

CRYFIELD ENERGY CENTRE

Location: University of Warwick, UK

Client: University of Warwick

Started on site: October 2013

Due for completed: May 2014

Size: 750sqm

Construction cost: £5.6m

BREEAM rating: Very Good

The combined heat and power (CHP) Energy Centre, located on the Cryfield campus at the University of Warwick, will provide a vital piece of infrastructure to help meet the full heating demand for current and future campus buildings while reducing the University's CO₂ emissions.

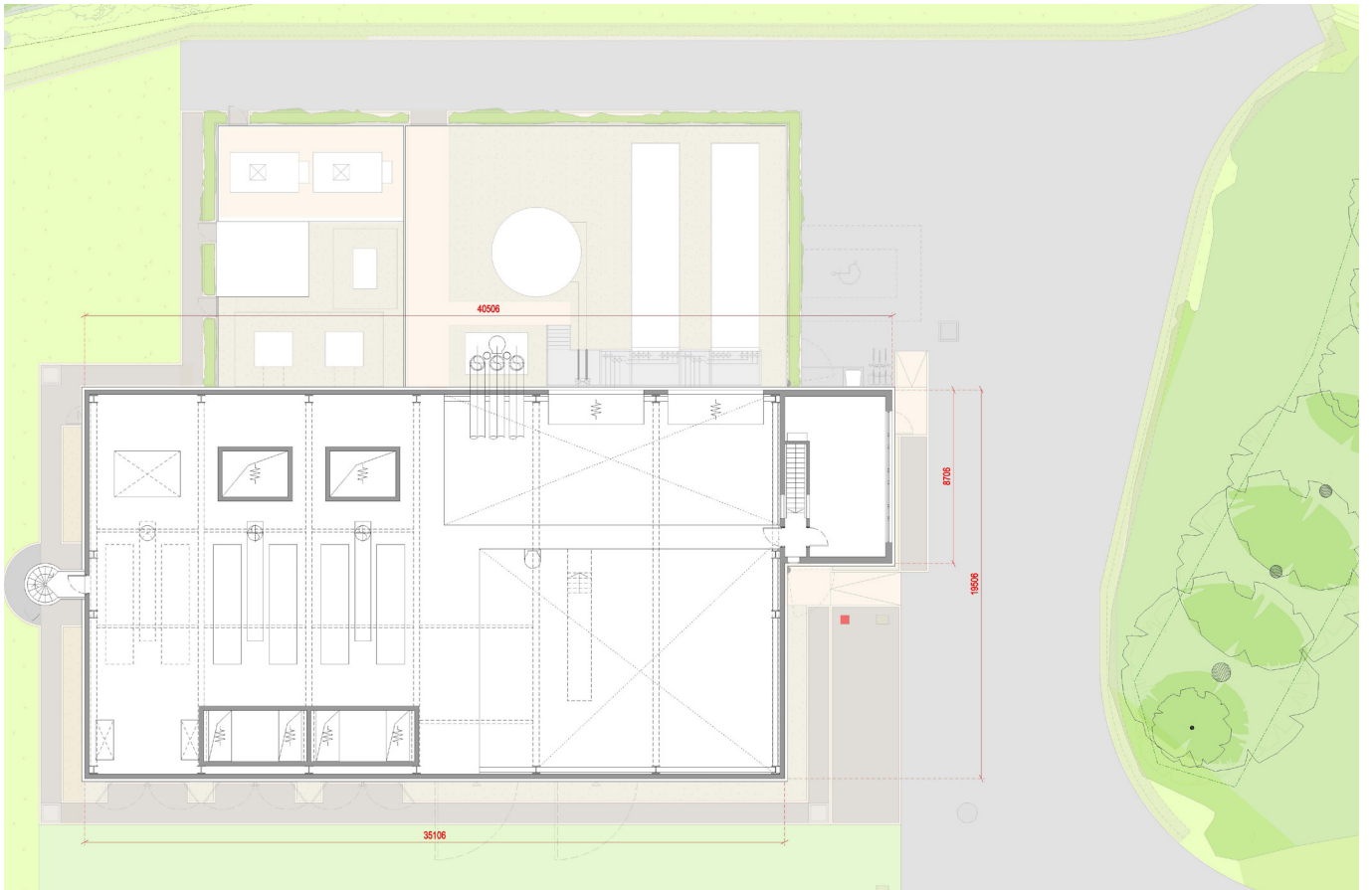
The design expresses a rural, industrial aesthetic, responding to its existing setting. Interior spaces have been planned efficiently for the optimum functioning of the mechanical plant, but a pair of pitched roofs break down the mass of the building and are reminiscent nearby of barn type structures. The roof will be clad in dark patinated zinc and sit above a rustic red brick base.

The Energy Centre will initially contain two 2MWe natural gas fired CHP engines and one 5MWe boiler. It has the capacity to house an additional CHP engine and an additional boiler. The heat generated by the plant will be fed into the existing campus district heating network and the electricity generated will be distributed using the existing campus HV network. Excess heat produced when demand is lower can be held in a thermal store and surplus electricity can be sold to the National Grid.

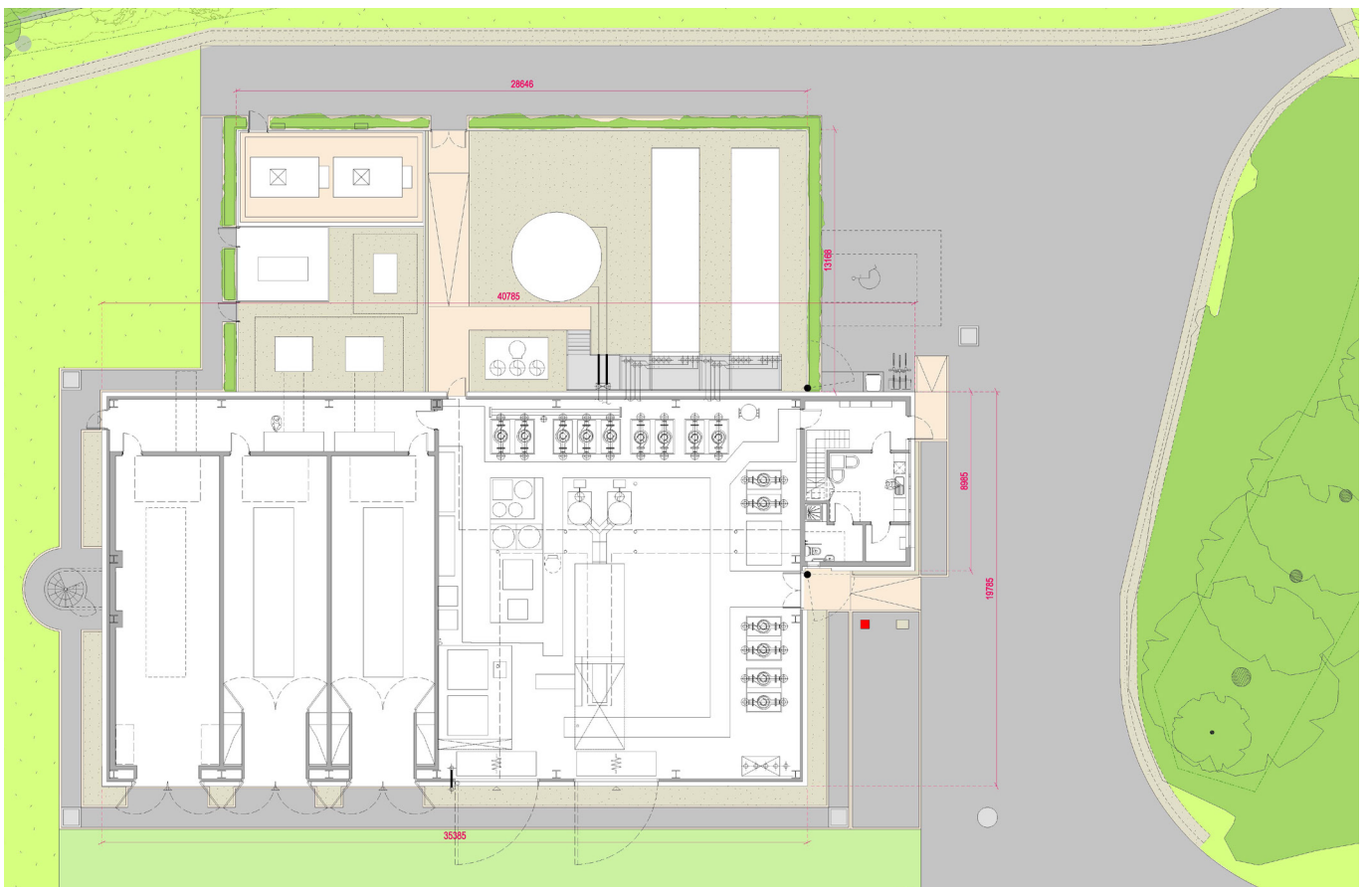
The building also contains ancillary accommodation, such as workspace and welfare accommodation, for a handful of maintenance staff. The design has been developed on a modular basis, with the potential for future expansion to accommodate low carbon technologies.



Above: CGI view of the proposed Energy Centre from Scarman Road.



Above: First floor plan



Above: Ground floor plan