Patel, Kreena

Subject: RE: Kings House School - Fire Statement

From: Alexandra Martin <Alexandra.Martin@landuse.co.uk>
Sent: 08 February 2022 11:41
To: Patel, Kreena; Dale, Nicki
Cc: Jon Grantham; David Miller; John Loveland
Subject: RE: Kings House School - Fire Statement

Hi Kreena and Nicki,

Please see attached the updated Fire Statement, including the declaration from Cundall.

Please also see below responses to the points raised in the review reports / objection letter.

PFFS review report No. 4

- Competency requirements page 2 – GLS requirements referenced are for a Major Development and Policy D12 (B) is referred to which is not applicable to this project being a Minor Development. The Fire Statement has been updated under the review of Steven Reilly, Associate Member of the Institute of Fire Engineers (AIFireE) and said professional membership has been stated in the fire statement. The document has been written under the supervision of Lee Leston-Jones, Partner at Cundall. Lee is a Chartered Engineer for more than 20 years.

- Necessity of Evacuation Lift page 3 – the fire strategy was originally written in 2019 when an evacuation life was not required as the London Plan was not issued at that time, therefore the omission of an evacuation lift was supported in the original fire statement, however experience with the London Plan has shown that evacuation lifts are necessary and the design has been updated accordingly, not as a reaction to FRS objections.

- Rubber stamping existing water supplies page 3 – this claim is untrue and Cundall have emails from June 2019 where the provision of a dry horizontal main with an inlet on kings road and an outlet somewhere near the entrance to the new extension building were discussed as possible compensatory measures.

- Dry main design page 3 - The provision of the horizontal dry main has been assessed by Cundall fire protection engineers and is considered a viable and workable solution and will be designed in line with the guidance set out in BS 9990. The objector has provided no technical justification for his opinion that the horizontal dry main will fall short of the requirements of Policy 12A. Cundall's opinion is that when installed in line with BS 9990 it will meet the reequipments of Policy 12A

- Conclusion page 4 – FRS has ignored the fact that this development is an extension of an existing building where the existing arrangements which are considered an acceptable benchmark are being upgraded with the provision of a BS12845 sprinkler system and dry rising main connection to the extension. Both of which were considered in Cundall's fire safety design before being raised by FRS and their claim of them being a refraction to their review is untrue.

- Means of egress statement page 5– This statement has been updated to reflect the increased occupant load in the classrooms and the design considerations used within the design have been reflected in the Fire Statement to demonstrate Cundall's affirmation that the design meets the requirements of D12 (A) of the London Plan

- Occupant load/Fire Service access page 5 – The FRS statement referring to the credibility of the fire service access in relation to the occupant load is confusing and does not provide any technical basis for this statement. The majority of the 676 estimated occupants is based mainly on the sports hall being utilised to its maximum floor space capacity (0.5m2/person), this represents a worst case scenario that would use to size the means of escape from the hall and which is unlikely to be the case in reality. Nevertheless final escape capacity from the sports hall for this potential occupancy is provided. The building is designed with exit

capacities and travel distances compliant with BS9999 apart from 1 portion of the classrooms having a small increase in occupancy load above guidance with justification and compensatory features provided.

PFFS review report No. 3

(i) – the statement in the Fire Statement has been updated to clarify where deviations from BS9999
   a. Clarification on the increased occupant load and design increases to mitigate this risk have been added to the fire statement
   b. Fire service vehicles access
      i. 45m requirements is for buildings not fitted with a fire main, therefore irrelevant.
      ii. 15% of perimeter - this requirement if for buildings not fitted with a fire main, therefore irrelevant

(ii) The fire safety design has considered all issues with regards to fire safety, with areas where the guidance of BS9999 have been difficult to comply with 100% being provided with compensatory features in discussion and agreements during early consultation with Building Control (including their opinion of Fire Service requirements)

(iii) The s at the end of buildings was a typo, it should read building in reference to the extension portion only. The design is based upon the guidance set out in BS999 (this was recognised and agreed by FRS to be a suitable design standard to the development in their PFSS Review Report dated Dec 21st 2021) which does not require a building of this size and use to be provided with sprinklers, therefore the provision of sprinklers in the extension areas is considered an enhancement.

(iv) Correct, the reference to fire fighting lift was a typo and should read evacuation lift

- Constraints of the site –
  - Firstly - The insisting buildings constraint are considered an acceptable benchmark are being upgraded with the provision of a BS12845 sprinkler system and dry rising main connection to the extension.
  - Secondly – it is agreed that the provision of sprinklers is not recognised alternative to fire service access within a British Standard, research has shown and it is widely accepted that the provision an automatic sprinkler system will reduce the fire growth rates of fire significantly and in over 90% of cases extinguish the fire altogether. Therefore reducing the demands of fire service intervention and the building control reviewer has agreed with this compensatory.
- November statement update – As stated previously the provision of a Dry main was considered in the design over 2 years previous. Dry main will be installed in line with BS 9990
- LFB approval – The fire safety design and provision of enhancements is based on early consultation with building control and their experience and expectations with regards to LFB approvals.

Kind regards,
Alex

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