

Draft Fire statement form

| Application information                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| 1. Site address line 1<br>Site address line 2<br>Site address line 3<br>Town<br>County<br>Site postcode (optional)                                         | 35-39 Friar Street                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                                                                                                                                                            | Reading                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                            | Berkshire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                            | RG1 1DX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2. Description of proposed development including any change of use:                                                                                        | Demolish the existing building and construct new mixed-use development comprising 103 residential units and 1,752 sqm floorspace of Class E (retail / food and drink and co-working) plus landscaping and other works.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience.                                                  | Basheer Youssef (the author) has 11 years' international experience of fire engineering. He is a member of the Institution of Fire Engineers (MIFireE).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                            | As a Fire Engineer he possesses wide-ranging experiences in many aspects of fire safety, detection and protection systems and developing realistic solutions in line with current national or international regulations and standards. He has experience with both UK codes and guidance, e.g. Approved Document B, BS 9999, BS 9991, HTM 05-02, PD 7974, BS 5839 part 1 & 6, BS EN 12845, BS 9251 and also overseas and international codes, e.g. NFPA and UAE Code.<br><br>As part of Jensen Hughes, Basheer can draw from the experience of other fire engineers in the UK and around the world, which will ensure the quality and the robustness of the fire strategy developed for the project. |
| 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. | Initial fire strategy review has been undertaken for the development by Jensen Hughes to identify the key fire strategy issues and ongoing input has been provided to assist the design team as they incorporate the fire strategy requirements into their specialist design.                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                            | The plans have been updated to reflect ongoing input. This will continue to be developed as the scheme progresses and discussion with approving authorities and the local fire and rescue services are undertaken.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                            | Consultation with the approving authorities has not been undertaken to date.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5. Site layout plan with block numbering as per building schedule referred to in 6.                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Site layout plan is:<br>inserted in the form                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



| The principles, concepts and approach relating to fire safety that have been applied to the development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |
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| 6. Building schedule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |
| Site information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                   |                                    |                                                                                  | Building information                                               |                           |                             | Resident safety information     |                                      |                                      |
| a)<br>block no. as per<br>site layout plan<br>above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | b)<br>• block<br>height (m)<br>• number of<br>storeys excluding<br>those below ground<br>level<br>• number of<br>storeys including<br>those below ground<br>level | c)<br>proposed use                 | d)<br>location of use within block by<br>storey                                  | e)<br>standards<br>relating to fire<br>safety/ approach<br>applied | f)<br>balconies           | g)<br>external wall systems | h)<br>approach to<br>evacuation | i)<br>automatic<br>suppression       | j)<br>accessible<br>housing provided |
| Core A & Core B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Top storey height<br>above ground floor:<br>32 m<br><br>Level Basement to<br>level 10: 12 storey                                                                  | Commercial units                   | Restaurant at Level Basement<br>and ground floor<br>Incubators Units at level GF | BS9999                                                             | no balconies              | class A2-s1, d0 or better   | simultaneous                    | yes- commercial<br>sprinklers, full  | N/A non resi                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                   | Ancillary areas                    | Plants Rooms, car park Cycle<br>store and Bin Store at Level<br>Basement         | BS9991                                                             | no balconies              | class A2-s1, d0 or better   | simultaneous                    | yes- commercial<br>sprinklers, full  | N/A non resi                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                   | Residential Co-Work                | Residential Co-Work on Level 01                                                  | BS9999                                                             | no balconies              | class A2-s1, d0 or better   | simultaneous                    | yes- commercial<br>sprinklers, full  | N/A non resi                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                   | Residential apartments,<br>studios | residential apartments at Level 01<br>to Level 10                                | BS9991                                                             | class A2-s1, d0 or better | class A2-s1, d0 or better   | stay put                        | yes- residential<br>sprinklers, full | M4(2) & M4(3)                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                   | External Communal<br>terrace       | External Communal terrace at<br>Level 07                                         | BS9991                                                             | no balconies              | class A2-s1, d0 or better   | simultaneous                    | none                                 | N/A non resi                         |
| 7. Specific technical complexities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |
| <p>The building top floor is more than 30m above ground level. The building contains two escape stairs (A and B) serving Basement to level 06 above ground level. From level 07 to level 10, only Stair A will be available for escape. Therefore, the fire strategy for the building will be developed on the basis that part of the building is served by a single escape stair.</p> <p>Both stair cores will discharge direct to outside via protected corridor. Both stairs will be continuous to the basement level. A fire engineered solution will be developed to support the stair continuing to basement level including high level of compartmentation i.e. at least 3 fire doors between any accommodation and the upper-level stair, smoke venting to the stair/lift lobby at basement level.</p> <p>As top floor height of the building exceeds 18m above ground and the floor area of the building exceeds 900m², both residential cores will be designed as firefighting cores including firefighting lifts. This will ensure that hose cover will be achieved to all areas within 60m of the fire main outlets in each stair in line with BS 9991 recommendations. Further information on fire fighting shafts is provided in Section 10.</p> <p>All external walls will be designed in line with Regulation 7 of the Building Regulations and no combustible materials will be proposed within the external wall construction (other than permitted exemption). Green walls are not proposed as part of the development.</p> <p>The development includes both residential and non-residential areas. All areas will be sprinklered throughout in line current sprinkler code guidance, i.e. BS:9251 (2021) or BS EN 12845 where appropriate as described in Section 6.</p> <p>PV panels will be provided on the roof. These will be installed in line with the manufacturer’s recommendations.</p> |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |
| 8. Issues which might affect the fire safety of the development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |
| <p>The fire strategy will be developed to ensure that the requirements of the Building Regulations will be met. The fire strategy will draw on guidance from the BS 9999 for the non-residential units (commercial units ) and for the residential areas including ancillary accommodation, will follow BS 9991.</p> <p>The final escape route from the stairs in each core is still under development to ensure that the escape route from the stair is protected to the same standard as the stair on upper levels as recommended by guidance. Any adjoining areas will be adequately separated from the final escape route (e.g. lobbied) or reconfigured to no connect to the final escape route. This will be developed in more detail as the design develops.</p> <p>The Internal layout of apartments is not known at this stage and will be reviewed as the scheme progresses.</p> <p>The internal layout of the commercial units will not be known at this stage and the fit-out fire strategy will be developed by each tenant as part of their own Building Regulations submission. However, the shell and core fire strategy including the distribution of exits is being developed to ensure that each commercial unit can be occupied based on a typical floor space factor of 2m²/person.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                   |                                    |                                                                                  |                                                                    |                           |                             |                                 |                                      |                                      |

The hose coverage for the retail unit is currently greater than 60m before fitout. It may be however needed to add a dry riser main. This will be developed in more detail as the design develops.

Mechanical smoke shaft's locations are under development and will meet the requirements stated in BS 9991 guidance.

**9. Local development document policies relating to fire safety**  
N/A

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

**10. Fire service site plan**

The access road provides a continuous through route around the buildings. All access roads will be designed to be sufficient in terms of load bearing capacity and clearance widths and heights for a Royal Berkshire Fire and Rescue Service pump appliance.

Core A and B are more than 18m in height; therefore, these cores will be provided with firefighting shafts comprising the following:

- Firefighting stair at least 1100mm clear width.
- Firefighting lift opening within 7.5m of the entrance to the firefighting stair.
- A fire main outlet within the stair enclosure at all levels.
- Fire main inlet on the external façade of the building within 18m and in sight of the fire vehicle parking position.
- Stair will be accessed via a smoke vented corridor.
- Automatically opening vent at the head of the stair achieving at least 1m<sup>2</sup> in cross-sectional area.
- 2 hours fire-resisting enclosure around the firefighting stair, firefighting lift and access route to the firefighting shaft at ground floor.
- Wayfinding signage will be provided to assist the fire service in line with current guidance.

Vehicle access is provided within 45m hose cover of all points within the Incubators units. This is compliant with Building Regulations guidance.

The hose coverage for the restaurant is currently greater than 60m before fitout. It may be however needed to add a dry riser main subject to discussion with the approving authorities.

**11. Emergency road vehicle access**

The primary access point to the building will be via Friar Street and Friar's Walk. A turning circle for a fire engine in the central space within Station Hill North will be provided.

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

**12. Siting of fire appliances**

The fire vehicles (pump appliances) will be able to park in front of the entrance to each stair serving the building within 18m and in sight of all fire main inlets as showings in section 14. This is in line with the parameters set out in Building Regulations guidance i.e. BS9991 and BS9999.

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

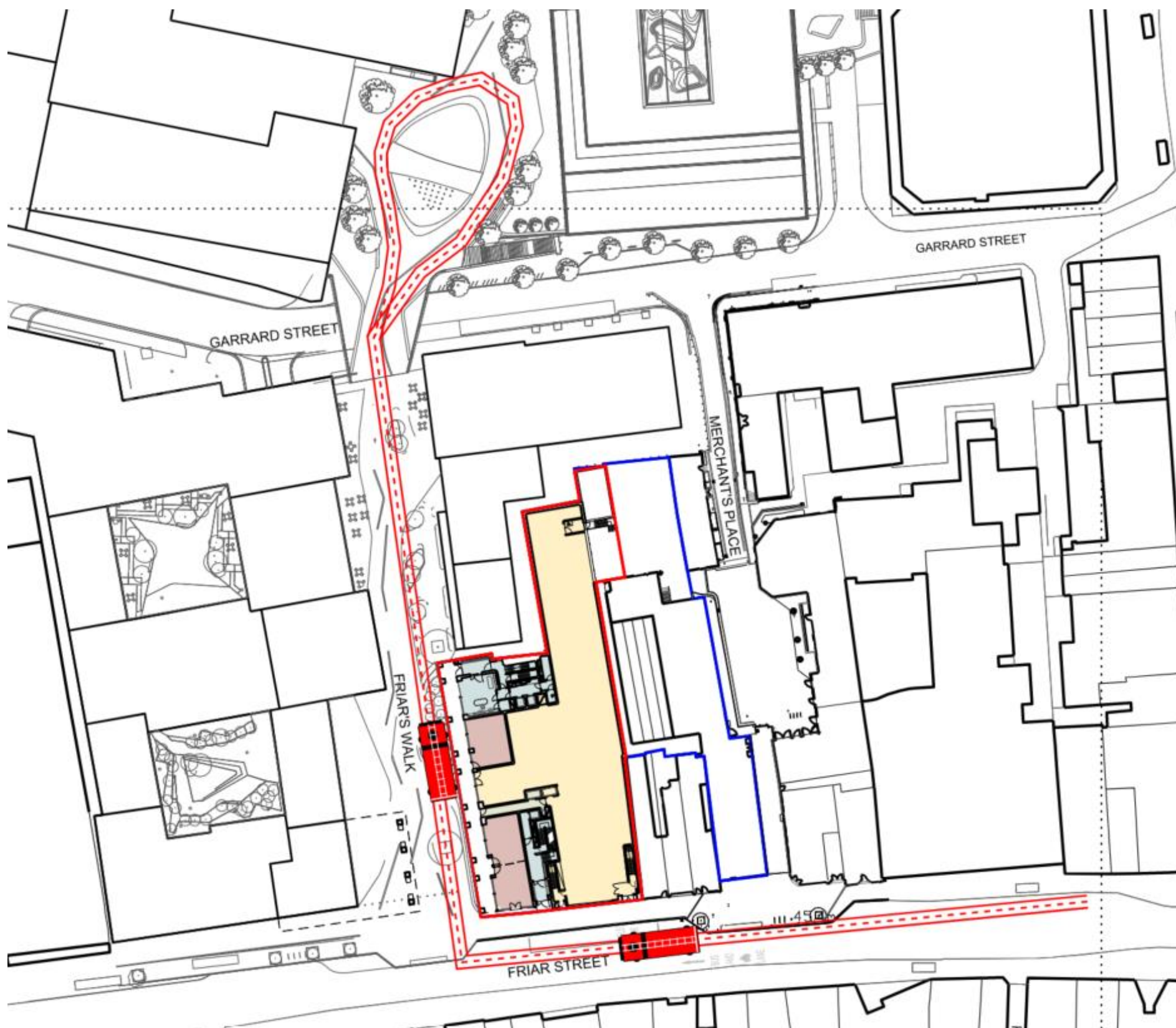
The existing hydrants are within 100m of the building's new fire main inlets as shown in the figure in section 14. A maintenance regime for all active fire safety measures will be developed in due course.

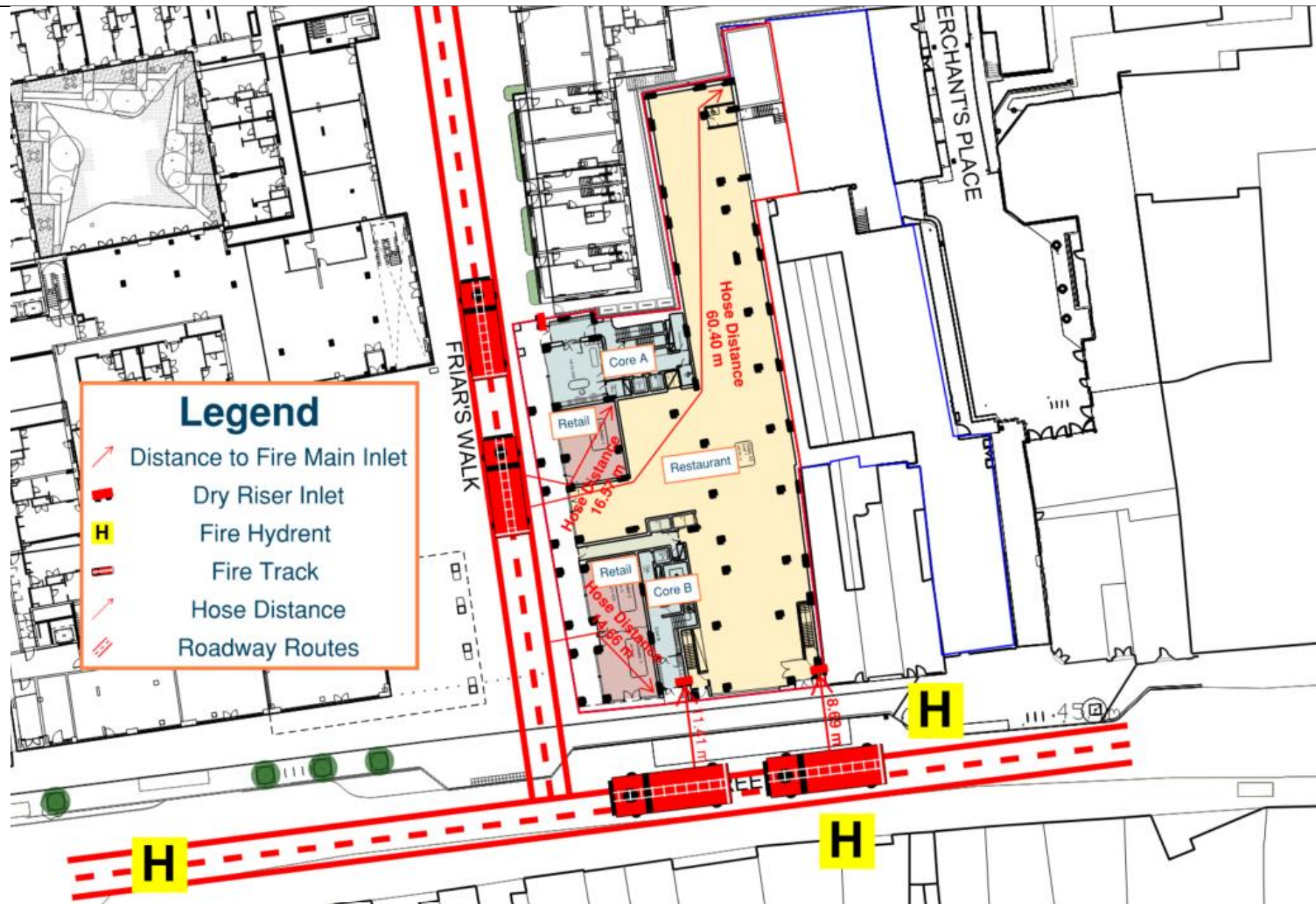
Nature of water supply:  
hydrant- public

Does the proposed development rely on existing hydrants and if so, are they currently usable / operable?  
don't know

**14. Fire service site plan**

Fire service site plan is:  
inserted in the form





Fire statement completed by

15. Signature

Basheer Youssef

16. Date

06/06/2022