

Fig. 164. Proposed roof plan. Plant / PV

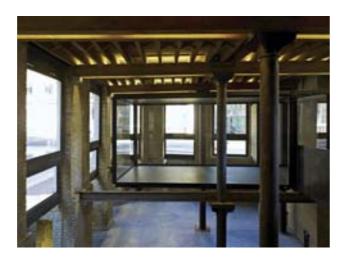
4.7 Key Element 5 -

Refurbishment













Our aim is to refurbish of the existing building at 20-23 Greville Street and strip some internal finishes back to its core structure. Since its construction in 1976, the building has been gradually covered with layers of plaster, boxing and battens to both meet changing space requirements over the last century, and meet fire regulations.

As part of the project's design development, a strategy has been engineered to meet all current building and fire regulations whilst revealing all original features and allowing a flexible generous floor plan.

Acoustic insulation, fire protection and services distribution will be added to better future proof the current building and express an honest concrete structure, protected with a clear intumescent varnish to meet all Part B Regulations.

Windows are to be upgraded and refurbished to increase the building's thermal insulation values and alter its visual appearance from the existing brown tinted single glazed aluminium units to double glazed, self cleaning and low iron panels.

Heating and lighting would use 5amp circuit lighting for task lights, surface mounted track lighting and heating and cooling units fitted direct to the ceiling with exposed conduits. Floor boxes would serve each bank of desks.

These additions will ensure the construction works have minimal disruption on the surrounding area and adjoining buildings. The extent of these

strip out and refurbishment works will allow the building to remain in use and prevent tenants from disruptive temporary relocation.

As highlighted on each of the following elevations, the proposal has been developed to improve where possible the existing fabric and where extended, use high performing materials. The following materials are proposed for each elevation:

#### Existing brickwork - U-value unknown

The existing brick and blockwork wall without insulation will be maintained. The new high performance windows will greatly improve upon the existing thermal performance as will the fully insulated rear extension.

#### New windows - U-value 1.2W/m2k approx

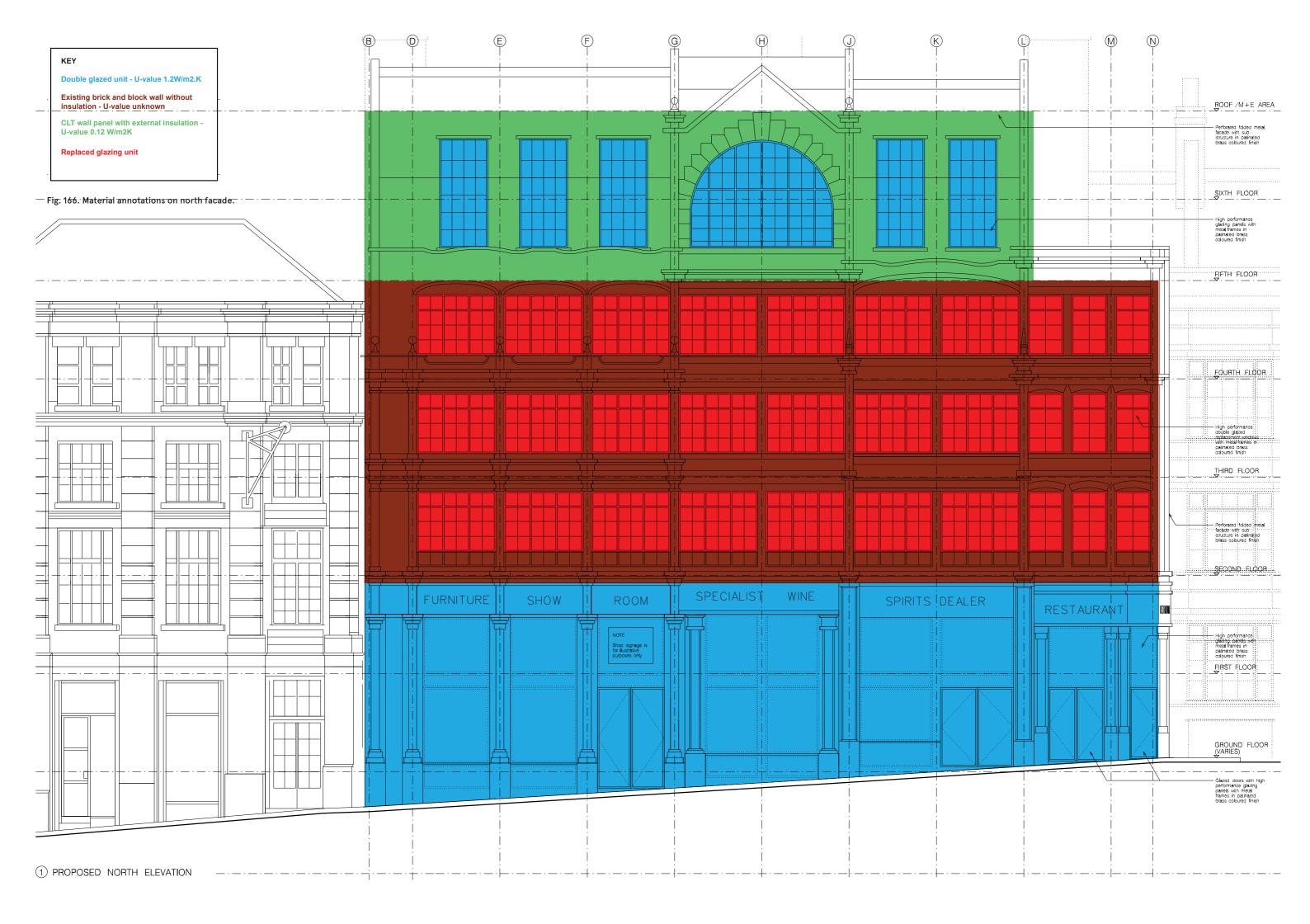
New high performance double glazed windows will be installed on all elevations using where chosen existing window apertures. This will greatly improve the existing thermal performance value.

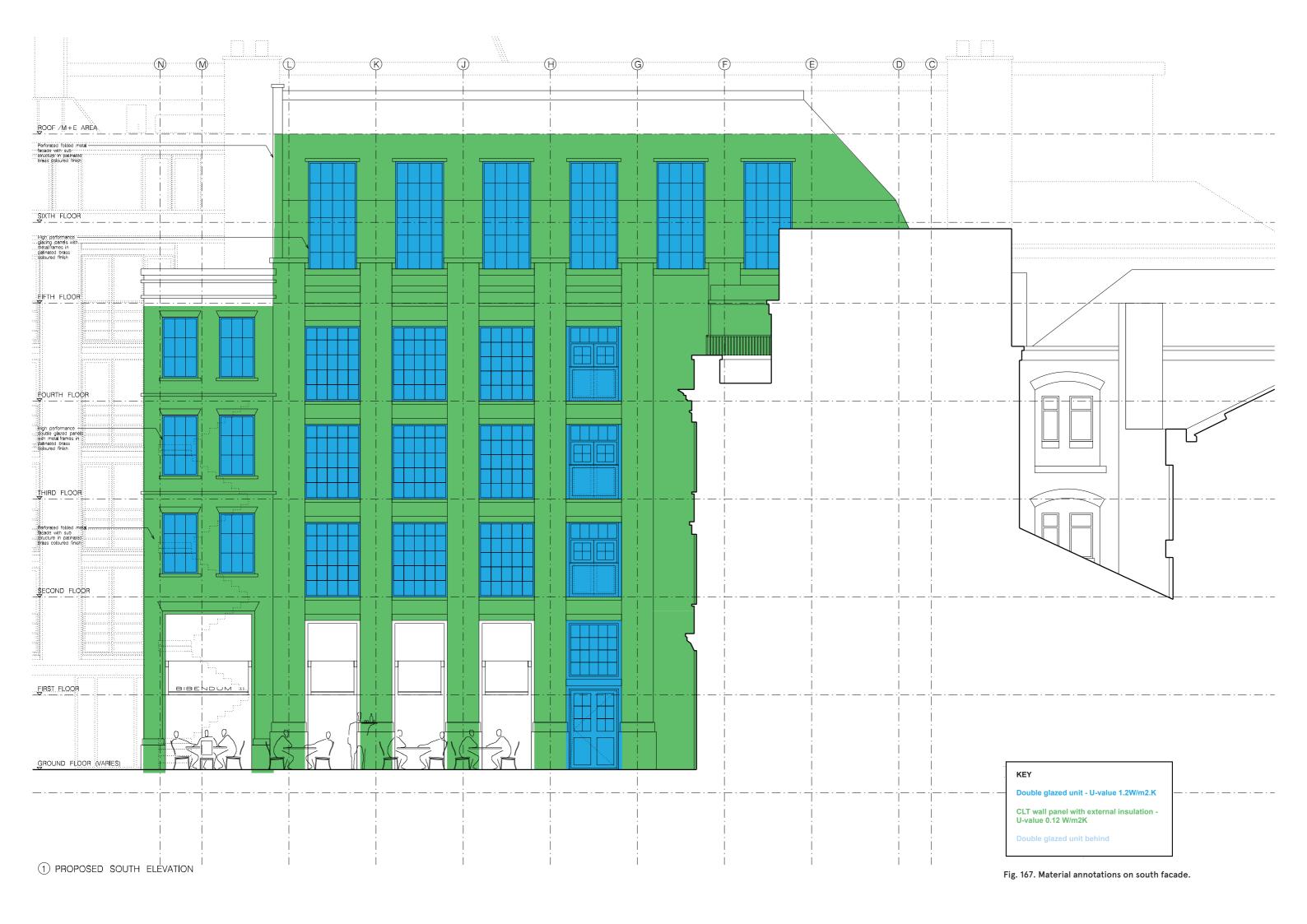
## CLT wall and roof panels - U-value 0.12W/m2k approx

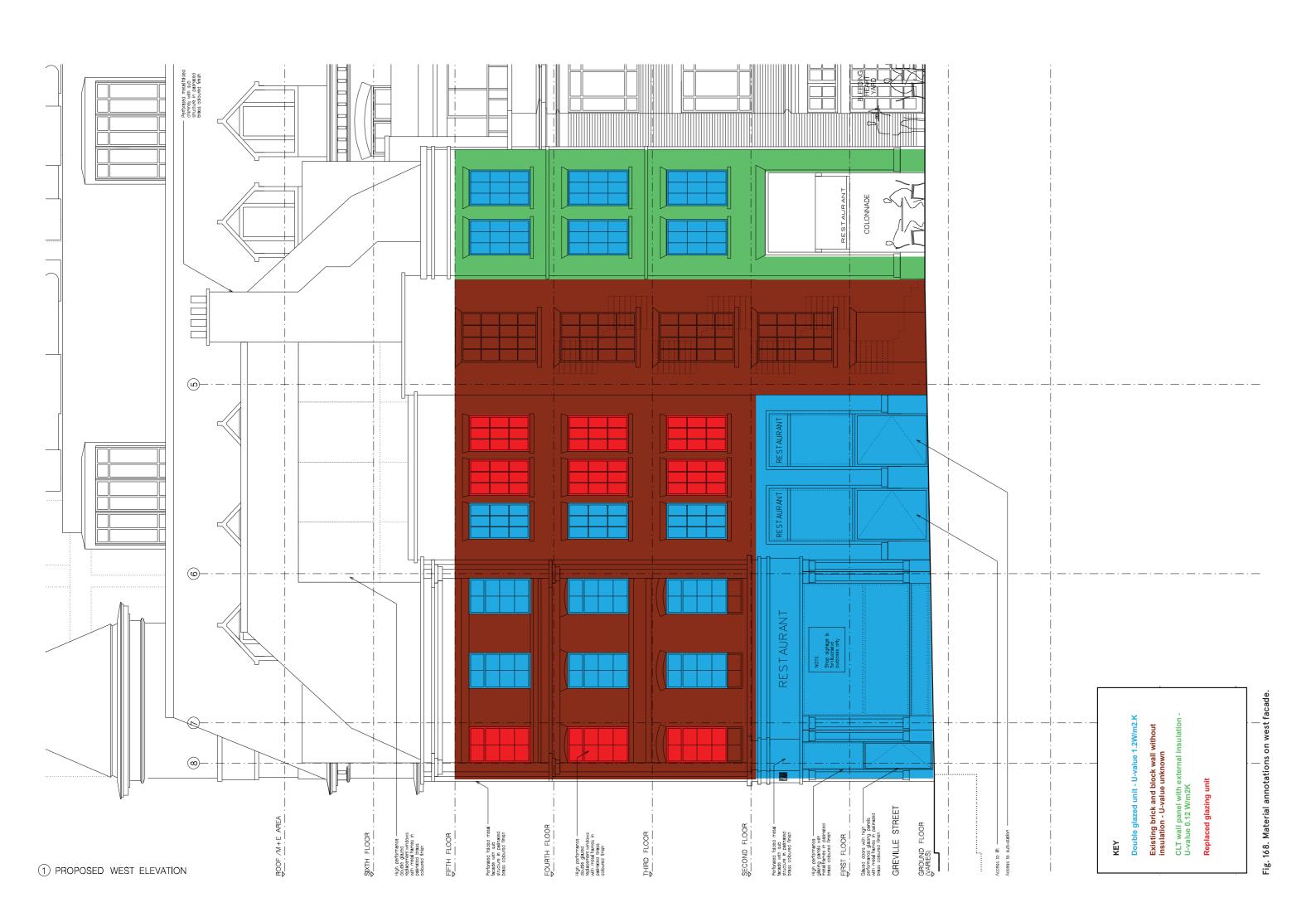
Highly insulated CLT wall and roof panels are proposed for the rear and roof extension. These will provide low U-values and be a major improvement on the existing building. The high insulation value of the insulated wall panels will reduce heat loss and solar gain when compared to the previous scheme's use of a glazed curtain wall system.

# Ground floor windows - U-value 1.2W/m2k approx

Ground floor windows will be high performing double glazed units to greatly improve the existing thermal performance value. The mesh facade will be used at these levels as a solar shade.







4.8 Additional Information



Fig. 169. Camden Development Policies 2010-2025.

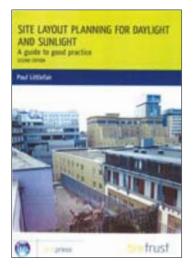


Fig. 170. BRE Good Practice Guide.

#### Policy

GL Hearn have provided ongoing advice on daylight and sunlight matters throughout the design process, and have undertaken technical assessment using the methods set out in the Building Research Establishment's (BRE) "Site layout planning for daylight and sunlight: A guide to good practice". This is to determine the likely effect of the proposed rear and roof extension at 20-23 Greville Street on the daylight and sunlight amenity received to the neighbouring properties, in compliance with

Policy DP26, ('Managing the impact of development on occupiers and neighbours') of Camden Council's Local Development Framework (adopted 2010) states the following in relation to daylight and sunlight amenity;

Camden Council's policies set out below.

The following are extracts from the Daylight and Sunlight Report prepared by GL Hearn.

"The council will protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity. The factors we will consider include: a) visual privacy and overlooking; b) overshadowing and outlook; c) sunlight, daylight and artificial light levels..."

Paragraph 26.3 of Policy DP26 goes on to state;

"...To assess whether acceptable levels of daylight and sunlight are available to habitable spaces, the Council will take into account the standards recommended in the British Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice."

Camden Council provides further guidance in assessing daylight and sunlight amenity in Section 6 of Camden Planning Guidance (CPG) 6, 'Amenity'. This guidance document highlights the following key messages;

"We (Camden Council) expect all buildings to receive adequate daylight and sunlight. Daylight and sunlight reports will be required where there is a potential to reduce existing levels of daylight and sunlight..."

The document advises that the daylight and sunlight report should assess the impact of the development following the methodology set out in the most recent version of Building Research Establishment's (BRE) "Site layout planning for daylight and sunlight: A guide to good practice", but goes on to state the following;

"While we strongly support the aims of the BRE methodology for assessing sunlight and daylight we will view the results flexibly and where appropriate we may accept alternative targets to address any special circumstances of a site."

Policy CS5 of Camden Council's Core Strategy (2010-2025) states the following in relation to managing the impact of growth and development;

"...The council will protect the amenity of Camden's residents and those working in and visiting the borough by: e) making sure that the impact of developments on their occupiers and neighbours is fully considered;"

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Scope of Assessment

The following are extracts from the Daylight and Sunlight Report prepared by GL Hearn.

'The neighbouring context is a mix of residential apartments (standard and serviced accommodation) and commercial premises; including offices, workshops, restaurants and retail units.

A number of neighbouring offices are currently occupied by architecture firms or are in use as design studios. Whilst the guidance given in the BRE report is predominately intended for residential properties, the principles can be also be applied to some commercial properties where the occupants are considered to have a reasonable expectation of daylight and sunlight. GL Hearn have therefore included a number of commercial properties, as well as all residential properties, within their assessment.

Furthermore, a number of neighbouring properties have recently or historically obtained planning permission for refurbishment and / or extensions of their own, although for many properties it is unclear whether the works have or will be going ahead.

The daylight and sunlight assessment has therefore been undertaken in the following two scenarios for completeness;

- Scenario 1: The neighbouring properties assessed in their current form; where it is unclear as to whether an approved planning permission (current or expired) has been implemented, the building in question has been assessed as per the existing drawings submitted with the planning application.
- Scenario 2: All neighbouring properties with current or expired planning consent built as per the proposed drawings submitted with the planning application. Applications that are currently pending decision have not been taken into account.

Full details of each of the neighbouring planning applications taken into account are detailed in the standalone daylight and sunlight report produced by GL Hearn, which will be submitted alongside the planning application.'

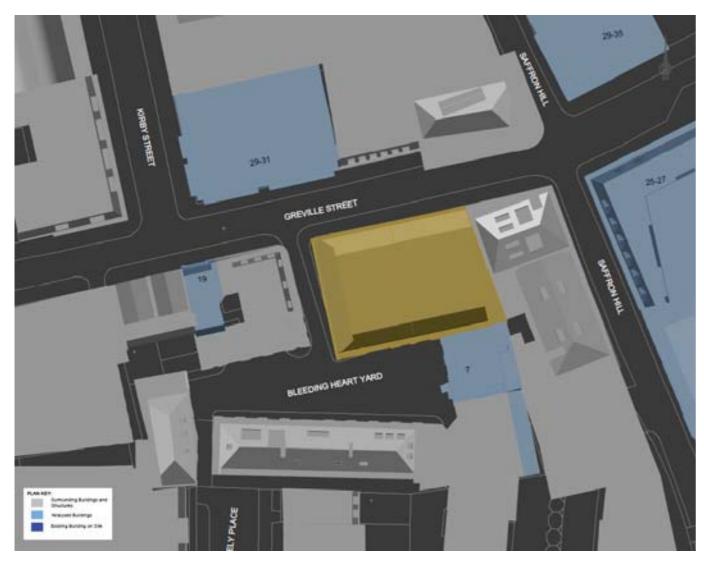


Fig. 171. Scenario 1 site plan showing analysed buildings.

Assessment Results for Scenario 1

The following are extracts from the Daylight and Sunlight Report prepared by GL Hearn.

'In terms of daylight amenity, assessment results for Scenario 1 demonstrate that 95% of the 193 assessed windows would retain Vertical Sky Component (VSC) values in-line with BRE Report guidance.

8 of the 10 windows achieving VSC values below the BRE recommendations are located on the north-facing elevation of 3-5 Bleeding Heart Yard. 2 of these windows are at ground floor and are assumed to serve workshop areas for a Jewellery repair merchant, although the low levels of natural light achieved in the existing conditions and the heavily barred windows suggest that natural daylight is not relied upon for operational purposes.

The 6 windows across first and second floor retain VSC values that are within 0.70 and 0.77 times the former value, narrowly below the BRE recommended 0.8 times. It would appear that these windows serve open plan studio spaces lit by multiple windows, the majority of which are BRE compliant.

The remaining 2 windows are located on the west-facing elevation of 7 Bleeding Heart Yard; 1 of which serves a second floor dual-aspect living room served by an additional 5 BRE compliant windows. The other serves a third floor single-aspect bedroom and retains a VSC value that is 0.78 times the former value, narrowly below the BRE recommended 0.8 times.

Daylight Distribution (DD) has also been assessed where internal layouts were known. Results show that 98% of the 93 rooms tested would remain BRE compliant. The 2 rooms not meeting the guidelines are a fourth floor hotel room in 29–31 Greville Street and a fourth floor living room in 25–27 Farringdon Road. These rooms retain DD values that are 0.70 and 0.75 times their former values respectively, narrowly below the BRE recommended 0.8 times.

Assessment diagrams show that the loss of daylight within the hotel room falls only within the circulation and sleeping area, leaving the lounge area in the front half of the hotel room unaffected. The living room within 25-27 Farringdon Road is a single aspect room approximately 7.7m deep. The BRE states:

"If an existing building contains rooms lit from one side only and greater than 5m deep, then a greater movement of the no sky line may be unavoidable."

Nonetheless, both the windows serving both rooms achieve VSC values in excess of BRE recommendations and therefore good levels of daylight will be retained.'

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Fig. 172. Scenario 2 site plan showing analysed buildings.

#### Assessment Results for Scenario 2

The following are extracts from the Daylight and Sunlight Report prepared by GL Hearn.

'Assessment results for Scenario 2, which represents a more likely future scenario, demonstrate a similarly high level of compliance, with 95% of the 200 windows assessed achieving BRE compliance for the VSC test and a compliance rate of 98% for the 96 rooms tested for DD. The same 10 windows and 2 rooms detailed above for Scenario 1 account for the remaining 5% and 2% respectively, with near identical retained VSC and DD values.

Turning to sunlight amenity, assessment results show that all assessed windows facing within 90 digress of due south would retain BRE compliant values for annual and winter sunlight in both Scenario 1 and Scenario 2. The overshadowing assessment of neighbouring external amenity areas also demonstrates full BRE compliance in both scenarios.

It is important to consider that the BRE Report aims to offer guidance only and is not intended to place restrictions on developing parties or Local Authorities.

#### The report states;

"The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy"..."Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. In special circumstances the

developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

Where daylight transgressions of the BRE Report guidance occur, the reductions are generally marginally beyond those considered immaterial by the BRE report, and the vast majority of affected windows appear to serve open plan spaces lit by multiple BRE compliant windows.

Taking into account the points above along with the special circumstances of the site (being the close proximity of the neighbouring properties that is typical for urban areas of historical character such as this), GL Hearn's report concludes that the proposed extension at 20-23 Greville Street will not materially harm the neighbouring daylight and sunlight amenity, with acceptable levels retained by all neighbouring properties with a reasonable requirement.

In line with policy requirements, a full daylight and sunlight report detailing the BRE methodology and GL Hearn's assessment results will be available to view alongside the submitted planning application.'



Fig. 173. Lower ground plan waste location and route for collection.

Waste Store

Shared Lift

**Shared Lift** 

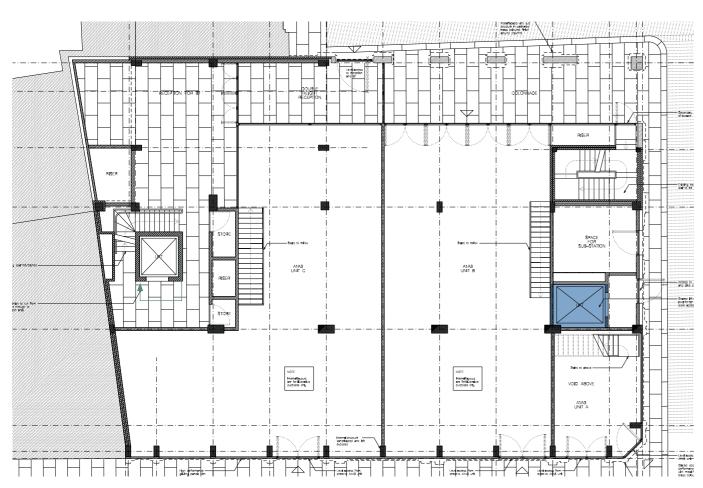


Fig. 174. Ground plan waste location and route for collection.

Strategy Policy - CS18 - Dealing with our waste and encouraging recycling and Development Plan Policies - DP26 - Managing the impact of development on occupiers and neighbours and DP22 - Promoting sustainable design and construction, we propose to:

Following Camden Planning Guidance 1, Core

- Provide adequate space for the storage of waste and recyclables
- Design a safe and accessible space to minimise disruption to occupiers
- · Ensure refuse collection is simplified
- Designate storage locations for each container
- Integrate such location into the building as to not detract from the conservation area.

Based on Camden Planning Guidance 1 Policy 10.18, 1m3 of waste storage space (recyclable and non-recyclable) should be provided for every 300-500sqm of commercial space. Following Camden Core Strategy Policy CS18, 50% of waste should be recyclable.

This will equate to the following waste provision:

Use Class	Area (m2)	Waste Req.	Waste Req.
		(m3)	(L)
B1	2,402	5	5000
A1/A3	915	2	2000
Total		7	7000

Following the guidelines above, we propose to offer the following waste provision:

Туре	Waste Req. (L)	Bin Provision	Total (L
Recyclable	3500	3 x 1100L /	3660
		1 x 360L	
Non-	3500	3 x 1100L /	3540
Recyclable		1 x 240L	

The waste store will be located at lower ground level accessed by each storey via a communal staircase. The bin store is located adjoining a lift to ground floor level, used on collection days to transport containers from lower ground to ground level.

The refuse strategy would make use of private contractors who will use small refuse lorries for refuse collections. Collections would be prearranged and scheduled to avoid peak delivery periods. Refuse collection is proposed to take place on-street with refuse and recycling bins moved by waste operatives from the refuse store to the refuse collection vehicle. The Goods In Manager will provide the private contractor with appropriate access advice and assistance as required.

Please see Delivery and Servicing Plan prepared by Caneparo Associates for more details.



Fig. 175. Basement plan cycle store location and route for access.

**Cycle Store and Facilities** 

**Access to Cycle Store** 

**Access to Cycle Store** 



Fig. 176. Ground plan cycle route for access to store.

and DP19 – Parking standards and limiting the availability of parking of the Camden Development Policies we propose to:

Following Camden Planning Guidance 7 Policy

9 Cycling Facilities, Core Strategy Policy CS11 -

Promoting sustainable and efficient travel and

policies DP17 - Walking, cycling and public transport

- Implement relevant cycle parking standards for the development
- Design and layout such cycle parking to meet CPG standards

Based on Camden Planning Guidance 7 Policy 9.8, cycle parking should be sited within 50 meters of the building entrance for stays over an hour. For stays under an hour, cycle parking should be sited within 25 meters of the building entrance. As office accommodation is provided above, it is assumed all users of the parking facilities will stay for this duration, but it is our aim to exceed these standards to offer convenient facilities accessible to all. Following this, cycle parking is situated 23 meters from the building entrance.

Based on Camden Planning Guidance 7 Policy 9.4-7 and Appendix 2: Parking Standards of the Camden Development Policies 2010 the following cycle provision should be adopted:

Use Class	Area (m2)	Requirement	Total
B1	2,662	1 space per 250sqm	11
		(+2 for visitors)	
A1	501	1 space per 250sqm	2
A3	480	1 space per 250sqm	2
			15

Based on Table 6.3 of the London Plan the following cycle provision should be adopted:

Use Class	Area (m2)	Requirement	Total
B1	2,662	1 space per 90sqm	30
A1	501	1 space per 250sqm	2
A3	480	1 space per 175sqm	3

Based on the above tables, the greater cycle provision will be adopted or in this case that of the London Plan - 35 spaces. However, we propose to offer a total of 36 spaces at lower ground level.

35

In addition to the 36 spaces in the form of Josta two tier racks, we propose to provide 2 additional accessible spaces, ample locker room, 2 shower/changing/WC rooms and one accessible shower/changing/WC.

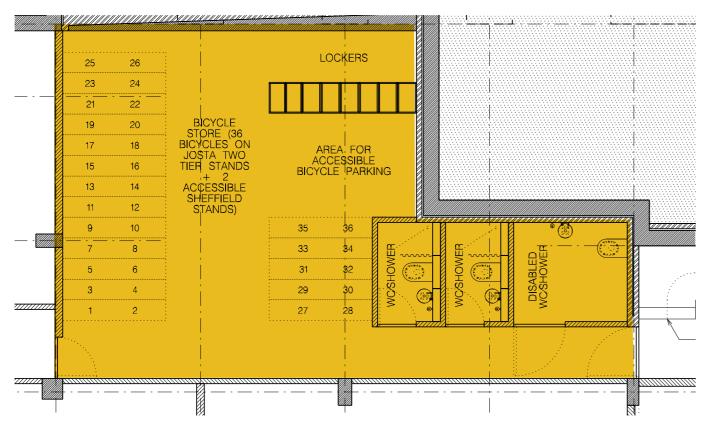


Fig. 177. Lower ground plan showing layout of cycle store.

**Cycle Store and Facilities** 

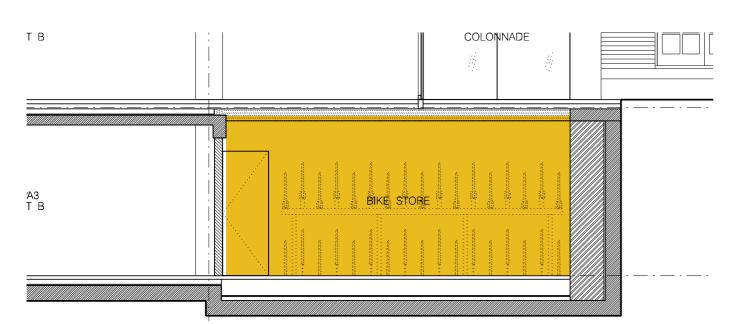
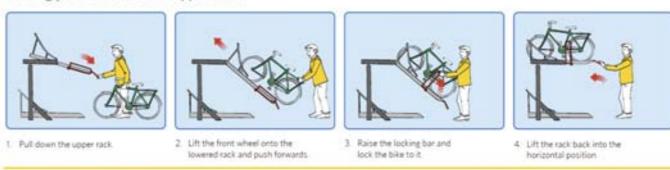


Fig. 179. Section through lower ground cycle store.

**Cycle Store and Facilities** 

# Store and retrieve your bike in four easy steps

# Loading your bike on to the upper racks



### Unloading your bike from the upper racks



Fig. 178. Josta two tier rack operational instructions.

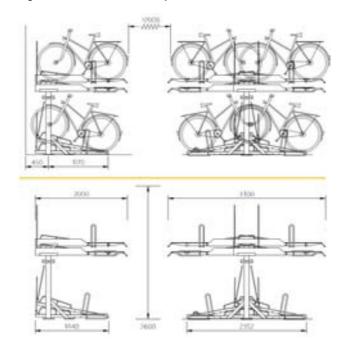


Fig. 180. Josta two tier rack sizing information.



Fig. 181. Josta two tier rack.