

ENERGY CONSERVATION STATEMENT

FOR

ERECTION OF A DETACHED
CHALET-STYLE DWELLING

ON LAND ADJACENT TO

ELM LODGE
TAMARISK WAY
FERRING
WORTHING
WEST SUSSEX
BN12 5ER

DECEMBER 2018

ENERGY EFFICIENCY

The site is situated within an established residential sustainable location.

The proposal is for a low maintenance dwelling, which will be highly insulated to meet and exceed the current requirements of Part L1A of the Building Regulations - incorporating full fill cavity insulation and high levels of roof insulation to minimise energy consumption and carbon footprint of the house, both in construction and use.

The proposed new dwelling will comply with DEFRA standards limiting thermal bridging and air leakage, and robust details for insulation will be observed at all junctions.

The main living areas have been located to take advantage of solar gain from the south-easterly direction and large windows, glazed doors and Velux roof lights will provide all spaces with good quality natural light. The windows and bi-fold doors will be sealed triple glazed units incorporating low-emissivity solar glass, and certified by an approved BFRC (British Fenestration Ratings Council) member to ensure that the thermal properties of the fenestration exceed current building regulation standards. One way mirror film will also be applied to the first floor glazing to minimise solar gain in summer months.

At detailed design stage a BRE certified energy assessor will undertake SAP calculations to ensure compliance with Part L of the Building Regulations for new build housing. Total carbon emissions will be minimised through the on-site installation and implementation of renewable or low carbon energy sources. It is anticipated that an Air Source Heat Pump certified under the Microgeneration Certification Scheme will provide 100% of underfloor heating and hot water throughout the dwelling.

Low energy electrical equipment and apparatus will be installed where practical, including energy efficient LED lamps throughout the dwelling.

Ventilation will be via natural means of opening doors and windows with humidistat controlled low energy extract fans for the kitchen, utility and bathrooms. Trickle vents will be fitted to doors and windows, and cross ventilation will be achieved with casement windows positioned on the front and rear elevation providing a consistent supply of fresh air and allowing high levels of daylight into the habitable rooms.

CONSTRUCTION AND DEMOLITION WASTE

Local materials will be employed where possible. Sand and aggregate will be sourced from local quarries where possible.

Any soil excavated during construction will be either reused on site or disposed of in an environmentally friendly way.

WATER CONSERVATION

The building will comply with current legislation and will utilise energy and water resources in an efficient manner from a new metered supply. The proposed scheme would incorporate low flow appliances with supply restrictor valves, spray taps and dual flush toilets.

It is anticipated that a pond specialist will assess the potential for surface and storm water to discharge into the existing pond, and should this be impractical then catchment pit type soakaways will be installed in accordance with Approved Document H. 100 litre water butts will be fitted to store water for irrigation usage during dry periods.

REFUSE AND RECYCLING

There is adequate room for compost bins within the garden. Refuse and recycling bins will be located externally between the garage and side boundary fence to allow easy access.

TRANSPORTATION

The property is within reasonable walking distance from public transport, including regular bus and train services.

All local shops, schooling, community and leisure facilities are within close proximity of the site.

Space for storing bicycles will be provided in the integral garage.