

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?

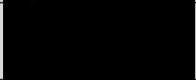
Policy D2 requires non-major developments to submit "adequate information" about how the development complies with the energy requirements of policy D2 and "information proportionate to the size of the development" regarding other matters of sustainability. These requirements for information will be 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 M Welsh
Agent's name:	Tracey Parker – Bespoke Architects
Site Address:	South Lodge, Westwood Lane, Wanborough, Guildford. GU3 2JE
Application reference (if known):	Planning Portal PP-12424023 / 23/P/01484
Description of proposal: (e.g. total and types of units/floorspace)	Proposed conversion of existing redundant barn to form a single dwelling
Questionnaire prepared by: (name and qualification/job title)	Tracey Parker – BA(Hons). Dip. Arch RIBA Architect
Signature of above:	
Energy information prepared by: (name and qualification/job title):	No energy consultant appointed at present
Signature of above:	Not applicable

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.

The proposed barn conversion will use traditional materials, all natural and recyclable; timber framed internally constructed envelope.

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.

Any material removed from the building or site will be reused wherever possible for hardcore, sub-floor base, backfilling & regrading within the ground. Any relevant external materials that need to be discarded as a result of the works will be salvaged, cleaned and re-used elsewhere

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

The contractor shall be responsible for managing the waste under their waste management plan which requires the utilisation of an accredited waste management company and the separation of specific waste products

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

Contractors will be responsible for this element, however instruction will be pass to minimise this element when ordering materials. A fully detailed scheme should facilitate accurate ordering and thus minimise waste.

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

Contractor shall be encouraged to locally source the materials where possible to minimise transport and carbon impact.

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

All timber materials will be sourced through specifications and therefore sustainably sourced. Timber materials sourced should have an FSC or PEFC certificate/accreditation which promotes forest management.

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.

The provision for high performance glazing, efficient insulation, air tightness and breathable energy efficient fabrics complying with current building regulations Part L and F would minimise operational energy use

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.

Consideration has been made within constraint of the existing building and site layouts, to creating maximum opening area of glazing windows and doors to capture natural lights efficiently and provide solar gain within areas of shading to control overheating.

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

The conversion proposed has been designed to allow for the habitable rooms to benefit from natural light with large fenestration areas and an open plan layout on the ground floor in the area benefitting most from the larger areas of glazing.

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

The design will have passive cooling via doors and windows with trickle vents. Possible solar reflective glazing and blinds for shading. Double glazed units to have 16mm min gap with a soft low E coating to current BS requirements. Insulated cavity closers with horizontal and vertical (quality felt) dpc's installed around all openings. All windows to be double-glazed and to have trickle vent 5000sq.mm, to comply with building regs Part L.

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

Not relevant to application as proposal does not make a provision for mechanical cooling

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.

The proposed conversion will, where possible, meet the national optional building regulation water efficiency standard. A Water efficiency calculation (s) (Part G) for the barn conversion will be submitted to the council prior to occupation.

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

The design will meet with Part G of the building regulations (Sanitation, hot water safety and water efficiency) to ensure a reduction in water use using fittings on taps, shower heads and water efficient cisterns in toilets.

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

For this proposal surface water will be discharged via existing and new soakaways. Where possible rainwater harvesting will be incorporated

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.

The specification of materials will take this requirement into consideration, and we plan to use sustainable materials, produced with a low environmental impact, such as wood, recycled materials, and materials made from renewable resources. In addition, we will include the use of energy-efficient appliances and lighting.

High levels of insulation will be installed within the internal timber framing to keep heat in during the winter and cool air in during the summer, which can help to reduce the need for energy for heating and cooling.

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.

The barn conversion will be insulated to current building regulation standards and care will be taken when considering the external landscaped areas to provide appropriate finishes and fittings.

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

Within the detailed design of the scheme, allowance will be made to landscape the areas around the proposed property to include the integration of surface water drainage from parking areas. Permeable paving can provide an opportunity to store water for later use and maintenance of the garden.

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

This is not currently proposed due to the size of the development.

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.

Water butts will be positioned to provide a good supply of stored rainwater for watering the garden.

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.

Not applicable

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.

Not applicable to this development

9. New buildings: Carbon reduction calculation

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

No, barn conversion only. No new buildings proposed

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

Not applicable

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
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