Fire Statement – FS 001.2

Project: VITA Student, Plot 9b First Street

Subject: The Town and Country Planning Order - Fire Statement

Date: 9 December 2024

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Checked: Iain Macfarlane

1 Introduction

This Fire Statement has been prepared by Design Fire Consultants Ltd (DFC) and is submitted in support of the planning application made by VITA Meadow Ltd for the Plot 9b First Street development located in Manchester. The temporary use of the construction compound does not impact the Fire Statement.

The purpose of this Fire Statement is to evidence that fire safety matters, as they relate to planning, have been considered at an early stage of the project.

This Fire Statement includes a focused and concise summary of the approach to the fire safety design of the development, site layout, access and facilities for firefighting, details of any consultation undertaken on issues relating to fire safety and consideration of any policies relating to fire safety in relevant local development documents.

This Fire Statement forms part of the planning application information only. It is not intended for formal Building Regulations submission and should not be used as such.

1.1 Town and Country Planning Order

The requirement for a Fire Statement is requested under The Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended)[1].

The regulatory regime also establishes the Health and Safety Executive as a statutory consultee.

A Fire Statement is required to be submitted as part of a full planning application (or with the reserved matters planning application) for:

[1] UK Government, 'The Town and Country Planning (Development Management Procedure and Section 62A Application (England) (Amendment) Order 2021', July 2021

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- A development which involves the provision of one or more relevant buildings;
- A development of an existing relevant building; or
- A development within the curtilage of a relevant building.

A relevant building is currently defined as:

- A building that contains two or more dwellings; and is 18m or more in height, or contains 7 or more storeys.
- A building that constitutes educational accommodation; and is 18m or more in height, or contains 7 or more storeys.

Educational accommodation is defined as:

- Residential accommodation for the use of students who are boarders at school in connection with them attending a school; or
- Residential accommodation for use of students attending higher education courses, further education courses, or course at 16 to 19 Academies.

The height of a building is measured from ground level on the lowest side of the building to the top floor surface of the top storey of the building. The height of the top storey excludes any storey which is a roof-top machinery or plant area or consists exclusively of machinery or plant rooms.

The number of storeys in a building is determined from the lowest external ground level, excluding any storeys below the ground level immediately adjacent to that part of the building. Where the building contains a mezzanine floor, if its internal area is at least 50% of the internal floor area of the largest storey in the building (which is not below ground level), it should be considered a storey.

1.2 Relevant Documents

Table 1: Relevant documents used to inform the Fire Statement

Name	Reference
Site Plan - Proposed	VS9B-TGA-G100-PL-ZZ-95021
General Arrangement Elevation - North	VS9B-TGA-G200-EL-ZZ-95050
General Arrangement Elevation - East	VS9B-TGA-G200-EL-ZZ-95051
General Arrangement Elevation - South	VS9B-TGA-G200-EL-ZZ-95052

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Name	Reference
General Arrangement Elevation - West	VS9B-TGA-G200-EL-ZZ-95053
General Arrangement - Level 00	VS9B-TGA-G200-PL-00-95030
General Arrangement - Level 01	VS9B-TGA-G200-PL-01-95031
General Arrangement - Level 02-03	VS9B-TGA-G200-PL-02-95032
General Arrangement - Level 04-11	VS9B-TGA-G200-PL-04-95033
General Arrangement - Level 12	VS9B-TGA-G200-PL-12-95034
General Arrangement - Level 13-31	VS9B-TGA-G200-PL-13-95035
General Arrangement - Level 32	VS9B-TGA-G200-PL-32-95036
General Arrangement - Level 33	VS9B-TGA-G200-PL-33-95037

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2 Fire Statement Form

The Fire Statement form includes a concise summary of the approach to fire safety taken, the site layout, access and facilities for firefighting, details of consultation undertaken on fire safety and consideration of local development documents.

Table 2: Application information

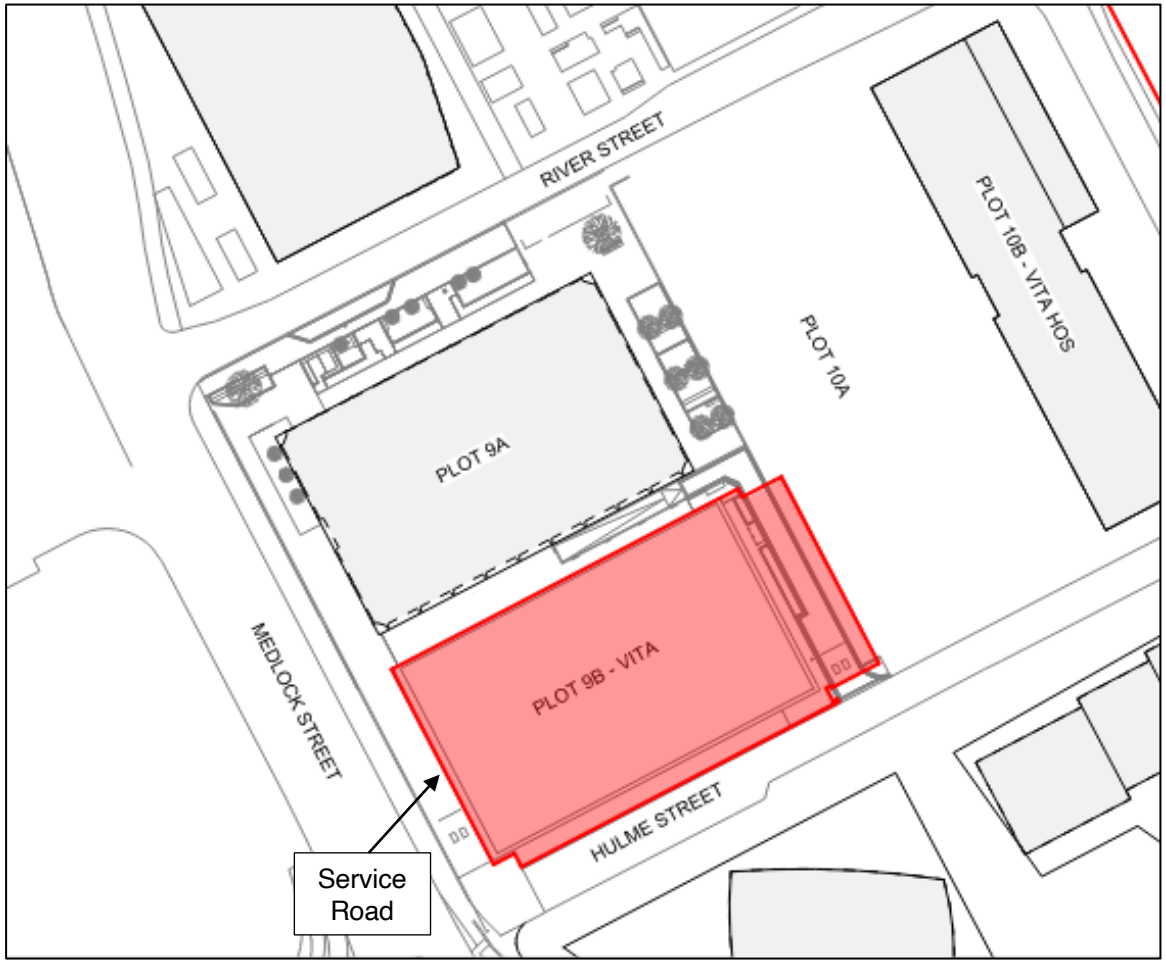
Application information		
1.	Site Address line 1	Plot 9b
	Site Address Line 2	First Street
	Site Address Line 3	
	Town/City	Manchester
	County	
	Site Postcode (Optional)	M15 4AA
2.	Description of proposed development including any change of use (as stated on the application form)	Erection of a purpose-built student accommodation (PBSA) building (Sui Generis), alongside ancillary amenity space, landscaping, secure cycle parking and other associated works; and use of Land east of River Street as a construction compound.

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Application information		
3.	Name of person completing the Fire Statement (as Section 15), relevant qualifications and experience.	**Author's Name:** Francesca Ravenhill **Post-Nominals:** BSc MSc MIMA **Relevant Qualifications and Experience:** Francesca has a Mathematical background with 7 years of experience in the fire safety consultancy industry. Francesca has worked on a range of projects across the different sectors including hotels and high rise residential. **Checker's Name:** Iain Macfarlane **Post-Nominals:** BSc CEng MIFireE MSFPE **Relevant Qualifications and Experience**: Iain is a Chartered Engineer and has a BSc (Hons) in Fire Safety and Business Management. Iain has over 20 years of experience in the fire safety consultancy industry and has led fire safety engineering on a wide range of projects in the UK, Europe, the Middle East, Africa as well as North America. Iain has technical expertise across the discipline, and across building sectors, although specialises in strategies for high rise and complex building design as well as with residential buildings.
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.	As the building is over 50m tall, BS 9991 recommends a Qualitative Design Review (QDR) is carried out in accordance with BS 7974[2] to determine whether BS 9991 recommendations are appropriate or if any fire engineering solutions should be carried out. The QDR will consist of three meetings as follows: • Meeting 1: Internal DFC review meeting held on 4th June 2024. A set of meeting minutes was produced. • Meeting 2: Meeting with DFC, Client, Architect, Contractor, Building Regulations Advisor and Greater Manchester Fire and Rescue Service (GMFRS) held on 1st October 2024. A set of meeting minutes has been produced. • Meeting 3: Final meeting with the appointed building control body and GMFRS, if willing, to discuss the detailed design of the scheme. This meeting will be carried out in RIBA Stage 4. The general arrangement plans and a high-level summary of the fire strategy principles have been sent to the Health and Safety Executive (HSE) for an initial review on 3rd July 2024 (pgo-5478). The HSE advised that pre-application advise is not currently available.

[2] BS 7974, 'Application of fire safety engineering principles to the design of buildings. Code of practice', 2019.

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Application information		
5.	Site layout plan with block numbering as per building schedule referred to in 6. *(consistent with other plans drawings and information submitted in connection with the application)*	As shown below, the proposed Plot 9b First Street development comprises a single high rise student residential building bordered by a service road (on Medlock Street), Hulme Street, and two office buildings (Plot 9a & Plot 10a First Street). 

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Table 3: The principles, concepts and approach relating to fire safety

The principles, concepts and approach relating to fire safety that have been applied to the development									
6. Building Schedule									
Site Information				Building Information			Resident Safety Information		
a) Block no. as per site layout plan above	b) - Block height (m) - Number of storeys excluding those below ground level - Number of storeys including those below ground level	c) proposed use (one per line)	d) location of use within block by storey	e) Standards relating to fire safety/ approach applied	f) Balconies	g) External wall systems	h) Approach to evacuation	i) Automatic suppression	j) Accessible housing provided
Block 1	Proposed block height is approximately 91.8m to the topmost occupied storey. The block consists of 32 above ground storeys including Ground Floor. There are no below ground storeys.	Other residential accommodation	Student ancillary accommodation (gym, study spaces, laundry, refuse etc.) and plant are located on the Ground Floor, First Floor and Roof (Level 32).	BS 9999	No Balconies	Class A2-s1, d0 or better	Simultaneous	Yes – Commercial Sprinklers (Full)	N/A non-residential

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The principles, concepts and approach relating to fire safety that have been applied to the development									
Block 1	Proposed block height is approximately 91.8m to the topmost occupied storey. The block consists of 32 above ground storeys including Ground Floor. There are no below ground storeys.	Student accommodation	Student accommodation studio rooms are located on Level 01 to Level 31.	BS 9991	No Balconies	Class A2-s1, d0 or better	Stay Put	Yes – Residential Sprinklers (Full)	43 units (5%) will be in accordance with Part M4(2) & M4(3). These will be distributed from Levels 1 to 31.

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The principles, concepts and approach relating to fire safety that have been applied to the development

7. Specific technical complexities

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above

Building Height: The building height exceeds 50m. Therefore, a Qualitative Design Review (QDR) will be required to ensure an adequate level of robustness is achieved in the fire strategy. This will consist of relevant documentation of the fire strategy approach being taken with due consideration of the building height. At this stage an internal technical review has been carried out to identify the challenges in the scheme and any additional requirements. This was followed by a review with a Building Regulations Advisor (Building Approvers) and Greater Manchester Fire and Rescue Service (GMFRS) to gauge their professional opinions and give confidence to the fire strategy approach. The minutes for these meetings have been recorded. As the design develops, additional meetings with various stakeholders and designers will be carried out to ensure that the fire strategy being developed will be viable.

Open plan apartment layout: The proposed layouts will be designed in accordance with the recommendations of BS 9991 for open plan flat design. Guidance notes that the cooking appliances in an open plan apartment should not be adjacent to the entrance of the flat. The design has been based on positioning the cooking facilities at least 1.8m away from the apartment entrance with allowance for a 0.9m escape route to ensure that a cooking fire will not impede on occupant egress. This will be reviewed as the design develops.

Fire service vehicle access: Fire service vehicle access is provided via Hulme Street and the service road to the west of Plot 9b (Block 1). The service road contains security cordons via the use of mechanical barriers, however vehicle access to Plot 9b via the barriers has been agreed and forms part of the legal contractual agreement across the wider site.

Refuse lobby internal connection: Guidance recommends that where a stair serves an area of higher fire risk it should be provided with an area of permanent ventilation not less than 0.4m^2 or be protected from the ingress of smoke by a mechanical smoke ventilation system. Therefore, due to the risk associated with the refuse room, the room will be sprinkler protected with a BS EN 12845[3] sprinkler system and separated from the stair with a ventilated lobby. The lobby will be ventilated with a 1.5m^2 natural smoke shaft or mechanical equivalent as per the above ground lobbies.

Shared commercial and residential sprinkler tank: A shared sprinkler tank will be provided for the residential and commercial sprinkler systems. The tank will be designed in accordance with the most onerous requirements in BS 9251[4] and BS EN 12845.

Items above have been discussed with the Building Regulations Advisor and GMFRS. The above will be further detailed in the Building Regulations submission fire strategy report.

[3] BS EN 12845, 'Fixed firefighting systems. Automatic sprinkler systems. Design, installation and maintenance', 2015+2019.
[4] BS 9251, 'Fire sprinkler systems for domestic and residential occupancies. Code of practice', 2021.

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The principles, concepts and approach relating to fire safety that have been applied to the development

8. Issues which might affect the fire safety of the development

Explain how any issues which might affect the fire safety of the development have been addressed.

Changes to design standards: BS 9991 is currently under review and due for imminent release. Therefore, changes may occur as a result of the new version being published; however, we are not able to confirm which changes will occur in the final version. When this occurs, a review of the new guidance and any implications on the developed fire strategy will be carried out to determine any risks that require addressing. Compliance with design guidance is not mandatory for compliance with Part B of Schedule 1 to the Building Regulations 2010, and alternative solutions can be acceptable where appropriate reasoning is provided. The approach being adopted would be documented for submission to the approving authorities (Building Safety Regulator) for review. In anticipation of future regulatory changes, the client has requested that additional requirements are met in the design. These requirements are in excess of that required to meet prescriptive fire safety guidance at the time of writing and will be refined with the client as the design develops.

Internal layouts may change as design develops. The fire strategy design will be developed in accordance with BS 9991 and BS 9999. Any deviations from the guidance as the design develops will be assessed. The solution will be justified with supporting assessment for review by the approving authorities (i.e. Building Safety Regulator), to obtain agreement that the scheme complies with Part B of the Building Regulations.

Where future building works (e.g. fit-out or changes post-handover) are exempt from the Building Regulations they would need to be managed under the Regulatory Reform (Fire Safety) Order 2005[5]. However, if the proposed works are to carry out 'building work' as defined in Regulation 3 of the Building Regulations, then the works must meet the relevant technical requirements in the Building Regulations at the time, and they must not make other fabric, services, and fittings less compliant than they were before – or dangerous.

9. Local development document policies relating to fire safety

Not applicable. No local policies have been identified.

[5] Statutory Instruments, '2005 No. 1541 Regulatory Reform, England and Wales, The Regulatory Reform (Fire Safety) Order 2005', 2005.

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Table 4: ***Emergency road vehicle access and water supplies for firefighting purposes***

Emergency road vehicle access and water supplies for firefighting purposes
10. Fire service site plan *Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?* Fire service access to the site is based on the guidance contained within BS 9991 and associated references to BS 9999. The building will be served by two firefighting shafts. Each firefighting shaft includes the following provisions: • A firefighting stair with minimum width of 1100mm, designed in accordance with BS 5395-1[6]. • A remote or automatic vent at the head of the stair open to the roof with a minimum free area of 1m^2. • A firefighting lift designed and installed in accordance with BS EN 81-20[7] and BS EN 81-72[8] provided within 7.5m of the stair door. • A wet rising main outlet provided in the stair on full landings at every level in accordance with BS 9990[9]. • A ventilated fire sterile firefighting lobby at all levels. Any services accessed from or passing through the shaft should be associated with the firefighting shaft only. • The firefighting shaft will be separated from the remainder of the building with 120 minutes fire resisting construction. Construction separating the firefighting stair, firefighting lift and firefighting lobby within the shaft should be 60 minutes fire resisting construction. The site plan provided in Section 14 shows the fire service access and provisions on the site, including the location of the wet rising main replenishment inlets, location of firefighting lifts and water hydrants. The site plan also shows indicative assembly points which will be located remote from the building in a place of ultimate safety as defined by guidance. The final location of the assembly points will be determined by the building management as the design develops and form part of the management plan for the building.

[6] BS 5395: Part 1, 'Stairs. Code of practice for the design of stairs with straight flights and winders', 2010.
[7] BS EN 81-20, 'Safety rules for the construction and installation of lifts. Lifts for the transport of persons and goods – Passenger and goods passenger lifts', 2020.
[8] BS EN 81-72, 'Safety rules for the construction and installation of lifts – particular applications for passenger and goods passenger lifts. Firefighters lifts', 2020.
[9] BS 9990, 'Non automatic fire-fighting systems in buildings. Code of practice', 2015.

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Emergency road vehicle access and water supplies for firefighting purposes

11. Emergency road vehicle access

Specify emergency road vehicle access to the site entrances indicated on the site plan

The access route (Hulme Street) is an existing highway and will typically provide the following access requirements for a pump appliance (in accordance with Table 20 of BS 9999). The service road and access route between Block 1 and Plot 10a should provide the following access requirements for a pump appliance:

Min. width of road between kerbs	Min. width of gateways	Min. turning circle between kerbs	Min. turning circle between walls	Min. clearance height	Min. carrying capacity	Max. reversing distance
3.7m	3.1m	16.8m	19.2m	3.7m	12.5 tonnes	20m

As noted in Section 7, access along the service road and access route between Block 1 and Plot 10a contains security cordons via the use of mechanical barriers. Access via the barriers has been agreed and forms part of the legal contractual agreement across the wider site. This has been discussed with Greater Manchester Fire and Rescue Service and will need to be agreed as part of the formal consultation process.

Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed? No – Swept path analysis has been undertaken by SLR Consulting to determine the suitability of the access routes on the site. As noted in Section 7, mechanical barriers are located on the route however access via the barriers has been agreed as part of the legal contractual agreement across the wider site. This has been discussed with Greater Manchester Fire and Rescue Service and will need to be agreed as part of the formal consultation process.

12. Siting of Fire Appliances

Guide: no more than 200 words

The firefighting shafts are fitted with wet rising fire mains. Emergency vehicle access for a pumping appliance will be provided to within 18m of, and within sight of, a suitable entrance giving access to the wet fire main and within sight of an inlet for the emergency replenishment of the suction tank for the wet fire main.

The fire service site plan provided in Section 14 indicates that the fire service vehicle provisions are in accordance with the guidance set out in BS 9999 and BS 9991.

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13. Suitability of water supply for the scale of development proposed

As noted in the building schedule (Section 6), the building will be served by a commercial and residential sprinkler system designed and installed in accordance with BS EN 12845 and BS 9251 respectively. As noted in Section 7, the commercial and residential sprinkler system will share a sprinkler tank. The tank will be designed in accordance with the most onerous requirements in BS 9251 and BS EN 12845.

Fire mains will be designed and installed in accordance with BS 9990. As indicated below on the live hydrant map from Greater Manchester Fire and Rescue Service (GMFRS) and shown indicatively on the fire service site plan in Section 14, public hydrants are located within 90m of an entry point to the building and not more than 90m apart.

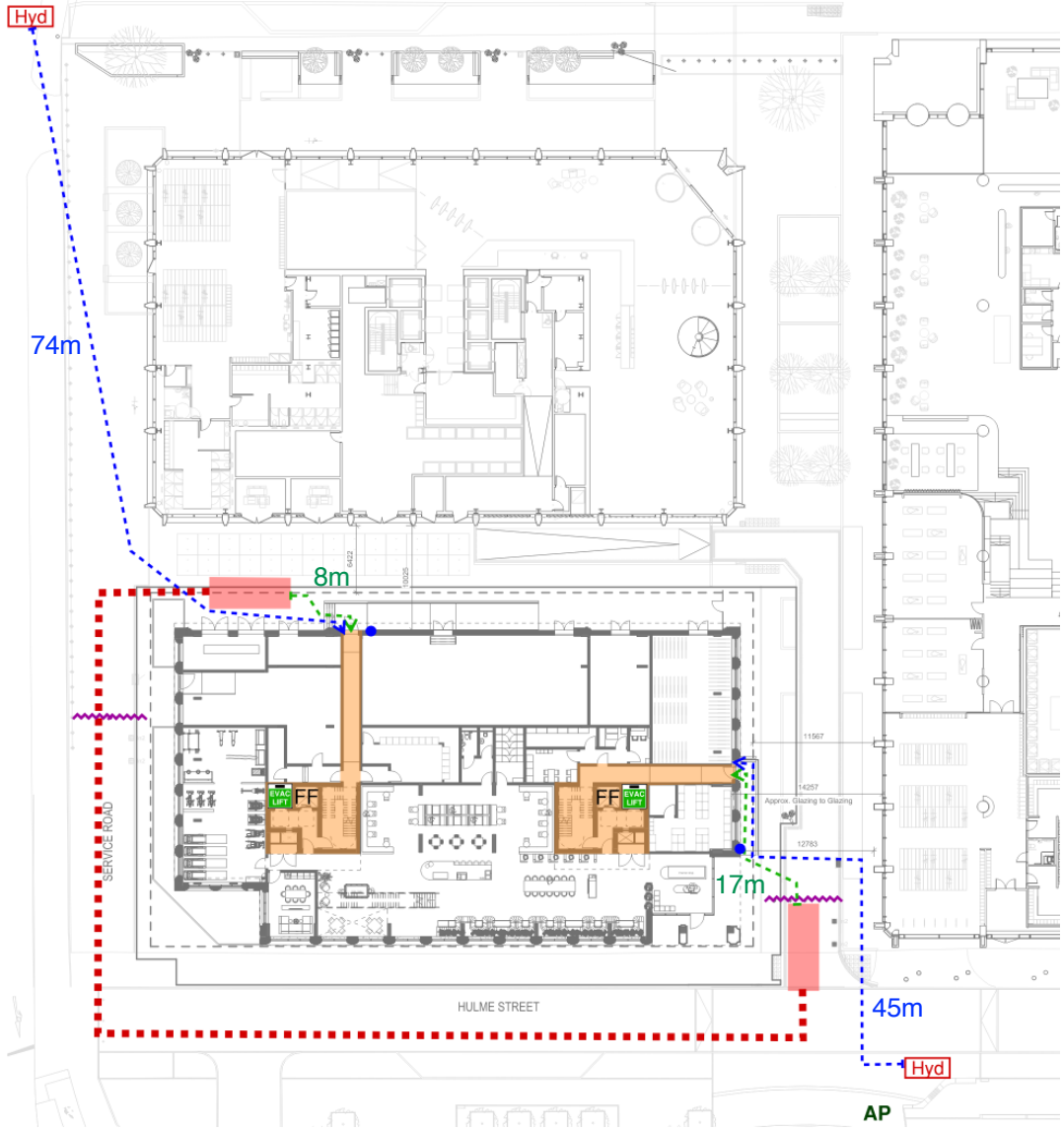
Nature of water supply (Choose one below): Hydrant – Public.

Does the proposed development rely on existing hydrants and if so, are they currently usable / operable? Yes



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14. Fire service site plan



Key

- Firefighting shaft
- FF — Firefighting lift
- EVAC LIFT — Evacuation lift
- Fire service vehicle
- Vehicle access route
- 8m — Fire service access point
- Mechanical barriers
- Emergency replenishment
- 8m — Fire hydrant distance
- Hyd — Fire hydrant
- AP — Indicative assembly point

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Table 5: Fire Statement completed by

Fire Statement completed by		
15. Signature	Author: Sophie Ewen / Francesca Ravenhill	Checker: Iain Macfarlane
		
16. Date	9 December 2024	

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