

THE DEVELOPMENT: TECHNICAL ANALYSIS

SUMMARY AND CONCLUSIONS

COMMERCIAL WASTE

The operator of the hotel will manage the waste arising from both the hotel and serviced apartments.

Hotel

Within the hotel, interim waste storage areas will be provided which are suitable for the specific business activities being undertaken, and encourage the segregation of refuse and recycling.

On a regular basis, the on-site FM team will remove the waste from the hotel interim waste storage areas and transport it directly to the main commercial waste stores at basement level 2, where they will segregate it into the appropriate containers.

Serviced Apartments

The serviced apartments will each incorporate sufficient internal waste storage containers to promote the separation of recyclable materials at source.

On a daily basis the on-site FM team will collect the waste from each serviced apartment and will transport it to the main commercial waste stores at basement level 2, where they will segregate it into the appropriate containers.

Waste Presentation and Collection

The commercial waste stores will be the location that all waste generated within the hotel and serviced apartments is stored prior to collection. The commercial waste stores will have sufficient storage capacity to hold the equivalent of one day's waste generation.

In order to provide additional waste storage capacity, a bin compactor suitable for 1,100 litre Eurobins will be provided within the larger commercial store.

Prior to collection, the on-site FM team will transport the waste from the commercial waste stores to the waste presentation area within the service yard.

The waste management contractor appointed by the hotel operator will park their RCV in the service yard and will collect each waste stream from the waste presentation area.

Once the bins have been emptied the on-site FM team will return the bins to the main commercial waste stores at basement level 2.

RESIDENTIAL WASTE

Each residential unit will incorporate a segregated internal waste storage containers to promote the separation of recyclable materials at source.

Residents will be responsible for transporting the waste from their apartments to their nominated main residential waste store area at basement level 1, and for separating their recyclables into the appropriate containers.

On collection days the on-site FM team will transport the bins to the waste presentation area which is located to the rear of the vehicle loading bays within the service yard at ground floor level. RBKC's waste collection contractor will park their RCV adjacent to the waste presentation area and will collect the bins directly from the waste presentation area.

Once the bins have been emptied, the on-site FM team will return the bins to the basement level 1 residential waste storage areas.

- KEY
- 01 HOTEL CONFERENCE PRE-FUNCTION SPACE

02 VOID ABOVE CONFERENCE ROOM

03 HOTEL BAR STORE

04 HOTEL PRE-FUNCTION STAGING AREA

05 HOTEL CLOAKROOM

06 HOTEL BOH

07 HOTEL LIFT LOBBY/CORE

08 HOTEL/SA PLANT ROOM

09 SA LIFT LOBBY

10 HOTEL/SA CARSTACKER

11 HOTEL/SA CAR LIFT

12 HOTEL/SA GYM & SPA

13 RESIDENTIAL PLANT ROOM

14 RESIDENTIAL CYCLE STORE

15 RESIDENTIAL CYCLE LIFT

16 RESIDENTIAL BIN STORE

17 RESIDENTIAL LIFT LOBBY

18 WC

19 STORAGE

20 SERVICE LIFT LOBBY

21 SHIPS LADDER

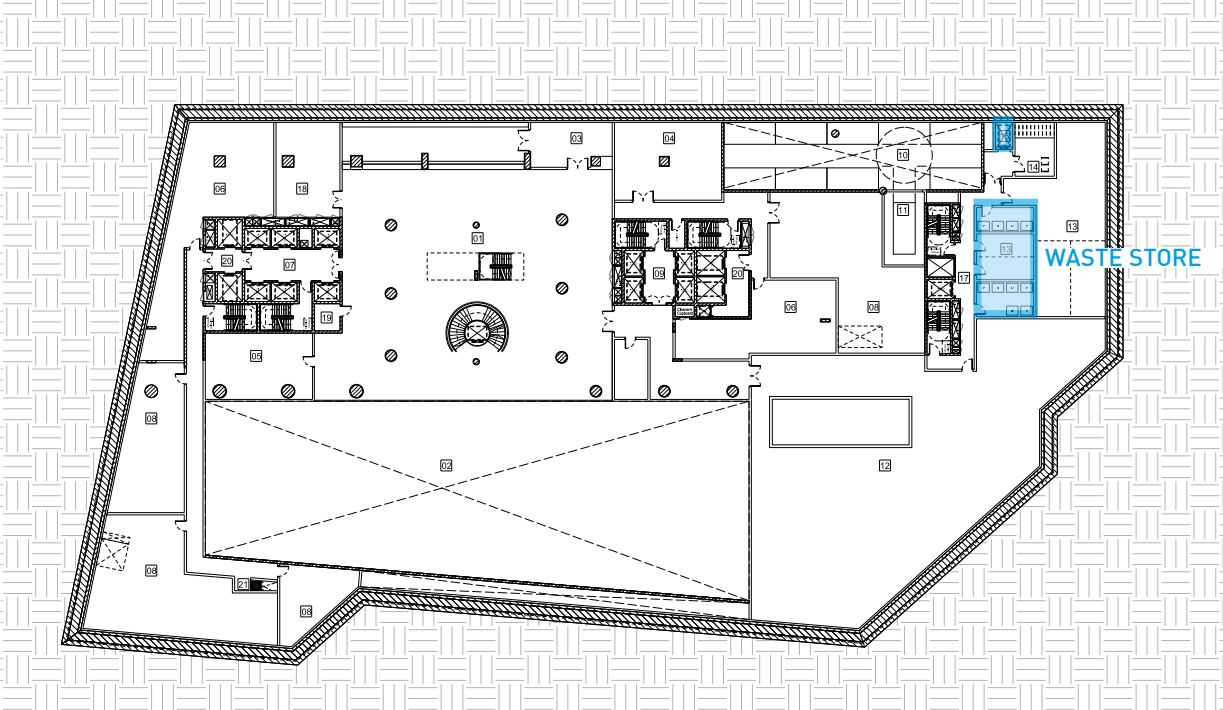


Fig 8.2.6 Residential waste stores

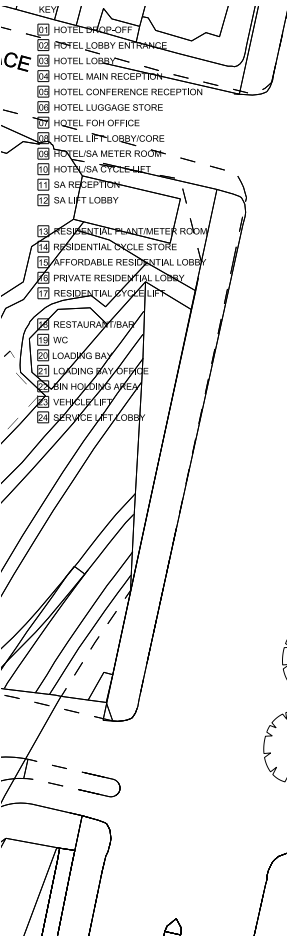
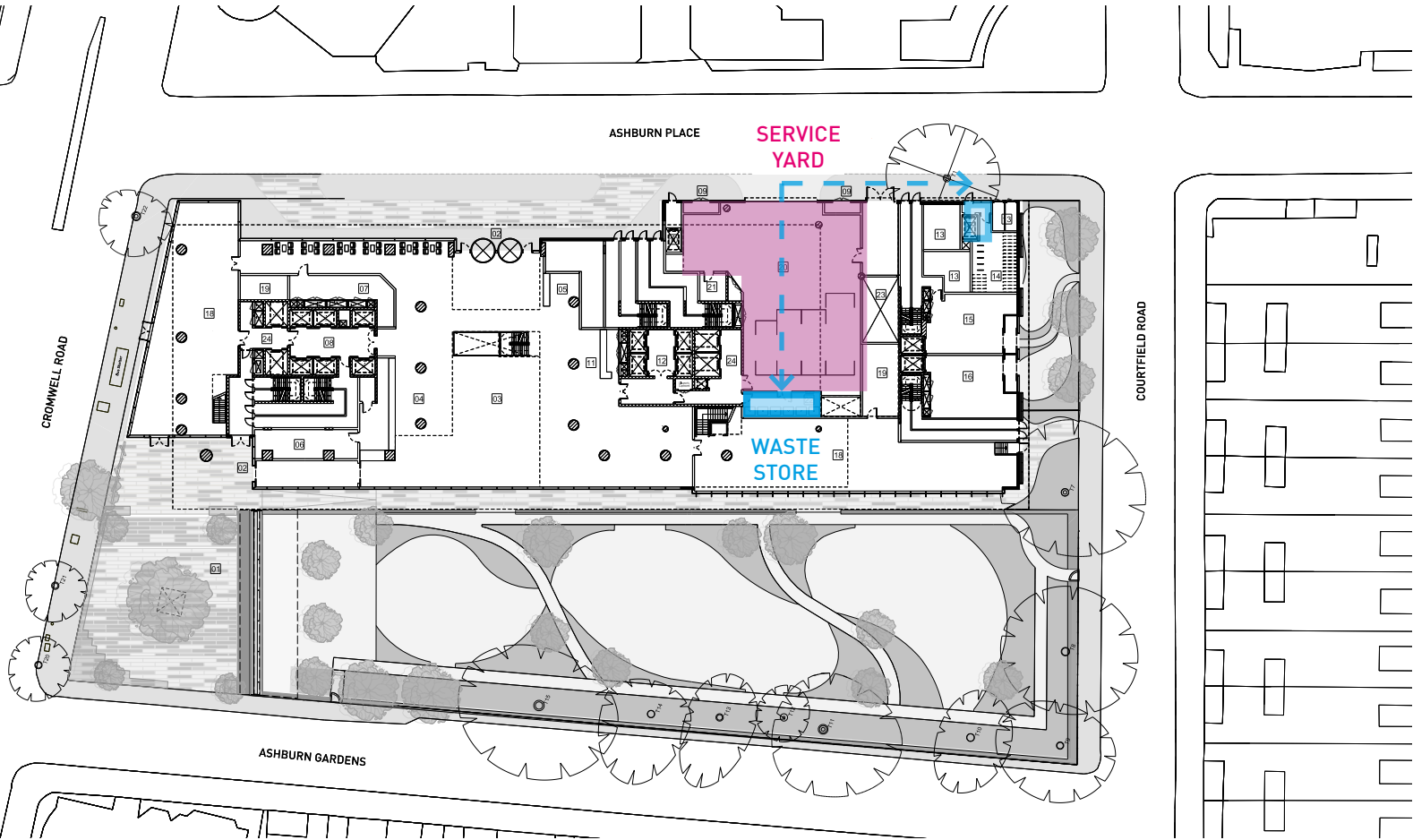


Fig 8.2.7 Service Yard



8.4 Energy Strategy

PSH have been appointed by Rockwell to undertake an Energy Efficiency Statement to accompany a planning application for the proposed multi use residential and Hotel scheme at Cromwell Road, Kensington, London, SW7 4DN.

The full Energy statement has been submitted as an addendum to the planning application.

As a “major” application the scheme should meet London Plan Policy 5.2 to 5.9, which requires the scheme to achieve a 35% carbon reduction for both domestic and non-domestic aspects of the scheme.

The scheme is subject to Kensington & Chelsea’s Local Consolidated Local Plan Strategic Policies July 2015. Policy CE1 states:

- a) New Residential developments should be Code Level 4 and none residential schemes should meet BREEAM Very good with 60% of unweighted credits available in energy.
- b) Refurbishments meet BREEAM Excellent (Residential) and BREEAM Very Good (Non Residential)
- c) Carbon emissions are reduced in accordance with the energy hierarchy, that being to consider energy efficient design and passive solutions first, secondly to consider decentralized heating, cooling and energy supplies are considered (CHP/ CCHP) and thirdly, to consider on site renewable and low carbon energy sources are considered.
- d) To provide CHP or CCHP of a suitable size to service the development and contribute to local district heat and energy network.
- e) Require all CHP or CCHP plant to connect to or be able to connect to other existing or planned CCHP plant or similar from a district heat network
- f) Require development to connect into existing district heat network where accessible
- g) Incorporate measures that will contribute to on site sustainable food production
- h) Require the development to further reduce carbon dioxide emissions through financial contributions.

The energy statement is set out as per the requirements of a full ‘London Plan Energy Statement’ report using the required format as set out in the GLA guidance. It sets out how the proposed Kensington Forum scheme meets the requirements of the London Plan Energy Statement Kensington Forum, Cromwell Road, SW7 4DN4

- › London Plan Policy 5.2
- › Provides provision to meet policy CE1 (decentralized heat and energy networks)
- › Incorporate on site renewable energy generation

It will also summarise the results of the BREEAM assessor with respect to the BREEAM energy requirement and make reference to the BREEAM Assessors report. London Plan Policy 5.2B sets a ‘zero carbon’ target for residential developments. This requires the remaining carbon emissions (after 35% reduction set out in 1.4 above) to be offset through a cash in lieu contribution to the relevant borough. As such, site carbon emissions are calculated in Tonnes per annum and are shown in table 2. It is assumed that this meets CE1 requirement h, listed above

EXECUTIVE SUMMARY

The Energy Statement for the Kensington Forum scheme and is written in the structure and format required by the London Plan document ‘GLA guidance on preparing energy statements’. The policy sets a carbon reduction target of at least 35% beyond Part L 2013 for on-site regulated emissions.

To assess the level of emissions, SAP and SBEM calculations have been carried out on a representative sample of residential units using the Elmhurst Design SAP 2012 (4.03 r08) and IESVE 2017 compliance software to gain the regulated emissions. A licensed and OCDEA accredited SAP Assessor and Level 5 Energy Assessor has carried out the calculations.

The design process and energy assessment has determined the following key measures and CO2 reductions for each stage of the energy hierarchy:

BE LEAN – Demand Reduction

High efficiency fabric including:

- › Glazing Yielding a U value of 1.2 or better
- › Wall U value of 0.15
- › Roof U value of 0.15
- › Floor U value of 0.15
- › All thermal bridges designed to accredited construction details
- › Air permeability of 3
- ›

Considered design to adapt to climate change and reduce the requirement for cooling, including:

- › West Facing apartments have glazed facades orientated to the North West to minimize peak afternoon solar gains
- › Balconies and other external façade treatments offering substantial solar shade
- › Fully opening balcony doors to help reduce the risk of overheating
- › Inclusion of Blinds to reduce solar gains.

BE CLEAN – Supply Energy Efficiently:

Considered design of the services to generate heat and power on site and retain energy, including:

- › A community Heating network is proposed utilizing high efficiency gas condensing boilers in conjunction with a CHP unit. The system has been designed to deliver 65% of the estimated annual space heating and domestic hot water requirement.
- › proposed community heating network provides opportunity to connect London Plan Energy Statement Kensington Forum, Cromwell Road, SW7 4DN6 into a district heating system should one become available in the future.
- › High efficiency Mechanical Ventilation with Heat Recovery and summer time bypass to the residential units.
- › Decentralized Ventilation for the hotel and residential units to increase diversity and eliminate unnecessary distribution loss’s
- › High Efficiency Chillers

- › Low Energy Lighting with efficiency of 85 luminair lumens per CW or better.
- › Daylight linking where practical
- › Occupancy linked light control where practical

BE GREEN – On Site Energy Generation

The proposed CHP system generates on site electricity more efficiently than centralized power stations. The principle reason being that the heat, which is usually wasted by power stations, can be used on site. In this case, for domestic hot water and space heating. The contribution from CHP is outlined above in the ‘Be clean’ scenario

Further electricity will be generated on site via solar Panels. A solar PV array is proposed to generate circa 55,000 kWh per annum, connected to the landlords supply. 15,000 kWh of which is apportioned to the apartments (circa 300kWh per apartment per annum), reducing residential emissions by a further 14%. The remaining 40,000 kWh per annum genarted is apportioned to the hotel, which reduces hotel emissions by a further 1%

The residential carbon reduction at each step of the energy hierarchy is demonstrated in tables 1 and 2 below

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	62	2
Proposed Development (DER)	55	2
After Decentralised & CHP Feasibility	37	2
After Renewable Energy	29	2

Table 1: Residential - carbon dioxide emissions after each stage of the energy hierarchy

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	7	
Savings from CHP/ Heat network	18	11
Savings from Renewables	8	40
Cumulative on site savings	33	54
Annual Savings from off-set payment	29	

Table 2: Residential - regulated carbon dioxide savings from each stage of the energy hierarchy

The non domestic carbon reduction at each step of the energy hierarchy is demonstrated in tables 3 and 4 below

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	4348	2691
Proposed Development (DER)	3912	2691
After Decentralised & CHP Feasibility	2632	2691
After Renewable Energy	2625	2691

Table 3: Carbon dioxide emissions after each stage of the energy hierarchy for non domestic buildings

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	437	10
Savings from CHP/ Heat network	1279	29
Savings from Renewables	8	1
Cumulative on site savings	1724	40
Annual Savings from off-set payment	n/a	n/a

Table 4: regulated carbon dioxide savings from each stage of the energy hierarchy for non domestic buildings

The Site Wide regulated carbon dioxide emissions and savings are set out in the following table 5 and 6.

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	4410	2693
Proposed Development (DER)	3967	2693
After Decentralised & CHP Feasibility	2669	2693
After Renewable Energy	2653	2693

Table 5: Site wide carbon dioxide emissions after each stage of the energy hierarchy

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	443	10
Savings from CHP/ Heat network	1298	29
Savings from Renewables	16	1
Cumulative on site savings	1757	40
Annual Savings from off-set payment	29	

Table 6: Site wide regulated carbon dioxide emissions and savings

The ‘clean’ scheme results in 11 credits being achieved under BREEAM issue Ene 01: Reduction of energy use and carbon emissions. (please refer to BREEAM assessment report by XCO2

CONCLUSION

In line with The London Plan (2014) and Kensington & Chelsea Local Policies, the Energy Statement has been written and produced to set out the energy efficiency and renewables energy strategy for the proposed development and to illustrate savings in terms of CO2 emissions.

The scheme benefits from building fabric efficiencies that improve on the Energy efficiency Standards set out in the building regulations.

High efficiency fabric, community heating with CHP and Photo Voltaic Panels are proposed to exceed the required reduction in regulated CO2 emissions of 35% and actually reduce emissions by an estimated 38.5%

The baseline emissions for the development have been assessed in accordance with Part L 2013 of the Building Regulations for the emissions at 4410 tonnes CO2/year.

Taking into proposed construction details and U-Values to all thermal elements, high levels of energy efficient lighting and a low air permeability rating, the CO2 savings from energy efficiency measures equate to an 10% decrease in CO2 emissions over the Part L 2013 baseline, or 443 tonnes CO2/year

Through efficient heating and DHW delivery and the use of CHP, the measures

equate to a further 29% decrease in CO2 emissions over the Part L 2013 baseline, or 1298 tonnes CO2/year

Through on-site technologies (PV) a reduction of 16 tonnes CO2/year has been achieved. This is a further reduction of 1% off the total baseline.

Total carbon reduction is 1757 Tonnes CO2 per annum or 40%.

The residential carbon reduction at each step of the energy hierarchy is demonstrated in tables 11 and 12 below

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	62	2
Proposed Development (DER)	55	2
After Decentralised & CHP Feasibility	37	2
After Renewable Energy	29	2

Table 11: Residential - carbon dioxide emissions after each stage of the energy hierarchy

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	7	
Savings from CHP/ Heat network	18	11
Savings from Renewables	8	40
Cumulative on site savings	33	54
Annual Savings from off-set payment	29	

Table 12: Residential - regulated carbon dioxide savings from each stage of the energy hierarchy

The non domestic carbon reduction at each step of the energy hierarchy is demonstrated in tables 13 and 14 below

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	4348	2691
Proposed Development (DER)	3912	2691
After Decentralised & CHP Feasibility	2632	2691
After Renewable Energy	2625	2691

Table 13: Carbon dioxide emissions after each stage of the energy hierarchy for non domestic buildings

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	437	10
Savings from CHP/ Heat network	1279	29
Savings from Renewables	8	1
Cumulative on site savings	1724	40
Annual Savings from off-set payment	n/a	n/a

Table 14: regulated carbon dioxide savings from each stage of the energy hierarchy for non domestic buildings

The Site Wide regulated carbon dioxide emissions and savings are set out in the following table 15 and 16.

	CO ₂ Emissions - (Tonnes per Annum)	
	Regulated	Unregulated
Baseline: Part L 2013 (TER)	4410	2693
Proposed Development (DER)	3967	2693
After Decentralised & CHP Feasibility	2669	2693
After Renewable Energy	2653	2693

Table 15: Site wide carbon dioxide emissions after each stage of the energy hierarchy

	CO ₂ Emissions - (Tonnes per Annum)	
	(Tonnes CO2 per Annum)	%
Savings From Demand Reduction	443	10
Savings from CHP/ Heat network	1298	29
Savings from Renewables	16	1
Cumulative on site savings	1757	40
Annual Savings from off-set payment	29	

Table 16: Site wide regulated carbon dioxide emissions and savings

The ‘clean’ scheme results in 11 credits being achieved under BREEAM issue Ene 01: Reduction of energy use and carbon emissions. (please refer to BREEAM assessment report by XCO2

8.5 Sustainability Statement

EXECUTIVE SUMMARY

The sustainability strategy for Kensington Forum has been developed with the design team to comply with the relevant environmental policies from the London Royal Borough of Kensington and Chelsea and the London Plan. Relevant energy policies have been addressed in the Energy Statement provided by PSH. The proposed development is targeting the achievement of BREEAM ‘Excellent’ and is expected to reduce on-site regulated carbon emissions by 38.5%.

This report outlines the sustainability strategy for the proposed Kensington Forum development, in line with the requirements set out by the London Plan and the London Borough of Kensington and Chelsea.

This sustainability statement is divided into three parts:

- > Planning Policies;
- > Sustainability Measures;
- > Sustainability Standards.

The first part provides an overview of the site and planning policies applicable to this development in accordance with the London Plan and London Borough of Kensington and Chelsea policies.

The second part outlines the sustainability strategy that has been employed to address the relevant planning policies.

The third part of this report outlines the sustainability measures that have been adopted to achieve a BREEAM New Construction ‘Excellent’ rating for the hotel.

A summary of the pre-assessment credits for the BREEAM assessment are provided at the end of the BREEAM section.

PLEASE REFER TO THE SUSTAINIBILTY STATEMENT PREPARED BY XCO2

8.6 Fire Strategy

INTRODUCTION

Description of Building

Kensington Forum is a proposed mixed use development in the London Borough of Kensington and Chelsea. The site plan is shown in Figure 8.6.1.

The development will primarily comprise hotel and serviced apartments arranged across two towers. The tallest tower is 30 floors above ground and the other is 22 floors above ground.

The same operator will run both the hotel and serviced apartments and will share the same communal areas. Access to the hotel at ground floor is from Ashburn Place with a secondary entrance from Cromwell Road. Mezzanine and first floors provide restaurant, bar, and conference facilities.

There are two levels of basement with a function/conference room located at B2. The basement will also include most of the back of house accommodation and plant.

There will be a residential apartment building located on the Courtfield Road side of the site.

Aim of report

The scheme is soon to submit for planning. As part of this process the client has commissioned JGA to provide fire strategy input and to prepare a concept fire strategy report for inclusion in the planning documentation and to allow early consultation with Building Control and London Fire Brigade.

The design is still at an early stage and will be developed in detail once planning is secured. This report describes the Fire Strategy concept and the fire strategy principles upon which the design is based. It draws from guidance in the Building

Regulations Approved Document B and BS9999. Guidance in BS9991 has been used to inform the residential design.

Fire engineering has been used to develop some aspects of the strategy. The technical basis for these solutions are described in this report. Any supporting fire engineering analysis that is required to develop these solutions to a full Building Regulations submission level of detail will be carried out after Planning.

SPRINKLERS

There is no Building Regulations requirement for hotels to be sprinklered. However, many major international hotel operators require sprinklers to be fitted as part of their brand standards.

The fire strategy for the Kensington Forum Hotel/Service Apartments has been developed based on the entire building being sprinklered. This provides additional flexibility for certain aspects of the design as well as enhancing life safety overall.

The sprinkler system will be designed in accordance with the relevant British Standards.

FIRE ALARM SYSTEM AND EVACUATION STRATEGY

Fire Alarm System

The hotel/serviced apartments will be provided with a comprehensive fire alarm system. Smoke detection will be provided in all bedrooms and throughout the remainder of the building to an L2 standard.

Evacuation Strategy

The hotel and serviced apartments will be operated by the same hotelier and have been designed based on a simultaneous evacuation strategy.

A staged fire alarm will be used to allow management to investigate a fire alarm.

MEANS OF ESCAPE

Guestrooms

Building Regulations guidance recommends that travel distance within guest rooms should not exceed 9m measured to the door into the protected corridor.

The standard bedrooms are less than 9 m deep and satisfy guidance.

The serviced apartments and some of the Superior, Deluxe and Suites are greater than 9 m deep. The worst case single direction escape is 14 m. These longer escape distances are justified as the building is sprinklered.

The duplex apartments on the top two floors of both towers are not addressed in guidance and a fire engineering solution involving a protected stair hallway within the apartment will need to be developed to support the provision of the duplexes. Further details on the fire engineering will be provided at a later RIBA stage.

Common Corridors

Guidance

Building Regulations guidance recommends that travel distance within the guest room corridors should not exceed 9m in a single direction and 35m where there is a choice of escape routes.

Benefits of Sprinklers

The escape distance limitations do not take into account the benefits of sprinklers. Sprinklers are designed to restrict fire growth and may even extinguish the fire and will provide occupants more time to make their escape. Therefore, longer escape distances are possible based on fire engineering.

Levels 2 to 6

Compliant escape distances can be achieved on the lower level bedrooms as shown in Figure 8.6.2 below.

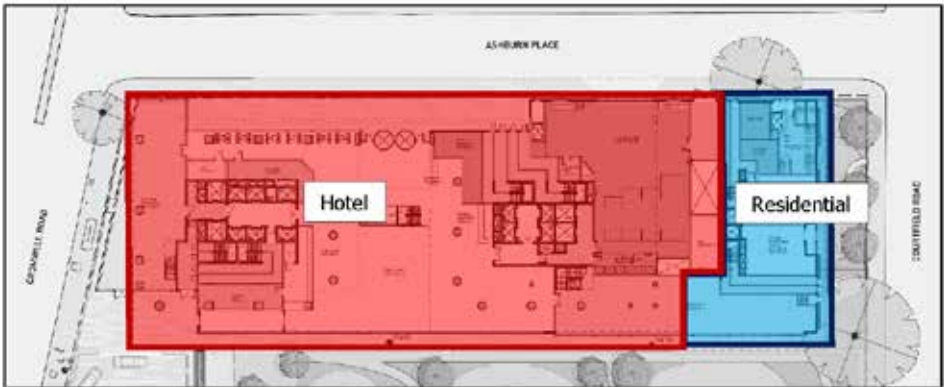


Fig 8.6.1 Site plan

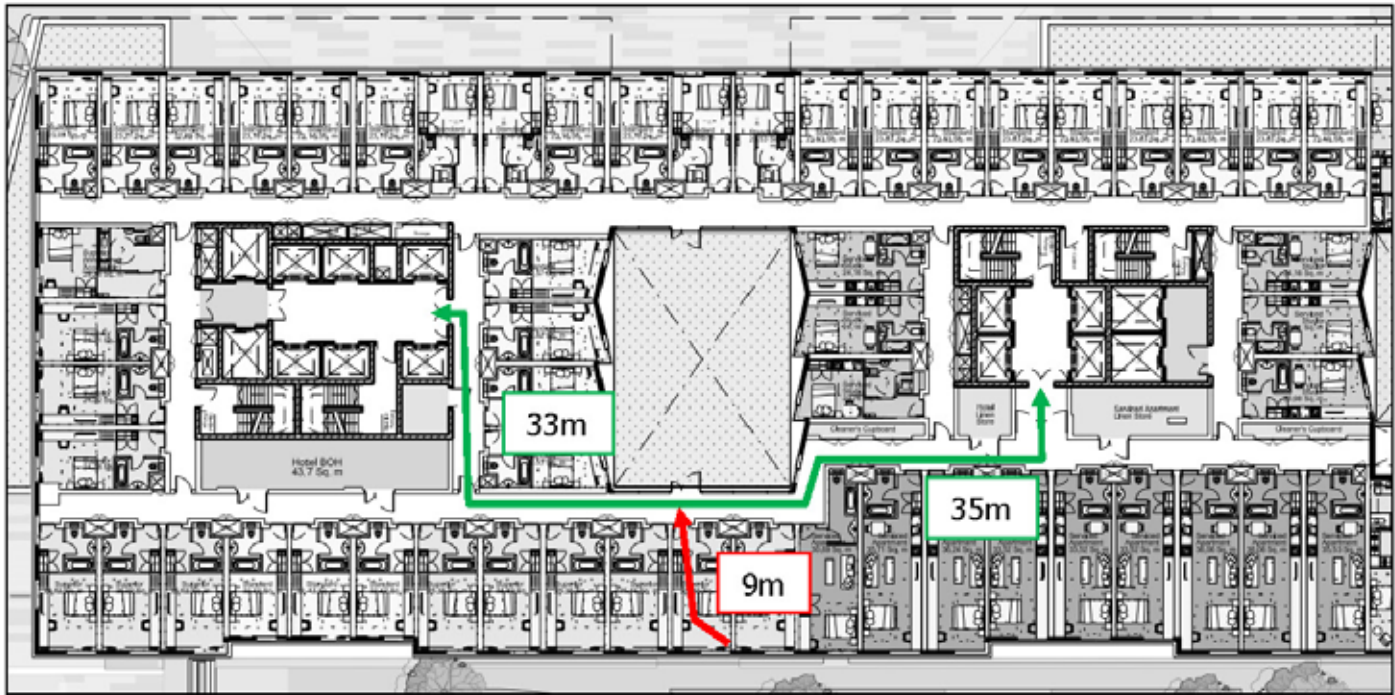


Fig 8.6.2 Guestroom Corridor Escape Distances

Levels 7 and 8

On Levels 7 and 8, a racetrack corridor is provided with dead ends located in the corners of the corridor. The dead-end corridors are approximately 8m.

Tower Levels (Level 9 Upwards)

Each of the towers is provided with two escape stairs linked by a racetrack corridor. This means that once occupants reach the corridor they generally have a choice of escape routes.

There are some dead end corridors that slightly exceed the 9 m recommended limit. Figure 4 shows an 11 m long dead end corridor. This is considered reasonable given the building is sprinklered.

The racetrack corridor will be sub-divided by cross corridor fire doors in accordance with usual standards.

Executive/Communal Lounges and Penthouse Suites

There are executive and communal lounges located on the top floor of each tower along with the Penthouse suites.

These floors will be configured such that both lounges have access to both stairs. Travel distances within the Lounges after fit out will not exceed 18m in a single direction or 45 m overall distance to an exit.

Dead-end corridor approximately 11m long. Noncompliant but can be justified using fire engineering as the hotel is sprinklered

Each stair is 1,400 mm wide. In principle, each lounge could accommodate up to 280 customers and staff. This is based on each storey exit being 1,400 mm wide and one of them being unavailable due to fire. If the storey exits are 1,050 mm wide then each lounge can cater for 220 customers and staff. A single storey exit would limit the occupancy of the executive lounge to 60.

The penthouse suites will be configured so that they can reach at least one of the staircases without having to escape through the communal lounge. The second staircase can be accessed via the communal lounge.

Mezzanine and First Floor Conference and Restaurant Areas

There are restaurants and syndicate/conference areas at mezzanine and first floor. These areas are served by four protected escape stairs. Each stair is 1,400 mm wide.

The stairs are sufficient to deal with 1,340 customers and staff on both levels at the same time with no more than 840 occupants on any one level. This is based on a standard Building Regulations guidance method of calculation with 1,400 mm wide storey exits. If the storey exits are only 1,050 mm wide then the maximum occupancy on either level would be 660. These occupancy constraints will inform the fitting out of the restaurants and how the syndicate areas are used.

Syndicate rooms that have only one exit will have a maximum capacity of 60.

Some adjustments will be needed at the next stage to maximise the flexibility for individual rooms and to ensure that the 18/45 m escape distance limits are met. Cross corridor fire doors will be provided in accordance with current standards.

Basement Floors

Occupancy and Escape Capacity

There are six 1,400 mm wide stairs serving the two basement levels. In principle, these stairs provide capacity for 2,010 customer and staff in total across both floors. The maximum permitted occupancy on any one level is 1,400 based on each storey exit being 1,400 mm wide.

These occupancy limitations will form the basis of any licensing agreement for the function room and the hotel management will need to take this into account as part of their event planning.

To realise the full capacity of both stairs some reconfiguration of the route to the two stairs on the south side of the basement, see Figure 8.6.6.

Fire engineering analysis taking into account sprinklers may permit increased occupancy numbers in the basement. It is also possible that some occupants would use the accommodation stairs to escape and this would also increase the overall escape capacity. This will be explored in more detail during the next stage.

Conference Room and Pre-Function

The Conference and Pre-function room will be the most densely occupied part of the basement during events. This space can cater for 1,400 customers and staff.

The exits from the rooms will need to open in the direction of escape. Escape is provided around the perimeter of the Function Room at Basement 2 by a racetrack corridor. This corridor is approximately 150m long which means that escape distances will exceed 45 m. Longer escape distances from the corridor are justified on the basis that this will be designed as a protected corridor and the adjoining spaces are sprinklered.

The corridor will also be provided with several cross corridor fire doors thereby limiting the distance an occupant would need to travel before reaching a place of temporary safety the other side of a fire door.

The function/conference room is served by a kitchen at B2. The adjoining corridors will provide the serving route from the kitchen to the event space. This will need to be managed to ensure that the corridor is available for escape at all times during an event.

Gym and Spa

The layout of the Gym and Spa is not known and will be developed as the design progresses, however, travel distances will be within 18m in a single direction and 45m where more than one escape is available.

Due to the size of the Gym and Spa, two exits will need to be provided, see Figure 8.6.7.



Fig 8.6.3 Levels 7 and 8

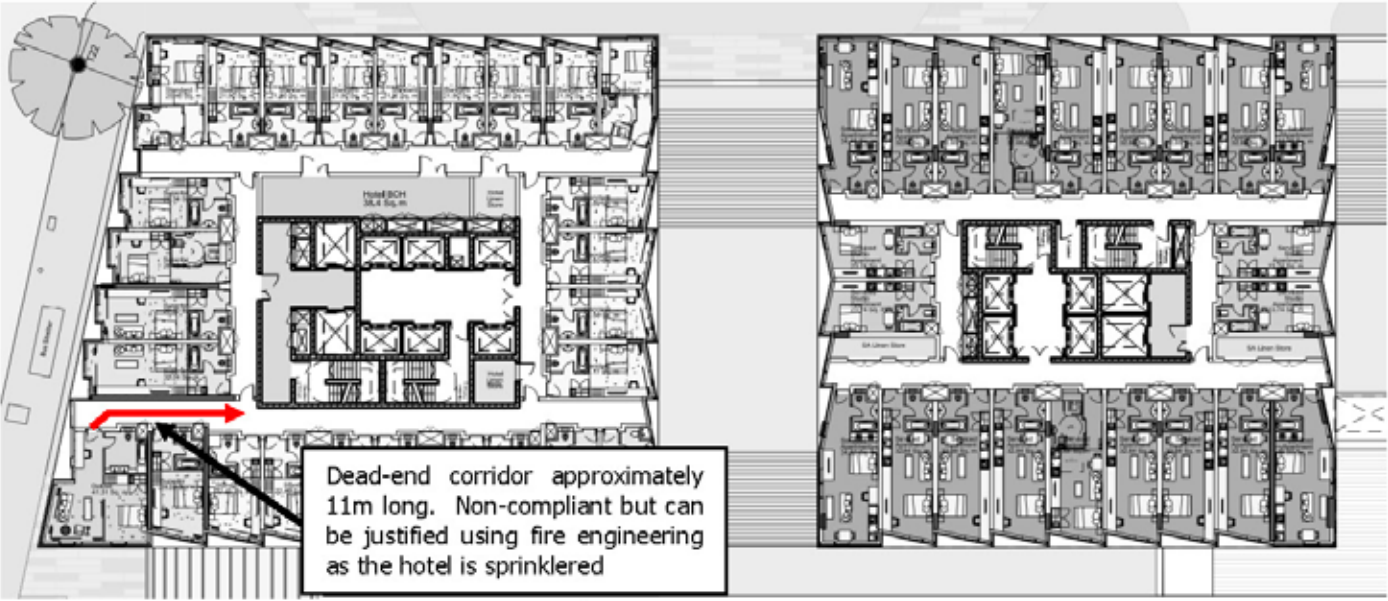


Fig 8.6.4 towers

THE DEVELOPMENT: TECHNICAL ANALYSIS

Ancillary Accommodation

A number of plant rooms are located on the Basement levels. The layout of the plant is not currently known. This will be reviewed as the design progresses and the rooms configured such that travel distances will be within 9 m in a single direction and 35m where there is a choice. Higher risk plant rooms will be considered on a case by case basis and shorter escape distances may be appropriate for certain rooms.

The current plans show that the Ventilation Plant and Hotel Heating/Hot Water Substation is accessed via a two stairs, see Figure 8.6.7. One of these stairs discharges at Ground, whereas the other stair discharges into the racetrack corridor at Basement 2. From here, occupants would have a choice of escape routes to other staircases.

Stairs and Lobbies

Lobbies

The four stairs serving the above ground levels will either be lobbied or will open into a protected corridor. Therefore, it is not necessary to discount a stair when evaluating their capacity.

Capacity

The above ground stairs are separated from the stairs serving the basement. Each have their own independent final exits. This therefore significantly reduces the risk of a basement fire affecting escape from the above ground levels. It also provides more

flexibility for the use of each area as the permitted occupancy at basement level is not influenced by the above ground escape and vice versa.

The four 1.4 m wide stairs are sufficient to deal with entire occupancy of the upper levels. This considers both the communal areas as well as the bedroom levels based on an occupancy of 2 persons per bedroom/serviced apartment.

The stairs provide capacity for up to 2,010 occupants in the basement.

Final Exit from Stairs

The stairs are inboard and will discharge into a protected corridor that leads to safety outside. The corridor and final exit doors will be 1,400 mm wide.

The drawings show the stairs in the north core currently discharge to outside via a corridor. The corridor and final exit should be at least as wide as the combined width of the stairs. The final exit will be reconfigured to provide sufficient width for the occupancy. This will be reviewed at a later stage.

Width of final exit should be at least as wide as the combined width of the stairs discharging via this route

Ground Floor Escape

There are two main entrances from the hotel lobby with the potential for additional exits into Garden Square. The two restaurants will also have exits direct to outside.

FIR

E FIGHTING FACILITIES

Fire Vehicle Access

There is good fire vehicle access to the site via Cromwell Road, Ashburn Place, and Courtfield Road. This is shown in Figure 8.6.9.

Fire vehicles need to be able to park within 18m and in sight of the inlet for the emergency replenishment suction tank for the wet rising fire main. The location of this will be established in due course. However, Fire vehicles are able to drive to within 10 to 12 m of each of the final exit doors serving the cores and there should be no difficulty in complying with this.

It is not necessary for fire vehicles to drive into Garden Square although vehicles will need to drive up to the drop off area adjacent to the Cromwell Road entrance.

Firefighting Cores and Lifts Serving the Towers

The top floor of both towers exceed 50m. The lowest basement (B2) is more than 10m below fire vehicle access level. Therefore, the hotel building needs firefighting stairs, firefighting lobby, firefighting lifts and wet risers.

Each Tower is slightly larger than 900 m². Therefore, strict compliance with Building Regulations guidance would require two firefighting cores and lifts in each tower. However, the hotel is fully sprinklered and this will greatly assist fire fighting operations as it should mean that fire fighters are faced with a relatively small fire upon arrival. In contrast, in an unsprinklered hotel there is potential for a fully developed fire with temperatures in the fire room ranging between 600 and 1,000 deg C and fire fighting operations would be significantly more difficult.

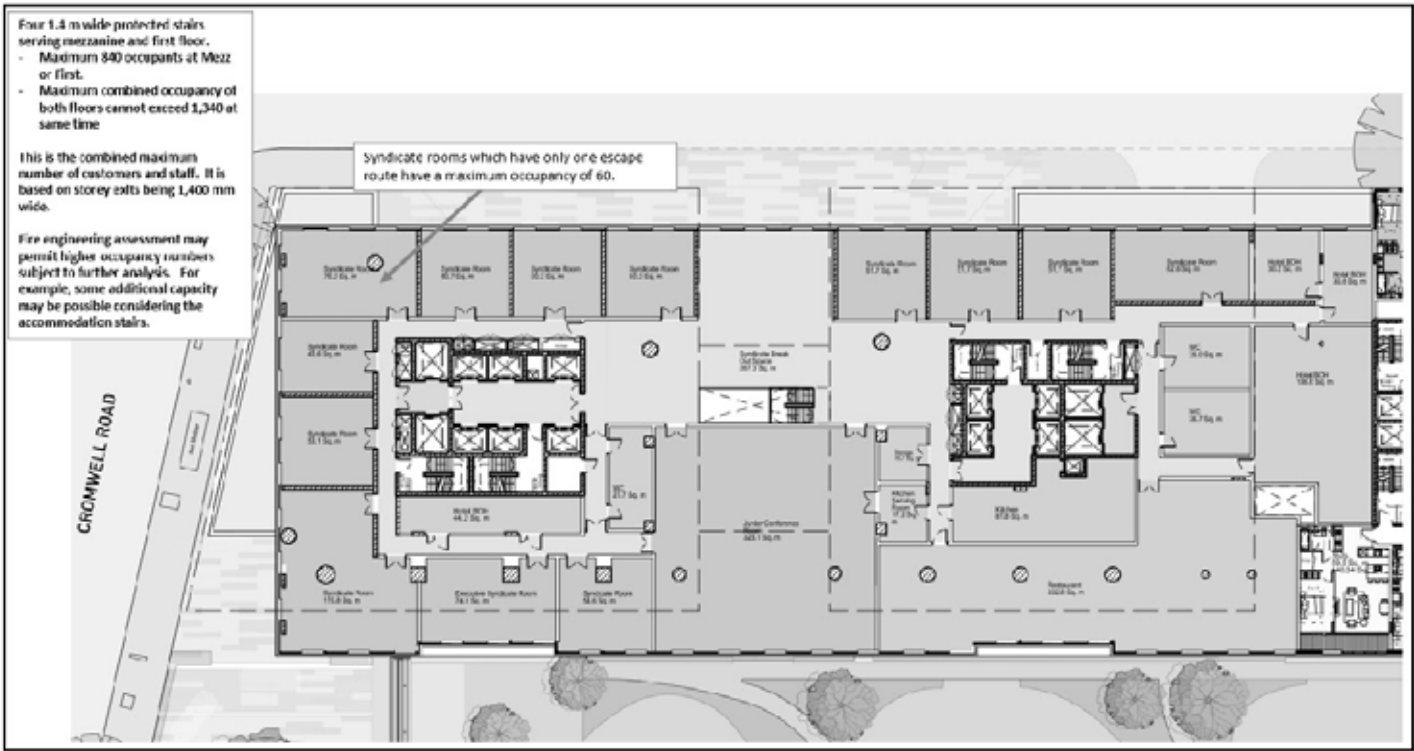


Fig 8.6.5 Conference and Restaurant Floors (Mezzanine and First)

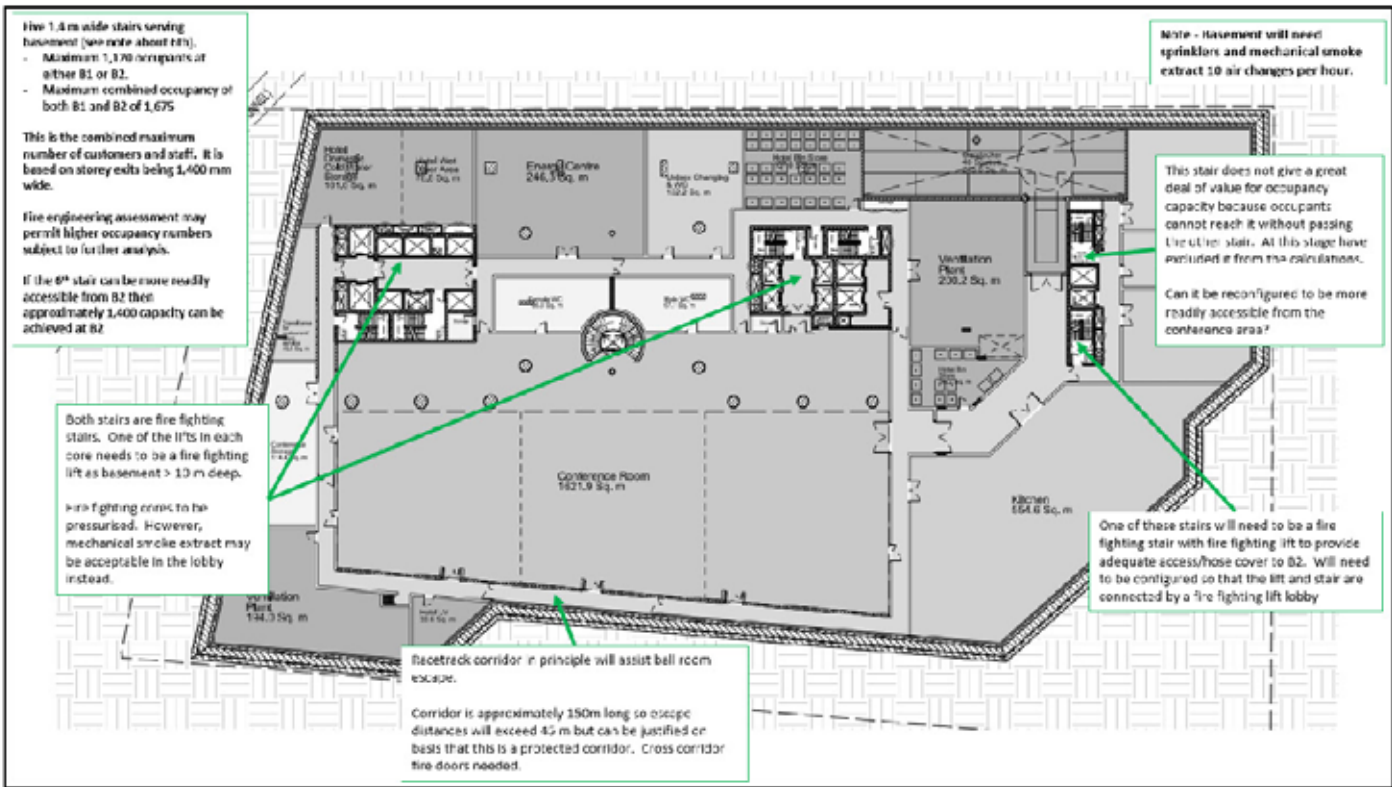


Fig 8.6.6 Basement Level 2

Adequate hose cover can be achieved from a single firefighting lift. It is, therefore, proposed that each tower will be designed with a single fire fighting stair and lift.

The firefighting core will be designed to serve every level they pass through. The South firefighting core is not shown serving first floor. The firefighting core will be reconfigured to serve first floor with the stair and lift connected by the lift lobby.

The firefighting lift lobbies at Ground floors will be provided with access to the firefighting stair.

Layout

The design of the cores is still developing. The design intent is to arrange the cores as shown in Figure 8.6.10 below. This is an extract from the Approved Document B.

Smoke Venting

The firefighting stairs and lobbies need smoke venting to protect the staircase from the ingress of smoke. Due to the height of the building and depth of the basement, code guidance would recommend a pressurisation system.

Pressurisation systems are rarely used as there are more efficient mechanical smoke extract solutions. The intention is to provide a mechanically assisted smoke extract shaft in each of the fire fighting lobbies. Replacement air would be provided by an automatically opening vent at roof level and by fire fighters opening the final exit doors at ground.

For buildings of this height the smoke shaft would typically be in the order of

0.8-0.9m² and provide an extract rate of 3-5m³/s. The design of the system will be developed in consultation with a specialist supplier during the next stage.

Hose Coverage

A wet riser will be provided in the firefighting lift lobbies in both towers. Guidance recommends that hose coverage is within 60m from the wet riser outlet. This can be achieved at all above ground levels from a single firefighting lift lobby.

Basement Fire Fighting Stairs, Lifts and Lobbies

The fire fighting lifts in both tower cores will extend to serve both basement levels. The basement fire fighting lift lobbies will be provided with wet risers and mechanical smoke extract.

One of the southern cores will also be designed as a fire fighting stair with lift and smoke vented lobby in order to achieve adequate hose cover to the basement.

Basement Smoke Venting

Due to the depth of the Basement, smoke venting will need to be provided by a mechanical smoke extract. The mechanical smoke extract will be able to achieve 10 air changes per hour and capable of handling gas temperatures of at least 300oC for at least an hour. The extract will operate on activation of the sprinkler system or automatic fire detection.

STRUCTURE AND COMPARTMENTATION

Structure

Structure will be designed to achieve 2 hours fire resistance.

Compartmentation

All floors will be designed as compartment floors achieving at least 90 minutes fire resistance. There will be some openings between basement, ground, mezzanine and first floors to allow open circulation stairs. A fire engineering case will be developed to permit this on the basis that the building is sprinklered and these floors are separated from areas of sleeping risk by compartment floors. This will be developed in more detail in the next stage.

Any risers or service shafts and lifts penetrating compartment floors will be designed as protected shafts achieving 90 minutes fire resistance.

The firefighting shafts will be enclosed in construction achieving 2 hours fire resistance.

The guestroom corridors will be enclosed in construction achieving 30 minutes fire resistance.

The hotel will be separated from the residential apartments by 2 hours fire resistant compartment walls.

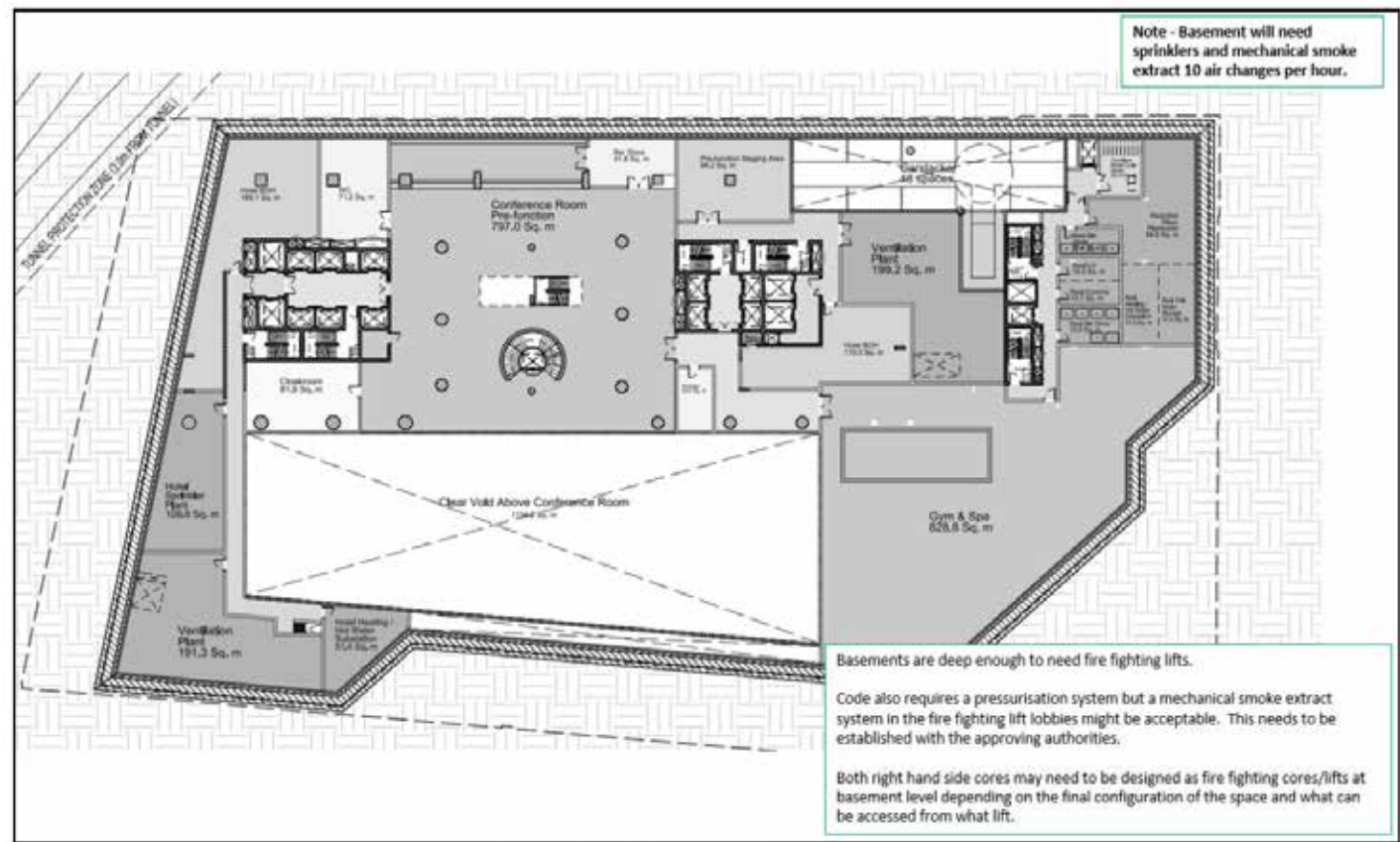


Fig 8.6.7 basement 1 escape

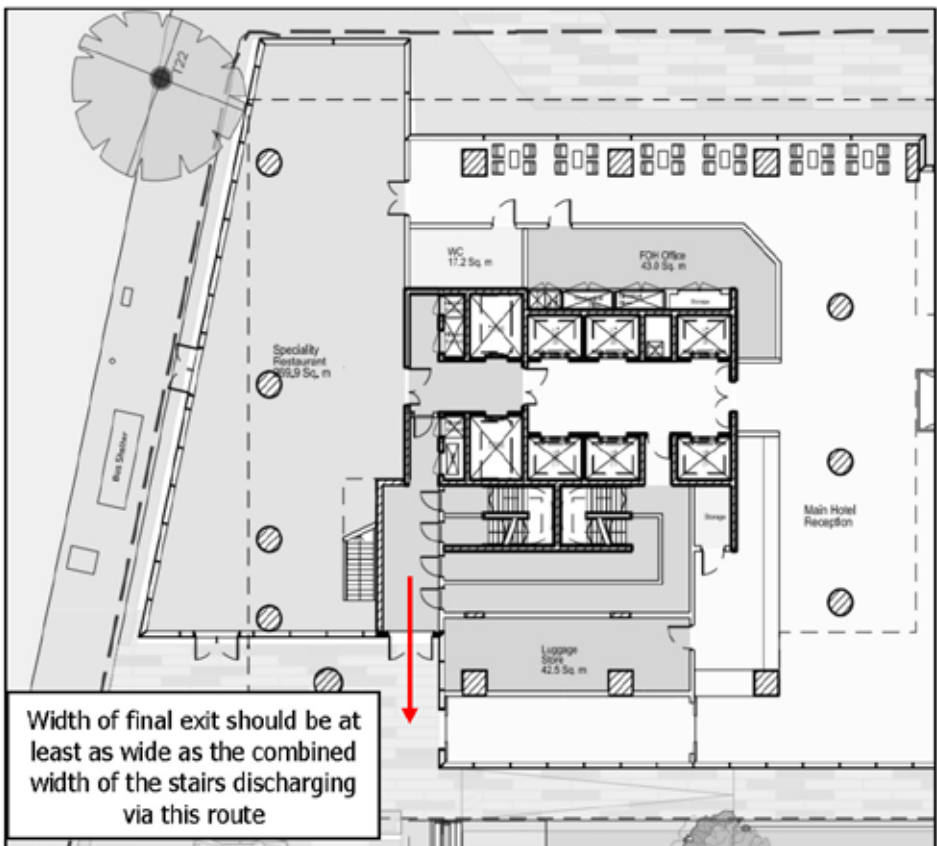


Fig 8.6.8 final exit from the stairs

THE DEVELOPMENT: TECHNICAL ANALYSIS

EXTERNAL WALL CONSTRUCTION

Materials

Guidance

Guidance recommends the external wall construction including the core of cladding panels of buildings with a storey more than 18m above ground should be of limited combustibility.

Design

As the towers exceed 18m in height, products which form part of the external wall construction will be designed to be of either limited combustibility or non combustible.

External surfaces will also meet the recommendations given in Approved Document B, Diagram 40, for surface spread of flame. However, it should be noted that a Class 0 surface spread of flame rating does not mean the product is also a material of limited combustibility.

The external wall systems will also be designed with suitable fire stopping/cavity barriers etc as required to satisfy Approved Document B guidelines.

Elevations and Unprotected Areas

Building Regulations require that buildings are designed to minimise the risk of fire spread across the site boundary to adjacent buildings. This is achieved by having sufficient separation distance between buildings and the site boundary and/or by reducing the amount of unprotected area e.g. glazing on the external façade of the building.

The building will be provided with sprinklers and therefore, the elevations of the hotel and residential will be assessed on a floor-by-floor basis.

Garden Square is part of the Kensington Forum development. Therefore, the notional boundaries for the site can be taken to the middle of the surrounding roads: Courtfield Road, Ashburn Gardens, Ashburn Place and Cromwell Road.

Given the provision of sprinklers and compartment floors there will be no significant restrictions on the amount of glazing permissible in the elevations.

RESIDENTIAL

Sprinklers

There is no Building Regulations requirement to provide sprinklers within the residential based on building height as the residential is less than 30 m high.

However, it is proposed to sprinkler the apartments. This will enhance fire safety and will also support the provision of open-plan apartments and give more flexibility in the design of the common corridors.

Automatic Fire Detection and Alarm

Open-plan apartments will be provided with an LD1 standard automatic fire detection and alarm.

Apartments accessed via a protected hallway will be provided with at least an LD3 standard automatic fire detection and alarm.

Apartment Layouts

Apartments with Hallways

Travel distances within the protected hallways will be restricted to 9m measured from the entrance to the door into the furthest room. The hallway will be designed to achieve 30 minutes fire resistance.

Open-Plan Apartments

Apartment Size

Guidance recommends that open-plan apartments will be no more than 16m x 12m in dimension. All apartments are within this size limit and can therefore be designed as open plan due to the provision of sprinklers.

Kitchens

Guidance recommends that kitchens in open-plan apartments will be enclosed if dimensions exceed 8m x 4m.

The recommendation in BS9991 comes from research carried out by the Building Research Establishment on behalf of the NHBC Foundation. The research involved a number of studies of apartments of varying size, using computational fire modelling to compare code compliant layouts in unsprinklered apartments with open-plan layouts in sprinklered apartments. The code compliant apartments were designed following the guidance of the Approved Document B (ADB) and had rooms accessed from a protected hallway.

The studies only covered apartments up to 16m x 12m, and kitchens were open to the living area in smaller apartments up to 8m x 4m, but enclosed in larger

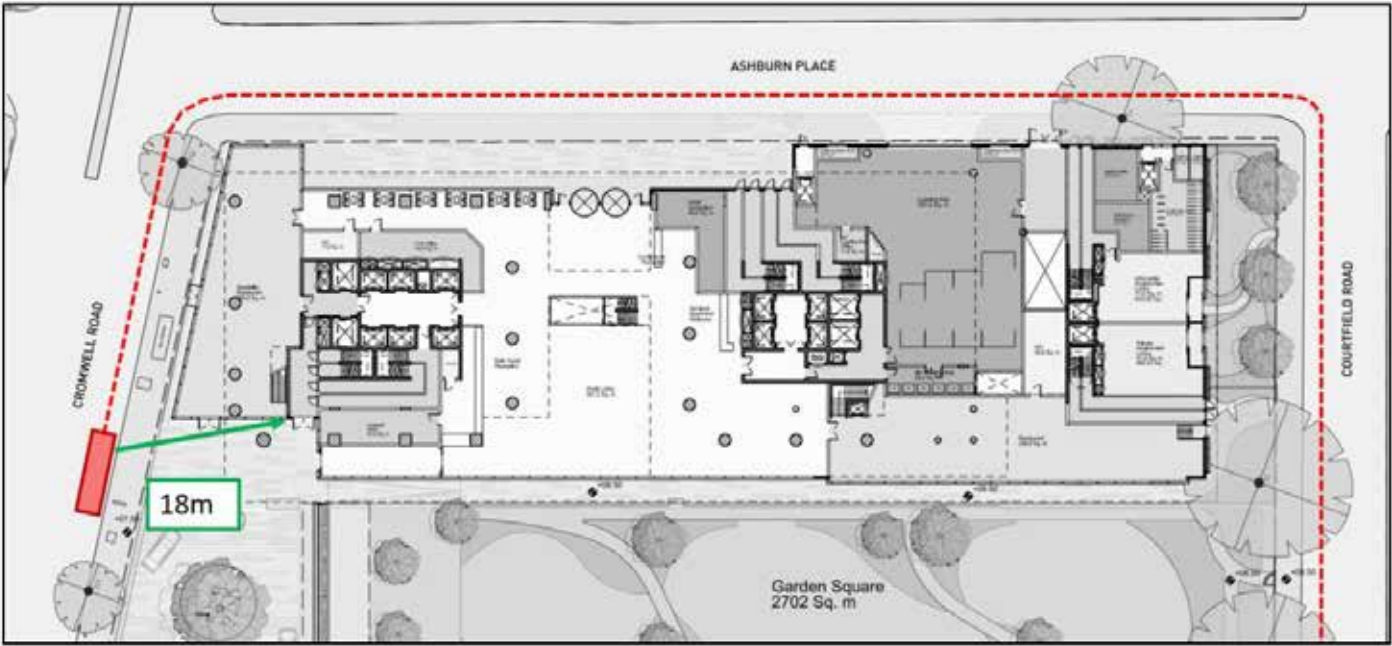


Fig 8.6.9 Fire vehicle access at ground

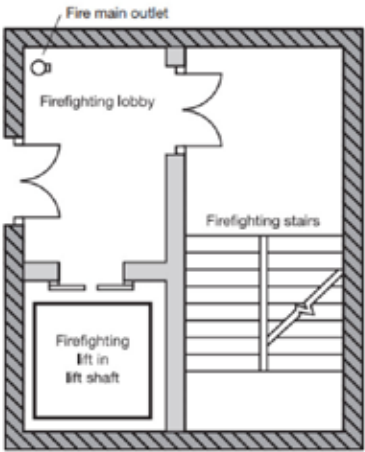


Fig 8.6.10 Fire fighting shaft arrangement

apartments. The conclusion of the studies was that sprinklers provided better conditions for apartment occupants than an ADB-compliant layout, but that further work was required to study the effect of larger apartment dimensions and the design of kitchens. The research did not conclude that open kitchens in larger apartments would present an additional danger to occupants, because that was not covered by the research carried out.

The proposal is to permit the kitchens to be open to the lounge in any open plan apartment. Fire engineering analysis will be carried out to support open-plan kitchens in larger apartments at the next stage..

Kitchen Location

BS9991 recommends that cooking appliances in open-plan kitchens will be located away from the apartment entrance door. Fire engineering heat radiation calculations show that provided the hobs are at least 1.8m from an opposing wall occupants will be able to escape past the kitchen without being affected by untenable levels of heat radiation.

Common Corridors

Travel Distances

The residential is currently provided with two stairs. This could be designed to be served by a single stair. Based on the provision of sprinklers, travel distances will need to be within 15m in this configuration.

In the two stair arrangement, cross-corridor doors will be needed separating the

two stairs and smoke venting will be needed in both wings. At 2nd and 3rd floor, as solid construction is provided between the two stairs, both corridors will need to be provided with smoke venting.

Smoke Venting on Typical Levels

A smoke extract system will be provided within the common corridors.

The mechanical smoke shafts typically have a cross-sectional area of 0.6-0.8m² and an extract rate of 3-5m³/s. This will need to be developed in consultation with the specialist supplier at the next stage.

An automatically opening vent at least 1m² in free area will be provided at the head of the stair.

On the floors where the stairs serve separate corridors, both common corridors will be provided with smoke extract.

Stairs and Final Exit from the Stair

Each level of apartments is accessed by a single stair. This complies with Building Regulations guidance. The escape stairs discharge directly to outside. There is no connection between the above ground flight of stairs and the stairs serving the two basement levels.

The final exits from the stairs will be separated from the residential lobbies by protected smoke vented lobbies.

Ground Floor

Residential Lobbies

The residential lobbies are located at Ground floor and provide access to the firefighting lifts. The stairs are accessed independently via a protected corridor from outside.

Ancillary Accommodation

A number of plant rooms and a cycle store are also located at Ground floor. The ancillary accommodation will be separated from the final exit from the stairs by fire resistant construction. There is no connection to the escape stair.

Travel distances in the plant rooms will be within 9m in a single direction and 18m in more than one direction.

Travel distance in the cycle store are approximately 13m.

Communal Lounge

The Communal lounge is provided with two exits into the stairs. Both stairs will need to be accessed via a protected lobby.

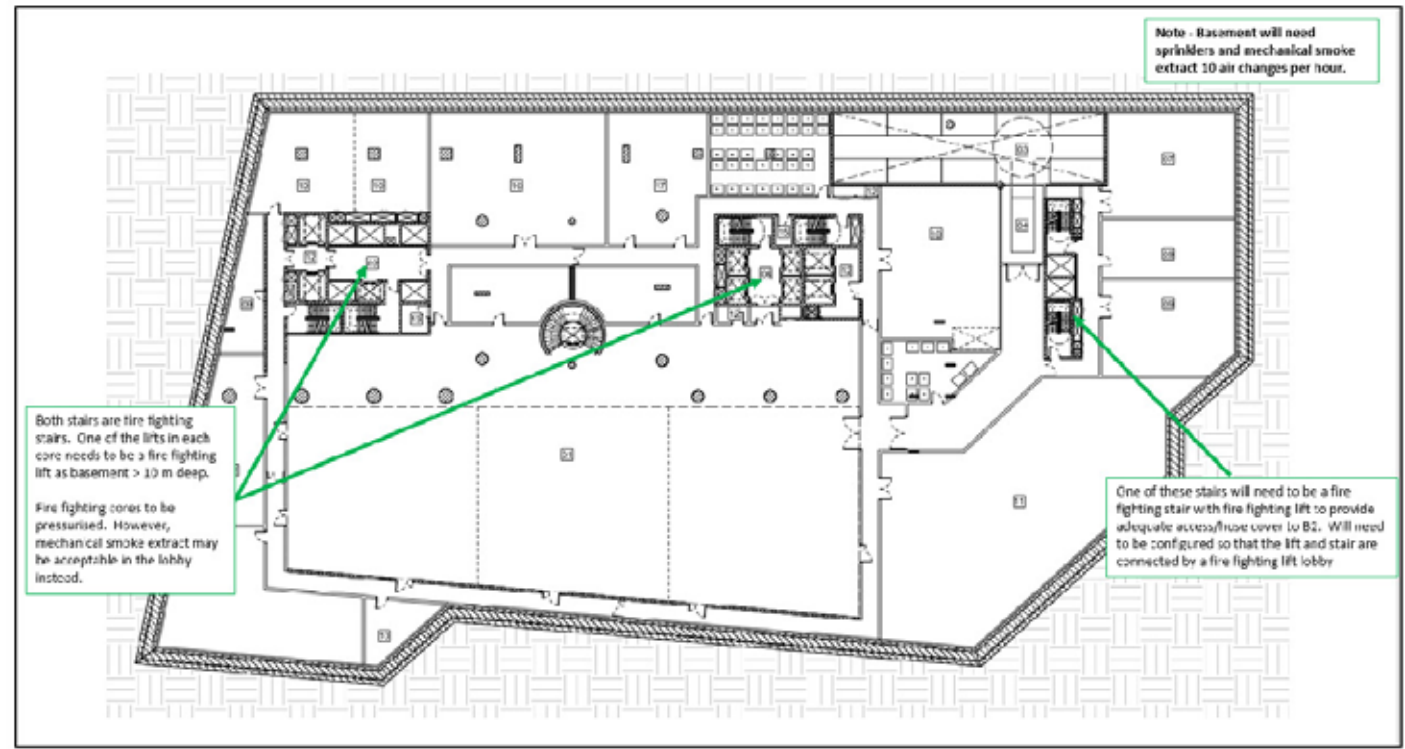


Fig 8.6.11 Fire fighting at basement levels

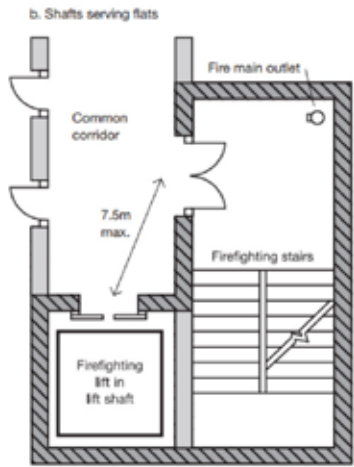


Fig 8.6.12 Fire fighting stair

THE DEVELOPMENT: TECHNICAL ANALYSIS

Firefighting Stairs and Lifts

Firefighting Shaft

The top floor of the residential is approximately 24m above ground. Therefore a firefighting stair and lift will be provided to each floor. This will comprise:

- › Firefighting stair at least 1100mm wide;
- › Firefighting lift located within 7.5m of the firefighting stair;
- › Dry riser outlet within the firefighting stair enclosure at each level.

As the residential tower is split into two separate wings on 2nd and 3rd floors, both wings will be provided with a firefighting stair and lift at all levels.

Layout

The fire fighting stair will achieve the layout as shown in Figure 8.6.12. Some reconfiguration of the cores in the next stage will be undertaken to satisfy the 7.5 m maximum distance between stair and lift.

Fire Vehicle Access

Fire vehicles will be able to park within 18m and in sight of the dry riser inlets serving the residential floors. This is typically located on the external elevation close to the entrance.

Fire vehicle access is provided from Ashburn Place and Courtfield Road. This provides sufficient access.

Hose Coverage

Hose coverage will be provided within 60m of the dry riser outlet.

Structure and Compartmentation

Structure

Any structural elements shared with the hotel will achieve 2 hours fire resistance.

Compartmentation

Floors will be designed as compartment floors achieving two hours fire resistance.

Each individual flat will be designed as a fire compartment and separated form other flats and the common corridor by one hour fire rated compartment walls.

External Wall Construction

Guidance recommends the external wall construction including the core of cladding panels of buildings with a storey more than 18m above ground should be of limited combustibility. As the residential exceeds 18m in height, products which form part of the external wall construction will comply with this with the exception of gaskets and sealants.

FIRE SAFETY MANAGEMENT

General

Once the building is occupied, it is the responsibility of the management to ensure that all fire safety systems are tested and maintained to ensure their continuous effectiveness. The management should: -

- › Be aware of all the fire safety features provided and their purpose
- › Ensure a competent person is present in the building during all occupied times
- › Liaise with and seek the advice of the fire authority

Staff

Staff should be trained by competent persons. The training should be at regular intervals and should ensure that all staff know what to do if a fire is discovered; the correct response on hearing a fire alarm, and the correct escape procedures from every part of the building.

A management structure should be provided to ensure that in the case of fire staff are aware of their responsibilities, which should be clearly defined. A chain of command should be provided with clear lines of responsibility, authority and accountability.

This Order places a duty on the ‘responsible person’ to ensure, ‘as far as is reasonably practical’ the safety of his employees and to take such general fire

precautions as may be reasonably required to ensure that the premises are safe [i.e. for non-employees].

Under the Order, there is a requirement to carry out and continually update an assessment of the risk of fire to people in and around the premises/building, and to assess and maintain the measures to reduce those risks to an acceptable level. Where there are five or more employees, the risk assessment must be recorded.

Fire Safety Manual

Before a building is occupied, a fire safety manual should be completed. The purpose of the manual is to clearly define the nature of the fire safety systems provided for the building. It should include: -

- › An explanation of the overall fire safety strategy
 - › Evacuation procedures
 - › Design documentation to describe the use of each fire safety system
 - › Staff roles in the event of a fire: their responsibility, authority and accountability
 - › A detailed maintenance routine
- The Fire Safety Manual should be reviewed periodically and when any alterations are made to the building. Details of the suggested contents of the fire safety manual are provided in Appendix G of the Approved Document B and Annex H of BS 9999 Code of practice for fire safety in the design management and use of buildings.

Maintenance and Housekeeping

It is the role of management to ensure that maintenance is carried out in accordance with the relevant British Standards, so that all fire safety systems are operational in the event of a fire. It is also important that good housekeeping practices are followed. The building management should be aware of any hazardous substances or practices within the building, which increase the risk of fire.

The Regulatory Reform (Fire Safety) Order 2005

This Order places a duty on the ‘responsible person’ to ensure, ‘as far as is reasonably practical’ the safety of his employees and to take such general fire precautions as may be reasonably required to ensure that the premises are safe [i.e. for non-employees].

Under the Order, there is a requirement to carry out and continually update an assessment of the risk of fire to people in and around the premises/building, and to assess and maintain the measures to reduce those risks to an acceptable level. Where there are five or more employees, the risk assessment must be recorded.

A Fire Risk Assessment should be carried out:-

1. On completion of the building fit out, and strictly before first occupation of the building.
2. Regularly, particularly where any changes occur such as changes in the use of the building, the number or nature of occupants, or building works.
3. We would recommend that a fire risk assessment is carried out at least annually.

Other legal duties include: -

1. Keeping a record of the Fire Safety Arrangements. These are the preventative and protective measures for the building.
2. A person must be nominated for any special role identified in an emergency plan.
3. Employees must be consulted about nominations to perform special roles, and about any proposals for improving the fire precautions.
4. Other employers in the building must be informed about any significant risks, which might affect the safety of their employees, and there must be co-operation with them in measures to reduce the risk.
5. Those having control over the workplace have a responsibility to ensure compliance with the regulations in those parts of the building over which they have control.
6. A suitable and readily available method of calling the emergency services must be established.
7. Employees are required to co-operate in ensuring that the workplace is safe from fire.

The order also adopts ‘Principles of Prevention’. These include:-

- › Avoiding risks;
- › Evaluating the risks which cannot be avoided;
- › Combating the risks at source;
- › Adapting to technical progress;
- › Replacing the dangerous by the non-dangerous or less dangerous [particularly with respect to hazardous substances];
- › Developing a coherent overall prevention policy which covers technology, organisation of work and the influence of factors relating to the working environment
- › Giving appropriate instructions to employees.

8.7 Wind Tunnel Assessment

The objective of this study was to determine the ground, balcony and podium level wind environment within and around the proposed development.

Three configurations were tested in the wind tunnel on a 1:300 model:

- > Configuration 1: Existing Site with Existing Landscaping and Existing Surrounding Buildings
- > Configuration 2: Proposed Development with Existing Surrounding Buildings and (retained) Existing Landscaping
- > Configuration 3: Proposed Development with Existing Surrounding Buildings and (retained) Existing Landscaping and Proposed Landscaping

Measurements were taken for 36 directions at 10-degree intervals. These covered ground level locations along the building facades and at corners, within open amenity spaces and terrace locations and on pedestrian routes within and around the Site.

Overall, while many areas around the site have suitable conditions, there are a number of locations that exceed the threshold for wind comfort and/or safety:

- > There are windier than desired conditions and strong winds exceedances to the north of the site, which are caused by the prevailing south-westerly being down washed by the taller of the two towers and accelerating around the north-western corner. Locations 73, 70, 67, 68 and 62.
- > There are podium and roof terrace levels which are windier than desired. Location 114, roof level for safety, Locations 118 and 119 for comfort criteria.

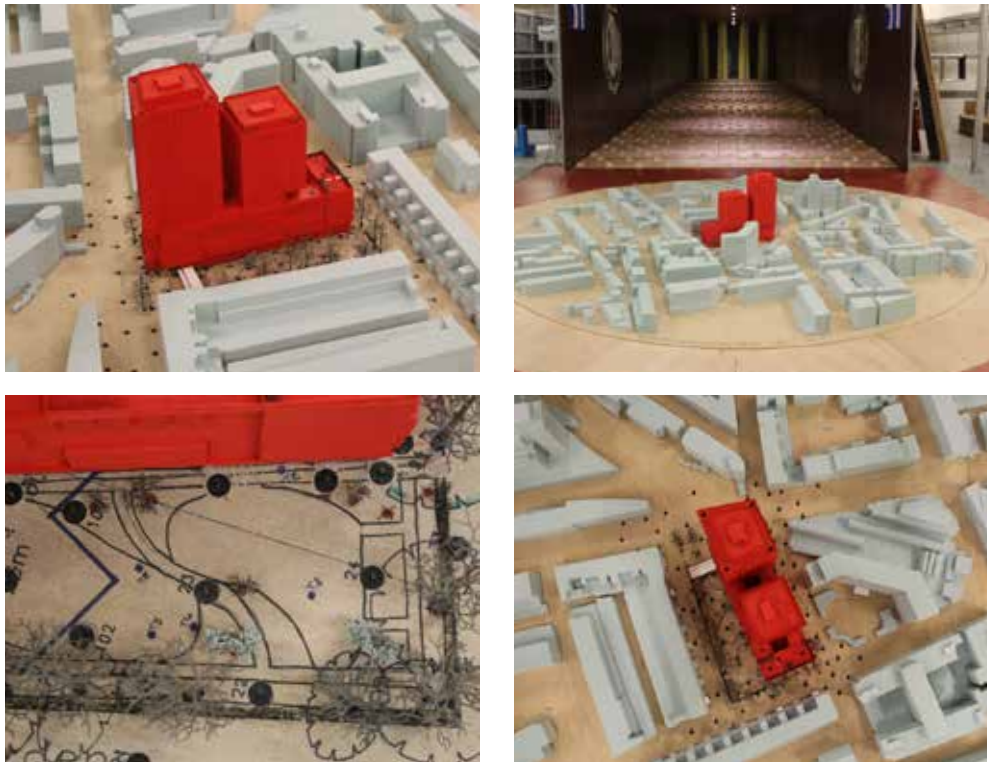


Fig 8.7.1 Windtunnel model photos

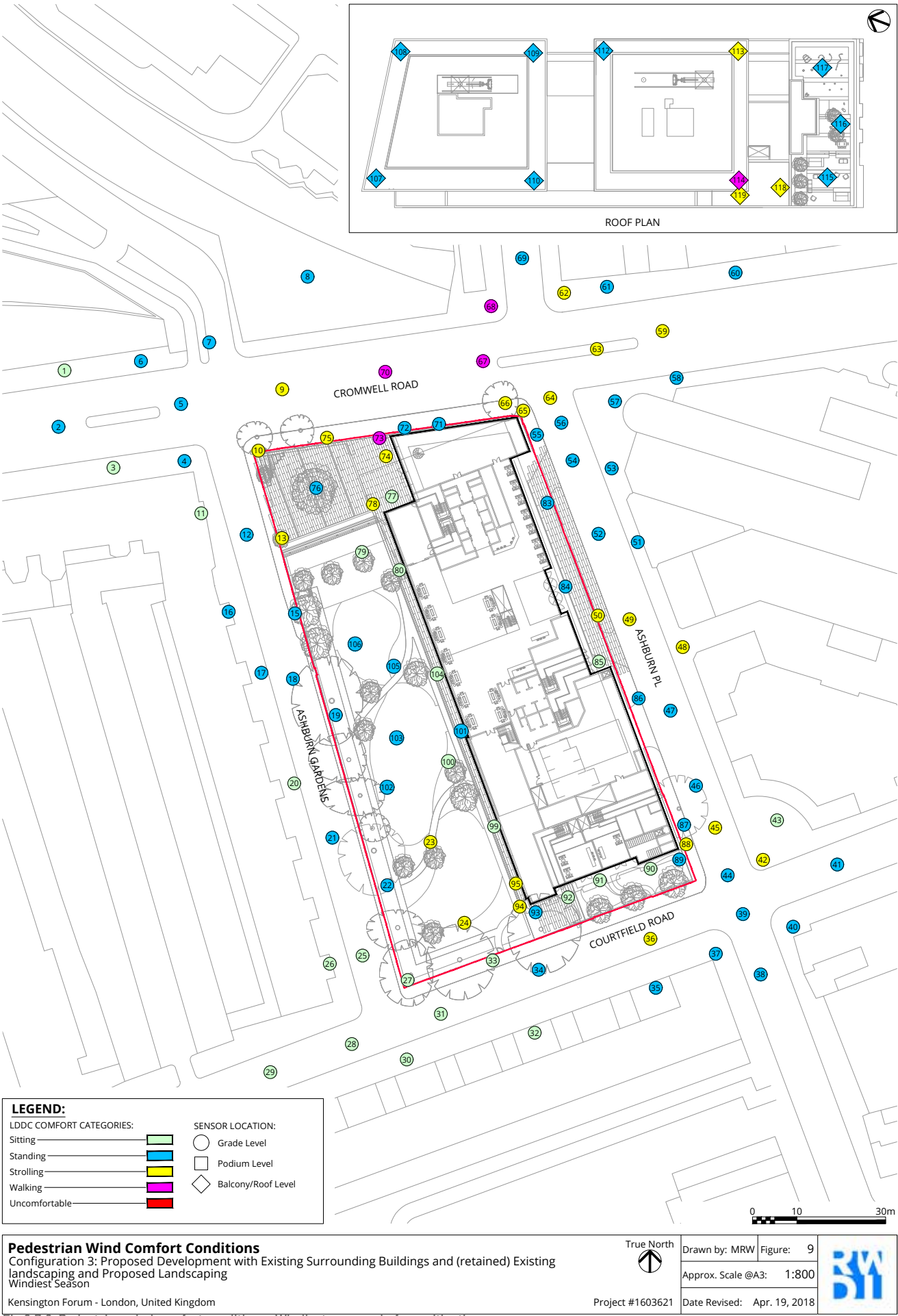


Fig 8.7.2 Pedestrian wind comfort conditions -Windiest season- before mitigation



Fig 8.7.3 Pedestrian wind comfort conditions -Windiest season- after mitigation

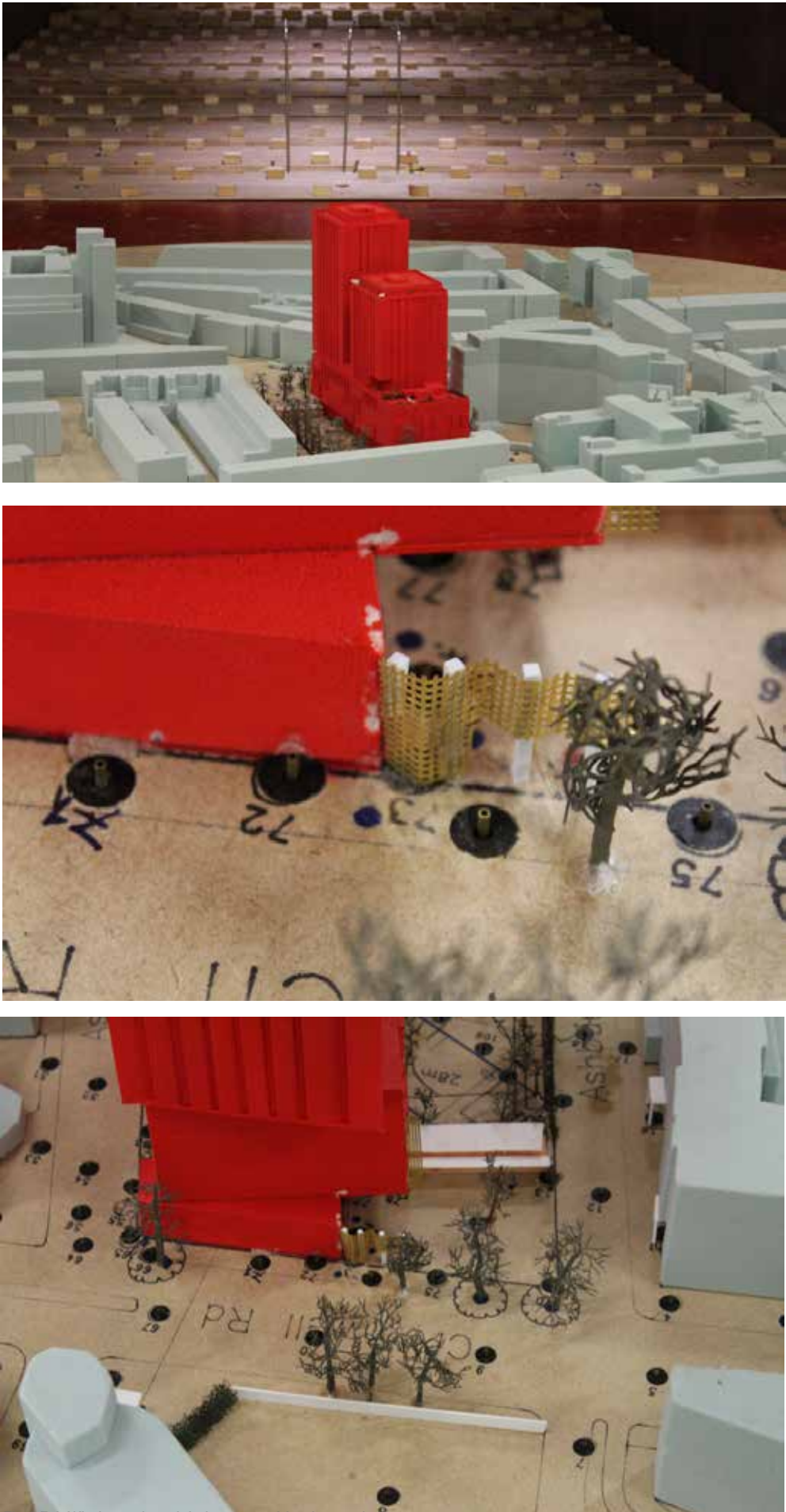


Fig 8.7.4 Windtunnel model photos at mitigation workshop

Based on the outcome the team has discussed several options for windmitigation wich have been tested on the 30th April in order to achieve the following goals:

- > Eliminate the occurances of all strong winds on site
- > Mitigate any comfort exceedances at ground level

At the end of the mitigation workshop, all safety exceedances were mitigated (mitigation run 15). This run consisted of the following measures:

- > Two 2m screens on roof terrace Two 3.5m deciduous trees on lower terrace
- > Elevated porous screen (2 floors high and 2m wide)
- > Five alternating elevated porous screens (3m above ground, 2m wide and 5m)
- > 2 panels of elevated screens (closest to facade) brought down to ground level
- > More detailed surrounds
- > 10m tree in line with existing trees along Cromwell Road adjusted closer to existing trees to the west
- > Proposed Landscaping scheme
- > All ground locations on and off site are suitable for their intended pedestrian use with no safety exceedances.
- > The lower level terrace will have suitable wind conditions for the mixed use space and the upper level terrace will have no seating. Additionally, the 2m screens implemented to eliminate strong winds on the shorter of the two towers can be designed as tested in the wind tunnel (2m high solid screen from back façade to balustrade), or these locations can be heavily landscaped in order to make them inaccessible.

THE DEVELOPMENT: TECHNICAL ANALYSIS

8.8 Façade Access

The façade access strategy for the Kensington Forum development will include:

- > Building maintenance units (BMUs) located on the roofs of Tower-A and Tower-B
- > Monorail suspended platforms to the façade areas beneath overhangs
- > Mobile elevating work platform (MEWP) to the Courtfield Road elevation and the southern end of the Ashburn Road elevation
- > Davit suspended platforms to the southern end of the garden elevation
- > Long reach cleaning tools and/or aerial work platforms (AWPs) up to Level 01 (Ground +7.0m)
- > Rope access work positioning techniques to the western elevations of the lightwells

Material hoisting for façade replacement works is to be provided by:

- > Auxiliary hoists integrated in to the BMU systems on Tower A and Tower B
- > Monorails in the soffit of the northern and eastern overhang areas
- > Mobile crane to the Courtfield Road elevation and the southern end of the Ashburn Road elevation
- > Material hoisting davits to the southern end of the garden elevation

The proposed BMUs for towers A & B are to be positioned to the east of the tower cores, traversing across the roof space north to south along twin track rails. The BMUs will feature a telescopic jib with approximately 33m maximum reach, which will provide complete access to the tower elevations and access to the podium elevations within reach of the systems. An integrated z-luffing mechanism will allow for raising of the jib and counterweight above the adjacent cores during operation but allow the systems to park in a low-profile position, lower than the height of the cores, when not being used. The systems will feature an integrated auxiliary hoist to allow for hoisting of glass and other materials during façade replacement works.

Some areas of the façades feature a saw tooth type design with expressed slabs above creating overhang conditions of up to 1.4m. Cleaning access will therefore require use of a counterweighted type platform suspended from the BMUs. This will allow the front of the platform to be positioned in to the facade recesses without the platform suspension lines impacting in to the façade. Replacement works to the saw tooth façade will require a method of secondary suspension to be integrated in to the soffit of the overhangs to allow the replacement panel to be positioned close to the façade.

The BMU suspended platform will need to be restrained in to the facade at least every 20m below the primary suspension point at the BMU jib head. This is typically achieved via a pin and socket type arrangement, whereby the socket is a permanent fixture in the facade and the pin is tethered to a lanyard which surrounds the suspension line. This method of restraint is only necessary where the primary suspension point over 40m above effective ground level (i.e. the two BMUs only).

Where the form of the building features large overhangs, monorails are proposed to be integrated in to the soffit of the overhang. A primary monorail will be used for platform rigging during regular cleaning and for glass suspension during replacement works. A secondary rail offset approximately 400mm from the primary

monorail will be used for platform rigging during replacement works. The suspended platforms are to be wheeled to location at ground level beneath the monorails, where the suspension lines will be rigged from operatives in the BMU platforms.

Pavement and/or road closures will be required for operation of the MEWP. Access may be achieved from distinct operating locations, limiting the level of disruption at ground level. Mobile crane hoisting for replacement façade materials is likely to require full road closures, however this is anticipated to occur no more frequently than once every ten years.

A twin davit system will be used to suspend a platform for access to the southern end of the western facing garden elevation. For operation, the davits will be engaged in to permanently installed bases that are integrated in to the floor build up. For storage, the davits will be disassembled into jib and mast components and stored at terrace level. A third davit will provide a point of suspension for material hoisting during replacement works.

The use of collective protection height safety measures has been prioritised across the development, in line with the work at height regulations and British Standards, however rope access is considered to be an appropriate access method for cleaning of the western elevations of the proposed open-air lightwells. An appropriate rigging zone and structural anchors are to be provided at the top of each elevation. A suitable egress door or hatch is to be located at the foot of the light-wells to allow abseil technicians to re-enter the building as part of regular operation and in the instance of emergency rescue.

A minimum 1.5m clear zone perpendicular to the façade and projected down to podium, terrace or ground level is required for safe emergency descent of all suspended access methods (BMU, monorail, davit and abseil). In the instance that landscape features such as canopies obstruct descent to ground, a safe emergency rescue scenario is to be outlined.

Low level façade areas up to Level 01 (Ground +7.0m) are proposed to be cleaned via long reach extendable cleaning tools and aerial work platforms - which can provide improved access for a more robust and higher quality clean.



Fig 8.8.1 Monorail



Fig 8.8.2 MEWP



Fig 8.8.3 Mobile crane



Fig 8.8.4 Abseil

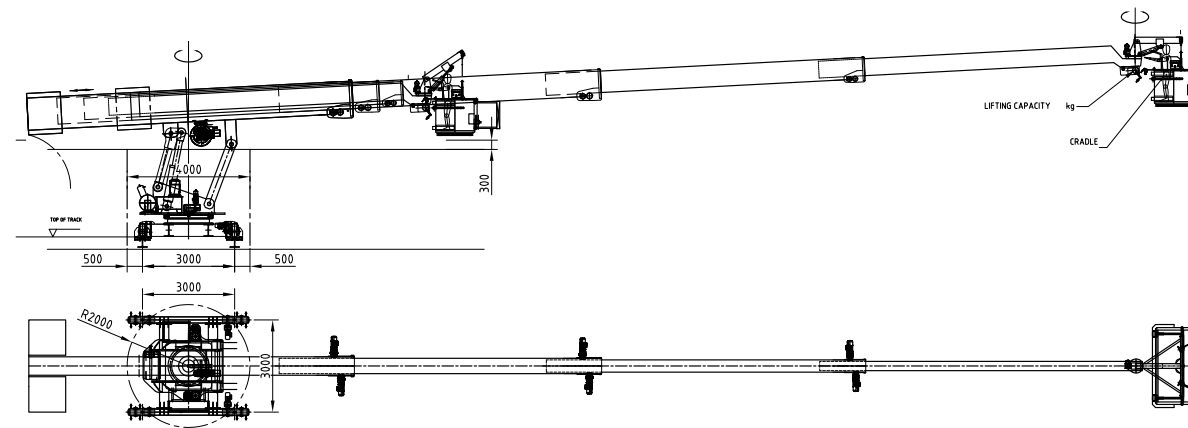


Fig 8.8.5 BMU unit on tower roofs

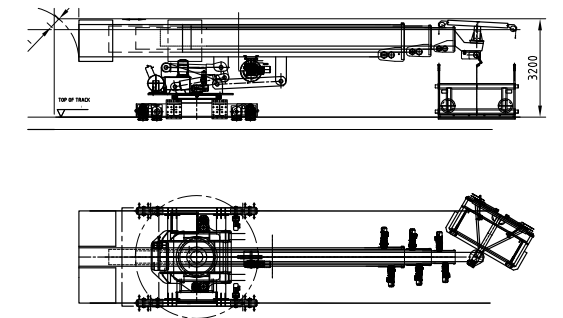
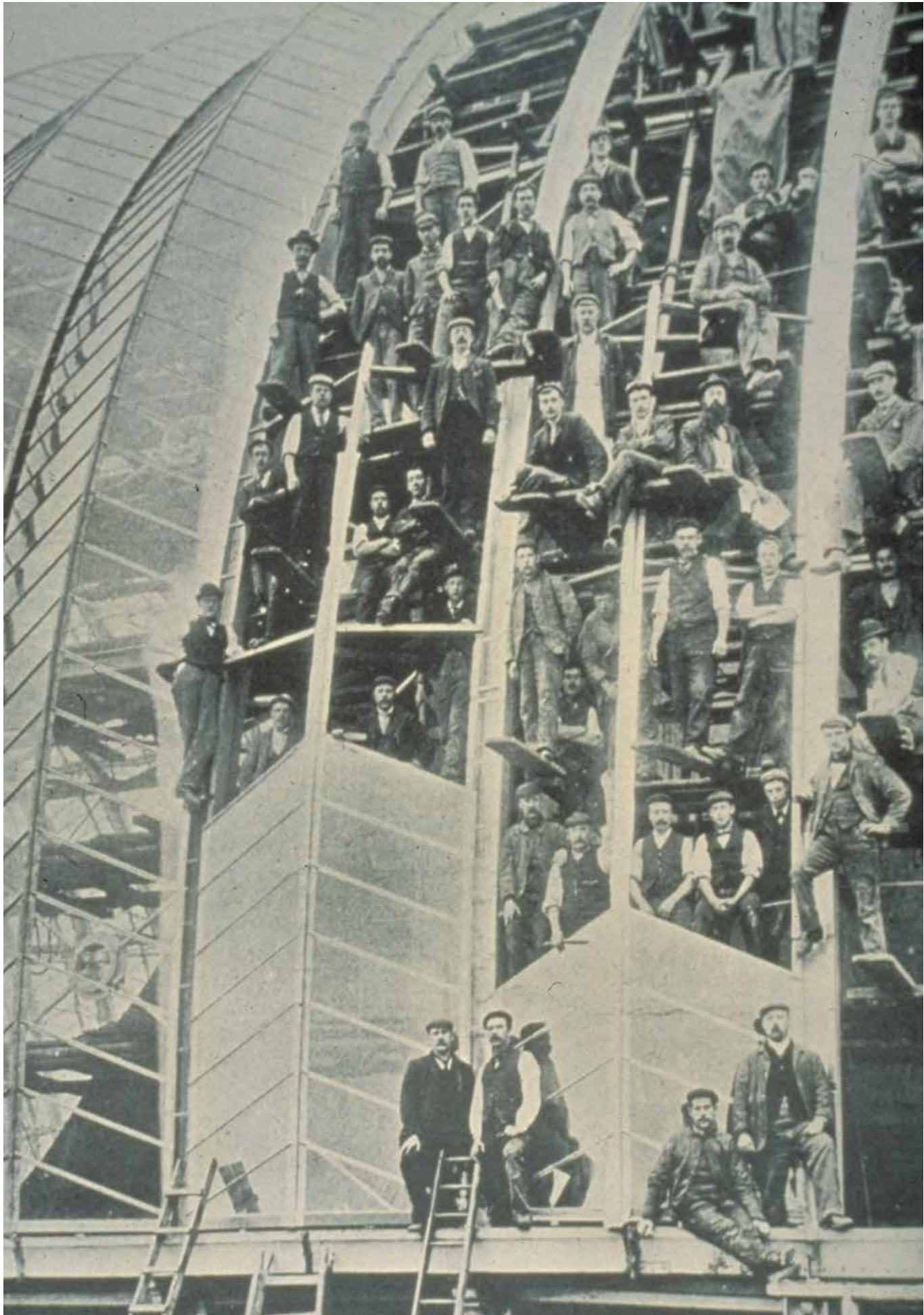


Fig 8.8.6 Davis and cradle





Applicant	Queensgate Bow UK Holdco Limited
Development Partners	Queensgate Investments & Rockwell Property
Architects	SimpsonHaugh
Structural Engineers	OCSC
Services Engineers	PSH Consulting
Planning Consultants	GVA
Townscape Consultant	Peter Stewart Consultancy
Visual Imagery	Hayes Davidson
Environmental Impact Assessment	TRIUM
Landscape Architect	EXTERIOR ARCHITECTURE
Daylight & Sunlight	Point 2 Surveyors
Transport Consultants	WSP
Fire Consultants	Jeremy Gardner Associates
Façade Engineers	WINTech
Access Consultants	BuroHappold
Wind Consultants	RWDI-Anemos
Lift Consultant	TUV SUD
CDM	Risk Wise Consulting
Façade Access Consultants	Hoare Lea
Public Relations Consultant	CRATUS
Publicity/Media Consultant	FHF
Models	A-models

APPENDIX 1

Planning Drawing List

10106 - Kensington Forum
Planning Application Drawing Schedule

SimpsonHaugh

10106 - Kensington Forum - Plannings Application - Drawing Schedule
15.06.2018

Planning Application Drawings					Colour status
DRAWING NO.	DRAWING TITLE	SCALE	SIZE		
G100 - GA Site Plan/Elevation					
10106-A-DRG-Z0-G100-0000-PL	Site Plan - Site Boundary	1:1250/1:2500	A1/A3		Colour
10106-A-DRG-Z0-G100-2000-PL	Site Plan - Existing	1:500/1:1000	A1/A3		Colour
10106-A-DRG-Z0-G100-2001-PL	Site Plan - Proposed	1:500/1:1000	A1/A3		Colour
10106-A-DRG-Z0-G100-4000-PL	Context Elevation - Existing - North	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4001-PL	Context Elevation - Existing - East	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4002-PL	Context Elevation - Existing - South	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4003-PL	Context Elevation - Existing - West	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4004-PL	Context Elevation - Proposed - North	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4005-PL	Context Elevation - Proposed - East	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4006-PL	Context Elevation - Proposed - South	1:500/1:1000	A1/A3		B&W
10106-A-DRG-Z0-G100-4007-PL	Context Elevation - Proposed - West	1:500/1:1000	A1/A3		B&W
F100 - Space Matrix					
10106-A-DRG-Z0-F100-2000-PL	Building Plans Matrix (Page 1 of 2)	1:500/1:1000	A1/A3		Colour
10106-A-DRG-Z0-F100-2001-PL	Building Plans Matrix (Page 2 of 2)	1:500/1:1000	A1/A3		Colour
G200 - GA Building Plans					
10106-A-DRG-Z2-G200-2100-PL	Level B2 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2101-PL	Level B1 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2000-PL	Level 00 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2000MZ-PL	Level 00 Mezz Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2001-PL	Level 01 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2002-PL	Level 02 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2003-PL	Level 03 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2004-PL	Level 04 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2005-PL	Level 05 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2006-PL	Level 06 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2007-PL	Level 07 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2008-PL	Level 08 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2009-PL	Level 09-15 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2016-PL	Level 16-19 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2020-PL	Level 20 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2021-PL	Level 21 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2022-PL	Level 22 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2023-PL	Level 23-26 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2027-PL	Level 27 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2028-PL	Level 28 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2029-PL	Level 29 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2030-PL	Level 30 Plan	1:200/NTS	A0/A3		B&W
10106-A-DRG-Z2-G200-2031-PL	Roof Plan	1:200/NTS	A0/A3		B&W

G200 - GA Building Section				
10106-A-DRG-Z0-G200-3001-PL	Section AA	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z1-G200-3002-PL	Section BB	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z1-G200-3003-PL	Section CC	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z1-G200-3004-PL	Section DD	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z1-G200-3005-PL	Section EE	1:200/NTS	A0/A3	Colour
G200 - GA Elevation				
10106-A-DRG-Z0-G200-4000-PL	North Elevation - Cromwell Road	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z0-G200-4001-PL	West Elevation - Ashburn Gardens	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z0-G200-4002-PL	East Elevation - Ashburn Place	1:200/NTS	A0/A3	Colour
10106-A-DRG-Z0-G200-4003-PL	South Elevation - Courtfield Road	1:200/NTS	A0/A3	Colour
F200 - Plan Layouts				
10106-A-DRG-Z0-F200-2000-PL	Typical Private Residential Layout Plans	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2001-PL	Typical Affordable Residential Layout Plans	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2002-PL	Typical Residential Wheelchair Accessible Layout Plans	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2100-PL	Typical Hotel Plan Layouts (Page 1 of 2)	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2101-PL	Typical Hotel Plan Layouts (Page 2 of 2)	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2102-PL	Typical Hotel Wheelchair Accessible Layout Plans	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2201-PL	Typical Serviced Apartment Layout Plans	1:50/1:100	A1/A3	B&W
10106-A-DRG-Z0-F200-2202-PL	Typical Serviced Apartment Wheelchair Accessible Layout Plans	1:50/1:100	A1/A3	B&W
G251 - Detailed Façade Studies - Rendered Elevation/Plan/Section				
10106-A-DRG-Z0-G251-5100-PL	Podium - Typical Conference Room Elevation	1:20	A0	Colour
10106-A-DRG-Z0-G251-5101-PL	Podium - Double Height Glazed Façade to Hotel Lobby	1:20	A0	Colour
10106-A-DRG-Z0-G251-5102-PL	Podium - Glazed Façade to Cromwell Road Restaurant	1:20	A0	Colour
10106-A-DRG-Z0-G251-5103-PL	Podium - Glazed Façade to Garden Restaurant	1:20	A0	Colour
10106-A-DRG-Z0-G251-5104-PL	Podium - Hotel Conservatory	1:20	A0	Colour
10106-A-DRG-Z0-G251-5105-PL	Podium - Hotel Entrance	1:20	A0	Colour
10106-A-DRG-Z0-G251-5200-PL	Towers - Typical Serrated Bay Windows	1:20	A0	Colour
10106-A-DRG-Z0-G251-5201-PL	Towers - Cromwell Road Staggered Bay Windows	1:20	A0	Colour
10106-A-DRG-Z0-G251-5202-PL	Towers - Executive Lounge	1:20	A0	Colour
10106-A-DRG-Z0-G251-5300-PL	Courtfield Road - Typical Level Bays and Winter Gardens	1:20	A0	Colour
10106-A-DRG-Z0-G251-5301-PL	Courtfield Road - Upper Level Recessed Facade	1:20	A0	Colour
10106-A-DRG-Z0-G251-5302-PL	Courtfield Road - West Elevation Residential	1:20	A0	Colour
10106-A-DRG-Z0-G251-5303-PL	Courtfield Road - East Elevation Residential	1:20	A0	Colour
10106-A-DRG-Z0-G251-5304-PL	Courtfield Road - Ground Floor	1:20	A0	Colour
10106-A-DRG-Z0-G251-5400-PL	Typical Soffit Details	1:20	A0	Colour

APPENDIX 2

Public Realm Strategy

WIDER PUBLIC REALM STRATEGY
KENSINGTON FORUM HOTEL
JUNE 2018

EX
A

GVA

WSP

PETER
STEWART
CONSULTANCY

simpsonhaugh

EXTERIOR
ARCHITECTURE

EXTERIOR ARCHITECTURE

WIDER PUBLIC REALM STRATEGY

KENSINGTON FORUM HOTEL

Date	15.06.2018
Revision	-
Written	ExA
Approved	Sam Martin Director
Doc Ref:	ExA_1754_P_900

CONTENTS

1 INTRODUCTION		
1.1 INTRODUCTION		5
1.2 PURPOSE OF THIS DOCUMENT		5
2 SITE CONTEXT		
2.1 DESIGN CONTEXT		7
2.2 TOWNSCAPE CONTEXT		8
2.3 EXTENT OF PUBLIC REALM STUDY		9
3 EXISTING CONDITION		
3.1 EXISTING CONDITION		11
4 STREETScape IMPROVEMENTS		
4.1 SITE MOVEMENT		14
4.2 PARKING		15
4.3 PROPOSED PAVING INTERVENTION		16
4.4 LEVEL CHANGES		18
4.5 GREEN INFRASTRUCTURE		19
5 INDICATIVE LANDSCAPE STRATEGY		
5.1 OVERALL SITE IMPROVEMENTS		21
6 LANDSCAPE CHARACTER AREAS		
6.1 LANDSCAPE CHARACTER AREAS		25
7 DESIGN DETAILS		
7.1 WAY-FINDING AND SENSE OF PLACE		36
8 CONCLUSIONS		
8.1 CONCLUSIONS		38



01 | INTRODUCTION

1 INTRODUCTION

WIDER PUBLIC REALM STRATEGY

1.1 INTRODUCTION

This Wider Public Realm Strategy has been prepared to inform consideration of the way in which the scheme has been designed to integrate into its context as well as to identify and promote opportunities for public realm enhancement between Gloucester Road and Ashburn Gardens in the interests of ensuring that the proposed development contributes to a successful and comprehensive piece of urban design.

In doing so, this Strategy identifies the importance of the relationship that the proposed development will have with the surrounding area and ways in which the proposed building can be knitted into the public realm to ensure that the changing nature of the area is fully and adequately reflected in the quality and experience of space.

Importantly, this Strategy also indicates the extent to which the proposed development can create a sense of quality, place and arrival; each of which are considered necessary to ensure that the opportunities associated with a scheme of this scale and kind are maximised and secured.

The Strategy, in exploring the challenges and opportunities of the wider public realm, also makes clear the design, public realm, transport and townscape rationale for assessing the wider public realm context of the scheme. It shows, in short, why landscaping works to the immediate area are considered both directly related to the scale of development and 'necessary' in planning terms.

The application pack consistently indicates the extent to which public realm improvements are considered necessary for the long-term success of the scheme. These details are not repeated within this Strategy and this document should therefore be read in the context of the wider submission.

It is nonetheless noted that the Design and Access Statement (DAS), dated June 2018, reveals the strong relationship between the existing wider context of the Site and the ways in which it poses both challenges and opportunities in achieving the kind of environment sought as part of the overall design concept. This is discussed in detail at Sections 2.4 and 2.6.

Of particular importance are the elements of the development described in Section 5 (built form) and Section 6 (landscape and public realm) of the DAS, which indicate the extent to the proposed development will achieve a step change in design quality, legibility and coherence, in line with the overall objective of delivering outstanding design quality which is required for all developments in RBKC, particularly tall buildings. They also serve to indicate how the character of Gloucester Road has scope for substantial improvement and to become a more cohesive destination as a result of this scheme to bring new activities and public amenity space.

It is clear to the Applicant that achieving the aspiration for a building sited in an appropriately high-quality context requires a long-term and sufficiently robust strategy if it is to be done successfully. In this context, the poor condition of the existing streetscape on the key approach routes from Gloucester Road tube station to the Site represents an important constraint to achieving the level of wider enhancement and integration consistent with the overall design vision and scheme principles. There is therefore a clear need to ensure these elements are fully integrated with one another; something which would have commercial as well as community benefit.

With this in mind, this Strategy seeks to envisage the ways in which the area may change and, accordingly, that the public realm could be amended to respond to this.

This Strategy starts from the principle that Gloucester Road underground station and the footways around the Site will continue to be a significant source of public trips to the Site. Consequently, improving the legibility and overall quality of the key routes to and from it will make an important contribution to ensuring that the delivery of the development facilitates wider improvements to the immediate area.

Whilst it is recognised that the routes to and from Gloucester Road are under the control of the local highway authority, the Applicant is of the view that the principles for the enhancement of the existing public realm which the scheme could facilitate, as set out in this document, are suitable, appropriate and could be delivered by the Royal Borough or its appointed contractors.

1.2 PURPOSE OF THIS DOCUMENT

This Wider Public Realm Strategy study provides consideration to the proposed development in the context of its immediate surroundings. It aims to identify locations at which it is necessary and desirable to improve the user experience of the public realm between Gloucester Road and Ashburn Gardens, specifically in the context of the proposed development and the impact it will have upon the character of the area.

Through identifying these locations, the intent is to promote opportunities for public realm enhancement to ensure that the quality of public space is appropriate for the ways in which the area may change in the future as a result of the proposal. The Applicant is of the opinion that the Strategy would be of assistance to the Borough in that, in addition to identifying opportunities, it also allows these to be quantified and costed. The Applicant is also willing to make a financial contribution, that will be secured through a Section 106 Agreement, to enable the Royal Borough to deliver these works to an appropriate standard.

As will become clear through this document, to deliver the quality aspirations that the Development is seeking to achieve requires a comprehensive approach to the design and delivery of the public realm. Further details are set out in the Design Context section of this Strategy.



Gloucester Road Station

02 | SITE CONTEXT

2 SITE CONTEXT

WIDER PUBLIC REALM STRATEGY

2.1 DESIGN CONTEXT

As explained in the context section of the DAS, the existing building sits on the site as a singular object that creates a series of negative urban spaces and aggressive streetscape, in particular:

- > The main entrance is positioned off the corner of Courtfield Road and Ashburn Place addressing the vehicular drop-off area and not the street.
- > Ashburn Place is a largely blank facade that offers little to the pedestrian experience with the only openings in the facade being for the vehicles serving the loading bay.
- > The open space, nominally a publicly accessible garden square, is disparate and irregularly shaped, appearing unwelcoming and feeling part of the hotel property.
- > Along Cromwell Road the pavement is widened significantly into the red-line ownership of the hotel, however the space has no purpose and being in the shadow of the building with no activity facing it, has become a wind-swept, left-over piece of streetscape.

As a consequence of these features of the existing building and public realm are fractured and disjointed. The main focus of circulation towards the existing building is along Courtfield Road; either by car, bus and taxi or by foot from Gloucester Road underground station. The experience for pedestrians is poor, not only when they arrive at Ashburn Place and the city block containing the hotel, but also along Courtfield Road and on Gloucester Road. The latter two provide exceptionally limited sense of arrival and little means of way-finding when exiting from the London Underground station.

Cromwell Road is similarly a poor urban environment dominated by the car. The slip road at the junction with Gloucester Road dominates over the pedestrian whilst the less used route along Cromwell Road unremarkable with little of interest to allow street users orientate themselves.

As explained in the DAS the analysis of the site and the existing building, together with the testing of numerous different formal arrangements, led to a proposed arrangement of built form which will fundamentally change the orientation of the hotel and, accordingly, the nature of the streets and space around the city block in which the hotel is located.

The proposed building is orientated towards Cromwell Road where the hotel entrance is located. This will 'correct' the urban design mistakes of the 1970's building by locating the massing to edge and animate Ashburn Place and also define a legible 'London Garden Square' space in addition to having entrances appropriately positioned.

The intention behind this organisation is to reinforce the nature of these streets; Cromwell Road is commercial heavily trafficking, busy and noisier, Courtfield Road is quieter and residential, Ashburn Place transitioning between the two. Consequently:

- > The main drop-off is moved diagonally across the site to a new formal arrival square accessed off Ashburn Gardens near the junction with Cromwell Road. The main entrance is accessed from this space and fronts onto Cromwell Road.
- > A secondary entrance is located on Ashburn Place with a high level of transparency of the hotel lobby and its cafés, lounges and restaurants.
- > The residential entrances to the 46 apartments are located off Courtfield Road.

As the building has been re-organised it is envisaged that not only the vehicular movement, but also the pedestrian movement, will change. Foot fall to the hotel will be higher along Cromwell Road as hotel guests leave and enter the building onto this main road. A high number of these people will then use the underground station at Gloucester Road to attend to their business or visit the attractions of London.

The busiest footfall movement area is expected be located in proximity of the main façade and the entrances off Cromwell Road and Ashburn Place. In light of this, an improved public realm and way-finding system could significantly improve the walking experience for the proposed development and the general public.

This document analyses the nature of the existing public realm in more detail and includes an illustrative masterplan for the wider context of the site that could be developed to provide a consistent environment for the new development, now re-orientated, and the existing surrounding streets. The delivery of a public realm improvements scheme which reflects this illustrative masterplan could allow the opportunity for a variety of spaces to be developed;

- > Spaces that allow for a sense of arrival to be experienced.
- > Spaces that create a sense of place and contribute to the perception of Gloucester Road as a destination in its own right.
- > Spaces that allow street users to orientated themselves.
- > Streets that include a variety of street furniture to improve pedestrian comfort.
- > Streets that offer visual interest with way-finding elements
- > An environment that provides a series of 'stepping stones' between the new hotel and the station offering a strong legibility.

Within the unified masterplan there is the possibility for a number of 'character zones' between the 'steeping stones'. These character zones are also illustrated indicatively in this document to show the potential of the masterplan for the wider public realm.

This Strategy demonstrates both the need for and potential of a wider public realm improvement masterplan in the context of the significant potential re-development of the site, which as proposed in this planning application creates the new destination of a garden square, an upgraded hotel facility orientated towards Cromwell Road and a new residential building facing Courtfield Road.

2 SITE CONTEXT

WIDER PUBLIC REALM STRATEGY

2.2 TOWNSCAPE CONTEXT

Gloucester Road currently provides a relatively limited sense of arrival upon exiting from the London Underground station. In the interests of creating a cohesive and legible environment for pedestrians walking to and from the station it is recommended that landscaping improvements are undertaken to enhance this experience to match the quality that will be created on the Site itself.

As set out elsewhere within this document, this enhancement would not only contribute to the establishment of a sense of place, but also contribute to a stronger sense of destination. This Strategy includes some design features that could help to achieve this.

Indeed, given the fact that the Site comprises an entire urban block, it is considered that the scale of the proposal and the inclusion of a garden square actually creates a destination in its own right. This is something which, if knitted into the townscape of the surrounding area, particularly at Gloucester Road, could provide a comprehensive and unified character in public realm terms, substantially enhancing legibility. There is an inherent physical relationship with the station that forms part of its setting and sense of place.

The Site's urban block is important within the townscape of the area as the location of a prominent building – a building which would be replaced by one of much higher visual quality, worthy of its prominence, as a result of the proposal. It is adjacent to another urban block immediately to the east which is important as the location of Gloucester Road London Underground (LU) Station. The proposed intensification of the Site is in line with planning policy which advocates such development close to transport infrastructure; and improving the public realm between the Site and the station is a way of making that linkage explicit in townscape terms, while at a practical level providing an enhanced pedestrian experience for people moving between them.

In contrast to much of the local area that surrounds them, the urban blocks containing the Site and Gloucester Road LU Station are not covered by conservation area designations and are of generally low to mediocre visual quality in terms of both

buildings and public realm (with the notable exception of the listed Gloucester Road Station). The proposed improvements offer the prospect of providing public realm across these two blocks which is of a high quality, commensurate with their importance and centrality within the local area; which would link these two important blocks together visually, reinforcing their identity as a central node in the local area; and which would bring the quality of their public realm up to the best of that evident within the local conservation areas which surround them, providing a fitting townscape setting for the listed Gloucester Road Station.

2 SITE CONTEXT

WIDER PUBLIC REALM STRATEGY

2.3 EXTENT OF PUBLIC REALM STUDY

This street strategy encompasses the public realm around Gloucester Road Station, Gloucester Arcade and the Kensington Forum Hotel as shown on the plan. It includes:

- > both sides of Gloucester Road opposite the Tube station
- > both sides of Courtfield Road
- > both sides of Ashburn gardens
- > both sides of Ashburn place
- > the southern footpath to Cromwell Road



03 | EXISTING CONDITION

3 EXISTING CONDITION

WIDER PUBLIC REALM STRATEGY

3.1 EXISTING CONDITION

GLOUCESTER ROAD

Gloucester Road station is a listed building at the junction of Gloucester Road and Courtfield Road. Its forecourt, at the main entrance, is a simple triangular Yorkstone paved area, emphasizing the architecture of the station, with a remarkable mature Plane tree, as shown on photograph one. A flush, pedestrian-led crossing is currently provided to cross Courtfield road ¹. This space is equipped with a bus stop, a public bicycle docking station, and three cast-iron and timber benches ². The public realm at the front of the station extends along Gloucester Road, in front of the secondary station entrance, and adjacent to Gloucester Arcade entrance ³.

The station has a potentially generous public realm as a forecourt however, the experience when leaving the station is disorientating, as the main entrance is visually blocked by the bus stop ⁴ while the secondary entrance is blocked by the kiosk ⁵.

The crossing of Gloucester Road near the Station is a critical element in the making of a pedestrian friendly and safe access to and from the station. Many pedestrians currently cross the road in an unsafe manner ⁶ which shows the wider desire for a safer, more accessible pedestrian route. There is no seating currently provided along Gloucester Road.

At the junction with Cromwell Road, where the vehicle and pedestrian circulations are dense, pedestrians have to complete two crossings due to the left-turn lane ⁷. This space is strongly marked by traffic infrastructure, which, combined with the cluttering of furniture and utilities ⁸, makes this space visually confusing with a low landscape character.



Gloucester Road Station



Gloucester Road Station main entrance



Gloucester Road Station secondary entrance



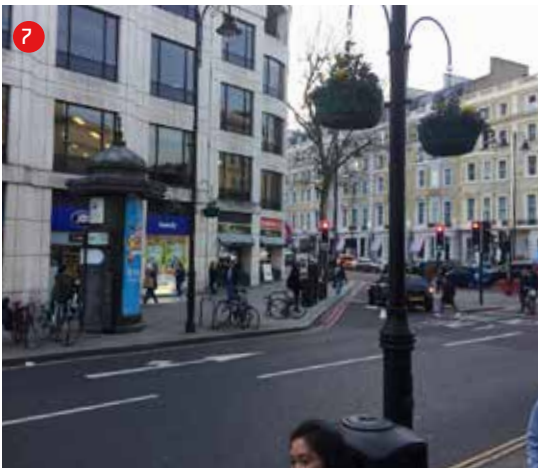
View from the main entrance



View from the secondary entrance



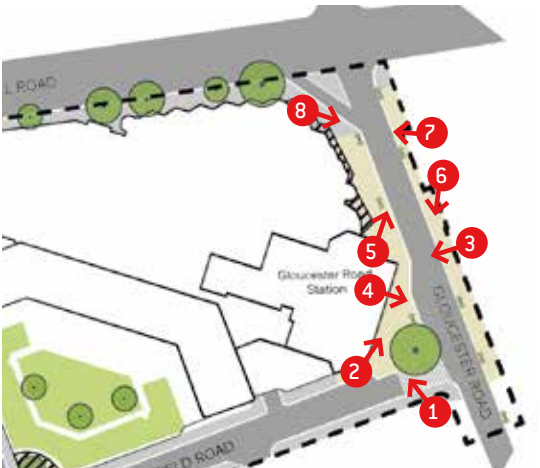
Gloucester Road pedestrian crossing



Gloucester Road and Cromwell Road junction



Gloucester Road and Cromwell Road junction



Location plan

3 EXISTING CONDITION

COURTFIELD ROAD EAST

When walking away from Gloucester Road Tube Station on Courtfield Road, the sense of place is suddenly lost. The footpaths are heterogeneously paved with concrete flags with concrete blocks or tarmac driveway entrances. Different public furniture and utilities clutter the views towards the station, as shown on photograph 9.

At the Courtfield Road/Ashburn place junction, the intersection is vehicle-led with a small paved roundabout and no pedestrian marked crossings. A small public space is cleared in the corner with a central semi-mature Plane tree. This space doesn't currently offer seating 10.

COURTFIELD ROAD WEST / ASHBURN GARDENS

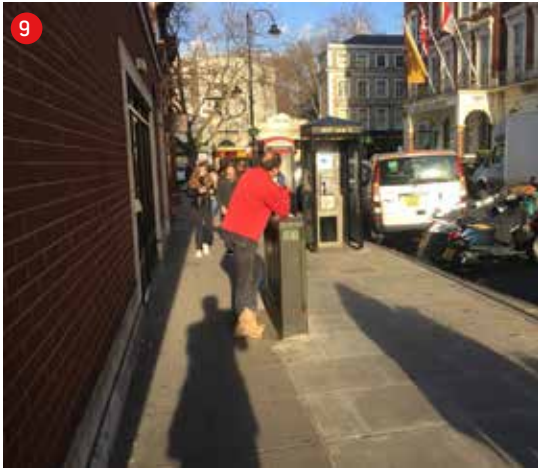
A group of mature trees marks the junction between Courtfield Road and Ashburn Gardens, facing the facades of the terraced houses that are within the Conservation area. The mature trees create a distinctive atmosphere in adjoining streets, atypical of the neighbourhood. The footpaths are surfaced with concrete flag pavers or tarmac, while the south side of Courtfield Road is paved with Yorkstone 11 12 13.

CROMWELL ROAD

Comwell Road has a Boulevard character, with a wide carriageway lined by a row of mature Plane trees. Although the footpath is currently very generous in front of the hotel, this will be reduced with the construction of the future hotel. The furniture and utilities on Cromwell Road is abundant and quite cluttered. The footpath is paved with concrete flag pavers 14.

At the Cromwell Road/Ashburn place junction, there is a large paved corner which is treated as public realm by users. This is the back of the Gloucester Arcade. No seating currently offered here, and this is the only junction with no tree at the angle 15.

Along the back wall of the Gloucester Arcade, the footpath is lined with a blank facade with low visual value 16.



Courtfield road looking toward Gloucester Rd Station



Courtfield Road and Ashburn Place roundabout



Courtfield Road at Ashburn Gardens junction



Ashburn Gardens west footpath



Ashburn Gardens east footpath



Ashburn Gardens and Cromwell Road junction



Cromwell Road and Ashburn Place junction



Cromwell Road



Location plan

04 | STREETSCAPE IMPROVEMENTS

4 STREETSCAPE IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

4.1 SITE MOVEMENT

The most prominent façade of the building and its main hotel entrance will be located on Cromwell Road, with a secondary entrance located at the northern end of Ashburn Place. The residential entrance is located on Courtfield Road.

The distances from the station to the hotel entrances via Courtfield Road and Cromwell Road are broadly similar, although the most direct route to the residential entrances is along Courtfield Road. From a 'convenience of the route' perspective, it is envisaged that residents will use Courtfield Road.

These routes have different characteristics, as described below:

- > Gloucester Road and the space fronting the Gloucester Road station entrance have great potential but are currently cluttered. A kiosk and bus stop visually obstruct the station entrance thus affecting the orientation and way-finding of the area. The section of Gloucester Road leading to Cromwell Road is cluttered with furniture, creating pinch points.
- > Courtfield Road is a quiet road providing the most convenient route to reach station at present. A larger proportion of people walking to and from the hotel and serviced apartments are expected to use this road considering the current signage and public realm conditions.

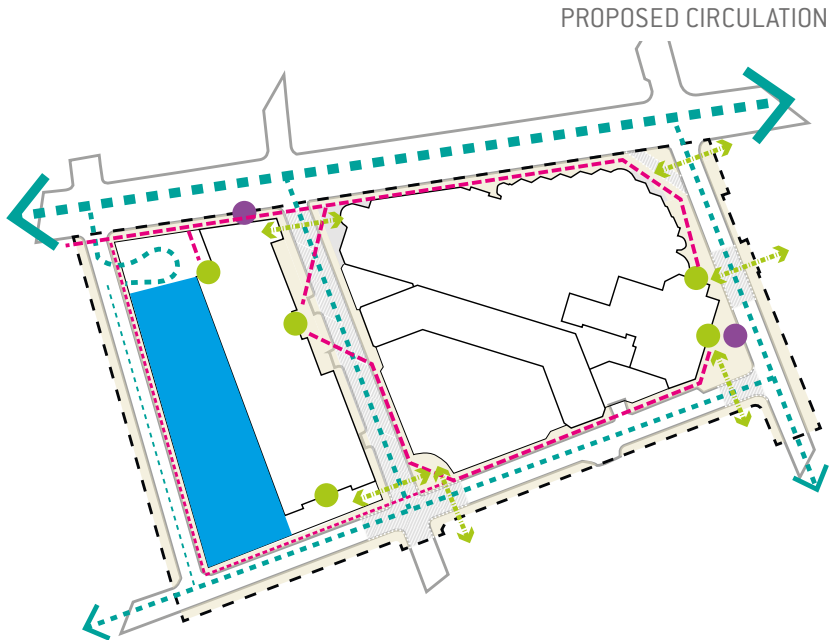
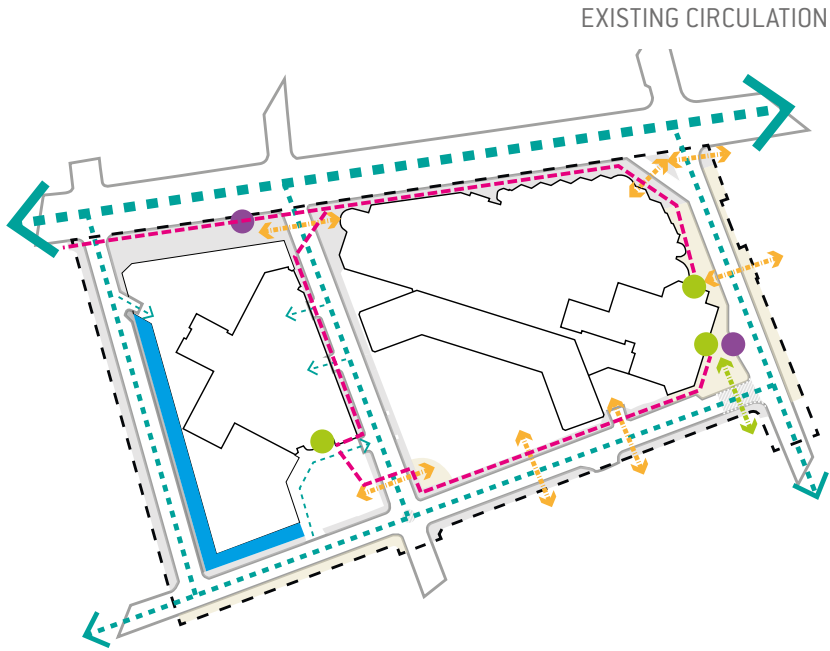
We expect the vast majority of the daily travel to and from the site to be completed, fully or in part, on foot. We assume that most of the walking trips will use Cromwell Road for part of their journey, due to the location of the main entrance and arrival square fronting the A4. The footway fronting the main hotel entrance and the Cromwell Road is also the most convenient location to find buses and it is an easy route to the underground and to some of the touristic attractions which can be reached on foot (Museum complex at Exhibition Road).

The forecast travel demand suggests that up to 78% of the daily movements will be completed either fully or partially on foot. Of this, a significant proportion, circa 50%, represents a trip which requires a short walking journey to reach public transport, either the buses along Cromwell Road or the Gloucester Road station.

There is an opportunity and a desire to make the Cromwell Road pedestrian experience more attractive, given the public frontage and the proposed main entrance is prominent on this side. The busiest footfall movement area is expected be located in proximity of the main façade and the entrances off Cromwell Road and Ashburn Place.

In light of this, an improved public realm and way-finding system could significantly improve the walking experience for the proposed development and the general public. It could also encourage more people to use the Cromwell Road route, rather than the Courtfield Road route.

This would be achieved rationalising the areas of busiest footfall and improving the quality of the paving and the signage, making the walking routes to and from the site safer and more enjoyable. An improved Cromwell Road route would provide a better orientation in the context of the wider area, where there is more opportunity for way-finding and legibility.

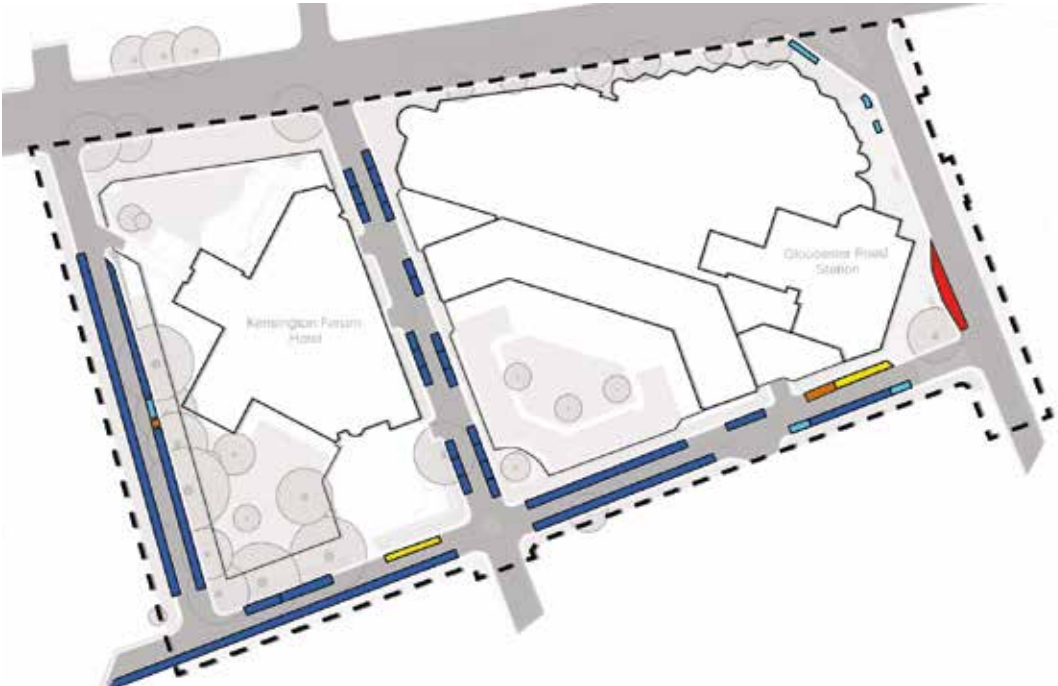


4 STREETSCAPE IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

4.2 PARKING

The principle for parking is that all spaces, whether permit, pay and display or car club, are relocated as conveniently as possible and there will be no loss of parking spaces



EXISTING PARKING

- - - Public realm study extent
- Car parking bays
- Taxis bays
- Motorcycle parking bays
- Bus stop lane
- Cycle stands



INDICATIVE PARKING

- - - Public realm study extent
- Car parking bays retained
- Car parking bay relocated
- Taxis bays retained
- Motorcycle parking bays retained
- Bus stop lane relocated
- Cycle stands retained
- Cycle stands relocated

4 STREETScape IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

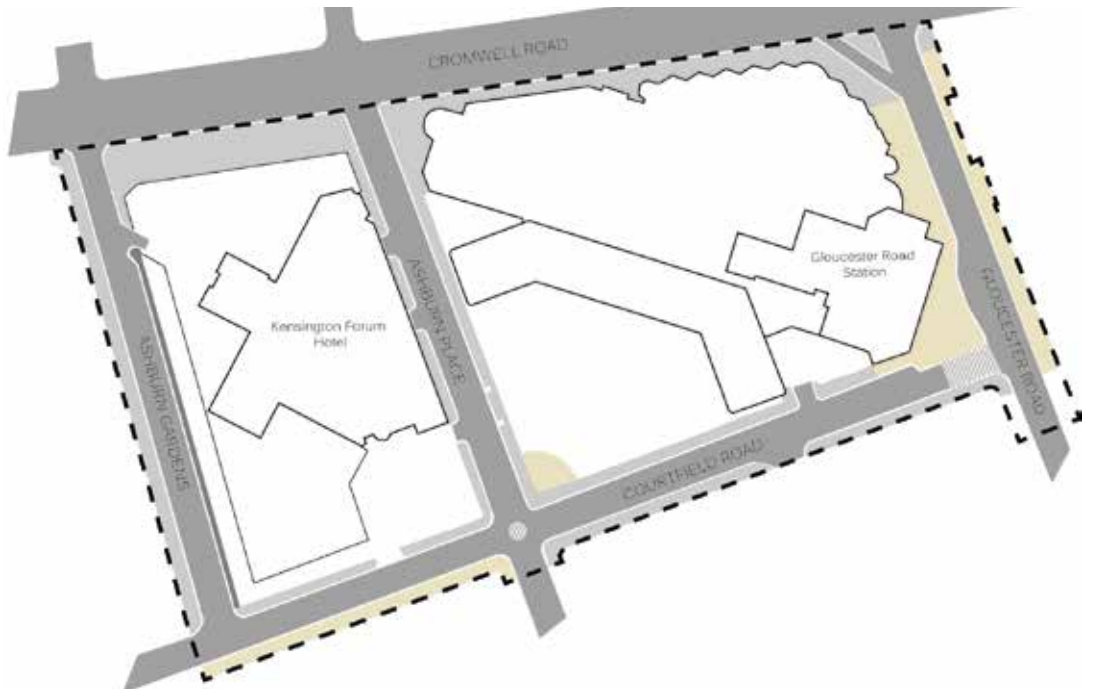
4.3 PROPOSED PAVING INTERVENTION

The existing surface treatment around Gloucester Road Station and the surrounding blocks is mismatched and in need of an upgrade. To create continuity and a sense of place, the pedestrian surface should be a continuous singular treatment, with variation in areas of vehicular movement. Opportunities are:

- > Replace all concrete flag paving with Yorkstone paving
- > Increase width of existing pedestrian crossing on Gloucester Road and raise with Granite paving
- > Raise vehicular route at southwest pedestrian crossing on Cromwell Road and Gloucester Road. Replace asphalt with Granite paving to emphasise pedestrian priority
- > Raised crossing at Courtfield Road and Ashburn Place intersection to slow vehicles and establish a gateway between Gloucester Road Station and the Hotel entrance
- > A shared surface (not single surface) street to Ashburn Place, prioritising pedestrian circulation

ADOPTABLE STANDARDS

The illustrative proposals contained within this document have been considered in accordance with the adoptable Royal Borough of Kensington and Chelsea standards. Accordance with these standards provides a strategy that can be implemented by the Planning Authority in line with their vision for public realm spaces. To ensure standards are met and achieved at a high level, continued coordination and collaboration with the Planning Authority is imperative.



EXISTING SURFACE TREATMENT

- - - Public realm study extent
- Asphalt roads
- Yorkstone paving
- Concrete paving
- Asphalt footpath
- Granite crossing



INDICATIVE SURFACE TREATMENT

- - - Public realm study extent
- Asphalt roads
- Yorkstone paving
- Granite crossings

4 STREETScape IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

4.3.1 INDICATIVE PAVING AREAS FOR UPGRADE

The adjacent diagram provides a high-level indication of the anticipated areas for surface upgrade.



4 STREETSCAPE IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

4.4 LEVEL CHANGES

Pedestrian priority is enhanced through considered alterations to the relationship between the footpath, kerb and vehicle carriageway.

Where vehicles are dominant in pedestrian areas, the carriageway is raised, in addition to the change in surface material. This occurs at:

- > The east west pedestrian crossing at the Gloucester Road Station entrance to Gloucester Road
- > Corner of Cromwell Road and Gloucester Road pedestrian crossing across the left turn lane
- > Vehicle entrances from Courtfield Road into private land
- > Ashburn Place



EXISTING LEVEL CHANGES

- Public realm study extent
- Raised kerb
- Flush kerb
- ▲ Access from the street



INDICATIVE LEVEL CHANGES

- Public realm study extent
- Raised kerb
- Flush kerb
- ▲ Access from the street

4 STREETSCAPE IMPROVEMENTS

WIDER PUBLIC REALM STRATEGY

4.5 GREEN INFRASTRUCTURE

Green infrastructure within the public realm is limited to Gloucester Road Station and its surroundings. London Plane trees create a sense of place and act as way finding to and from the Station. There is an opportunity to increase the green infrastructure within the public realm, supported by the development of the new Garden Square to Ashburn Gardens. Opportunities are:

- > Increase size of hanging baskets to Gloucester Road
- > Raised planters to Gloucester Road and Station entrance
- > Aid in way-finding and complete the Gloucester Road Station block with a London Plane tree on Ashburn Place and Cromwell Road corner. A new urban plaza
- > Tree planting to Ashburn Place
- > A new Garden Square to Ashburn Gardens



EXISTING GREEN INFRASTRUCTURE

- - - Public realm study extent
- Trees
- Hanging baskets
- Soft landscape



INDICATIVE GREEN INFRASTRUCTURE

- - - Public realm study extent
- Trees
- Hanging baskets
- Soft landscape

05 | INDICATIVE LANDSCAPE STRATEGY

5 INDICATIVE LANDSCAPE STRATEGY

WIDER PUBLIC REALM STRATEGY

5.1 OVERALL SITE IMPROVEMENTS

The existing surface treatment to the public realm surrounding Gloucester Road Station and its environs is fragmented and reaching the end of its maintenance life. Whilst areas of higher quality yorkstone paving exist outside the Station entrance, several areas consist of lower quality, tired concrete flag paving. A consistent surface treatment, as opposed to the existing varying surface, creates an environment that is legible and aids in wayfinding. Areas of asphalt and vehicle crossovers prioritise vehicle circulation over pedestrian. A unified, legible and high-quality surface treatment provides greater pedestrian priority and therefore safety for users of the space within the public realm.

Within the public realm are several items of street furniture, including a significant number of telephone boxes, litter bins, benches, cycle stands and other objects. Many of these items are tired and underutilised. Consolidation of street furniture and removal of underused items would expand and enhance the public realm.



Existing hard and soft landscape



Proposed hard and soft landscape intervention

5 INDICATIVE LANDSCAPE STRATEGY

WIDER PUBLIC REALM STRATEGY



06 | LANDSCAPE CHARACTER AREAS

6 LANDSCAPE CHARACTER AREAS

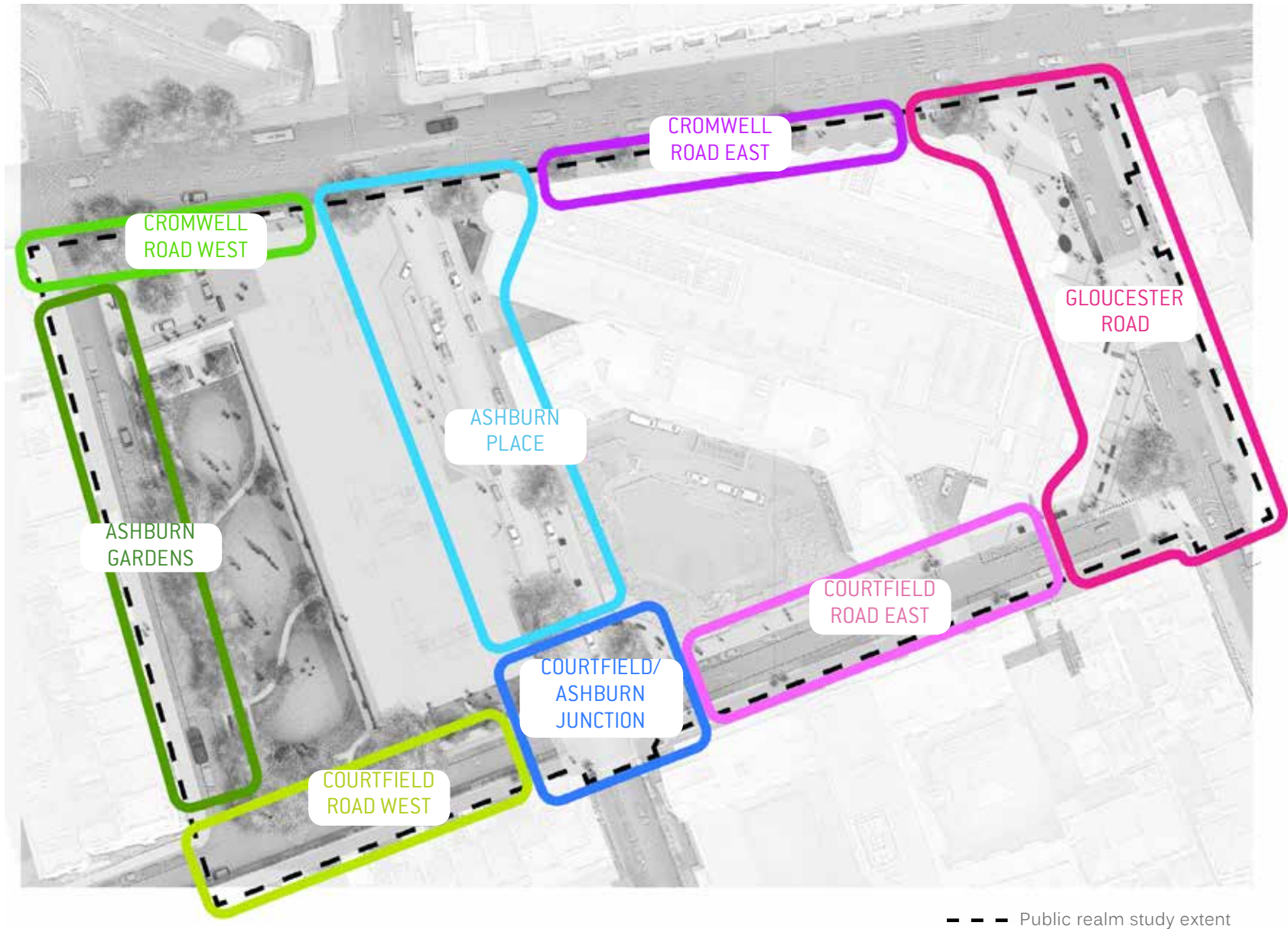
WIDER PUBLIC REALM STRATEGY

6.1 LANDSCAPE CHARACTER AREAS

This section sets out a series of character areas. Each area is identifiable by a particular character and developing and strengthening this character through hard and soft landscape interventions enhances the experience for the user. Further interventions include opportunities for public art, street furniture and considered engagement with the street via new building entrances. The detail of opportunity and potential response is set out in the following sections.

LANDSCAPE CHARACTER AREAS

- - - Intervention extent
- GLOUCESTER ROAD
- COURTFIELD ROAD EAST
- COURTFIELD/ASHBURN JUNCTION
- ASHBURN PLACE
- COURTFIELD ROAD WEST
- ASHBURN GARDENS
- CROMWELL ROAD WEST
- CROMWELL ROAD EAST



6 LANDSCAPE CHARACTER AREAS

6.2 GLOUCESTER ROAD

The forecourt of Gloucester Road tube Station is a great opportunity to create a local simple public square emphasizing the remarkable station architecture. With a coherent Yorkstone surface thorough and the provision of seating and soft landscape, this space could read as one, while a linear feature paving could help on way-finding to and from the station and add dynamism to the space.

The key element to create a clear, easy to read, space is the relocation of the bus stop and the kiosk. The bus stop can be moved towards the road, inducing the removal of the right-turn lane, while the kiosk can be relocated on the other side of the footpath, still visible from the secondary tube entrance.

To give pedestrian priority at the crossing of Gloucester road, the existing crossing can be extended by 10 meters towards north and be raised, with a granite paving finish, similar to the existing one at Courtfield Road. On the south, a balustrade between the bus stop and the crossing could guide the pedestrian towards the crossing, while on north, a stripe of raised planting can separate the carriageway from the footpath.



High Street, Kensington



Exhibition Road, Kensington

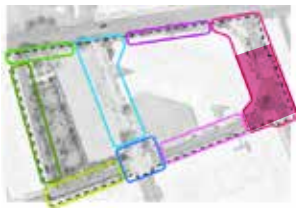


View towards the Station entrance



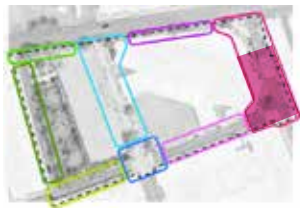
Sloane square

WIDER PUBLIC REALM STRATEGY



6 LANDSCAPE CHARACTER AREAS

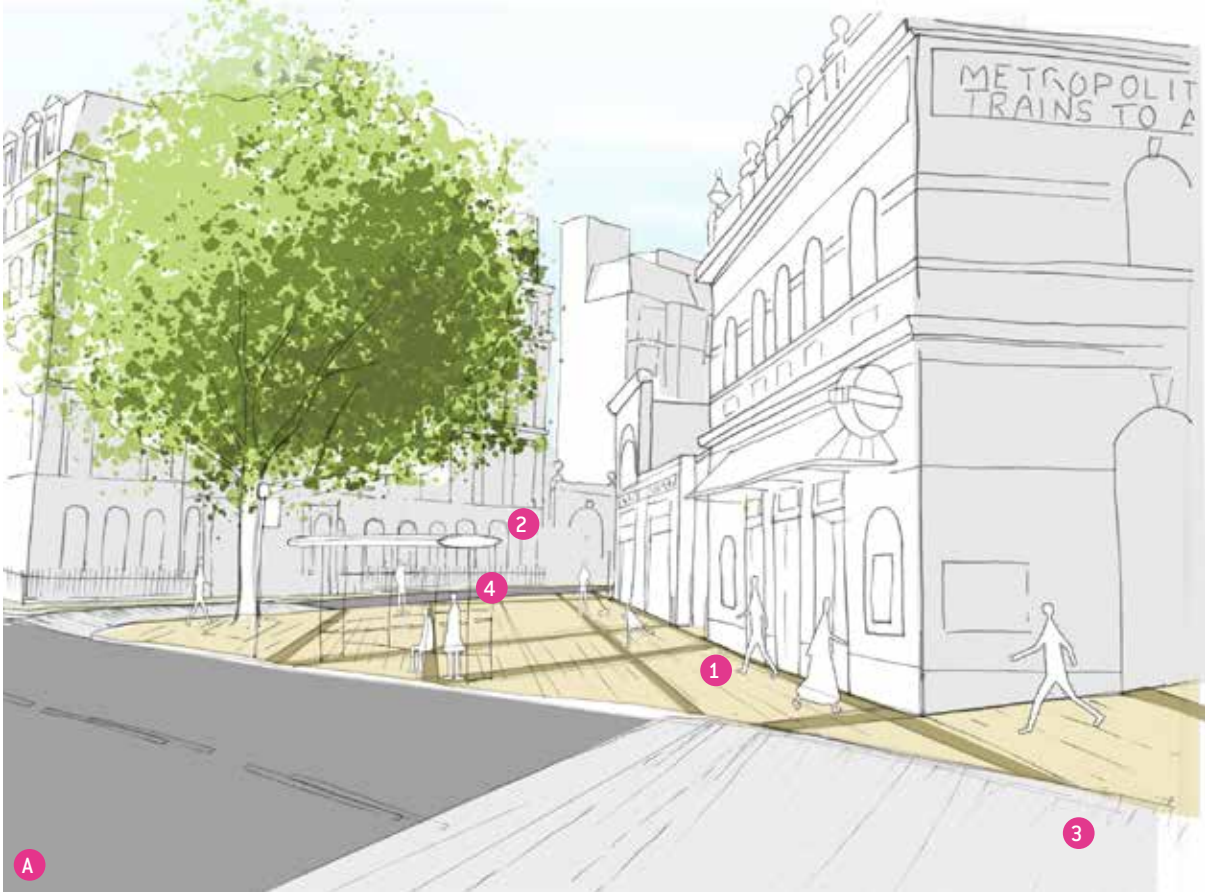
WIDER PUBLIC REALM STRATEGY



6.2 GLOUCESTER ROAD



- 1 Yorkstone paving with linear bands that connect the streetscape with the Station. Way-finding feature integrated into the paving surface
- 2 Light, transparent bus shelter that allows views through
- 3 Raised granite paving to widened pedestrian crossing to promote greater pedestrian priority
- 4 Central feature to Gloucester Road Station plaza, behind bus shelter near existing tree



Light bus shelter



Linear Yorkstone paving

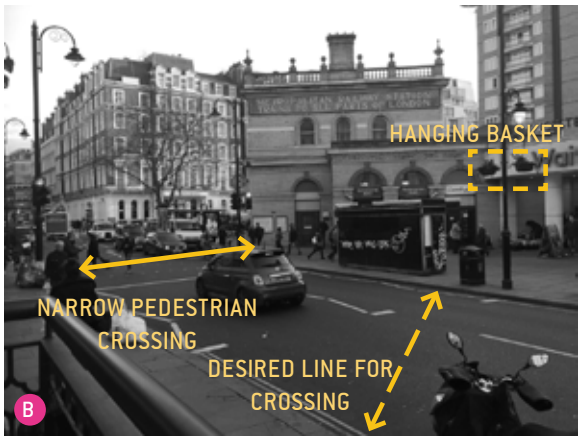
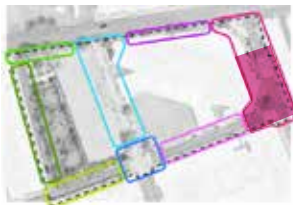


Yorkstone paving with inserts

6 LANDSCAPE CHARACTER AREAS

WIDER PUBLIC REALM STRATEGY

6.2 GLOUCESTER ROAD



- 1 Yorkstone paving with subtle linear bands that connect the streetscape with the Station. Way-finding feature integrated into the paving surface
- 2 Light, transparent bus shelter that allows views through
- 3 Raised granite paving to widened pedestrian crossing to promote greater pedestrian priority
- 4 Increase the size of hanging basket, planted with ecological-value species
- 5 Replacement of the Kiosk



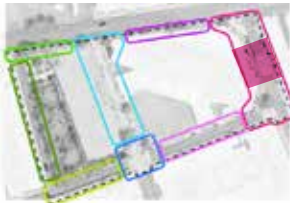
Raised planting and seating opportunities



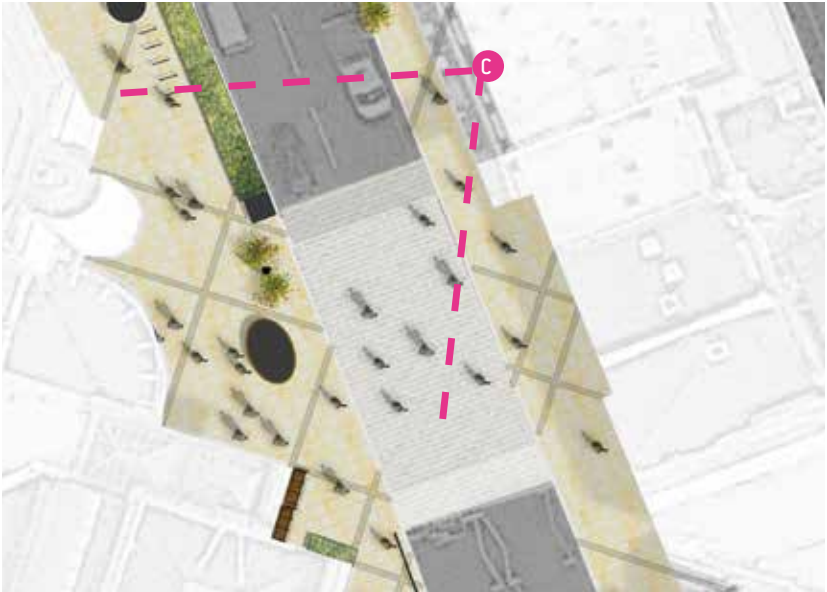
Paving change indicating pedestrian crossing

6 LANDSCAPE CHARACTER AREAS

WIDER PUBLIC REALM STRATEGY



6.2 GLOUCESTER ROAD



Proposed relocation of the kiosk



Existing condition

The existing kiosk to Gloucester Road Station is under utilised. A new kiosk, on the same location, would promote street activation and a sense of place.

- > High quality, considered kiosk design
- > Opportunity to consolidate street furniture and integrate into kiosk design
- > Create a free public realm that's removed of clutter



Proposed relocation of the kiosk



Exemplar kiosk - Heatherwick Studio Kiosk