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FULL PLANNING APPLICATION · SEPTEMBER 2026

Carbon and Energy Statement

Places for Everyone Policy JP-S2

Clough Farmhouse, Clough Lane, Prestwich, Manchester M25 3JD
Proposed Demolition of Existing Dwelling and Erection of Replacement Dwelling and Detached Garage

Prepared by Cadence Architecture on behalf of Mr & Mrs Kelly
Careful design and honest budget conversations, from the very first meeting.

1. Introduction

This Carbon and Energy Statement has been prepared by Cadence Architecture on behalf of Mr and Mrs Kelly in support of a full planning application for the demolition of the existing dwelling and the erection of a replacement dwelling and detached garage at Clough Farmhouse, Clough Lane, Prestwich, Manchester. It is submitted in accordance with the validation requirements set out in the pre-application response of 13 July 2026 and demonstrates how the development responds to Places for Everyone Policy JP-S2: Carbon and Energy.

2. Policy Context

Policy JP-S2 requires new development to be net zero carbon in relation to its operational carbon emissions, and requires development proposals to set out how this has been achieved in a Carbon and Energy Statement structured in accordance with the energy hierarchy: reducing energy demand first, supplying energy efficiently second, and incorporating renewable and low-carbon technologies third. The policy also requires new development to incorporate adequate electric vehicle charging points. The development will comply with Part L (2022) of the Building Regulations as a minimum, with the fabric measures set out below designed to exceed those standards.

3. The Energy Hierarchy

3.1 Be Lean: Reducing Energy Demand

The scheme adopts a fabric-first approach, with the greatest carbon savings secured through the permanent fabric of the building rather than bolt-on technology:

- A high-performance building envelope with enhanced insulation designed to exceed Part L (2022) standards
- Airtight construction to reduce uncontrolled heat loss, with mechanical ventilation with heat recovery (MVHR) providing fresh air while retaining warmth
- A compact built form with a simple gabled envelope, minimising the external surface area through which heat is lost
- Optimised orientation along an east-west axis, maximising passive solar gain and natural daylight to the principal living spaces
- Integration of a significant proportion of the accommodation at lower ground level, set into the natural slope of the site, using the thermal stability of the ground to reduce heat loss and summer overheating
- A controlled glazing strategy: generous south-facing openings capture passive solar gain, while the reduced expanse of ground floor sliding doors and the simplified fenestration of the revised elevations limit excessive glazed area and associated heat loss
- The zinc standing seam roof and wall system providing a continuous, well-sealed thermal envelope at the upper level

3.2 Be Clean: Supplying Energy Efficiently

The dwelling will be all-electric, with no fossil fuel combustion on site. Space heating and hot water are proposed to be delivered by a low-carbon heat pump system serving low-temperature underfloor heating, which operates efficiently with the highly insulated envelope. Lighting will be low-energy LED throughout, with zoned smart

heating controls allowing occupants to condition only the spaces in use. The detailed servicing strategy will be finalised with the M&E designer and SAP assessor at detailed design stage, and the SAP assessment will demonstrate the operational carbon performance of the completed specification.

3.3 Be Green: Renewable and Low-Carbon Technologies

Renewable and low-carbon technologies will be incorporated where practicable and viable, having regard to the sensitivities of the St Mary's Conservation Area and the woodland setting. The suitability of roof-mounted photovoltaic generation will be assessed at detailed design stage, balanced against the visual considerations of the Conservation Area roofscape; the standing seam roof system is compatible with low-profile, non-reflective PV integration should this be pursued. The all-electric servicing strategy ensures that the dwelling's operational carbon intensity will continue to fall with the decarbonisation of the national grid.

4. Electric Vehicle Charging

In accordance with Policy JP-S2, Policy JP-S5, and Approved Document S of the Building Regulations, electric vehicle charging of at least 7kW (Mode 3, single phase) will be provided to serve the parking provision on the driveway and within the detached garage, with certification and photographic evidence of the installation available to the Local Planning Authority. The applicant accepts a condition securing this provision.

5. Conclusion

The development responds to Policy JP-S2 through the energy hierarchy: demand is minimised through a fabric-first envelope, compact form, earth-sheltered lower ground floor and controlled glazing; energy is supplied efficiently through an all-electric, low-carbon servicing strategy; and renewable technologies will be incorporated where practicable and viable within the constraints of the Conservation Area setting. Together with the replacement of a poorly performing existing dwelling that falls well short of modern standards, the proposal delivers a substantial improvement in the operational carbon performance of the site and accords with Policy JP-S2.