

VICTORIA PARK PROBATION CENTRE MANCHESTER OUTLINE FIRE SAFETY STRATEGY



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Project No.: MA22098
Revision: R02
Date: 16/12/2022

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QUALITY MANAGEMENT

Revision	Date	Comment	Author	QA & Technical Review	Approver
R00	14/10/2022	First issue for comments	Jesus Gil	Alex Robinson	Richard Rankin
R01	02/12/2022	Updated following removal of water mist system from townhouses	Alex Robinson	Melanie Harris	Richard Rankin
R02	16/12/2022	Updated following changes in general arragments	Jesus Gil	Alex Robinson	Richard Rankin

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1 INTRODUCTION

1.1 Appointment

OFR Consultants have been appointed by Victoria Britannia Limited to provide fire engineering support for the Victoria Park residential scheme located on Laindon Road, Manchester.

This document is the outline fire strategy for the development at RIBA Stage 3. The intent of the document is to provide fire safety advice and to define the key fire strategy elements, that will be further developed during RIBA Stage 4.

This report specifically covers life safety issues only. Property protection issues do not fall under the scope of this document. This fire strategy will allow the design to be discussed to seek agreement in principle with an appointed Building Control body. As the project progresses, a detailed fire strategy, including all relevant analyses, shall be developed and integrated into the final design for submittal for approval by the Building Control body. Ultimately the design will need to be fully translated into the completed scheme using due skill and care by competent persons to ensure the requirements of the Building Regulations are met.

1.2 Applicable Legislation

Fire safety of building works is legislated by the Building Regulations 2010 (including amendments up to 2019) [1]“the Regulations”. The Regulations have been enacted under the Building Act 1984 [2]and are published by the Controller of HMSO. The Regulations impose requirements on people carrying out building work. The requirements are functional rather than prescriptive in nature which means that the designer is given the freedom to choose the method they use to satisfy the legislation.

This strategy has been developed to address the requirements of Part B of the Regulations that governs fire safety of building design. These requirements are segregated into distinct aspects of building design as follows:

- B1 – Means of warning and escape;
- B2 – Internal fire spread (linings);
- B3 – Internal fire spread (structure);
- B4 – External fire spread; and
- B5 – Access and facilities for the fire and rescue service.

All aspects of the fire safety design remain subject to review by the building control body (including their statutory consultation with the local fire and rescue service), and, ultimately, formal approval by the building control body.

The strategy has been developed in cognisance of the Construction (Design and Management) Regulations 2015 (CDM 2015)[3], which sets out what designers are required to consider in order to protect anyone involved in the construction or ongoing use of a project. The strategy does not address site fire safety during the building works. The Health and Safety Executive (HSE) issues guidance notes on identifying and managing fire precautions during the works and they should be consulted by the appropriate party.

1.3 Design Basis and Guidance

The guidance of BS 9991:2015[4] has been used as the principal basis for this fire strategy, supplemented by the further documents referenced therein. Ultimate responsibility for the implementation of the strategy by the building management team rests with the responsible person for the building, as defined in the RRO.

Approved Document B[5] has been used to supplement the guidance in BS 9991 as this has recently been updated to include the advice relating to the new Regulation 7(2) with regards to the limitations and restrictions on material in external wall construction.

Additional amendments to Approved Document B have been introduced in December 2022 and these are included within this fire strategy, where considered applicable.

Alternative fire engineering methods are employed to support solutions where strict adherence to the codes would conflict with the wider aspirations for the scheme, or where the guidance recommendations would be applied beyond their remit / scope. Departures from guidance are identified and alternative proposals (and associated analysis) are documented.

Where not specifically stated, fire safety provisions should be specified and installed according to the current editions of relevant published guidance (in this instance, BS 9991:2015).

1.4 Reference Information

This report has been prepared based on the drawings produced by Ollier Smurthwaite Architects listed in Table 1.

Table 1: Reference drawings

Drawing No.	Title	Revision	Date
A662_P_002E	Block Plan	E	Oct 2022
A662_P_100N	Site Plan	N	Nov 2022
A662_P_200E	Block 1 plans	E	Oct 2022
A662_P_201E	Block 1 plans	E	Oct 2022
A662_P_150B	Apartment type 1A plan	B	Oct 2022
A662_P_151C	Apartment type 2A plan	C	Oct 2022
A662_P_152D	House type 3A plan	D	Dec 2022
A662_P_153C	House type 4A plan	C	Dec 2022
A662_P_154C	Apartment type 1B/2B plan	C	Dec 2022
A662_P_155B	House type 3B plan	B	Dec 2022
A662_P_156B	House type 6A plan	B	Dec 2022
A662_P_157C	Apartment type 1C plan	C	Oct 2022
A662_P_158B	Apartment type 1D plan	B	Oct 2022

2 BUILDING CHARACTERISATION

The proposed scheme is located southeast of Manchester within the Victoria Park suburban area, the site is depicted in Figure 1. The proposed scheme consists of the construction of 8 different residential blocks, composed of flats which are mostly housed in Block 1 and Townhouses which are distributed between blocks 2-8.

The largest building within the scheme, Block 1 has 4 storeys (G + 3) with a height to the topmost level of 9 m, this building will consist of several flats units ranging from one to two bedrooms, some of these units will have an open-plan layout.

The rest of the blocks will constitute of townhouses, or apartment units housing two individual apartments with separate entrances, all of these buildings will be 3 storeys (G+2) and will be independent from one another.

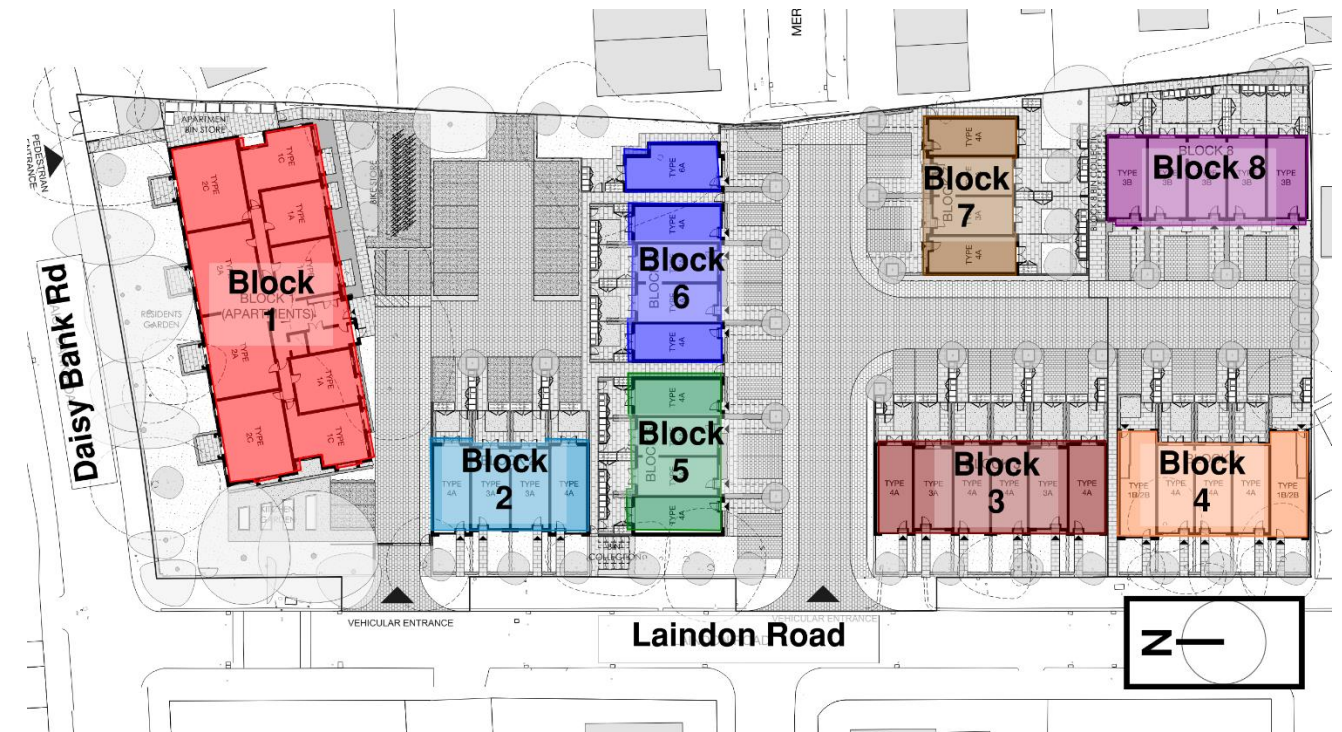


Figure 1: Site location

3 SUMMARY OF FIRE SAFETY SYSTEMS

3.1 Fire Detection and Alarm

An automatic fire detection and alarm system will be provided throughout the buildings as the list below. The system should be designed and installed in accordance with the recommendations of the relevant parts of BS 5839-6:2019+A1:2020 [6] for residential areas and BS 5839-1:2017 [7] for non-residential areas.

- Flats: Category LD1 Grade D1;
- Common corridors: Category L5;
- Townhouses: LD2 Grade D1

3.2 Automatic Fire Suppression Systems

Block 1 will be provided with a water mist system throughout, designed in accordance with BS 8458:2015 [8]. This is considered necessary to justify the open plan flat arrangements within this block. No suppression is provided within any of the other blocks.

3.3 Smoke ventilation system arrangements

Within the scheme, only Block 1 will require smoke ventilation provisions for life safety, these systems are described in the following subsections.

3.3.1 Stairs

The stairs will be provided with an automatic opening vent (AOV) at its head with a minimum free geometric area of 1.0 m², to align with recommendations in BS 9991. This AOV will be actuated upon detection of smoke within the stair, or the common corridor.

3.3.2 Common corridors

Ventilation will be provided within the scheme with two systems implemented depending on the floor. The lowest three storeys (Ground, First and Second) of the building will have a ventilated lift lobby that will be fitted with an AOV that would open on detection of smoke within one of the adjacent common corridors or in the lobby itself. These AOV's should have a minimum free area of 1.5 m² and conform to BS EN 12101-2[9].

A mechanical ventilation system will be provided on Third Floor which will consist of a push-pull system fitted in the roof. This will consist of the two smoke shafts, one at each of the corridor as shown in Figure 2. Such a system is necessary to justify the extended travel distances within the corridor on this level. A computational fluid dynamics (CFD) analysis will need to be undertaken at the next design stage to validate the proposed design and determine the required extract rates for the system. As the lift opens directly into the corridor on this level, then the CFD analysis will also need to demonstrate that the corridor can act as place of refuge for occupants who need to use the lift in the event of a fire.

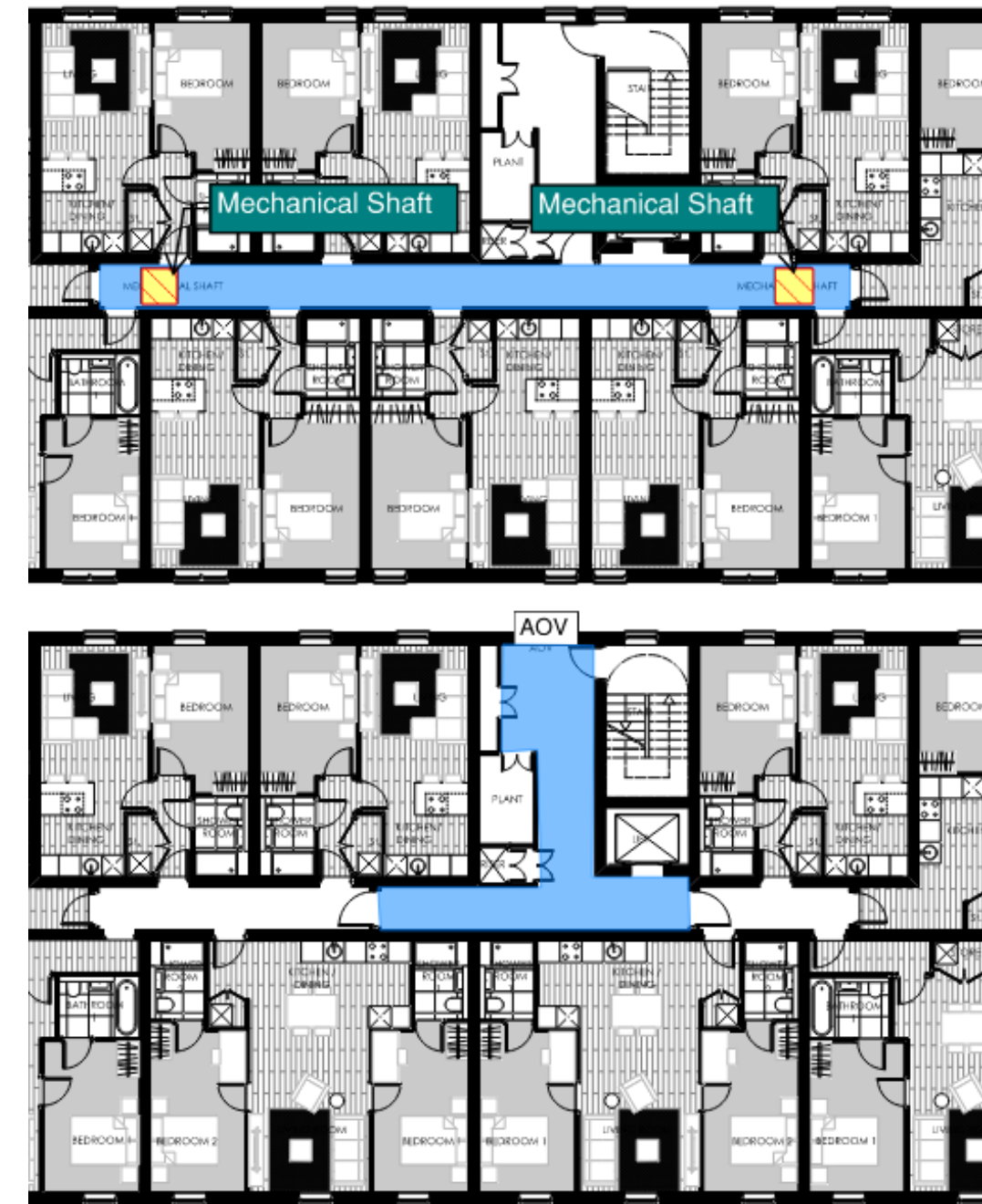


Figure 2: Common corridor ventilation system, Block 1

3.4 Emergency Lighting

Escape routes within Block 1 should be provided with effective lighting to allow persons to safely use these routes in the event of a fire occurring or in the event of failure of the normal lighting power supply. Emergency lighting should be installed in accordance with BS 5266-1 [10].

3.5 Emergency Power

Emergency power supplies are necessary for all active fire safety systems, including the following:

- Fire detection and alarm system;
- Emergency lighting and exit signage;
- Smoke control systems (fans, control equipment and vents);
- Firefighting provisions;
- AWFSS (mist system);
- Evacuation Lifts (where provided).

If the primary power source fails, then the power supply should be automatically switched over to a secondary power source. Failure of or damage to one of the power sources should not cause the failure of the other power source or the failure of the supply of power to the system. All power and control cabling should comply with the relevant recommendations of BS 8519:2020 [11] and Section 15 of BS 9991.

4 MEANS OF ESCAPE

The following section outlines the key principles with regards to means of escape.

4.1 Evacuation Strategy

The residential units in the buildings will operate what is referred to as a “safe to stay, safe to leave” evacuation strategy. There is no specific difference between this strategy and a “stay put” strategy as the approach set out in BS9991 is sometimes referred to. However, the term “stay put” can be confusing as it implies all occupants other than those in the residential unit of fire origin remaining in place. The actual strategy envisaged in the standard guidance is that:

- Only the occupants from the flat/townhouse of fire origin should need to evacuate initially;
- All other occupants should be safe to remain safely in place;
- If further occupants decide to leave or need to leave because they become affected by heat or smoke, they can;
- If the fire and rescue service consider wider evacuation is required, then this can be accommodated.

4.2 Horizontal Means of Escape

4.2.1 Flats

The total travel distance from any point within the flat to the entrance door of the flat should be limited to 20 m as the residential areas of buildings will be provided with an automatic water fire suppression system (AWFSS) and an LD1 fire detection and fire alarm system in accordance with BS 5839-6:2020.

4.2.1.1 Open Plan Unenclosed Kitchens

BS 9991 recommends that the kitchen should be enclosed where the size of the apartment exceeds 8 m by 4 m. Applying this recommendation to the layouts of these apartments is expected to be impracticable and OFR would consider that provided the cooker is remote from the escape route and entrance door, the risk will be tolerable. Further assessment and analysis can be provided at the next stage of the design if required by the approval authorities.

As the kitchen areas in these flats will not be enclosed as per BS 9991 recommendations, is OFR's recommendation that all flat cooking hobs should be positioned such that occupants are not required to escape within 1.5m of the hob (at a distance measured from the closest hob), this is currently understood to be met as seen in Figure 3. An analysis can be provided at the next design stage to validate this distance as adequate to keep the means of escape as tenable.



Figure 3: Open plan flat in block 1

4.2.1.2 Common Corridors (Block 1)

BS 9991 recommends that the escape routes should be provided in accordance with the recommendations shown in Figure 4 (Figure 6 in BS 9991).

It is understood that final design of the first three storeys of Block 1 will comply with the recommendations of BS 9991, the design will ensure that the distances between any of the apartments or the access door to the ventilated lift lobby will be below 7.5 m, these lobbies are not to open directly into any potential fire hazard. The design of the lobbies are to be developed further at the next design stage.

For the Third Floor, travel distances will be limited to 13.1 m which exceeds the 7.5 m recommendation in BS 9991. However, the Third Floor of the Block 1 will be equipped with a mechanical ventilation system, as discussed in Section 3.3.2 to demonstrate that despite the extended travel distance, the design still provides an adequate level of safety. This is a derogation from BS 9991 and would need to be agreed on by the relevant stakeholders including the approval authority.

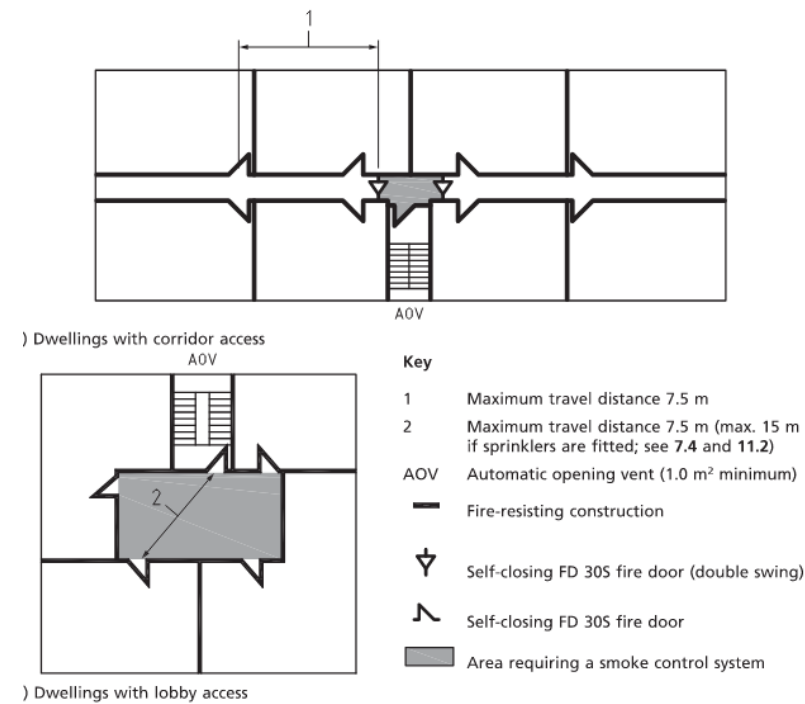


Figure 4: Recommended escape route provisions in single stair buildings (Figure 6-BS 9991)

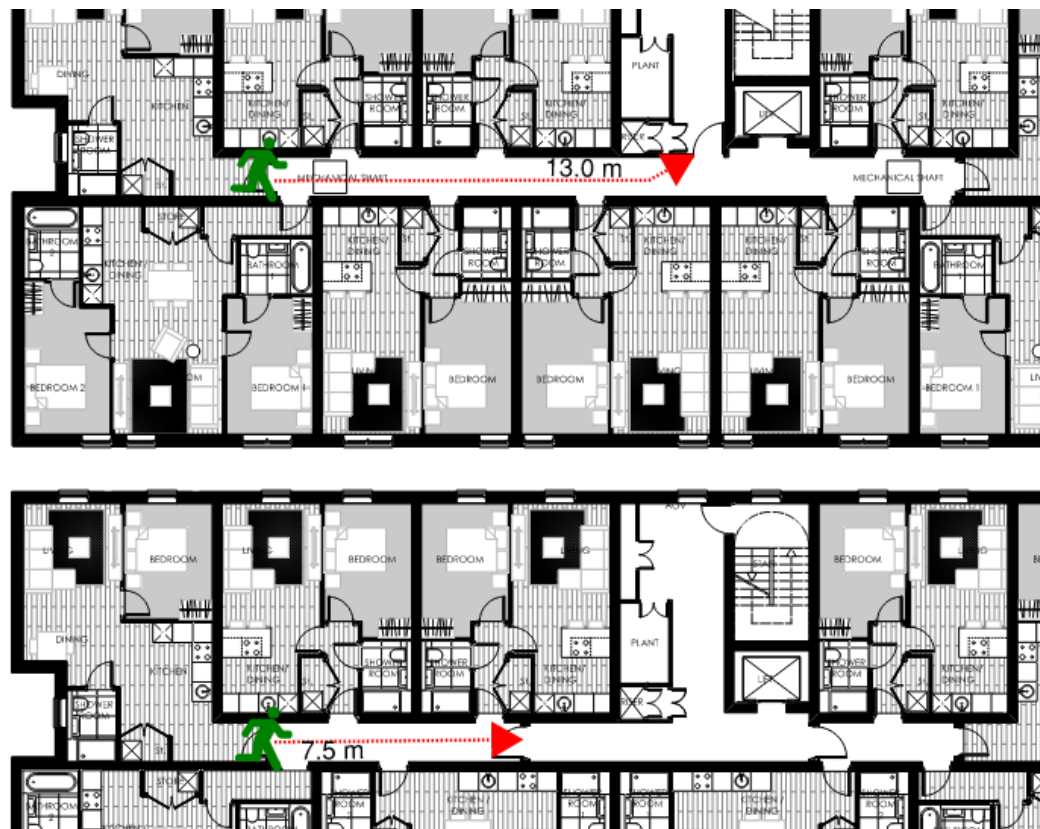


Figure 5: Common corridors travel distances for the Third Floor (upper image) and Ground to Second Floor (lower image)

4.2.2 Townhouses

For houses with one floor more than 4.5 m above ground level BS 9991 recommends the following recommendations:

- The top storey or level of the house should be separated from the lower storeys by fire-resisting construction and should be provided with an alternative escape route leading to its own final exit; or
- The internal stairway should be constructed as a protected stairway, connecting the ground and all upper storeys, and either deliver directly to a final exit to allow access to at least 2no. independent escape routes leading to alternative exits; or
- Where an open-plan arrangement exists at ground level, in order to separate the ground floor from the upper storeys, either:
 - A protected stairway should be provided; or
 - The house should be fitted throughout with an AWFSS, together with a fire-resisting partition and door to separate the ground floor from the upper storeys. The fire-resisting door should be arranged such that occupants on the upper floors can access an escape window at first floor level in the event of a fire in the open-plan area.

Currently option b) or c)1. is expected to be implemented.

4.3 Common Stairs (Block 1)

Is recommended that the stairs of Block 1 should have an unobstructed width (measured between the walls and/or balustrades) of 1.1 m, this is to aid any firefighting activities. The width should be kept clear for a vertical distance of 2.0 m.

Additionally, the flights and landings of these stairs should be constructed of materials achieving class A2-s3, d2 or better.

4.4 Final Exits

Protected stairways should discharge either:

- Directly to a final exit; or
- Into a protected corridor leading to a final exit which is itself lobbied from any accommodation.

The protected corridors leading to the final exit should have the same standard of fire-resistance and lobby protection as the stairway it serves.

In all blocks the final exits should discharge directly to a street, passageway, walkway, or open space that allows for the rapid dispersal of persons away from the vicinity of the building.

4.5 Persons with mobility impairment

The accessible means of escape needs to form an integral part of the design and be incorporated into the fire safety strategy. No reliance will be made on the fire service to assist in the evacuation of mobility impaired occupants; Therefore, the proposed lift in block 1 should be designed as an evacuation lift.

5 INTERNAL FIRE SPREAD

5.1 Linings

All wall and ceiling linings in the building is to meet the recommendations of BS 9991:2015 [12] in residential areas and BS 9999:2017 [13] in non-residential areas. The recommendations of both are summarised in Table 2.

Table 2: Classification of linings

Location	European Class ⁽¹⁾
Small rooms of area not more than: 4m² in residential accommodation 30 m² in non-residential accommodation	D-s3, d2
Other rooms ⁽²⁾	C-s3, d2
Circulation spaces within dwellings	
Other circulation spaces (including the common areas of the building)	B-s3, d2
(1) When classified in accordance with BS EN 13501-1:2018 [14]	
(2) Parts of walls in rooms may be of European Class D-s3, d2 provided that the total area of those parts in any one room does not exceed one half of the floor area of the room, subject to a maximum of 20 m ² in residential accommodation, and 60 m ² in non-residential accommodation	

5.2 Structural Fire Protection

Although the different blocks within the Victoria Park scheme have different heights to the top occupied storey they will sit in between the 5 m to 18 m mark, meaning that the buildings will share similar requirements with regards to the fire resistance of the loadbearing elements of the structure, as per guidance these should have as a minimum 60 minutes fire resistance.

The fire resistance periods of the main building elements are provided in Table 3. Common to all the provisions of Part B of the Building Regulations is the property of fire resistance. Fire resistance is a measure of one or more of the following:

- Loadbearing capacity I – resistance to collapse, which applies to loadbearing elements only;
- Integrity (E) – resistance to fire penetration; and
- Insulation (I) – resistance to the transfer of excessive heat.

In addition, every story in Block 1, a apartments type 1B and 2B will be separated via compartment floors.

5.3 Compartmentation and Fire Resisting Construction

Table 3 details all of the compartmentation requirements for each building within the Victoria Park scheme. This information is based on the compartmentation guidance provided in BS 9991:2015 and BS 9999: 2017. Based on the height, area and occupancy characteristics of the buildings; every floor should be designed as a compartment floor.

5.3.1 Fire Doors

Fire doors are to be provided as per Table 3. All fire doors will be fitted with self-closers except for fire doors to cupboards and service risers, which are to be kept locked shut.

Where a self-closing device is considered of hindrance to the normal use of the building, automatic hold-open devices linked to the fire detection and alarm system [15] may be provided.

Table 3: Fire resistance of elements within Blocks A, B and C

Element	Minimum Fire Resistance rating (minutes) ^{a)}	Minimum Fire Resistance Fire Doorset
Loadbearing Elements	60 R	N/A
Compartment Walls	60 REI	FD 60S
Party walls adjoining townhouses	60 REI	-
Compartment Floors	60 REI	N/A
External Wall (space separation)	Refer to Table 5	
Life safety equipment	120 REI	FD 60S
Protected Stair Enclosures (Block 1)	60 REI	FD 30S
Protected Stair Enclosures (townhouses)	30 REI	FD 30
Lift shafts	60 REI	FD 30
Flat Enclosures	60 REI	FD 30S
Protected Lobbies	30 REI	FD 30S
Cavity Barrier	30 E & 15 I	FD 30
a) The 'R' rating only applies to elements that are loadbearing.		

5.4 Cavity Barriers

Cavity barriers should be provided to close cavities, as per section 19.1 of BS 9991.

6 EXTERNAL FIRE SPREAD

6.1 External Wall Construction

Regulation 7 (specifically Regulation 7(2)) of the Building Regulations specifies that for **relevant buildings**, meaning Residential buildings above 18 m, the materials which become part of an external wall, or specified attachment, of a relevant building must be of European Classification A2-s1, d0 or Class A1, classified in accordance with BS EN 13501-1:2018 [14], updates in AD B that will take effect on December 2022 recommend to provide an equal classification to residential buildings above 11 m.

All buildings within the Victoria Park scheme **are not considered relevant buildings** as they sit below the 11 m mark. However as best practice, it is recommended that whenever practicable the external wall build-up achieve Class A2-s1,d0 or better). Additionally, it is recommended that consultation to the insurer/warranty provider of the building is sought to understand the implications of the wall build-up.

6.2 Roofs

Refer to Table 4 for acceptable designation of roof coverings.

Table 4: Designation of covering of roof or part of roof

Designation of covering of roof or part of roof	Distance from any point on relevant boundary		
	Less than 6 m	At least 6 m	At least 20 m
B _{ROOF} (t4)	●	●	●
C _{ROOF} (t4)	○	●	●
D _{ROOF} (t4)	○	○	●
E _{ROOF} (t4)	○	○	○
F _{ROOF} (t4)	○	○	○
● Acceptable ○ Not acceptable			

6.3 Space Separation Assessment

A preliminary space separation assessment carried out in accordance with BR 187 [16] has been conducted, in order to determine the requisite quantity of fire rated external wall construction to mitigate the risk of fire spread across relevant boundaries. This assessment is subject to future plan revisions and will be updated at Stage 4.

The following assumptions have been made for these calculations:

- Each area has been measured as an equivalent rectangle;
- The fire has been assumed to compromise the entirety of a compartment;
- The fire will be restricted to a single level due to the compartment floors;
- The relevant boundaries on all elevations have been measured to the centreline of the adjacent roadways or block as shown below in (Table 5 and Figure 6);
- In areas where the building is constructed on the relevant boundary this calculation was not done as external walls in these areas should be fire resisting from both sides, with only small, unprotected openings allowed, as defined in BS 9991.

Table 5: External fire spread allowable unprotected area %

Building	Elevation	Heat Flux (kW/m ²)	Relevant Boundary	Boundary Distance (m) ^{a)}	Enclosing Rectangle (W x H) (m) ^{b)}	Allowable Unprotected Area (%)
Block 1	1	84	Centre of Road	15.2	9.2 x 3	100
	2	84	Site boundary	1.9	8.1 x 3	49.1
	3	84	Centre of Road	2.9	6.4 x 3	100
	4	84	Centre of Road	15.6	7.6 x 3	100
Block 2	5	84	Centre of Road	3.7	10.3 x 9	43.4
	6	84	Half point to other block	2.7	10.3 x 9	30.2
Block 5	7	84	Half point to other block	<1	-	0
	8	84	Centre of Road	11.3	3.9 x 9.0	100
	9	84	Half point to other block	2.7	3.9 x 9.0	59
Block 6	10	84	Site boundary	1.8	10.5 x 9.0	21.7
	11	84	Half point to other block	<1	-	0
Block 7	12	84	Site boundary	<1	-	0
	13	84	Centre of Road	5.4	10.1 x 9.0	76.11
Block 3	14	84	Centre of Road	4.7	10 x 9.0	61.85
Block 4	15	84	Half point to other block	<1	-	0

a)

Preliminary estimated measurements at this stage of the design development

b)

The height of the enclosing rectangle is taking as the maximum height from the ground level to level 1

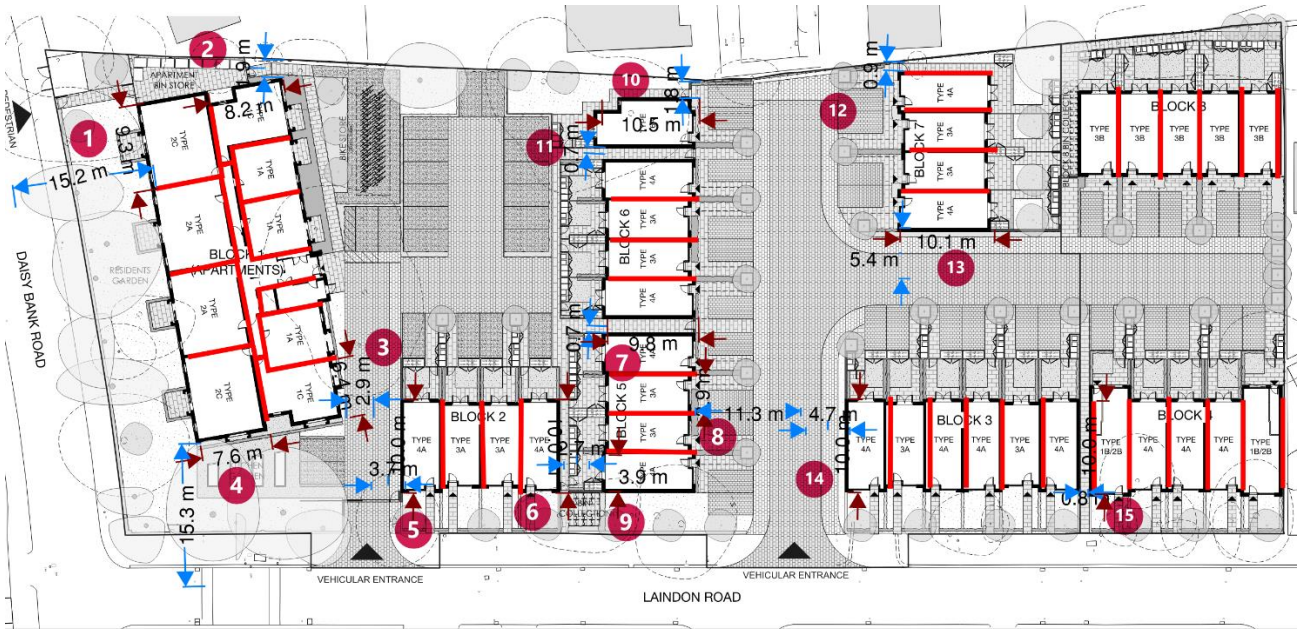


Figure 6: Relevant boundaries for elevations within the scheme

7 FIRE SERVICE ACCESS AND FACILITIES

7.1 Internal Fire-fighting Facilities

Block 1 is recommended to be provided with dry fire mains installed in accordance with BS 9990:2017 as the hose laying distance for these buildings exceed 45 m. The rest of the blocks will not require any mains. Dry main outlets should be housed within the stair enclosures at each level for Block 1.

As per the current drawings, all areas of Block 1 will be within 45 m of a dry riser outlet.

7.2 External Fire-fighting Facilities

The site will be accessed via Laindon road, The current provisions are to allow access for a fire appliance to within 18 m of the inlet positions for Block 1, and below 45 m to any point within the townhouses. This is achieved with the exception of Block 8 where distances to the upper floors are expected to exceed 45 m, up to a maximum of c.55 m. As this is a derogation from the guidance it is recommended that a means to turn the fire appliance is provided adjacent Block 8 to allow the fire service to park within 45 m of all areas of this block. The design of the access road will be developed further at the next design stage.

The fire appliance access route should, as a minimum, comply with Table 6, however fire appliances are not standardised in the UK. Therefore, the figures provided in Table 6 should be confirmed by the local Fire and Rescue Service.

As per guidance, turning facilities should be provided in any dead-end access route that is more than 20 m long. This can be by a hammer-head or turning circle.

7.3 Water Supplies

7.3.1 Fire hydrant

A fire hydrant should be available within 90 m of fire main inlet connection points; it should be confirmed that this recommendation has been met.

Each fire hydrant should be clearly indicated by a plate, fixed nearby in a conspicuous position, in accordance with BS 3251:1976[17].

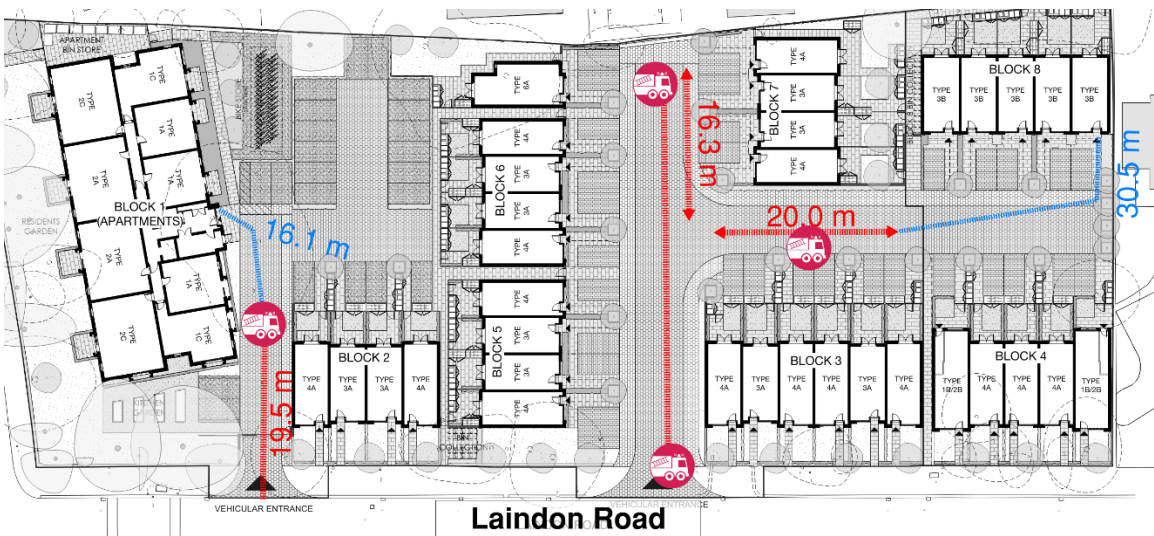


Figure 7: Indicative Firefighting access

Table 6: Fire and rescue service vehicle access route specification

Appliance type	Minimum width of road between kerbs	Minimum width of gateways	Minimum turning circle between kerbs	Minimum turning circle between walls	Minimum clearance height	Minimum carrying capacity
Pump	3.7 m	3.1 m	16.8 m	19.2 m	3.7 m	12.5 tonnes

8 REFERENCES

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- [17] BSI, BS 7346-7:2013 Components for smoke and heat control systems. Code of practice on functional recommendations and calculation methods for smoke and heat control systems for covered car parks, London: BSI, 2013.

Appendix A INITIAL FIRE SAFETY COMMENTS

	TREES REMOVED		TEGULA CONCRETE PAVING FLAG
	EXISTING TREE RETAINED		TEGULA CONCRETE PAVING BLOCKS
	PROPOSED TREE		TEGULA CONCRETE PAVING BLOCKS
	GRASS		GRAVEL STABILISER GRIDS ON GEOTEXTILE
	GRAVEL		PROPOSED 2M CLOSE BOARDED FENCE
	LOW LEVEL HEDGE		PROPOSED 2M METAL RAILING
	PLANTING MIX		PROPOSED 1800MM HIGH BRICK WALL
	BINS		PROPOSED 1200MM LOW LEVEL TIMBER FENCE
	BIKES		PROPOSED 600MM LOW LEVEL BRICK WALL
	RAISED PLANTER BEDS		EXISTING WALL REDUCED TO 600MM WITH NEW STONE COPING

Buildings fitted with dry fire mains should have access for a fire appliance to within 18 m of each fire main inlet connection point, typically on the face of the building close to the entrance point leading to the fire-fighting shaft, with the inlet visible from the fire appliance.

MERWOOD GROVE

The current provisions allow access from the fire appliance below 45 m to any point within the town houses with the exception of Block 8 where distances to the upper floors are expected to exceed 45 m, up to a maximum of c.55 m.

HOLBECK GROVE

DAISY BANK ROAD

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Project: MA22098-Victoria Park

Title: Initial Fire Safety Comments

Revision: R03 **Scale:** As shown

Prepared by: JG **Date:** 16/12/22

Reviewed by: AR **Date:** 16/12/22

- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door

A space separation assessment has been done for the scheme, this analysis has show that several of the elevations would need to be fire resisting from both sides.

VEHICULAR ENTRANCE

 $z -$

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IMPORTANT NOTES:

N	23/11/22	ADDED TREES AND REMOVED PAVEMENT FROM PRIVATE ROAD
M	01/11/22	ADDED TREES
L	27/10/22	ADDED EXTERNAL WORKS KEY
K	26/10/22	AMENDED BOUNDARY TREATMENT
J	21/10/22	ADDED ACCESSIBLE SPACE AND AMENDED LANDSCAPING
REVISION	DATE	DESCRIPTION

CLIENT: BRITANNIA GROUP	
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT	
ADDRESS: VICTORIA PARK PROBATION CENTRE	
DRAWING TITLE: SITE PLAN	
SCALE: 1:200 @ A1	DATE: JULY 2022
DRAWING NO.: A662 P. 100N	

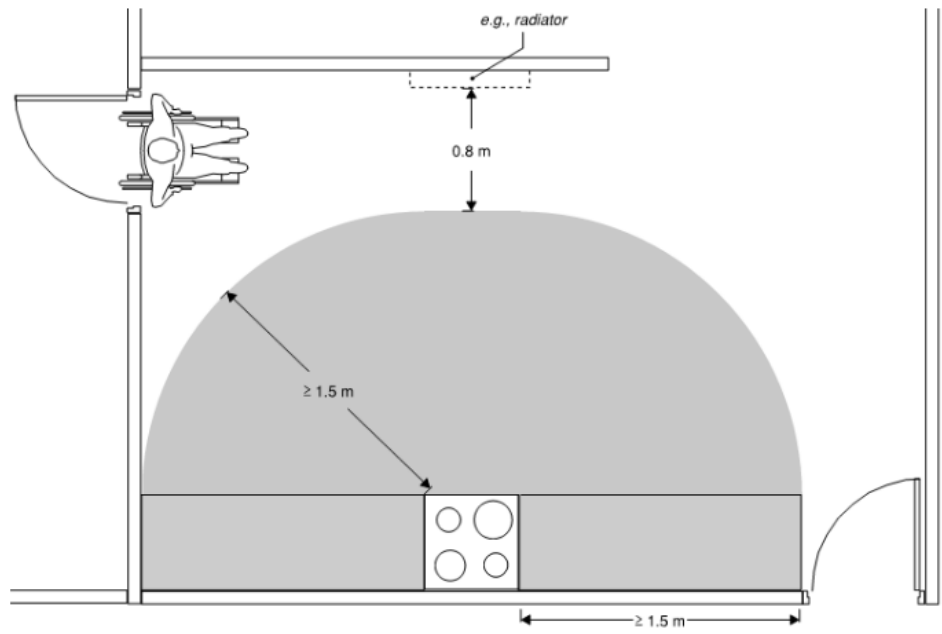
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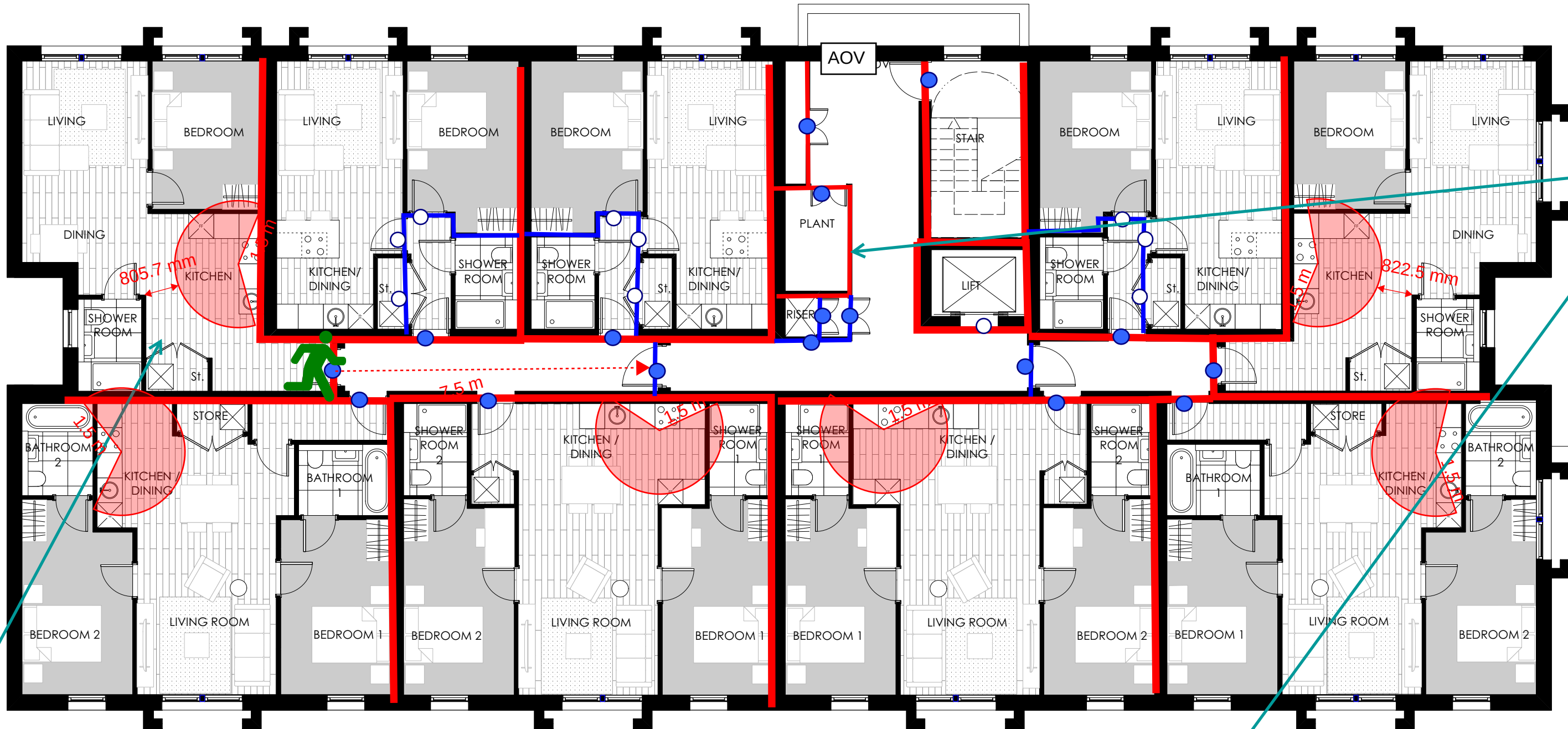


KEY PLAN
1:1000

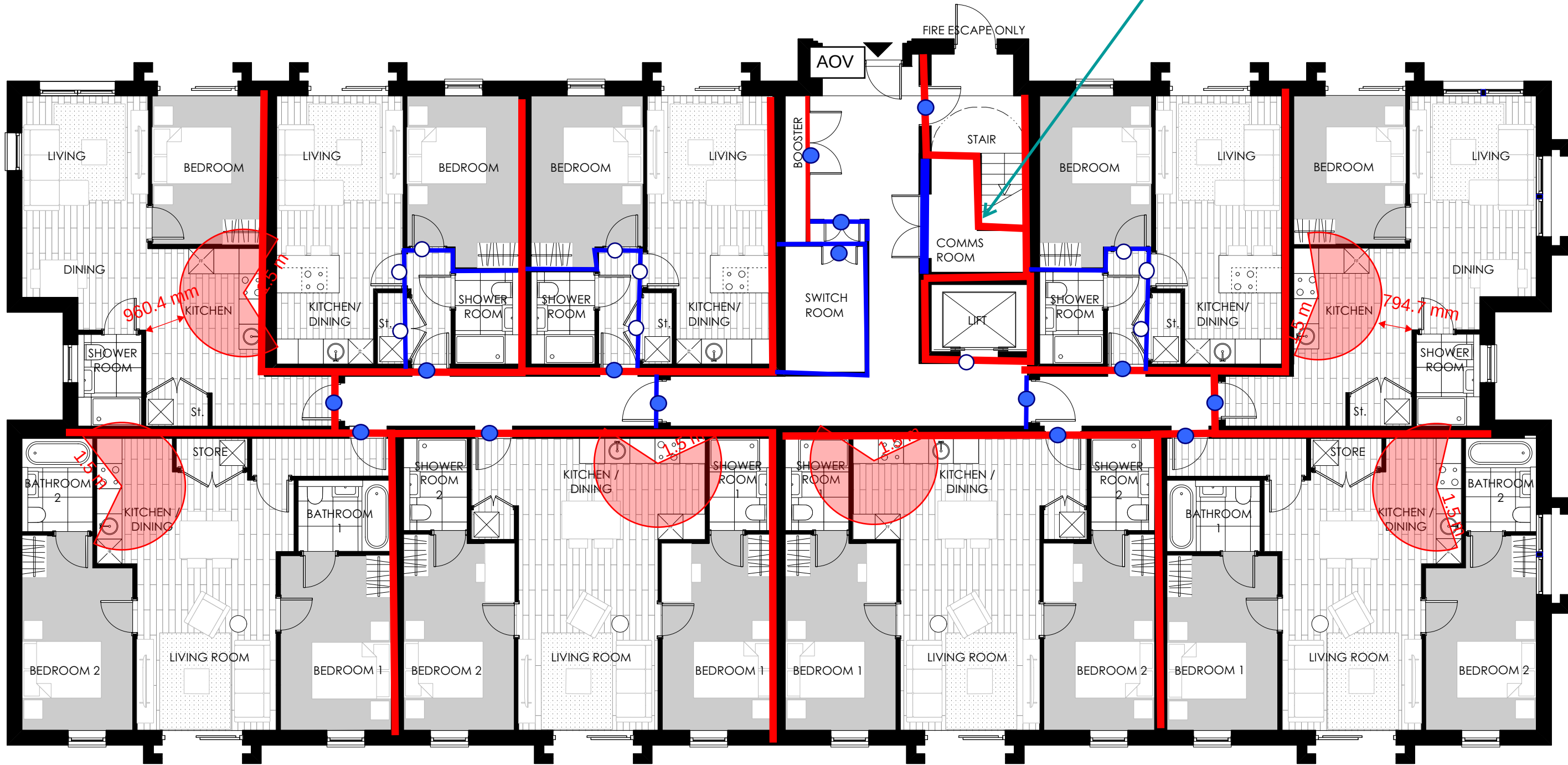
OFR
Hobs or other high risk cooking devices should be at least 1.5 m away from any exits and escape routes linking to the main corridor. This means that at least a 0.8 m width should be provided to allow people on wheelchairs to evacuate as shown in the image below.



The Current position of the hobs would appear to be suitable , however the arrangement would need to be agree with by the approval authorities.



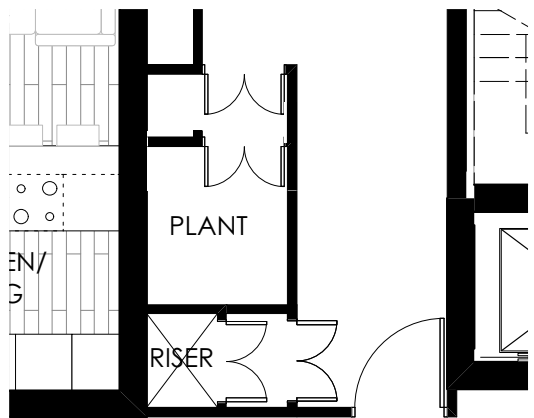
FIRST FLOOR PLAN
1:100



GROUND FLOOR PLAN
1:100

OFR

Where travel distance is measured to a stair lobby door, the lobby should not directly connect with any dwelling, storage space or any other space containing a potential fire hazard. Therefore any direct access to high hazard areas within the lobby , would need to be provided a small fire resistant "lobby " .



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Project: MA22098-Victoria Park
Title: Initial Fire Safety Comments
Revision: R03 **Scale:** As shown
Prepared by: JG **Date:** 16/12/22
Reviewed by: AR **Date:** 16/12/22

OFR - Drawing Legend

- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door

BLOCK 1 PLANS
1:100@A1



IMPORTANT NOTES:

REVISION	DATE	DESCRIPTION
E	20/10/22	AMENDED SERVICES PROVISION
D	05/10/22	AMENDED TO FIRE ENGINEER COMMENTS
C	20/09/22	AMENDED TO FIRE ENGINEER COMMENTS
B	14/09/22	AMENDED WINDOW POSITIONS
A	02/09/22	AMENDED APARTMENT MIX

CLIENT: BRITTANIA GROUP

PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT

ADDRESS: VICTORIA PARK PROBATION CENTRE

DRAWING TITLE: BLOCK 1 PLANS

SCALE: 1:100@A1

DATE: JUNE 2022

DRAWING NO: A662_P_200E

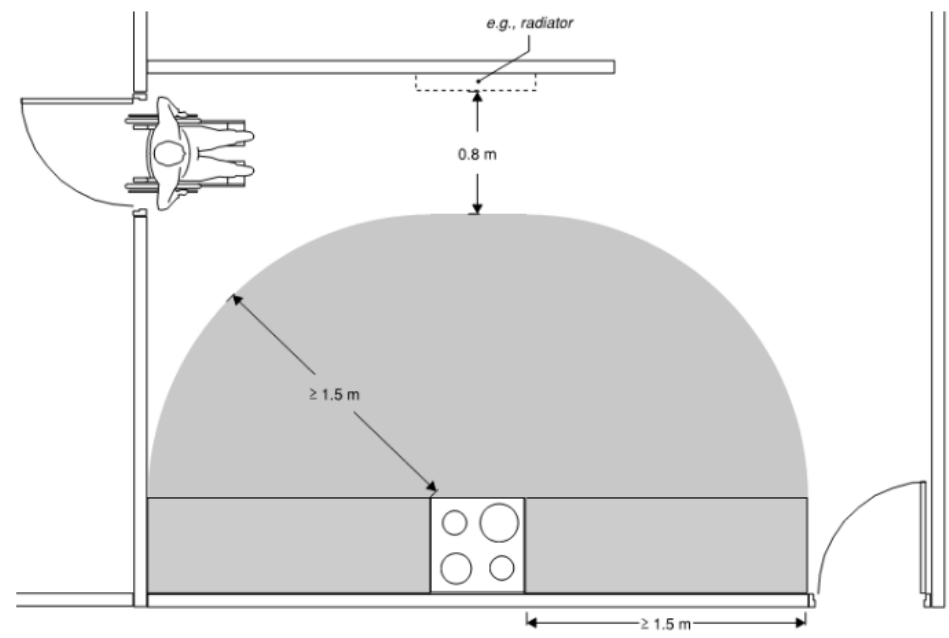
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KEY PLAN
1:1000

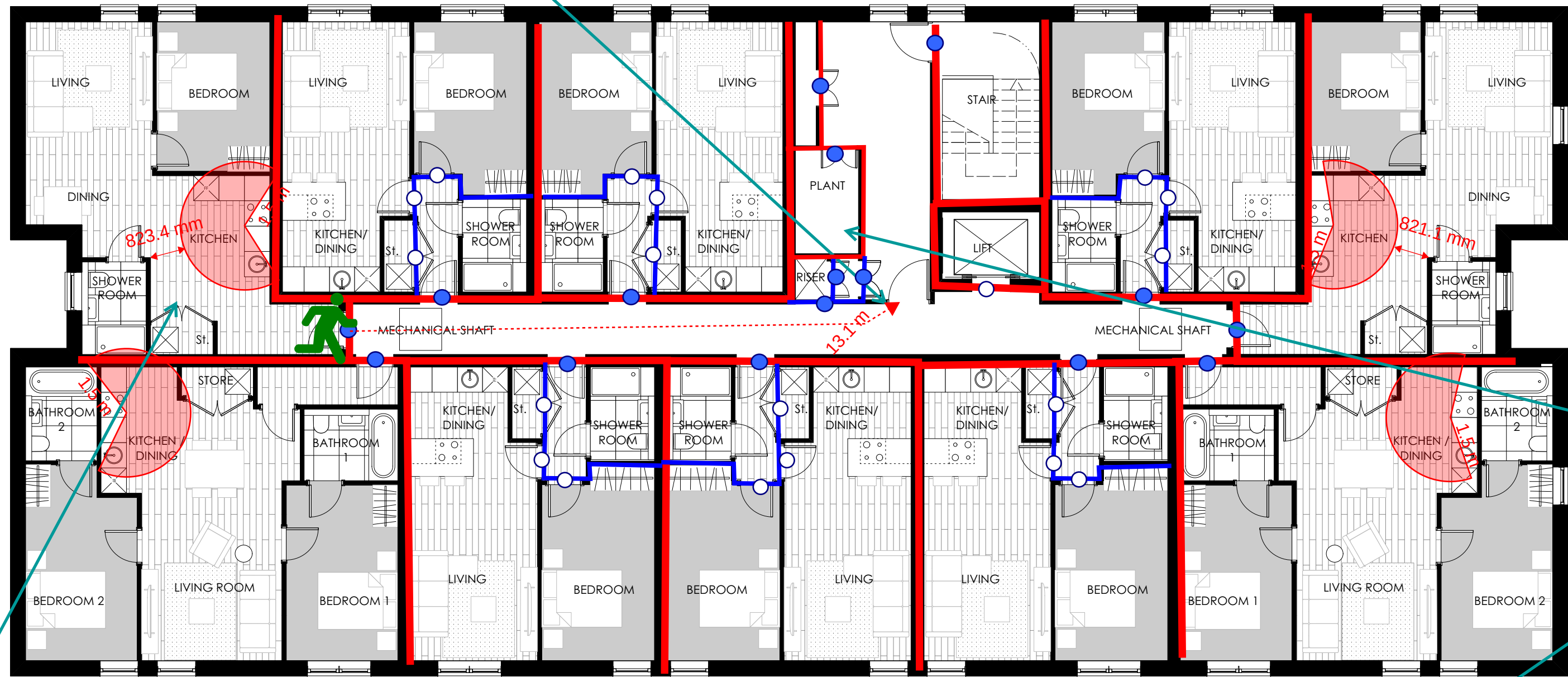
OFR
Hobs or other high risk cooking devices should be at least 1.5 m away from any exits and escape routes linking to the main corridor. This means that at least a 0.8 m width should be provided to allow people on wheelchairs to evacuate as shown in the image below.



The Current position of the hobs would appear to be suitable , however the arrangement would need to be agree with by the approval authorities.

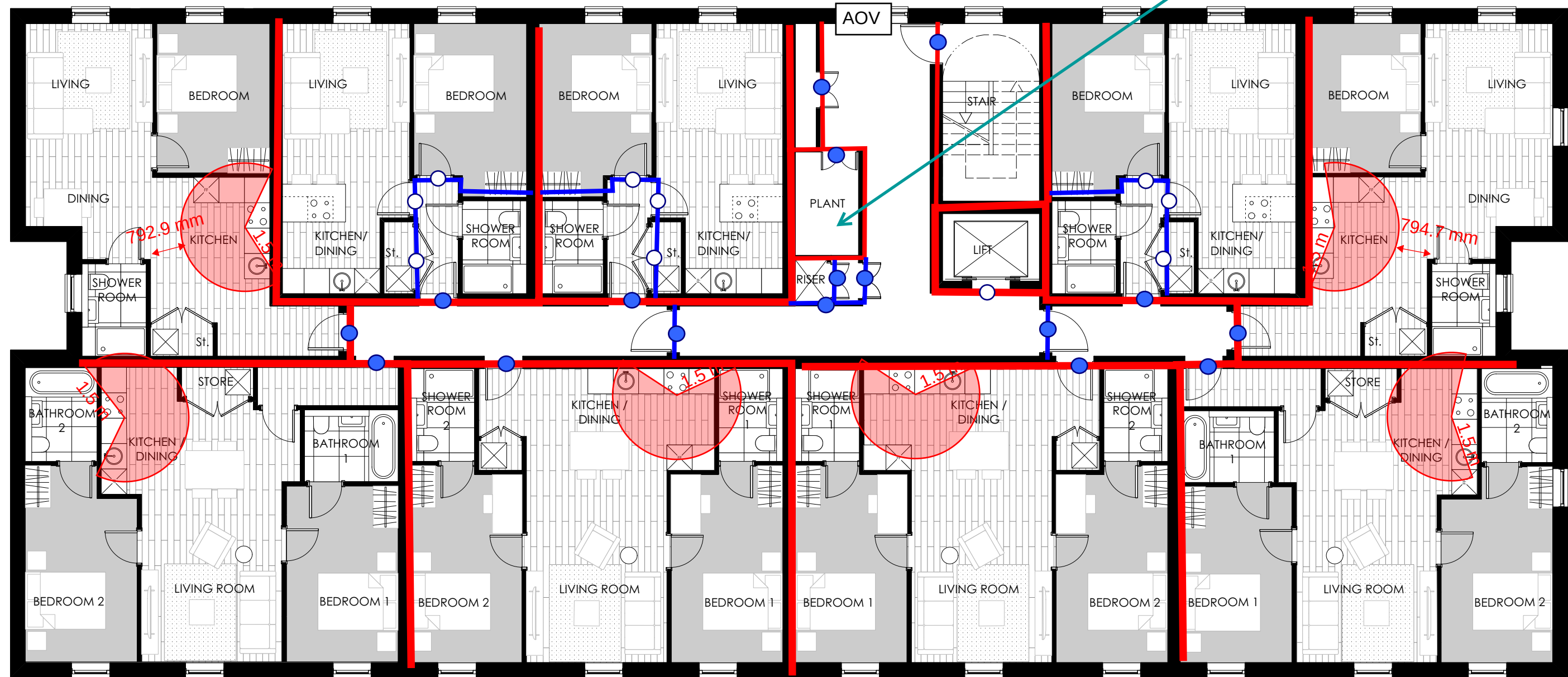
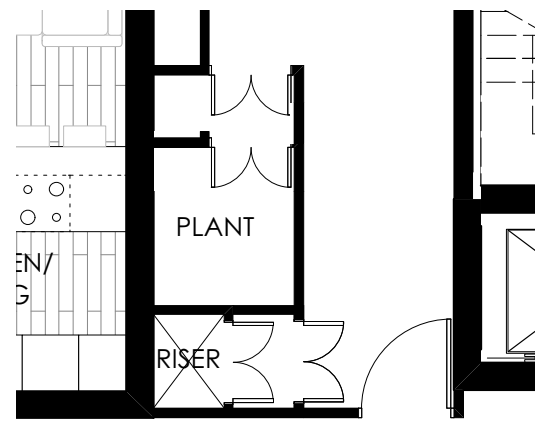
OFR
As the implemented AWFSS is a mist system maximum travel distances in corridors are recommended by guidance to be limited to 7.5 m

A smoke modelling analysis will need to be undertaken to determine the suitability of the extended travel distance and to determine the required smoke extract rates. This approach will also need to be agreed with all relevant stakeholders



THIRD FLOOR PLAN
1:100

OFR
Where travel distance is measured to a stair lobby door, the lobby should not directly connect with any dwelling, storage space or any other space containing a potential fire hazard. Therefore any direct access to high hazard areas within the lobby , would need to be provided a fire resistant "lobby " .



SECOND FLOOR PLAN
1:100

OFR

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Scale:

As shown

Prepared by:

JG

Date:

16/12/22

Reviewed by:

AR

Date:

16/12/22

OFR - Drawing Legend

- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door

BLOCK 1 PLANS
1:100@A1

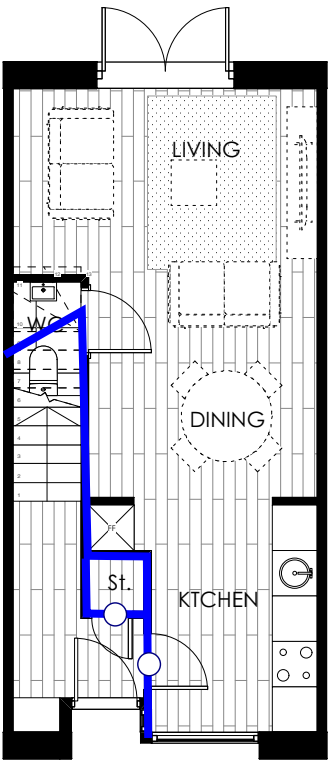
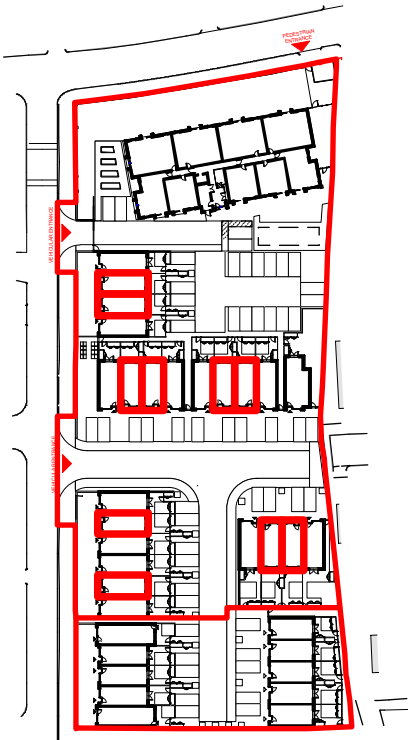


IMPORTANT NOTES:

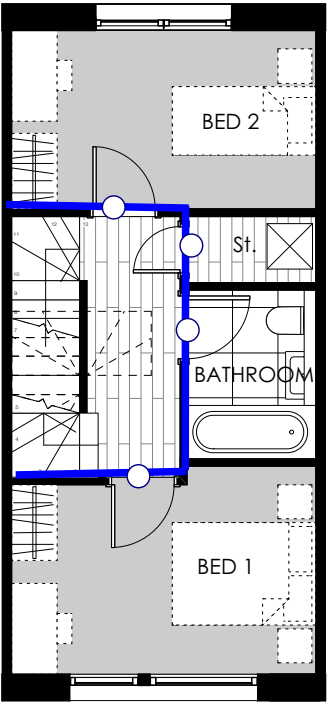
REVISION	DATE	DESCRIPTION
E	20/10/22	AMENDED SERVICES PROVISION
D	05/10/22	AMENDED APARTMENT LAYOUTS
C	21/09/22	AMENDED TO FIRE ENGINEER COMMENTS
B	14/09/22	AMENDED WINDOW POSITIONS
A	02/09/22	AMENDED APARTMENT MIX

CLIENT: BRITANNIA GROUP
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT
ADDRESS: VICTORIA PARK PROBATION CENTRE
DRAWING TITLE: BLOCK 1 PLANS
SCALE: 1:100@A1
DATE: JUNE 2022
DRAWING NO: A662_P_201E

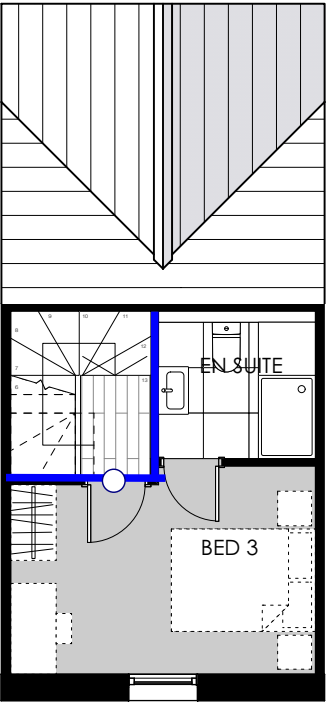
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HOUSE TYPE 3A
PROPOSED GROUND FLOOR PLAN



HOUSE TYPE 3A
PROPOSED FIRST FLOOR PLAN



HOUSE TYPE 3A
PROPOSED SECOND FLOOR PLAN

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Scale:

As shown

Prepared by:

JG

Date:

16/12/22

Reviewed by:

AR

Date:

16/12/22

OFR - Drawing Legend

- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door

NIA: 90.4sqm / 973sqft

HOUSE TYPE 3A PLAN

1:100@A3

PLANNING

D	02/12/22	AMENDED TO PROTECTED STAIR
C	05/10/22	REVISED INTERNAL LAYOUT
B	26/09/22	AMENDED INTERNAL LAYOUT
A	06/09/22	REVISED LAYOUT
REVISION	DATE	DESCRIPTION

CLIENT: BRITTANIA GROUP	
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT	
ADDRESS: VICTORIA PARK PROBATION CENTRE	
DRAWING TITLE: HOUSE TYPE 3A PLAN	
SCALE: 1:100@A3	DATE: JUNE 2022
DRAWING NO: A662_P_152D	

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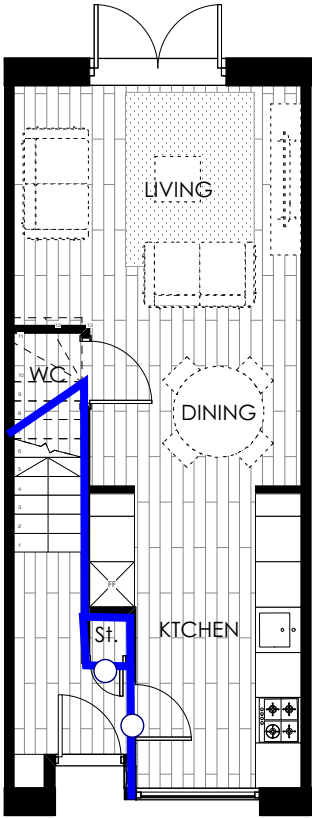
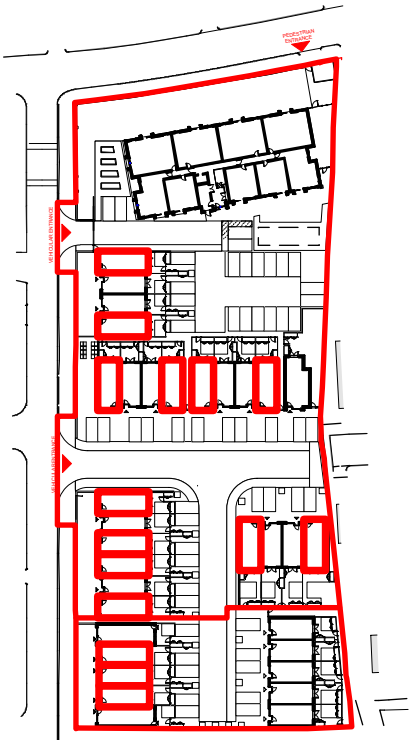
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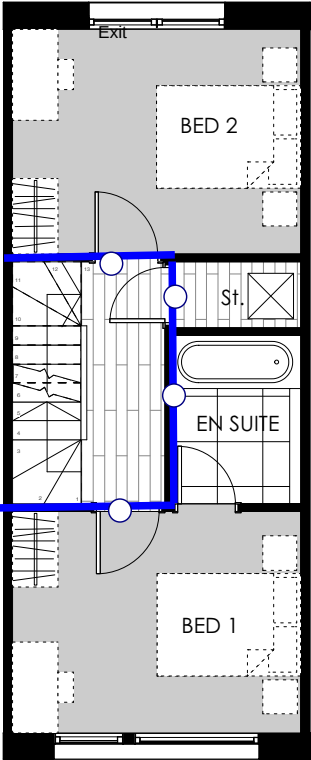
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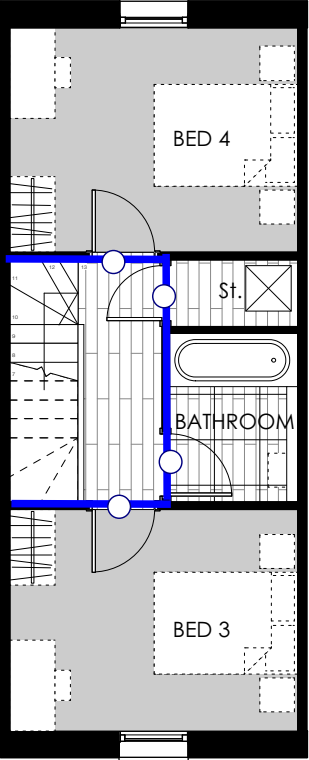
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HOUSE TYPE 4A
PROPOSED GROUND FLOOR PLAN



HOUSE TYPE 4A
PROPOSED FIRST FLOOR PLAN



HOUSE TYPE 4A
PROPOSED SECOND FLOOR PLAN

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Prepared by:

JG

Reviewed by:

AR

Scale:

As shown

Date:

16/12/22

Date:

16/12/22

OFR - Drawing Legend

- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door

NIA: 106.1sqm / 1141.5sqft

HOUSE TYPE 4A PLAN

1:100@A3

PLANNING

C	02/12/22	AMENDED TO PROTECTED STAIR
B	05/10/22	REVISED INTERNAL LAYOUT
A	06/09/22	REVISED LAYOUT
REVISION	DATE	DESCRIPTION

CLIENT: BRITANNIA GROUP	
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT	
ADDRESS: VICTORIA PARK PROBATION CENTRE	
DRAWING TITLE: HOUSE TYPE 4A PLAN	
SCALE: 1:100@A3	DATE: JUNE 2022
DRAWING NO: A662_P_153C	

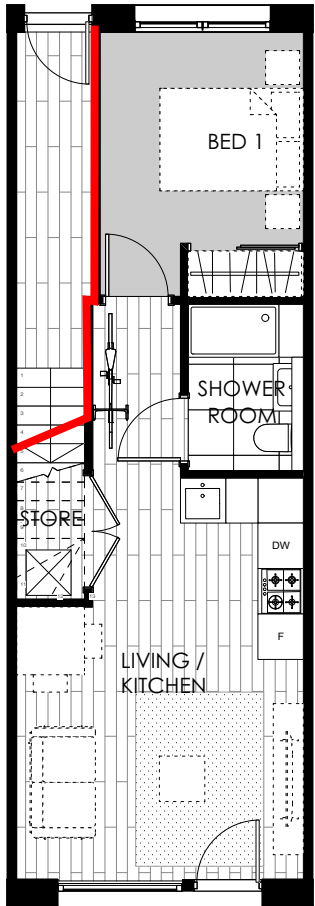
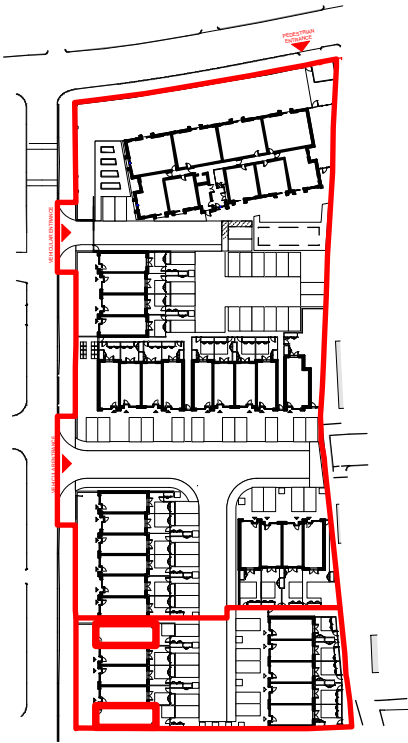
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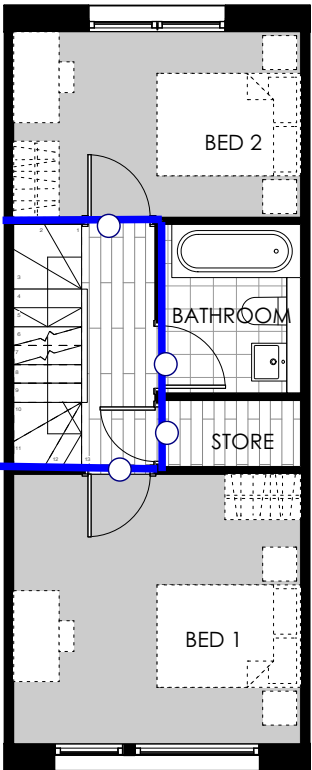
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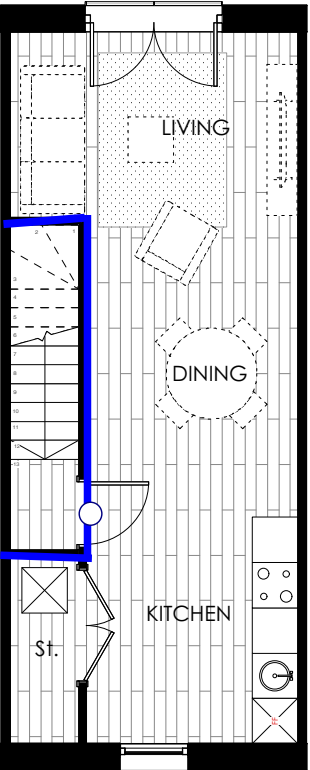
HOUSE TYPE 1B
PROPOSED GROUND
FLOOR PLAN

NIA: 37sqm / 398sqft



HOUSE TYPE 2B
PROPOSED FIRST
FLOOR PLAN

NIA: 71.5sqm / 769.2sqft



HOUSE TYPE 2B
PROPOSED SECOND
FLOOR PLAN

OFR

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Scale:

As shown

Prepared by:

JG

Date:

16/12/22

Reviewed by:

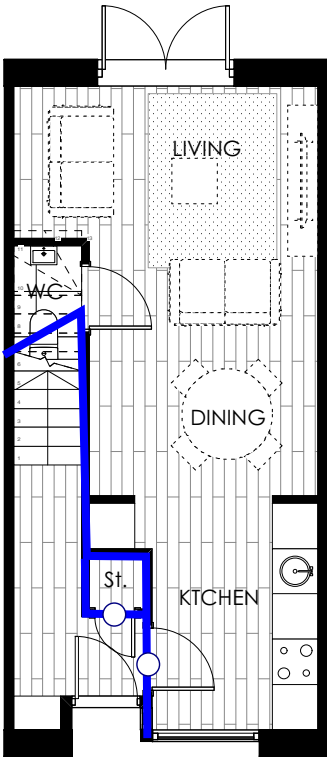
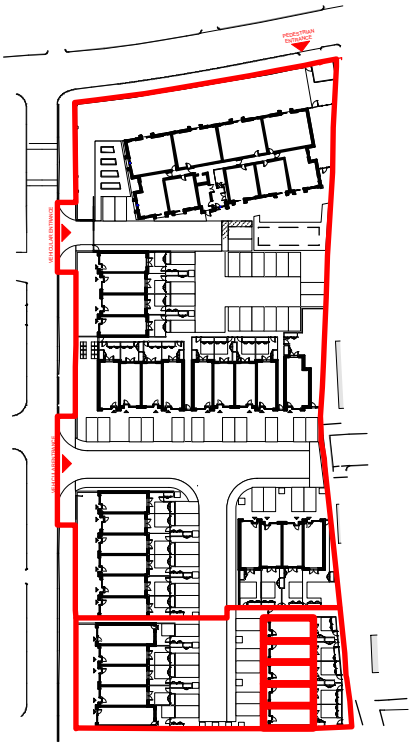
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Date:

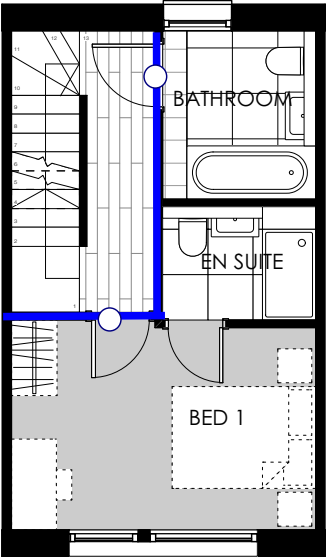
16/12/22

OFR - Drawing Legend

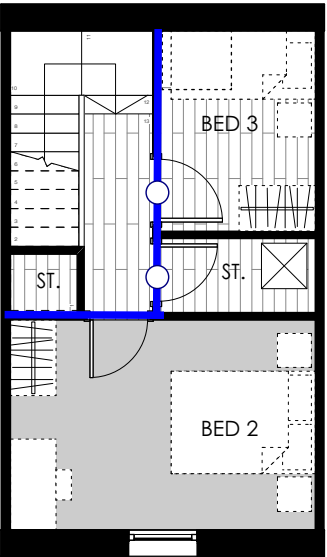
- 60 minutes fire resistance
- 30 minutes fire resistance
- FD60S Fire door
- FD30S Fire door
- FD30 Fire door



HOUSE TYPE 3B
PROPOSED GROUND FLOOR PLAN



HOUSE TYPE 3B
PROPOSED FIRST FLOOR PLAN



HOUSE TYPE 3B
PROPOSED SECOND FLOOR PLAN

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Scale:

As shown

Prepared by:

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Date:

16/12/22

Reviewed by:

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Date:

16/12/22

OFR - Drawing Legend

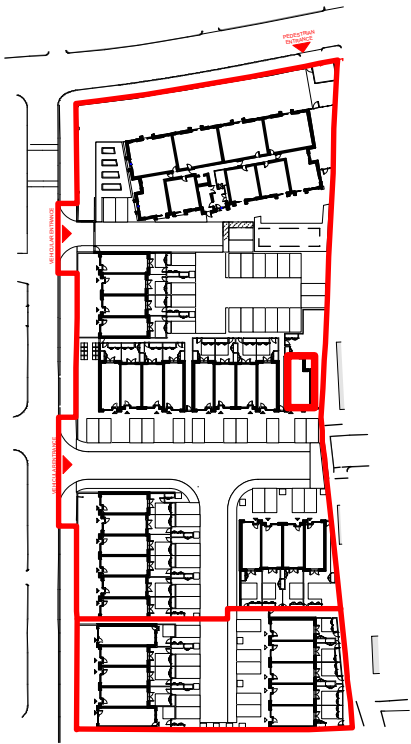
60 minutes fire resistance

30 minutes fire resistance

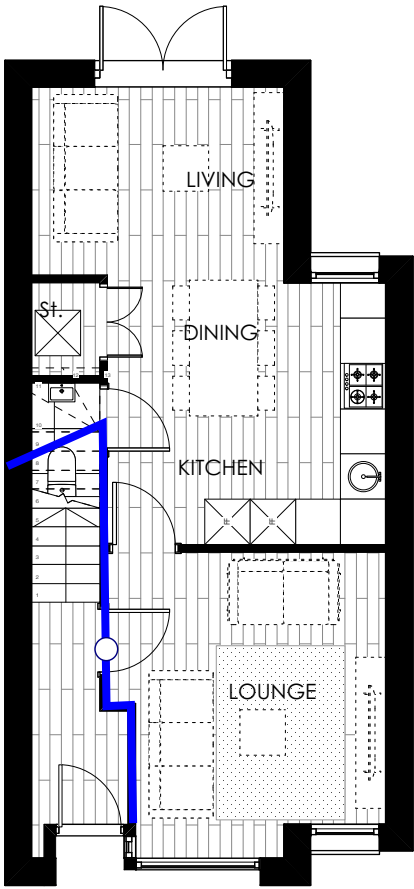
FD60S Fire door

FD30S Fire door

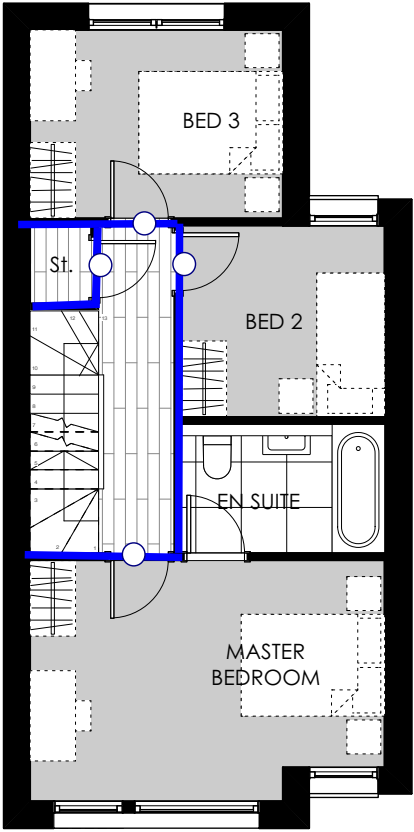
FD30 Fire door



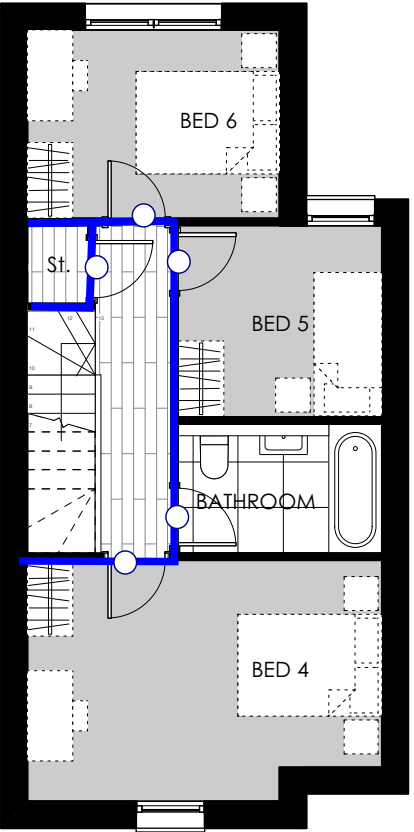
KEY PLAN



HOUSE TYPE 6A
PROPOSED GROUND FLOOR PLAN



HOUSE TYPE 6A
PROPOSED FIRST FLOOR PLAN



HOUSE TYPE 6A
PROPOSED SECOND FLOOR PLAN

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Project:

MA22098-Victoria Park

Title:

Initial Fire Safety Comments

Revision:

R03

Scale:

As shown

Prepared by:

JG

Date:

16/12/22

Reviewed by:

AR

Date:

16/12/22

OFR - Drawing Legend

60 minutes fire resistance

30 minutes fire resistance

FD60S Fire door

FD30S Fire door

FD30 Fire door

71411.1sqft

HOUSE TYPE 6A PLAN
1:100@A3

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PLANNING

B	02/12/22	AMENDED TO PROTECTED STAIR
A	05/10/22	REVISED INTERNAL LAYOUT
REVISION	DATE	DESCRIPTION

CLIENT: BRITTANIA GROUP	
PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT	
ADDRESS: VICTORIA PARK PROBATION CENTRE	
DRAWING TITLE: HOUSE TYPE 6A PLAN	
SCALE: 1:100@A3	DATE: JUNE 2022
DRAWING NO: A662_P_156B	

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