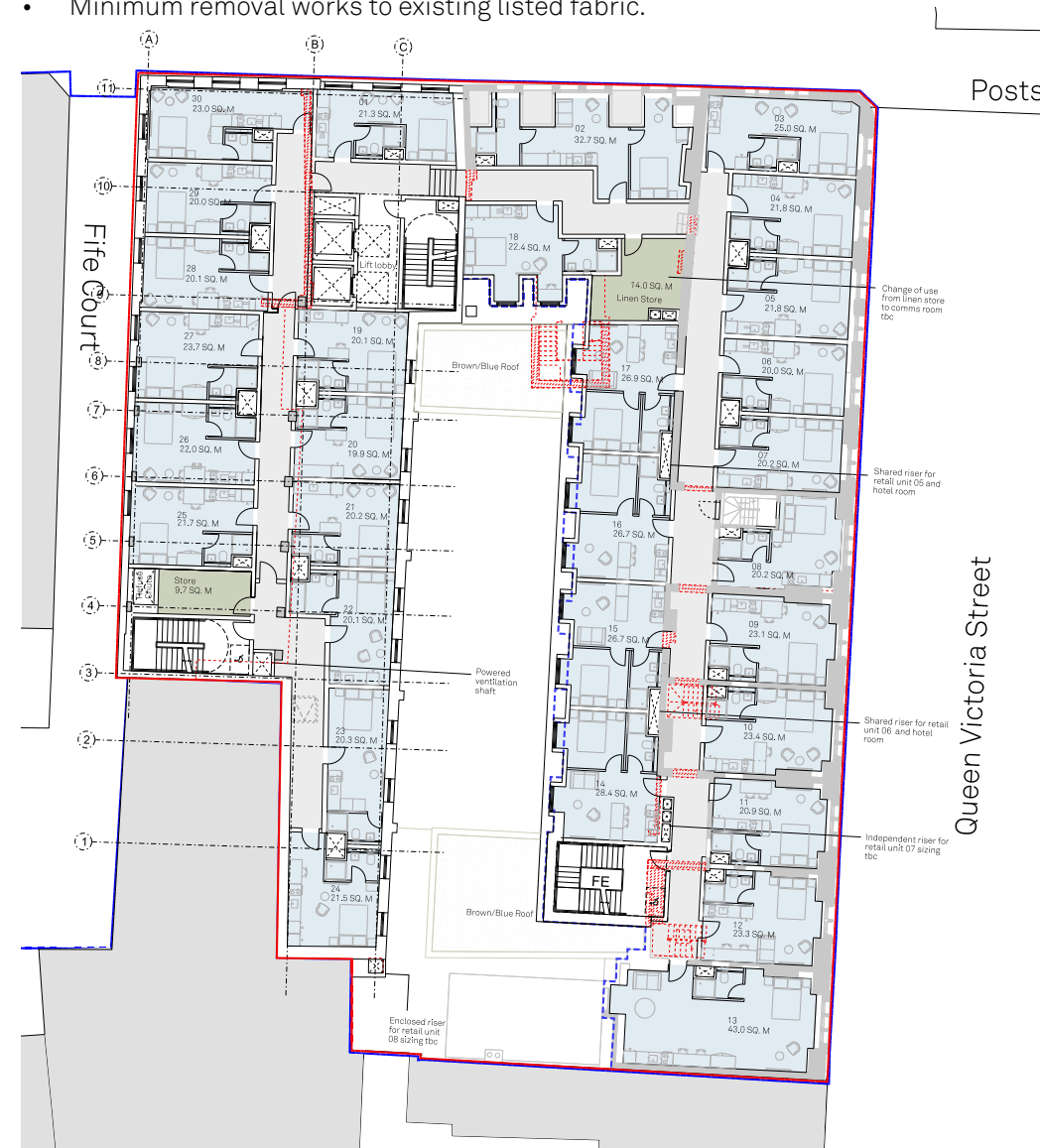


4.0 THE PROPOSAL

4.6 LAYOUTS

Third Floor Plan

- 31 rooms ranging from 20 - 30 sqm;
- 1 main core with 2 no. secondary escape cores;
- 145 Friar floor removed, rebuild and extend;
- Rear of 146 Friar Street extended;
- Rear extension to no 3, 5, 7, 9, 11 & 13 Queen Victoria Street;
- Minimum removal works to existing listed fabric.



Consented plan



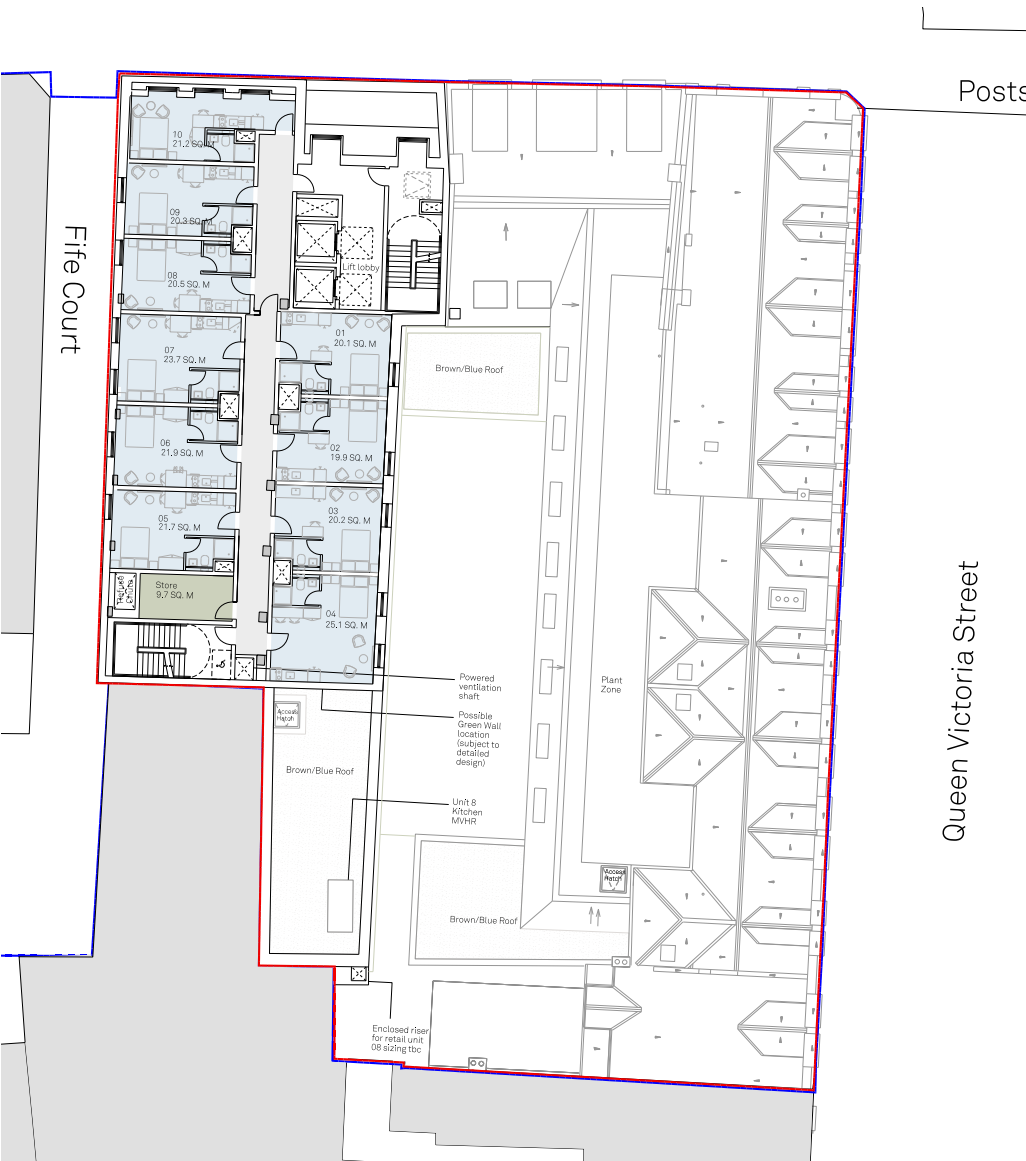
Proposed plan

4.0 THE PROPOSAL

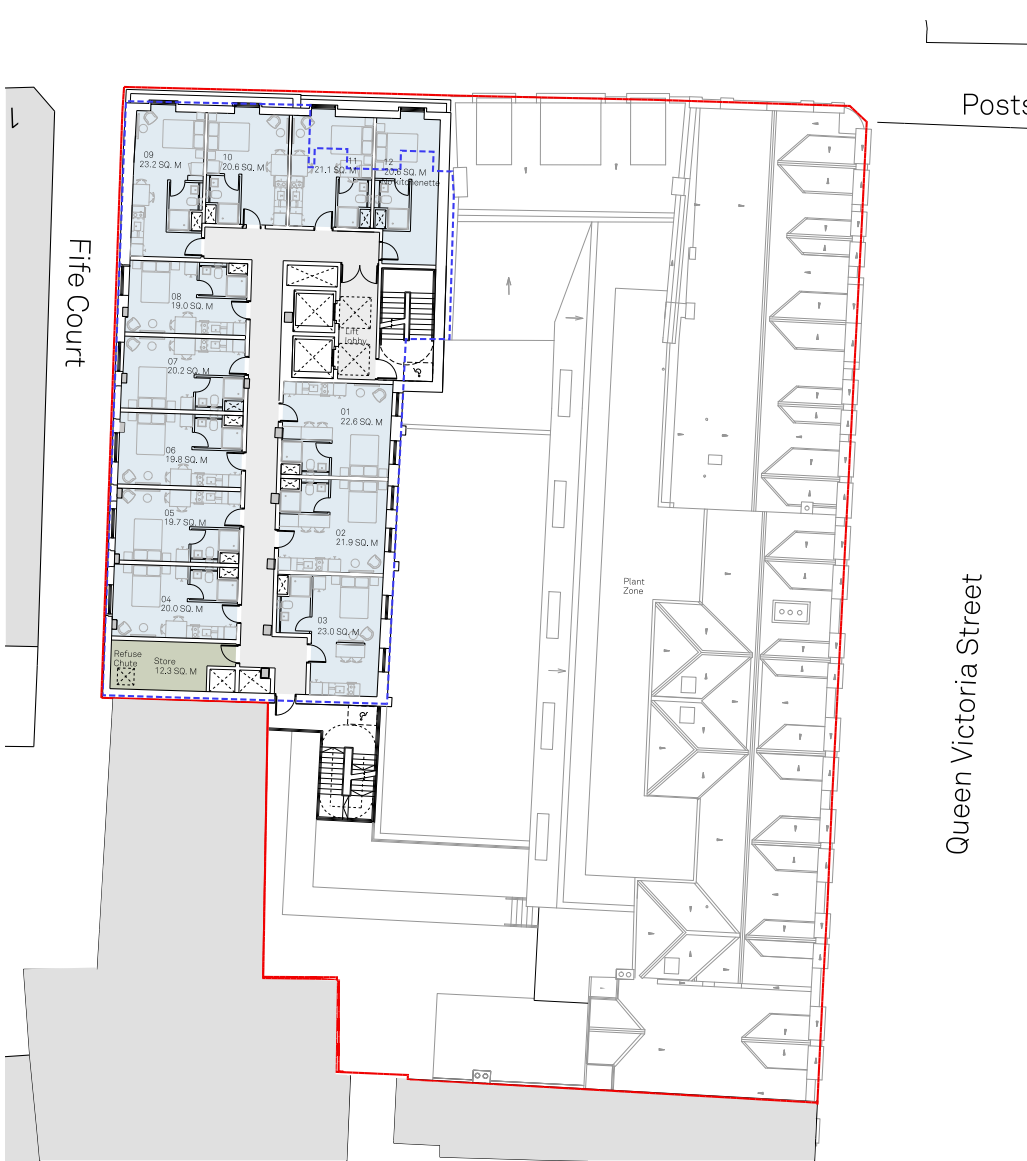
4.6 LAYOUTS

Fourth Floor Plan

- 12 rooms ranging from 20 - 23 sqm;
- 1 main core and 1 x secondary escape core;
- 145 & 146 roof extension.



Consented plan



Proposed plan

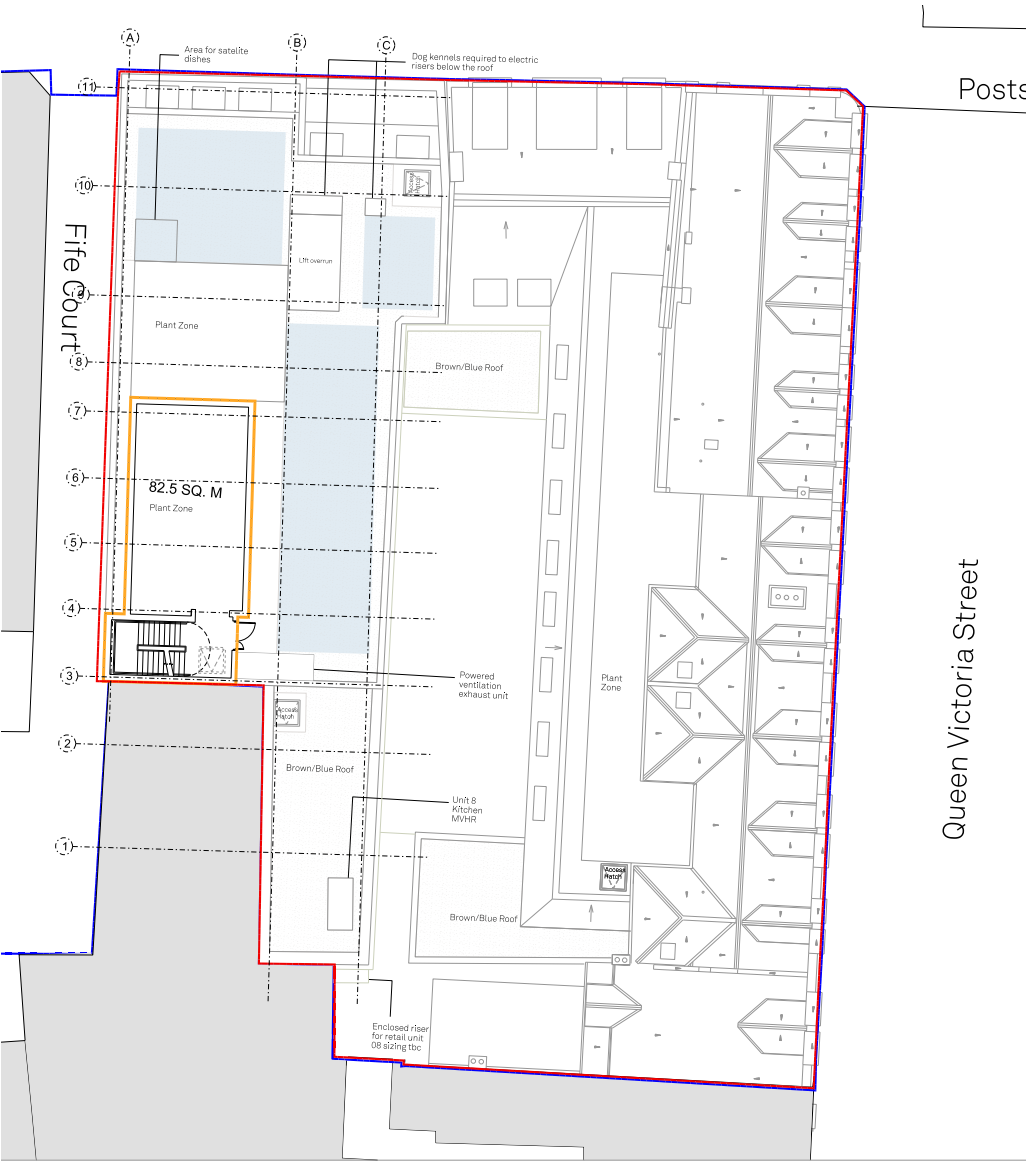


4.0 THE PROPOSAL

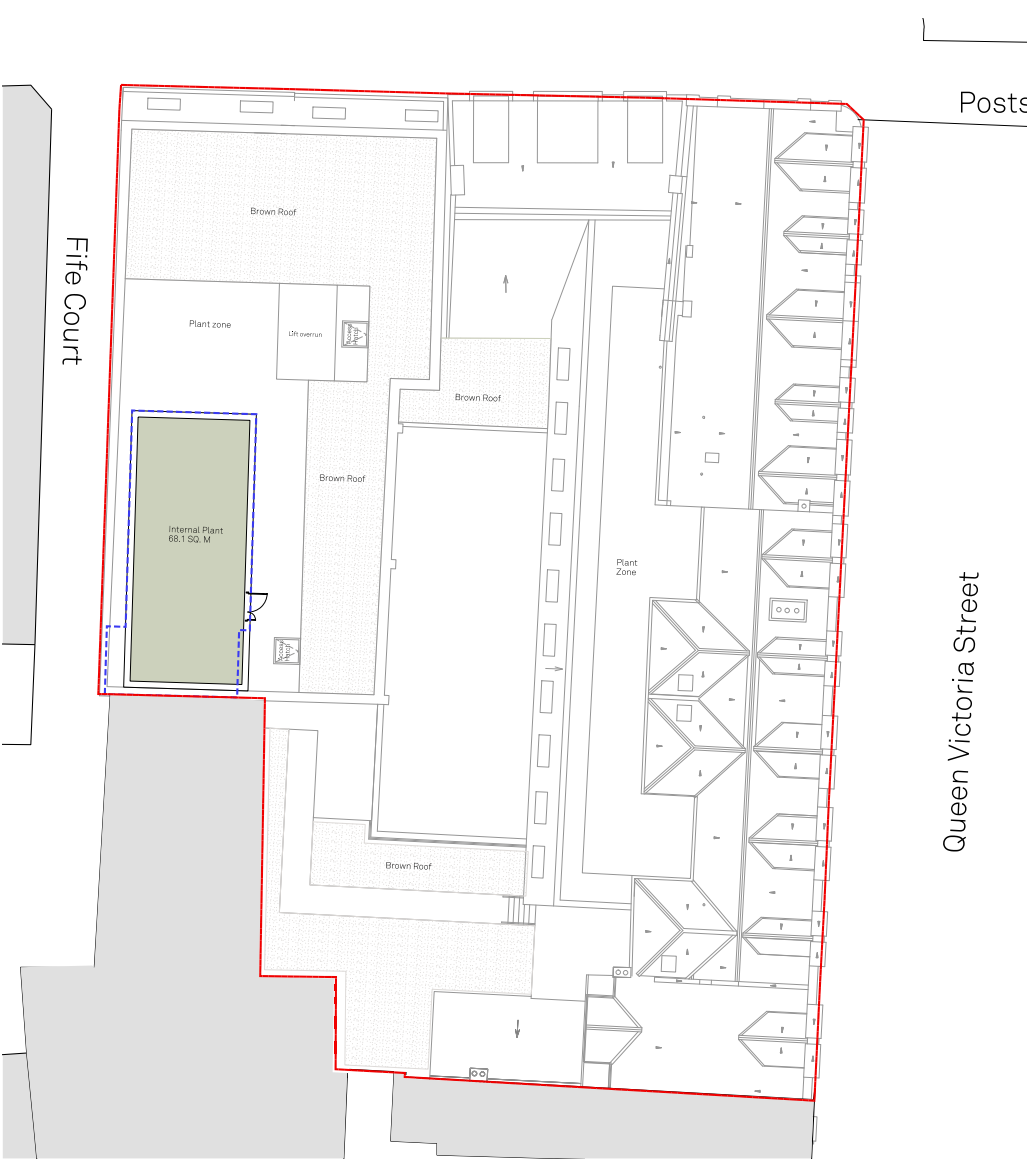
4.6 LAYOUTS

Lower Roof Plan

External plant consisting of air source heat pumps (ASHPs), condensers, air handling units (AHUs) and photovoltaic (PV) arrays will be located at roof level. Space for an external LV generator has also been allocated if required.



Consented plan



Proposed plan



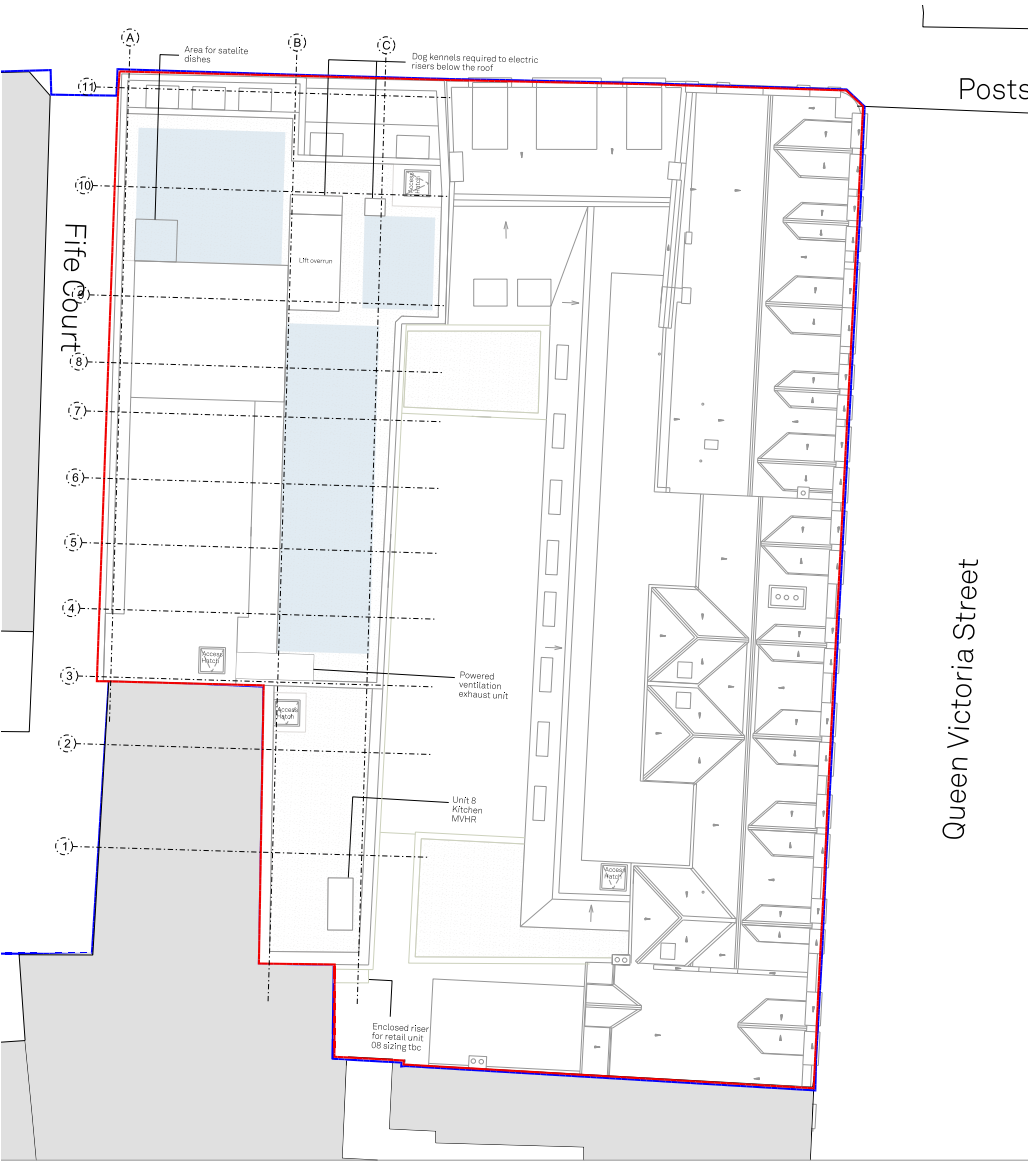
4.0 THE PROPOSAL

4.6 LAYOUTS

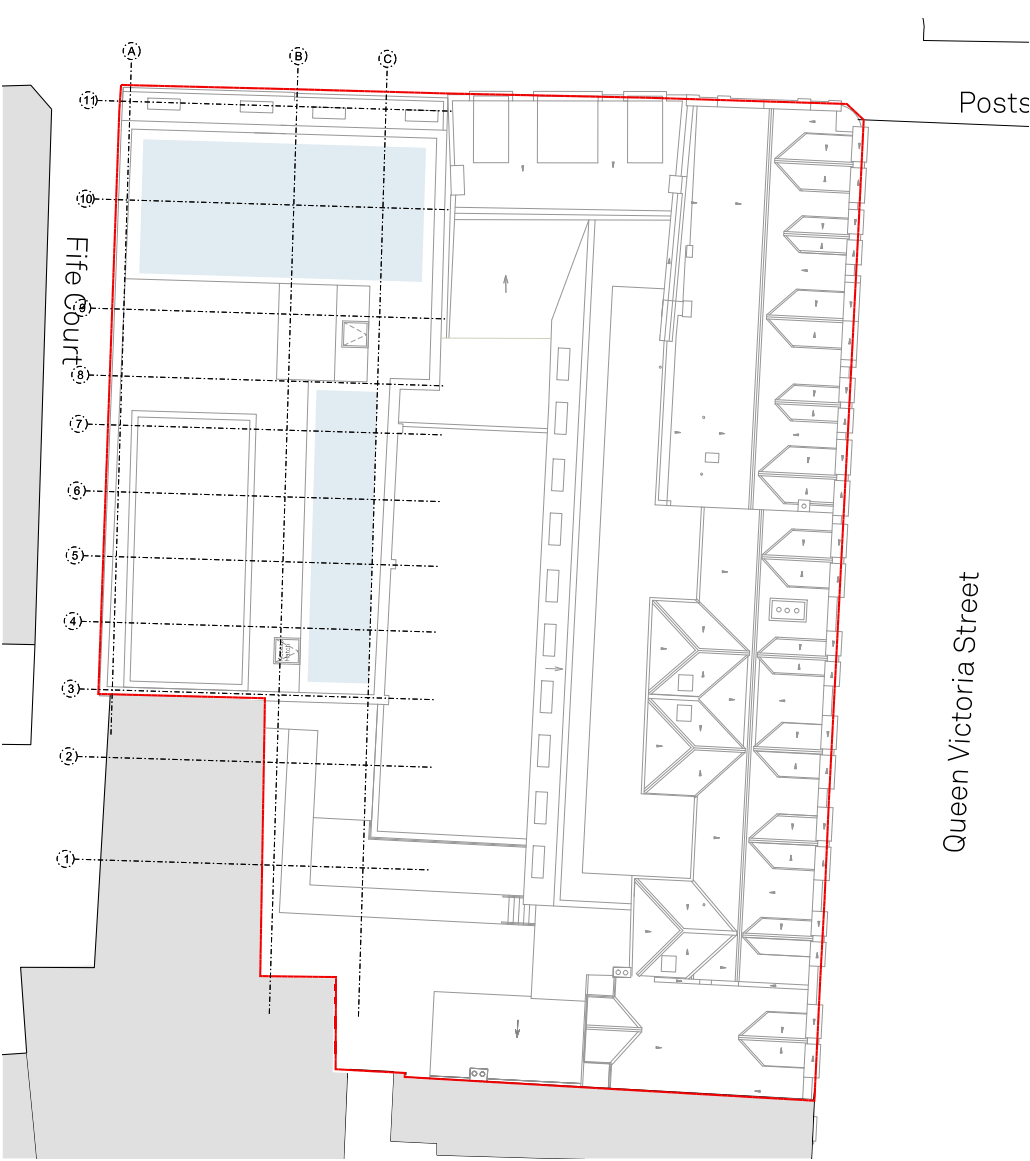
Upper Roof Plan

A roof top switch room will be provided to serve the roof mounted equipment and to house a potential LV generator switch panel.

Distribution will primarily be routed through designated services zones, noting that these will predominantly consist of the main ceiling voids and risers



Consented plan



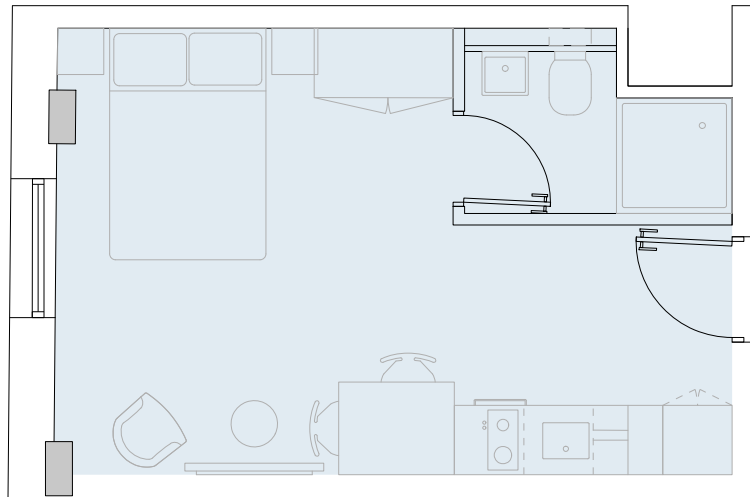
Proposed plan



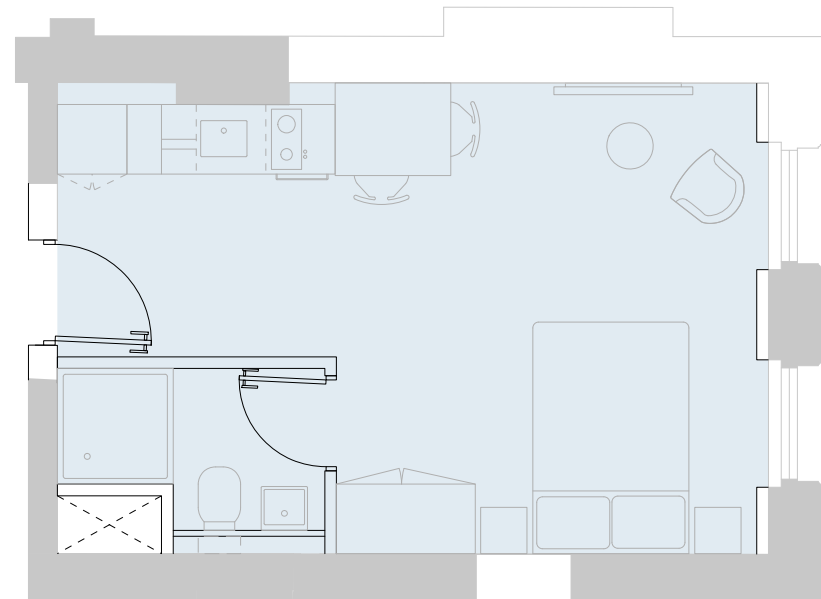
4.0 THE PROPOSAL

4.6 LAYOUTS

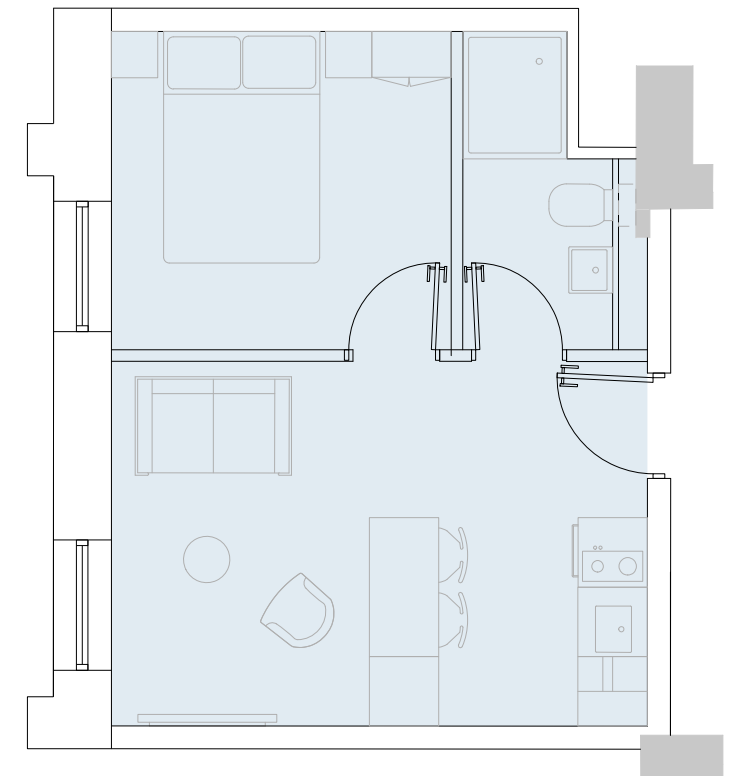
The scheme utilises a range of room typologies. All options have been developed in line with the Leonardo brand standards. Where necessary, the typologies have been modified to accommodate a greater mix of users and variation of building massing.



Type 1
Typical Compact Studio Apartment
Typical 20-23sqm Guest Room



Type 2
Typical Studio Apartment
Typical 24-26sqm Guest Room



Type 3
Typical One Bed Apartment
Typical 26sqm+ Guest Room

4.0 THE PROPOSAL

4.7 AREA SCHEDULE

Basement				
Unit No. /	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	
Aparthotel BOH/Plant		97.9		Back of House
Aparthotel BOH/Plant		51.8		Back of House
Lift lobby		10.1		Circulation
Retail Unit 02 (Lower)		109.6		Retail
Retail Unit 03 (Lower)		103.8		Retail
Retail Unit 04 (Lower)		84		Retail
Retail Unit 05 (Lower)		65.1		Retail
Retail Unit 06 (Lower)		90.5		Retail
Basement Aparthotel BoH NET Area		159.8	1720.1	
Basement Retail NET Area		453	4876.0	
Total NET Area		613	6596.1	
Proposed GIA		679.1	7309.8	

Ground				
Unit No. /	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Type
Retail Unit 01		192.7	2074.2	Retail
Retail Unit 02		106.7	1148.5	Retail
Retail Unit 03		95.7	1030.1	Retail
Retail Unit 04		102.6	1104.4	Retail
Retail Unit 05		91.9	989.2	Retail
Retail Unit 06		216.1	2326.1	Retail
Aparthotel Lobby		74.9	806.2	Front of house
Aparthotel F&B/ Social Space		67.8	729.8	Front of house
Aparthotel WCs		12.6	135.6	Front of house
Aparthotel Circulation		19.3	207.7	Front of house / Circulation
Baggage Store		4.2	45.2	Back of House
Aparthotel Comms		11.1	119.5	Back of House
Deliveries/Holding		12.3	132.4	Back of House
Food Prep		20.6	221.7	Back of House
Refuse		12.3	132.4	Back of House
Back Office		10.7	115.2	Back of House
BOH Circulation		32.3	347.7	Back of House / Circulation
Ground Aparthotel FoH NET Area		155.3	1671.6	
Ground Aparthotel BoH NET Area		71.2	766.4	
Ground Aparthotel Circulation NET Area		51.6	555.4	
Ground Retail NET Area		806	8672.5	
Total NET Area		1084	11665.9	
Proposed GIA		1203.6	12955.4	

First Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Type
Guestroom 01	1	29.8	320.8	Guestroom
Guestroom 02	1	30.5	328.3	Guestroom
Guestroom 03	1	24.8	266.9	Guestroom
Guestroom 04	1	22.4	241.1	Guestroom
Guestroom 05	1	23.1	248.6	Guestroom
Guestroom 06	1	20.6	221.7	Guestroom
Guestroom 07	1	20.3	218.5	Guestroom
Guestroom 08	1	20.2	217.4	Guestroom
Guestroom 09	1	24	258.3	Guestroom
Guestroom 10	1	23.6	254.0	Guestroom
Guestroom 11	1	20.6	221.7	Guestroom
Guestroom 12	1	23.2	249.7	Guestroom
Guestroom 13	1	29.1	313.2	Guestroom
Guestroom 14	1	30.3	326.1	Guestroom
Guestroom 15	1	22.8	245.4	Guestroom
Guestroom 16	1	23	247.6	Guestroom
Guestroom 17	1	22.9	246.5	Guestroom
Guestroom 18	1	22.8	245.4	Guestroom
Guestroom 19	1	22.9	246.5	Guestroom
Guestroom 20	1	26.6	286.3	Guestroom
Guestroom 21	1	22.6	243.3	Guestroom
Guestroom 22	1	21.9	235.7	Guestroom
Guestroom 23	1	23	247.6	Guestroom
Guestroom 24	1	20	215.3	Guestroom
Guestroom 25	1	19.7	212.0	Guestroom
Guestroom 26	1	19.8	213.1	Guestroom
Guestroom 27	1	20.2	217.4	Guestroom
Guestroom 28	1	19	204.5	Guestroom
Guestroom 29	1	25.6	275.6	Guestroom
Guestroom 30	1	21.7	233.6	Guestroom
Guestroom 31	1	18.5	199.1	Guestroom
Guestroom 32	1	19.3	207.7	Guestroom
Corridor		149.4	1608.1	Circulation
BOH Store		12.3	132.4	Back of House
First Floor Guest Rooms NET Area		734.8	7,909.3	
First Floor FoH NET Area		884.2	9,517.4	
First Floor BoH NET Area		12.3	132.4	
First Floor Circulation NET Area (not including lifts or stairs)		149.4	1,608.1	
Total Net Area		896.5	9,649.8	
Total First Floor Guestroom Count		32		
Proposed GIA		1,060.4	11,414.0	



4.0 THE PROPOSAL

4.7 AREA SCHEDULE

Second Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Room Type
Guestroom 1	1	30.3	326.1	Guestroom
Guestroom 2	1	30.9	332.6	Guestroom
Guestroom 3	1	24.8	266.9	Guestroom
Guestroom 4	1	22.4	241.1	Guestroom
Guestroom 5	1	23.1	248.6	Guestroom
Guestroom 6	1	20.6	221.7	Guestroom
Guestroom 7	1	20.3	218.5	Guestroom
Guestroom 8	1	20.0	215.3	Guestroom
Guestroom 9	1	24.3	261.6	Guestroom
Guestroom 10	1	23.8	256.2	Guestroom
Guestroom 11	1	20.7	222.8	Guestroom
Guestroom 12	1	23.4	251.9	Guestroom
Guestroom 13	1	21.3	229.3	Guestroom
Guestroom 14	1	20.6	221.7	Guestroom
Guestroom 15	1	23.0	247.6	Guestroom
Guestroom 16	1	23.0	247.6	Guestroom
Guestroom 17	1	22.9	246.5	Guestroom
Guestroom 18	1	22.8	245.4	Guestroom
Guestroom 19	1	22.9	246.5	Guestroom
Guestroom 20	1	26.7	287.4	Guestroom
Guestroom 21	1	22.6	243.3	Guestroom
Guestroom 22	1	21.9	235.7	Guestroom
Guestroom 23	1	23.0	247.6	Guestroom
Guestroom 24	1	20.0	215.3	Guestroom
Guestroom 25	1	19.7	212.0	Guestroom
Guestroom 26	1	19.8	213.1	Guestroom
Guestroom 27	1	20.2	217.4	Guestroom
Guestroom 28	1	19.0	204.5	Guestroom
Guestroom 29	1	25.6	275.6	Guestroom
Guestroom 30	1	21.7	233.6	Guestroom
Guestroom 31	1	18.5	199.1	Guestroom
Guestroom 32	1	19.3	207.7	Guestroom
Corridor		148.7	1600.6	Circulation
BOH Store		12.3	132.4	Back of House
Second Floor Guest Room NET Area		719.1	7740.3	
Second Floor FoH NET Area		867.8	9340.9	
Second Floor BoH NET Area		12.3	132.4	
Second Floor Circulation NET Area (not including lifts or stairs)		148.7	1600.6	
Total Net Area		880.1	9473.3	
Total Second Floor Guestroom Count		32		
Proposed GIA		1,034.9	11139.6	

Third Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Room Type
Guestroom 01	1	26.4	284.2	Guestroom
Guestroom 02	1	26.9	289.5	Guestroom
Guestroom 03	1	25.7	276.6	Guestroom
Guestroom 04	1	21.8	234.7	Guestroom
Guestroom 05	1	23.4	251.9	Guestroom
Guestroom 06	1	20.8	223.9	Guestroom
Guestroom 07	1	20.5	220.7	Guestroom
Guestroom 08	1	20.3	218.5	Guestroom
Guestroom 09	1	23.2	249.7	Guestroom
Guestroom 10	1	23.7	255.1	Guestroom
Guestroom 11	1	21.0	226.0	Guestroom
Guestroom 12	1	23.6	254.0	Guestroom
Guestroom 13	1	20.0	215.3	Guestroom
Guestroom 14	1	20.0	215.3	Guestroom
Guestroom 15	1	22.8	245.4	Guestroom
Guestroom 16	1	22.8	245.4	Guestroom
Guestroom 17	1	22.7	244.3	Guestroom
Guestroom 18	1	22.6	243.3	Guestroom
Guestroom 19	1	22.9	246.5	Guestroom
Guestroom 20	1	22.6	243.3	Guestroom
Guestroom 21	1	21.9	235.7	Guestroom
Guestroom 22	1	23.0	247.6	Guestroom
Guestroom 23	1	20.0	215.3	Guestroom
Guestroom 24	1	19.7	212.0	Guestroom
Guestroom 25	1	19.8	213.1	Guestroom
Guestroom 26	1	20.2	217.4	Guestroom
Guestroom 27	1	19.0	204.5	Guestroom
Guestroom 28	1	25.6	275.6	Guestroom
Guestroom 29	1	21.7	233.6	Guestroom
Guestroom 30	1	18.5	199.1	Guestroom
Guestroom 31	1	19.3	207.7	Guestroom
Corridor		149.1	1604.9	Circulation
BOH Store		12.3	132.4	Back of House
Comms		4.5	48.4	Back of House
BOH Store/Plant		22.6	243.3	Back of House
Third Floor Guest Room NET Area		682.4	7345.3	
Third Floor FoH NET Area		831.5	8950.2	
Third Floor BoH NET Area		39.4	424.1	
Third Floor Circulation NET Area (not including lifts or stairs)		149.1	1604.9	
Total Net Area		870.9	9374.3	
Total Third Floor Guestroom Count		31		
Proposed GIA		1,016.3	10939.4	



4.0 THE PROPOSAL

4.7 AREA SCHEDULE

Third Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Room Type
Guestroom 01	1	26.4	284.2	Guestroom
Guestroom 02	1	26.9	289.5	Guestroom
Guestroom 03	1	25.7	276.6	Guestroom
Guestroom 04	1	21.8	234.7	Guestroom
Guestroom 05	1	23.4	251.9	Guestroom
Guestroom 06	1	20.8	223.9	Guestroom
Guestroom 07	1	20.5	220.7	Guestroom
Guestroom 08	1	20.3	218.5	Guestroom
Guestroom 09	1	23.2	249.7	Guestroom
Guestroom 10	1	23.7	255.1	Guestroom
Guestroom 11	1	21.0	226.0	Guestroom
Guestroom 12	1	23.6	254.0	Guestroom
Guestroom 13	1	20.0	215.3	Guestroom
Guestroom 14	1	20.0	215.3	Guestroom
Guestroom 15	1	22.8	245.4	Guestroom
Guestroom 16	1	22.8	245.4	Guestroom
Guestroom 17	1	22.7	244.3	Guestroom
Guestroom 18	1	22.6	243.3	Guestroom
Guestroom 19	1	22.9	246.5	Guestroom
Guestroom 20	1	22.6	243.3	Guestroom
Guestroom 21	1	21.9	235.7	Guestroom
Guestroom 22	1	23.0	247.6	Guestroom
Guestroom 23	1	20.0	215.3	Guestroom
Guestroom 24	1	19.7	212.0	Guestroom
Guestroom 25	1	19.8	213.1	Guestroom
Guestroom 26	1	20.2	217.4	Guestroom
Guestroom 27	1	19.0	204.5	Guestroom
Guestroom 28	1	25.6	275.6	Guestroom
Guestroom 29	1	21.7	233.6	Guestroom
Guestroom 30	1	18.5	199.1	Guestroom
Guestroom 31	1	19.3	207.7	Guestroom
Corridor		149.1	1604.9	Circulation
BOH Store		12.3	132.4	Back of House
Comms		4.5	48.4	Back of House
BOH Store/Plant		22.6	243.3	Back of House
Third Floor Guest Room NET Area		682.4	7345.3	
Third Floor FoH NET Area		831.5	8950.2	
Third Floor BoH NET Area		39.4	424.1	
Third Floor Circulation NET Area (not including lifts or stairs)		149.1	1604.9	
Total Net Area		870.9	9374.3	
Total Third Floor Guestroom Count		31		
Proposed GIA		1,016.3	10939.4	

Fourth Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Room Type
Guestroom 01	1	22.6	243.3	Guestroom
Guestroom 02	1	21.9	235.7	Guestroom
Guestroom 03	1	23.0	247.6	Guestroom
Guestroom 04	1	20.0	215.3	Guestroom
Guestroom 05	1	19.7	212.0	Guestroom
Guestroom 06	1	19.8	213.1	Guestroom
Guestroom 07	1	20.2	217.4	Guestroom
Guestroom 08	1	19.0	204.5	Guestroom
Guestroom 09	1	24.8	266.9	Guestroom
Guestroom 10	1	20.8	223.9	Guestroom
Guestroom 11	1	26.9	289.5	Guestroom
Corridor		55.7	599.5	Circulation Area
Store		16.1	173.3	Back of House
Fourth Floor Guest Room NET Area		238.7	2569.3	
Fourth Floor FoH NET Area		294.4	3168.9	
Fourth Floor BoH NET Area		16.1	173.3	
Fourth Floor Circulation NET Area (not including lifts or stairs)		55.7	599.5	
Total Net Area		310.5	3342.2	
Total Fourth Floor Guestroom Count		11		
Proposed GIA		369.1	3973.0	

Fifth Floor Plan				
Unit No.	Guestroom Count	c. Net area (sq.m.)	c. Net area (sq.ft.)	Room Type
Internal Plant		68.0	731.9	Plant
Fifth Floor BoH NET Area		68.0	731.9	
Total Net Area		68.0	731.9	
Proposed GIA		68.0	731.9	

FINAL TOTALS		c. Net area (sq.m.)	c. Net area (sq.ft.)
Total FoH NET Area		3033.2	32649.1
Total Guest Room NET Area		2375.0	25564.3
Total BoH NET Area		379.1	4080.6
Total Circulation NET Area (not including lifts or stairs)		554.5	5968.6
Total Retail NET Area		1258.7	13548.5
Total NET Area		4722.6	50833.6
Total Proposed GIA		5,431.4	58463.0
Total Guestroom Count		106	

- Note, all areas are:
- Approximate
 - Subject to detailed site survey
 - Subject to detailed planning consent
 - Subject to building regulations approval
 - Subject to consultant input and detailed design development



5.0 ACCESS AND MAINTENANCE

5.1 TRANSPORT STRATEGY

Overview

Servicing and access arrangements will remain largely the same as the consented scheme.

The location of the site is such that there is a well-established network of pedestrian and cycle routes along key highway links providing excellent connectivity to destinations throughout Reading as well as nearby bus stops and Reading railway station. This offers guests and staff with realistic opportunities to travel to the site by sustainable modes of transport.

Deliveries and servicing arrangements associated with the existing uses takes place from Queen Victoria Street during the designated hours or from Friar Street / Station Road using the existing loading bays. It is considered that there is sufficient capacity on Queen Victoria Street and other local loading bays to accommodate the delivery and servicing required generated by the proposed development.

The apart-hotel is provided with a service entrance on the western boundary, accessed from Fife Court. It is proposed that linen collection/delivery and food deliveries would take place from Fife Court with vehicles sizes not exceeding a 4.6T van due to existing access constraints along Fife Court.

KEY:

Bus stop

Existing loading bay

Loading bay proposed to be ammended to allow 11pm - 8am and 11am-2pm maximum dwell time 1 hour

Hotel entrance

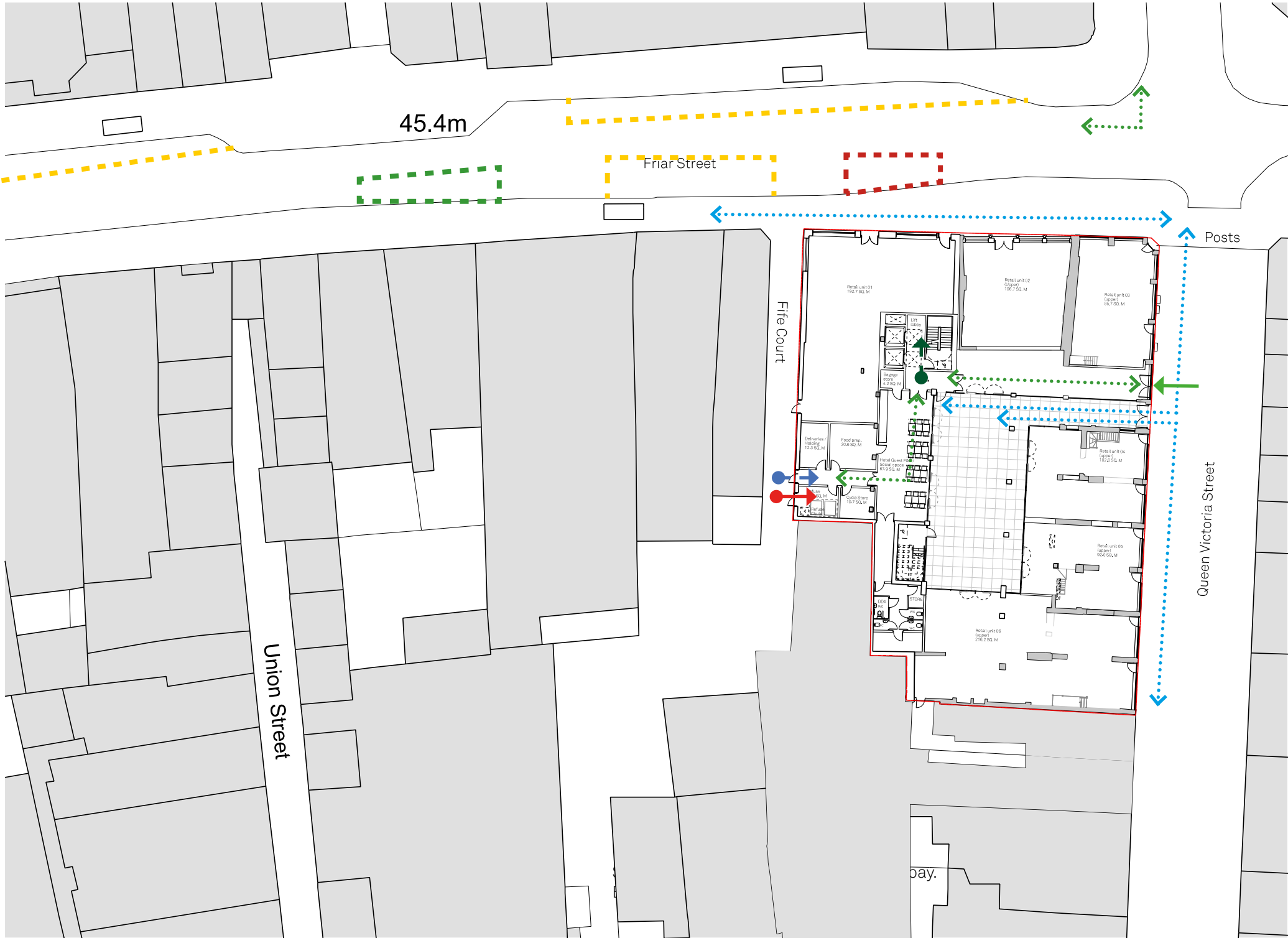
Level access to lifts

Hotel delivery access

Refuse access

Plant maintenance access

Pedestrian Access to Site



Proposed location plan illustrating existing and proposed loading bays

5.0 ACCESS AND MAINTENANCE

5.2 TRANSPORT AND SERVICING

Pedestrian and Cycle Accessibility

Given it's central location, the site bares close proximity to frequent public transport services and established pedestrian / cycle routes which provide excellent opportunity for end-users to travel by sustainable means and reduce reliance on travel by private car. The development will retain pedestrian access from Queen Victoria Street and Friar Street along with the creation of a public realm area accessed from Queen Victoria Street.

Cycle parking will be provided in accordance with the Reading Borough Local Development Framework, Revised Parking Standards and Design SPG (2011) which requires 1 space per 6 staff. There is expected to be a maximum of 20 staff on site at any one time and therefore, a total of 4 cycle parking spaces will be provided.

The combination of the cycle parking on site and additional stands within the surrounding area, provide ample opportunity for cyclists arriving at the site to securely park bicycles without requiring a prohibitive journey on foot to the site.

Refer to Transport Statement for further detail.

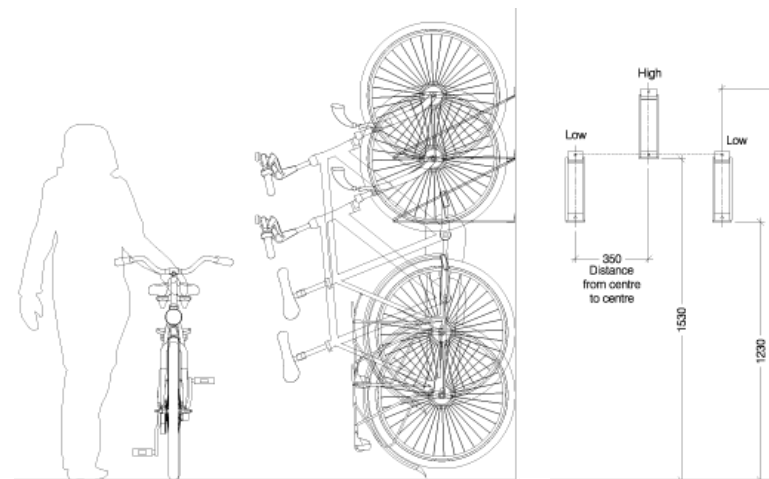
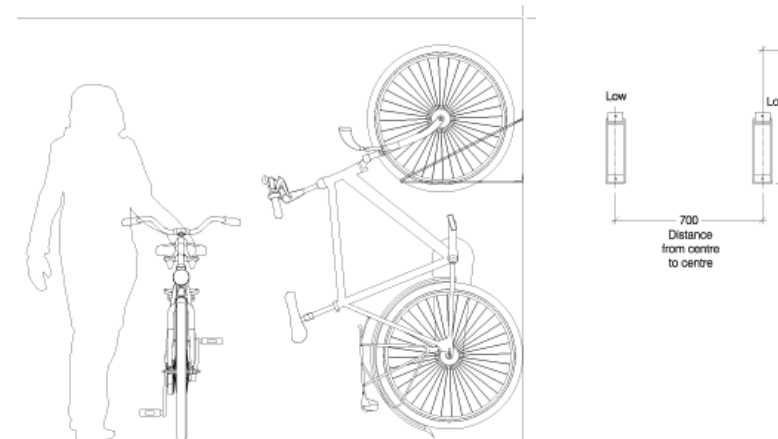
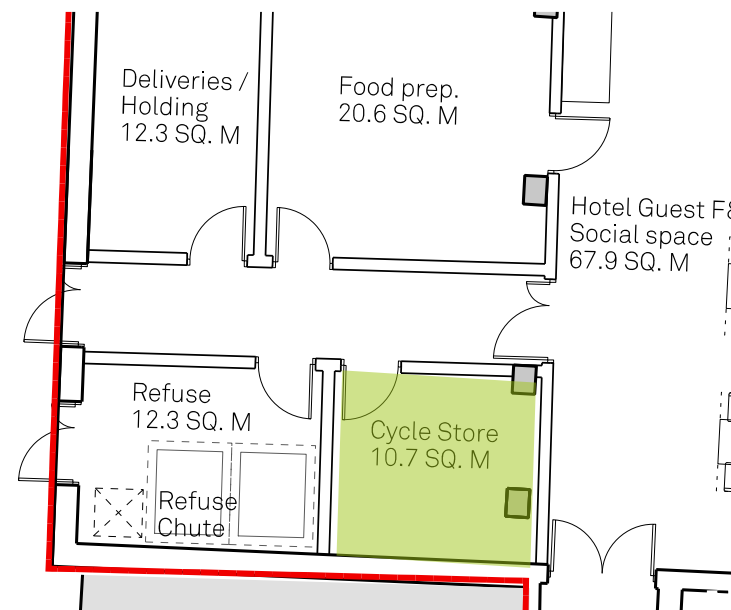


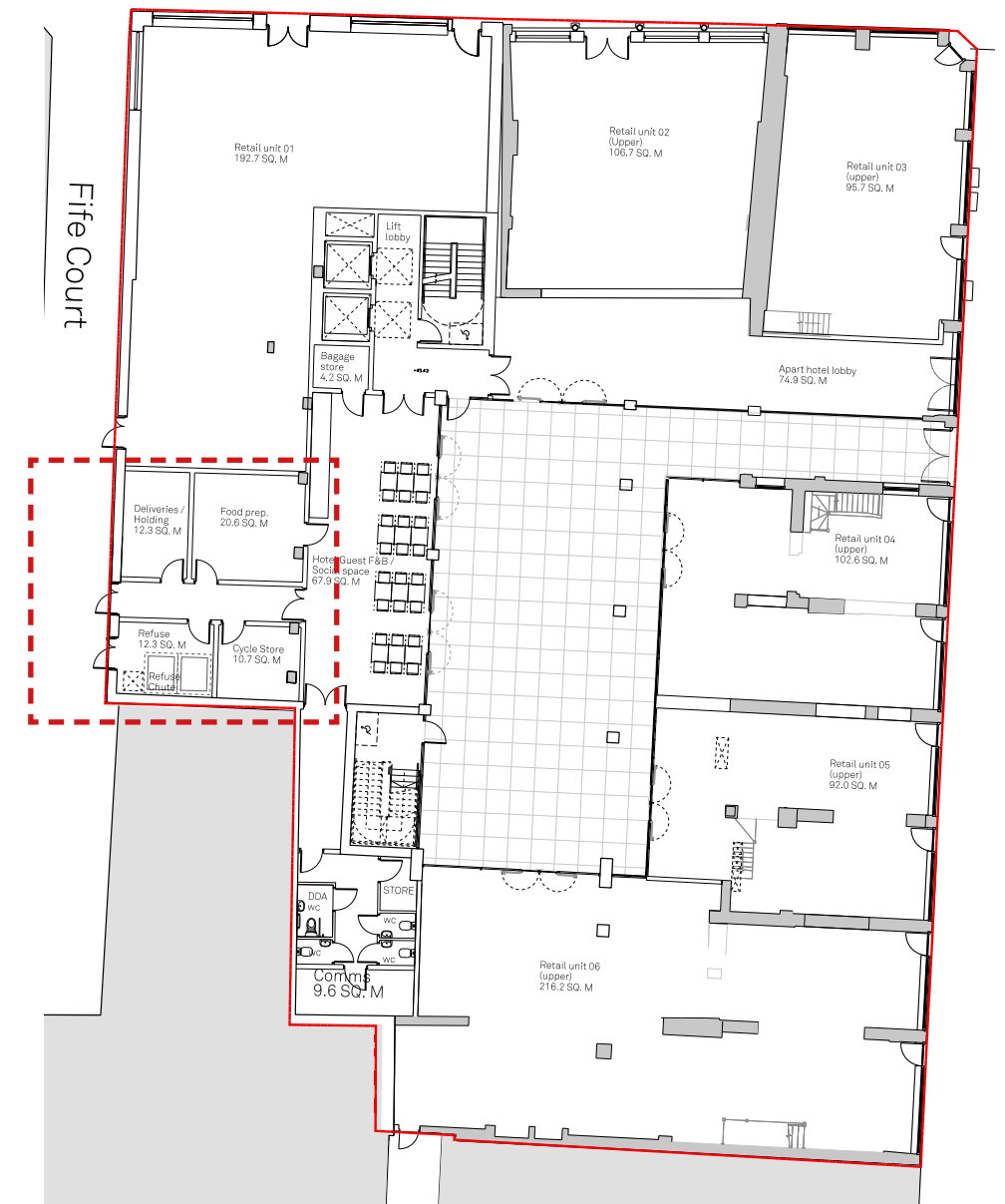
Illustration of vertical bike stand at varying mounting configurations from side and front elevation.



High - low configuration (left) low configuration (above).



Ground floor plan highlighting location of aparthotel cycle zone in green.



Ground floor plan highlighting location of aparthotel cycle zone.

5.0 ACCESS AND MAINTENANCE

5.3 SERVICING AND REFUSE

Retail

Currently, the retail units along Queen Victoria Street and Friar Street are all serviced from the front, with the individual units holding waste internally. This waste is bagged and separated into general waste, dry mixed recycling, and paper and card. This separated waste is then placed on the street on pre-agreed days ready for collection during the hours of 10 am and 6 pm.

It is envisaged that the existing retail units will continue to be serviced from the front as currently is the case. It is also proposed that the additional three retail units in the market space will also be serviced in this way, with waste placed on Queen Victoria Street in the same manner.

Apart hotel

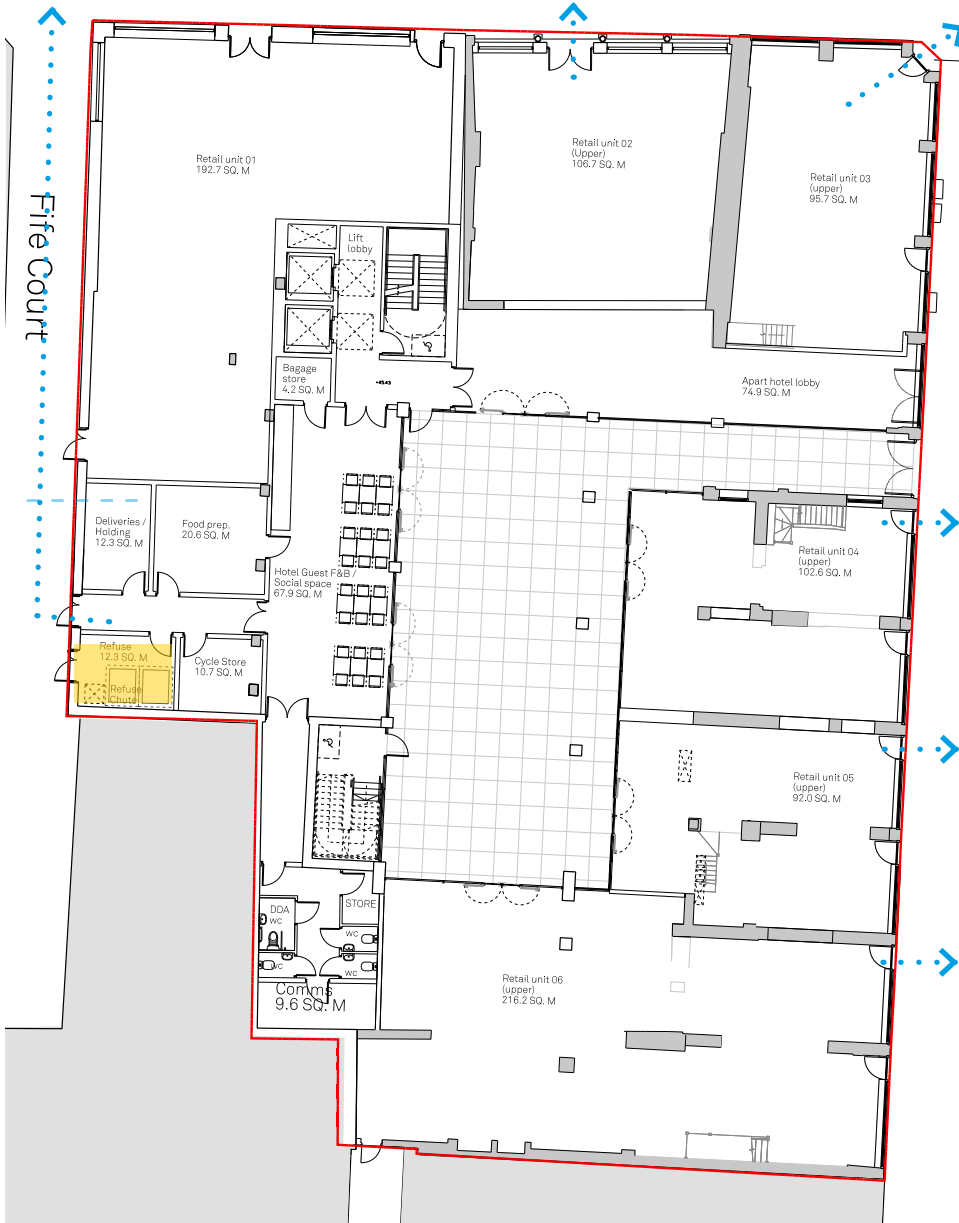
It is proposed that the waste and recycling collections and deliveries will be managed by a private collection company. Bins will be wheeled from the designated refuse store on Fife Court to Friar Street and the collection arrangements and carry distances would be agreed with the appointed contractor.

A self-contained bin store will be constructed off Fife court enabling easy access and for the bins to be collected and returned as the bin lorry arrives at the roadside. The bin store will be suitably ventilated, will house 1100l bins, and will be serviced by a private waste collection company. Waste will be separated at the source, with separate general waste and recycling bins in each kitchen throughout the building. This will then be collected as each apartment is cleaned and moved to the refuse store on the ground floor by cleaning staff. It is envisaged that the waste collection by the private collection company will be required 2-3 times per week, however, during busy periods this may increase to daily.

The aparthotel will also have requirements for servicing such as removing and replacing bed linen. There will not be any on-site cleaning facilities, therefore, dirty and clean linen will be stored on-site with regular deliveries to collect and return linen.



KEY:
■ Refuse Store to aparthotel
➡ Servicing routes



Ground floor plan highlighting aparthotel refuse store in yellow and servicing routes in blue

5.0 ACCESS AND MAINTENANCE

5.4 SECURITY AND MANAGEMENT

Security Estate management and lighting Principals

As per consented scheme, the principles of the security strategy are to promote community safety and remove, where possible, the fear of crime through sensible design of the built form. Whilst it is inevitable that this will be enhanced by way of digital surveillance, the promotion of natural surveillance is the primary objective. The nature of the market square behind the main high street will require some form of restricted access during the hours of darkness, however, the intention is that users of the aparthotel will be given 24 hour access.

Given the central city centre location, the site will benefit from natural surveillance of the busy high street and the digital surveillance of the on-street CCTV network. Therefore the main high street shops will largely be unaffected from the current situation. Most retail units from Queen Victoria Street and Friar Street will have their own dedicated CCTV to protect the premise they are responsible for.

As for the Aparthotel, it will be essential that unauthorised access is designed out and the pre-application consultee advice of the Crime Prevention Design Advisor has been taken into account to ensure this is achieved. It is noted that 'Secured By Design' accreditation is not considered applicable to this application.

The new courtyard will require adequate lighting to ensure the area is well-lit and does not create any dark corners that are difficult to monitor via CCTV.

A more detailed proposal will be secured by way of condition, however, the principle of the proposal will be to light the undercroft and cut-through with high-level soffit lights.

This will be supplemented with up/down lights on the piers of both the colonnade and new retail units. Some further security

Estate Management

Thackeray Estates' Managing Agents would be responsible for management of the buildings and the courtyard and will ensure compliance with statutory regulations and public safety. It is the intention that a management office will be set up in the scheme (the exact location is yet to be determined but will be within the basement area) and this will provide management and security resources for the scheme.

The Managing Agents will provide a 24 hours, seven days a week contact number to allow residents, retailers and occupiers to raise any issues of concern to be resolved as a matter of priority. There will be a thorough and transparent system for recording calls and reporting progress and resolution.

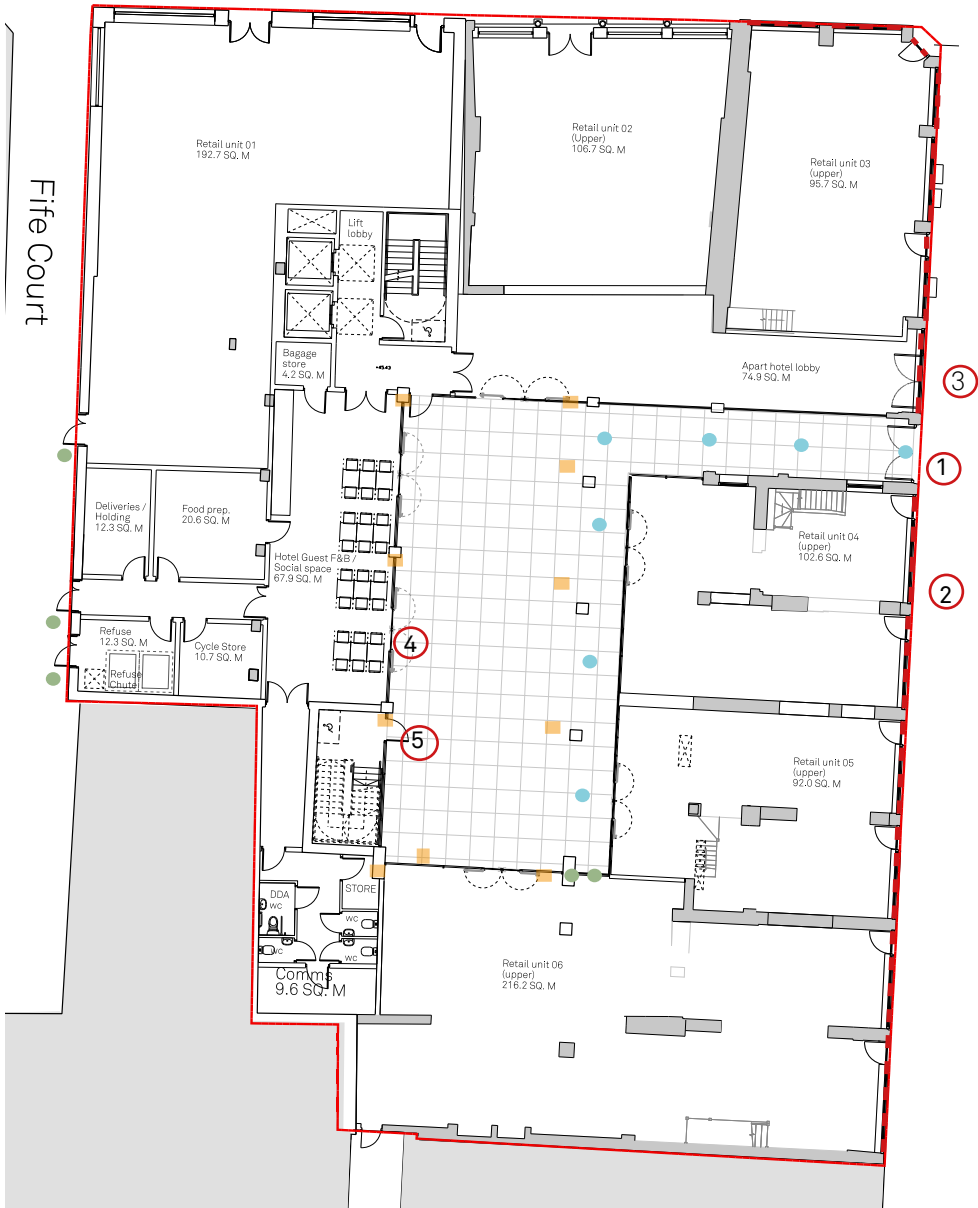
Fire Safety Provisions – a fire safety strategy would be developed, which would be consulted with and agreed with the Fire Authority.

The principle of the security strategy is to promote community safety and remove, where possible, the fear of crime through sensible design of the built form. The pre-application consultee advice of the Crime Prevention Design Advisor has been considered to ensure this is achieved.

KEY:

- 1. Secure entry gate to be locked out of hours
- 2. Retail units to be secured internally if required by individual tenant
- 3. Main entrance to aparthotel
- 4. Door to be locked out of hours
- 5. Fire escape only, no access

- Up/down Lighting
- Soft Lighting
- Security Lighting



6.0 FIRE STRATEGY

6.1 FIRE STRATEGY

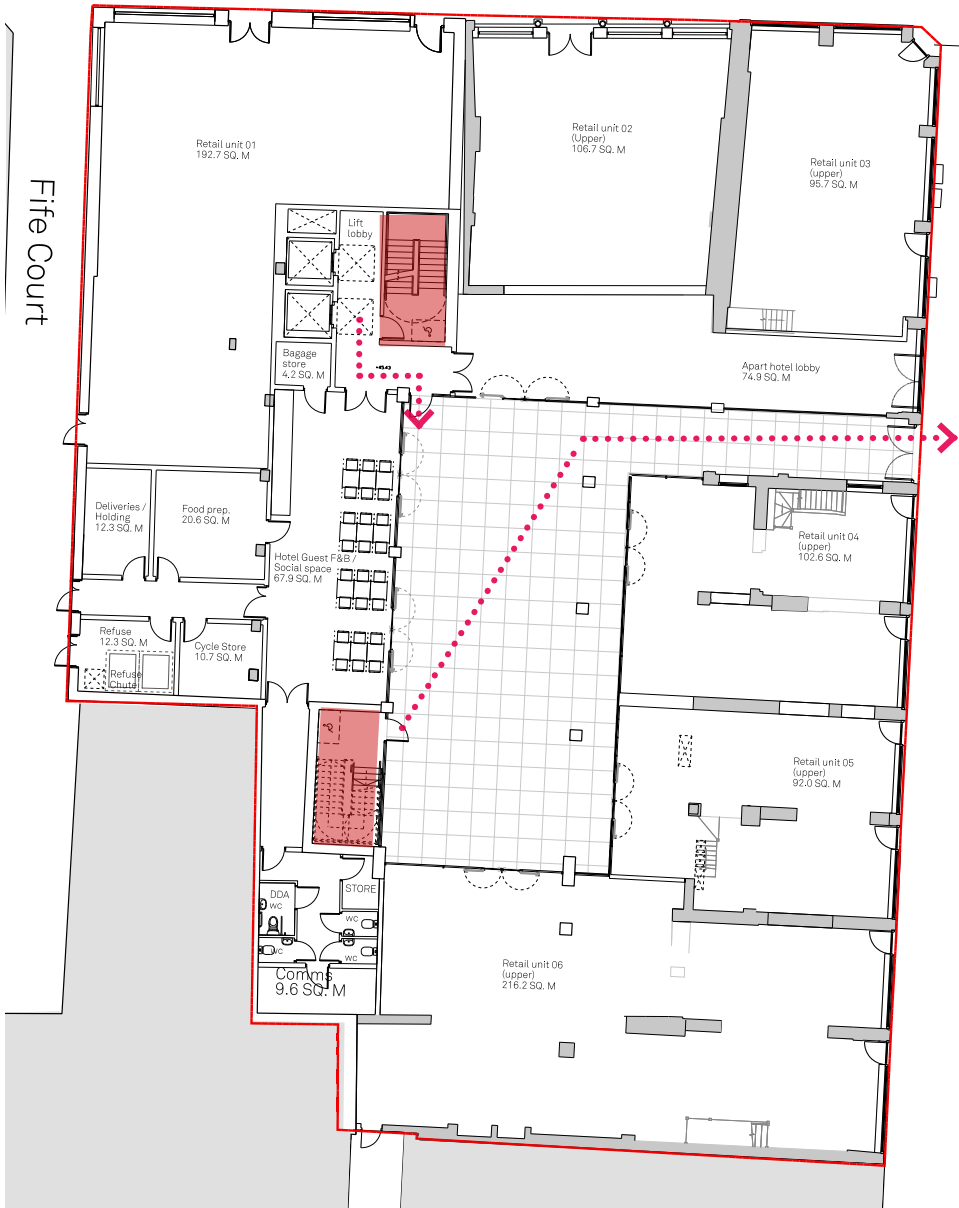
The scheme has been developed in compliance with fire safety approved document.

	Information/Requirement	AD B2 Ref
Travel Distances	Within Bedrooms Single direction - 9m Bedroom Corridors Single direction – 9m More than one direction - 35m Elsewhere Single direction – 18m More than one direction - 35m	Table 2.1
Inner Rooms	Permitted if they are not a bedroom	2.11
Minimum Number of Protected Stairways	Minimum of two stairs (building >11m & travel distances >9m)*	3.3
Stairway Widths	1,000mm for simultaneous evacuation	Table 3.2
Refuges	One refuge required per protected stairway	3.4
Fire Resistance of Structure	60 minutes	Table B4
Compartment Walls	60 minutes (each side separately)	Table B3
Compartment Floors	60 minutes (from underside)	Table B3/B4
Firefighting Shaft	Not required, building <18m	17.2
Number of Firefighting Shafts	None (Building height <18m)	17.5
Firefighting Lift	Not required building <18m	17.2
Firefighting Lobby	Not required	
Dry/Wet Riser	Likely to be required	15.1
Fire Alarm System	Category L1 or L2 (all areas with more than 1m ² floor area covered)	1.4 BS5839 Part 1 Annex A
Sprinklers	Not required However this is recommended to enhance the fire protection for the building, improving occupant safety and building protection	8.14
Smoke Control	Basement area required – area >200 m ² Other areas no requirements	18.3

KEY:

Fire escape core

Direction of travel / safety of outside the building



7.0 SUSTAINABILITY

7.1 BREEAM

Summary

The energy strategy for the ‘1-15 Queen Victoria Street & 145-148 Friar Street’ development has been developed to comply with Building Regulations Part L 2013 and the policies of Reading Borough Council (RBC). The proposal seeks to achieve BREEAM excellent.

The RBC sustainable Design and Construction SPD 2019 requires new developments above 1000m2 to achieve BREEAM Excellent. The development comprises the refurbishment of the listed building at 1-15 Queen Victoria Street and parts of 145 Friar Street with new extensions filling in demolished spaces.

It will be assessed as BREEAM 2014 Bespoke Refurbishment and Fit-out, based on the client brief and majority of floor area being Refurbishment and Fit-out. Note that the basis of this assessment is using the RFO 2014 V2 scheme as the majority of the floor space is constrained by existing building. In order to represent the building more accurately, and ensure a single assessment, a bespoke approach is recommended. Note there will be small changes in criteria determined by the outcome of the BRE’s bespoke registration assessment.

The proposed energy strategy includes:

- + High performing fabric for new build and refurbished elements
- + High performance VRF heat pump heating and cooling
- + Heat pumps for DHW
- + MVHR for ventilation
- + High performance LEDs throughout with presence/absence detection
- + 130m2 PV on the roof

Retention

The proposal seeks to retain and extend a significant amount of existing building as possible. Overall, a combined percentage of over 50% can be attributed

Photovoltaic

A monocrystalline photovoltaic (PV) system will be provided across the development to achieve compliance with all relevant British standards, Building Regulations and Industry Standard such as regulated Carbon Dioxide emissions, as defined under approved Documents Part L2.

In addition, the system will be provided to ensure an Energy performance Certificate (EPC) rating of A.

Adaptation to Climate Change

The following measures shall be incorporated into development:

+ Wherever possible, new buildings shall be orientated to maximise the opportunities for both natural heating and ventilation and reducing exposure to wind and other elements.

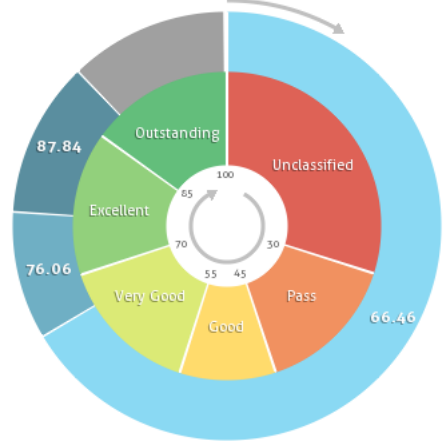
+ Proposals involving both new and existing buildings shall demonstrate how they have been designed to maximise resistance and resilience to climate change for example by including measures such as solar shading, thermal mass, heating, and ventilation of the building and appropriately coloured materials in areas exposed to direct sunlight, green and brown roofs, green walls, etc

	Total Credits Available	Weighting	Scenario 1	Scenario 2	Scenario 3
Management	21	14.64%	17	18	21
Health & Wellbeing	20	16.63%	12	13	14
Energy	26	18.26%	18	21	22
Transport	9	7.32%	7	9	9
Water	9	7.32%	6	6	6
Materials	13	15.25%	8	8	11
Waste	11	8.39%	7	9	10
Pollution	13	12.20%	5	8	10
Exemplary/Innovation	10	10%	2	2	4
Total	132		82	94	107
Score			66.46%	76.06%	87.84%

Current Scores

- 66.46 Scenario 1
- 76.06 Scenario 2
- 87.84 Scenario 3
- Unachievable

BREEAM Score Chart



	QVSI	QVSI +
Retained (m2)	NA	632
Extended (m2)	668	151
New (m2)		736
Total Retained	632	
Total New	1555	
Retained Area percentage	41%	

Retention and new construction table

BREEAM assessment scoring table and chart



7.0 SUSTAINABILITY

7.2 MECHANICAL SERVICING

M+E Principles

The mechanical services within the development will be as per the consented scheme and will generally comprise of the following:

- Primary heating and cooling will be provided via roof mounted VRF condenser units / air source heat pumps (ASHPs). Space heating and cooling to each guest room, all public areas, food prep area and offices will be provided by ducted fan coil units located within bulkheads and ceiling void.

- Each guest room on the western side of the building will be provided with an individual MVHR unit located within the entrance bulkhead.

Each guest room on the eastern side of the building will be served by a centralised ventilation system, consisting of an air handling unit at roof level and/ supply / extract grilles in each room as required.

Each retail unit will be provided with detected intake and exhaust louvres integrated into the façade/ signage on courtyard side, retail units 2 and 3 will require louvres integrated into shop front signage as they are not directly connected to the courtyard area. Kitchen areas will be served by dedicated supply and extract ventilation units located at roof level.

- Hot water generation via ASHPs with gas boiler top up

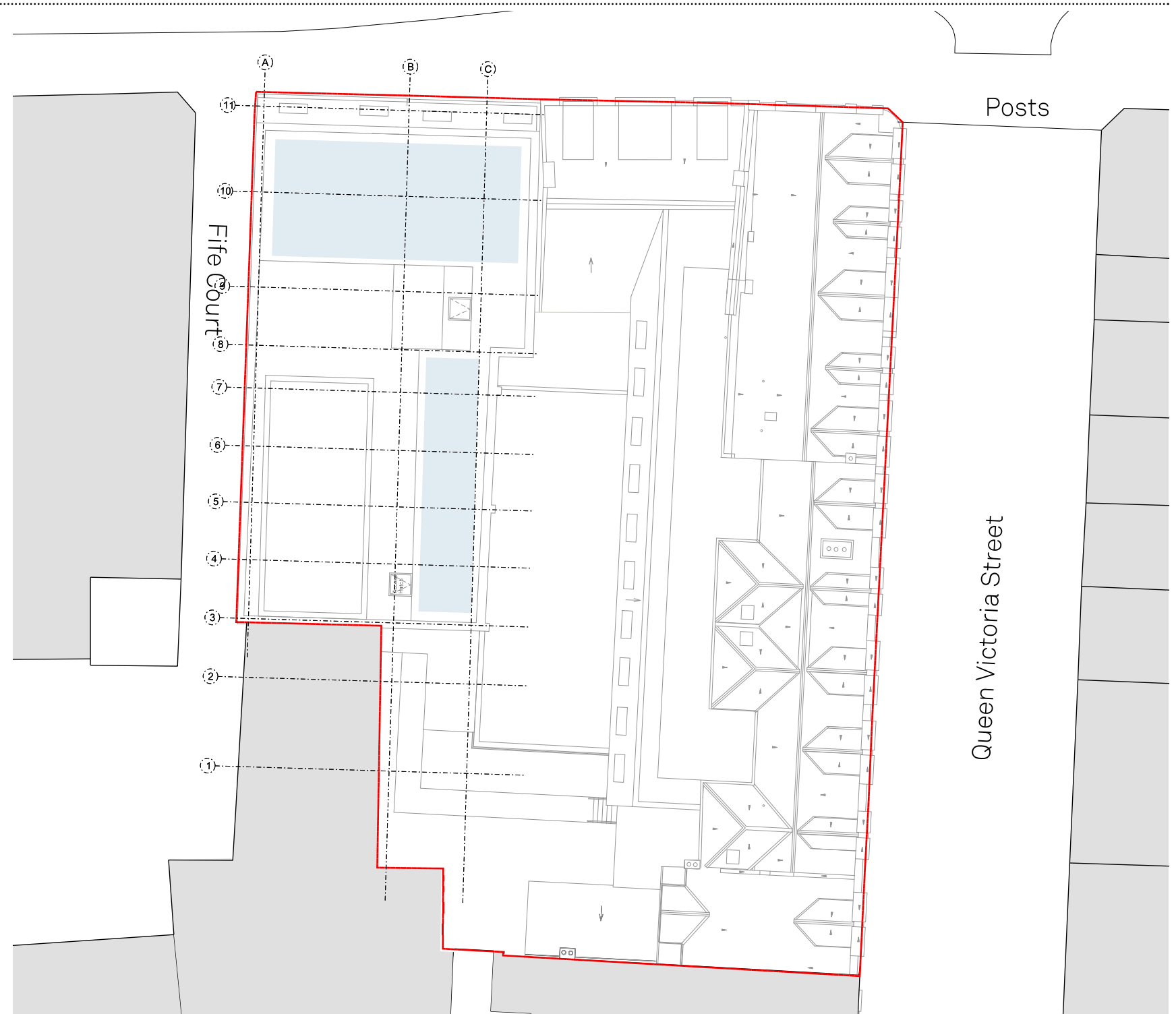
Suds

To provide source control and minimise runoff from the new building, a brown/blue roof will cover 240m² (collecting 35% of the runoff from the site) and 150m² (9% of the site area) will be designed as permeable paving with the potential for attenuation to be provided beneath the permeable paving using permavoid subject to detailed design.

Photovoltaic

A monocrystalline photovoltaic (PV) system will be provided across the development to achieve compliance with all relevant British standards, Building Regulations and Industry Standard such as regulated Carbon Dioxide emissions, as defined under approved Documents Part L2.

In addition, the system will be provided to ensure an Energy performance Certificate (EPC) rating of A.



Roof Plan: PV coverage (illustrated with hatch) and Plant Zone.

7.0 SUSTAINABILITY

7.3 DRAINAGE SYSTEMS

Site Drainage

A flood risk assessment (including drainage assessment) has been undertaken for the proposed development. In accordance with the SuDS hierarchy and best practice guidance, source control measures such as green roofs should preferably be used in conjunction with infiltration forms of SuDS, such as permeable paving, soakaways, swales and soakage basins being used where viable to manage surface water as close to source as possible.

The site is covered 100% with hard surfacing, with the majority of the site (>95%) covered by buildings. A small passageway runs to the rear of the terraced properties on QVS.

If infiltration is not viable, or if attenuation of surface water is required, then above ground attenuation systems such as blue roofs, detention basins and ponds will ideally need to be used to ensure runoff is attenuated and restricted to greenfield run off rates prior to discharge to a suitable water body.

Comparison with Consented scheme

It is intended for the proposed scheme to achieve the same level of permeable areas as the consented scheme .

Consented scheme (221232/211233)
Intended impermeable area - 815sqm
Intended permeable area - 366sqm

Proposed scheme Intended impermeable area - 815sqm
Intended permeable area (paving + brown/green roof) - 366sqm

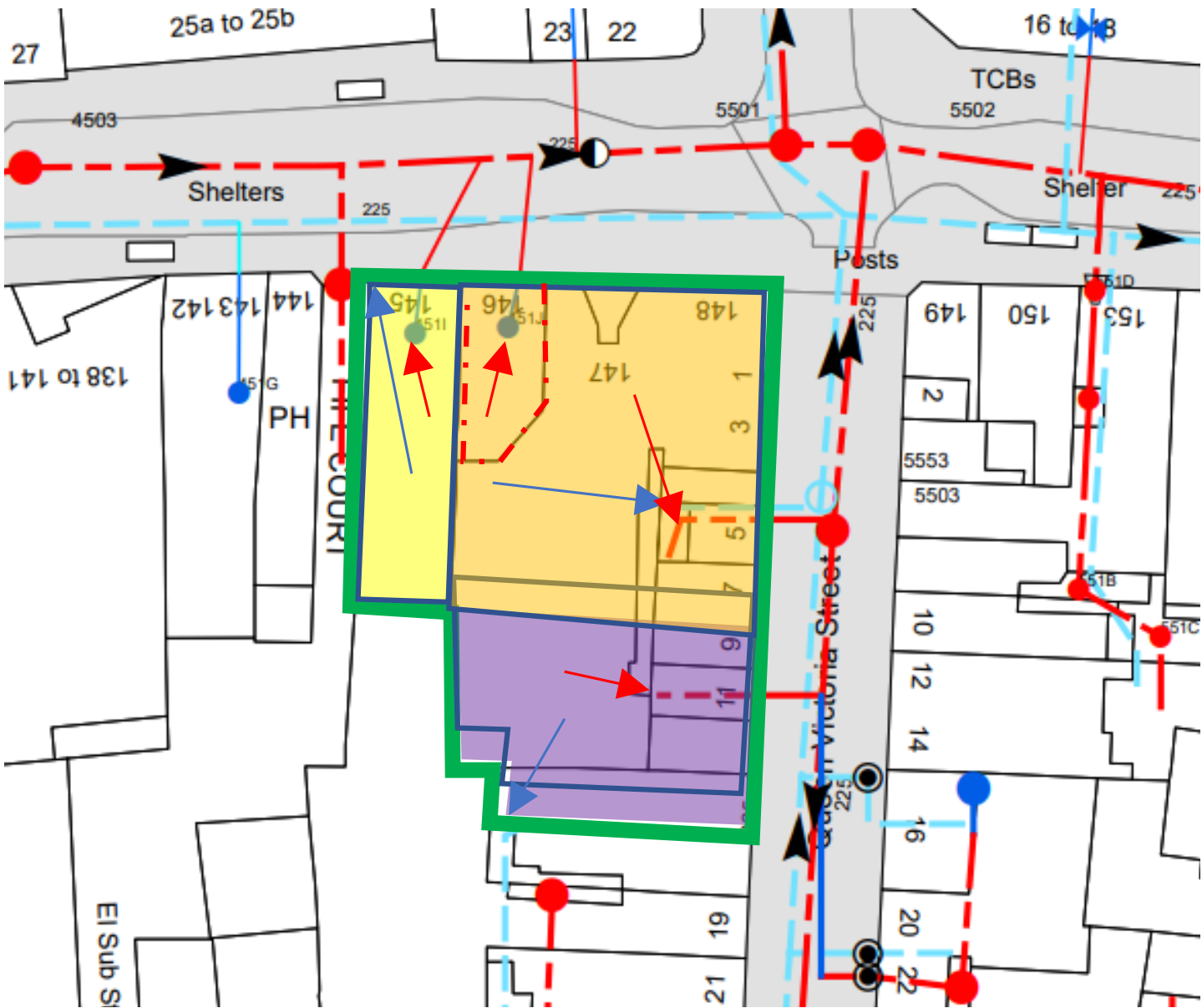


Figure 1 Illustrating Intended Site Drainage
Text taken from Flood Risk & Drainage Strategy Report

8.0 STRUCTURAL METHOD STATEMENT

8.1 STRUCTURAL METHOD STATEMENT

Structural Strategy for No. 145 Proposed Development

The proposed construction of the building will be the same as the consented scheme and will consist of a two storey vertical extension to the existing building structure. This will enable the existing façade to remain safely in place during the proposed construction works.

The existing main building structure consists of in-situ reinforced concrete floor supported off concrete encased steel beams. These in turn are supported of vertical steel columns. The existing mansard roof is formed of a similar construction to the main building. The elevations consist of solid masonry walls.

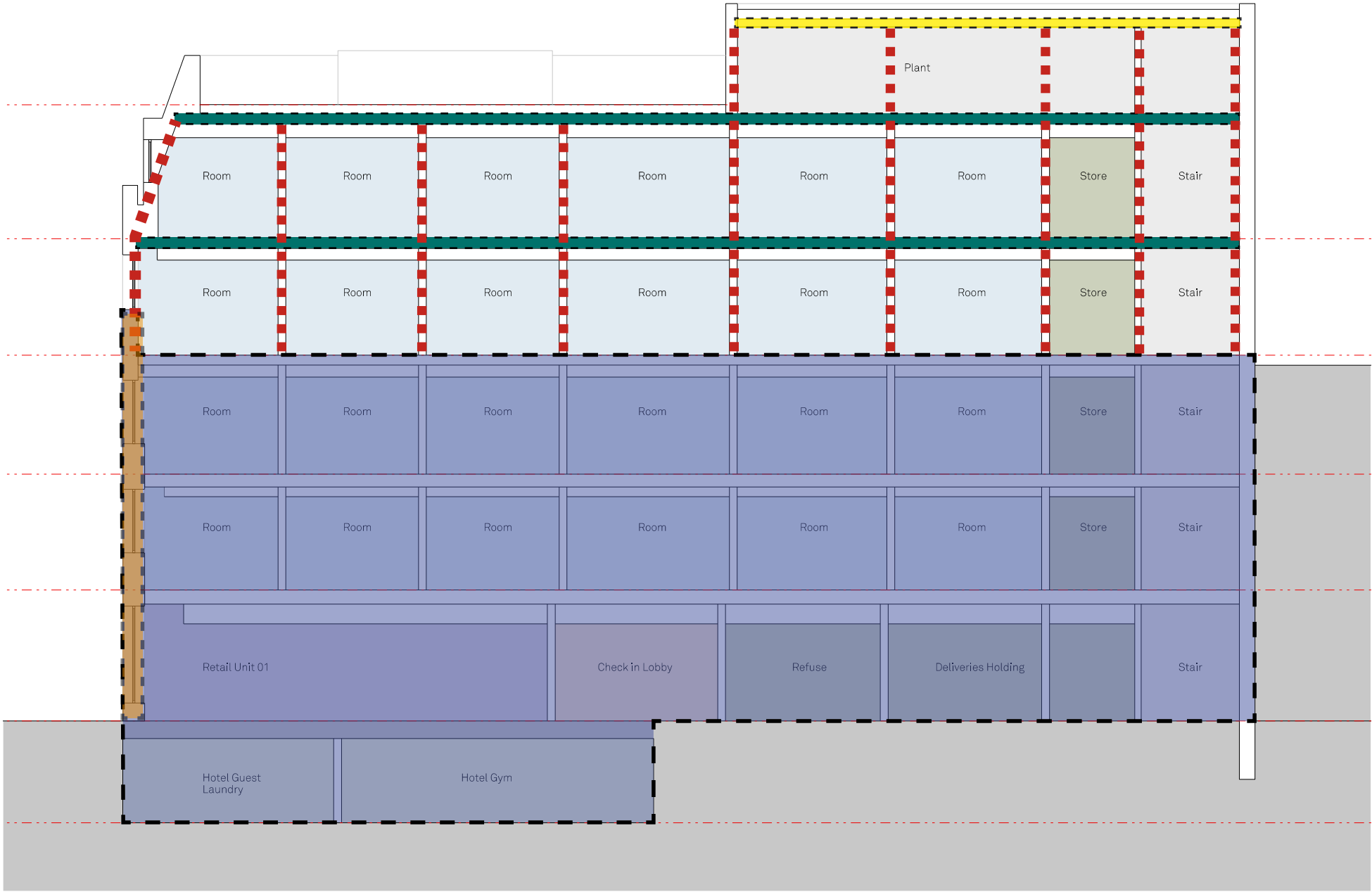
During the works, the existing mansard structure will be carefully demolished and replaced with a steel frame with a lightweight metal floor joist in fill. This lightweight framing system will be built directly off the existing second floor slab.

The removal of the heavy concrete mansard structure and replacement with a lightweight steel framing system, means that there will be no significant increase in loading on the existing building structure and avoid the requirement to undertake foundation strengthening works. The façade will be extended using a lightweight metal framing system and an external cladding system to match the existing retained façade.

Text taken from Axiom Structures

Key

-  Existing structure to remain
-  New lightweight insulated roof panels.
-  New lightweight floor system to new steel frame structure.
-  New steel frame to following existing building column grid
-  Existing façade to be retained with main building structure



9.0 HERITAGE

9.1 HERITAGE STATEMENT

Summary

The proposed scheme of works is based on an understanding of the significance, character, historic development and surviving historic fabric of the grade II listed buildings on the site. The proposals have been designed to provide a new viable use for the Site and the listed buildings within it. The proposal would continue to provide investment towards their repair and maintenance, sensitive to their significance.

The revised scheme will ensure the heritage benefits of the consented scheme are maintained.

148 Friar Street and 1-15 Queen Victoria Street

The Queen Victoria Street terrace (including 148 Friar Street and 1-15 Queen Victoria Street) is a building of considerable architectural quality, primarily deriving from the quality and form of its front elevation which includes brickwork, terracotta, decorative gables, granite pilasters and original windows. While its significance has been affected by virtue of poor quality shop-fronts but the building remains a good example of an early 20th century commercial premises and this bestows a degree of historic (illustrative and associative) interest.

147 Friar Street

The significance of 147 Friar Street primarily relates to the architectural quality of the 1880s front elevation, particularly the double height colonnade shop-front and the 3no. segmental headed dormer windows that feature moulded coping between and modillion cornices. As with the Queen Victoria Street terrace, the building is a good example of a late 19th century commercial premises.

146 Friar Street

No 146 Friar Street is unlisted and has been altered beyond recognition and has no architectural value. In town-scape terms, whilst it follows the rhythm of the street frontage, its scale appears to be disproportionately smaller. The modern shop-front further detracts from the contribution to the setting of the listed buildings and wider the town-scape of the area. The proposal to rebuild it to a more appropriate scale whilst adhering to the modesty in architectural detailing would ensure that the character and appearance of the listed buildings continues to be distinctive.

145 Friar Street

No 145 Friar Street has an early 20th Century front facade above the modern shop front on the ground floor. This has some architectural value which would be retained as part of the proposals. The rear of the building would be redeveloped and incorporated within the consented scheme to create a more comprehensive redevelopment of the Site.

Overall, the Site has high architectural value. Closely related to the development of Reading it is considered to have historic and communal value. Additionally, they have high group and townscape value, following a similar grain and urban form prevalent along Queen Victoria Street and Friar Street. The rhythm of the built form in particular is of importance which appears congruent within the wider area.



145 Friar Street 146 Friar Street 147 Friar Street 148 Friar Street 1-15 Queen Victoria Street

10.0 CONCLUSION

10.1 READING BENEFITS

The Public Benefit

The proposals bring this vacant, dilapidated and detracting site into a beneficial use that will provide a firm basis for the enhancement and regeneration of Queen Victoria Street and this part of Friar Street that is long overdue. The employment space is not fit-for-purpose in comparison to modern provision and the loss of which will enable comprehensive redevelopment of the site, including the provision of employment generating uses.

The proposals will reinvigorate these prime and essential primary retail frontages in the Primary Shopping Area that is a key gateway to the town centre. The redevelopment will create employment opportunities that are currently not provided by this predominantly vacant site.

The proposed development and uses are appropriate to the town centre location and will enhance the retail and leisure provision (in this case C1) within Reading town centre.

The Annual Monitoring Report 2018-19 notes an exceptionally low provision of C1 floorspace within the monitoring year with 1,500m² permitted within Reading but none delivered.

The site is an appropriate location for an aparthotel use and represents a use that has been under-provided. An aparthotel will assist in the provision of short-term letting accommodation for people visiting Reading.

This private sector-led scheme will boost business and enhance visitor experiences in a way that improves the quality of life for all in the Reading region and will form part of the Council's ambition to see a coherent and enhanced improvement to Queen Victoria Street.

There are few locations in the Borough that have better accessibility to public transport options and town centre services and facilities.

The proposals represent efficient use of brown field land with development at a scale and density appropriate to the high accessibility level of the site.

The scheme will meet the desires of the Reading 2050: A Vision for Reading 2050.

It meets the Council's ambition for a 'A City of Culture':

- Build upon the success of the Reading Festival – all year round cultural events through provision of vibrant public gathering spaces and street life and diverse venues – new 'Reading on Thames Festival'
- Refurbishing existing heritage assets
- Greater diversification of retail offer
- Strong, coordinated and well-marketed leisure offer
- Further support growing night economy – capitalise on music heritage

The proposals represent a unique opportunity to enhance and utilise this highly accessible location within the town centre, bringing a largely vacant and dilapidated site back into viable use, including the restoration and secured longevity of the Listed Buildings.



10.0 CONCLUSION

10.2 READING BENEFITS

The Heritage Benefit

Specific heritage benefits can be summarised as:

- Reviving the currently underused heritage assets by providing the listed buildings with an active viable use that will remove risk to the structures and see for their future conservation and maintenance;
- Preventing further deteriorating to the listed buildings, specifically 1-15 Queen Victoria Street and 148 Friar Street. These buildings are currently in a significantly deteriorating condition with the highly significant frontage at risk of collapse without swift intervention to halt decay;
- Reinstatement of appropriate and in-keeping shop fronts throughout the site, thus enhancing the significance and authenticity of the listed buildings;

- Retention and restoration of key elements of heritage significance, for example the important façades, original staircases and elements of historically legible plan form;

- Opportunities to reinstate appropriate detailing (fire surrounds, cornices and skirting boards etc.) in those areas of the listed building (primarily 5-15 Queen Victoria Street) which, internally, retain a higher degree of survival and plan form.

While interventions to the listed buildings are required to facilitate this, the proposals are based on a thorough understanding of the historic development, character and significance of the grade II listed buildings.

Through the design development phase the project team has sought to minimise harm through good design and retention of historic fabric and maximise benefits.



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