Studio Partington



Residents' Briefing Update

Revisions:

First Issue ---

Great Arthur House Fire Compartmentation City of London Corporation

14.12.2020



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1.0 Introduction

Following on from the Residents' Briefing Document distributed to residents in June, the project team are pleased to report that RIBA Stage 2 on the project was completed at the end of October. In summary, this effectively means that the team has managed to:

- 2. define the brief
- identified.

This document has been prepared to provide an update to residents on the progress of the project thus far.

A typical flat interior

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1. understand the current state of the building in fire safety terms

3. develop options at a strategic level for addressing any issues



2.0 The Fire Safety Design Review

In the Residents' Briefing Document issued in June, several points were identified which needed to be addressed, namely:

- 1. The fire resistance of the existing compartmentation, including party walls, ceilings and floors.
- 2. The effect of installing sprinklers on the fire resistance thresholds required for compartmentation.
- 3. The ideal evacuation strategy for the building.

In response to this, the appointed fire engineers, BB7, have prepared a Design Review of fire safety in the building, on the basis of, "BB7's understanding of the original design intent of the building when constructed," and, "which active and passive fire safety precautions are either considered insufficient or not present in the building".

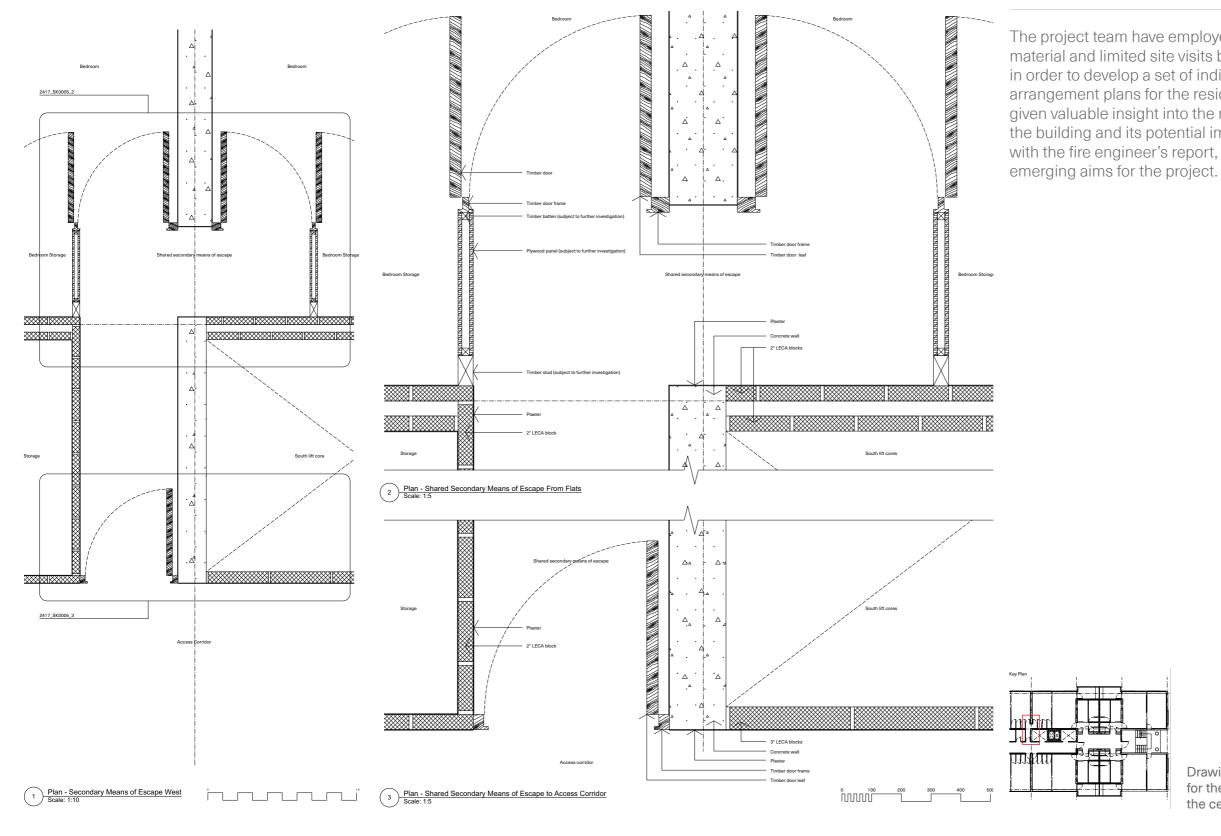
It is probably worth reiterating that the fire safety measures currently put in place by the Corporation, calling for simultaneous evacuation of the building in case of fire, ensure that homes in Great Arthur House are safe, however, it must be pointed out that this strategy is not in line with accepted best practice for evacuating a building in the event of fire. The accepted best practice for a residential building is a stay-put strategy, therefore, the aim of the project is to facilitate the adoption of a stay-put strategy in Great Arthur House.







3.0 Research and Surveys



The project team have employed extensive research of archive material and limited site visits by both architects and fire engineers, in order to develop a set of indicative details and general arrangement plans for the residential floors of the building. This has given valuable insight into the materials and construction used in the building and its potential impact on compartmentation. Together with the fire engineer's report, these drawings have informed the



Drawings showing indicative details for the secondary means of escape to the centre flats on the western side



Sprinklers 4.0

It is the considered view of the project team that the single most significant factor that can contribute towards the implementation of a stay-put strategy is the installation of sprinklers to the flats. In light of the proposed sprinkler installation, and existing design features, such as the secondary means of escape to each flat, it is clear that there is potential to develop an appropriate level of compartmentation, which minimises the amount of intervention to walls, floors, doors and ceilings.

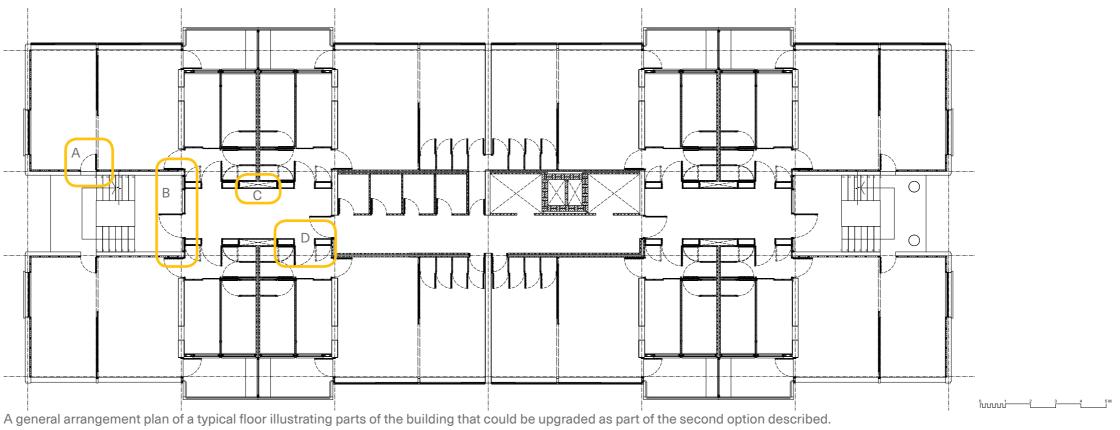
While the sprinkler installation is integral to the work we are undertaking, it is important to note that the sprinkler project is being delivered by another team, therefore, the extent of our involvement with the sprinkler installation has solely been to liaise with the project team to ensure that our efforts are as coordinated as possible.

5.0 Emerging Aims

Taking all this into account, two viable options are available, all of which assume the installation of sprinklers:

- 1. Upgrade a significant portion of the building fabric to a level that would comply with the recommendations of current Building Regulations. This would be highly disruptive for residents, assuming it could even be feasibly achieved in a listed structure, such as Great Arthur House.
- 2. In view of the inherent safety measures in the building design identified by BB7, such as each flat having two means of escape and each common lobby also having two means of escape, the third option would be to undertake selective upgrades to the building fabric which would improve passive fire safety. This would include:

- A. Upgrading the escape door to the half-landings on the stairs and other secondary means of escape
- B. Upgrades to the glazed screens in each entrance lobby.
- C. Upgrading the separation between the risers and adjacent flats.
- to be determined.





- D. It may also require selective upgrades to the entrance doors and their associated cupboards, though this has yet
- This second option seems best able to balance the demands required by a stay-put evacuation strategy, and the desire to preserve as much historic fabric in the building as possible.
- With this in mind, the next step for the team will be to consult with the relevant statutory authorities, such as Building Control and the planners, to understand their thoughts on the broad strategy outlined above. Followed by detailed design work in the new year.

6.0 Programme

