

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:	DDK Ltd
Agent's name:	Richard Bayley Associates
Site Address:	Stringers Barn, Salt Box Road, Guildford, GU4 7PX
Application reference (if known):	22/P/00703
Description of proposal: (e.g. total and types of units/floorspace)	Extension of the existing warehouse building following removal of existing cabin
Questionnaire prepared by: (name and qualification/job title)	Richard Bayley
Signature of above:	Richard Bayley
Energy information prepared by: (name and qualification/job title):	
Signature of above:	

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 '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.

Where ever possible recycled fill materials will be souced from the local company Chambers Ltd.

In addition we will where possible use second hand materials such as facing bricks and roof covering.

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.

At site clearance stage the hand standings will be segregated into heaps which will remain on site.

The hardcore materials will be crushed and used in the sub structures whilst the top soil will be used for landscaping purposes at the end of the build.

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

This will be collected by Chambers Ltd and hence will be under the control of their waste management controls and accredited waste procedures.

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

Good cost control documentation and ordering by the contractor will enable selection of materials to be delivered in bulk loads hence minimising waste and packaging.

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

Yes where ever possible.

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

Where possible FSC (Forest Stewardship Council) timber will be purchased.

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.

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.

In addition the building will be highly insulated and will achieve an overall U value of greater than required under the building regulations. LED lighting will be used throughout the shed..

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.

The front of the building faces south and the client proposes to explore the use of solar panels on the roof.

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

This is an industrial building.

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

This is an industrial building.

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

This is an industrial building.

3. Water efficiency (Policy D2 1d). See 'Water efficiency' 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.

All in accordance with Part G of the Building Regulations

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

All fitted water appliance will be checked to ensure they are within the Water Calculation requirements for new dwellings. Flow restrictors to be used where possible.

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

Soak ways will be constructed within the granular sub soil but rain water harvesting will be utilised prior to water entering the soak way, This brown water will be used for garden purposes and flushing of toilets.

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.

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

This is an industrial building.

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.

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 site is on granular sub soil which is good draining in the event of monsoon rainfall.

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

Yes permeable paving on lime stone sub base all over granular sub soil.

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

N/A

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.

Solar panels and enhanced insulation over and above the requirements of the Building Regulations.

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.

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.

Solar panels will provide approx 4.5KW of electricity. The Air Source heat pump will provide addition hot water heating plus heat and cooling and will hence reduce CO2 emissions.

This will provide much gains against a tradition Gas fired system in terms of the COP.

9. New buildings: Carbon reduction calculation

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

Extended warehouse.

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 '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
N/A			
N/A			