

Applicant's name:	Mr & Mrs Rivers-Moore
Agent's name:	Iain Collie Architecture Limited
Site Address:	8 Parkside Close, East Horsley KT24 5BY
Application reference (if known):	PP-12641456
Description of proposal: (e.g. total and types of units/ floorspace)	First floor front extension including new cat slide dormer, single and two storey side and rear extensions and alterations to fenestrations.
Questionnaire prepared by: (name and qualification/job title)	Iain Collie Architecture Limited
Signature of above:	Iain Collie
Energy information prepared by: (name and qualification/job title):	Iain Collie Architecture Limited
Signature of above:	Iain Collie

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.

The applicant will use locally sourced building materials, provided the appropriate colours / size / finish are available in the quantity required. Where new materials are used, the applicant will consider the environmental credentials of the supplier to reduce embodied carbon and aim to use recycled aggregates.

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.

Given the age of the property, it is unlikely that demolition materials will be suitable for re-use on site.

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

Mineral waste, where appropriate, will be sent to be crushed for re-use

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

Packing materials will either be returned to the supplier for recycling or recycled by the applicant.

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

There are numerous building supply firms close to the site and sourcing locally will significantly reduce transportation

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

FSC / PEFC timber will be used for the new roof and framing, ensuring the use of sustainably certified material and chain of custody to ensure verification of source. Care will also be taken when choosing suppliers to ensure products used come from sustainable sources.

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.

The new extensions will be well insulated and sealed. Double glazed windows will be used along with composite / metal framed doors. Energy efficient lighting will be provided throughout.

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.

Improvements have been made to the floor plans to enhance natural daylight and ventilation to the internal spaces, which will minimise the reliance on artificial heating and lighting.

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

Yes, as noted above in 2b.

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

Through ventilation will provide passive cooling and ventilation to the new extensions on both floors.

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

Air conditioning may be used for client comfort during the most severe weather, however the property will benefit from passive ventilation which will minimise the reliance on mechanical cooling.

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 applicable

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

Demand will be reduced through use of low spray taps and aerated shower heads, dual flush toilets and the fitting of more-efficient white goods inc. dishwasher and washing machine.

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

Water butts could be provided for the extensions, connected to down pipes to allow for water collection for garden use.

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.

A-rated white goods will be installed where these are required.

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 grounds around the dwelling are already grassed with areas of paving and planting. The proposals include the enhancement of the garden for occupant enjoyment. Where hard surfaces are proposed, they will be constructed of permeable materials. Natural ventilation and good insulation will also help with hotter / drier summers

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

Yes - see above

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

Yes - Soak-aways will be provided to manage surface water run off where appropriate.

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.

This is not applicable

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.

This is not applicable

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.

This is not applicable

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.

This is not applicable

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.

This is not applicable

9. New buildings: Carbon reduction calculation

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

This is not applicable

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