Visual from Gray's Inn Road

Window detail

Petersen Tegl D48 FF brick

APPEARANCE

Summary of facing materials:

+ Petersen D48 FF brick
+ Commercial ground floor aluminium windows + doors: PPC Ral 7016
+ Ground floor gates, cycle store and refuge screen: PPC Ral 7016
+ Residential aluminium glazing, grilles + perimeter cladding: PPC Ral 1035
+ Residential balustrades: PPC Ral 1035
+ 4th floor cladding: PPC Ral 1035
+ Ground floor ventilation grilles: PPC 7016

Existing - Portpool Lane towards Gray's Inn Road

Proposed - Portpool Lane towards Gray's Inn Road

1-5 Portpool Lane from Gray's Inn Road

Visual not verified

Existing - Portpool Lane from Gray's Inn Road

Proposed - Portpool Lane from Gray's Inn Road

Visual not verified

1 Executive Summary

This report describes the energy strategy adopted for the proposed residential and office accommodation at 1-5 Portpool Lane in the London Borough of Camden (LBC).

The development comprises six private residential apartments and 350m² of office accommodation (at basement and ground floors).

Energy is an integral part of the development's design, and this report demonstrates how the scheme responds to national, regional and local planning guidance in relation to climate change mitigation.

1.1 Carbon Reduction Targets

London Borough of Camden Sustainability Planning Guidance (CPG 3) dated September 2013 and the London Plan 2011, require that all new developments achieve a minimum 40% improvement in regulated carbon dioxide emissions over the 2010 Building Regulations requirements.

The GLA's Sustainable Design and Construction Supplementary Planning Guidance dated April 2014 confirms that a flat 35% carbon dioxide improvement target (against the 2013 Building Regulations) should be used for both residential and non-residential development to avoid complexity.

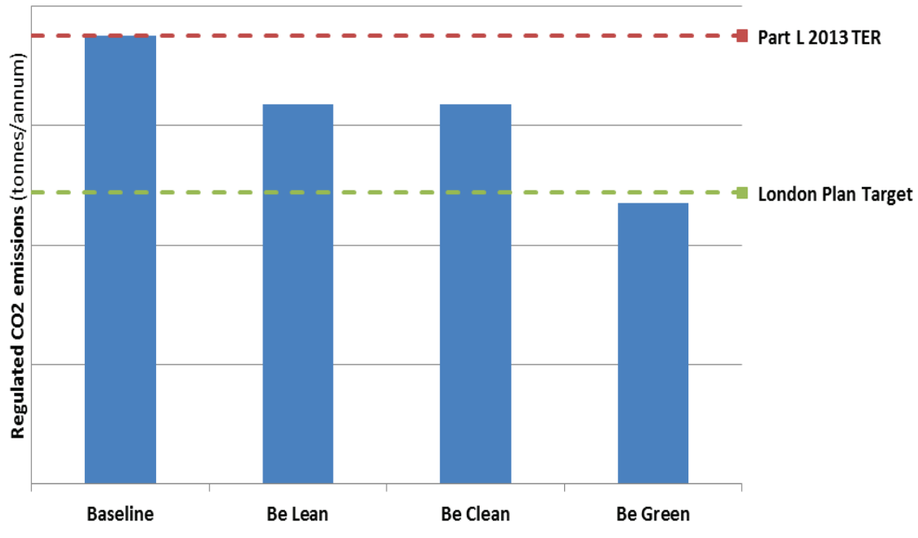
1.2 Carbon Reduction Strategy

The feasibility of achieving these targets has been assessed using the latest version of the Standard Assessment Procedure (SAP) for the residential apartments and the Simplified Building Energy Model (SBEM) for the office accommodation.

The targets will be achieved by following the energy hierarchy, as detailed below;-

- Be Lean – Use less energy
- Be Clean – Supply energy efficiently
- Be Green – Use renewable energy

The graph below details the proposed energy hierarchy for 1-5 Portpool Lane;-



The following table details the carbon dioxide emissions expected at each stage of the energy hierarchy;-

	Carbon dioxide emissions (Tonnes CO_2 per annum)	
	Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	16.89	21.28
After energy demand reduction	14.31	21.28
After CHP	14.31	21.28
After renewable energy	10.58	21.28

The following table details the regulated carbon dioxide savings expected to be achieved at each stage of the energy hierarchy;-

	Regulated carbon dioxide savings	
	(Tonnes CO_2 per annum)	(%)
Savings from energy demand reduction	2.58	15.3
Savings from CHP	0.00	0.0
Savings from renewable energy	3.73	26.1
Total Cumulative Savings	6.31	37.4
Total Target Savings	5.9	35
Annual Surplus	0.40	

Passive Design and Energy Efficiency (Be Lean)

The development will demonstrate best practice performance for fabric and engineering services, providing a 15% reduction in regulated carbon dioxide emissions over the Part L 2013 compliance target.

For the residential apartments, the Fabric Efficiency is expected to be 8% better than the Approved Document L1A target rate.

Community Energy and CHP (Be Clean)

The potential for connecting into an existing or planned decentralised energy scheme has been investigated and it is considered that a connection is currently not feasible. There are no existing or planned schemes in the vicinity, and the proposed development is not within an opportunity area.

The proposed scheme is very small with only six apartments and 350m² of office space, and any potential CHP would be very small. A whole life cost appraisal has been carried out and the inclusion of CHP is considered to be unviable for the development.

Renewable Energy Systems (Be Green)

The opportunities for renewable energy systems have been reviewed, and it proposed that photovoltaic and solar thermal panels are installed on the roof of the building. It is planned to provide the following;-

- 46m² of photovoltaic panels (residential and office)
- 4m² of solar thermal panels (office)

As detailed above these provisions are expected to result in a further 22% improvement over Part L, following the passive design and energy efficiency measures.

1.3 Environmental Assessment

A Code for Sustainable Homes rating of 4 is targeted for all of the apartments at 1-5 Portpool Lane. The target rating required to achieve Code Level 4 is 68%.

A Code for Sustainable Homes pre-assessment has been carried out under the November 2010 version and May 2014 Addendum.

The pre-assessment indicates that a score of 70% is achievable, with all mandatory elements required for Code 4 met. Please refer to separate document.

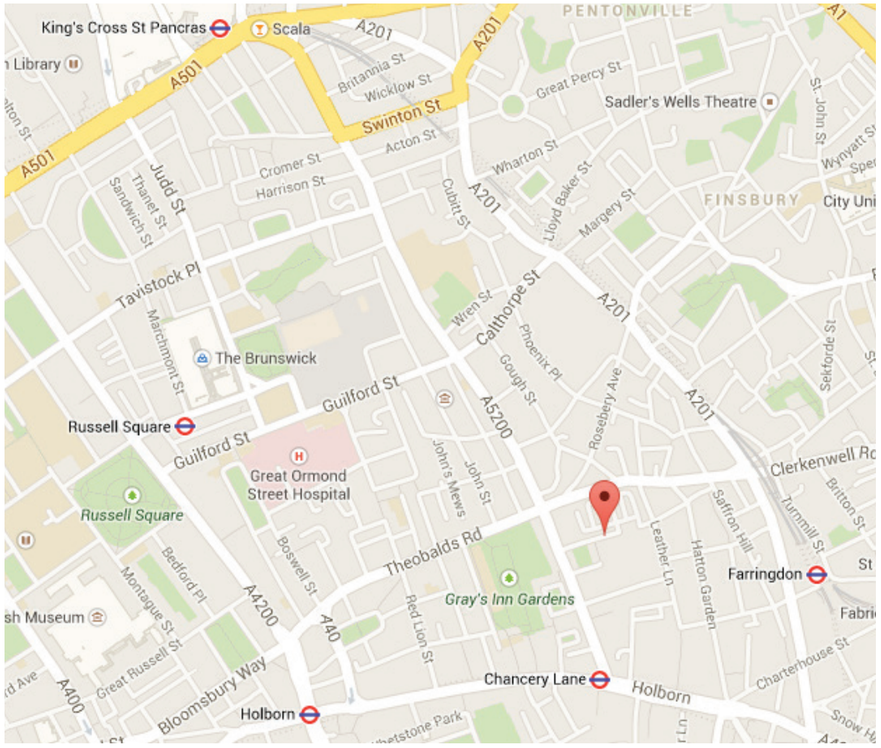
INCLUSIVE DESIGN 5.1

All appropriate standards of inclusive design have been considered and have been included in the proposal from an early stage and will continue as an essential part of the design. The design has developed with regard to mandatory access standards and it is intended that the scheme has the capacity to meet wider best practice access standards. The intentions are:

- To maximise access to all parts of the development for residents and visitors regardless of disability;
- To meet requirements of The Building Regulations Approved Document M – Access to and Use of Buildings, 2004;
- To meet the requirements of Lifetime Homes (July 2010);
- To meet the aims of the Equality Act 2010 (since 1 October 2010),
- To follow design guidance given in relevant British Standards, and other currently published good practice detailing the needs of disabled people where possible; and
- To meet local authority access policies where relevant.

SECURITY 5.2

The development will meet Secured by Design standards where possible.

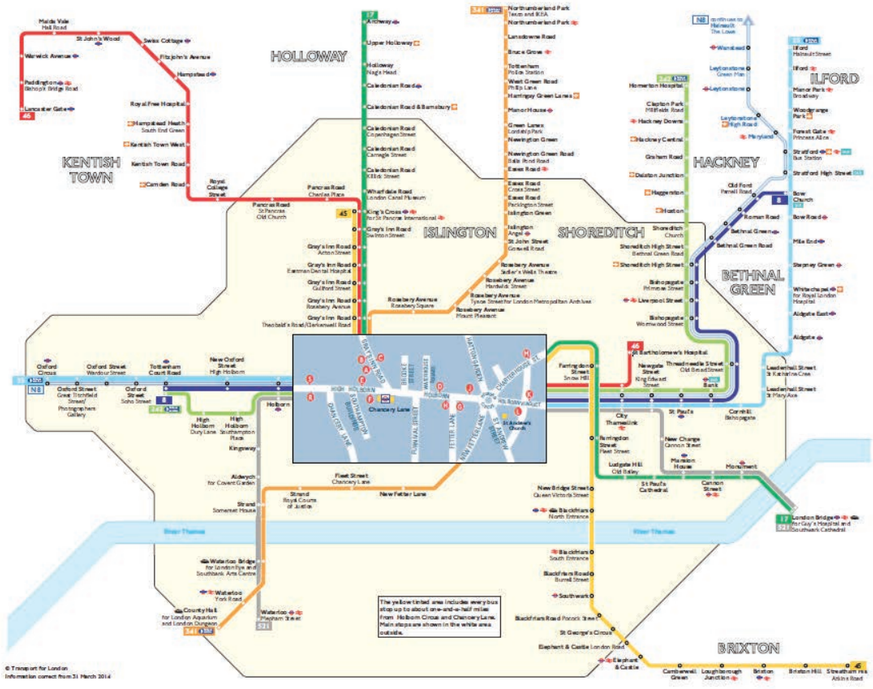


Map of Holborn showing tube stations near Portpool

HIGHWAYS AND PARKING

The proposal does not include provision for any car parking spaces on the site. This is considered appropriate given the site's location in an area of excellent accessibility in respect to public transport. The site has a rating of PTAL 6B which is the highest rating. It is therefore proposed that the new units would be car free preventing future occupiers of the development to apply for an on-street car parking permit. This would be put in place by way of a legal agreement.
It is intended that cycle parking would be provided in line with policy DP18, appendix 2 and Camden's Planning Guidance 7 (transport) which requires one space per unit.

The site is situated within a Controlled Parking Zone and benefits from excellent transport links with a PTAL level of 6b, which is the highest accessibility level. Gray's Inn Road feeds into the A501 (Euston Road) to the north which provides access to Marylebone to the west and Shoreditch to the east. There are excellent connections from all modes of transport, with Chancery Lane tube station to the south and Kings Cross St Pancras Mainline Train Station to the north, and also offers numerous bus links to and from Central London.



Holborn buss routes

WASTE MANAGEMENT

Taking into account the Camdens Waste & Recycling Storage Requirements in CPG1, we have allowed for the following:

1. Residential development of 6 dwellings or fewer are usually serviced by a kerbside waste and recyclables collection.

The development will accommodate the following:

+ Internal storage areas are designed into each unit
+ Internal space is to provided for recycling storage designed into the kitchens
+ Storage for both mixed recyclables, organic kitchen waste and non-recyclable waste.
+ Recycling waste storage comprises either a box or bag which are normally stored inside and taken to the kerbside on collection days
+ External storage for waste outside the building within the curtilage (for waste collector) will be provided. 1No 660L Euro bin

2. B1 unit:

+ Allow for 1 cubic metres waste storage for every 300-500sqm of GIA:
  Due to the restricted area available we will provide 1 660L Euro bin for the B1 unit

PROPOSED AREA SCHEDULE

Stiff + Trevillion Architects Ltd, 16, Woodfield Road, London W9 2BE
020 8960 5550 E mail@stiffandtrevillion.

Stiff + Trevillion

1-5 PORTPOOL PLACE - PROPOSED AREA PLAN

TO BE READ IN CONJUNCTION WITH AREA PLANS

REVISION E | ISSUED -05/09/14

FLOOR/UNIT	AREA SQM	AREA SQFT
LOWER GROUND FLOOR		
COMMERCIAL (GIA)	178.99	1926.63
OVERALL (GIA)	178.99	1926.63
OVERALL (GEA)	224.91	2420.91
GROUND FLOOR		
COMMERCIAL (GIA)	153	1645.47
RESIDENTIAL CIRCULATION CORE (GIA)	25.52	274.69
LANDLORD PLANT AREA	11.85	127.55
OVERALL (GIA)	190.37	2047.71
OVERALL (GEA)	223.2	2402.5
1ST FLOOR		
FLAT 101 - 1 BED FLAT FLAT (GIA)	67.04	721.61
FLAT 102 - 3 BED FLAT FLAT (GIA)	99.64	1072.51
RESIDENTIAL CIRCULATION CORE (GIA)	24.28	261.34
FLAT 101 - BALCONY	3.4	36.59
FLAT 102 - BALCONY	3.4	36.59
OVERALL (GIA) (EXCLUDING BALCONIES)	190.96	2055.46
OVERALL (GEA) (EXCLUDING BALCONIES)	213.49	2297.89
2ND FLOOR		
FLAT 201 - 2 BED FLAT (GIA)	73.63	792.54
FLAT 202 - 2 BED FLAT (GIA)	76.24	820.64
RESIDENTIAL CIRCULATION CORE (GIA)	24.7	265.86
FLAT 201 - BALCONY	3.4	36.59
FLAT 202 - BALCONY + TERRACE	18.98	204.29
OVERALL (GIA)	174.57	1879.05
OVERALL (GEA)	206	2217.6
3RD FLOOR		
FLAT 301 - 2 BED DUPLEX (3RD + 4TH) (GIA)	53.43	575.11
FLAT 302 -2 BED DUPLEX (3RD + 4TH) (GIA)	58.48	629.47
RESIDENTIAL CIRCULATION CORE (GIA)	29.66	319.25
FLAT 301 - BALCONY + TERRACE	16.69	179.64
FLAT 302 - BALCONY + TERRACE	12.33	132.7
OVERALL (GIA) (EXCLUDING BALCONIES)	141.57	1523.84
OVERALL (GEA) (EXCLUDING BALCONIES)	161.8	1741.6
4TH FLOOR		
FLAT 401 - 2 BED DUPLEX (3RD + 4TH) (GIA)	44.26	476.4
FLAT 402 - 2 BED DUPLEX (3RD + 4TH) (GIA)	46.88	504.61
RESIDENTIAL CIRCULATION CORE (GIA)	19.1	205.59
FLAT 401 - BALCONY + TERRACE	15.85	170.6
FLAT 402 - BALCONY + TERRACE	12.85	138.31
OVERALL (GIA) (EXCLUDING BALCONIES)	110.24	1186.6
OVERALL (GEA) (EXCLUDING BALCONIES)	122.83	1322.13
OVERALL AREAS		
TOTAL GIA	986.7	10619.29
TOTAL GEA	1152.23	12402.63
TOTAL GIA (INCLUDING BALCONIES + TERRACES)	1073.6	11554.6
TOTAL GEA (INCLUDING BALCONIES + TERRACES)	1239.13	13337.94
RESIDENTIAL UNITS		
2 BEDS FLAT	5	
3 BED FLATS	1	
NEW AREA CREATED		
TOTAL GEA	378.4	4185.73
TOTAL GIA	303.97	3279.45

EXISTING AREA SCHEDULE

Stiff + Trevillion Architects Ltd, 16, Woodfield Road, London W9 2BE
020 8960 5550 E mail@stiffandtrevillion.

Stiff + Trevillion

1-5 PORTPOOL PLACE - EXISTING AREA PLAN

TO BE READ IN CONJUNCTION WITH AREA PLANS

REVISION E | ISSUED -05/09/14

FLOOR/UNIT	AREA SQM	AREA SQFT
EXISTING		
BASEMENT		
OVERALL GIA	210	2260.4
OVERALL GEA	230	2475.6
GROUND		
OVERALL GIA	202	2174.3
OVERALL GEA	224.4	2411.1
1ST FLOOR		
OVERALL GIA	135.3	1452.1
OVERALL GEA	159.7	1611.3
2ND FLOOR		
OVERALL GIA	135.3	1453.1
OVERALL GEA	159.7	1718.9
OVERALL EXISTING AREAS		
TOTAL GEA	773.8	8216.9
TOTAL GIA	682.6	7339.9

POLICY

It is considered that the height of the scheme is appropriate for the site and is in accordance with Core Strategy policy CS14, Development Policies DP24, DP25, DP26, DP29 and CPG 1(Design). Further details of the proposal are considered and clearly explained in the attached documentation.

In accordance with policy CS1 and the density matrix within the London Plan which suggests an acceptable density level of between 650 – 1100 hr/ha, the scheme provides 6 residential units which comprise 17 habitable rooms. Given the site area of 0.06ha the scheme has a density of 283 habitable rooms per hectare which is below the density range for the central area, however this is a mixed use scheme with office space on the lower floors and the density is considered appropriate given the design, nature and scale of the development.

The closest residential properties to the development would be along the eastern and north eastern boundary. The impact of the additional storeys on the neighbouring residential units has been assessed in accordance with policy DP26 to ensure the proposal does not result in a detrimental level of loss of sunlight/daylight. In terms of the proposed terraces, it is considered that an appropriate set back and landscaping can be provided to ensure that minimal overlooking takes place.

The proposed development is also capable of complying with key residential design standards; will provide sufficient amenity space; does not result in an unacceptable relationship with neighbouring properties and achieves a high quality design solution.

CONCLUSION

We conclude that the redevelopment of the site for a mixed use development is in accordance with Camden's Core Strategy, Development policies document, and Planning Guidance documents. The proposal represents an important opportunity to deliver a more efficient and attractive form of development that will complement and enhance the streetscape.