



SUSTAINABLE CONSTRUCTION AND DESIGN STATEMENT

LAND WEST OF RYEFIELD FARMHOUSE, WOODGATE

The proposal is for 5 No new dwellings and associated works. This statement sets out the sustainability credentials for the development.

Minimum water usage of 110 litres per person per day

Water use will be restricted to 110 litres per person per day by incorporating the following measures:

- Dual flush wcs
- Aerated spray taps to sinks and basins
- Low flow shower heads
- Water efficient white goods
- Water butts for harvesting rainwater

Sustainable design, good environmental practice and sustainable building techniques/technology

Where possible building materials with low embodied energy will be prioritised. This will be undertaken using the BRE Green Guide to Specification. All timber will be sourced in accordance with the FSC (Forest Stewardship Council) guidelines.

A Construction & Management Plan will be employed throughout the construction phase. Good planning and management will be used to reduce waste, utilise local labour and materials, and reduce water and energy use.

Minimisation of energy consumption

The buildings will be of traditional construction. To achieve a minimum 10% improvement of CO2 emissions against 2013 Part L standards the fabric of the building will be improved as follows:

- Cavity wall insulation increased from 75mm to 100mm
- Floor insulation increased from 100mm to 125mm
- Skeiling insulation increased from 150mm to 175mm
- Loft insulation increased from 100/200mm (between/over) to 100/300mm (between over)
- Windows u value uprated from 1.6 to 1.4
- Glazed doors u value uprated from 1.8 to 1.6

To achieve a 10% further improvement of CO2 emissions PV panels will be incorporated into the south and west facing roofs.

Adaptation to climate change

Surface water run-off from the roofs and driveways will be designed following the principles of sustainable urban drainage systems – please refer to the Drainage Report.

External openings to the proposed buildings are largely traditional in size and together with the increased insulation levels proposed will reduce the potential for overheating.

Any new planting undertaken will consider the need for drought resistant plants and plants that encourage wildlife.

Natural environment and biodiversity

Please refer to the Ecological Impact Assessment Report for proposed ecological enhancements.

Reducing pollution

The new dwellings will be provided with an electric car charging point each to reduce emissions from vehicles.

External lighting will be kept to a minimum and fittings with low-spillage specified to reduce light pollution (also refer to the Ecological Impact Assessment Report).