

## Climate Change, Energy and Sustainable Development Questionnaire

### **When should this questionnaire be used?**

This questionnaire is for minor developments (developments from one to nine residential units and one to 1000 square meters of non-residential floor space) and householder developments.

Developments of a scale above these thresholds (major developments) should not use the questionnaire, but should instead submit a Sustainability Statement and an Energy Statement. See policy 'D2: Climate change, sustainable design construction and energy' (policy D2) and the 'Climate Change, Sustainable Design, Construction and Energy SPD' (the 'SPD') for more information. The SPD is available on the Council's website.

### **What is the purpose of this questionnaire?**

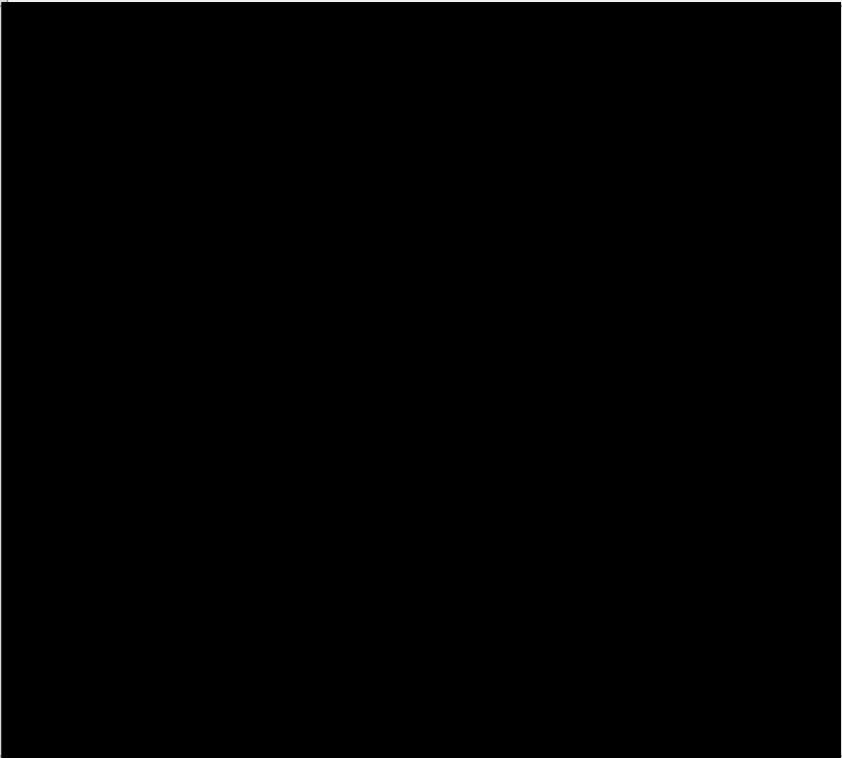
Policy D2 requires non-major developments to submit "adequate information" about how the development complies with the energy requirements of policy D2 and "information proportionate to the size of the development" regarding other matters of sustainability. These requirements for information will be deemed to have been met if a correctly completed questionnaire is submitted.

The questions in the questionnaire are based on requirements set out in Local Plan policies and you should refer to these to make full use of the questionnaire. The Climate Change, Sustainable Design, Construction and Energy SPD sets out guidance on the matters covered within the questionnaire.

The questionnaire is not an exhaustive list of sustainability matters and additions to the questionnaire are welcome.

The questionnaire is intended to guide development towards sustainable outcomes through compliance with Local Plan policy, from the initial proposal and site layout through to detailed design proposals, the construction process and finally the operation of the completed building. As a result, it is important that the questionnaire is first considered at the outset of planning and at the earliest stage of design. It should be updated as plans evolve.

If planning permission is granted, a condition will be applied requiring work to be carried out in accordance with the information provided in the questionnaire. It is important that the questionnaire is completed in good faith and any works identified within it are deliverable.

Applicant's name:	Giles and Vicki Cameron
Agent's name:	Weyside Architects Ltd
Site Address:	Oakdene, Oak Grange Road, W. Clandon, GU4 7UB
Application reference (if known):	TBC
Description of proposal: (e.g. total and types of units/ floorspace)	Construction of new single storey rear extension following demolition of existing rear extension and detached outbuilding.
Questionnaire prepared by: (name and qualification/job title)	James Donlon, Architect RIBA, Weyside Architects Ltd.
Signature of above:	
Energy information prepared by: (name and qualification/job title):	James Donlon, Architect RIBA, Weyside Architects Ltd.
Signature of above:	As above

## Part 1: Sustainable design, construction and climate change adaptation

### 1. Efficient use of minerals, use of secondary aggregates, waste minimisation and reuse of material from excavation and demolition (Policy D2 1a &1b). See 'Resources, materials and waste' in the sustainable design and construction guide in section 5 of the SPD.

1.a Will the use of primary minerals be minimised through e.g. the use of renewable materials, recycled and secondary aggregates, and other recycled and reused materials? Please provide details.

*PV panels have been installed to the best exposed upper roofs of Oakdene.  
No further renewables are proposed as part of this project.*

1b. Will demolition/excavation material from the proposed works be reused on site? Please provide details of where material will be derived and where it will be used.

*Demolition materials will be retained, assessed for condition and re-used as far as possible.  
Grubbed out foundations to be re-used as compacted fill in new works where engineer deems appropriate.*

1c. Will unused mineral waste be sent for reuse or recycling? Please provide details.

*Recycled where possible*

1d. Will non-mineral construction waste (e.g. packaging, timber, plastics) be minimised? Please provide details.

*Contractor to minimise (Weyside Architects to include in project specification).*

1e. Will locally sourced materials be used? Please provide details.

*Where feasible and economic. This scale of project will be carried out by a local building contractor, limiting energy usage in attending site regularly through out the project. Materials will be sourced from local suppliers.*

1f. Will materials be sustainably sourced (e.g. FSC certified timber)? Please provide details.

*Timber to be FSC certified. All materials to be sourced from reputable, responsible firms.*

## **2. Low energy design: landform, layout, building orientation, massing and landscaping (Policy D2 1c and 2). See 'Site layout, landscaping and urban form' and 'Building design' in the sustainable design and construction guide in section 5 of the SPD.**

2a. Will operational energy demand be minimised through low energy design and the use of energy efficient fabric? Please provide details. This information should align with the energy data provided in parts 2a and 2b of this questionnaire.

*New extensions to meet the requirements of Part L1B.*

2b. Has the layout of the site, landscaping and orientation of buildings taken account of solar receipts and other environmental factors to reduce the need for mechanical heating and artificial lighting in the development? Please provide details.

*Orientation of extensions are heavily determined by the orientations of the host building.*

*Design of the new extension has been developed to allow excellent levels of natural light through the single storey extension, using doors, windows and rooflights with good thermal values.*

2c. Will the internal layout of buildings make best use of solar gain and natural light? Please provide details.

*Yes - refer to drawings - consideration of natural light has been key in developing the proposals.*

2d. Will passive cooling/ventilation measures be incorporated into the scheme? Please provide details.

*Openable windows and rooflights to the new extension will help natural cross-flow on hot days.*

2d. Will the scheme include mechanical cooling (e.g. air conditioning)? If so, explain why passive measures would not be adequate.

*No.*

## **3. Water efficiency (Policy D2 1d). See 'Water efficiency' in the sustainable design and construction guide in section 5 of the SPD.**

3a. If the scheme includes new dwellings, will these be designed to the national optional building regulation water efficiency standard of 110 litres per person per day (regulation 36(2b))? The relevant Water Efficiency Calculation (s) (Part G) for the new dwellings should be submitted to the Council prior to occupation.

*No new dwellings*

3b. For all developments, will water efficiency measures be incorporated into the scheme to reduce the demand for water? Please provide details.

*New shower room and utility room included in new extension.*

*Fittings to shower room will be selected at the detailed design stage, Intention is to limit usage to 110 litres per person per day (as regulation 36(2b)).*

3c. For all developments, will water harvesting measures be incorporated into the scheme? Please provide details.

*Not planned for.*

#### **4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 'Measures that enable sustainable lifestyles for building occupants' in the sustainable design and construction guide in section 5 of the SPD.**

4a. Will measures that enable sustainable lifestyles for building occupants be incorporated into the scheme? Please provide details.

*Yes, low demand for electrically powered lighting by designing for good levels of natural light, including rooflights to the single storey extension.*

*Detailed design will proceed in accordance with advice of STM Environmental to mitigate future risk/impact of flooding.*

#### **5. Climate change adaptation (Policy D2 4 and P4). See 'Climate change adaptation' in the sustainable design and construction guide in section 5 of the SPD.**

5a. Will the scheme incorporate adaptations for the full range of expected climate impacts including: hotter/drier summers, warmer/wetter winters, more frequent and severe heatwaves and overheating, and more frequent and severe heavy rainfall events and flooding? Please provide details.

*The extensions are designed to meet Part L1b of Building Regulations.*

*High levels of insulation combined with well-proportioned openable areas of windows/doors will allow for good natural control of comfort conditions within the building.*

5b. Will the use of soft landscaping and permeable surfaces be maximised (as opposed to hard surfacing)? Please provide details.

*The site is well appointed for natural drainage, with a large area of lawn to the rear that will continue to attenuate surface water landing on the site.*

5c. Will surface water be managed by Sustainable Drainage Systems (SuDS)? Please provide details.

*Existing surface water drainage to be used.*

*Water butt to be installed to north elevation.*

*Existing rear garden will act as attenuation.*

#### **6. Any further information**

6a. Please provide information about any other sustainable design, construction and climate change measures that will be incorporated into the scheme.

*N/A*

*Modest extension has been designed to meet the requirements of Part L1B so will be built to exceed the requirements for energy efficiency and in doing so will improve the energy performance of the host property.*

## Part 2a: Energy

### 7. Combined (Cooling) Heating and Power ((C)CHP) networks (Policy D2 6, 7 and 8).

7a. Will the development fall within the vicinity of a (C)CHP/heat distribution network (of any scale from single building to district heat)? If so, please list the identified networks.

No

7b. If the development will fall within the vicinity of a (C)CHP/heat distribution network, will the proposed development connect to it or be connection-ready? If not, please set out a clear justification.

No

7c. Is the development within a Heat Priority Area? If so, is a (C)CHP or heat distribution network proposed as the primary source of energy for the development? If not, please set out a clear justification.

No

7d. If a new (C)CHP or heat distribution network is proposed, is it designed in accordance with the CIBSE Heat Networks Code of Practice? If not, please provide a clear justification.

N/A

### 8. Low and zero carbon energy

8a. If the scheme includes the provision of low and zero carbon technologies, provide details of the proposed energy systems here including: type of technology, location of installation and predicted energy yield.

N/A

### 9. New buildings: Carbon reduction calculation

9a. Will the proposed scheme deliver any new buildings (net or gross)?

No

9b. If the answer to 9a is yes, please complete the following carbon reduction calculation template in part 2b.

## Part 2b: Carbon reduction calculation

For guidance on how to complete this table, see section 'Questionnaire Part 2b: Carbon reduction calculation' in section 6 of the SPD. Add more rows as appropriate.

1. Reference	2. Target Emission Rate (TER)	3. Dwelling Emission Rate (DER) or Building Emission Rate (BER)	4. % carbon reduction from TER
e.g. Plot 1	e.g. 17.2	e.g. 13.4	e.g. 22.09%
