## **London Borough of Camden**

# **Energy Efficiency and Renewable Energy and Sustainability Plan**

## S106 Pro-forma V.3 – Part A Pre-implementation

(To be submitted for approval : planningobligations@camden.gov.uk)

Scheme address:	115-119 Camden High Street London NW1 7JS
Planning Reference:	2019/3138/P
Related Planning References:	N/A
Scheme Description:	Demolition of existing two storey building and erection of a part-four, part-five storey building (plus enlargement of existing basement and plant room at roof level) comprising retail (Class A1) at ground floor level fronting Camden High Street, 80-bed hotel (Class C1) and 3 x 2-bed residential units (social rented) (Class C3) fronting Delancey Street.
Person/s undertaking review on behalf of applicant (include organisation name and registration number):	Jennifer Pugh, PSH Consulting – Licensed BREEAM New Construction Assessor, BREEAM AP and CIBSE Low Carbon Consultant.

This form must be completed by an appropriately qualified independent Energy and Sustainability Consultant, undertaking the review of the Energy Efficiency and Renewable Energy and Sustainability Plans, as required by the S106 Legal Agreement, on behalf of the applicant. Please complete the form in full. If you have any questions please contact planningobligations@camden.gov.uk

#### **S106 CLAUSE DETAILS**

Please summarise how the applicant is meeting their planning obligations relating to energy / sustainability as outlined within the S106 agreement (add/ remove rows as applicable).

S106 clause no.	S106 clause wording	Summary of performance
2.27	The incorporation of the measures set out in the submission document entitled Energy Statement and dated June 2019 by PSH to achieve a 46.4% site wide reduction in CO2 emissions beyond the Part L 2013 baseline.	Stage 4 calculations determine that a 46.1% site-wide reduction in CO2 emissions, beyond the Part L 2013 baseline, are being achieved. These calculations are reported using the SAP 10 carbon emission factors as per the GLA Energy Assessment Guidance (2018). Full details are provided in the Stage 4 Energy Report submitted alongside this form.
2.27	Further details (including detailed drawings, any necessary surveys and system specifications) of how the Owner will reduce the Development's carbon emissions from low and zero	As per the table on Page 6 of this document, the 'Pre-implementation (Detailed Design Stage) proposals' for the commercial part of the scheme are demonstrated to achieve a 41.5% reduction in carbon emissions through low and



	carbon technologies located on the Property ensuring the Owner will target a reduction of at least 40% in carbon emissions in relation to the Property.	zero carbon technologies (i.e. ASHPs). The GLA Carbon Emissions reporting tool has been provided alongside this document.
2.27	Separate metering of all low and zero carbon technologies to enable the monitoring of energy and carbon emissions and savings.	This is included for in the Detailed Design. See drawing '3187-PSH-H-XX-SM-E-8801- Layout1.pdf'.
2.27	A building management system being an electronic system to monitor the Development's heating cooling and the hours of use of plant.	This is included for in the Detailed Design. See Section B2.3.9.16.1 of '21-05-25 Mechanical Technical Specification Rev C5'.
2.27	A pre-Implementation design-stage review by an appropriately qualified and recognised independent professional in respect of the Property including Full Design stage SAP (for residential) calculations certifying that the measures incorporated in the Energy Efficiency and Renewable Energy Plan are achievable in the Development and satisfy the aims and objectives of the Council's strategic policies on the reduction of carbon emissions contained within its Development Plan.	The Stage 4 Energy Report has been produced by PSH to document the pre-implementation design-stage energy calculations for the domestic and non-domestic elements of the site. This report confirms the carbon savings that can be achieved on-site, as per design at the end of RIBA Stage 4 (pre-implementation. Appendices B – F of the Stage 4 Energy Report include the SAP and BRUKL output sheets.  The calculations have been carried out by an accredited Level 5 energy assessor, as detailed in Section 7 of the Stage 4 Energy Report.
2.27	Measures to secure a post construction review of the development by an appropriately qualified and recognised independent professional in respect of the Property (including but not limited to photographs, installation contracts and full As-Built SAP (for residential) calculations certifying that the measures incorporated in the Energy Efficiency and Renewable Energy Plan have been achieved in the development and will be maintainable in the Development's future management and occupation; and identifying means of ensuring the provision of information to the Council and provision of a mechanism for review and update as required from time to time.	The client, Demar Holdings (BVI) Ltd, will be appointing a qualified professional to undertake a review of the construction information at completion of the development, to confirm compliance with the project targets for Energy and Carbon efficiency.
2.63	Achieve the targets set out in the submission document entitled Sustainability Statement dated June 2019 by PSH and sustainable design measures and climate change adaptation measures in line with policies contained in the Council's Local Plan policies CC1 (Climate Change Mitigation) and CC2 (Adapting to Climate Change).	Policy CC1 - The Stage 4 Energy Report sets out compliance with this policy. Policy CC2:  The trees on Delancy Street are being removed as part of the development proposals. This has been agreed with Camden Council and included in the S106 that Camden Council will replace the trees at an agreed cost to the client. Please refer to Sections 19.1 and 19.2 of the Camden Council Committee Report. A Flood Risk Assessment was submitted as part of the planning application and the drainage strategy has been designed to achieve the targets for surface water runoff: rate and volume as set out in the Sustainability Statement. A brown roof has been included in the scheme to enhance the ecological value of

		the site. All the credits relating to the enhancement of ecology (LE 04) have been achieved in the design stage BREEAM assessment.  • The TM59 conclusions in Appendix G of the Energy Statement submitted at Planning Application remain applicable to the residential units onsite. Active cooling has been removed from the residential units, without compromising compliance with TM59. This in accordance with the GLA Cooling Hierarchy. ASHPs are being used to provide heating within the specified spaces of the hotel. A thermal comfort analysis has been carried out in accordance with the requirements of HEA 04 and the BREEAM credits have been awarded.  • The Design Stage BREEAM Assessment for the hotel has been submitted to the BRE. The assessment has been submitted with a percentage score of 73.04%, which is equivalent to an 'Excellent' rating.
2.63	Achieve a maximum internal water use of 105 litres/person/day in respect of the London Affordable Rented Housing Units, allowing 5 litres/person/day for external water use.	Sanitary fittings are yet to be agreed with Odu- Dua Housing Associations (Affordable Housing Operators). Confirmation of flow rates of sanitary fittings and overall water consumption can be provided once agreed and spec
2.63	Include a design stage Building Research Establishment Environmental Assessment Method (BREEAM) review report completed by a licensed BREEAM assessor in respect of the Development (excluding the London Affordable Rented Housing Units) with a target of Achieving Excellent and attaining at least 61% of the credits in Energy, 64% in Materials and 67% in Water categories.	The Design Stage BREEAM Assessment for the hotel has been submitted to the BRE. The assessment has been submitted with a percentage score of 73.04%, which is equivalent to an 'Excellent' rating. Percent Specific category ratings achieved are as follows:  • Energy – 65% • Materials – 50% • Water – 66%  The project team have made Camden Council aware that the materials target set at Stage 2 is no longer achievable at Stage 4.

# **BUILDING SPECIFICATION TARGETS**

### **Energy and Sustainability Statement key targets:**

Please outline in the table below the key targets from the Energy and Sustainability Statements submitted at Full Planning stage, and summarise how the detailed design specification compares. Add or delete rows as necessary.

Please clearly outline any reasons for changes to the approved building specification.

	Approved Planning Documents: energy and sustainability statement targets	Pre-Implementation (Detailed Design Stage): performance against targets
Carbon reduction targets	Energy Statement [3145- 190614-JP-115-119 Camden High StEnergy Statement-Rev01]	The Stage 4 Energy Report calculations determine that a 46.1% site-wide reduction in CO2 emissions, beyond the Part L 2013 baseline, are being achieved. These calculations are reported using the SAP 10 carbon emission factors as per the GLA Energy Assessment Guidance (2018).



		Improvements in the glazing and external wall u-values			
Building fabric u-values and air permeability	Energy Statement [3145- 190614-JP-115-119 Camden High StEnergy Statement-Rev01]	have been specified to further improve thermal performance beyond the Energy Statement submitted at Planning Application. Details of the u-values and air permeability are provided in Section 4.1 of the Stage 4 Energy Report.			
Low carbon technologies	Energy Statement [3145-	As per the Energy Statement submitted at Full Planning Application, ASHPs have be specified use to provide the space heating and cooling for the non-domestic demise and contribute to the domestic hot water demand.			
	190614-JP-115-119 Camden High StEnergy Statement-Rev01]	As per the table on Page 6 of this document, the 'Pre- implementation (Detailed Design Stage) proposals' for the commercial part of the scheme are demonstrated to achieve a 41.5% reduction in carbon emissions through low and zero carbon technologies (i.e. ASHPs). The GLA Carbon Emissions reporting tool has been provided alongside this document.			
Renewable energy targets	Energy Statement [3145- 190614-JP-115-119 Camden High StEnergy Statement-Rev01]	No renewables are present within the scheme, as per the Full Planning Application. Carbon savings are achieved through the use of ASHPs, which are considered a Low or Zero carbon technology (see row above).			
Decentralised energy network connection	Energy Statement [3145- 190614-JP-115-119 Camden High StEnergy Statement-Rev01]	Not targeted as there are no existing or potential heat networks within an acceptable proximity (see Section 5 of the Stage 4 Energy Report).			
Metering, monitoring and management	Energy Statement [3145- 190614-JP-115-119 Camden High StEnergy Statement-Rev01]	As confirmed in the full planning application Energy Statement, Sub-metering and low energy local controls will be used where feasible. New meters are proposed to the new mechanical systems to satisfy the requirements of Approved Document Part L, and to allow monitoring of key energy and utility consumers within the building.  See drawing '3187-PSH-H-XX-SM-E-8801-Layout1.pdf.			
Code for Sustainable Homes - Overall % + Rating - % credits Energy - % credits Water % credits Materials	Not applicable	The Affordable Housing Units are not undergoing Code for Sustainable Homes assessment.			
BREEAM - Overall % + Rating - % credits Energy - % credits Water - % credits Materials	BREEAM Pre- assessment [3187- 190611-JP-115-119 Camden High St BREEAM Pre- assessment-Rev01]	The Design Stage BREEAM Assessment for the hotel has been submitted to the BRE. The assessment has been submitted with a percentage score of 73.04%, which is equivalent to an 'Excellent' rating. See document: 'BRE Confirmation of Design Stage Assessment Submission'. Percent scores achieved in the specific categories are as follows:  • Energy – 65%  • Materials – 50%  • Water – 66%  The project team have made Camden Council aware that the materials target set at Stage 2 is no longer achievable at Stage 4.			
Materials, sourcing and waste	Sustainability Statement [3187-190614-JP-115- 119 Camden High St- Sustainability Statement- Rev01]	<ul> <li>A building LCA has been completed at RIBA Stage 4 to achieve 2 credits under Mat 01.</li> <li>A Sustainable Procurement Plan has been developed for the scheme and the Main Contractor has committed to achieving 20% of the Responsible Sourcing Points in Mat 03 – equivalent to 2 credits.</li> <li>70% of the waste category credits under BREEAM have been awarded, including the</li> </ul>			

		Wst 05 exemplary level credit for 'adaptation to climate change'.  • A pre-demolition audit has been completed and construction resource efficiency targets have been included in the Main Contractors contract.
Green infrastructure	Sustainability Statement [3187-190614-JP-115- 119 Camden High St- Sustainability Statement- Rev01]	<ul> <li>A brown roof has been included in the scheme to enhance the ecological value of the site. All the credits relating to the enhancement of ecology (LE 04) have been achieved in the design stage BREEAM assessment. See drawing: A277-MCO- XX-R0-DR-A—27115.</li> </ul>
Water efficiency and SuDS	Sustainability Statement [3187-190614-JP-115- 119 Camden High St- Sustainability Statement- Rev01]	<ul> <li>3 credits are awarded under Wat 01 using efficient flow rates for the sanitaryware.</li> <li>A blue roof has been incorporated into the scheme to reduce the site surface run-off rate.</li> </ul>
Other		

#### **ENERGY HIERARCHY**

Please enter in the tables below carbon reductions for each stage of the energy hierarchy (Baseline, Be Lean, Be Clean, Be Green) and for each development type, following the guidance outlined in the GLA's *Guidance on Preparing Energy Assessments* and *Camden Planning Guidance CPG3*.

Please be aware that where carbon dioxide reduction targets are not met, the applicant will be required to provide details of their remedial proposals, either to:

- 1. Retrofit on-site carbon reduction measures with a view to meeting targets, or
- 2. Implement carbon reduction measures elsewhere in the borough (prior agreement with the Council will be sought)
- 3. Make a carbon offset payment, where appropriate.

#### Key targets from approved Energy Statement:

	(in refurbis	mercial New-build includes major ishments assessed nder Part L2A)  Residential New-build (includes major refurbishments assessed under Part L1A)		jor sessed	Commercial Refurbishment (assessed under Part L2B)			Residential Refurbishment (assessed under Part L1B)				
	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*
Baseline	124.0	N/A	N/A	1.691	N/A	N/A		N/A	N/A		N/A	N/A
Be Lean	110.0	14.0	11.3%	1.495	0.20	11.6%						
Be Clean	110.0	0.0	0.0%	1.495	0.00	0.0%						
Be Green	66.0	44.0	40.0%	1.332	0.16	10.9%						
TOTAL	66.0	58.0	46.8%	1.332	0.36	21.2%						
Target	80.60	43.4	35.0%	1.370	0.32	19.0%	N/A	N/A	N/A	N/A	N/A	N/A
Shortfall	-14.60	-14.60	-11.8%	-0.038	-0.04	-2.2%	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> reduction calculated against previous stage (except TOTAL, which is calculated against Baseline)

#### Pre-implementation (Detailed Design Stage) proposals:

	Commercial New-build (includes major refurbishments assessed under Part L2A)		Residential New-build (includes major refurbishments assessed under Part L1A)		Commercial Refurbishment (assessed under Part L2B)			Residential Refurbishment (assessed under Part L1B)				
	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*	Total tCO2	tCO2 reducti on*	% reducti on*
Baseline	121.7	N/A	N/A	1.691	N/A	N/A		N/A	N/A		N/A	N/A
Be Lean	111.8	9.9	8.1%	1.309	0.38	22.6%						
Be Clean	111.8	0.0	0.0%	1.309	0.00	0						
Be Green	65.4	46.4	41.5%	1.309	0.00	0						
TOTAL	65.4	56.3	46.3%	1.309	0.38	22.6%						
Target	78.7	42.6	35%	1.370	0.32	19.0%	N/A	N/A	N/A	N/A	N/A	N/A
Shortfall	-13.3	-13.7	-11.3%	-0.382	0.38	-3.6%	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> reduction calculated against previous stage (except TOTAL, which is calculated against Baseline)



# **EVIDENCE**:

Enclosed? Yes N/A	Notes:							
Copies of SAP/	Please submit SAP/SBEM calculations evidencing the CO2 savings for each stage of the energy hierarchy, including baseline (TER), alongside this report. State which apartments have been sampled (if applicable). Results need to reflect the detailed design of the development.							
Title of Submission	Date produced	Author's Name, Organisation & Client						
Stage 4 Energy Report '3187-210608-JP-115-119 Camden High StStage 4 Energy Report- Rev02' (see Appendices for calculations)	08.07.2021	Jennifer Pugh, Neville Dugan, PSH for Demar Holdings (BVI) Ltd.						
'Stage 4a June 070621_gla_carbon_emission_report ing_spreadsheet_v1.1'	07.06.2021	Neville Duggan, PSH for Demar Holdings (BVI) Ltd.						
'210607 - GLA data extraction to 3 decimal places extract'	07.06.2021	Neville Duggan, PSH for Demar Holdings (BVI) Ltd.						
Code for $\square$ Sustainable Homes Design Stage Assessment	Council is no to achieve Cf	to be a Design Stage Assessment. Although the longer able to condition new housing developments SH certification, applications already committed to achieving certification will be required to fulfil this						
Title of Submission	Date produced	Author's Name, Organisation & Client						
Not applicable								
BREEAM Design  Stage Assessment and Certificate	and not a cop also submit D	this will need to be the Design Stage Assessment revieurly of the "Pre-Assessment" review. Applicants should lesign Stage certificates, or evidence from BRE of this review for certification.						
Title of Submission	Date produced	Author's Name, Organisation & Client						
BREEAM Design Stage Interim Certification yet to be provided. Evidence has been provided for submission of the Design Stage Assessment to the BRE titled: 'BRE Confirmation of Design Stage Assessment Submission'.	03.06.2021	Jennifer Pugh, PSH for Demar Holdings (BVI) Ltd.						

Technical details/ plans/ drawings of installed CHP and other low/ zero carbon technologies (where relevant)			Please submit	details where relevant, as outlined in the S106.			
Title of Submission			Date produced	Author's Name, Organisation & Client			
'21-05-25 Mechanical Specification Rev Co See Section B2.3		nical	25.05.2021	David Jenkins, PSH for Demar Holdings (BVI) Ltd.			
CHP Air Quality Assessment				the Council's guidance on completing air quality outlined in <i>CPG</i> 6.			
Title of Submission			Date produced	Author's Name, Organisation & Client			
Not applicable							
Decentralised Energy Network connection details.			Details should include: plans/drawings demonstrating: adequate plant room space provision; space for future heat exchanger; details of provisions made for connections (capped pipework, pipe routes, and provision of domestic hot water isolation valves); and any further details demonstrating that the connection has been designed in accordance with the CIBSE Heat Networks Code of Practice for the UK.				
Title of Submission			Date produced	Author's Name, Organisation & Client			
Not applicable.							
Remedial CO <sub>2</sub> and renewables proposals			carbon reducti	ntaining full details of proposals to fulfil approved on targets &/or renewable energy targets by: site, measures elsewhere in Borough, or additional tion.			
Title of Submission			Date produced	Author's Name, Organisation & Client			
Not applicable.							
Please provide a	ny furtl	ner informa	ition relevant to	this development – prior to implementation:			

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I confirm that the information supplied in this Proforma (and supporting evidence) is accurate. I will notify the Council should any of the information contained change. The agreed contents of the Energy Efficiency and Renewable Energy and Sustainability Plan, the information contained in this Proforma and the terms of Section 106 agreement pursuant to the planning permission must be complied with, unless otherwise agreed in writing by the Council.

Signed:	
Print full name:	Jennifer Pugh
Position:	Senior Sustainability Consultant at PSH Consulting.
Date:	08.06.2021

Please submit to: planningobligations@camden.gov.uk

End of form A (Pre-Implementation)