

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?

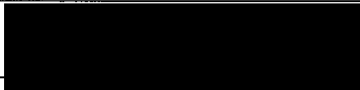
Policy D2 requires non-major developments to submit "adequate information" about how the development complies with the energy requirements of policy D2 and "information proportionate to the size of the development" regarding other matters of sustainability. These requirements for information will be 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:	Dr C Carlisle
Agent's name:	Miss Rhiannon Dallow
Site Address:	1 Castle Hill, Guildford, GU1 3SX
Application reference (if known):	22/P/00618
Description of proposal: (e.g. total and types of units/floorspace)	Change of use from residential care home(Class C2) to single dwellinghouse (Class C3).
Questionnaire prepared by: (name and qualification/job title)	Miss Rhiannon Dallow, Ba Architecture, Architectural Assistant
Signature of above:	
Energy information prepared by: (name and qualification/job title):	N/A
Signature of above:	N/A

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 'Error! Reference source not found.' 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.

Primary mineral use will be minimised. Unused demolition rubble will be crushed, screened and re-used as recycled aggregate. Recycled and secondary aggregates will be used over primary minerals where possible and incorporate available manufactured or natural aggregates depending on available sources.

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.

Unused demolition rubble will be crushed, screened and re-used as recycled aggregate. Excavated soil will be redistributed on site to minimise carbon footprint.

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

Where possible, unused concrete and demolition rubble will be crushed, screened and re-used as recycled aggregate.

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

Materials will be ordered just-in-time and handled carefully to prevent the likelihood of damage on site. Where possible, materials will be ordered from suppliers that accept returns of unused materials and packaging.

Waste materials and packaging will be sorted on site for recycling.

Off-cuts will be collected and reused across the site where possible. Materials will be handled carefully to prevent the likelihood of damage on site.

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

Where possible, transport emissions associated with material sourcing will be minimised.

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

FSC certified timber will be used throughout the construction. Brickwork is designed to be long-wearing and low-maintenance. These materials will reduce occupational/operational carbon through their material lifespan and can also be reused in the future.

2. Low energy design: landform, layout, building orientation, massing and landscaping (Policy D2 1c and 2). See 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.

Yes. The building fabric will be designed to meet or improve on the U-values as set out within the Part L requirements through a fabric-first approach.

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.

Yes.

The removal of some existing internal walls to the proposed kitchen, reception room and bedrooms will reinstate natural light and cross-ventilation in areas of the house that will generate higher levels of thermal gains due to user activity.

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

The removal of some existing internal walls to proposed kitchen, reception room, bedrooms and ensuites will reinstate natural light.

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

The removal of existing internal walls to the proposed kitchen, reception room, bedrooms and ensuites will reinstate cross-ventilation in an area of the house that will generate higher levels of thermal gains due to user activity.

2e. 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 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.

N/A

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

Yes. Dual flush toilets installed with aerated washbasin taps in bathrooms. Water efficient white goods and appliances installed in utility and kitchen.

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

No.

4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 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. Work from home will be encouraged to reduce lifestyle carbon emissions through the new provision of space created from the internal layout alterations e.g. Home office on the lower ground level.

5. Climate change adaptation (Policy D2 4 and P4). See 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.

Yes. The existing thermal mass of the building will retain warmth from overnight cooling. Cooling will be achieved through existing opening to release any heat that has been absorbed during the day. This will create a more comfortable dwelling during the hotter summers and severe heatwaves and reduce the likelihood of overheating.

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

Existing soft landscaping will be retained.

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

Yes. All surface water will be taken to a suitable soakaway on site.

6. Any further information

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

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.

N/A

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.

N/A

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.

N/A

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

8. 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.

N/A

Part 2b: Carbon reduction calculation

For guidance on how to complete this table, see section 'Error! Reference source not found.' in section Error! Reference source not found. 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%
N/A	N/A	N/A	N/A