

Sustainability Statement

1. BACKGROUND

Cambridge Stores is a Victorian two stored terraced house facing the A38 Bristol Road in the hamlet of Cambridge located between Gloucester and Bristol.

A planning application for altering and renovating the terraced house designated as House 'A' and constructing two new separate two storied dwellings in the large rear garden of the property.

2. OPPORTUNITIES TO RESPOND TO SUSTAINABILITY OBJECTIVES

a. Renewable Energy:

- Solar PV in-roof panels to roof of altered/renovated House 'A' (40m² area facing west)
- Solar PV in-roof panels to roof of new House 'B' (49m² area facing west)
- Solar PV in-roof panels to roof of new House 'C' (49m² area facing south)
- Inverters installed for battery storage of electricity to be used at peak times
- Panels connected to house electrical distribution board to reduce grid demand

b. Avoiding Cooling and Overheating:

- High performance double glazing to all windows, doors, fixed panels and rooflights
- Rooflights with solar adjustable blinds
- Solar shading from pergolas and blinds in windows and fixed panels

c. Building Form and Construction:

- Renovated terraced House 'A' with party walls reduces exposed external walls
- All floors with 150mm high performance rigid insulation
- All masonry external walls with 100mm high performance thermal insulation
- All roofs with 150mm high performance rigid insulation
- All interfaces of materials air-tight with minimal thermal cold bridging

d. Low Carbon Heating:

- Underfloor electric heating throughout all floors except store rooms
- New efficient electrical appliances to kitchens and utility rooms
- Electric hot water supplies to kitchens, utility and bathrooms
- Battery storage for excess electrical supply
- Efficient electric fan ventilation to kitchens, utility and bathrooms with insulated ducts
- LED light fittings throughout
- Electric smart meters to monitor/control use of energy

e. Ecology, Biodiversity and Amenity:

- Extensive garden and planted areas available to encourage biodiversity
- Terraces and gardens with good sun orientation provide quality outside amenity

f. Location with Access to Facilities and Countryside:

- In hamlet of Cambridge with community facilities and local restaurant/pub
- Close to Dursley (1.5 miles) for shopping, health care, education, other facilities
- Bus services to Dursley, Uley, Eastington, Stonehouse, Stroud, Gloucester
- Also bus service to Rednock School and Rednock School Grounds
- Surrounding countryside for walking, picnics, cycling

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