

28th Feb 2024

SUTATINABILITY STATEMENT

MANOR VIEW, CHURCH RD, THORNTON-IN-CRAVEN, LANCASHIRE, BD23 3TU

APPLICATION FOR *PLANNING CONSENT* FOR BUILDING OVER EXISTING GARAGE TO FORM NEW MASTER BEDROOM SUITE.

The planning application seeks to extend the existing dwelling while upgrading and improving the building fabric to minimise the energy required to heat the property which will have a positive sustainability impact.

The house was built late 80s early 90s with natural stone outer skin to match the local area and insulated timber frame internal leaf, it would of exceed insulation requirement at the time of construction and the proposed extension and refurbishment of the property intends to do the same.

There was a glazed rear extension carried out in 2012 which once again done to a high standard with high levels of insulation and good quality glazing to ensure it exceeded the regulations at the time.

Upgrading the insulation in the loft will be carried out as part of the new sun tunnels and loft insulation will become 300mm rockwool to surpass current regulations, upgrading/ replacing the front elevations glazing is also intended as part of the build to reduce solar gain in summer and heat loss in winter, all glazing will achieve U values of not less than 1.2 w/m²/K. These fabric upgrades will help reduce the houses carbon footprint and improve natural light reducing the need for artificial. Upgrading of the existing cavity wall insulation is not proposed as the cavity and existing construction methods prohibit it and if carried out would possibly lead to a lack of ventilation, bridging of cavities which intern could lead to damp and mould.

The proposed extension over the existing garage intends to heavily upgrade and insulate this section of the house by forming a very well insulated SIPs like build with timber frame walls with cedar cladding, a fabric first approach is intended with u-values as low as 0.12 w/m²k to be achieved with roofs and walls, airtightness will also be very high with a SIPs build as to also retain as much heat as possible while reducing the need for heating, the extension will have a glazed front elevation as to give high levels of natural light and reduce the need for artificial lighting, all glazing will have u-values of not less than 1.2 w/m²k as to exceed current regulations and glazing will be set back on this south elevation as to reduce solar gain in the summer.

Upgrading much of the houses lighting is also intended to low energy LED fittings as to further reduce the houses carbon footprint.