GUILDFORD BOROUGH

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(a) 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:	
Agent's name:	Mr Tony White
Site Addre	14 Pilgrims View, Ash, Guildford, GU12 6HU
application reference (if known):	24/P/00206
Description of proposal: (e.g. total and types of units/floorspace)	Erection of a 1 bedroom detached bungalow following demolition of existing detached double garage
Questionnaire prepared by: (name and qualification/job title)	Mr G Powell MCIOB
Signature of above:	Graham Powell
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 'Erreur : source de la référence non trouvée' 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.

Wherever possible and locally avaiable

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.

Existing garage to be demolished and masonary used for hardcore beneath slab and patio

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

Mineral waste can be strictly controlled due to the small nature of the build, so quantities be can ordered correctly, with on site mixing, Any excess mineral waste will be responsibly recycled wherever available

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

Most materials ie bricks/blocks to be delivered in pallet form and pallets returned

Timber would be free from packaging, loose materials ie sand etc to be delivered in re-usable jumbo bags or loose tipped

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

Nurmerous merchants within a 5 mile radius

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

Sawn , planed, moulded and sheet timber to be FSC certified in accordance with suppliers timber environmental policy

2. Low energy design: landform, layout, buildin orientation, massing and landscaping (Policy D2 1c and 2). See 'Erreur : source de la référence non trouvée' and 'Erreur : source de la référence non trouvée' 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 fabric of the extension will not exceed the maximum heat loss requirements under the newly adopted August 2022 Part L Building Regulations ,Lighting will be 100% efficient, Glazing double glazed with 28mm Argon infill and warm edge spacers to meet reduced U value

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.

N/A as orientation is fixed

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

As above – Air source heat pump in lieu of PV panels

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

Window openings kept to a minimum and in accordance with SAP calculations

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 'Erreur : source de la référence non trouvée' 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.

yes

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

Water efficiency under building regs is a requirement for new build 110 litres/day per person using eg

full and part flush wcs

Consideration given to flow rates on both high and low-level pressure taps and showers

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

No water harvesting proposed, but subject to later SUDS design

4. Measures that enable sustainable lifestyles for building occupants (Policy D2 1e). See 'Erreur : source de la référence non trouvée' 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

5. Climate change adaptation (Policy D2 4 and P4). See 'Erreur : source de la référence non trouvée' 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.

Not within flood zone, although resilient methods of construction used, Extension to have well insulated walls, floors and roofs to new build standards, Window design to prevent heat loss and heat gain with adequate openable areas for ventilation,

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

Permeable paving to be used for vehicle off road hardstanding

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

Existing surface water discharges to soakaways – new SW outlet to discharge to new soakaway or attenuation brake tank as per later SUDS design criteria

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.

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.

Yes Air Source Heat Pump

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.

See Below

Part 2b: Carbon reduction calculation

For guidance on how to complete this table, see section ‘Erreur : source de la référence non trouvée’ in section Erreur : source de la référence non trouvée of the SPD. Add more rows as appropriate.

Reference	2. Target Emission Rate (TER)	3. Dwelling Emission Rate (DER) or Building Emission Rate (BER)	4. % carbon reduction from TER
Plot 1	13.44	3.95	70.61%