

APPENDIX 11

ADAPTING TO CLIMATE CHANGE AND SUSTAINABLE CONSTRUCTION POLICY

Adapting to Climate Change and Sustainable Construction

In addition to reducing carbon emissions under Policy ENV1, sustainable construction requires the creation of adaptable buildings which are resilient to the effects of climate change and which also minimise the use of natural resources.

Climate change could have potentially major impacts on Three Rivers through a greater intensity and frequency of extreme weather events such as flooding, storms, drought, heat waves or extended cold periods.

It is therefore important that development incorporates measures to minimise and mitigate the effects of these consequences.

Ensuring that development is constructed in the most sustainable way to reduce impacts on the environment also requires consideration for the inclusion of measures to reduce energy and water consumption, to reduce waste and to use sustainable building materials.

Policy xx Adapting to Climate Change and Sustainable Construction	
(1)	All major developments are required to submit a Sustainability Statement demonstrating how sustainable design and construction methods have been used, and measures to enable the development to mitigate and adapt to climate change over its lifetime.
	Adapting to Climate Change
(2)	To help manage the impacts of climate change, new development should build in greater resilience to climate change and extreme weather events through the design of sites and buildings, including where appropriate: <ul style="list-style-type: none">a) Managing flood risk and promoting sustainable drainage systems (Policy xx);b) Promoting and enhancing the Green Infrastructure network across the District (Policy xx), and integrating this as part of the design process;c) Protecting the natural environment, and conserving and enhancing biodiversity (Policy xx);d) Considering the layout of new development, building orientation, shading, construction materials and ventilation systems to address sunlight and daylight, passive solar gain and reduce risks of overheating and reliance on air conditioning systems.
	Sustainable Design and Construction

- (3) New development should be designed and constructed to:
- a) Make efficient use of mineral resources and incorporate a proportion of recycled materials and/or secondary aggregates;
 - b) Minimise waste and reuse material resulting from excavation and demolition activity;
 - c) Conserve water in accordance with the tighter Building Regulations optional requirement of 110 litres/person/day or subsequent updated tighter standards, and reduce flood risk;
 - d) Be flexible and adaptable to the needs of future occupier;
 - e) Incorporate measures to enhance biodiversity value.
- (4) Major non-residential development should aim to achieve BREEAM 'Excellent' Standard, unless this is demonstrated to be unviable.

Reasoned Justification

Mitigating and adapting to climate change are intrinsic to the whole of Local Plan and are key priorities for the Council.

The NPPF emphasises that using natural resources prudently, minimising waste and mitigating and adapting to climate change are key elements of achieving sustainable development. Plans should take a proactive approach to mitigating and adapting to climate change, taking into account long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes and the risk of overheating from rising temperatures.

To address this all development should take into account opportunities to mitigate and manage the effects of climate change and to use resources efficiently. While opportunities may be more limited for minor developments, improvements should still be sought in the design and construction of these schemes where possible.

For major developments where there is generally more scope to achieve significant improvements, a Sustainability Statement is required as part of an application to demonstrate how sustainable design and construction measures are included to mitigate and adapt to climate change and reduce the use of natural resources over the intended lifetime of a development.

Adapting to Climate Change

Managing the impacts of climate change has strong links to other Local Plan policies and objectives including around the conservation and enhancement of the natural environment and biodiversity (Policy xx), promoting and enhancing Green Infrastructure (Policy xx) and the management of flood risk and provision of sustainable drainage systems (Policy xx).

In addition, projected increases in future temperatures must be taken into account to ensure that developments provide for a suitable standard of amenity and quality of life for future occupiers. As a consequence, development proposals need to consider how measures have been taken to minimise overheating and to reduce reliance on air conditioning and details should be included within submitted Sustainability Statements.

Sustainable Design and Construction

Ensuring that development is constructed in the most sustainable way requires consideration to be given to reducing the use of natural resources including through minimising waste, using sustainable building materials and reducing water consumption; and making sure that development is flexible and adaptable to respond to future needs, manages flood risk and supports enhancements to biodiversity.

With regard to the conservation of water, the NPPF advises that local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards. Under the Building Regulations, all new homes are required to meet water efficiency standards of 125 litres/person/day. However the NPPG highlights that where there is a clear local need, Local Planning Authorities can specify requirements for new dwellings to meet the tighter Building Regulations optional requirement of 110 litres/person/day.

Three Rivers is within a 'water stressed' area. However, household water consumption in the District is significantly higher than in the rest of Hertfordshire or nationally. As a result, there is a need to make sure that development improves the way we use water with a water efficiency standard for new development above the basic national standard. However, achieving greater efficiency standards than this baseline requirement is highly encouraged. Non-residential development should also apply measures to reduce water consumption.

The Building and Research Establishment Environmental Assessment Method (BREEAM) provides market recognition for low environmental impact non-residential buildings. It addresses a wide range of environmental issues and enables developers and designers to prove the environmental credentials of their buildings. Standards for buildings range from pass to excellent.

For major non-residential developments, proposals should aim to achieve BREEAM 'Excellent' Standard unless this is demonstrated to be unviable. The Sustainability Statement should include a BREEAM pre-assessment or design stage assessment, and planning conditions will require submission of a post-construction certificate to demonstrate achievement.