

0036.7 - SUSTAINABLE DESIGN AND CONSTRUCTION STATEMENT

Proposal: Application for a proposed extension to an agricultural building at Newton Grange, Bank Newton, Nr Gargrave, Skipton BD23 3NT.

Prepared by: Rachel Swarbrick, Quarry House, Babyhouse Lane, Lothersdale, BD20 8EF

This Sustainable Design and Construction report has been prepared to summarise how the proposed development at Newton Grange, Bank Newton, Nr Gargrave, Skipton BD23 3N, will minimise resource and energy consumption compared to the minimum under the current building regulations and how it is located and designed to withstand the longer-term impacts of climate change in response to Policy Env3 of the Craven Local Plan 2019.

This report summarises the intent to deliver a development that meets the policy aims of the Local Plan as far as is possible with the type of building. As the building is less than 1000m² formal assessment to BRE should not be required, and therefore no condition requiring a BREEAM Assessment to be certified should be applied.

PLANNING POLICY

The Craven Local Plan was adopted on 12th November 2019. This document sets out the application response to Policy ENV3 Good Design, Specifically section 't' Sustainable design and Construction. The development seeks to promote sustainable development in terms of the criteria which apply: Daylighting, ventilation, heating, materials, water use, waste, pollution and energy, and reduce the impact of its associated carbon emissions whilst working within the constraints of the Policy summarised below: Sustainable Design and Construction Sustainability (t) should be designed in, so that development takes all reasonable opportunities to reduce energy use, water use and carbon emissions and to minimise waste, ensure future resilience to a changing climate and wherever possible to generate power through solar or other means, in accordance with Building Regulations. This should include residential, industrial and commercial developments.

The development is exempt from Building Regulations and the following proposed sustainability measures are additional.

SUMMARY OF SUSTAINABILITY AND CLIMATE CHANGE MITIGATION MEASURES HEATING/ INSULATION

The proposed building will be unheated.

BIODIVERSITY

The site is surrounded by open fields and Crickle beck runs down the south east face of the building which is surrounded by trees and shrubs which will be unaffected. Natural biodiversity of the area will not be affected.

SECURE DESIGN

The dwelling will have to adhere to the requirements of Part Q of the building regulations which incorporate many of the requirements from the 'Secured by Design' approach. The building does not have doors.

DRAINAGE AND FLOOD RISK

The site is located in flood zone 1, in an area with low probability of flooding. The additional roof space area will be drained to soakaways.

SUSTAINABLE SOURCING OF MATERIALS

All construction materials will be sourced locally to minimise transportation impacts.

Materials will be responsibly sourced by the Main Contractor, and will be specified to have as low an embodied impact as is possible/ available. Materials with a low embodied impact as defined within the BRE Green Guide to Specification will be selected for use in the building design and construction. The BRE Green Guide to Specification assesses each building element (such as walls, floors, roof and windows) and assigns an Environmental Impact Rating (from A+ to E). The following Green Guide Ratings should be targeted to ensure the development has a low embodied impact:

Roof A+

External walls A+

Internal walls A

Ground and upper floors A

The construction industry is a major consumer of resources and has a large impact on the sustainability of the UK and the wider world. BRE Global has developed a framework standard for Responsible Sourcing (BES 6001) along with an associated independent third-party certification scheme. This standard and certification scheme will help organisations manage and reduce the impacts throughout the supply chain.

WATER CONSERVATION

The development will not increase water usage.

CONCLUSION

The development has limited scope for climate change mitigation measures beyond sourcing the materials locally. The building will not be heated so doesn't require insulation.

Therefore, the climate change measures are restricted to the procurement of low-embodied energy materials, transportation, local labour and sustainable drainage. As such the Main Contractor will procure materials using the recognised sustainable sourcing of materials schemes and selecting products certified to BES6001 and ISO14001 as well as registering with the Considerate Constructors scheme. Due to the restrictive nature of the building type is not a requirement to achieve the BREEAM 'Very Good' rating despite the applicable elements scoring highly and therefore this restriction should not apply. Notwithstanding the low BREEAM rating the development can be shown to have taken every opportunity to minimise energy use, water use, waste production and carbon emissions and therefore accords with Policy Env3 of the Craven Local Plan 2019.