

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.

Part 1: Applicant details

Applicant's name:

Mr A Davey

Agent's name:

Rathbone Miller Ltd

Site address:

The Arbour, 5 Guildown Road, Guildford GU2 4HA

Application reference (if known):

n/a

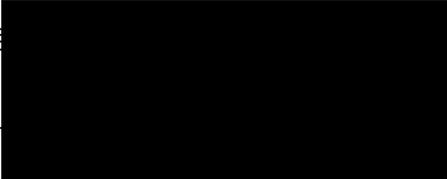
Description of proposal (e.g. total and types of units/floorspace):

Proposed new second floor and new roof

Questionnaire prepared by (name and qualification/job title):

Peter Finch, Architect.

Signature of above

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Energy information prepared by (name and qualification/job title):

n/a

Signature of above:

n/a

Part 2: Sustainable design, construction, and climate change adaption

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.

1.b. 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.

Yes, existing roof slates to be retained and re-used

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

n/a

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

As far as possible by using bulk deliveries and returning packaging such as pallets to suppliers.

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

Timber from sustainable resources and FSC certified. Roof slating to be partly re-used and new to be UK sourced.

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

Yes – all timber products will be FSC certified

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.

2.a. 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.

The new roof structure will be insulated to exceed Building Regulations requirements and windows will be high performance 1.1 U value.

- 2.b. 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.

The new windows will incorporate solar control glass to reduce solar gain and with the use of internal blinds will reduce solar gain even further. Solar panels (PV) will offset building energy use and contribute to overall carbon emissions.

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

The windows in the design will provide adequate daylight to reduce reliance on artificial light

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

Opening windows and trickle ventilation, solar control glass and internal blinds on windows.

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

No – the existing house currently does not have mechanical cooling and the extended part will not.

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

- 3.a. If the scheme includes new dwellings, will these be designed to the national optimal 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.

n/a

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

Yes – taps, showers and other sanitary appliances will not exceed Building Control maximum permissible flow rates

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

The existing system will remain.

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.

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

Yes – PV solar panels on the roof to generate electricity to feed back into the national grid and into on site batteries to be used for consumption by the house and charging electric cars.

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.

5.a. 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.

n/a – no change to the existing land/ground surrounding the house

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

n/a – no change to the existing land/ground surrounding the house

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

n/a – no change to the existing land/ground surrounding the house

6. Any further information

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

n/a

Part 2a: Energy

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

7.a. 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

7.b. 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.

n/a

7.c. 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

7.d. 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

8.a. 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.

The new roof is to have photovoltaic panels - approx 24 sq meters which at 20% efficiency and a daily average of 4.5 hours sunlight the potential will be 21kWh per day.

9. New buildings: Carbon reduction calculation

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

no

9.b. 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%