

READING BOROUGH LOCAL PLAN

Adopted November 2019



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Reading
Borough Council

Working better with you

supplement this policy and will provide further detail on how developments will be expected to achieve the BREEAM ratings required by policy CC2.

Adaptation to Climate Change

CC3: ADAPTATION TO CLIMATE CHANGE

All developments will demonstrate how they have been designed to incorporate measures to adapt to climate change. The following measures shall be incorporated into development:

- *Wherever possible, new buildings shall be orientated to maximise the opportunities for both natural heating and ventilation and reducing exposure to wind and other elements;*
- *Proposals involving both new and existing buildings shall demonstrate how they have been designed to maximise resistance and resilience to climate change for example by including measures such as solar shading, thermal mass, heating and ventilation of the building and appropriately coloured materials in areas exposed to direct sunlight, green and brown roofs, green walls, etc;*
- *Use of trees and other planting, where appropriate as part of a landscape scheme, to provide shading of amenity areas, buildings and streets and to help to connect habitat, designed with native plants that are carefully selected, managed and adaptable to meet the predicted changed climatic conditions; and*
- *All development shall minimise the impact of surface water runoff from the development in the design of the drainage system, and where possible incorporate mitigation and resilience measures for any increases in river flooding levels as a result of climate change*

- 4.1.6 Adaptation is about making sure future communities can live, work, rest and play in a comfortable and secure environment in the face of inevitable climate change. Taking action now to help successfully achieve adaptation measures would help to reduce vulnerability for people, businesses, services and infrastructure to climate change. Adaptation measures need to be built into all new developments to ensure the sustainable development of housing, businesses and the economy of Reading. Applicants should refer to the forthcoming Sustainable Design and Construction SPD for further guidance.
- 4.1.7 The impacts of climate change are predicted to increase over time, with winters getting warmer and wetter, while summers become hotter and drier. It is expected that there will be more extreme weather leading to impacts including intense rainfall and floods, heatwaves, droughts and increased risk of subsidence. These impacts will affect people's lives, homes and businesses as well as essential services and supplies such as transport, hospitals, water supply and energy. There will also be significant impacts on biodiversity and the natural environment.
- 4.1.8 Given the anticipated level of growth of the Borough over the coming years, it is imperative that this growth takes place in a sustainable manner incorporating climate change adaptation technologies. Buildings, services and infrastructure need to be able to easily cope with the impacts of climate change. Part of this ability to cope relates to ensuring that new development is designed to adapt to more intense rainfall, the possibility of flooding, plus heat waves and droughts. The design of developments therefore needs to more carefully consider matters such as shading, insulation and ventilation, surface water runoff and storage and the use of appropriate tree and other planting.

- 4.1.9 Reading is an urbanised Borough with a high proportion of hardstanding/ built form, and is built on two main rivers - the Thames and the Kennet. Other watercourses in the Borough include Foudry Brook and its tributaries, the Berry Brook, Vastern Ditch, Christchurch Ditch, the creek along the base of the Warren escarpment and various ditches on the Kennet floodplain upstream of the A33. In addition the Holy Brook, a smaller watercourse, runs through the town centre. As such the Borough is vulnerable to flooding from surface water run-off and directly from watercourses. While Reading itself was not significantly affected by the floods of 2007 and 2008, around two-thirds of the flooding during the 2007 floods was caused by surface water¹⁷.
- 4.1.10 There is a need to look at the whole community and consider how developments could be affected by rainfall and the different flood pathways. Strategic Flood Risk Assessments (SFRA), and the Surface Water Management Plan (SWMP) should be used to help with this, as well as guidance on how buildings can be made more resistant and resilient to climate change by including features such as green roofs for sustainable drainage or raised floor levels for flood-proofing.
- 4.1.11 Applications for change of use of existing buildings should also incorporate measures to adapt to climate change through for example, being flood repairable, i.e. when refurbishing a building, constructing internal parts in such a way that although flood water enters a building, elements that are damaged by flood water are capable of being easily repaired or replaced; raising the level of sockets above expected flood levels; inclusion of pump and sump systems below floorboards to remove water faster than it can enter the house from below ground level¹⁸. Ultimately, raising the height of flooring above predicted flood levels is a better alternative. All types of flooding (fluvial, surface water and groundwater) must be considered.

Decentralised Energy

CC4: DECENTRALISED ENERGY

In meeting the sustainability requirements of this plan, developments of the sizes set out below shall demonstrate how consideration has been given to securing energy for the development from a decentralised energy source.

Any development of more than 20 dwellings and/ or non-residential development of over 1,000 sq m shall consider the inclusion of decentralised energy provision, within the site, unless it can be demonstrated that the scheme is not suitable, feasible or viable for this form of energy provision.

Where there is existing decentralised energy provision present within the vicinity of an application site, further developments of 10 dwellings or more or non-residential development of 1,000 sq m or more will be expected to link into the existing decentralised energy network or demonstrate why this is not feasible.

- 4.1.12 Decentralised energy is a term that covers a variety of technologies, including various renewable technologies, and more efficient energy generation such as Combined Heat and Power (CHP), which provides heating and electricity at the same time. This policy promotes the

¹⁷ The Pitt Review: Interim Report, November 2008

¹⁸ <http://www.nhbcfoundation.org>