

Ecology and environment

During the first phase of pre-application public planning engagement, queries were raised around the trees on the Hardwick Manor site as well as the Manor building.

We intend on retaining the arboretum and as many trees as possible as we appreciate how important it is for wildlife and the natural benefits greenery has on the wellbeing of our patients, staff and visitors.

We have surveyed all of the trees on the site and have identified 1 ancient and 19 veteran trees. The design has been developed to mitigate any impacts on these trees. Some non veteran trees will be impacted to create new access routes into the site and where possible, new trees will be planted to offset this.

Environmental Impact Assessment (EIA)

Due to the regional importance of a new hospital, the planning application is supported by a detailed Environmental Impact Assessment (EIA). EIA is a legal requirement in planning, for certain types of projects that have the potential to cause significant environmental effects. It is a very thorough process, initially requiring extensive surveys to be undertaken, to collect data to understand the local area (everything from road infrastructure through to protected species and habitats present).

Experts then use this data to understand what the potential impacts of the project would be on the environment and how best to reduce, or where possible, stop them.



Sustainability

The design process seeks to make this a 21st century development and sustainability is central to the design process. Our ambition is to design a net zero carbon hospital. We are also committed to the hospital achieving a BREEAM (Building Research Establishment Environmental Assessment Method) 'excellent' standard.

The energy strategy for the hospital is likely to comprise an all-electric solution, which entails the

Key points

Several measures during the design and EIA process have been undertaken and others are being developed which consider the environmental value of the site and help to define our approach to developing the most sustainable new hospital. Some of these measures include:

- A number of design options for the new hospital building were identified and tested against a variety of factors such as the impact of the option on the environment and sustainability. These factors were considered to select the most suitable design option.
- We know traffic levels, car parking and road safety are critical to developing a sustainable project. We have sought to minimise traffic impacts and to encourage sustainable forms of transport.
- The design process includes a strategic landscape design which has sought to create a positive environment for patients, staff and visitors maximising the benefits of the parkland setting.
- An ecology strategy has been devised which aims to avoid impact to protected species and habitats and retain existing habitats of ecological value within the site. Together with the landscape strategy, the ecology strategy will enhance the biodiversity within the site through the creation of new habitats and provision for wildlife, seeking to create an area that is richer in ecological value than before the development.
- A surface water management strategy which will draw upon modern techniques for sustainable water management. This will allow water to be visible (chiefly in the form of a landscaped drainage basin) throughout the public realm to help minimise the risk of flooding.
- We propose to use sustainable urban drainage system (SuDS) features such as permeable paving, filter drains, swales and rain gardens. This will also assist in providing additional storage for surface water in addition to providing water quality treatment, amenity and the biodiversity benefits.
- The EIA will also cover issues in relation to noise, air quality and visual impact of the completed project as well as the environment impacts associated with the construction phase.

