

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:	JAMES HILL
Agent's name:	JAMES HILL
Site Address:	73 HIGH PATH ROAD, GUILDFORD, GU1 2QL
Application reference (if known):	23/P/00369
Description of proposal: (e.g. total and types of units/floorspace)	Erection of two storey and single storey rear extension following demolition of existing two storey and lean two extensions and conversion of loft space to habitable accommodation with changes to roof to include gable end type roof to the front elevation with roof lights.
Questionnaire prepared by: (name and qualification/job title)	JAMES HILL CONSTRUCTION DIRECTOR, BSC HONS
Signature of above:	
Energy information prepared by: (name and qualification/job title):	JAMES HILL CONSTRUCTION DIRECTOR, BSC HONS
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.

Unfortunately, due to the fact that the new brickwork needs to be installed prior to the demolition of the existing it won't be possible to reuse the brickwork from the main house section. Across the rear of the property as much of the existing at first floor will remain rather than remove and complete rebuild of the façade. The garden space is small and as such the distribution of the spoil from the small number of excavations won't be able to be reused. If all weathering details can be maintained, and the condition of the tiles is good the existing main roof tiles will be reused on the new section of tiled roof.

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.

The site is too small to keep the spoil on site and re purpose.

1c. Will unused mineral waste be sent for reuse or recycling? Please provide details. Where possible i.e. existing roof timbers will be reused.

All waste will be segregated on removal and the waste away provider will reuse or recycle where possible. Recycle / reuse figures can be provided during the build.

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

All deliveries will be made from sustainable companies that are and have been working on minimisation of there packaging.

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

Where possible and available materials will be sourced locally

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

All timber will be FSC, and chain of custody can be provided.

All plasterboard will be from British Gypsum and their sustainability information can be provided.

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.

Currently the property is very inefficient both in its shell construction and internal elements. Through the work some of these shell areas will be removed and replaced with new energy sections that meet the current requirements. The areas of the existing which are to remain will be enhanced to provide a much more even low energy solution.

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 the nature and position of the property on the land the new works orientation is dictated by the existing building.

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

The new layout will enhance both solar gain and natural light to the refurbished / new sections at the ear of the building. The current layout has resulted in areas in the middle of the building requiring artificial light and heating to allow them to be used. The new design will allow these areas to benefit from more natural light and solar gain through opening the areas up which will draw natural light through and placing specific rooms that individuals' wellbeing will be improved through into natural light zones and rooms that require this less such as bathrooms towards the centre.

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

Due this being a refurbishment / extension the existing heating infrastructure will be maintained. New energy efficient boiler will be installed, heating system pipework and outlets changed to correctly sized units to provide a far more efficient and comfortable system for the occupants.

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 '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.

This is not a new dwelling.

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

The scheme doesn't increase the capacity for more occupants and as such the water, heating etc consumption will not increase. Due to the more efficient, better performing system to is envisaged that the consumption will drop. Smart meters, thermostats etc will be installed to allow better monitoring of consumption.

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

No, existing water supply will be maintained.

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.

In its current condition the building doesn't allow for a sustainable lifestyle in both its internal space function and from a heating and cooling perspective. The extension and refurbishment will resolve these issues.

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 scheme will allow for adaptations to cope with increased wetter winters. However, it will only be as good as the local infrastructure can cope with. The plot will not be in position to flood due to its location. The increased thermal vapour performance of the property will benefit both the wetter and hotter weather periods.

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

The current hard service at the front of the property will be changed to a permeable surface and the rear hard surfaces be reduced.

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

Existing drainage system will be maintained.

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.

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.

NA

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.

NA

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.

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.

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.g. 13.4	e.g. 22.09%