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Retrospective Fire Strategy

Residential Apartments at
Chloe Court, Bournemouth Road,
London SE15 4UN

For Wandle
230 Blackfriars Road,
London, SE1 8NW

Issue Date: January 31st 2024 – First Issue Report For Review and Client Discussion Only

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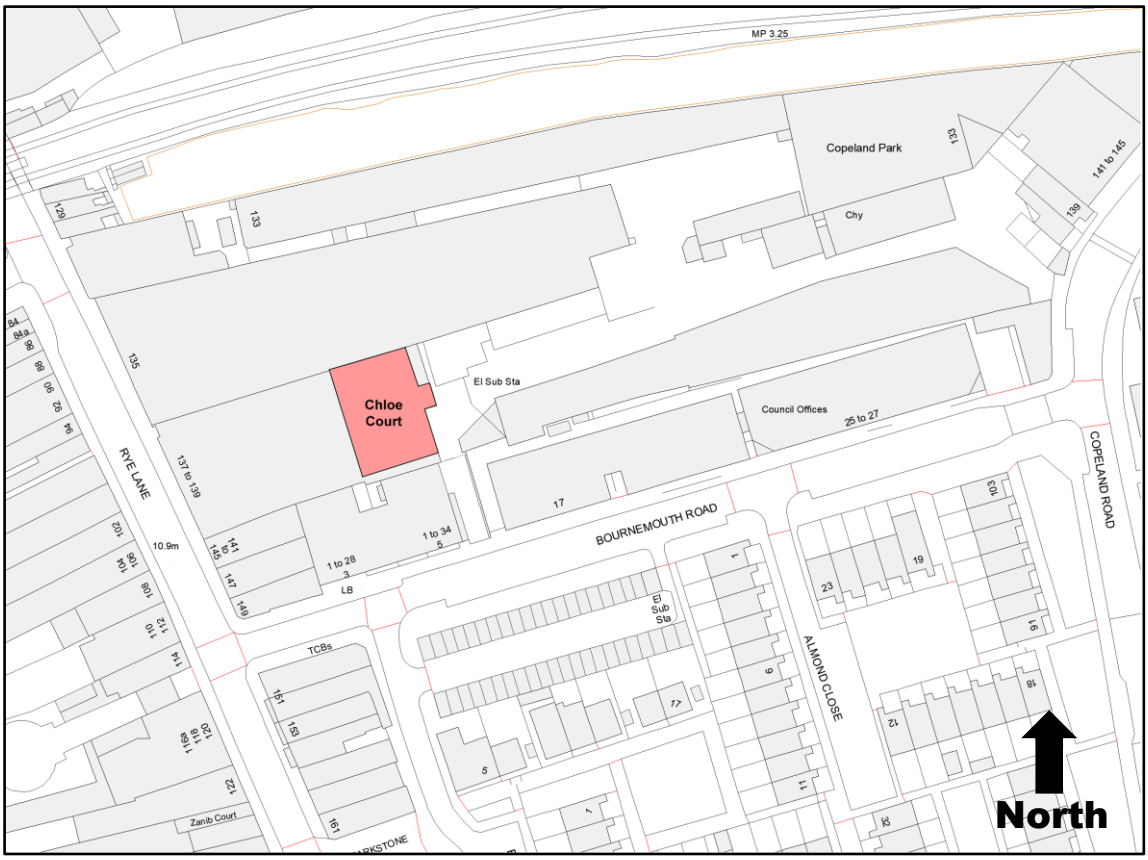
1. Introduction

1.1 Background

Keegans have been commisioned by Wandle to complete a retrospective fire safety review of the residential development at Chloe Court, Bournemouth Road, London and develop the associated Fire Strategy for the property.



Location Plan

The Fire Strategy has been completed by Andrew Morrison assisted by Wayne Howatt. Andrew is a Chartered Building Surveyor and a Chartered Building Engineer holding member status with the RICS and CABE as well as member status with the IFSM, with over 35 years' experience of surveying and construction including fire precaution and remedial works and the investigation of external wall systems and fire safety issues on many residential properties over several years. Academic qualifications include a BSc in Building Surveying and a MSc in Fire Safety Engineering, the completion of the RICS Level 6 Award for External Wall System Assessment and a FPA European certificate in Fire Risk Assessment.

Wayne Howatt holds member status with the IFSM and the IFPO. Academic qualifications include a B.Arch and a Diploma in Architectural Technology. Wayne has over 35 years' experience in the fields of architecture, building surveying and construction. He is a director of Keegans and is an experienced Fire Risk Assessor and Fire Risk Manager.

1.2 Report Scope and Contents

This document is focused on fire safety and compliance associated with life safety issues. We have not considered any elements associated with protection of assets.

1.3 Standards and Compliance

- Approved Document B (ADB) Volume 1 Dwellings, 2019 Edition incorporating 2020 and 2022 amendments.
- Relevant British Standards; BS9991 and BS9999.
- The Regulatory Reform (Fire Safety) Order 2005 (RRFSO).
- The Fire Safety Act 2022.
- HSG135 – Fires Safety in Construction

1.4 Details of the Development

Location

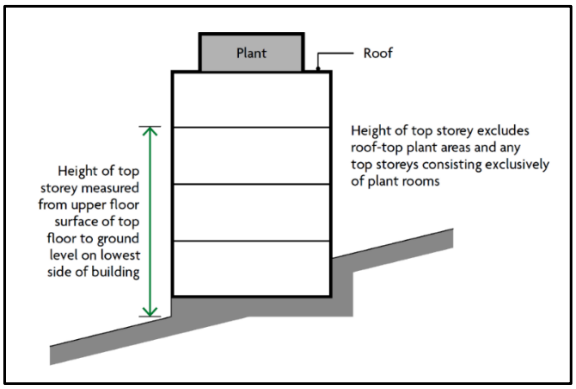
Chloe Court, Bournemouth Road, London, SE15 4UN

Number of flats

- 22 Single level and maisonette flats accessed by a single protected stairwell and a single lift.
- The building has a secure entrance at Ground Floor level with access through the covered pend from Bournemouth Road.
- Vertical access is by means of a single protected stairwell and a lift (non-firefighting).
- There is access from the First Floor to the internal courtyard to the West of the property, above the non-connected retail premises below.

Number of storeys and heights

- 7 Storeys (Ground to Sixth). The residential accommodation is from the First Floor, with the Ground Floor being predominately occupied by retail space (not connected).
- The height to the top storey is approximately 18.5m when measured in accordance with Diagram D6 of Approved Document B.



ABD Diagram D6 - Height of top storey in building

Chloe Court Main Entrance Area Viewed from Copeland Park Ind. Est.

Chloe Court Viewed from the First Floor Courtyard

1.5 Construction Overview

The primary structure is formed from concrete and steel with a brick/block external wall substrate. Over the substrate is an insulated render finish.

External Walls

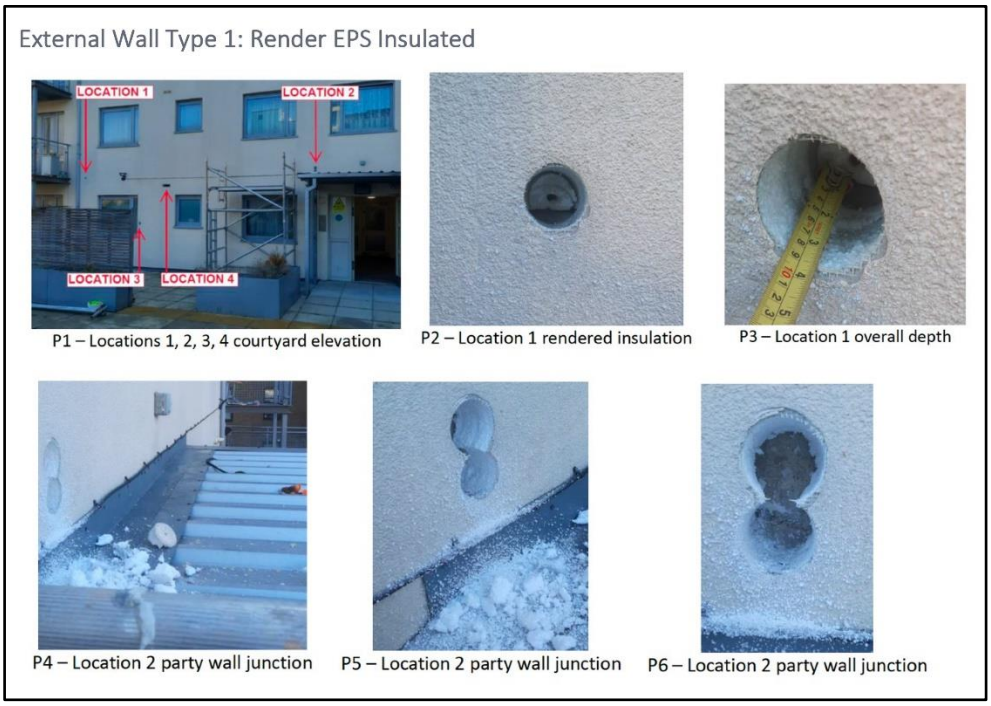
A completed PAS9980 Review was provided which shows that the building has been assessed to be High Risk with remediation required. The risk to life has been assessed as Substantial.

The PAS9980 Review has been completed by Michael A Fox of MAF Associates on 6th March 2023.

External Wall Details from the PAS9980 Review

The external walls are constructed around a concrete frame with load bearing masonry walls and floor. The insulated render is the main external wall material.

The outer walls are noted as: Wall type 1, render over EPS Insulation. The insulated render system is considered to be combustible as such the external surfaces of the building are likely to assist fire. The EPS insulation is likely to have a Material Fire Classification of Grade E or lower, as such the product is considered combustible. The insulated render covers the majority of the building, and this is considered to be a negative factor, the render spans floor levels and has window penetrations, these are negative factors, but they are also aggravated by the lack of cavity barriers at floor and party wall areas. It is unlikely to have the system will have the necessary fire resistance in the event of a fire.



Extract from FRAEW Showing Insulated Render Build UP, by MAF Associates

Mitigation Required

From the completed PAS9980 Review, the following mitigation actions have been noted as being required:

Item	Description
Wall type 1	Render over EPS Insulation
Risk	High — Remediation required
Reason	EPS insulation, no cavity barriers
Action	Remove and replace the EPS render system with a non-combustible alternative system. Install proprietary cavity barriers in line with compartment walls and floors as well as suitable cavity barriers around the openings.

Wall Attachments

The balconies are stacked and any fire starting on a balcony could interact with the external wall and assist spread between balconies.

Item	Description
Balconies	Storage
Risk	Medium — Remediation required
Reason	Stacked balconies and combustible screening
Action	Remove personal storage and timber screening

2. Emergency Escape Strategy

2.1 Evacuation Principle

The current evacuation strategy is Simultaneous Evacuation. The FRA provided (dated 8th December 2022) details that a full fire alarm system has been installed and is suitable for Simultaneous Evacuation.

A Simultaneous Evacuation strategy is considered to be generally inappropriate for a purpose built residential apartment building. The reasoning behind this may be due to the external wall treatment and the access issues for the Fire Service detailed herein.

2.2 Building Population

The building is general needs housing. All residents will be required to evacuate in the event of fire. Being a long-term residential building with occupants having good knowledge of the building, an approximate maximum number of evacuees will be 50. This includes a maximum allowance for visitors to the properties served by the protected stairwell.

2.3 Alarm and Detection System

Within Dwellings

ADB requires a minimum of a Grade D2 Category LD3 alarm and detection system within a residential dwelling. All system elements and components must be designed and installed in compliance with BS 5839-6.

Within Common Areas

The common escape routes are to be fitted with a Category L2 system in accordance with BS 5839-1. This will consist of smoke detection in all corridors and stair wells and must be capable of automatic actuation of the smoke control systems. The system will not automatically sound an audible warning. Smoke detectors should be sited in compliance with the relevant standards, with all parts of any common area being no more than 7.5m away from a detector.

Alarm Panel Type and Location

The fire alarm panel is to be located on the ground floor near the primary entrance and will be placed appropriately for staff and firefighters. The exact location should be confirmed as agreed with the local Fire and Rescue Service.

Special Needs Check

If people with special needs are to be resident in the building, then their requirements will be assessed on an individual basis. There must be a means to alert hard of hearing and other ASN occupants of the building. Exact provisions should be agreed with all relevant parties. The chosen alert systems must be interfaced with the alarm and detection system. There must be a Personal Emergency Evacuation Plans (PEEPs) developed to specify the evacuation plan for each occupant with special needs as and when required. PEEPs will be housed in the PIB. For people with mobility issues, a degree of mitigation is provided by the adoption of a 'safe to stay' evacuation principle. Additionally anyone who cannot descend the stairs should wait on a landing within the protection of the stair enclosure and await assistance from the Fire Service.

2.4 Means of Escape

Within Dwellings

In accordance with the recommendations in ADB, travel distances within each apartment should not exceed 9m in a single direction to an escape route. The protected entrance hall should not exceed 9m and should be constructed of a 30-minute fire rated material with FD20 fire doors. Cooking facilities are to be designed and located so that they will not prejudice the escape from any point within the flat.

Within Common Corridors

ADB states that the maximum permitted single direction travel distance is 7.5m within a ventilated corridor in a dead-end situation (see Diagram 3.7 over). The distance from the stair door to the furthest apartment for all corridors from the Floor 2 to Floor 6 does not appear to be within 7.5m and therefore would not meet the single direction requirements. Given that this is an existing building there are limited options to address this issue. Other forms of mitigation may be required. All other ADB travel distance requirements have been met.

Fire Doors to Escape Routes

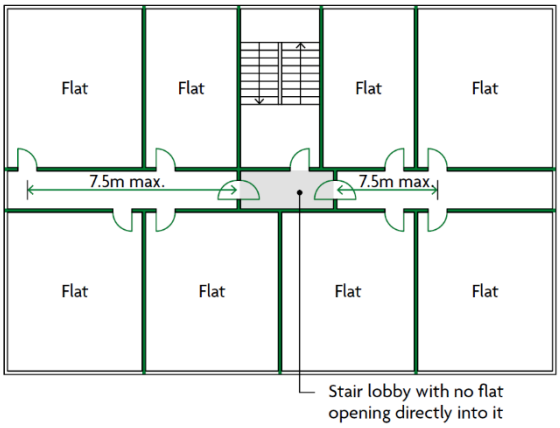
- Be hung to open not less 90 degrees.
- Should be sufficiently recessed to prevent its swing from encroaching on the required egress route of the escape.
- Only fitted fastenings which are readily operated, without the use of a key and without having to manipulate more than one mechanism.
- Provided with vision panels if they are provided to sub-divide corridors or where doors are hung to swing both ways.
- Door widths are to be a minimum of 750mm.
- Compliant with all applicable British Standards and Codes of Practice.

Protected Stairwells

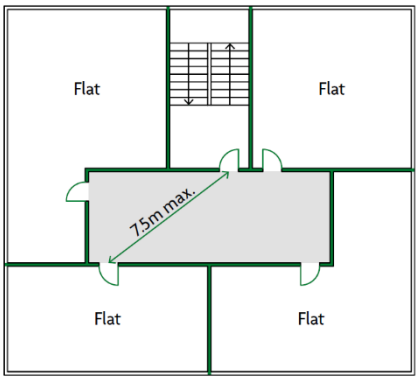
The protected stair must discharge either directly to the external area final exit, or via means of a protected 'sterile' corridor and then to the final exit. Clear width of stairs should be measured between the walls and/or balustrades. Handrails and strings encroaching into the width of the stair by a maximum of 100mm on each side may be discounted from the staircase's clear width. The stairs have a minimum clear width of 1200mm, as only a single apartment is required to evacuate at any one time, the stair size is sufficient for this amount of people and is in compliance with the requirements of ADB Section 3, Paragraph 3.6. All stairs require a 1.0 sqm. AOV at high level, these are equipped to actuate on activation of smoke detection. Final exit doors should be provided with the same clear width as the stair they serve.

See para 3.27 and 3.36

a. Corridor access flats



b. Lobby access flats



Shaded areas indicate zones where ventilation should be provided in accordance with paragraphs 3.50 to 3.53 (An external wall vent or smoke shaft located anywhere in the shaded area)

Fire resisting construction

NOTES:

1. The arrangements shown also apply to the top storey.
2. See Diagram 3.9 for small single stair buildings.
3. All doors shown are fire doorsets.
4. Where travel distance is measured to a stair lobby, the lobby must not provide direct access to any storage room, flat or other space containing a potential fire hazard.
5. For further guidance on the performance of the fire doorsets from the corridor to the flat and/or stairway refer to Appendix C, Table C1.

ADB Diagram 3.7 - Flats Served by One Common Stair

2.5 Ventilation and Smoke Control Provisions

The relevant sections in ADB state that all openable vents for smoke control should be outward opening, not be top-hung and open to a minimum of 30 degrees.

All elements must conform to BE EN 12101-2.

2.6 Evacuation of People with Special Needs

The building is general needs housing, if people with special needs are to be resident in the building, then their requirements will be assessed on an individual basis. There are no specific requirements stating the need to provide disabled egress facilities in private residential buildings. Should a fire develop, the building has been designed in a way to afford occupants to 'stay put' through appropriate levels of compartmentation. If a fire were to develop within an apartment area, disabled occupants can make their way to a protected area of the building, such as a protected corridor or stair.

Personal Emergency Evacuation Plans (PEEPs) will be developed as required and be agreed upon for all occupants requiring assistance during an evacuation. Detailed PEEPs will allow fire service personnel attending the building to be made aware as to the level of support required during an evacuation. A management strategy should be developed to detail how to manually assist any persons with special needs downstairs and to a place of safety. (see also Section 6.4 Premises Information Boxes).

2.7 Emergency Lighting

Emergency lighting must be provided throughout in compliance with BS 5266 and BS EN 1838. This lighting will be positioned appropriately to give luminance near to each exit door and to highlight any possible dangers and safety equipment.

Key areas for the installation of emergency lighting include:

- At common area doors to escape routes.
- Staircases.
- Near any change in level.
- Mandatory emergency exits and safety signs.
- At each change of direction.
- At any intersection of corridors.

2.8 Signage

Fire escape and directional signage will be provided throughout to aid residents from any point in the building. The purpose of the signage is to guide occupants via the primary escape route from their location to a place of safety outside of the building. All signage must be compliant with BS5499: Part 4 and 10 and BS ISO 3864-1.

Criteria for location of fire escape and directional signage includes:

- Where direct sight of an escape route is obstructed, additional signage is to be considered.
- Escape route signage must take precedence over all other signs.
- All changes of direction in corridors, stairways and open spaces forming part of an escape route will be marked with intermediate signs.
- Each intermediate door or junction will also be signed.
- Signs are not to be fixed to doors or sited where they are obscured by open doors.

2.9 Photovoltaic Panels

The PV panels installed at roof level must be fitted with compliant AC and DC isolator switches with clear indication for use by fire fighters.

3. Internal Fire Spread

3.1 Linings

The materials used in the construction of internal walls and ceilings can greatly impact the spread of fire within a building. The specification of these materials is of significant importance in escape routes and protected spaces.

European Standard EN 13501-1 : 2018 provides fire classification of construction products and building elements. This European Standard provides the reaction to fire classification procedure for all construction products, including products incorporated within building elements. Products are considered in relation to their end use application. This document applies to three categories, which are treated separately in the standard; construction products, floorings and linear pipe thermal insulation products. To be non-combustible, materials must meet the requirements of Euro Class A1, or A2-s1,d0.

Definition	Construction products			Floorings	
	A1			$A1_{fl}$	
non-combustile materials	A2 - s1 d0 A2 - s2 d0 A2 - s3 d0	A2 - s1 d1 A2 - s2 d1 A2 - s3 d1	A2 - s1 d2 A2 - s2 d2 A2 - s3 d2	$A2_{fl}$ - s1	$A2_{fl}$ - s2
combustible materials - very limited contribution to fire	B - s1 d0 B - s2 d0 B - s3 d0	B - s1 d1 B - s2 d1 B - s3 d1	B - s1 d2 B - s2 d2 B - s3 d2	B_{fl} - s1	B_{fl} - s2
combustible materials - limited contribution to fire	C - s1 d0 C - s2 d0 C - s3 d0	C - s1 d1 C - s2 d1 C - s3 d1	C - s1 d2 C - s2 d2 C - s3 d2	C_{fl} - s1	C_{fl} - s1
combustible materials - medium contribution to fire	D - s1 d0 D - s2 d0 D - s3 d0	D - s1 d1 D - s2 d1 D - s3 d1	D - s1 d2 D - s2 d2 D - s3 d2	D_{fl} - s1	D_{fl} - s1
combustible materials - highly contribution to fire	E		E - d2	E_{fl}	
combustible materials - easily flammable	F			F_{fl}	

Classification According to European Standard EN 13501-1

's' – Smoke emission level, values range from 1 (absent/weal) to 3 (high).
'd' – Flaming droplets and/or particle production, values range from 0 (absent) to 2 (high).

Table 4.1 Classification of linings

Location	Classification
Small rooms of maximum internal floor area of 4m²	D-s3, d2
Garages (as part of a dwellinghouse) of maximum internal floor area of 40m²	
Other rooms (including garages)	C-s3, d2
Circulation spaces within a dwelling	
Other circulation spaces (including the common areas of blocks of flats)	B-s3, d2[1]

NOTE:

1. Wallcoverings which conform to **BS EN 15102**, achieving at least class C-s3, d2 and bonded to a class A2-s3, d2 substrate, will also be acceptable.

ADB Table 4.1 – The Surface Linings of Walls and Ceilings

The surface linings of walls and ceilings should meet the classifications in Table 4.1 as shown above.

ADB states the following requirements:

Walls

4.2 For the purposes of this requirement, a wall includes both of the following:
a. The internal surface of internal and external glazing (except glazing in doors).
b. Any part of a ceiling which slopes at an angle greater than 70 degrees to the horizontal.

4.3 For the purposes of this requirement, a wall does not include any of the following.
a. Doors and door frames.
b. Window frames and frames in which glazing is fitted.
c. Architraves, cover moulds, picture rails, skirtings and similar narrow members.
d. Fireplace surrounds, mantle shelves and fitted furniture.

4.4 Parts of walls in rooms may be of lower performance than stated in Table 4.1, but no worse than class D-s3, d2. In any one room, the total area of lower performance wall lining should be less than an area equivalent to half of the room's floor area, up to a maximum of 20m2 of wall lining.

Ceilings

4.5 For the purposes of this requirement, a ceiling includes all of the following:
a. Glazed surfaces.
b. Any part of a wall at 70 degrees or less to the horizontal.
c. The underside of a gallery.
d. The underside of a roof exposed to the room below.

3.2 Structure

There must be a minimum standard of fire resistance to prevent the premature failure of load bearing elements of the structure.

Elements of the structure are defined as follows:

- A member forming part of the structural frame of a building or any beam or column.
- A load bearing wall or load bearing part of a wall.
- A floor.
- A gallery.
- An external wall structure supporting fire protected elements for the prevention of external fire spread.
- A compartment wall.

The following are excluded from the definition of elements of structure:

- A structure that only supports a roof, unless:
    - The roof performs the function of a floor such as parking vehicles or as a means of escape, or
    - The structure is essential for the stability of an external wall which needs to have fire resistance.
- The lowest floor of the building.

As the building is 18.5m in height, when measured in accoradnce with Diagram D6 of ADB, the building has been constructed with the required 90 minute fire resistance to all elements of the structure when tested in accordance with the appropriate part of BS 476 for load bearing elements. The compartment floors should be provided throughout with 60-minute fire resistance rating.

3.3 Automatic Water Fire Suppression Systems (AWFSS)

As the building was constructed between 2016 and 2018, the compliance standards in place at that time stated that AWFSS protection was not required within the residential apartments and common areas for a building of this height and configuration.

4. Compartmentation

4.1 Compartmentation

Each residential apartment must be a completely separate compartment, while all party walls (and walls to common areas) are to be compartment walls. Additionally, as the building serves as a residential accommodation, all floors are to be constructed as compartment floors.

Referencing ADB, in particular Tables B3 and B4, we have summarised the compartmentation fire ratings that are required to achieve adequate compliance:

Location	Fire Rating (minutes)
Compartment Floor	60
Walls separating apartments	60
Stair	60
Risers	60
Protected Entrance Halls (within flats)	30

We have also produced a summary of the fire door ratings that are required to achieve adequate compliance:

Location	Fire Rating	Self-Closer
Flat Entrance Door	FD30S	Yes
Protected Entrance Halls	FD20	No
Protected Common Areas/Stairwells	FD30S	Yes
Service Risers	FD30S	No (locked)

Note: The above ratings are the minimum standard required for compliance. In certain instances, the building may have compartmentation and door ratings which are in excess of the minimum.

Refer to Section 9 for drawings detailing the lines of compartmentation.

4.2 Protection of Openings and Fire Stopping

To ensure that all fire compartmentation and fire separating elements are not compromised, it is required that every opening to allow services to pass through are all suitably fire protected by providing a sealant or fire stopping so that the required fire resistance is not reduced. This can be achieved by the use of proprietary seals, fire resisting materials, adopting pipes with a restricted diameter or by sleeving. All materials and solutions adopted must meet the requirements for installation of the relevant manufacturers. Vertical service risers will be enclosed in a fire protected shaft and fire stopped at each compartment floor.

4.3 Fire and Smoke Dampers

Fire dampers are to be operated by smoke detection and thermal fusible link if ducts access or leave a compartment.

All fire and smoke dampers are to be tested to BS EN 1366-2 and classified to BS13501-3. The dampers are to have the same fire resistance as the wall or floor they penetrate.

Dampers are not required within internal protected entrance halls if:

- The duct work used is of rigid steel construction and all joints in the duct work are sealed with an intumescent sealant to prevent any leakage of hot smoke into the corridor.
- All penetrations in walls are fire stopped to the minimum fire resistance of the wall duct passes through.
- Ventilation ducts supplying or extracting air directly to or from a protected entrance hall, should not also serve other areas.
- Any system of mechanical ventilation which re-circulates air, and which serves both the stairway or entrance halls, and other areas should be designed to shut down on the detection of smoke within the system.

If PVC ductwork is to be used and passes through (but does not serve) the enclosure to a protected entrance hall, an intumescent fire collar shall be fitted at the point at which the ductwork crosses the enclosing walls of the protected entrance hall.

4.4 Cavity Barriers

See comments from the PAS9980 review in Section 1.5.

Fire spread is likely to move through the concealed spaces or cavities in a construction. The provision of cavity barriers within these voids is critical to halting the spread of smoke and flames.

Cavity barriers must be provided at the junction between any external cavity wall and a compartment wall or floor and around openings (doors, windows etc.) in external walls. Cavity barriers must also be provided in voids above all internal corridor sub-divisions.

Cavity barriers should be constructed to provide 30min fire resistance (E30 I15 when exposed from each side separately). The cavity barriers should be tightly fitted to a ridged construction and mechanically fixed in position. The type of cavity barriers to be used in each location must be confirmed as suitable prior to commencement of site construction.

4.5 Roof Level Compartmentation

The lines of compartmentation between flats, and between flats and the common area/ancillary accommodation located on the top floor of a building should extend through the roof void in a continuous vertical plane to the underside of the roof and be fire stopped at the wall/roof junction to afford a minimum 60-minutes fire resistance.

5. External Fire Spread

5.1 External Fire Spread

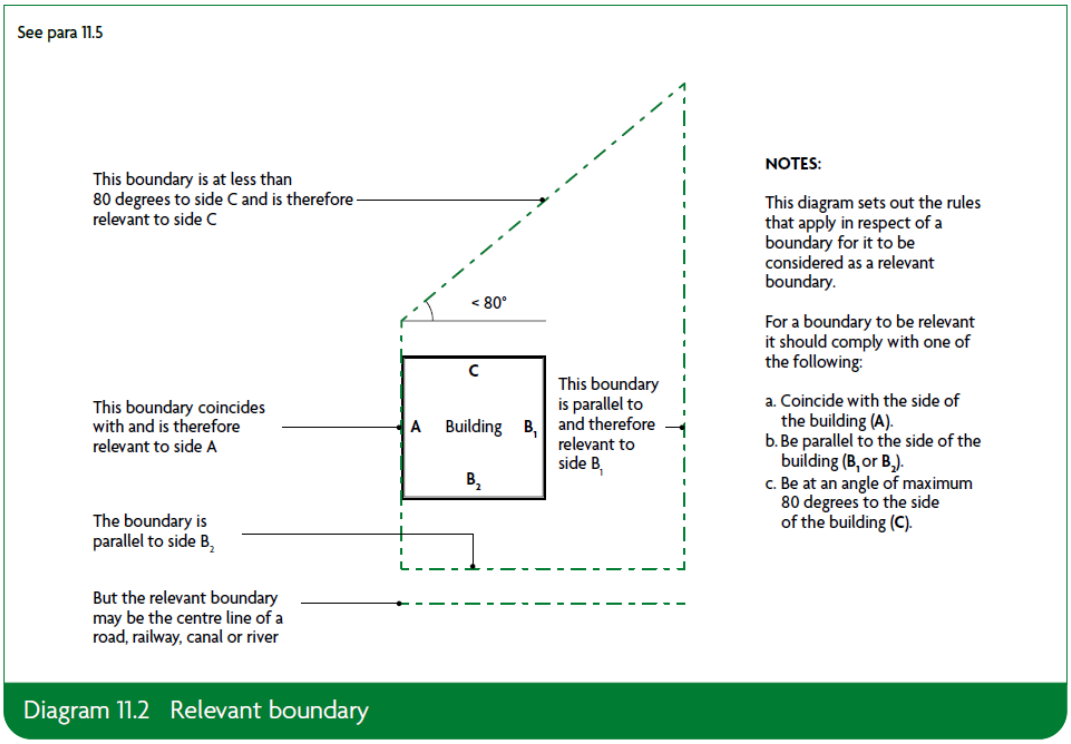
ADB States that 'The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building. The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building'.

5.2 Space Separation

ADB states that 'The fire resistance of a wall depends on its distance from the relevant boundary (see Diagram 11.1). Separation distances are measured to boundaries to ensure that the location and design of buildings on adjoining sites have no influence on the building under consideration. The boundary that a wall faces is the relevant boundary (Diagram 11.2). It may be one of the following.

a. The site boundary.

b. The centre line of a space where further development is unlikely, such as a road, railway, canal or river'.

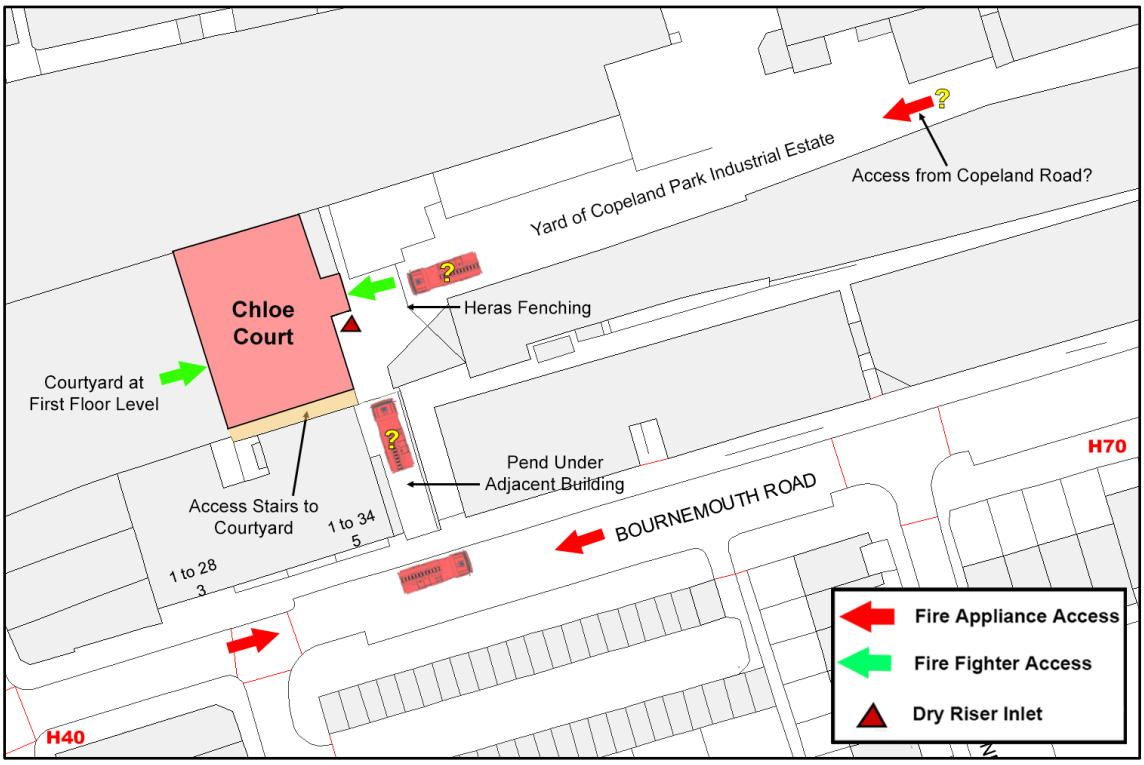


ADB Diagram 11.2 Relevant Boundary

The current condition of the building appears to meet the requirements of ADB for the percentage of unprotected space calculated from the distances to the relevant boundaries.

6. Fire Service Access and Facilities

Access for the Fire & Rescue Service is significantly compromised by the 'off street' nature of the building location. There is no direct road access for a fire appliance to get within a reasonable distance of the property. A fire appliance parked on Bournemouth Road would be approximately 35m from the dry riser inlet. As detailed below, this is well in excess of the required 18m. It is possible that an appliance could be positioned closer to the building by accessing through either the covered pend under the adjacent flats, or from the yard of Copeland Park Industrial Estate which is accessed off of Copeland Road through security gates. Both of these options have issues which would need to be discussed and agreed with the local Fire & Rescue Service.



Fire Access Block Plan

The local Fire Station is Peckham Fire Station, 78-80 Peckham Rd, London SE5 8PR which is 0.7 miles from the site address using the direct route which includes road restrictions at the end of Bournemouth Road. The alternative route, which is free of road restrictions, is 1.4 miles. Based upon these travel distances, an estimated travel time of less than 10 minutes is considered reasonable and as such, a swift response to any emergency call would be anticipated.

6.1 Dry Riser

The building has been designed with single dry riser inlet. This must be installed in full accordance with BS 9990.

The dry riser design must include for the following:

- Inlets at ground level should be within 18m of fire appliance access and visible from the tender unit.

- Outlets at each floor level should be within 45m of all parts of the building on a route suitable for laying hose, this is achieved from both stairs.
- Dry rising mains should be designed to operate at 12-bar of pressure.
- In order to provide an adequate level of water delivery dry rising mains should be installed with a two-way inlet breaching for 100mm mains, this should be in accordance with BS 5041-3.
- The inlet breaching should be provided for within an inlet box conforming to BS5041-5, with its lower edge positioned between c.400mm-600mm above Ground level.
- Inlet breaching should be fitted with a 25mm drain valve, in accordance with BS5401-3. This is to satisfy the draining of the riser after testing and use.
- An air release valve should be installed at the top of each vertical rising main. This allows for ventilation of the main, acting as a vacuum break allowing the water within the pipe to drain out after use.
- Dry rising mains should have landing valves located on the roof if practicable to allow for testing.
- Landing valves should be designed and installed in accordance with BS5041-2.

The Riser Inlet is located adjacent to the main Ground Floor entrance area. This measured as 32m from the nearest fire appliance access on Bournemouth Road and as such is in excess of the required distance. In order to achieve the required distance, the fire appliance would be required to access the site by means of the pend from Bournemouth Road and park closer to the inlet. It is strongly recommended that there is discussions with the local fire service as to their view on satisfactory fire appliance access.

6.2 Fire Hydrants

As the building does not have a compartment of more than 280sqm, the existing hydrant (H40) located at the corner of Bournemouth Road and Rye Lane is within 100m of the building and is therefore compliant. There is an additional hydrant (H70) on Bournemouth Road within 130m of the building.

All hydrants are to have signage in accordance with BS 3251. M&E should confirm that any existing hydrants are working, and suitable, for the building's purpose.

6.3 Wayfinding Signage

To assist the fire service to identify each floor in a block of flats, floor identification signs and flat indicator signs should be provided.

The floor identification signs should meet all of the following conditions:

- The signs should be located on every landing of a protected stairway and every protected corridor/lobby (or open access balcony) into which a firefighting lift opens.
- The text should be in sans serif typeface with a letter height of at least 50mm. The height of the numeral that designates the floor number should be at least 75mm.
- The signs should be visible from the top step of a firefighting stair and, where possible, from inside a firefighting lift when the lift car doors open.
- The signs should be mounted between 1.7m and 2m above floor level and, as far as practicable, all the signs should be mounted at the same height.
- The text should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch.

The wording used on each floor identification sign should take the form Floor X, with X designating the number of the storey, as intended for reference by residents. The floor number designations should meet all of the following conditions:

- The floor closest to the mean ground level should be designated as either Floor 0 or Ground Floor.
- Each floor above the ground floor should be numbered sequentially beginning at Floor 1.

All floor identification signs should be supplemented by flat indicator signs, which provide information relating to the flats accessed on each storey. The flat indicator signs should meet all of the following conditions:

- The signs should be sited immediately below the floor identification signs, such that the top edge of the sign is no more than 50mm below the bottom edge of the floor identification sign.
- The wording should take the form Flats X–Y, with the lowest flat number first.
- The text should be in sans serif typeface with a letter height of at least half that of the floor indicator sign.
- The wording should be supplemented by arrows when flats are in more than one direction.
- The text and arrows should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch.

6.4 Premises Information Boxes

The provision of PIBs in residential buildings should comply with the Fire Industry Association (FIA) and National Fire Chiefs Council (NFCC) Code of Practice.

The need to ensure that information is available to the fire and rescue service in a consistent format to assist with the emergency response, especially taking into account those with mobility, cognitive or sensory impairments is crucial. The Code of Practice helps ensure that those most in need of support are fully considered in the decisions and plans for managing an incident.

PIBs should be located at the main Fire Fighter Access entrance areas.

7. Fire Safety Management

7.1 Regulatory Reform (Fire Safety) Order

The Regulatory Reform (Fire Safety) Order 2005 places a general duty of fire safety care on employees, occupiers and/or owners of property to provide and maintain adequate fire precautions.

The legislation is supported by requiring that a Fire Risk Assessment and a Fire Safety Management Plan should be completed at the time of occupation of the premises to comply with Article 9 of The Regulatory Reform (Fire Safety) Order 2005.

The FRA should identify and include the following:

- Potential fire hazards
- Evaluate the risk from the hazards.
- Identify who would be at risk.
- Identify an adequate level of fire precautions to compensate for the risk.

Based upon the information provided to us, the last FRA produced for the property was in December 2022, this was a non-intrusive Type 1 report. We would comment that for a residential property of this type and height, a FRA should be produced every 12 months. This frequency of reporting would also be supported by specific issues identified at the building, including the PAS9980 Review and the issues with common corridor travel distances and fire appliance access. We believe that an new FRA should be instructed as a matter of urgency, and that an intrusive Type 4 assessment would be appropriate.

The responsible person on occupation should provide adequate fire safety information to all eventual residents of the flats. This could be in the form of a home user guide to include basic prevention measures and the fire evacuation strategy and procedures. Further information on advice to occupiers of dwellings in residential buildings including an example fire evacuation plan is provided in Annex F of BS 9991:2015.

The fire emergency plan must be communicated to each resident on occupation. Residents should have a clear understanding of what actions to take should a fire situation occur, and they need to evacuate the building.

8. Conclusion

We believe that design and condition of the building does not currently meet with prescriptive requirements stated.

These requirements have typically been stated as a performance specification and should be adhered to during the operation and maintenance of the building.

Our concerns are principally based upon the following significant issues:

- The outstanding issues and remedial works detailed in the PAS9980 review.
- The buildings 'off road' location and subsequent access issues.
- The non-compliant travel distances in the common corridors.

Limitations & Disclaimer

This report has been prepared solely for Wandle and is for their sole and exclusive use. It should be expressly noted that no responsibility or liability howsoever arising is accepted to any third party for the whole or any part of the contents of this report.

The information collected and statements made in this report are based solely on a review of the written, drawn and photographic information and statements made by Wandle.

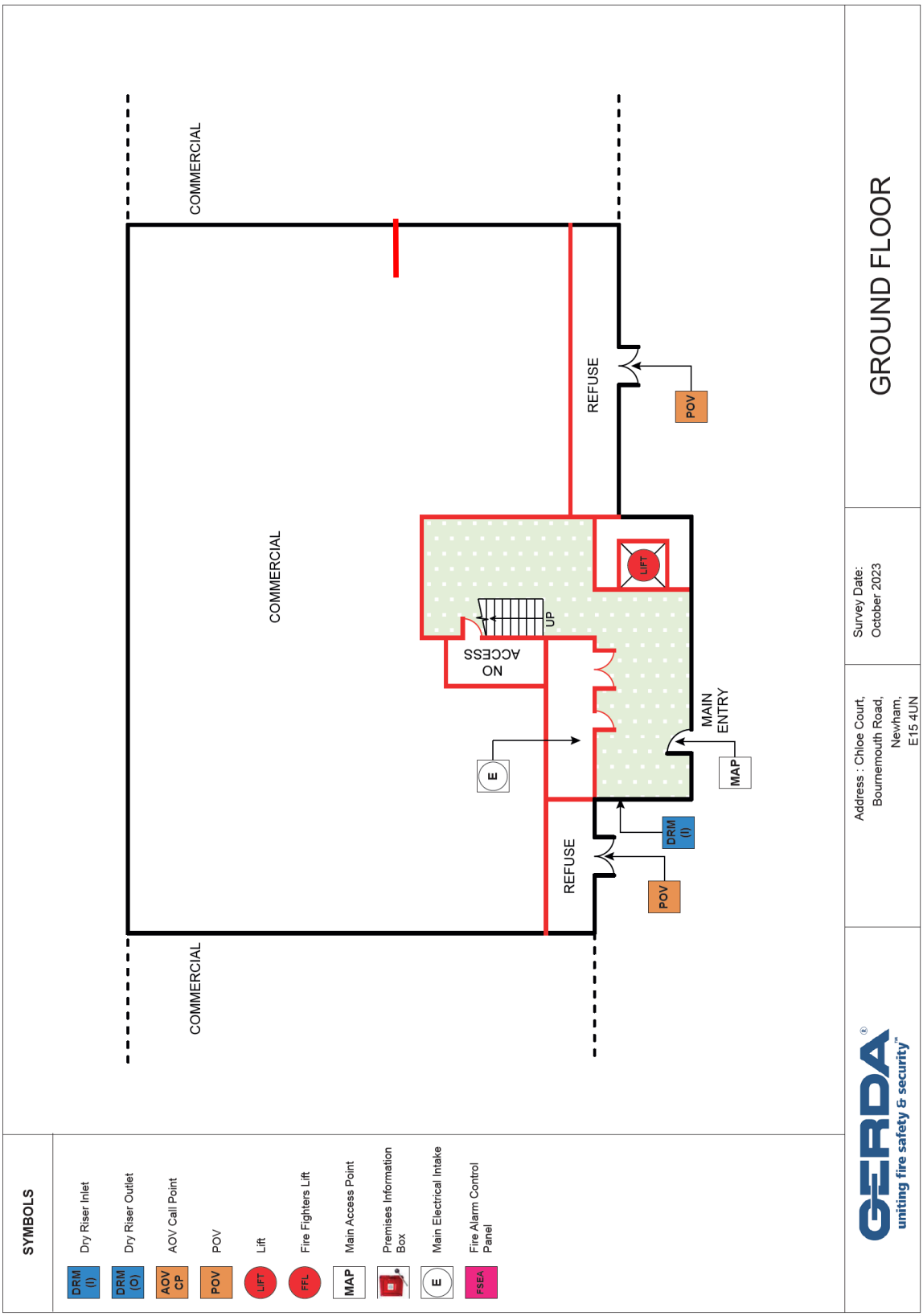
This assessment has been based on a desktop review of the information provided by the client and their appointed professional team.

We reserve the right to withdraw this report if any of the information provided is found to be incorrect.

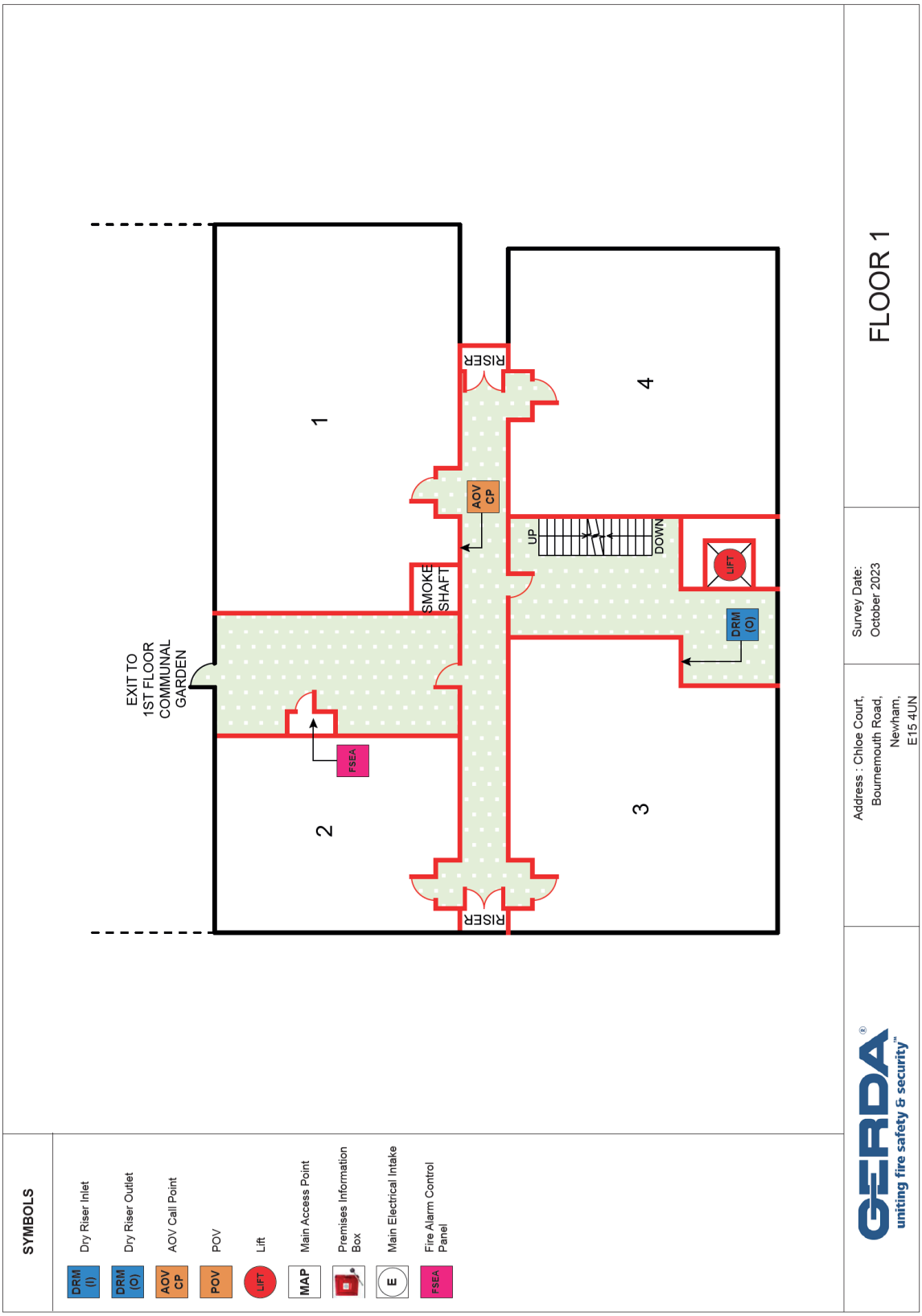
The agreement from which this report arises does not give rise to any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this agreement.

9. Fire Strategy Drawings

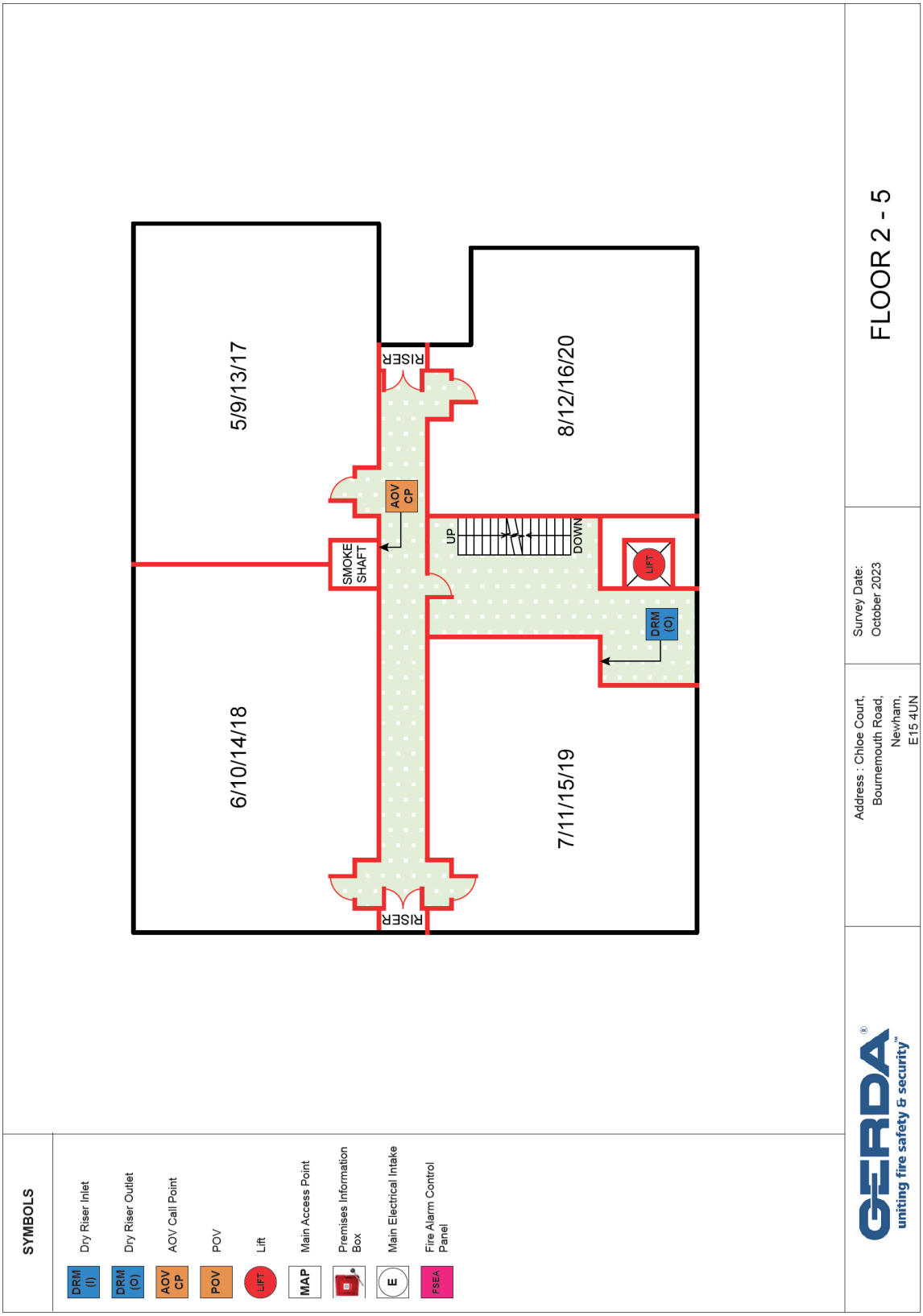
The following drawings indicate the layout, means of escape, fire equipment and compartmentation design of the building. The plans have been prepared by Gerda Security for Wandle.



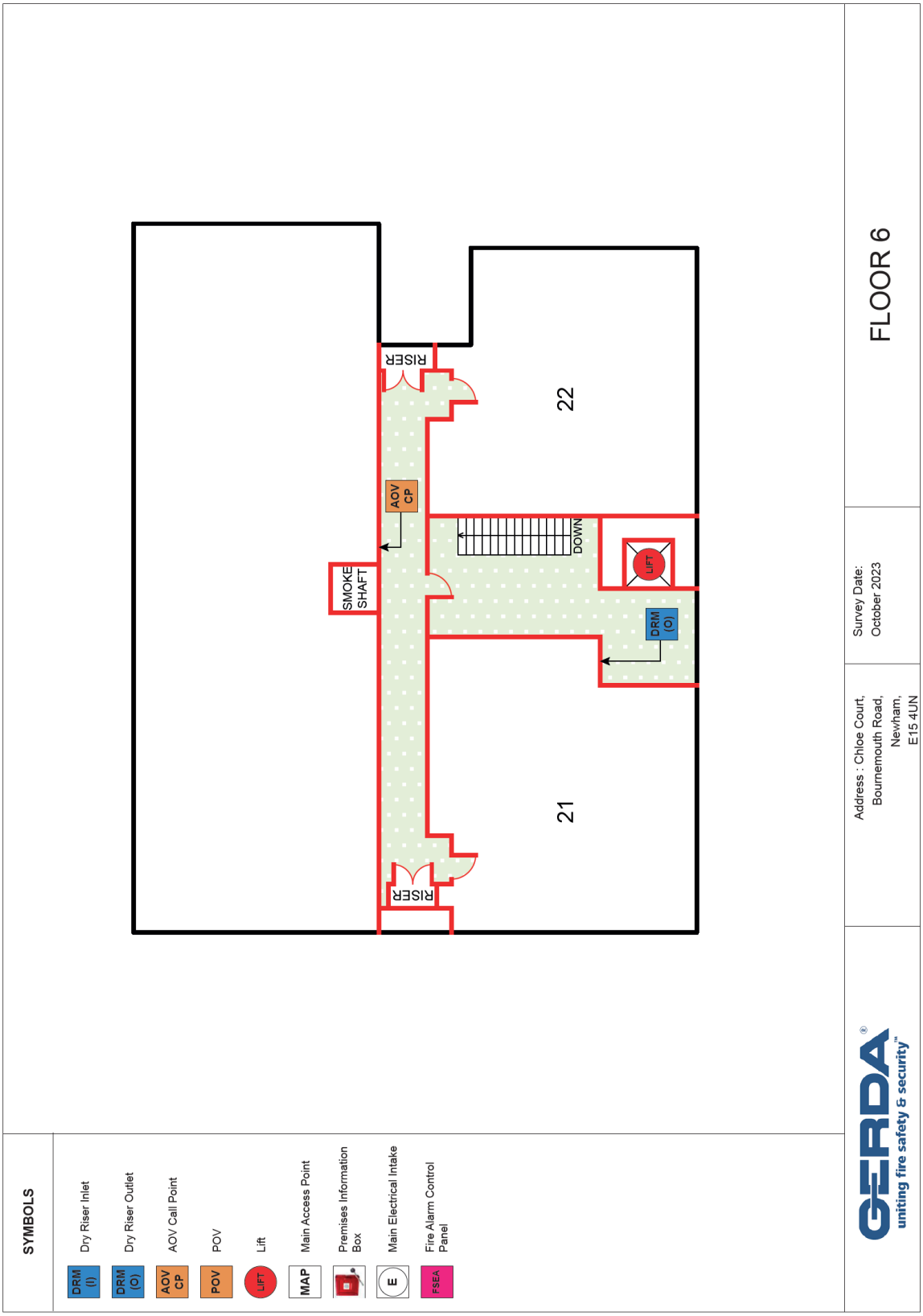
Ground Floor Plan (Fire Strategy)



First Floor Plan (Fire Strategy)



Second to Fifth Floor Plan (Fire Strategy)



Sixth Floor Plan (Fire Strategy)

Vertical Plan (Fire Strategy)