

Design Note – DN 003.0

Project: Streatham Vale, London
Subject: Response to London Fire Brigade
Date: 20 October 2023
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1 Introduction

Following issue of the relevant Fire Statements¹ & ² for Blenheim Shopping Centre - Residential development, the London Fire Brigade (LFB) have provided comments on the fire safety design.

The LFB response³ highlights areas where they consider further information to be required, or areas of the design which vary from the relevant design standards and as such could impact on planned requirements if not demonstrated to meet Building Regulations as the design develops.

The comments raised by LFB have been reviewed by DFC, and the wider design team.

This design note documents the response and actions taken to address each of these comments.

2 Response to LFB Comments

LFB Comment (1):

Fundamental concerns relating to single stair for Block A.

We note that the design is for a tall residential building relying upon a single staircase.

While it may not be appropriate for detailed design following a framework such as that set out in BS 7974 (including a qualitative design review – QDR) to be undertaken at the planning stage, the lack of multiple staircases for a building of this height is not an aspect of the design which, in our view, should be left until the Building Regulations consultation process to resolve. Therefore, further justification should be provided at this stage which demonstrates that the principles of the London Plan 2021 will be met.

In our opinion the information provided by the applicant at this stage should recognise that the further design analysis is required later, and that if the BS 7974 analysis including a QDR determines that additional facilities are required such as an additional stair, then the project may need to return to planning for review of those changes.

The National Fire Chiefs Council have issued a policy position statement indicating that in their view residential buildings of 18 metres or of at least 7 storeys, must become the threshold at which more than one staircase should be required in new residential buildings. We further draw your attention to the recent announcement from government stating their expectation that multiple staircases will be required in residential buildings above 18m. While the transitional arrangements are not yet available,

¹ DFC, Blenheim Shopping Centre, Penge, London, SW20 ERW, Fire Statement, London Plan, Revision 03, 14 February 2023

² DFC, Blenheim Shopping Centre, Penge, London, SW20 ERW, Fire Statement, Town and Country Planning, Revision 03, 14 February 2023

³ Town and Country Planning Consultation Response 2327338 Blenheim Shopping Centre, Penge, SE20 8RW 92-002791, date response sent 13 October 2023

and may not apply to this particular development, the intent of government is clear that the 18m threshold will be introduced and that the timeframe for introduction should be short.

Design teams and developers should be planning for the new requirements under the Building Safety Act for in scope buildings once occupied, including the need to provide a safety case review. The design as currently proposed may have implications on those responsible for demonstrating the ongoing safety in the building.

DFC Response:

Block A measures 17.7m in height from L00 to L05 (six storeys), therefore a second stair is not required in accordance with the design guidance BS 9991, nor the recent policy issued by the National Fire Chiefs Council or the recent announcement from government.

LFB Comment (2):

Fundamental concerns relating to single stair for Blocks B, D & E.

We note that the design includes the following features not supported by fire safety guidance and which, in our opinion, are not compatible with a single stair design:

- Amenity spaces at height, their connection with residential means of escape or potential conflict with the proposed 'stay put' design strategy for the residential accommodation. This is relating to the shared amenity spaces for Blocks B/C and D/E.

In our opinion, the planning authority should not consider these aspects appropriate given the reliance on a single staircase for occupant's means of escape, and we question how the principles of the London Plan 2021 have been met by this design.

The National Fire Chiefs Council have issued a position statement indicating that in their view residential buildings of 18 metres or of at least 7 storeys must become the threshold at which more than one staircase should be required in new residential buildings. We further draw your attention to the recent announcement from government stating their expectation that multiple staircases will be required in residential buildings above 18m. While the transitional arrangements are not yet available, and may not apply to this particular development, the intent of government is clear that the 18m threshold will be introduced and that the timeframe for introduction should be short.

Design teams and developers should be planning for the new requirements under the Building Safety Act for in scope buildings once occupied, including the need to provide a safety case review. The design as currently proposed may have implications on those responsible for demonstrating the ongoing safety in the building.

DFC Response:

Since the submission of the fire statements referenced, the design has been revised.

Block B and D are now both served by two stairs.

Block E measures 15.2m in height from L00 to L04 (five storeys), therefore a second stair is not required in accordance with the design guidance BS 9991, nor the recent policy issued by the National Fire Chiefs Council or the recent announcement from government.

The redesign also makes changes to the ancillary space, such that the only ancillary spaces accessed from within Blocks B, D & E:

- Access to the Building Estate Management office is proposed to be provided via Block B Lobby at L00. This is permitted given the two stair design.

- Access to the Caretakers room is proposed to be provided from the final escape corridor from Block D Lobby. This is permitted given the two stair design.
- Access to the communal rooftop amenity and services area is provided from the L04 common corridor within Block E. If a fire in the communal rooftop amenity and services area occurred, this is unlikely to impact the common corridor which forms the escape route for occupants, on the basis the communal rooftop amenity and services area is externally located. Therefore, any smoke is likely to dissipate to open air, as opposed to entering the building.

LFB Comment (3):

Ensuring suitable means of escape for all occupants in open plan apartments

We note that the proposal is to include open plan internal flat arrangements where the kitchen and in particular the cooking appliance is positioned in close proximity to the internal escape route and the flat entrance door. Guidance (ADB V1 paragraph 3.18 and BS 9991:2015, clause 9.1) recommends that cooking facilities are remote from the main entrance door and located in such a way that they do not prevent escape if they are involved in a fire. In this case, we note that the location of the cooking appliance is close to the door and that an assessment has been carried out in the form of a radiated heat analysis, in order to demonstrate its suitability. While we acknowledge that this is primarily a matter for the approving authority, it is our view that other factors should have been considered in the assessment, some of which are detailed in a – e below:

- a. the human behaviour e.g., willingness to pass a fire;
- b. the (accumulated) radiated heat, toxicity, and time period for which they will be exposed;
- c. the potential fire spread;
- d. the visibility conditions;
- e. the requirement for an early warning of a fire which meets the recommendations of BS 5839 part 6 with regards to the inner room protection e.g., a smoke detection should be positioned in all access rooms and along the means of escape.

It is therefore our opinion that any analysis carried out should include the above factors and suitably demonstrate to the approving authority that the facilities are remote from the main entrance door and do not impede the escape route from anywhere in the flat.

DFC Response:

Noted.

Where kitchens are to be unenclosed these shall be justified with an appropriate assessment developed in consultation with the approval authorities; taking account of all necessary parameters.

This will be developed further at the next design stage.

LFB Comment (4):

Evacuation lifts for Blocks A, B, C, D & E

We note the proposal to include an evacuation lift, however, there should be sufficient numbers of evacuation lifts provided so that if an evacuation lift is out of service (e.g., as a result of breakdown or maintenance), there is at least one that is still available for use from all areas of the building. Therefore, we question how London Plan 2021 Policies D5 and D12 have been met in this regard.

Design teams and developers should also be planning for the new requirements under the Building Safety Act for in scope buildings once occupied including the need to provide a safety case review.

The design as currently proposed will, in our view, have implications on those responsible for demonstrating the ongoing safety in the building.

DFC Response:

Block A, B, C, D & E are each provided with an evacuation lift.

There is currently no formal guidance provided by government in regard to the implementation of evacuation lifts under Policy D5 of the London Plan, beyond the requirement for one evacuation lift per core. Policy D5 does not set a requirement for multiple evacuation lifts.

The fire strategy has been developed with the incorporation of evacuation lifts to meet the stated requirements of Policy D5.

The design of any buildings will have implications on those responsible for demonstrating ongoing safety in buildings, as all buildings must be appropriately managed to ensure they remain fit for use at all times.

Management procedures should be in place for the maintenance and downtime, of any fire life safety system to mitigate any associated risk during this time period. Fire evacuation lifts are to form part of these procedures.

LFB Comment (5):

Access and facilities for the fire and rescue service for Blocks A, B, C, D & E

We note the proposal to include a firefighter's lift, however, there should be sufficient numbers of firefighters' lifts provided so that if a firefighter's lift is out of service (e.g. as a result of breakdown or maintenance), there is at least one that is still available for use from all areas of the building. Therefore, the level of provision should be reviewed for this design.

DFC Response:

Each storey area within each block is less than 900m². Current guidance permits the use of a single firefighting shaft (with single firefighting lift) to be used in buildings with floor areas less than 900m².

As such, the firefighting lift provisions reflect that recommended by current guidance.