35 Cumberland Avenue, Fixby, Huddersfield
Climate Change Statement

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CLIMATE CHANGE STATEMENT

PART 1: Applicant Details

Applicant:	Mr Abdul Bismilla
Agent:	Andrew Lees Architect
Site Address:	35 Cumberland Avenue, Fixby Huddersfield HD2 2JJ
Description of Development:	Whole house deep retrofit, alterations, new rear extension and rationalisation of roof structure.

This document is set out according to Kirklees Council template. Please see the application Design and Access Statement (document reference ALA-45-REP-02) for more detail on the sustainable design strategies integrated into the design.

PART 2: Climate Change Mitigation Measures
(set out according to Kirklees Council template)

Q1: What measures have been/will be taken to reduce the energy demand associated with your proposed development beyond the minimum required in Building Regulations?

The design has been developed as an evidence-based exemplar low-energy scheme with iterative energy assessment informing the design process. See section 3 of the Design and Access Statement for more details.

Q2: What measures have been/will be taken to limit the carbon consumed through the implementation and construction processes, e.g. by reusing existing on-site materials or sourcing materials locally? (See section 3)

As discussed in the Design and Access Statement, the proposals are for a low energy retrofit: creatively re-using an existing building rather than taking the usually easier option of demolishing and starting again. Demolitions are carried out selectively, and material will wherever possible be re-used on site: e.g. timber can be readily repurposed, demolished masonry can be re-used as bricks / blocks if recovered intact, or used as rubble fill in new subfloors otherwise. As the scheme is developed in more detail, the specification will factor in an assessment of the carbon footprint of new materials as part of the decision-making process. All timber will be specified to be FSC or PEFC chain of custody traceable and responsibly sourced.

Q3: What measures have been/will be taken to utilise renewable or low carbon energy sources? (See section 4)

The reconfigured house is optimised for solar energy harvest. See section 3 of the Design and Access Statement for more details. The proposal is designed to require minimal heating and to be heat-pump ready.

Q4: What measures have been/will be taken to ensure the building design and layout has been optimised to energy efficiency beyond the minimum requirements in Part L of the Building Regulations? (See section 5)

The building form has been designed to improve upon the efficiency of the current structure: more efficient surface area / form factor, a simpler envelope with less junctions to keep airtight, the creation of a "solar space" main living area. See section 3 of the Design and Access Statement for more details. The iterative energy modelling has also indicated no risk of summer overheating. South facing windows will be deeply inset in the façade to provide some shading during summer months, while allowing useful solar gain when the sun is lower in the winter. The existing masonry structure of the house will be exposed internally as "thermal mass", providing a steadying thermal inertia to the internal environment.

Q5: What measures have been/will be taken to reduce potential impacts of flooding associated with your proposed development? (See section 6)

The site is not in a flood risk zone, so no building-specific flood risk mitigation requirement exists. In terms of the development's own contribution to drainage infrastructure and the risk of flooding, the rationalised building roof form (see in particular the butterfly roof to the main extension) gathers drainage to four downpipes, which will each incorporate simple water butts to harvest rainwater for garden irrigation and arrest runoff. The new driveway / parking area with be free draining resin-bound gravel to avoid flash surface runoff.

Q6: What measures have been/will be taken to reduce water stress associated with your proposed development? (e.g. Water retention and minimisation measures) (See sections 7 and 8)

Low volume flush sanitaryware, aerated taps and showers will be specified. See also answer to Q5 re: water butts to roof drainage.

Q7: What measures have been/will be taken to provide biodiversity net gains? (See section 8)

The proposal does not significantly reduce garden area. The re-landscaped garden will be developed to incorporate species that promote biodiversity – tree planting, plants that encourage insect pollinators, the potential for incorporation of nesting boxes for birds and bats will be explored in the detailed design.

Q8: What measures have been/will be taken to reduce air pollution associated with your proposed development? (See section 9)

The proposal is designed to be heat-pump ready. The proposed MVHR system will filter incoming air, and – through its recovery of heat from exhaust air – reduce any heating generated pollution. The proposals remove the existing chimney, and the house will have no solid fuel appliances. Regarding transport, it will feature charging ports for EVs and the large ground floor storage area with dedicated external side door provides ample cycle storage space.