

Sustainability Statement

187, Leckhampton Road, Cheltenham, GL53 OAD

11th March 2024

Introduction

187 Leckhampton Road is in the Leckhampton area of Cheltenham, within Cheltenham Borough Council.

The property is a late Edwardian detached house.

The original house is a cavity wall construction with a more modern extension built in the 1980s.

There is limited opportunity to greatly impact the thermal efficiency of the existing building.

However, the following key measures have been considered:

Key Measures

Site and orientation

The proposed extension faces west and therefore will not incur a great deal of solar heat gain from the afternoon sun, thus ensuring there is no excessive overheating because of the new windows and doors to the new extension.

Overheating will be further reduced by the installation of roof lights in the new extension roof which will allow heat to escape in hot weather.

Building Fabric Design and Detailing

Insulation is a key part of sustainability. It serves to conserve energy by minimising the escape of heat from the building.

Due to the age of the building, heat loss is a principal issue in this dwelling. The new extension will comply fully with up-to-date building regulations which will ensure a very high standard of thermal insulation. The addition of the proposed extension will greatly improve the overall thermal efficiency of the property.

In addition to the structure, all new windows and doors will meet current u-value requirements along with draft proofing and airtightness.

The existing property is served by a modern boiler which is efficient and uses low carbon to heat the dwelling. With the added thermal efficiency of the extension, it is expected that less heat will need to be generated to provide the required warmth for the dwelling.

All sanitary ware and fittings for the new shower room will comply with current building regulations in terms of maximum flow rates, thus conserving water. All pipe work will be insulated to prevent heat loss and where possible pipe runs shortened to minimise pipe lengths and loss of heat.

There is the opportunity to install a rainwater butt at the rear of the new extension to provide water to irrigate the garden.

Transport and Travel

The property is situated on a main bus route into the centre of Cheltenham.

Ecology and Biodiversity

Although the extension will remove part of the existing soft landscaping, there will remain an ample area for lawns, plants, and a wild bee-friendly area.

Recycling

The household recycles all waste in accordance with Cheltenham Borough Council's recommendations.