

Technical note

Project name	Buxton House		
Design note title	HSE Comments		
Document reference	22176-HYD-XX-XX-RP-FE-1002		
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Revision	00		
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Introduction

This technical note addresses comments received from the Health and Safety Executive (HSE) on 03.05.2024 (reference pgo-5084) for the Buxton House project in Huddersfield, with regards to fire safety only.

1. Substantive response for the local planning authority

The following section provides responses to the comments provided within Section 1 of the HSE comments document.

- 1.1 Noted.
- 1.2 Noted.
- 1.3 Please refer to Revision 04 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001) for proposed use and layout of the basement.
- 1.4 Fire statement to be updated to include amended wording with regards to recommendations which have since been implemented. This will be provided separately.
- 1.5 Noted.
- 1.6 Noted.
- 1.7 Noted.
- 1.8 As per 1.3, please refer to Revision 04 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001) for proposed use and layout of the basement.

2. Supplementary information

The following section provides responses to the comments provided within Section 2 of the HSE comments document.

- 2.1 Noted.
- 2.2 Noted.
- 2.3 At levels 01-11, it is considered that sufficient separation is afforded between the firefighting lift and the firefighting stair, by virtue of the lift opening being located within the firefighting lobby. Please see 2.4 for comment on the lift opening at level 00.
- 2.4 Noted. Please refer to Section 7.2.2/7.2.2.1 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001, Rev.04) for commentary on the dual-entry lift opening located within the firefighting stair core at ground floor. As part of the fire strategy proposals, a 120-minute fire and smoke curtain is to be provided to the lift on the entrance lobby side, so as to afford protection of smoke ingress into the lift shaft/stair.
- 2.5 Noted.
- 2.6 Noted that the acceptance of the existing clear width of the firefighting stair is subject to consultation with the local fire service. Please see Section 7.2.1 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001, Rev.04) for commentary on the clear width of the firefighting stair. Whilst it is acknowledged that the clear width does not achieve 1100mm, falling short c.130mm, the requirement for a wider firefighting stair is to facilitate contraflow of occupants escaping via the stair at the same time the fire service are utilising the stair. However, given that the building is to be residential use with a stay-put evacuation strategy, the number of occupants evacuating is likely to be low (c.2-4 people), and an alternative escape stair is available. Thus, the risk of encountering, and needing to accommodate for, contraflow is low. Additionally, the basis of the proposed use of Stair 1 for the firefighting stair is the impracticalities of utilising Stair 2 (i.e. separation from firefighting lift >7.5m, Stair 2 is only accessible from the first-floor car park, which is not expected to be suitable for fire service vehicle access, and the location of the existing dry riser being within Stair 1).
- 2.7 Noted.
- 2.8 Noted.
- 2.9 Noted.
- 2.10 Noted. It is understood that the client preference is for computational fluid dynamics (CFD) analysis to be undertaken at RIBA Stage 4, and for the CFD to be conducted by others. Section 8.2.2.1 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001) highlights the risks presented by carrying out CFD at a later design stage, this includes substantial design changes such as core layouts, shaft dimensions, etc. Hydrock, now Stantec, take no liability should the outcome of the CFD result in significant design changes at a later design stage.
- 2.11 In agreement. Please see 2.10.
- 2.12 Noted.
- 2.13 Noted.
- 2.14 Noted. Please see Section 3.4.1.3 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001, Rev.04) for commentary on open-plan apartment arrangements, and Section 3.4.1.4 for commentary on non-open-plan apartments (levels 02-11). Drawings in Appendix A of the fire safety strategy report indicatively illustrate a 1.8m radius + 900mm from cooking facilities. Whilst it is acknowledged that in some cases, the 900mm additional radius has a pinch-point caused by the location of the kitchen/living space wall, the reduction in additional width is considered minimal (pinch points measuring to a minimum of c.610mm).

- 2.15 Noted.
- 2.16 Correct, the proposed design no longer incorporates a residents' lounge. Please refer to Revision 04 of the fire safety strategy (document reference 22176-HYD-XX-XX-RP-FE-1001) for the proposed amenity spaces within the building.
- 2.17 Noted.
- 2.18 Noted. It is acknowledged that the building is an existing, operational residential building, and it is therefore expected that the hydrant detailed in Section 7.4 of the fire safety strategy report (document reference 22176-HYD-XX-XX-RP-FE-1001, Rev.04) currently serves the building. The design proposes to maintain the residential use; however, the number of residential units will be reduced from the current state, and thus it is expected that the burden placed on the existing hydrant will be subsequently reduced. Notwithstanding, Hydrock, now Stantec, maintain the recommendation that the hydrant should be assessed for suitability in line with BS 9990:2015.
- 2.19 Noted.
- 2.20 Noted.
- 2.21 Noted.