GUILDFORD BOROUGH

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 D. Pathak

Agent's name:

Brian Hendry

Site address:

Oak Tree Corner, Silkmore Lane, West Horsley, Surrey KT24 6JB

Application reference (if known):

OTC (form submitted with application)

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

Alteration and extension of existing single storey dwelling to for 2 storey dwelling

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

J B Hendry (Brian Hendry Architecture) B.A. Dip. Arch. (Mackintosh), RIBA

Signature of above:

[redacted]

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

As above

[redacted]

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.

   The project comprises the adaptation and extension of an existing building rather than the demolition and re-build and will therefore re-use much of the existing building plus construction will reuse bricks, tiles, hardcore and timber from demolition of existing building where possible.

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, as above + re-use for hardcore etc.

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

Yes. Any unused materials for recycling will be sent to a recycling contractor.

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

Yes, where possible.

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

Yes, where possible and using local suppliers

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

Yes. Details to be in building specification. FSC timber and locally sourced materials will be used, where possible

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.

N/A. The project is an alteration to an existing buildings and therefore will be conditioned by that fact but will of course be built to Building Control Standards as a baseline of performance, to be improved upon. The proposed building will be enormously better insulated than the existing and the spatial design makes use of the orientation and existing mature trees and shrubs to provide passive heating and

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.

N/A as an existing building, the site, landscaping and orientation of building are already determined but have been made use of as above in 2a.

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

Yes. Natural light maximised by the use of rooflights and fenestration (as shown on drawings).

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

Yes. Natural passive cooling utilised through use of opening rooflights for 'chimney' ventilation where possible and fanlights and openable casement will be used to facilitate cross ventilation.

2.e. 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.

3.a. 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

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

The project will comply with all new and statutory requirements for water efficiency.

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

Yes, to the extent of expanding the existing system of water butts to make use of rainwater for gardening

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.

'Measures that enable sustainable lifestyles for building occupants' does not, on the whole, apply to alterations to existing dwellings except that the occupants will incorporate vehicle chargers as they need and hopefully GBC will encourage enhanced public transport for these poorly served villages. Measure for waste management are included.

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 new extension is to an existing building.

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

N/A ... existing landscape (predominantly soft)

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

N/A, but, as previously, water butts are and will be used.

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 project is an extension to an existing domestic building and will be, by its nature, be an improvement on the existing dwelling

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.

   Not appropriate to an extension is to existing building using existing materials.

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.ge 13.4	e.g. 22.09%