Report
for
Whitbread Group PLC

FIRE STATEMENT
FOR
PREMIER INN LONDON UXBRIDGE EXTENSION
AT
RIVERSIDE WAY, UXBRIDGE

C. S. TODD
& ASSOCIATES LTD

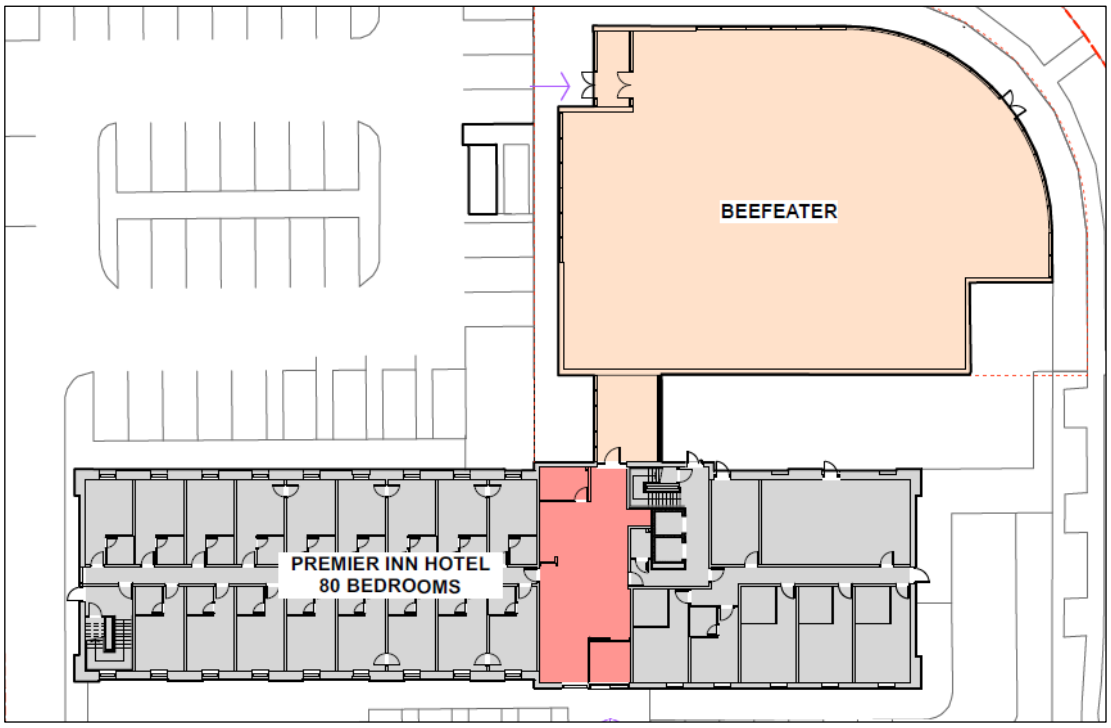
October 2024

CONTENTS

1. INTRODUCTION

1.1 This fire statement has been prepared by C.S. Todd & Associates Ltd ("CSTA"), on behalf of Whitbread Group PLC ("Whitbread"), in support of an application for planning permission for a three-storey extension to the existing Premier Inn London Uxbridge located at 500 Riverside Way, Uxbridge UB8 2YF (hereafter referred to as "the Premises").

1.2 The Premises currently comprise a three-storey hotel (ground, first and second floors) with a link-detached single storey Beefeater restaurant. Both buildings have flat roofs.



Existing hotel and restaurant arrangements

1.3 The proposed development comprises demolition of the existing restaurant to form a car parking area, and construction of a new, flat roofed three storey extension on the other side of the hotel. The new extension will provide guest bedrooms and a smaller restaurant, predominantly for guest use. A proportion of the ground floor will provide an under croft, as shown on the plan below.

Proposed hotel and restaurant arrangements

1.4 Policy D12 of the London Plan requires development proposals to achieve the highest standards of fire safety, embedding these at the earliest possible stage.

1.5 The proposals in this document follow the headings outlined in Policy D12 of the London Plan, and include:

1) the building's construction (method);
2) the means of escape for all building users and the evacuation strategy;
3) features which reduce the risk to life, such as fire detection and alarm systems, passive and active fire safety measures and associated management and maintenance plans;
4) access and facilities for the fire and rescue service personnel;
5) how provision will be made on site to enable fire appliances to gain access to the building;
6) ensuring that any potential future modifications to the building will consider, and not compromise, the base build fire safety/protection measures.

1.6 Policy D5 of the London Plan requires that, when passenger lifts are provided in a new building, at least one lift is designed as an evacuation lift. In this case, the existing hotel building is provided with passenger lifts but not an evacuation lift. The new extension will not be provided with lifts.

1.7 Greater London Authority London Plan Guidance Sheet Policy D5(B5) includes a checklist for providing evacuation lifts. The guidance sheet and flow chart refer to the

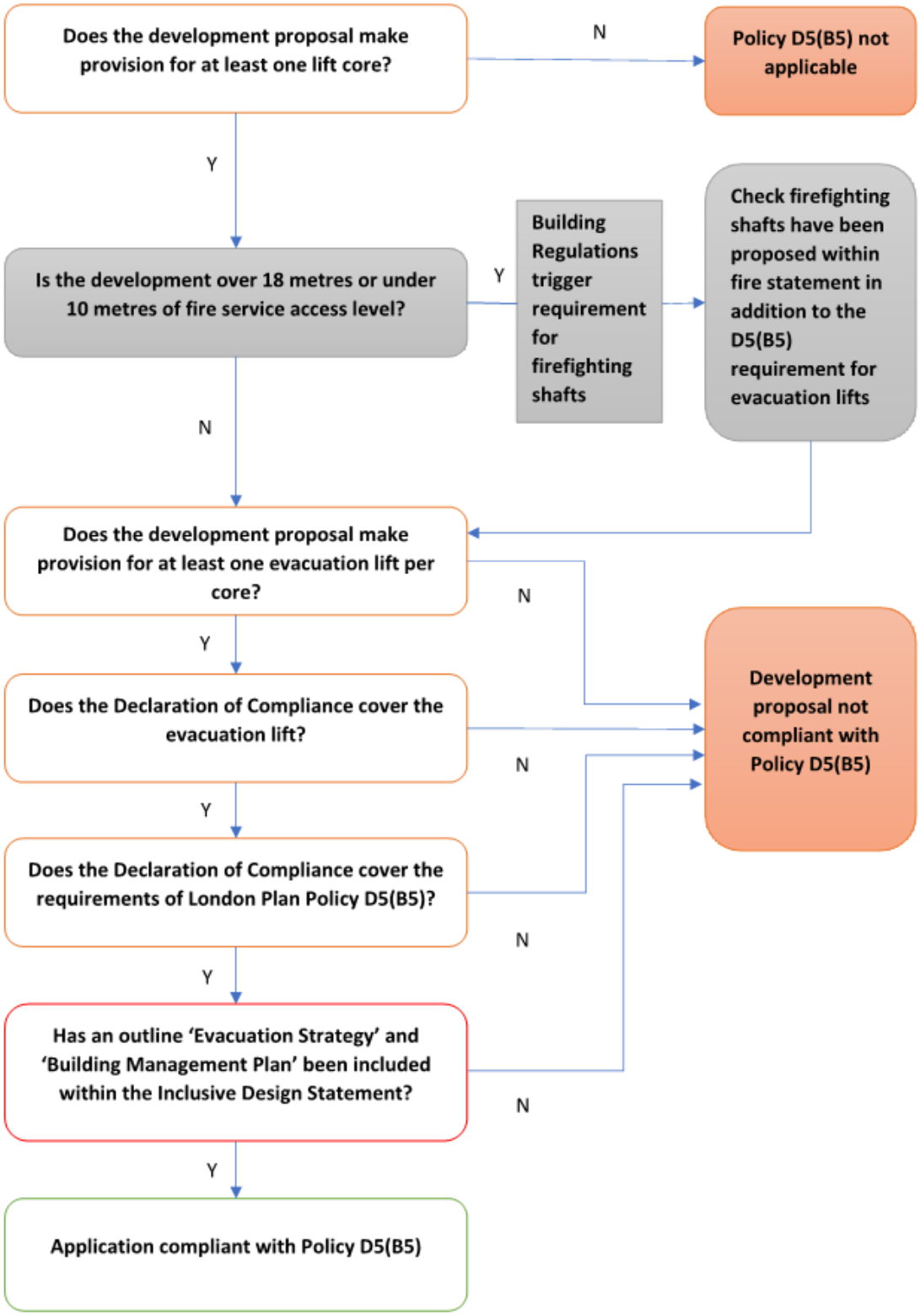
"development proposal". In the context of the London Plan and similar planning documents, a development proposal is taken to refer to the new construction, extension, or significant modification that is being proposed, as opposed to the existing structures that are not being altered as part of the proposal.

1.8 Policy D5(B5) requires development proposals to be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum, at least one lift per core (or more, subject to capacity assessments) should be a suitably sized fire evacuation lift, suitable to be used to evacuate people who require level access from the building.

1.9 Passenger lifts and, therefore, evacuation lifts will not be provided in the new extension, neither will a passenger lift in the existing building be upgraded to evacuation lift standard. Evacuation of people unable to use the stairs unassisted will be based on refuges, evacuation chairs and trained Whitbread Team Members.

Greater London Authority
London Plan Guidance Sheet
Policy D5(B5)

Figure 1: London Plan Policy D5(B5) Evacuation lift checklist



1.10 This fire statement is not to be considered a full fire strategy document, albeit it will be used to support the building regulations application in due course.

1.11 The submission of this fire statement constitutes neither a warranty of future results by C.S. Todd & Associates Ltd, nor an assurance against risk. The statement represents only the best judgement of the consultant involved in its preparation, and is based, in part, on information provided by others. No liability whatsoever is accepted for the accuracy of such information.

2. DESCRIPTION OF THE BUILDING

2.1 The existing Beefeater restaurant will be demolished, and the area used for car parking. The extension will comprise three storeys and will be constructed in the existing hotel car park on the other side of the hotel. Additional parking will also be available in the under croft of the new extension.

2.2 The extension will comprise a ground floor restaurant, kitchen and linen room with guest bedrooms on all floors.

2.3 The extension will be served by two protected staircases, with access also to the stairs in the existing hotel building via protected corridors. All stairs are internal and lead directly to a final exit.

2.4 For fire safety purposes, the height of the top storey (second floor) will be greater than 5 m but less than 11 m (circa 6 m). The height of the building will be less than 11 m (circa 9 m).

2.5 The distribution of bedrooms in the hotel and extension is shown in the tables provided by Axiom Architects ("the Architects") copied below. The new Solus restaurant will provide 98 covers.

EXISTING HOTEL	
total existing bedrooms	**80**
storeys	3
UA bedrooms	8
3.1m & non model small bedrooms	0
reception type	TBC
air conditioning	yes

NEW BUILD BEDROOMS			
total new build bedrooms			**72**
in annexe	0	in extension	72
in conversion of existing restaurant			0
storeys			3
total Prem +			22
bedroom split:			
UA			6
21.2m2 Quad, Triple or Double			1
21.2m2 Twin			8
18.9m² Double (3.1m width)			35
Prem + UA			1
Prem + 21.2m²			14
Prem + 18.9m² (3.1m width)			7

REFIT OF EXISTING BEDROOMS	
total of existing bedrooms lost	**2**
bedrooms lost to form UA	0
bedrooms lost to form F&B	0
UA from conversion of existing standard bedrooms	0

NEW F&B			
type	SOLUS 2.0	guest mix	Business
size (bed module)	N/A	target covers %	65%
actual number of covers			98
actual number of covers as a % of total bedrooms			65%

PARKING	
existing spaces	116
proposed spaces	147

TOTALS = NET EXISTING + ADDITIONAL	
total bedrooms on completion	**150**
total UAs	15
UA as a % of new total	10%
total 3.1m wide & non model small bedrooms	42
3.1m wide & non model small as a % of new total	28%
21.2m² Twin as a % of new total	5.3%

3. COMPETENCY

3.1 The London Plan (Policy D12) recommends that the fire statement should be produced by someone who is third-party independent and suitably qualified. This should be a qualified engineer with relevant experience in fire safety, such as a Chartered Engineer registered with the Engineering Council by the Institution of Fire Engineers (IFE).

3.2 The consultant producing this fire statement is Stephen Robinson, who has an Honours degree in Fire Engineering, a Master's degree in Fire Safety Engineering and is a registered Chartered Engineer under licence by The Institution of Fire Engineers (CEng) and a Member of the Institution of Fire Engineers (MIFireE). Stephen has worked in the fire sector for 44 years.

3.3 All reports prepared by consultants within the CSTA practice are subject to comprehensive quality assurance checks by a director or suitably qualified consultant.

4. DESIGN APPROACH

4.1 The fire safety strategy for the building adopts the guidance in Approved Document B to the Building Regulations 2010 (ADB)[1].

4.2 The Building Regulations are functional and there is no obligation to follow the recommendations in ADB. However, in this case, no fire engineering design aspects are proposed for these premises.

4.3 Fire and rescue service access will be based on the provision of external access for fire appliances and firefighting, using access by means of normal circulation routes.

4.4 ADB does not require an automatic suppression system in a development of this height and use and automatic suppression will not be provided.

4.5 However, the design will incorporate Whitbread's requirements that exceed some of the recommendations in ADB. For example, Whitbread requires cavity barriers in external walls at the junction with each wall separating guest bedrooms.

4.6 From 1st December 2022, hotels with a floor level at least 18 m above ground floor level were classified as a "Relevant Building" under Regulation 7 of the Building Regulations. The classification prohibits the use of combustible materials in the construction of external walls, with minor specified exceptions. The extension and hotel do not have any level above 18 m and so are not classified as a "Relevant Building".

4.7 The Architects' GA plans, to which reference is made in the production of this fire statement, are listed in the table below. Copies of the plans are included in Appendix A to this Fire Statement.

Level	Number
Existing ground floor	6262-P-100
Existing 1st and 2nd floors	6262-P-101
Existing roof	6262-P-102
Proposed ground floor	6262-P-110 B
Proposed 1st floor	6262-P-111 A
Proposed 2nd floor	6262-P-112 A
Proposed roof	6262-P-113 A

[1] Approved Document B (Fire safety) Volume 2 – *Buildings other than dwellings,* 2019 edition incorporating 2020 and 2022 amendments

5. BUILDING CONSTRUCTION

5.1 This fire statement addresses the fire resistance of the elements of structure, the reaction to fire of the materials forming external walls, the fire resistance of external walls beyond the limit of permissible unprotected openings, measures to limit fire spread of fire over walls and ceiling linings, the fire resistance of walls and doors protecting escape routes and measures to prevent penetration into, or fire spread over, the roof from the outside. For detailed content regarding specific construction methods and materials, reference should be made to the appropriate reports.

5.2 The extension will be constructed using a timber frame. The construction of the timber frame will follow the guidance provided by the Structural Timber Association ("the STA") and, specifically to cover the fire risk during construction, it is anticipated that a Timber Frame Fire Risk Report (TFFR) will be completed by CSTA.

5.3 The extension will comprise a steel frame at ground floor with a composite deck forming the first-floor slab. Above this level will be the timber frame. This is consistent with the construction of the original building.

5.4 External walls will broadly be as per the existing construction comprising typical timber frame detailing but with a different specification/thickness of insulation.

5.5 Floors will form compartment floors.

5.6 Roof construction will comprise a timber frame roof deck, insulation and single ply membrane covering.

5.7 Bathroom service enclosures will be accessible from bathrooms and stopped off at each floor.

5.8 It is anticipated that ducted air movement systems will be confined to ground floor reception/restaurant/back-of-house area only.

5.9 The arrangements for kitchen extract ductwork will be subject to further design.

6. MEANS OF ESCAPE AND FIRE WARNING

Fire Evacuation Strategy

6.1 The hotel will operate a two-stage alarm, allowing a 3-minute period for initial staff verification of an alarm arising from a single smoke detector, followed by a simultaneous evacuation.

Assembly Points

6.2 The assembly point will be designated within the large car park surrounding the existing hotel building. This area has significant standing capacity and areas at a safe distance from the hotel, ensuring guest safety and preventing evacuees from causing an obstruction to the fire and rescue service.

Escape Routes

6.3 The means of escape will meet the requirements of ADB with respect to travel distance (purpose group 2b), number, and width, of exits and capacity of protected stairs. These are summarised below:

Location	Travel distance – one direction	Travel distance - more than one direction
In bedrooms	9 m	18 m
In bedroom corridors	9 m	35 m
Elsewhere	18 m	35 m
Within Plant room	9 m	35 m
Total including allowance in plant room (not open air)	18 m	45 m
Open air plant	60 m	100 m

6.4 It is noted that there is a marginally extended single direction travel distance along the bedroom corridors on the first and second floors of the existing hotel. This is an existing condition and is within the acceptable overall single direction travel distance (room and corridor) of 18 m, recommended in the Government Guide for sleeping risk premises and for the purpose of satisfying the requirements of the Regulatory Reform (Fire Safety) Order 2005 (as amended). An improvement will be made to the existing stair serving this dead-end section of corridor by the addition of a FD 30S fire door to improve the stair enclosure and remove the stair enclosure from the corridor circulation route. This will allow the stair to be bypassed, and an alternative stair reached, in the unlikely event that the stair becomes smoke logged.

6.5 Access to the two new stairs serving the extension will be by doors that are at least 850 mm in width. A single 850 mm storey exit door is sufficient for 110 people if the other storey exit door is assumed to be obstructed by fire. This is adequate for the occupants of 32 guest bedrooms on each of the first and second floors, most of which will have a capacity of two occupants. In this case, additional storey exits are also available via the other two stairs serving the existing hotel.

Maximum number of people	Minimum width
60	750 mm
110	850 mm
220	1,050 mm
More than 220	5 mm/person

6.6 Guest bedrooms will be served by protected corridors on each floor, formed from 30 minutes' fire-resisting walls and FD 30S fire doors. Corridors will be sub-divided by fire-resisting doors, to reduce the risk of smoke simultaneously obstructing the route to both protected stairs and to protect corridors where there is, initially, single direction travel. Corridors will be a minimum of 1,200 mm wide.

6.7 The new restaurant area will be provided with access to two final exits that are independent of exits serving the stairs. Exit capacity will be sufficient for at least 110 people, which is in excess of the proposed occupancy of 98 covers. A further back-of-house exit will be provided for the kitchen and associated areas.

6.8 The ground floor bedrooms in the extension will be served by a protected corridor provided with two final exits direct to outside and independent from other areas of the hotel. The initial single direction section of bedroom corridor will comply with the recommendations of ADB for travel distance, separation and protection.

6.9 The means of escape routes from the existing hotel will remain broadly unchanged, albeit with upper floor access to the additional protected stairs serving the extension. However, an additional protected corridor will be provided to link with the corridor serving the existing ground floor bedrooms, to provide a protected route leading to a final exit at the reception end of the existing bedroom corridor. This is an improvement to the current arrangements but considered necessary due to the proposed open aspect between reception and the restaurant.

6.10 An additional escape hatch will be provided on the new roof. This will be accessed by ladder and, subject to final design consideration, will either be located in one of the new stair enclosures or in the second-floor linen room.

6.11 The two new stairs serving the extension will each be 1,200 mm wide. The stairs are lobby protected or approached via protected corridors, so it is not necessary to discount a stair for means of escape purposes. The capacity of the stairs is shown in the table below and is clearly adequate for the 64 bedrooms served on the first and second floors of the extension. The end stair of the extension does not serve the ground floor. The centrally located stair has a potential merging flow into the stair enclosure from the eight ground floor guest bedrooms, which is insignificant in terms of potential congestion at the final exit.

Extension Stairs	Width	Floors served (storeys)	Capacity (persons)	Capacity per floor (persons)
End	1,200 mm	1 & 2	285	142
Central	1,200 mm	1 & 2	285	142
Total			**570**	

6.12 The capacity of escape routes serving the upper floor will be limited by storey exit capacity, rather than stair capacity, but more than what is required in each case.

6.13 Final exits from the stair enclosures will broadly match the stair width. However, given the over capacity of the escape routes, it would be feasible to reduce final exit widths from the stairs to some extent.

6.14 Escape routes will have a minimum clear headroom of 2 m.

6.15 Suitably signed refuge positions, measuring 1,400 mm x 900 mm, will be provided within the stair enclosures at each level. Communications equipment, complying with the recommendations of BS 5839-9[2], will be provided at disabled refuge points, with the master station located at a suitable position on the ground floor, close to a final exit. Evacuation chairs will be provided.

Emergency Escape Lighting

6.16 The hotel extension will be provided with comprehensive coverage of emergency escape lighting. The emergency escape lighting will comply with the recommendations of BS 5266–1[3] and the requirements of BS EN 1838[4] and BS 5266-8[5].

6.17 The emergency escape lighting system will comprise a mixture of self-contained, non-maintained and maintained luminaires with integrated battery packs and inverter units.

6.18 All emergency luminaires will have a standby operation of three hours, with their associated charger units able to suitably recharge within 24 hours. Testing facilities will be key switches located adjacent to local distribution boards for tests to large areas such as Main Reception, bedroom corridors and staircases. For tests to isolated areas such as offices, linen rooms and WCs, test facilities will be installed within the local lighting switch plate

6.19 Provision will be made for all final exits, corridor fire doors and direction changes to fire exit routes to have illuminated directional exit signage.

---

[2] BS 5839-9: 2021. *Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems*.
[3] BS 5266-1: 2016. *Emergency lighting - Code of practice for the emergency lighting of premises*
[4] BS EN 1838: 2013. *Lighting applications – Emergency lighting.*
[5] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

6.20 Emergency escape lighting will be designed to a minimum of one Lux on all escape routes with 10% of the general illumination level over all distribution boards, switchboards and plant items.

Fire Exit Signs

6.21 Escape routes will be provided with suitable 'FIRE EXIT' signs in compliance with the following standards.

a) BS 5499-4: 2013. *Safety signs. Code of practice for escape route signing*.

b) BS ISO 3864-1: 2011. Graphical symbols. Safety colours and safety signs. Design principles for safety signs and safety markings.

c) BS EN ISO 7010: 2020 + A6: 2023. Graphical symbols. Safety colours and safety signs. Registered safety signs.

d) BS 5499-10: 2014+A1: 2023. Guidance for the selection and use of safety signs and fire safety notices.

Means of Warning of Fire

6.22 The extension will be provided with a comprehensive fire detection and alarm system, which will meet the recommendations for a Category L1 system, as defined in BS 5839-1[6]. The fire detection and alarm system will be an analogue, addressable type.

6.23 The hotel and extension will operate a single fire detection and alarm system. The appointed fire alarm contractor will develop a proposal confirming how the current fire alarm system will be extended. Both the existing building and the new extension will be controlled by a fire alarm control panel at a single point in, or around, reception.

Surface Linings

6.24 To control the spread of flame across surfaces, all finishes to walls and ceilings will meet the performance classification recommended in Table 10 of ADB. Therefore, the classification of the surfaces of walls and ceilings within the buildings will comply with the following:

Classification of linings		
Location	**National class**	**European class**
Small rooms of area not more than 30m^2:	**3**	**D-s3, d2**
Other rooms:	**1**	**C-s3, d2**
Other circulation spaces:	**0**	**B-s3, d2**

[6] BS 5839-1: 2017. *Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises.*

Additional Provisions

6.25 Electrically operated, hold-open devices provided on fire-resisting doors, e.g. within the bedroom corridor areas, will be interfaced to the fire detection and alarm system.

6.26 Doors on escape routes that are fitted with electronic locks will be interfaced with the fire detection and alarm system to deactivate the door locking system on fire alarm activation, or in the event of a power failure.

6.27 Powered sliding doors will be provided on the new final exits from reception. Sliding doors will be designed, installed, and tested in compliance with the recommendations of BS EN 16005[7] and BS 7273-4[8], and include an emergency override control (green box).

6.28 In the case of powered sliding doors without a hinged break-out facility, the opening of the doorset will be required to be guaranteed by a fail-safe system according to Performance Level "d" of BS EN ISO 13849-1[9].

6.29 More generally, electronic door locks on escape routes will comply with the recommendations of BS 7273-4.

[7] BS EN 16005: 2023. *Power operated pedestrian doorsets. Safety in use. Requirements and test methods.*

[8] BS 7273-4: 2015+A1:2015. *Code of practice for the operation of fire protection measures. Actuation of release mechanisms for doors*.

[9] BS EN ISO 13849-1: 2023. *Safety of machinery. Safety-related parts of control systems. General principles for design*

7. INTERNAL FIRE SPREAD

7.1 For the purpose of Table B4 in Appendix A of ADB, the height of the highest occupied level of the extension to the hotel will be no more than 11 m, when measured in accordance with Diagram D5 of ADB. Therefore, the elements of structure will be specified to provide not less than 60 minutes' fire resistance. Fire resistance means the level of performance of the element of structure, when tested in accordance with the requirements of BS 476 Parts 20-24[10] or EN equivalent, as specified for a particular element in Tables B3 and B4 of ADB.

7.2 All floors will be specified as compartment floors. There are no floor area or volumetric limitations for fire compartments in a hotel.

7.3 All service shafts penetrating a compartment floor will be constructed as protected shafts with the appropriate fire resistance, as specified in Tables B3 and B4 of ADB.

7.4 Bathroom service enclosures will be sealed at compartment floor level so will not be classified as protected shafts. They will be separated from bedroom corridors by partitions providing 30 minutes' fire resistance (REI) from both sides. Access hatches located in corridors will provide 30 minutes' fire resistance from both sides and be provided with smoke seals. However, in this case, access to bathroom services will not be from the corridor but from within bathrooms. This is considered a superior arrangement as it removes potential weaknesses in the integrity of protected bedroom corridors.

7.5 Enclosures to stores, plant rooms, refuse areas, service cupboards that are not protected shafts, and team rooms will provide 30 minutes' fire resistance with FD 30S fire-resisting doors.

7.6 Where air handling ducts pass through fire-separating elements, such as compartment walls or the enclosures to protected escape routes, then the integrity of those elements should be maintained, using one, or a combination, of the following four methods:

- Method 1: thermally actuated fire dampers;
- Method 2: fire-resisting enclosures;
- Method 3: protection using fire-resisting ductwork;
- Method 4: automatically actuated fire and smoke dampers triggered by smoke detectors.

---

[10] BS 476-20:1987. *Fire tests on building materials and structures. Method for determination of the fire resistance of elements of construction (general principles)*
BS 476-21: 1987. *Fire tests on building materials and structures. Methods for determination of the fire resistance of loadbearing elements of construction*
BS 476-22: 1987. *Fire tests on building materials and structures. Methods for determination of the fire resistance of non-loadbearing elements of construction*
BS 476-23: 1987. *Fire tests on building materials and structures. Methods for determination of the contribution of components to the fire resistance of a structure*
BS 476-24: 1987. *Fire tests on building materials and structures. Method for determination of the fire resistance of ventilation ducts*

7.7 Method 1 will not be used for extract ductwork passing through the enclosures of protected escape routes, because large volumes of smoke can pass thermal devices without triggering them.

7.8 Where Method 3 is used and ductwork penetrates the enclosure of a protected escape route, it will have fire resistance for both integrity and insulation.

7.9 Whitbread requires all kitchen extract ductwork Internally within the building to be fire rated. The ductwork will be rated to 120 minutes in both stability and integrity. The system to be utilised is a Firemac Duct System, ref FM 120 (Type B) which must be installed fully in line with Firemac guidance notes.

7.10 Fire dampers will meet both of the following conditions:

a) conform to BS EN 15650[11]; and

b) have a minimum E classification of 60 minutes, or to match the integrity rating of the fire-resisting elements, whichever is higher.

7.11 Fire and smoke dampers will meet both of the following conditions:

a) conform to BS EN 15650; and

b) have a minimum ES classification of 60 minutes, or to match the integrity rating of the fire resisting elements, whichever is higher.

7.12 Dampers are not suitable for protecting ducting used for smoke extraction, or for fume extraction from kitchens. In these cases, Method 2 (fire-resisting enclosure) or Method 3 (fire-resisting ductwork), as specified in ADB, should be used.

7.13 All openings around pipes and services passing through a fire-resisting wall or floor will be adequately protected by sealing or fire stopping, so that the fire resistance of the element is not impaired. Openings for pipes through a fire-separating element may be dealt with by proprietary sealing, restricted pipe diameter or a sleeve. Fire stopping work will be completed by a third-party registered contractor, using Hilti products, unless otherwise agreed by Whitbread.

7.14 To reduce the potential for fire spread, cavity barriers will be provided for both of the following:

a. to divide cavities; and

b. to close the edges of cavities.

(See Diagram 9.1 from ADB copied below. Cavity barriers should not be confused with fire-stopping details.)

[11] BS EN 15650: 2010. Ventilation for buildings. Fire dampers.

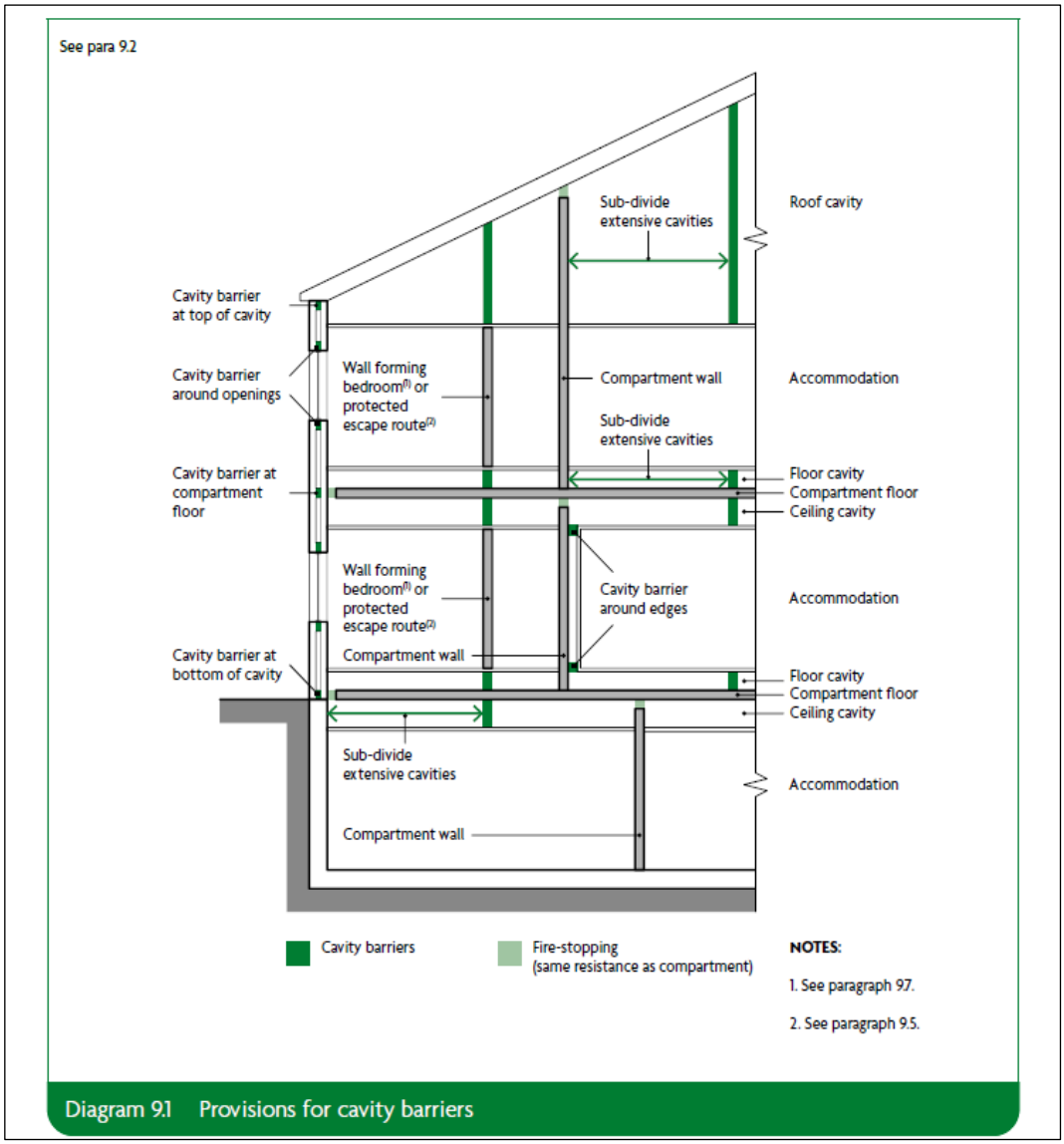


Diagram 9.1 Provisions for cavity barriers

7.15 Cavity barriers will be provided at all the following locations (see also Diagram 9.1 from ADB above):

a. at the edges of cavities, including around openings (such as windows, doors and exit/entry points for services);

b. at the junction between an external cavity wall and every compartment floor and compartment wall;

c. at the junction between an internal cavity wall and every compartment floor, compartment wall or other wall or door assembly forming a fire resisting barrier;

d. where a partition protecting an escape route is not full height, or has a void under it;

e. in divided corridors, cavity barriers may be needed to prevent alternative escape routes being affected by fire and/or smoke.

7.16 Cavity barriers will be used to sub-divide any extensive cavities exceeding the dimensions set out in Table 9.1 of ADB. Some exceptions are permitted to these dimensions in specified circumstances.

Table 9.1 Maximum dimensions of cavities in buildings other than dwellings (purpose groups 2 to 7)

Location of cavity	Class of surface/product exposed in cavity (excluding the surface of any pipe, cable or conduit, or any insulation to any pipe)	Maximum dimension in any direction (m)
Between roof and a ceiling	Any	20
Any other cavity	Class C-s3, d2 or better	20
	Worse than Class C-s3, d2	10

7.17 Whitbread requires additional cavity barriers to be installed in external wall cavities at the junction of each guest bedroom enclosing wall with the external wall. This is regardless of whether the wall separating bedrooms is designated as fire resisting or the external wall is fire resisting.

8. SMOKE VENTILATION

8.1 No means for smoke ventilation will be provided, or are required, in the extension.

9. EMERGENCY POWER SUPPLIES

9.1 There is no requirement for a standby electrical generator at the premises.

9.2 The secondary power supply for emergency escape lighting and the fire detection and alarm systems will be provided by integral batteries.

10. EXTERNAL FIRE SPREAD

10.1 The reaction to fire performance of external surfaces (i.e. outermost external material) of external walls are prescribed in Table 12.1 of ADB (below). For a hotel of less than 11 m in height and more than 1 m from the relevant boundary, no provision is made in ADB. In this case all external walls will be greater than 1 m from the relevant boundary.

Table 12.1 Reaction to fire performance of external surface of walls

Building type	Building height	Less than 1000mm from the relevant boundary	1000mm or more from the relevant boundary
'Relevant buildings' as defined in regulation 7(4) (see paragraph 12.15)		Class A2-s1, d0[1] or better	Class A2-s1, d0[1] or better
All 'residential' purpose groups (purpose groups 1 and 2)	More than 11m	Class A2-s1, d0[2] or better	Class A2-s1, d0[2] or better
	11m or less	Class B-s3, d2[2] or better	No provisions
Assembly and recreation	More than 18m	Class B-s3, d2[2] or better	From ground level to 18m: class C-s3, d2[3] or better From 18m in height and above: class B-s3, d2[2] or better
	18m or less	Class B-s3, d2[2] or better	Up to 10m above ground level: class C-s3, d2[3] or better Up to 10m above a roof or any part of the building to which the public have access: class C-s3, d2[3] or better[4] From 10m in height and above: no minimum performance
Any other building	More than 18m	Class B-s3, d2[2] or better	From ground level to 18m: class C-s3, d2[3] or better From 18m in height and above: class B-s3, d2[2] or better
	18m or less	Class B-s3, d2[2] or better	No provisions

NOTES:

In all cases all the following provisions apply.

- Regulation 7(1A) prohibits the use of relevant metal composite materials in the external walls, and specified attachments, of all buildings of any height (see paragraphs 12.12 and 12.13).
- The advice in paragraph 12.4 should always be followed.

In addition to the provisions within this table, buildings with a storey 18m or more above ground level should also meet the provisions of paragraph 12.6.

In addition to the provisions within this table, buildings with a storey 11m or more above ground level should also meet the provisions of paragraph 12.7.

1. The restrictions for these buildings apply to all the materials used in the external wall and specified attachments (see paragraphs 12.14 to 12.17 for further guidance).
2. Profiled or flat steel sheet at least 0.5 mm thick with an organic coating of no more than 0.2mm thickness is also acceptable.
3. Timber cladding at least 9mm thick is also acceptable.
4. 10m is measured from the top surface of the roof.

10.2 Neither the extension (nor the existing hotel) will have a floor over 18 m above ground and neither will be classified as a "Relevant Building" under Section 7(4) of the

Building Regulations. However, except for the timber frame components, the materials forming the external walls and insulation will be non-combustible.

10.3 As previously noted, cavity barriers in external walls will exceed the requirements of ADB.

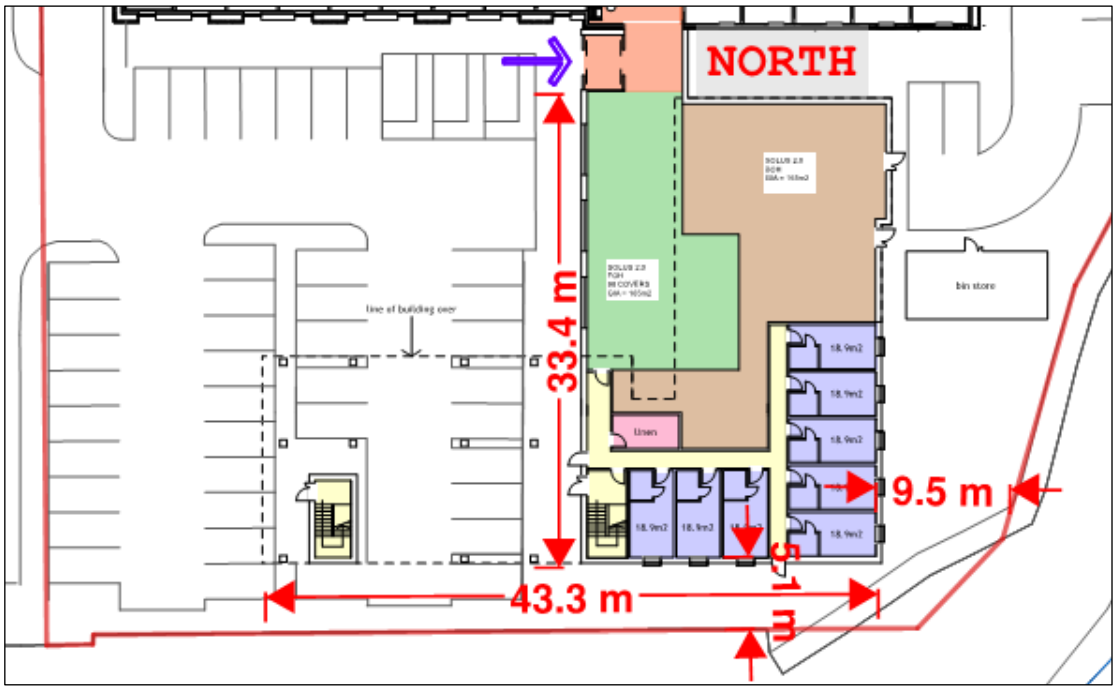
10.4 To prevent fire spread to an adjacent building by thermal radiation, it is necessary to consider the permitted extent of unprotected parts of an external wall and window and other openings in relation to the relevant boundary. The method used for assessing the external fire spread risk to adjacent buildings is the calculated method provided in the Building Research Establishment document BR 187[12]. For a hotel, the lower cited heat output of 84 kW/m2 is applicable for calculating separation distances.

10.5 Unprotected areas of the façade include windows with regular glazing and doorways, but also any part of an external wall that does not provide fire resistance and, hence, could add to thermal radiation in the event of a serious fire in the building. So, for example, if calculations show that 20% of a façade may be unprotected, then the remaining 80% of the external wall must have the prescribed fire resistance. Part 5 of Table B3 of ADB sets out the required fire resistance for external walls that are more than the permitted unprotected area, or are close to the relevant boundary.

10.6 The extension will have compartment floors, so it is only necessary to consider external fire spread from one floor at a time.

10.7 The relevant boundaries are taken as the property boundaries but could be placed at the centre of adjoining public highways. The western boundary is remote from the building and requires no further consideration. The northern boundary faces the existing hotel and there is no requirement to consider external fire spread between different parts of the same building. Analysis of the southern and eastern boundaries is provided below, together with a plan showing boundary distances and elevation lengths.

[12] BR 187: External fire spread: building separation and boundary distances.



Boundary distance and elevation lengths

10.8 Storey height is taken as 3 m. To determine if the external walls may comprise 100% unprotected openings (hence no limitations on standard glazing systems), an enclosing rectangle of 3 m high by 50 m wide is selected from BR 187 for the south elevation and an enclosing rectangle 3 m high by 40 m wide from BR 187 for the east elevation. Separation distance for 100% unprotected openings is provided in the table below and in both cases is satisfactory.

Elevation & enclosing rectangle	Separation distance required for 100% unprotected openings	Separation distance available
South (3 m by 50 m) 1st and 2nd floors worst case	5 m	5.1 m
East (3 m by 40m) All floors the same	5 m	9.5 m

10.9 The roof covering will meet the designation BRoof(t4) as set out in Table 14.1 of ADB. While there is no specific requirement for a roof to be fire resisting from the underside, measures will be taken to meet the requirement in ADB to prevent a breach of compartmentation via the roof structure.

10.10 There are currently no proposals for a green roof to the extension.

10.11 There are currently no proposals for additional photovoltaic cells on the extension.

Table A: Enclosing rectangle 3 m high

	Distance from relevant boundary for unprotected percentage not exceeding								
Width	20%	30%	40%	50%	60%	70%	80%	90%	100%
Minimum boundary distance (m)	Figures in brackets for residential, office and assembly uses								
3.0	1.0 (1.0)	1.5 (1.0)	2.0 (1.0)	2.0 (1.5)	2.0 (1.5)	2.5 (1.5)	2.5 (2.0)	3.0 (2.0)	3.0 (2.0)
6.0	1.5 (1.0)	2.0 (1.0)	2.5 (1.5)	3.0 (1.5)	3.0 (2.0)	3.5 (2.0)	3.5 (2.5)	4.0 (2.5)	4.0 (3.0)
9.0	1.5 (1.0)	2.5 (1.0)	3.0 (1.5)	3.5 (2.0)	3.5 (2.5)	4.0 (2.5)	4.5 (3.0)	4.5 (3.0)	5.0 (3.5)
12.0	1.5 (1.0)	2.5 (1.0)	3.0 (1.5)	3.5 (2.0)	4.0 (2.5)	4.5 (3.0)	5.0 (3.0)	5.5 (3.5)	5.5 (3.5)
15.0	2.0 (1.0)	2.5 (1.5)	3.5 (2.0)	4.0 (2.0)	4.5 (2.5)	5.0(3.0)	5.5 (3.5)	6.0 (3.5)	6.0 (4.0)
18.0	2.0 (1.0)	2.5 (1.5)	3.5 (2.0)	4.0 (2.5)	5.0 (2.5)	5.5 (3.0)	6.0 (3.5)	6.5 (4.0)	6.5 (4.0)
21.0	2.0 (1.0)	3.0 (1.5)	3.5 (2.0)	4.5 (2.5)	5.0 (3.0)	5.5 (3.0)	6.0 (3.5)	6.5 (4.0)	7.0 (4.5)
24.0	2.0 (1.0)	3.0 (1.5)	3.5 (2.0)	4.5 (2.5)	5.0 (3.0)	6.0 (3.0)	6.5 (3.5)	7.0 (4.0)	7.5 (4.5)
27.0	2.0 (1.0)	3.0 (1.5)	3.5 (2.0)	4.5 (2.5)	5.5 (3.0)	6.0 (3.5)	6.5 (3.5)	7.0 (4.0)	7.5 (4.5)
30.0	2.0 (1.0)	3.0 (1.5)	4.0 (2.0)	4.5 (2.5)	5.5 (3.0)	6.0 (3.5)	7.0 (4.0)	7.5 (4.0)	8.0 (4.5)
40.0	2.0 (1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	5.5 (3.0)	6.5 (3.5)	7.0 (4.0)	8.0 (4.5)	8.5 (5.0)
50.0	2.0 (1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	6.5 (3.5)	7.5 (4.0)	8.5 (4.5)	9.0 (5.0)
60.0	2.0 (1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	7.0 (3.5)	7.5 (4.0)	8.5 (4.5)	9.5 (5.0)
80.0	2.0 (1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	7.0 (3.5)	8.0 (4.0)	8.5 (4.5)	9.5 (5.0)
100.0	2.0 (1.0)	3.0(1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	7.0 (3.5)	8.0 (4.0)	9.0 (4.5)	10.0 (5.0)
120.0	2.0(1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	7.0 (3.5)	8.0 (4.0)	9.0 (4.5)	10.0 (5.0)
130.0	2.0(1.0)	3.0 (1.5)	4.0 (2.0)	5.0 (2.5)	6.0 (3.0)	7.0 (3.5)	8.0 (4.0)	9.0 (4.5)	10.0 (5.0)

BR 187 Extract

11. ACCESS AND FACILITIES FOR THE FIRE AND RESCUE SERVICE

11.1 The extension/hotel does not have a floor greater than 18 m above fire and rescue service access level and will not be provided with a firefighting shaft, firefighting lift or dry rising main.

11.2 In accordance with ADB, firefighting access requirements will be met by perimeter access for fire appliances and access for firefighters using normal building circulation routes.

11.3 The extension is contiguous with the existing hotel, so it is appropriate to consider access overall. For buildings not fitted with fire mains, Table 15.1 of ADB (below) requires 15% access to the building perimeter for a pumping appliance. It can be seen from the yellow route highlighted on the site plan below that this is significantly exceeded.

Table 15.1 Fire and rescue service vehicle access to buildings not fitted with fire mains

Total floor area[1] of building (m²)	Height of floor of top storey above ground (m)[2]	Provide vehicle access to:	Type of appliance
Up to 2000	Up to 11 Over 11	See paragraph 15.1 15% of perimeter	Pump High reach
2000–8000	Up to 11 Over 11	15% of perimeter 50% of perimeter	Pump High reach
8000–16,000	Up to 11 Over 11	50% of perimeter 50% of perimeter	Pump High reach
16,000–24,000	Up to 11 Over 11	75% of perimeter 75% of perimeter	Pump High reach
Over 24,000	Up to 11 Over 11	100% of perimeter 100% of perimeter	Pump High reach

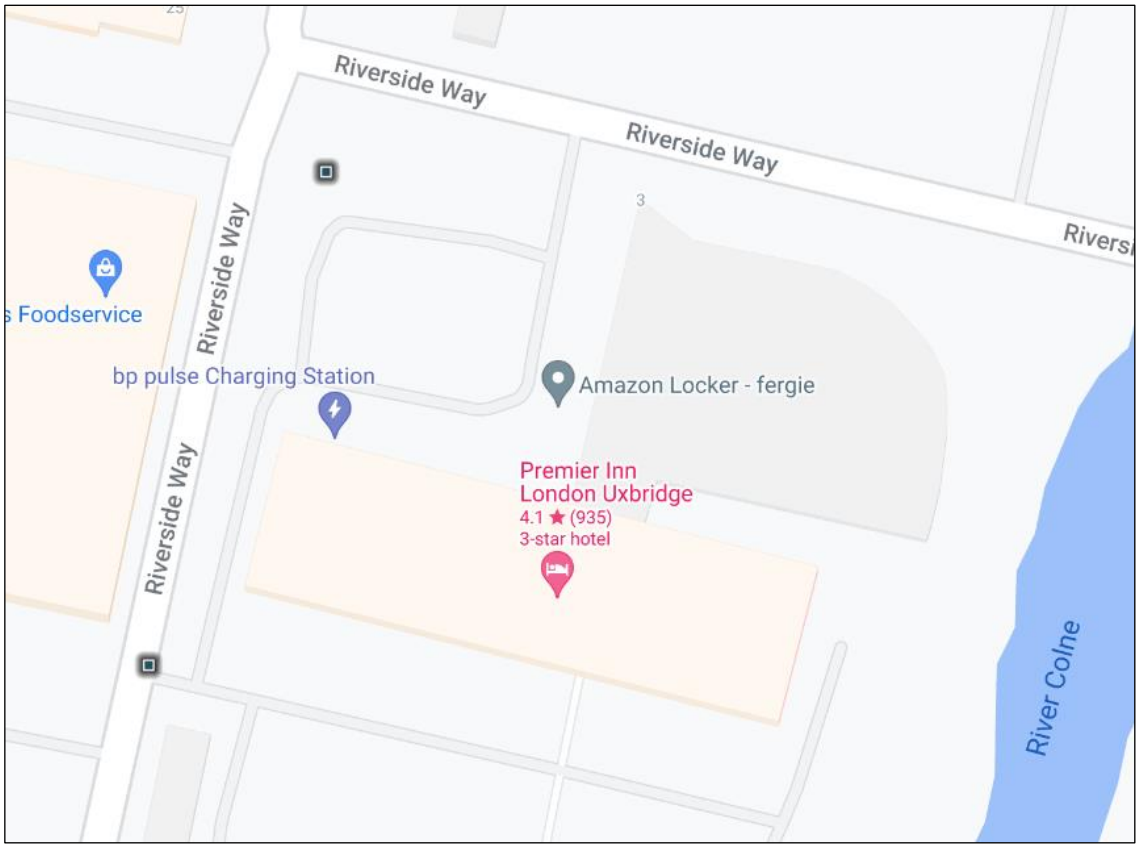
NOTES:

1. The sum of the area of all storeys in the building (excluding basements).
2. For storage buildings (purpose group 7(a)), measure height to mean roof level (see Appendix D).

Fire appliance access

11.4 ADB recommends that every elevation to which vehicle access is provided should have a door, a minimum of 750 mm wide, to give access into the building. The maximum distance between doors, or between a door and the end of the elevation, should be limited to 60 m. This recommendation will be met.

11.5 The closest fire hydrants located, using the Fire Protection Association mapping tool, are directly adjacent to the site (black square within square symbol on the plan below).



Fire Hydrants immediately adjacent to the site on Riverside Way

12. AUTOMATIC WATER FIRE SUPPRESSION SYSTEM

12.1 An automatic water suppression system is not required in the building to comply with building regulations.

13. STATEMENT OF COMPLIANCE

In my opinion, this fire statement demonstrates that the fire safety provisions of the proposed development are commensurate with the requirements of London Plan Policy D12 and Policy D5 and provide the basis for meeting the functional requirements of the Building Regulations.

Signed:

S. ROBINSON
BEng, MSc, CEng, MIFireE

25th October 2024

APPENDIX A – ARCHITECTS' GA PLANS

(For greater resolution refer to Plans in PDF or DWG Format)

Legend:

- Existing Restaurant & BOH
- Existing Premier Inn

Rev	Date	Description	By	Chk

AXIOM ARCHITECTS
1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel. 01273 479434 www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

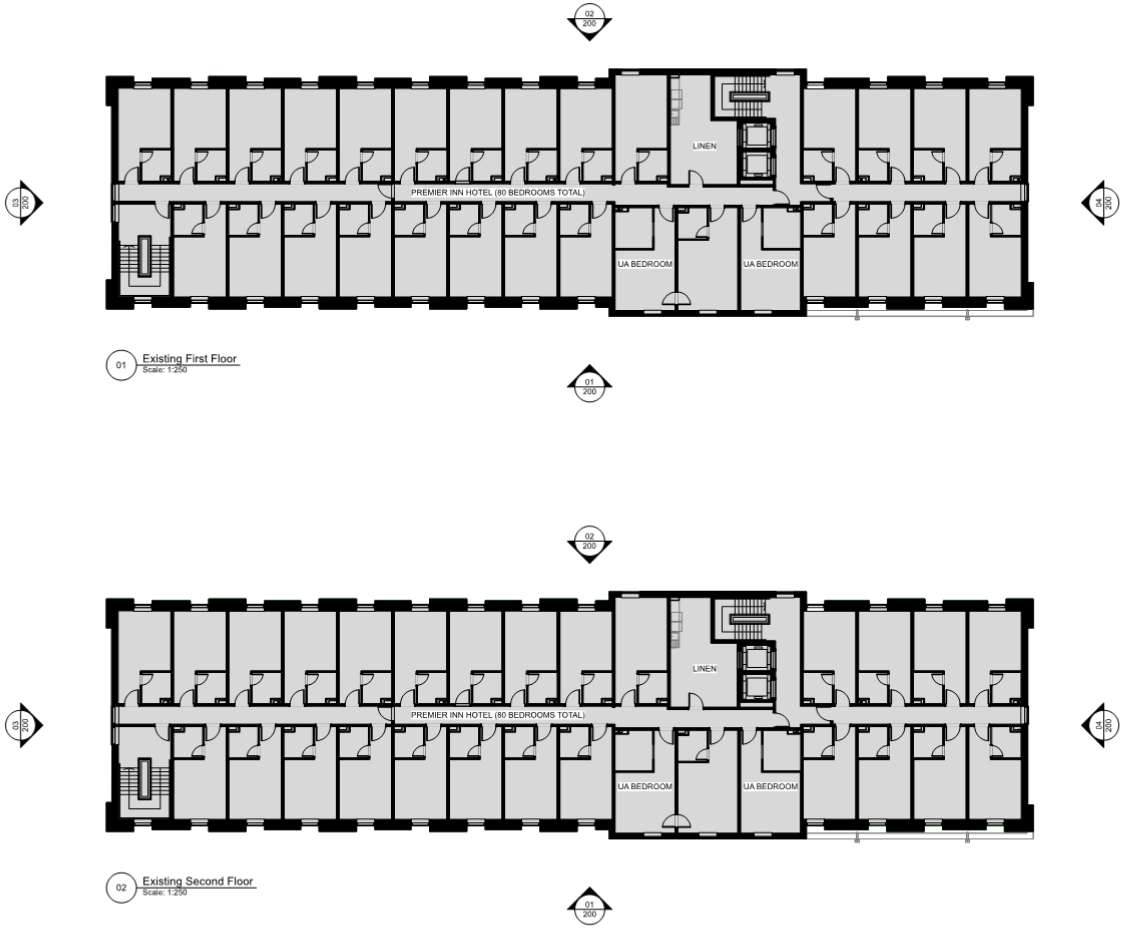
Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Existing Ground Floor Plan

Scale	Date	Drawn	Checked
1:250@A3	02/09/24	AW	AB

Drawing No. **6262-P- 100** Revision

Status
PLANNING



Legend:

- Existing Restaurant & BOH
- Existing Premier Inn

Rev	Date	Description	By	Chk

AXIOM ARCHITECTS
1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel. 01273 479434 www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

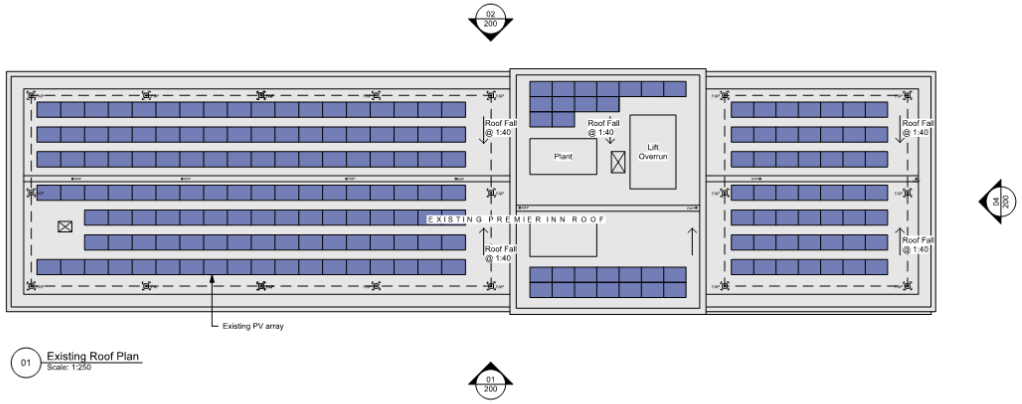
Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Existing First & Second Floor Plans

Scale	Date	Drawn	Checked
1:250@A3	02/03/24	AW	AB

Drawing No. **Revision**
6262-P- 101

Status
PLANNING



01 Existing Roof Plan
Scale: 1:250

Rev	Date	Description	By	Chk
A	24/09/2024	Plant updated.	AB	

AXIOM ARCHITECTS

1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel. 01273 479434
www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

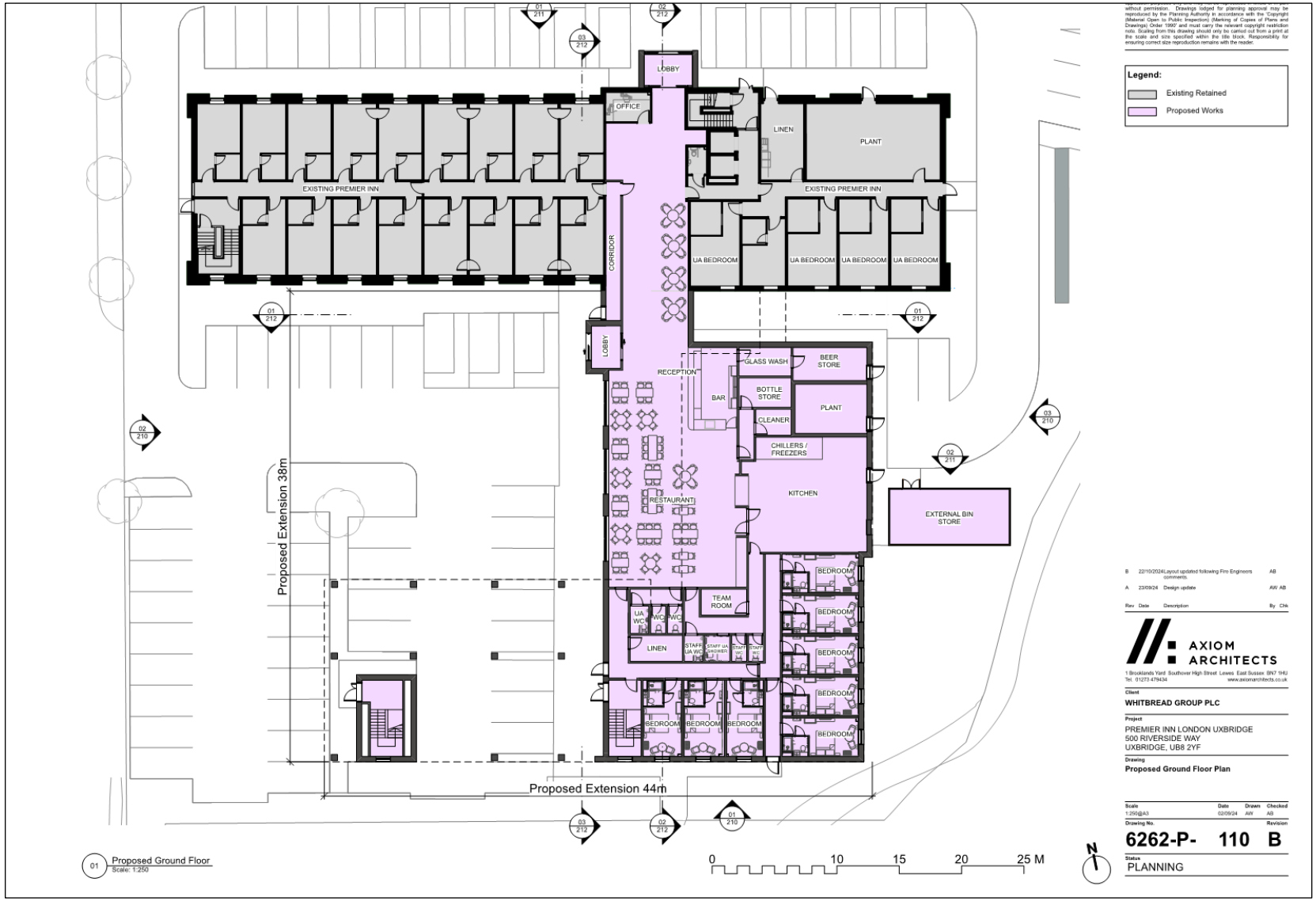
Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Existing Roof Plan

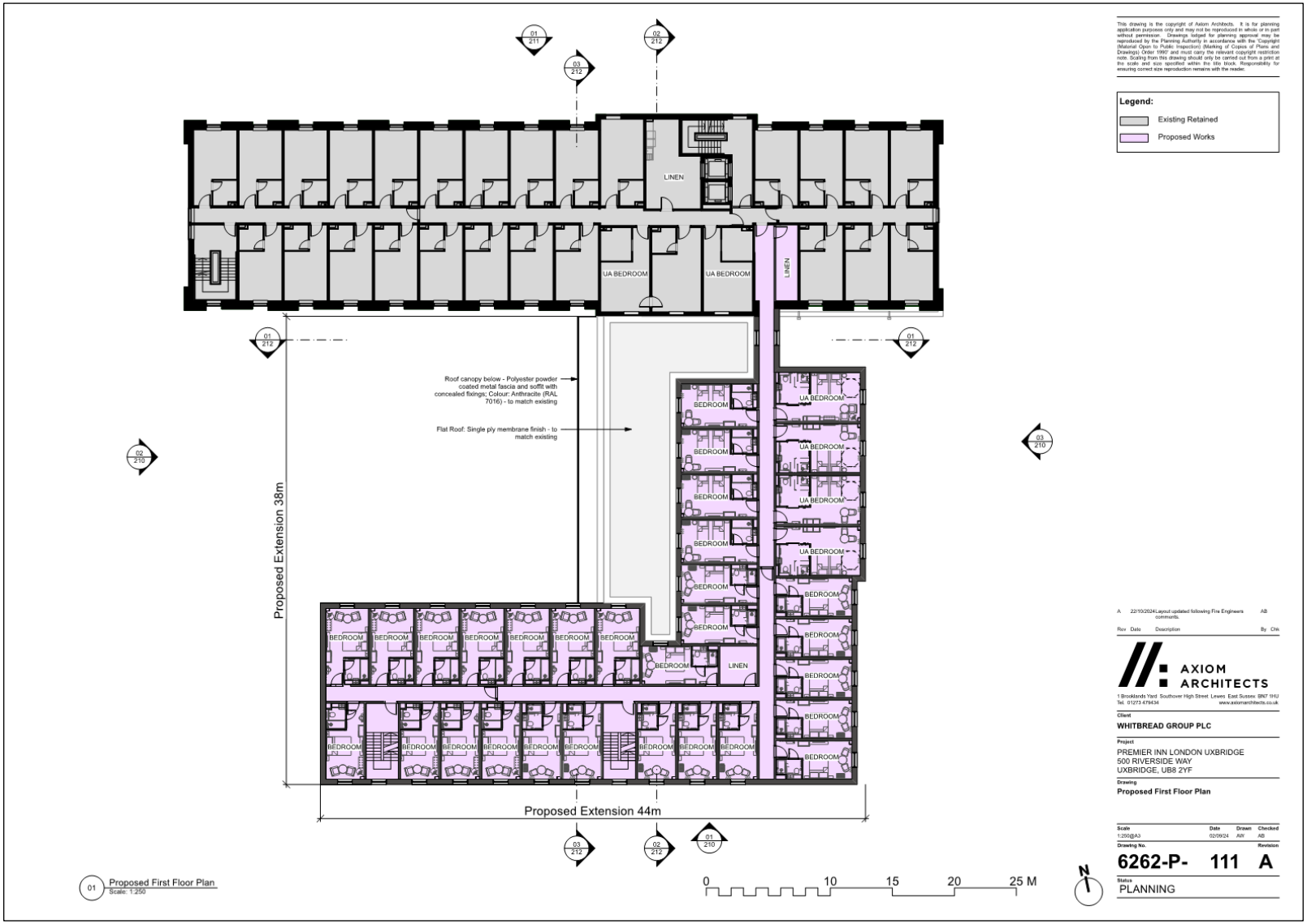
Scale	Date	Drawn	Checked
1:250@A3	02/09/24	AW	AB

Drawing No. **6262-P- 102** Revision **A**

Status
PLANNING



Rev	Date	Description	By	Chk
B	22/10/2024	Layout updated following Fire Engineers comments.	AB	
A	23/09/24	Design update	AW	AB



01 Proposed First Floor Plan
Scale: 1:250

Legend:

- Existing Retained
- Proposed Works

Rev	Date	Description	By	Chk
A	22/10/2024	Layout updated following Fire Engineers comments.	AB	

AXIOM ARCHITECTS
1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel. 01273 479434 www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

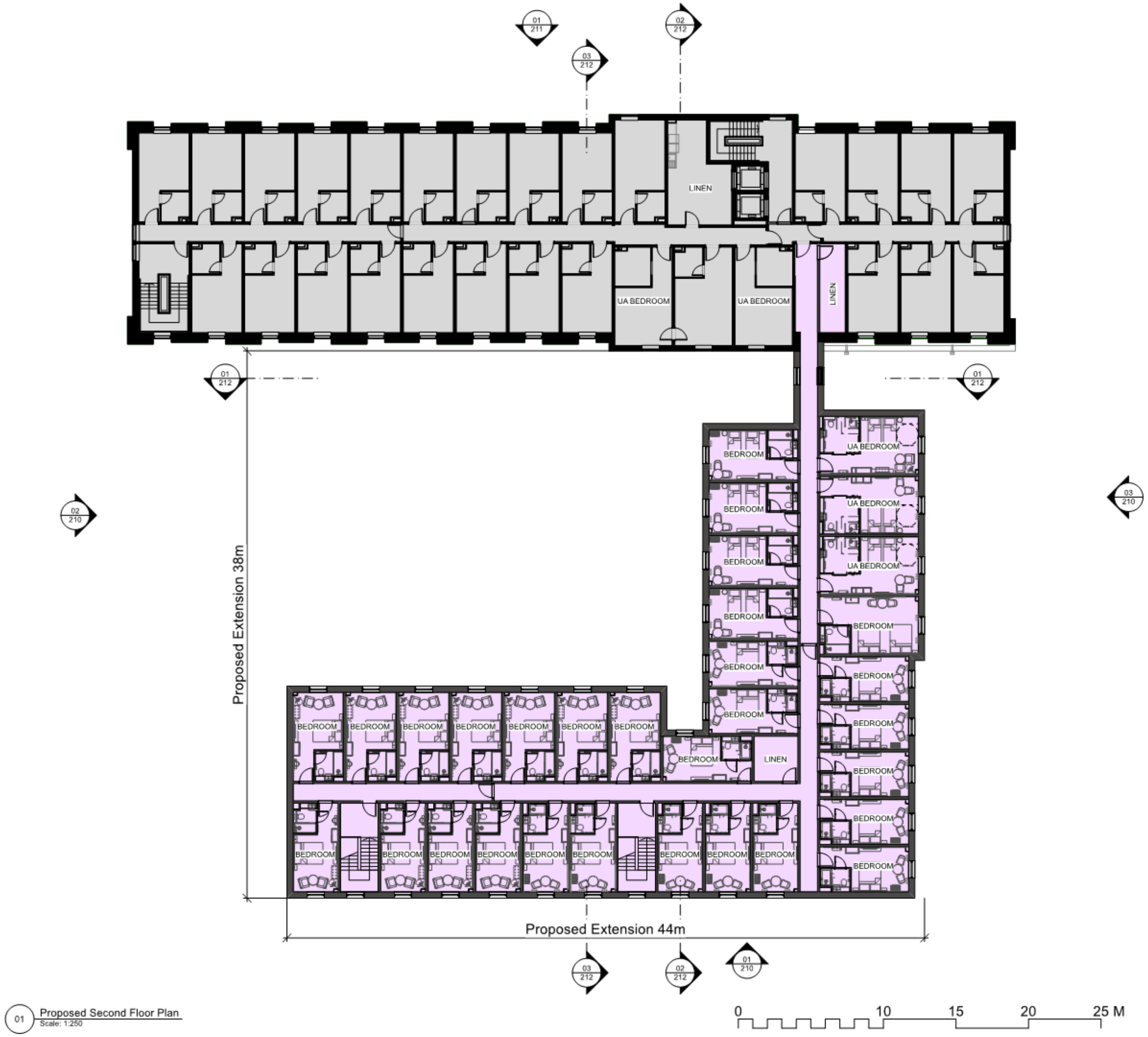
Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Proposed First Floor Plan

Scale	Date	Drawn	Checked
1:250@A3	02/09/24	AW	AB

Drawing No. **6262-P- 111** Revision **A**

Status
PLANNING



01 Proposed Second Floor Plan
Scale: 1:250

Legend:

- Existing Retained
- Proposed Works

Rev	Date	Description	By	Chk
A	22/10/2024	Layout updated following Fire Engineers comments.	AB	

AXIOM ARCHITECTS

1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel. 01273 479434 www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

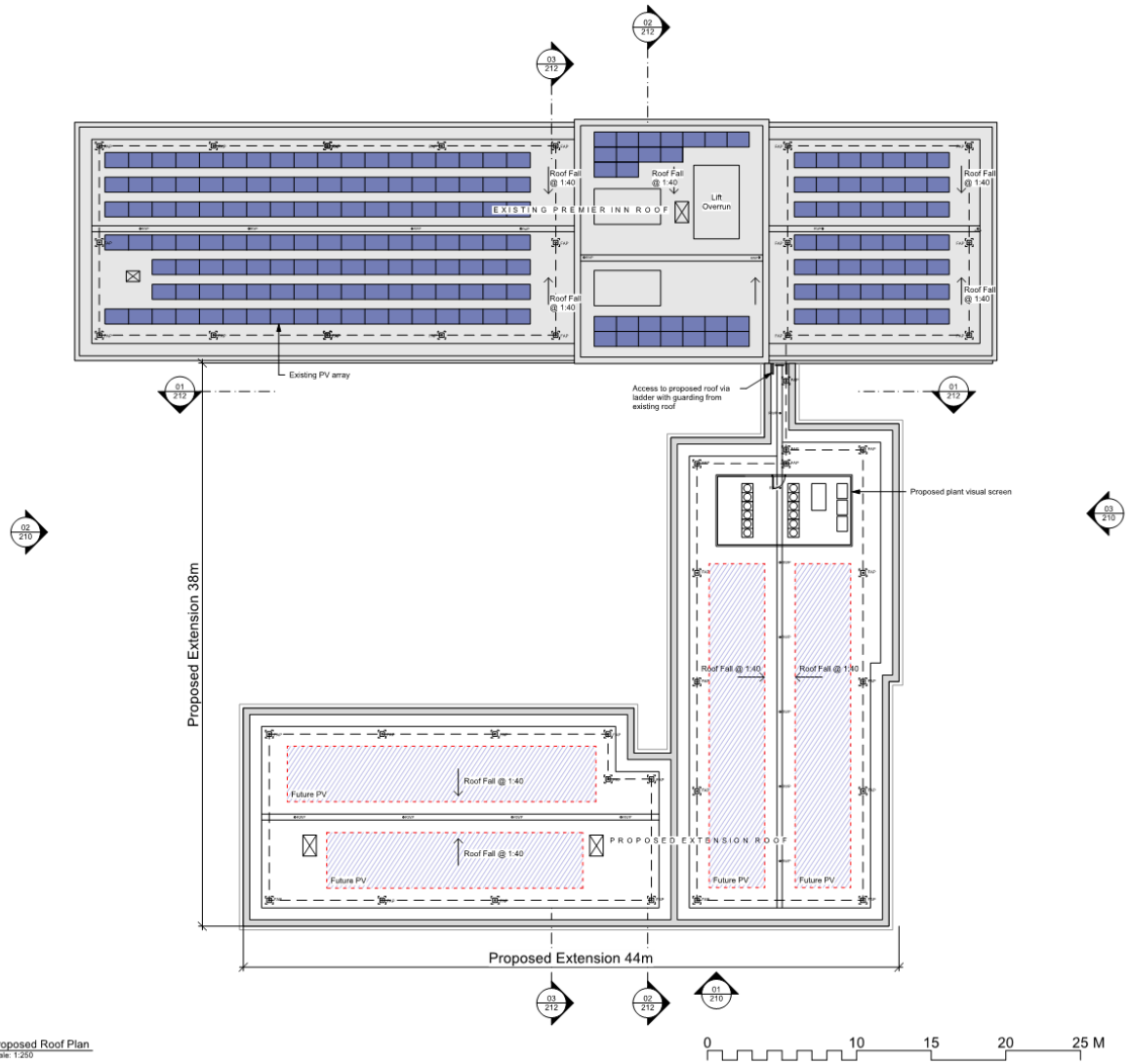
Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Proposed Second Floor Plan

Scale	Date	Drawn	Checked
1:250@A3	02/09/24	AW	AB

Drawing No. **6262-P- 112** Revision **A**

Status
PLANNING



01 Proposed Roof Plan
Scale: 1:250

0 10 15 20 25 M

N

Rev	Date	Description	By	Chk
A	23/09/24	Design update	AW	AB

AXIOM ARCHITECTS
1 Brooklands Yard Southover High Street Lewes East Sussex BN7 1HU
Tel 01273 479434 www.axiomarchitects.co.uk

Client
WHITBREAD GROUP PLC

Project
PREMIER INN LONDON UXBRIDGE
500 RIVERSIDE WAY
UXBRIDGE, UB8 2YF

Drawing
Proposed Roof Plan

Scale	Date	Drawn	Checked
1:250@A3	02/09/24	AW	AB

Drawing No. **6262-P- 113** Revision **A**

Status
PLANNING