



20A Parkhill Road, London NW3

SUSTAINABILITY STATEMENT

February 2018

Document Issue Register

1.0 Planning Issue

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1 Introduction

- 1.1 This report details a Statement of Sustainability for the proposed redevelopment of 20A Parkhill Road, London. The proposal entails the demolition of the existing 3-storey building known as ‘The Coach House’, and its replacement with a building of identical height and increased floor area. The building will remain submissive to the surrounding properties, which are mostly 4-storey buildings. The external façade comprises London stock facing brickwork, with fenestration onto Parkhill Road consisting of openable sash-type windows.
- 1.2 The existing building is presented over three storeys, with residential basement/storage at lower ground floor, living room at ground floor and a single bedroom at 1st floor level. The proposed building will feature living spaces at lower ground floor, with bedrooms at ground floor and 1st floor level, thereby increasing the number of bedrooms (3no.) and improving the quality of accommodation.
- 1.3 The purpose of this report is to review the sustainability requirements at local (borough) level, and to discuss how these requirements have been met. The requirements relate to the Camden Local Plan (2017), which has been referenced.



Figure 1: Existing building (centre), view from Parkhill Road

2 Executive Summary

2.1 The development has been shown to meet the local sustainability requirements. These include the Camden Local Plan Policy CC1 and other related policies. Further guidance and specific targets have been sourced from the Camden Planning Guidance Document 3 – Sustainability (CPG3).

Policy	Requirements	Achieved?
Camden Local Plan Policy CC1	<ul style="list-style-type: none"> all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation 	✓
Camden Planning Guidance Doc 3 – Sustainability (CPG3)	<ul style="list-style-type: none"> demonstrate how the development mitigates against the causes of climate change and adapts to climate change 	✓
Water Efficiency Calculator Tool	<ul style="list-style-type: none"> Maximum internal water use of 105 L/person/day 	✓



Figure 2: Proposed building (centre), view from Parkhill Road

3 Local Requirements and Guidance

3.1 Camden Local Area Requirements

3.2 According to 'Camden's Local Area Requirements for Planning Applications February 2014' – pg 23 & 24, the following is required with regards to Sustainability Statements for minor residential development:

3.3 Details must be provided of – *“sustainable design and construction measures showing how you propose to reduce the energy, water and materials used in design and construction.”*

3.4 Energy – there is no requirement to submit an Energy Statement, as the scheme is less than 5 dwellings (however the scheme will still need to comply with Building Regulations Approved Document L1A)

3.5 Note: the Code for Sustainable Homes has been withdrawn by Government in March 2015.

3.6 Camden Local Plan

3.7 The requirements of the Camden Local Plan, Policy CC1, are stated below:

“The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation.

We will:

a. promote zero carbon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;

b. require all major development to demonstrate how London Plan targets for carbon dioxide emissions have been met;

c. ensure that the location of development and mix of land uses minimize the need to travel by car and help to support decentralised energy networks;

d. support and encourage sensitive energy efficiency improvements to existing buildings;

e. require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and

*f. expect all developments to optimise resource efficiency.
For decentralised energy networks, we will promote decentralised energy by:*

g. working with local organisations and developers to implement decentralised energy networks in the parts of Camden most likely to support them;

h. protecting existing decentralised energy networks (e.g. at Gower Street, Bloomsbury, King's Cross, Gospel Oak and Somers Town) and safeguarding potential network routes; and

i. requiring all major developments to assess the feasibility of connecting to an existing decentralised energy network, or where this is not possible establishing a new network.

To ensure that the Council can monitor the effectiveness of renewable and low carbon technologies, major developments will be required to install appropriate monitoring equipment."

- 3.8 Camden Planning Guidance Document 3 – Sustainability (CPG3) provides further guidance on how to achieve these policies.

4 Discussion

4.1 Energy

4.2 The development will meet the requirements of Building Regulations Approved Document L1A 'Conservation of fuel and power in new dwellings'.

4.3 This includes the Dwelling Emissions Rate (DER) meeting the Target Emissions Rate (TER), and the Dwelling Fabric Energy Efficiency (DFEE) meeting the Target Fabric Energy Efficiency (TFEE).

4.4 The three steps of the energy hierarchy will be followed in order to achieve this: "Be Lean; Be Clean; Be Green".

4.5 Improved passive energy performance ('Be Lean') will be achieved through the specification of high-performing building fabric (U-values which improve upon the Part L requirements), and a combination of Accredited and Enhanced Thermal Bridge details.

4.6 Efficient Building services ("Be Clean") will be installed which meet and exceed the Domestic Building Services Compliance Guide requirements, such as condensing gas boiler, and Low Energy Lighting will be implemented throughout.

4.7 An indicative design-stage SAP report has been provided in Appendix 1.

4.8 **Water**

4.9 Please see Appendix 2 – BRE Water Efficiency Calculator for further details relating to water consumption

4.10 The BRE Water Efficiency Calculator Tool has been used to predict water usage for the proposed dwelling.

4.11 A target of 105L/person/day (internal) has been set by Camden Council, with an additional 5L/person/day for external water use.

4.12 The consumption of water will be kept to a minimum within the proposed extension through the implementation of water efficient fittings and appliances. These will include the following:

- Low-flow taps and showers
- Dual Flush WC's
- Low volume (to overflow) bathtub

4.13 Through the implementation of water efficient fittings and appliances, waste water will also be reduced within the proposed extension.

4.14 In terms of surface water run-off from the site, the sustainable drainage strategy will be designed to ensure all surface water is discharged through sustainable means.

4.15 As shown in the Flood Risk Map below, the site of the proposed development does not fall within a flood risk zone (Flood Zone 1: Low probability of flooding):

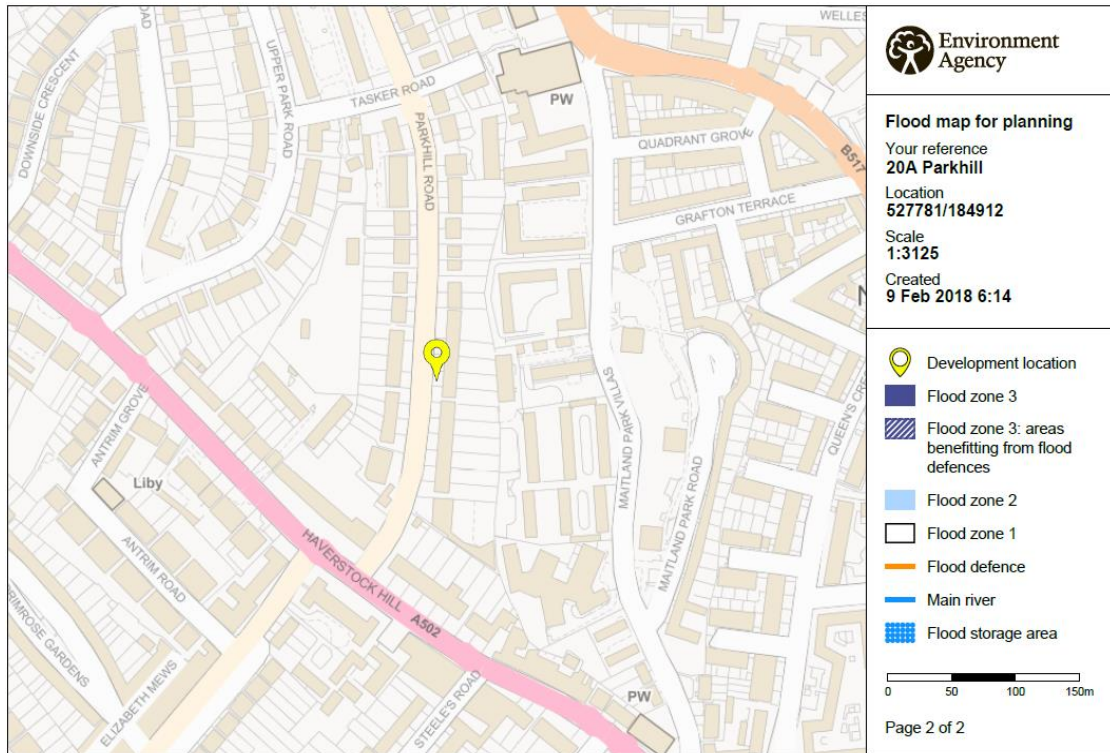


Figure 4: Waltham Cross Flood Zones (Source: Environment Agency)

4.16 Other Issues - Transport

4.17 The site of the proposed development is located 0.5 miles from Chalk Farm underground station, and 0.4 miles from Belsize Park underground station, thus the site is suitably located for public transport.

4.18 Additionally, numerous local buses operate in the area (along Haverstock Hill approximately 200 yards to the south of the development).

4.19 Parkhill Road has a 30mph speed limit and benefits from street lighting, therefore is suitable for cycling. Camden Town centre is an 8-minute cycle away (1.0 miles), offering numerous facilities such as shops and restaurants.

4.20 Other Issues – Resource Efficiency

4.21 Where possible, the building will make use of recycled building materials, such as hardcore from demolition, and responsibly sourced timber products.

4.22 The structure of the existing building will not be retained, therefore reduction of ‘embedded’ CO₂ (associated with traditional manufacturing and transport of building materials) could be achieved by incorporating materials reclaimed from the demolition of the existing building.

4.23 In addition to the structural materials and hardcore, further sustainable materials will be included in the design of the building. These may include, for example:

- Mineral wool insulation – made from natural volcanic rock, recyclable
- Floor boards, structural roof timber – responsibly sourced timber products

5 Appendix 1: Indicative SAP Report

Regulations Compliance Report

Approved Document L1A, 2013 Edition, England assessed by Stroma FSAP 2012 program, Version: 1.0.4.10
 Printed on 12 February 2018 at 15:27:01

Project Information:

Assessed By: () **Building Type:** Mid-terrace House

Dwelling Details:

NEW DWELLING DESIGN STAGE Total Floor Area: 129m²
Site Reference : 20A Parkhill Road **Plot Reference:** 3 Bed House
Address : 20A Parkhill Road, London, NW3 2YN

Client Details:

Name:
Address :

**This report covers items included within the SAP calculations.
 It is not a complete report of regulations compliance.**

1a TER and DER

Fuel for main heating system: Mains gas
 Fuel factor: 1.00 (mains gas)
 Target Carbon Dioxide Emission Rate (TER) 14.2 kg/m²
 Dwelling Carbon Dioxide Emission Rate (DER) 14.11 kg/m² **OK**

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE) 43.8 kWh/m²
 Dwelling Fabric Energy Efficiency (DFEE) 40.8 kWh/m² **OK**

2 Fabric U-values

Element	Average	Highest	
External wall	0.15 (max. 0.30)	0.15 (max. 0.70)	OK
Party wall	0.00 (max. 0.20)	-	OK
Floor	0.11 (max. 0.25)	0.11 (max. 0.70)	OK
Roof	0.11 (max. 0.20)	0.11 (max. 0.35)	OK
Openings	1.20 (max. 2.00)	1.20 (max. 3.30)	OK

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals 3.00 (design value)
 Maximum 10.0 **OK**

4 Heating efficiency

Main Heating system: Boiler systems with radiators or underfloor heating - mains gas
 Data from manufacturer
 Combi boiler
 Efficiency 95.0 % SEDBUK2009
 Minimum 88.0 % **OK**

Secondary heating system: None

5 Cylinder insulation

Hot water Storage: No cylinder **N/A**

Regulations Compliance Report

6 Controls

Space heating controls	TTZC by plumbing and electrical services	OK
Hot water controls:	No cylinder	
	No cylinder	
Boiler interlock:	Yes	OK

7 Low energy lights

Percentage of fixed lights with low-energy fittings	100.0%	
Minimum	75.0%	OK

8 Mechanical ventilation

Not applicable

9 Summertime temperature

Overheating risk (Thames valley):	Not assessed	?
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10 Key features

Air permeability	3.0 m ³ /m ² h
Roofs U-value	0.11 W/m ² K
Party Walls U-value	0 W/m ² K
Floors U-value	0.11 W/m ² K
Photovoltaic array	

DRAFT

6 Appendix 2: BRE Water Efficiency Calculator Tool

CSH Wat tool May 09



Job no:
 Date:
 Assessor name:
 Registration no:
 Development name:

20A Parkhill Road

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 PRINTING: before printing please make sure that in "Page Setup" you have selected the page to be as "Landscape" and that the Scale has been set up to 70% (maximum)

WATER EFFICIENCY CALCULATOR FOR NEW DWELLINGS - (BASIC CALCULATOR)

Installation Type	House Type:	Type 1		Type 2		Type 3		Type 4		Type 5		Type 6		Type 7		Type 8		Type 9		Type 10		
		Description:	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure	Capacity/ person/ flow rate day	Unit of measure
Is a dual or single flush WC specified?		Dual																				
WC		4	5.84	Full flush volume																		
		2.6	7.70	Part flush volume																		
Taps (excluding kitchen and external taps)		5	9.48	Flow rate (litres / minute)																		
Are both a Bath & Shower Present?		Bath & Shower																				
Bath		140	15.40	Capacity to overflow																		
Shower		9	39.33	Flow rate (litres / minute)																		
Kitchen sink taps		5	12.56	Flow rate (litres / minute)																		
Has a washing machine been specified?		Yes																				
Washing Machine		7.2	15.12	Litres / kg																		
Has a dishwasher been specified?		Yes																				
Dishwasher		1.22	4.39	Litres / place setting																		
Has a waste disposal unit been specified?		No	0.00																			
Water Softener			0.00	Litres / person / day																		
			109.8	Calculated Use																		
			0.81	Normalisation factor																		
Code for Sustainable Homes			99.9	Total Consumption																		
			Level 3/4	Mandatory level																		
Building Regulations 17.K			5.0	External use																		
			104.9	Total Consumption																		
			Yes	17.K Compliance?																		