

A stylized, light brown map of North West Cambridge is positioned on the left side of the page, partially overlapping the dark brown background and the light blue background. The map shows the irregular shape of the area with some internal lines representing roads or boundaries.

NORTH WEST **cambridge**

Sustainability Statement - Clarification
March 2012

Sustainability Statement Clarification

February 2012

The Sustainability Statement (September 2012) submitted for the Proposed Development states that the use of green roofs will be considered on a building by building basis but does not propose the use of green roofs for all buildings. This note provides additional clarification on the use of green roofs in the Proposed Development.

Green roofs can offer a number of benefits for sites:

- an increase in biodiversity through the creation of habitats for birds and insects;
- an increase in the ecology of a site providing space for additional planting, especially important in dense urban environments;
- assisting with keeping buildings cool by providing additional thermal mass. This is particularly true of intensive green roofs with large amounts of gravels and soils.
- reducing rainwater run-off by intercepting and holding rainwater.
- potential for cooling solar PV panels, improving their performance.

The ecological advantages are largely based around the premise that a green roof can provide a usable area where otherwise the creation of natural habitats may not be possible. Dense urban areas are a prime example where the space provided by roofs could be valuable. The Proposed Development will contain a significant amount of open land used for the creation of natural diverse habitats. Between a third and half of the Application Site will be green landscaped for this purpose. These green spaces will be distributed both around buildings in the form of courtyards, gardens, and streets, and in large areas on the western edge and the central green corridor. In addition the Application Site is bordered by open rural areas along the western edge adjacent to the M11. The extensive green infrastructure provided therefore means that green roofs would have limited additional benefit for the Proposed Development in terms of ecology and biodiversity.

The Proposed Development will maximise the use of natural ventilation, making use of mechanical cooling only where absolutely necessary. Passive design and free cooling will be an important consideration in the design of the buildings, and thermal mass will be included in the analysis. Green roofs provide one method of increasing thermal mass, but other measures are available which can provide similar benefits, and whose impact can be limited with careful material selection.

The proposed water strategy for the development makes use of extensive rainwater collection. In addition a system of SUDS is proposed which will help reduce run-off from the Application Site. The reduction in run-off resulting from green roofs, whilst not being incompatible with rainwater collection, will be of limited additional benefit.

Green roofs could provide benefits for the Proposed Development, but these are likely to be limited and alternative methods are currently proposed, or may be available. Therefore green roofs may be proposed during the design of selected buildings, and the decision on whether to include them will be based on an assessment of other alternative options at the appropriate time.