**Energy and Sustainability Consultation Response**

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| **Scheme address** | 13 Murray MewsLondonNW1 9RJ |
| **Planning reference number** | 2016/6897/P |
| **Description of development** | The erection of a 3 storey mews house (Class C3) following demolition of the existing lock up garages.  |
| **No. of residential units** | 1 |
| **Non-residential floor space (GIA m2)** | N/A |
| **Type of non-residential floor space** | N/A |
| **Building regulations requirements**  | Assessed under L1A |
| **Relevant documents for reference** | Sustainability Statement, by J Simpson of AJ Energy Consultants Limited, and dated 27 February 2017Energy Assessment, by J Simpson of AJ Energy Consultants Limited, and dated 27 February 2017 |

**POLICY REQUIREMENT: NEW BUILD MINOR RESIDENTIAL**

***5 or more residential units or >500m sq GIA:*** *are expected to submit an* ***energy statement****, but* ***ALL new-build minor residential development (adding 1+ unit)*** *will need to meet the following policy requirements:*

* *Follow the hierarchy of energy efficiency, decentralised energy and renewable energy technologies set out in the London Plan (2011) Chapter 5 (particularly Policy 5.2) to secure a minimum 19% reduction in regulated CO2 emissions below the maximum threshold allowed under Part L 2013 (19% is equivalent to code 4 mandatory requirements). GLA guidance on preparing energy assessments and CPG3 should be followed. In particular, improvements should be sought on the minimum building fabric targets set in Part L of the building regulations*
* *CS13 requires all developments to achieve a 20% reduction in CO2 emissions through renewable technologies (the 3rd stage of the energy hierarchy) wherever feasible, and this should be demonstrated through the energy statement.*

***All minor residential developments (over 1+ unit)*** *are also expected to submit* ***a sustainability statement*** *- the detail of which to be commensurate with the scale of the development showing how the development will:*

* *Implement the sustainable design principles as noted in policy DP22*
* *Demonstrate that the development is capable of achieving a maximum internal water use of 105 litres per day (plus an additional 5 litres for external water use).*

**ENERGY STATEMENT**

**ENERGY HIEARCHY RESULTS:**

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|  | **Overall area weighted reductions** |
| Total tCO2 | % reduction at each stage |
| **Baseline** | 2.326 | N/A |
| **Be Lean** | 2.067 | 11.1% |
| **Be Clean** | 2.067 | 0% |
| **Be Green** | 1.475 | 25.5% |
| **TOTAL** | 0.851 | 36.6% |
| **Shortfall** | N/A | N/A |

**BE LEAN:**

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| **Proposed specification:** |
| **Building fabric u-values (W/m²K)** |  |
| **Air permeability (m2/hr/m2)** | 3 |
| **Low carbon technologies and building services** | * Energy efficient lighting
* High efficiency gas boiler
* Solar PV
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**BE CLEAN:**

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| **Connection to an existing decentralised energy network:** |
| **Proximity to existing decentralised energy networks and proposals to connect** | No decentralised energy network nearby.  |
| **Future proofing:** |
| **Opportunities to connect to a future network**  | Connection to an energy network not feasible for this scheme |
| **On-site CHP** |
| **Suitability for on-site CHP** | CHP not feasible for this scheme |

**BE GREEN**

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| **Proposed technologies:** |
| **Solar PV:** | 6 x 250 Wp panels to generate approximately 1,141 kWh of electricity per annum.  |

**SUSTAINABILITY PLAN**

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| **Summary of proposed measures** |
| **Cooling hierarchy** | Natural ventilation - no mechanical cooling proposed.  |
| **Materials, sourcing and waste** | Wherever possible, the new materials used will be sustainably sourced to achieve an A or A+ rating under the Green Guide. Recycled materials, and materials with low embodied energy will be specified wherever possible. |
| **Green infrastructure and biodiversity (including green/brown roofs)** | Green roof proposed. Details to be secure through condition.  |
| **Water efficiency and SuDS (including rainwater and greywater harvesting)** | The water consumption in the proposed dwellings would be less than 105 litres per person per day. Water meter to be provided. Green roof will provide some run-off reduction |
| **Building Management Systems, metering, monitoring and management** | Water meter.  |

***NEW BUILD:***

***Water efficiency condition:*** *The development hereby approved shall achieve a maximum internal water use of 105litres/person/day, allowing 5 litres/person/day for external water use. Prior to occupation, evidence demonstrating that this has been achieved shall be submitted and approved by the Local Planning Authority.*

*Reason: To ensure the development contributes to minimising the need for further water infrastructure in an area of water stress in accordance with policies CS13 (Tackling climate change through promoting higher environmental standards), DP22 (Promoting sustainable design and construction) and DP23 (Water)*

***Sustainability in accordance with statement:***

*The development hereby approved shall incorporate sustainable design principles and climate change adaptation measures into the design and construction of the development in accordance with the approved sustainability statement (Sustainability Statement, by J Simpson of AJ Energy Consultants Limited, and dated 27 February 2017). Prior to occupation, evidence demonstrating that the approved measures have been implemented shall be submitted and approved in writing by the Local Planning Authority.*

*Reason: To ensure the development contributes to minimising the effects of, and can adapt to a changing climate in accordance with policies CS13 (Tackling climate change through promoting higher environmental standards) and DP22 (Promoting sustainable design and construction).*

***Energy in accordance with statement:***

*The development hereby approved shall be constructed in accordance with the approved energy statement [Energy Assessment, by J Simpson of AJ Energy Consultants Limited, and dated 27 February 2017] to achieve a 36.6% reduction in carbon dioxide emissions beyond Part L 2013 Building Regulations in line with the energy hierarchy, and a 25.5 % reduction in carbon dioxide emissions through renewable technologies.*

*Reason: To ensure the development contributes to minimising the effects of, and can adapt to a changing climate in accordance with policies CS13 (Tackling climate change through promoting higher environmental standards) and DP22 (Promoting sustainable design and construction).*

***Solar PV***

*Prior to first occupation of the buildings, detailed plans showing the location and extent of photovoltaic cells to be installed on the building shall have been submitted to and approved by the Local Planning Authority in writing. The measures shall include the installation of a meter to monitor the energy output from the approved renewable energy systems. The cells shall be installed in full accordance with the details approved by the Local Planning Authority and permanently retained and maintained thereafter.*

*Reason: To ensure the development provides adequate on-site renewable energy facilities in accordance with the requirements of policy CS13 of the London Borough of Camden Local Development Framework Core Strategy and policy DP22 of the London Borough of Camden Local Development Framework Development Policies.*

***Green Roof details***

*Full details in respect of the green roof in the area indicated on the approved roof plan shall be submitted to and approved by the local planning authority before the relevant part of the development commences. Details of the green roof provided shall include: species, planting density, substrate and a section at scale 1:20 showing that adequate depth is available in terms of the construction and long term viability of the green roof, as well as details of the maintenance programme for green roof. The buildings shall not be occupied until the approved details have been implemented and these works shall be permanently retained and maintained thereafter.*

*Reason: In order to ensure the development undertakes reasonable measures to take account of biodiversity and the water environment in accordance with policies CS13, CS15 and CS16 of the London Borough of Camden Local Development Framework Core Strategy and policies DP22, DP23 and DP32 of the London Borough of Camden Local Development Framework Development Policies.*