

Sustainability Statement

1 Oakhill Way, Hampstead, NW3 7LR

December 2014

1.0 Introduction

A major purpose of the work proposed in this planning application is the transformation of this building's energy efficiency. This is in line with the guidance on sustainability (CPG3). It is noted that Section 4 stipulates that: "All buildings, whether being updated or refurbished, are expected to reduce their carbon emissions by making improvements to the existing building. Work involving a change of use or an extension to an existing property is included. As a guide, at least 10% of the project cost should be spent on the improvements."

In the case of this proposal and the energy efficiency measures shown on the application drawings, the percentage of the project cost directed towards energy efficiency exceeds this guidance.

The policy states two other 'key messages': that the "*potential measures are bespoke to each property*"; and that "*sensitive improvements can be made to historic buildings to reduce carbon dioxide emissions*". The proposed bespoke measures appropriate to this building are discussed below.

2.0 Insulation

2.1 The existing building was constructed in the 1950s and therefore has solid brick walls or uninsulated cavity walls. The application drawings show that these walls are to be insulated externally through the addition of insulation and render. This method may be supplemented by blowing insulation into an existing cavity. Insulating externally involves applying insulation to the external faces of external walls. The later is optimal in energy efficiency terms as is allows a greater thickness of insulation to be installed. This is the solution shown on the application drawings. The insulation type proposed is 100mm of Kingspan Kooltherm K5 External Wall Board which has a very low thermal conductivity of 0.02 and is therefore equivalent to using 200mm (approximately) of conventional insulation such as Rockwool. A through colour or painted render will then be applied.

The appearance of painted render or stucco is common within the Hampstead conservation area.

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- 2.2 The existing roof has a low degree of retrofit insulation. 250mm of insulation is proposed to the new roof shown on the application drawings.
- 2.3 The newly constructed parts of the building; the roof structure and extension will be constructed to meet current building regulations.

3.0 Draught-proofing

- 3.1 The existing sash windows, though the majority are modern replacements, do not all have draught seals. Draught seals will be incorporated throughout in the replacement windows. The front door, letterbox and the proposed sliding doors to the rear will also be draught sealed.
- 3.2 Both existing bathroom ceilings are penetrated by recessed downlights and have ventilated roof spaces above them meaning the cold 'outside' air has another direct pathway into the existing building. The proposal removes these.

4.0 Windows

- 4.1 The existing sash windows, though the majority are modern replacements, are all single-glazed. All new windows and replaced windows shown on the application drawings are doubled-glazed (and are noted as such). NB. As this building is in a conservation area, all new windows and French doors will exactly match the existing (white-painted timber construction; glazing bar profile and width to match the existing).
- 4.2 The new sliding doors to the rear of the property are proposed to be Sky-Frame sliding doors which are triple glazed and have very low thermal conductivity.
- 4.3 The elimination of draughts from windows is discussed in paragraph 3.4 above.

5.0 Heating and hot water

5.1 Heating and hot water will be provided by a highly efficient modern gas boiler with integral highly insulated h/w storage. All pipework will be insulated.