

RED BANK OUTLINE PLANNING APPLICATION

Fire Strategy Statement

March 2023



Far East
Consortium

Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	23/03/2023	Fire Strategy Statement	MeH/ ShB	SB	SB

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Executive summary

This Fire Strategy Statement has been produced to support the Redbank outline planning application. The key considerations are as followed:

- This document presents an overview of the design principles to be considered and incorporated into the detailed design which will be the subject of detailed applications pursuant to the outline planning permission.
- Each detailed planning application will be supported by a detailed Fire Strategy Statement, and where buildings fall under the definition of a 'relevant building' under Regulation 7 (2), will be subject to consultation with HSE through the Gateway One process.
- All buildings will be individually assessed at the detailed design stage against the relevant guidance at the time.

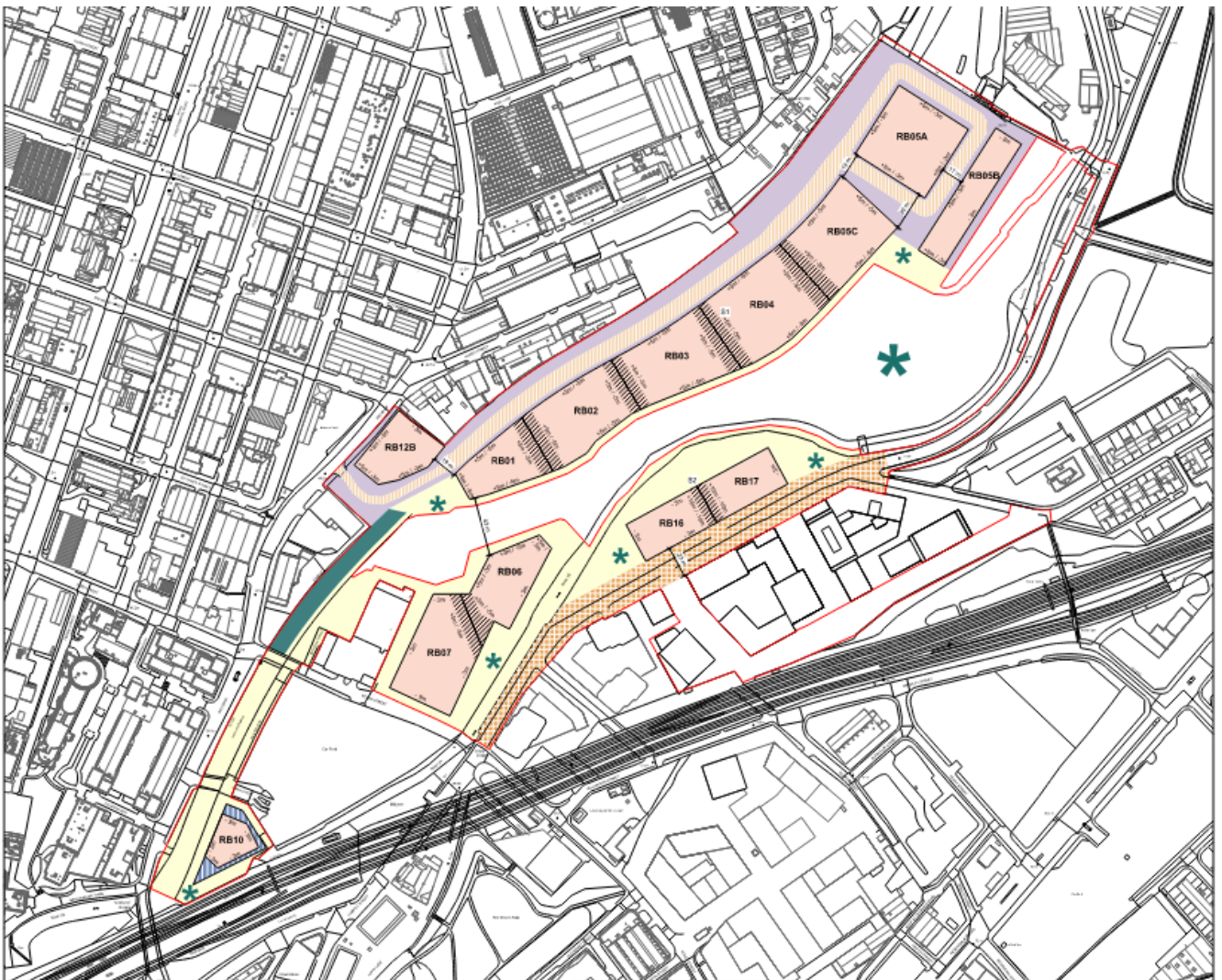
1. Introduction.

This Fire Strategy Statement has been prepared by Hoare Lea on behalf of Far East Consortium (FEC) in support of an outline planning application with all matters reserved for a residential led development for up to 3,250 dwellings with supporting commercial, social and community infrastructure at Red Bank, Victoria North, Manchester. The outline planning application consists of 12 residential plots and one flexible primary school or residential plot, and the layout is shown in Figure 1 below. An overview of the fire safety requirements is presented within this Fire Strategy Statement. A detailed fire strategy will be submitted with each detailed planning application pursuant to the outline planning permission.

All residential buildings will be assessed against the guidance of the draft BS 9991, however, it is noted that this document is yet to be published and all buildings should be individually assessed at the detailed design stage against the relevant guidance at the time.

The primary school should either be designed to BB 100 or BS 9999 (2017). However, this is to be confirmed and reviewed at the detailed design stage by the relevant design team.

Figure 1: Parameter Plan 1: Development Plots and Public Realm



2. Fire Safety Overview.

2.1 Sprinkler Protection.

All buildings containing residential apartments are required to be provided with sprinkler protection where the building height exceeds 11m in height. At the time of writing, sprinklers should be provided in accordance with BS 9251:2021. Where ancillary areas are provided which exceed the area limits in BS 9251, sprinkler protection should be provided in accordance with BS EN 12845.

It is noted that the LPC have updated their *Sprinkler Rules* document. This has included a significant change in TB229, where car parks are not classified as a HHP3 areas, up from an OH2 area. To be compliant, a sprinkler tank serving a car park will need to be 350m³-400m³, where they previously will have required 105-185m³.

As the primary school building is less than 30m in height, it is not required to be provided with sprinkler protection to meet the functional requirements of the Building Regulations, given the recommended compartment sizes (based on the guidance document applied) are not exceeded. However, sprinkler protection may be required for property protection and insurance purposes.

2.2 Regulation 7 and Relevant Buildings.

In accordance with Regulation 7(2), where residential buildings have a storey height in excess of 18m above the lowest adjacent external ground level, the external wall construction, and specified attachments including balconies, solar shading or solar panels, should achieve European Classification A2-s1, d0 or Class A1.

2.3 Fire Service Access.

2.3.1 Rising Mains.

For buildings greater than 18m in height, but less than 50m, a fire fighting shaft, including a dry rising main, should be provided. For buildings greater than 50m in height, a firefighting shaft incorporating a wet rising main is required.

2.3.2 Vehicle Access.

2.3.2.1 Buildings with mains.

For building with fire mains, fire service vehicle access should be provided around the site such that the vehicle may park within 18m of the fire main inlet valves and firefighting shaft entry points of each building.

2.3.2.2 Townhouses.

For independently accessed townhouses which are not provided with sprinklers, all parts of the dwelling should be no more than 45m from a Fire Service vehicle parking location, measured on a route suitable for hose laying.

Where town houses are provided with sprinkler protection throughout and have no floors more than 4.5m above Ground, the hose laying distance can be increased to 90m.

Where sprinkler protected town houses have only one floor above 4.5m, the hose laying distance can be increased to 75m.

2.3.2.3 Primary School.

The primary school is approximately 3,000m² in area. Given the top floor height of the building does not exceeds 7.5m, Fire Service vehicle access will need to be provided to a minimum of 15% of the building perimeter.

If the height of the school is increased to >7.5m, Fire service vehicle access will need to be provided to within 18m of the firefighting shaft access point and fire main inlet.

2.3.3 Hydrants.

In accordance with BS 9991, hydrants should be provided within 90m of the Fire Service access route into the building, or for buildings provided with fire mains – within 90m of dry fire main inlets and located on a ring main no more than 90m apart. A full assessment will be conducted at the detail design stages of the plots.

The location and condition of any existing hydrants is subject to confirmation via survey. The hydrant requirements should be confirmed and reviewed at the detailed design stage of each individual building.

2.4 Forthcoming Changes to Requirements.

There are a number of upcoming legislation and document changes which may affect the scheme which are detailed below.

2.4.1 Requirement for two stairs.

A draft update to Approved Document B was published in December 2022, with the government proposing the introduction of a threshold whereby residential building above 30 metres in height should be designed and built with two staircases.

This document is currently in consultation phase and therefore, the proposed threshold may change when the updated document is published.

2.4.2 BS 9991 update.

A draft update to BS 9991 was issued for public consultation towards the end of 2021. It is noted that this document is currently due for issue in October 2023. The contents of the draft document are not guaranteed to be included; however, the key changes include (but are not limited to) the following:

- Requirements for evacuation lifts to be provided in buildings over 18m in height.
- Single stair arrangements are only permitted in buildings above 18m if a number of requirements are met, including the requirement for a pressurisation system, and no connection to ancillary accommodation at the exit level.
- Single stairs in buildings over 11m are only permitted to connect to a basement level if a number of conditions are met, including separation between the flights connecting the ground level to the basement and the ground level to the upper levels.
- All structural elements should be 90 minutes for buildings less than 30m in height, and 120 minutes for buildings greater than 30m.
- All load-bearing elements should be constructed from class A1 materials in buildings above 18m.
- Secondary power supplies are to be provided via:
 - Generator.
 - HV supplies from two separate substations: or
 - UPS batteries.



SHAHISTA BUTT
GRADUATE FIRE ENGINEER

+44 161 672 7147
shahistabutt@hoarelealea.com

HOARELEA.COM

Royal Exchange
Manchester
M2 7FL
England

