

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:	Mr Adrian Bailes
Agent's name:	Mr Wilkinson
Site Address:	Bradstone Garden Cottage, Christmas Hill, Shalford, Guildford, GU4 8HR
Application reference (if known):	24/P/00312
Description of proposal: (e.g. total and types of units/floorspace)	Proposed ground floor front infill extension, side extension, rear basement and ground floor rear extension above, raising part of the roof to form additional first floor rooms including two front dormers one rear dormer with Juliet balcony and minor fenestration.
Questionnaire prepared by: (name and qualification/job title)	Oliver Pullan, ARB – Lytle Associates Architects
Signature of above:	<i>O Pullan</i>
Energy information prepared by: (name and qualification/job title):	Oliver Pullan, ARB – Lytle Associates Architects
Signature of above:	<i>O Pullan</i>

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.

Recycled materials such as existing bricks and clay tiles will be used, where possible. Flat Roof dormer to the window to be timber framed and residential annexe to be timber clad.

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.

Demolished materials to be used as hardcore for extensions new patio where possible.

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

We intend to re- use some products as hardcore on site, existing bricks and roof tiles to be re used where possible. Other materials will be sorted and recycled.

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

Materials such as timber framed windows and conservatory to be sorted and recycled. Suppliers will be instructed to use returnable pallets and site fencing, where possible.

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

Materials such as bricks, tiles and timber will be sourced from the UK, where possible,

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

Yes, any timber used will be FSC certified.

2. Low energy design: landform, layout, building orientation, massing and landscaping (Policy D2 1c and 2). See 'Error! Reference source not found.' and 'Error! Reference source not found.' 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.

- Thermal bridging to be reduced where possible.
- Design and construction to meet with the target U-Values given within part L of the Building Regulations.
- Proposals to replace all windows within existing openings with more high performing replacements.

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.

Due to working with an existing building and to mitigate the impact of the proposals upon the street scene, residential extensions are set facing the rear of the property and are north facing. Existing bathroom, Bedroom 04 and master bedroom to have south facing roof lights and dormer windows.

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

- General opening of a previously enclosed series of rooms to create larger more open spaces. Large north facing openings introduced to the rear Living Area, Kitchen/ Dining Space to increase natural light levels. Increase in opening width of Lounge and Study windows.
- Existing bathroom, bedroom 04 and master bedroom to have south facing roof lights and dormer windows.
- First Floor flat roof dormer to increase natural light levels in first floor areas.
- All rooms (apart from proposed master bed ensuite and larder) to have their own windows.

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

Internal layout encourages passive cooling such as cross ventilation in the open plan living area and master bed suite. All new and replacement windows to have trickle vents.

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

Mechanical extract fans with appropriate flow rates proposed. Mechanical cooling is not intended.

3. Water efficiency (Policy D2 1d). See 'Error! Reference source not found.' 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 are proposed.

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

All new WCs to comply with building regulations water efficiency standards.

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

Rainwater harvesting system to be encouraged, such as water butts.

4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 'Error! Reference source not found.' 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.

No, due to the small-scale development.

5. Climate change adaptation (Policy D2 4 and P4). See 'Error! Reference source not found.' 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.

- All proposed rainwater goods to have appropriate flow rates and number of outlets.
- Improved thermal performance of replacement windows within existing openings.
- Proposed external envelope to comply with the target U-values of part L of the building regulations.

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

- Soft landscaping, existing trees and shrubs to be retained where possible. Rear patio line is the same as existing.
- All proposed hard landscaping to be laid to falls.

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

Surface water to connect to existing site surface water drainage.

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.

None

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.

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.

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.

No new heat distribution network proposed.

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.

No provision.

9. New buildings: Carbon reduction calculation

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

Yes

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 '**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
TBC			