths in this scheme measure the same, therefore any exit on each level can be discounted in the calculations. The number of persons safely accommodated through each storey exit is outlined below:

Storev Exit Capacity

| Number of storey/final exits | Clear Width per Exit<br>(mm) | Storey Exit Capactiy -<br>For risk profile A2.<br>(3.6mm/person) | Storey Exit Capactiy -<br>For risk profile A1.<br>(3.3mm/person) | Storey Exit Capactiy - For risk<br>profile A1 with enhanced fire<br>detection. (2.81mm/person) | Maximum Expected Occupancy |  |
|------------------------------|------------------------------|--|--|--|----------------------------|--|
|                              |                              |  | Basement   |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 113                        |  |
| Ground Floor                 |                              |  |  |  |                            |  |
| 4                            | 3 x 1800 + 1 x 1500          | 2833   | 3091   | 3630   | 158                        |  |
|                              | First Floor                  |  |  |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 196                        |  |
|                              |                              |  | Second Floor   |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 196                        |  |
|                              |                              |  | Third Floor  |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 184                        |  |
|                              |                              |  | Fourth Floor   |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 123                        |  |
|                              |                              |  | Fifth Floor  |  |                            |  |
| 2                            | 1050                         | 292  | 318  | 374  | 116                        |  |

Proposed horizontal escape appears satisfactory. Please note maximum expected occupancy will be further developed during the course of the project but will be kept within the limits set for horizontal and vertical means of escape.

#### **Provisions for Vertical Means of Escape:**

The building is provided with two protected stairs, one of which is a firefighting shaft (Stair 1). Stair 1 serves from basement to the fifth floor and discharges at ground floor level onto Thanet Street. Stair 2 (a protected escape stair) serves from basement to third floor and discharges at ground floor level onto Thanet Street.

As all escape stairs are lobbied or shown to provide equivalent protection in accordance with BS 9999:2017 Clause 17.3.2, no stair needs to be discounted. Although a stair is not discounted, the location of a fire may prevent one of the storey exits being accessed from that floor (Clause 16.6.1 BS 9999:2017), therefore stair capacities will need to be calculated to take into account that one floor may only be served by 1 escape stair (calculated using the largest floor).

Minimum stair widths have been calculated using BS 9999:2017 Table 13 for an A2 & A1 risk profiles:

**Stair Capacity** 

| Stair 1   | Stair width required per person (mm) | Stair width (mm) proposed | Stair capacity |
|---|--------------------------------------|---------------------------|----------------|
| Stair for basement to ground - 1 floor served A2 risk profile with enhancements | 3.825                                | 1200                      | 314            |
| 5th floor to ground- 5 floors served A1 risk profile with enhancements          | 1.8275                               | 1200                      | 657            |
|   |                                      |                           |                |
| Stair 2   | Stair width required per person (mm) | Stair width (mm) proposed | Stair capacity |
| Stair for basement to ground - 1 floor served A2 risk profile with enhancements | 3.825                                | 1200                      | 314            |
| 5th floor to ground- 5 floors served A1 risk profile with enhancements          | 1.8275                               | 1200                      | 657            |
|   |                                      |                           |                |
| Pasament to ground  | Total capacity                       | Maximum expected          | Minimum stair  |
| Basement to ground  | Total capacity                       | occupancy                 | width allowed  |
| Stair 1 ( Firefighting)   | 313                                  | 113                       | 1200mm         |
| Stair 2 (Escape Stair)  | 313                                  | 113                       | 1200mm         |

Each stair is lobby protected and therefore one does not need to be discounted. Only on the fire floor should the stair serve the entire floor. Therefore each stair should be capable of handling 50% of the floors it serves plus 100% of the largest floor.

| Above ground            | Total capacity | Maximum expected | Minimum stair |  |  |  |
|-------------------------|----------------|------------------|---------------|--|--|--|
| <b>3</b>                | то от отрасто, | occupancy        | width allowed |  |  |  |
| Stair 1 ( Firefighting) | 657            | 508              | 1100mm        |  |  |  |
| Stair 2 (Escape Stair)  | 657            | 508              | 1000mm        |  |  |  |

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For further clarification 2 stairs with a total capacity each of 657 people over 5 floors would mean that if each floor had the same number of people, each floor could have 219 people.

#### **Provisions for Loadbearing Elements of Structure:**

As the building has a top floor more than 18m but less than 30m above ground and primarily has an A1 risk profile with a sprinkler system designed to BS12485 throughout then all load bearing elements of structure are to achieve at least a 60 minute fire resistance rating. This will need to be increased to 120 minutes for any structure supporting the firefighting shaft and 240 minutes for any structure supporting the substation enclosure.

#### **Provisions for Compartmentation:**

All floors are to be of concrete construction and will form compartment floors achieving at least 60 minute fire resistance rating for load bearing, integrity and insulation.

#### Compartmentation (fire-resistance) requirements

| Part of building  | Fire resistance rating (mins) | Fire doors |
|---|-------------------------------|------------|
| Protected stairs  | 60 (each side separately)     | FD30s      |
| Risers  | 60 (each side separately)     | FD30s      |
| Firefighting lobbies & corridors where not part of the FF shaft | 60 (each side separately)     | FD30s      |
| Firefighting shaft  | 120 (Outside) 60 (inside))    | FD60s      |
| The refuse store  | 60 (each side separately)     | FD60s      |
| Protected corridor  | 30 (each side separately)     | FD30s      |
| Plant rooms – Non-Life safety equipment                         | 60 (each side separately)     | FD60s      |
| Plant rooms – Life safety equipment                             | 120 (each side separately)    | FD60s      |
| Storerooms  | 30 (each side separately)     | FD30s      |
| Sub-station enclosure   | 240 (each side separately)    | FD120      |
| Compartment floors  | 60 (from underside only)      | NA         |

#### **Provision of Construction Materials:**

The building is primarily of steel and concrete construction.

#### **Protection of Openings and Firestopping**

Any ductwork passing through compartment/fire resistant walls will maintain integrity of those elements by either:

- Containing within fire resisting construction.
- Containing by using fire resistant ductwork.
- Protection by installing fire dampers.

Ventilation ducts supplying or extracting air directly to or from a protected stairway should not serve any other areas.

Ductwork serving other areas and passing through a stair enclosure should be fire rated or separated by a fire-resistant enclosure.

Ductwork serving both protected escape routes and other areas will be provided with fire and smoke dampers (ES Rated) that are activated automatically on the activation of the building fire alarm and detection system. Dampers to in accordance with BS 9999 Section 32.5.

Ductwork passing through fire rated walls separating fire compartments (other than enclosing protected escape routes or stairs) should be provided with fusible link fire dampers in accordance with BS 9999 Section 32.5.

Any openings for pipes with a restricted diameter (as given in Table 31 of BS 9999) breaching compartment walls are required to be fire stopped (unless protected along its entire length with fire resisting material),

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keeping the opening as small as possible, in accordance with BS 9999. All other pipes (of any diameter) should be provided with a proprietary seal, tested in accordance with BS EN 1366-3:2015.

Thermally actuated fire dampers and automatic actuated fire and smoke dampers triggered by smoke detection are not acceptable on kitchen extract system due to the likely build-up of grease within the duct which can adversely affect the effectiveness of any dampers.

#### **Provisions for Cavities**

Cavity barriers will be provided to close cavities and openings in the following locations:

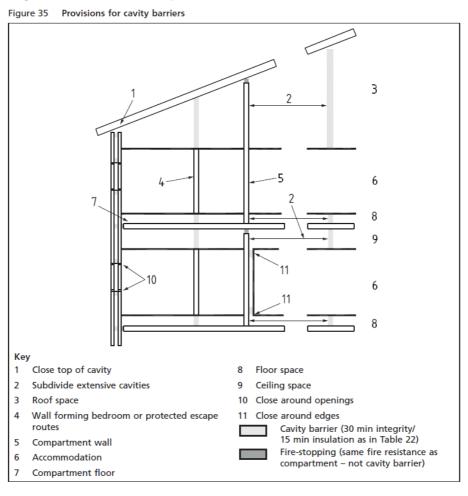
- At the edges of cavities, including around openings such as doors and windows.
- At the junction between an internal cavity wall and every compartment floor, compartment wall or other wall or door assembly forming a fire resisting barrier.

In addition to the above locations cavity barriers are also proposed in any newly created cavities (including ceiling voids and under floor service voids) where the cavity exceeds 20m (i.e. at 20m centres).

The cavity barriers will provide a 30 minute fire rating (i.e. 30 minutes integrity and 15 minutes insulation). Any penetrations through the cavity barriers will be either:

- Fitted with a proprietary sealing system.
- Pipes of limited diameters that are sealed with fire-stopping, or sealed with sleeving of non-combustible pipe material.
- Dampers are required to ductwork.

This is detailed in Figure 35 in BS 9999 as reproduced below.



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#### **Provisions for Firefighting Intervention:**

As the proposed building is to have a floor over 18m above ground level therefore a firefighting shaft is required. The new 4<sup>th</sup> and 5<sup>th</sup> floors are both less than 900m² in area and therefore it is considered that only one firefighting shaft is required. However, it is noted that all the existing floors, which are lower than 18m above ground level do exceed 900m² and therefore the provision of one firefighting shaft should be verified with the LFB and the BCO responsible for this project.

The proposed firefighting shaft will include:

- Firefighting stair
- Firefighting lift
- Firefighting lobby (Smoke controlled)
- A fire main (dry riser)
- A 1m<sup>2</sup> AOV to the head of the stair.

The firefighting stair should be designed in accordance with BS 5395-1, with a width between the walls or balustrades of not less than 1.1m. This width should be maintained clear for a vertical distance of 2.0m, measured from the pitch line or landing floor level, with the following exceptions:

- a) stringers, each intruding into the stair not more than 30 mm; and
- b) handrails, each intruding into the stair not more than 100 mm.

Firefighting lobbies should have a clear floor area of not less than 5m² and should not exceed 20m². All principal dimensions should be not less than 1.5m. It is noted that some of the lobbies may slightly exceed the 20m² limit. This is considered reasonable and should not pose any risk to fire fighting operations as all lobbies will have a basic layout, with all areas within them clearly visible and unobstructed from all other areas within them and with doors into adjoining areas being clearly sign posted.

Additional doors will be provided on the fire service access level to disconnect the upper stories from the basement stair section.

A firefighting shaft should not contain any cupboards or provide access to service shafts serving the remainder of the building.

All elements of structure that support the walls of a firefighting shaft should achieve at least 120minutes fire resistance rating for load bearing.

# 2.8 Section 8: Issues which might affect the fire safety of the development:

Access is compliant subject to provisions highlighted in Section 2.7.

#### 2.9 Section 9: Local development document policies relating to fire safety:

The project is located within the Greater London Authority (GLA) region and therefore should support the design intent of the London Plan Sections D12. Since the application is for a major development, Policy D12 Part B has been addressed.

Policy D5(B5) in the London Plan is to support dignified escape for persons of reduced mobility. The proposed development has introduced 2 dual purpose lifts for evacuation and firefighting into the main core. The lifts will meet all the requirements for both a firefighting lift and an evacuation lift. This is done in order to provide redundancy in the evacuation and firefighting phases. Both lifts will be able to provide means of dignified escape from all floor levels to the ground floor from which they can exit the building via a protected route leading to open air with level access.

Policy D12 Part B requires that all major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor. This statement details how the development proposal will function in terms of:

"1) the building's construction: methods, products and materials used, including manufacturers' details"

Construction methods, products and materials used will be developed by the design team in strict accordance with guidance to the Building Regulations. Manufacturer's details and installations will be continually monitored through the procurement.

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"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"

The building design has suitably located and sized escape stairs to accommodate safe escape routes from the building along with evacuation/ firefighting lifts provision that will accommodate disabled users with assistance from management.

"3) features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans"

The development is to be fitted with a suite of fire safety systems including, sprinklers, fire detection and alarm system, emergency lighting, and signage. These together with the passive measures (fire rated walls and doors) and ongoing management and maintenance plans will provide a robust life safety strategy for the occupation of the buildings.

"4) 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"

Sections 2.10 - 2.14 set out the strategy with regards to firefighting access and equipment to undertake firefighting operations.

"5) how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building"

Access to and around the site is available directly by public highways with an access point into the firefighting shaft.

"6) ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures"

A robust management operation plan will be put in place to ensure that the building is maintained during it's use and that any future modifications are assessed against existing provisions prior to being undertaken.

## 2.10 Section 10: Fire service site plan

The proposed building is to have a floor over 18m above ground level therefore a firefighting shaft is required. The new 4<sup>th</sup> and 5<sup>th</sup> floors are both less than 900m² in area and therefore it is considered that only one firefighting shaft is required. However, it is noted that all the existing floors, which are lower than 18m above ground level do exceed 900m² and therefore the provision of one firefighting shaft should be verified with the LFB and the BCO responsible for this project.

The proposed firefighting shaft will include:

- Firefighting stair
- Firefighting lift
- Firefighting lobby (Smoke controlled)
- A fire main (dry riser)
- A 1m<sup>2</sup> AOV to the head of the stair.

The firefighting stair should be designed in accordance with BS 5395-1, with a width between the walls or balustrades of not less than 1.1m. This width should be maintained clear for a vertical distance of 2.0m, measured from the pitch line or landing floor level, with the following exceptions:

- c) stringers, each intruding into the stair not more than 30 mm; and
- d) handrails, each intruding into the stair not more than 100 mm.

Firefighting lobbies should have a clear floor area of not less than 5m² and should not exceed 20m². All principal dimensions should be not less than 1.5m. It is noted that some of the lobbies may slightly exceed the 20m² limit. This is considered reasonable and should not pose any risk to fire fighting operations as all lobbies will have a basic layout, with all areas within them clearly visible and unobstructed from all other areas within them and with doors into adjoining areas being clearly sign posted.

Additional doors will be provided on the fire service access level to disconnect the upper stories from the basement stair section.

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A firefighting shaft should not contain any cupboards or provide access to service shafts serving the remainder of the building.

All elements of structure that support the walls of a firefighting shaft should achieve at least 120 minutes fire resistance rating for load bearing.

## 2.11 Section 11: Emergency road vehicle access

Firefighting access is key for successful firefighting and therefore the appropriate provisions must be made regarding site access.

Public roadways will allow access into the building satisfying the following table requirements.

Table 4: LFB fire appliance access route requirements

|  | Pump (P) | 32m Turntable<br>Ladder (TL)      | 64m Turntable<br>Ladder (TL)   | Fire Rescue<br>Unit (FRU) | Special |
|--|----------|-----------------------------------|--------------------------------|---------------------------|---------|
| Min width between kerbs (m)                                    |          |                                   | 3.7                            |                           |         |
| Min Width of gateway (m)                                       |          |                                   | 3.2                            |                           |         |
| Max. width considering equipment trays, any extending legs (m) | 4.18     | 5.6<br>without<br>spreader plates | 6.4<br>with spreader<br>plates | 5.34                      | 4.4     |
| Min clearance height (m)                                       | 3.4      | 3.45                              | 4.1                            | 3.35                      | 4.25    |
| Appliance length(m)  | 7.8      | 10.3                              | 12                             | 9.2                       | 9.9     |
| Min sweep circle (turning circle between walls) (m)            | 17       | 19.5                              | 23.5                           | 18.6                      | 24.5    |
| Min turning circle between kerbs (m)                           | 16       | 17.5                              | 21.5                           | 17                        | 22      |
| Gross Vehicle Weight<br>(GVW) (KG)                             | 14000    | 18000                             | 32000                          | 14500                     | 26000   |
| Capacity, Gross Laden<br>Weight (GLW) (KG)                     | 12286    | 17284                             | 30173                          | 12900                     | 24600   |

Note: \* The minimum carrying capacity should be checked with the local fire brigade.

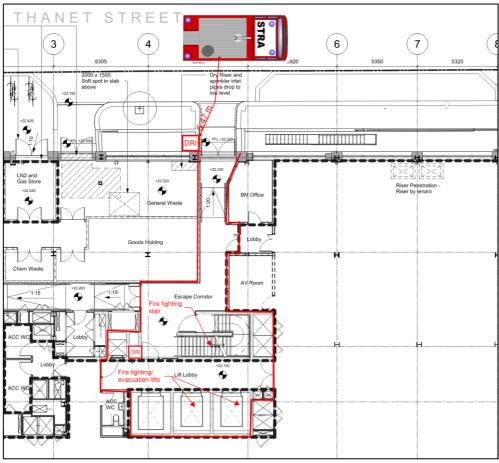


Figure 4: Firefighting access into the building

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#### 2.12 Section 12: Siting of fire appliances

Siting of the fire appliances will be to the front of the main building entry point at ground level.

# 2.13 Section 13: Suitability of water supply for the scale of development proposed

The existing public hydrants are illustrated in the figure below, with 2 fire hydrants located within 90m of the entrance of the building.

The water supplies will therefore be via the public mains.



Figure 5: Fire Hydrant locations (courtesy of RISC Authority).

# 2.14 Section 14: Fire service site plan

The design team will provide a site plan as stated in Section 10.

#### 2.15 Section 15: Declaration and Signature

We the undersigned confirm that principles given in the above Planning Fire Statement will satisfy the Policies D5(B5) and D12 of the London Plan.

The principles of this Planning Fire Statement will be further developed to satisfy the Policies of the London Plan and the functional requirements of the Building Regulations.

The above Planning Fire Statement and declaration is signed by Robert Clarke.

#### 2.16 Section 16: Date

The following fire safety statement is dated 11 April 2025.

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#### 2.17 Conclusion

Having reviewed the documentation issued to Marshall Fire Ltd by McLaughlin & Harvey we agree with the overall design proposals and conclusion presented in the drawings that the proposed works can be developed to satisfy the functional requirements of the Building Regulations.

It is considered that the scheme meets Planning Gateway One and gives respect to the proposed changes to Fire Safety in accordance with BS 9999:2017

The London Plan requests that the 'Highest Standards of Fire Safety' be considered and therefore property protection whilst not a Building Regulation requirement maybe considered to increase the life safety and fire safety of the building.

The evolution of the design development and the principles of the golden thread concept and will form the basis of the developing Fire Strategy through further design, construction and operating of the building.

We would however reiterate that the findings are limited to the information reviewed only and the installation, maintenance and ongoing maintenance are not our responsibility.

# 3. References

BS 9999:2017 - Fire safety in the design, management and use of buildings - Code of practice

BS 5839-1, 2017. Fire detection and fire alarm systems for non-residential buildings. Part 1: Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises. BSI Standards Limited.

Fire Statement Guidance, Annex D Gov.co.uk

BR 187: 2014 External Fire Spread Building Separation and Boundary Distances.

London Plan Policy D5 and Fire Safety Policy D12.