

## Fire Statement – FS 001.0

Project: Plot 10b First Street House of Social 1 Ltd  
Subject: The Town and Country Planning Order - Fire Statement  
Date: 23 January 2023  
Author: Francesca Ravenhill  
Checked: Iain Macfarlane



### 1 Introduction

This Fire Statement has been prepared by Design Fire Consultants (DFC) and is submitted in support of the planning application made by House of Social 1 Ltd for Plot 10b First Street the House of Social development located in Manchester.

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

This Fire Statement includes a focused and concise summary of the approach relating to the fire safety design of the development, site layout, access and facilities for firefighting, details of any consultation undertaken (if any) 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)<sup>1</sup>.

Under planning gateway one, the following key elements were introduced by the regulatory regime:

- To establish the Health and Safety Executive as a statutory consultee for relevant planning applications.

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

## Plot 10b First Street House of Social

- To require a Fire Statement to be submitted with a relevant application for planning permission for a development which involves one or more relevant buildings.

A relevant building is currently defined as either:

- A building that contains two or more dwellings; and is 18m or more in height, or contains 7 or more storeys; or
- 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 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                    | Drawing Number                |
|-------------------------|-------------------------------|
| Level 00 (Ground Floor) | 1172-TGA-XX-00-DR-A-03000-P03 |
| Mezzanine               | 1172-TGA-XX-00-DR-A-03001-P02 |
| Level 01                | 1172-TGA-XX-00-DR-A-03002-P01 |
| Level 02 (Typical)      | 1172-TGA-XX-00-DR-A-03003-P04 |
| Level 13                | 1172-TGA-XX-00-DR-A-03014-P01 |
| Site Plan               | 1172-TGA-XX-XX-DR-A-95020-P01 |

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| Name                    | Drawing Number                |
|-------------------------|-------------------------------|
| East Elevation          | 1172-TGA-XX-XX-DR-A-05000-P03 |
| North & South Elevation | 1172-TGA-XX-XX-DR-A-05001-P03 |
| West Elevation          | 1172-TGA-XX-XX-DR-A-05002-P03 |

## 2 Fire Statement Form

The Fire Statement form includes a concise summary of the relevant information for the application and the fire safety matters which are relevant to land use planning. The information relating to fire safety measures for the building provided herein is not exhaustive and will be refined as the design develops.

*Table 2: Application information*

| Application information |                                                                                                     |                                                                                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                      | Site Address line 1                                                                                 | Plot 10b                                                                                                                                                                                                                                                                                    |
|                         | Site Address Line 2                                                                                 | First Street                                                                                                                                                                                                                                                                                |
|                         | Site Address Line 3                                                                                 | River Street                                                                                                                                                                                                                                                                                |
|                         | 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) | Full Planning Permission for a 14-storey building comprising purpose-built student accommodation (Sui Generis) and ground floor foodhall (Sui Generis), and other associated works including external amenity spaces, public realm, secure cycle parking, access and servicing arrangements |

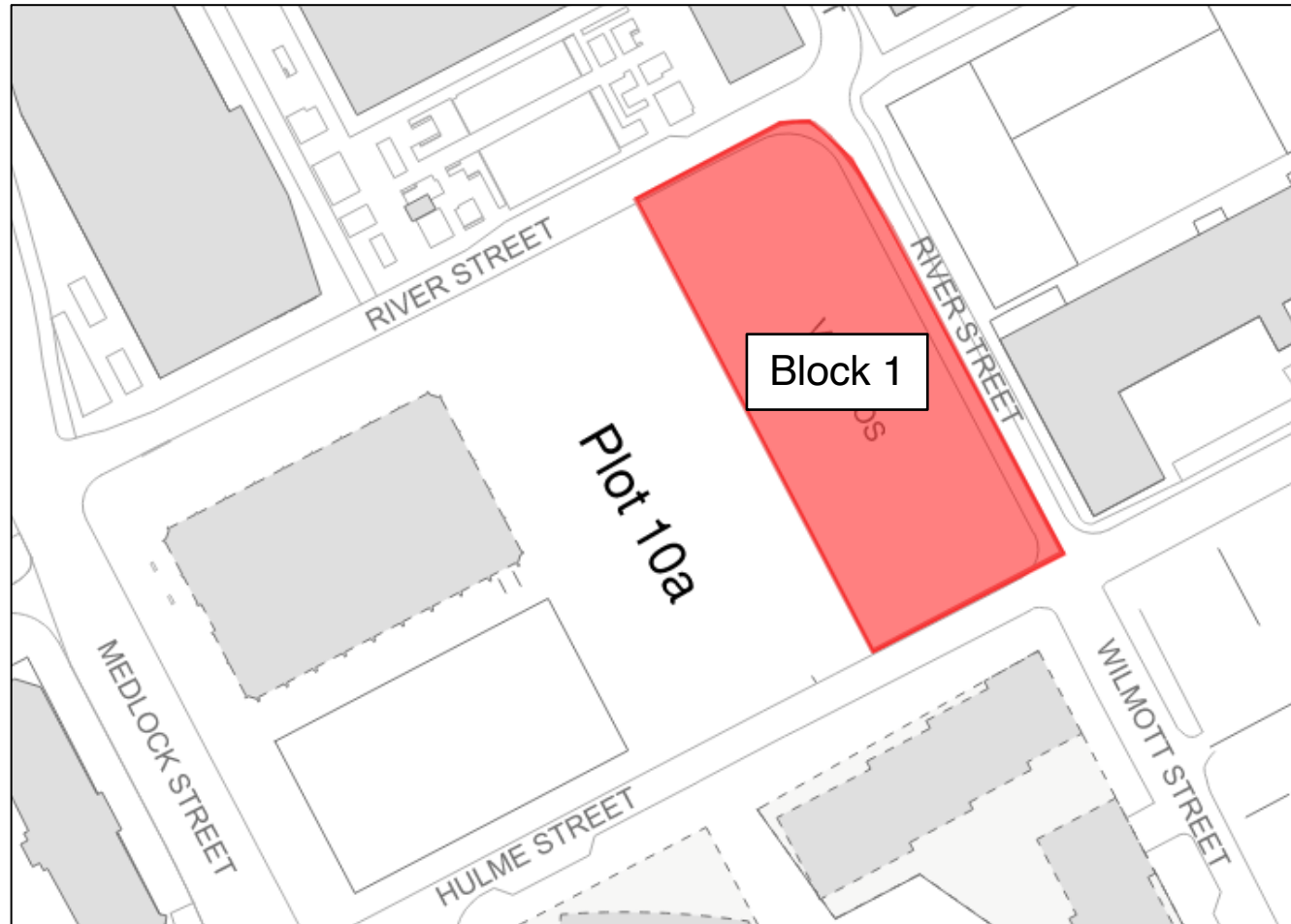
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| Application information |                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.                      | Name of person completing the Fire Statement (as Section 15), relevant qualifications and experience.                                                   | <p><b>Author's Name:</b> Francesca Ravenhill</p> <p><b>Post-Nominals:</b> BSc MSc MIMA</p> <p><b>Relevant Qualifications and Experience:</b></p> <p>Francesca has a Mathematical background with 5 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.</p> <p><b>Checker's Name:</b> Iain Macfarlane</p> <p><b>Post-Nominals:</b> BSc CEng MIFireE MSFPE</p> <p><b>Relevant Qualifications and Experience:</b></p> <p>Iain is a Chartered Engineer and has a BSc (Hons) in Fire Safety and Business Management. Iain has 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.</p> |
| 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. | <p>The fire strategy design has been discussed with Ball and Berry Approved Inspectors within design workshops, however a formal Building Regulations submission has not yet been undertaken.</p> <p>Design Fire Consultants (DFC) has presented a high-level review of the technical complexities on the scheme (as noted in Section 7) and once the design is further developed during RIBA Stage 3, Ball and Berry can support consultation with Greater Manchester Fire and Rescue Service.</p> <p>A pre application meeting (pgo-2256) has been held prior to submission of the fire statement to discuss the fire safety matters relevant to the planning application.</p>                                                                                                                                                                                                                                                                                                                                                                                    |

## Plot 10b First Street House of Social

5. Site layout plan with block numbering as per building schedule referred to in 6.

As shown below, the proposed Plot 10b First Street House of Social development comprises a single high rise student residential building bordered by River Street, Hulme Street and Plot 10a First Street, which contain student residential and office buildings.



**Plot 10b First Street House of Social**
*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)<br>Block no. as per site layout plan above                                                           | b) - Block height (m)<br><br>- Number of storeys excluding those below ground level<br><br>- 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 38.7m to the topmost occupied storey.<br><br>The block consists of 14 above ground storeys including Ground Floor and Mezzanine.<br><br>There are no below ground storeys. | Restaurant, café, hot good, take-away, drinking establishment | A food hall is located at Ground Floor and Mezzanine. | BS 9999                                                | No Balconies | Class A2-s1, d0 or better | Simultaneous                | Yes – Commercial Sprinklers (Full) | N/A non-residential            |

**Plot 10b First Street House of Social**

| The principles, concepts and approach relating to fire safety that have been applied to the development |                                                                                                                                                                                                                          |                       |                                                                                                                                                 |         |              |                           |          |                                     |                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|---------------------------|----------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Block 1                                                                                                 | <p>Proposed block height is approximately 38.7m to the topmost occupied storey.</p> <p>The block consists of 14 above ground storeys including Ground Floor and Mezzanine.</p> <p>There are no below ground storeys.</p> | Student accommodation | Student ancillary accommodation and plant are located at Ground Floor and Level 13 (Roof). Mezzanine to Level 12 contain student accommodation. | BS 9991 | No Balconies | Class A2-s1, d0 or better | Stay Put | Yes – Residential Sprinklers (Full) | 24 of the units will be in accordance with Part M4(2) & M4(3). These will be located on every floor from Level 1 to 12 (2 per floor). |

## Plot 10b First Street House of Social

### 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. Guide: no more than 500 words
- Cluster flat layout: The proposed cluster accommodation will be designed in accordance with the recommendations in BS 9991. Guidance notes that kitchens should be located at the remote end of the corridor away from the final exit to the cluster. As the design develops the location of the kitchen and cooking facilities will need to be assessed to ensure that a cooking fire will not impede occupant egress. This may require alternative cooker locations, or the implementation of power cut-off devices to cooking hobs to mitigate the associated hazards. A power cut-off device has been allowed for in each cluster. Where required, an assessment into the effectiveness of power cut-off devices in conjunction with sprinkler system protection in protecting means of escape, will be fully qualified during detailed design.
- Siting of stairs and corridor travel distance: Clause 27 of BS 9991 notes '*additional common stairs should be sited such that they provide effective alternative directions of travel from any dwelling served by those stairs other than accepted dead ends [see Figure 7b]*'. A dead-end travel distance of 30m exists in the common corridors from Mezzanine to Level 12, which exceeds the 15m noted in Figure 7b. However as noted in Clause A.3 of BS 9991, where the travel distances are exceeded, further analysis is required to develop a performance-based smoke ventilation strategy using the referenced SCA Guide<sup>2</sup> as a basis. The SCA Guide which is referenced in guidance recommends a maximum travel distance in the corridor of 30m. The travel distance has therefore been limited to 30m, and an enhanced smoke ventilation system has been allowed for in the design for cost and spatial planning.
- Fire service vehicle access: Vehicle access for the fire service to one of the firefighting shafts is between Block 1 and the adjacent Plot 10a. Due to the location of the access route and the existing level changes, fire service vehicles would be required to reverse a total of 27m (as shown in Section 14). The proposed distance is extended by 7m from the recommended 20m maximum reversing distance in guidance. This is considered reasonable as alternative access is provided to the other firefighting shaft and the distance includes the length of the fire service vehicle and therefore reversing distance from the parked position would be circa 21m.
- Connection between food hall and residential: The residential area will be fire separated from the food hall located at Ground Floor and Mezzanine. Escape from the residential areas will be via the two residential stairs for use by residential occupants and two separate protected escape stairs have been provided in the food hall for means of escape for food hall occupants. An access route from one of the residential stairs is provided between the residential area and food hall for day-to-day access only. The two areas are separated with 60 minutes fire resistance, a protected lobby, and the connection will not be signed as an escape route. Further detailed analysis will be provided to demonstrate that protection to the residential stair will be maintained in the event of a fire in the food hall as the design develops.
- A high-level review of the fire strategy and associated justifications have been discussed with Ball & Berry during design team workshops. The justification and any detailed analysis required will be undertaken as the design develops. This will need to be discussed and agreed during the formal consultation process with Greater Manchester Fire and Rescue Service.

<sup>2</sup> Smoke Control Association, 'Guidance on Smoke Control to Common Escape Routes in Apartment Buildings (flats and maisonettes)', 2020.

## Plot 10b First Street House of Social

| The principles, concepts and approach relating to fire safety that have been applied to the development |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.                                                                                                      | <p><b>Issues which might affect the fire safety of the development</b></p> <p><i>Explain how any issues which might affect the fire safety of the development have been addressed.</i></p> <p><i>Guide: no more than 500 words</i></p> <p>Changes to design standards: BS 9991 is currently under review. 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. It is anticipated that the final version of the standard will be published at the beginning of 2023 at the earliest, but a confirmed date has not yet been provided. 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 justification is provided. In addition, where new guidance is published there is no obligation to retrospectively design to the guidance, and there is normally a reasonable timeframe before the recommendations in the guidance take effect. 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.</p> <p>Internal layouts may change as the design develops. 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 risk assessed. The solution will be justified with supporting assessment for discussion with the Approving Inspector and Greater Manchester Fire and Rescue Service, to obtain agreement that the scheme complies with Part B of the Building Regulations.</p> <p>Where future building works are exempt from the Building Regulations they would need to be managed under the Regulatory Reform (Fire Safety) Order 2005<sup>3</sup>. 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.</p> |
| 9.                                                                                                      | <p><b>Local development document policies relating to fire safety</b></p> <p>Not applicable. No local policies have been identified.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

<sup>3</sup> 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>10. Fire service site plan</b> - 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? Guide: no more than 200 words</p> <p>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.</p> <p>Each firefighting shaft includes the following provisions:</p> <ul style="list-style-type: none"> <li>• A firefighting stair with minimum width of 1100mm, designed in accordance with BS 5395-1<sup>4</sup>.</li> <li>• A remote or automatic vent at the head of the stair open to the roof with a minimum free area of 1m<sup>2</sup>.</li> <li>• A firefighting lift designed and installed in accordance with BS EN 81-20<sup>5</sup> and BS EN 81-72<sup>6</sup> provided within 7.5m of the stair door.</li> <li>• A dry rising main outlet provided in the stair on full landings at every level in accordance with BS 9990<sup>7</sup>.</li> <li>• 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 lobby which serves the stair will be ventilated with a mechanical smoke ventilation system which maintains smoke free conditions in the stair equivalent to or better than a natural smoke shaft.</li> <li>• 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 should be 60 minutes fire resisting construction.</li> </ul> <p>The site plan provided in Section 14 shows the fire service access and provisions on the site, including the location of the dry rising main 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.</p> |

<sup>4</sup> BS 5395: Part 1, 'Stairs. Code of practice for the design of stairs with straight flights and winders', 2010.

<sup>5</sup> 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.

<sup>6</sup> BS EN 81-72, 'Safety rules for the construction and installation of lifts – particular applications for passenger and goods passenger lifts. Firefighters lifts', 2020.

<sup>7</sup> BS 9990, 'Non automatic fire-fighting systems in buildings. Code of practice', 2015.

**Plot 10b First Street House of Social**
**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. Guide: no more than 200 words*

The access routes (River Street and Hulme Street) are existing highways and will typically provide the following access requirements for a pump appliance (in accordance with Table 20 of BS 9999). The 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, the maximum reversing distance between Block 1 and Plot 10a will be extended to circa 27m. This will need to be discussed and agreed with Greater Manchester Fire and Rescue Service.

*Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed? Yes.*

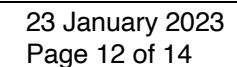
**12. Siting of Fire Appliances**

*Guide: no more than 200 words*

The firefighting shafts are fitted with dry rising fire mains. Emergency vehicle access for a pumping appliance will be provided to within 18m of both fire main inlet connection points, and the inlets will be visible from the appliance.

The fire service site plan provided in Section 14 shows that vehicles can park within 18m of the proposed dry rising main inlet locations in accordance with the guidance set out in BS 9999 and BS 9991.

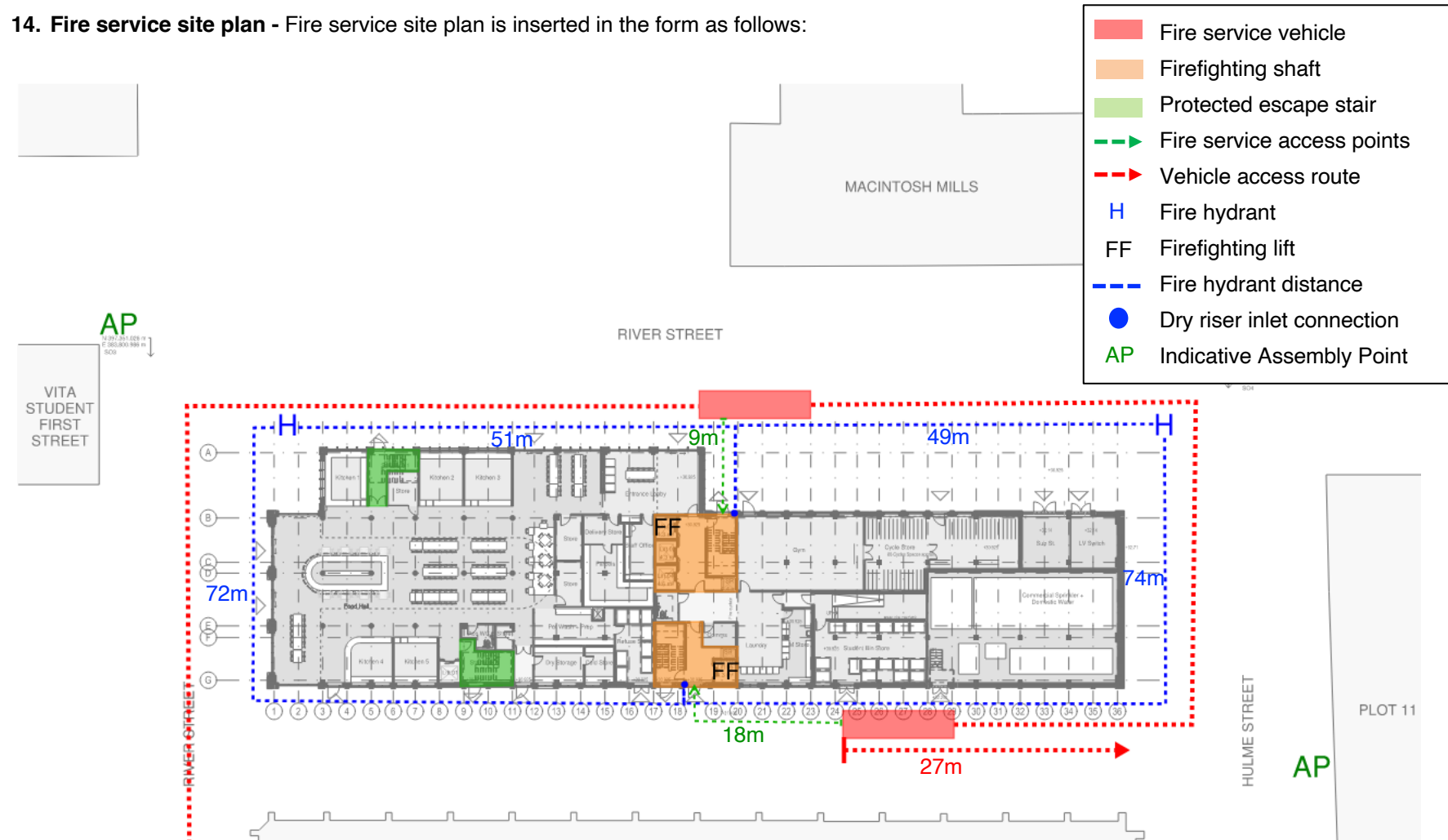
Figure 1: Live hydrant map from GMFRS



## Plot 10b First Street House of Social

### Emergency road vehicle access and water supplies for firefighting purposes

14. Fire service site plan - Fire service site plan is inserted in the form as follows:



**Plot 10b First Street House of Social***Table 5: Fire Statement completed by*

| Fire Statement completed by |                                                                                   |                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 15. Signature               | Author: Francesca Ravenhill                                                       | Checker: Iain Macfarlane                                                            |
|                             |  |  |
| 16. Date                    | 23 January 2023                                                                   |                                                                                     |