Incoming Email from Adrian Jess <adrian@studioe.co.uk> on 07/11/2012 18:19 Create Mail Reply	File Ref 1 Architect File Ref 2 None File Ref 3 None To: Terry Ashton <Terry.Ashton@Exova.com>; "A.McQuatt@maxfordham.com" <A.McQuatt@maxfordham.com>; Chweechen Lim <Chweechen.Lim@appleyards.co.uk> cc: "david.hale@appleyards.co.uk" <david.hale@appleyards.co.uk>; "ColinChiles@Leadbitter.co.uk" <ColinChiles@Leadbitter.co.uk>; Stefano Strazzullo <Stefano.Strazzullo@curtins.com>; Grenfell <Grenfell@studioe.co.uk> Subject: Grenfell Tower - RBKC building control notes

Associated Documents

created by: **Adrian Jess** on **07-Nov-12**

Terry,

Please find below my notes following our meeting with RBKC building Control regarding fire strategy and subsequent discussions with Andrew @ Max Fordham's and yourself by way of clarification of the outstanding fire issues.

Andrew / Chee,

Generally the meeting was positive with just one minor change to the layouts. There are however a number of services issues that have come out of the meeting and I have highlighted them in red which will also have an impact on the scope / costs for stage D. RBKC noted that while we could still get informal advice from them and possibly LFB we are unlikely to get formal approval for 2-3 months after submitting the application given the backlog at LFB, so it would be prudent to allow for an alternative option of smoke vent to walkway +1 level at the very least should RBKC / LFB take the formal view that extending the existing smoke vent is not suitable.

MTG 06/11/12
ATT: John Allen (RBKC)
Dave Gammon (RBKC)
Terry Ashton (Exova)
Adrian Jess (SE LLP)

Fire Fighting:

Ground Floor:

- Fire Engine hard standing to remain as existing. (18m max. From dry riser inlet in direct line of sight)
- Due to the additional dry riser connections being added at Mezzanine and Walkway levels it is likely that RBKC / LFB will insist that the inlet be relocated onto an external facade from its current position within the stair core. MF to investigate potential for dropping through the ground floor slab (100 dia) in its current location and install an extension

adjacent to Grid 3 on the underside of slab within the plant room which relocates the inlet externally adjacent to the main entrance.

- BC Submission should clarify that existing lifts are 'fire fighting' from Ground Floor and that new lift only travels within the three story entrance lobby.
- No smoke vent required for ground floor core lobby (vented via open main entrance / high level AOV
- RBKC however raised concerns at having fire fighting lift and stair access in separate locations (Note: existing stair never went to ground / final exit at walkway level led to external staircases)

Mezzanine level:

- No requirement for fire fighting lift to stop at Mezzanine level.

Walkway level:

- Ventilated smoke lobby fire escape from boxing into core accepted
- Final exit route from existing staircase to ground level / external walkway accepted.

Smoke Ventilation:

- No vent required at ground level
- AOV strategy for main entrance and atrium to be extended into reception smoke lobby serving concierge and back office. Written clarification required that modelling / testing of AOV will not be required as part of submission.
- RBKC accepted strategy of extending existing residential system down to service walkway +1 (It is not clear if RBKC have an understanding of the existing smoke extract systems design limitations of stair protection as opposed to smoke clearance within individual core lobby.) Walkway +1 is classed as new residential rather than refurbishment due to the change of use which may mean the existing smoke extract is not fit for purpose for new build. EX to arrange MTG with RBKC / LFB to discuss smoke vent requirements in detail.
- RBKC questioned piecemeal strategy of providing smoke vent at Walkway +1 and not at Mezzanine residential level despite satisfying current codes through the provision of open able escape windows to mezzanine flats (FGL to window cill 3710). Design Team to consider extending existing smoke extract system to mezzanine level.
- MF noted that the new louvers fitted to the existing system should increase the flow rate capacity of the fans which could potentially offset extending the system to lower floors. As noted in the earlier point existing system may not be fit for purpose for extending further or as a response to new build.
- MF suggested identifying a provisional sum as part of the contingency for the upgrade of the existing smoke extract fans as one option.
- SE raised concerns regarding statutory certification / work warranties of extending an existing system of unknown capacity. Is it practical to amend existing system with louvers, test and then extend to lower floors, then test again against benchmark. Proof the extension works have not made the existing system performance worse.
- **MF to scope feasibility and outline costs for a stand alone horizontal smoke extract (colt system) servicing the walkway +1 and mezzanine levels. Single set of Fans accessible at high level within walkway +1 ceiling void ducted to / from external envelope that also serve as supply / extract for mezzanine as backup design option.**
- EX to arrange MTG with RBKC / LFB to discuss smoke ventilation in detail. (MF included to present horiz. extract alternative if necessary?)

Means of Escape / Detection & Containment:

- RBKC generally accepted proposed means of escape strategy
  - Existing residential to remain in flats and evacuated on instruction by LFB (as existing)
  - Walkway +1 follows existing residential
  - Boxing club final exit direct to Walkway, alternative means of escape through existing core into entrance lobby with final escape onto walkway or staircase to ground level and exit by the front entrance
  - Mezzanine residential escape into entrance lobby down new staircase with final exit at the front entrance. Alternative access via open able external windows.
  - Nursery direct access to ground level via nursery entrance and fire escape doors.
- Existing residential core lobby smoke detectors linked to smoke extract louvers for automated response.
- Individual fire panels for nursery, boxing club and offices to be interlinked with warning display on main building fire panel (entrance lobby). Individual fire panels for nursery, boxing club and offices should also be interlinked with each other. (Mezzanine residential via main fire panel should also be interlinked with boxing club.)
- RBKC noted that all stores / non private kitchens need to have 30min FR containment
- RBKC noted that concierge opening should have a 120min FR curtain controlled by fire alarm.
- New connections to the existing rubbish chute will be formed at Walkway +1 and Mezzanine level . RBKC raised concerns regarding the containment by requesting ventilated smoke lobby access between the chute and core lobby. MF to clarify existing operation of the chute. Fresh air supplied mechanically to the each of the existing rubbish chute rooms from roof level? combined with negative air pressure in the chute itself ensures smoke remains within the rubbish chute. MF to consider extending existing fresh air supply to Walkway +1 and Mezzanine rubbish chute rooms.

Regards,

Adrian Jess
SE LLP

From: Terry Ashton [mailto:Terry.Ashton@Exova.com]
Sent: 07 November 2012 10:17
To: Adrian Jess
Subject: Grenfell Tower

Adrian

Please see attached notes from yesterday's meeting for any comments you may have. Could you also indicate to whom at Max Fordham (Andrew?) and Leadbitters I should send copies to

Thanks

Terry

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