

Hinkley Point C Somerset

Kier BAM Joint Venture & NNB GenCo

BIG Biodiversity Challenge Award category: Client

Project overview

Hinkley Point C will be the first nuclear power station to be built in the UK for more than 20 years. It will have the capacity to generate safe, reliable, low-carbon electricity, enough to power around 6 million homes for its anticipated lifespan of 60 years.

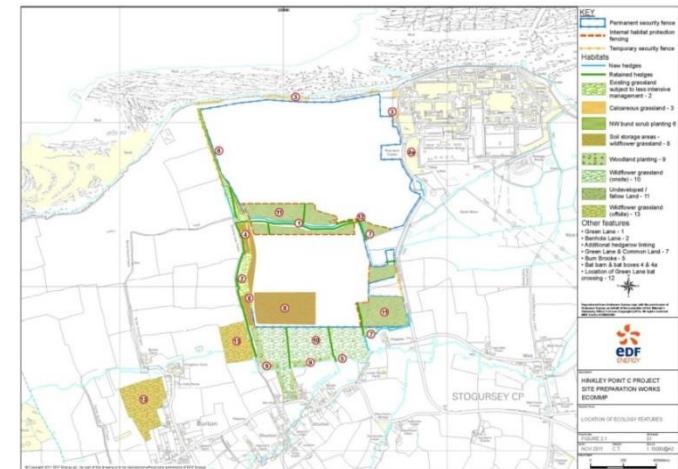
Early preparatory works have been undertaken on site ahead of the main construction that will follow a final investment decision. These include the construction of roundabouts, temporary construction roads and drainage works. Also integral to being ready for main construction has been the process of Early Contractor Involvement with key contractor partners, allowing them to improve constructability, reduce risk and improve schedule.

What were the biodiversity conditions on site, prior to the enhancement?

The site boundary originally covered an area of approximately 0.84km²/84ha. The majority of this land contained arable fields and grassland bordered by mature hedgerows. Areas of broad-leaved woodland and scattered, isolated scrub were present with three watercourses and three ponds. Ten bat species were recorded, including horseshoe and barbastelle.

Were there any specific conditions that led to you carrying out this work?

Due to the legal protection afforded to bats, both on site and off site mitigation was deemed necessary to offset project impacts. These mitigation measures were submitted within applications for Site Preparation



Location of ecology features

Works and the Development Consent Order nuclear licence. These statutory conditions provided the basis for implementing short term mitigation i.e. bat gantries designed to maintain connectivity across site and long term mitigation i.e. land management off site for foraging, as well as a bat house designed for multi-species roosting and breeding for all seasons.

What were the biodiversity measures taken?

Bat Barn

The bat barn was constructed in 2011 on the western boundary of the site integrated into Green Lane - the main commuting corridor for bats which has been retained and protected throughout the construction phase. The barn has been purpose built in accordance to a design specified in a method statement supporting the NE Bat Licence. The barn has been designed to accommodate a variety of bat species throughout the year. **The building incorporates a large open roof space with a 'hot box', a light sampling room, a cool room for hibernation and various roosting crevices for vespertilionid bats.** Scrub has been planted around the barn to provide cover for emerging bats and connectivity within the wider landscape.

Bat Boxes

60 bat boxes were installed in 2010 in 3 woodlands to the east of site (Branland Copse North; Branland Copse South; and Hankley Brake) in order to provide summer roosting opportunities.

Bat Gantry

To ensure connectivity a bat gantry has been installed along Green Lane where there is a gap created by the haulage road of more than 10m.

Planting for Foraging

The fields in the southern area of site have been sown with Emorsgate 'Tussock Mixture' (EM10) to improve the foraging opportunities for bats on site. Two fields, comprising of approximately 10ha of land off-site, have also been sown with a wildflower mix (EM3) as a means for long term management. A further five fields comprising of over 15ha have been seeded with Emorsgate 'Tussock Grass Mixture' (EG10).

Throughout construction, long term landscaping of the site includes restoration of key foraging areas as well as enhancement planting of wildflower and embankment seeding.



Purpose built bat barn

How would you best describe the project?

Mitigation

Further information

Monitoring of the bat barn have confirmed these mitigation measures to be successful. During summer 2015 a lesser horseshoe bat (rare in the UK) was observed roosting and 40 bat droppings were identified suggesting bats were roosting there in the summer months. A lesser horseshoe was also found hibernating in December 2015 and January 2016.

What was your personal motivation for carrying out the enhancement?

Having grown up in Somerset I have both a personal and professional interest in minimising the impact of our construction works on the environment. I am proud to have contributed to the construction of these innovative mitigation measures which help to guarantee the future of Bat species here.

Emma Keen

Kier BAM JV Environment Manager

To carry out the proposed 10 year development it was vital to invest in an innovative programme of ecological Works to ensure connectivity for the bat species. Monitoring has shown now to have been a great success.

Marcus Pearson

NNB GenCo Environment and Sustainability Manager

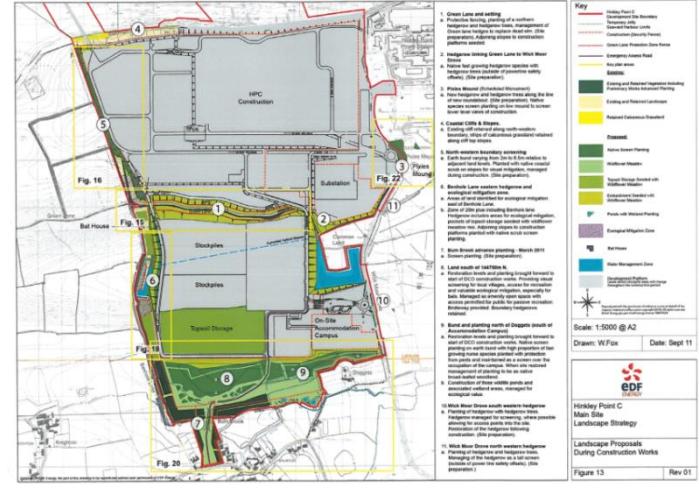


Figure 13 Landscape Proposals During Construction Plan

Landscape proposal during construction phase