

St Mary's University Twickenham.

Planning Fire Safety Strategy

Planning Application Number: 21/0483/FUL

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Author Statement and Qualifications

Joe Fortune – Honours Degree in Fire and Rescue. Associate member of the Institute of Fire Engineers. 3 ½ years of operational experience as a Fire Safety Officer and Advisor. Produced built environment Fire Safety Strategies for the NHS, St Marys University and have a working understating of Approved Document B (ADB).

1) Identify suitably positioned unobstructed outside space for:

a. fire appliances to be positioned on

There are two sites designed and kept available for emergency service appliances they are both located on the development site and in full control of the owner-occupiers of the building and subsequent developers. The proposed development will not have an impact on the existing routes and will be kept accessible both during and after construction. Access is protected by bollard posts accessible by the fire brigade and on campus security via a FB padlock. Both sites are in line with ADB requirement B5 guidance for a small building not fitted with fire mains.

b. appropriate for use as an evacuation assembly point

There are two designated evacuation assembly points for the development site. One located in the main car park for up to 80 occupants and a second assembly point to the rear of the building for up to 120 occupants. Occupants can be safely guided outside from the front to the rear assembly and fire marshals are trained and aware of the capacities for each. Both assembly points are away from the access routes and other potential hazards.

2) Are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures

The Main Campus Library (Block H) Fire Alarm System is designed and maintained to category L2. The extension to the undercroft will be fitted with appropriate fire detection in keeping with the L2 design category. The evacuation strategy is for all occupants including those with disabilities to be alerted via sound, visual or other means, and a simultaneous evacuation to commence to a place of complete safety. The development structure materials will consist of glass panels conforming to BS 6206 and aluminium framing to same classification and standard as the current external façade.

The development will consist of an additional automatic sliding door that will be required to failsafe in the event of a power failure the existing automatic door will continue to be access controlled with an electromechanical override (green break glass unit) available for emergency in the direction and side of escape.

3) Are constructed in an appropriate way to minimise the risk of fire spread

The developments construction will be safely managed through the use of risk assessments and method statements. The constructions methods will be of low risk in relation to fire. It is not expected that any hot works will be undertaken for the duration of this development but sufficient controls and permits will be put in place if hot works were to be required. The materials used will be of a minimum fire class A2-s1, d0.

4) Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.

The total maximum occupancy for the building of 200 occupants (Using the floor space factors as set out in ADB Appendix D Table D1) will not increase or decrease in relation to this development. The development will add an additional 2.2m to the travel distance for occupants escaping through the main entrance this is an acceptable addition to the travel distance. The furthest distance recorded being 31.6m (Using the limitations on travel distances as set out in ADB section 2 table 2.1). A robust system of personal emergency evacuation plans (PEEPs) are put in place for those who require assistance and the use of alternative perceptual warnings are considered at this stage, refuges are maintained and kept clear for the use of disabled occupants and plans are in place to evacuate those situated at refuges prior to emergency services attending. Where groups of occupants on campus where English is not a first language a risk assessment will highlight this and the appropriate message will be portrayed to the group.

5) Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.

The university wide evacuation procedure is in place for the library building and is simply for:

"All occupants to react to the warning signal given when a fire is discovered or detected, then making their way by the means of escape, to a safe refuge to call for further assistance or a place of complete safety away from the premises and any potential hazards."

The strategy for each building is reviewed periodically every three years or during the design phase of all new build projects and significant refurbishments with significant emphasis on the use of the building by those with disabilities.

6) Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

Emergency appliance access will be provided as set out in question 1. No special fire safety equipment for the fire and rescue services has been included into the scheme. The proposals do not include the creation of a compartment size above the 280m₂ threshold and therefore there are no additional requirements for fire hydrants above those that are existing.