

Cotton End Forest School
High Road, Cotton End, Bedford, MK45 3AA
 Built by Willmott Dixon for Bedford Borough Council

BIG Biodiversity Challenge Award Category: *Project of the Year Award (>5ha)*

Project overview

Significant landscape and greenspace enhancement comprising a network of swales, drainage headwalls, permeable pond, grass seeded amphitheatre, ornamental shrub planting, mixed wildflower turf seeding, amenity grass seeding, sports pitch grass seeding, woodland planting, mixed native hedgerow planting, specimen tree planting, orchard tree planting and retention of existing trees and hedgerows.

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

The site was a farmers field to start with. Minimal existing vegetation retained. Planning Conditions 6,7 and 8 relate to the survey and enhancement of landscaping and greenspace areas.

What were the reasons behind this project ?

Bedford Borough Council wanted to provide a school that could benefit from significant enhancement of Biodiversity and well-being in addition to being sustainable in terms of drainage management.



Amphitheatre (right) new trees and permeable pond (left)
 Credit: Andrew Gladwin, Willmott Dixon



Permeable pond with drainage feeding into it
 Credit: Andrew Gladwin, Willmott Dixon

What were the biodiversity measures taken?

The project could be replicated in a similar area. Long term management of greenspaces will be up kept by the School's appointed grounds maintenance contractor. It is unknown at present whether the project represents an innovation. New areas of habitat have been created. Although not measured, it is easy to confirm improvement by the fact that there was minimal vegetation on site at the start of works. No survey has been undertaken to date as to the enhanced ecological value of the site.

The project supports requirements laid out in the Bedfordshire Biodiversity Action Plan. A Biodiversity Roadshow had been carried out by the Willmott Dixon North London & East Sustainability Team to the Cotton End Project Team during the summer of 2018 to highlight the importance of enhancing biodiversity and well-being on construction projects. It was felt that this helped maintain the level of enhancement proposed as there was concern that some of the activity could have been shelved due to expense.



Newly planted trees, grass seeded amphitheatre, swale and drainage
Credit: Andrew Gladwin, Willmott Dixon



New Specimen and Orchard Tree Planting amongst existing vegetation
Credit: Andrew Gladwin, Willmott Dixon

Further information

The enhanced landscaping and greenspaces were installed over a period of 8 months between August 2018 and April 2019. The baseline situation was monitored and accounted for in the Ecological Survey of the site that was carried out prior to Willmott Dixon occupancy of the site. Post installation, it is unclear as to what level of monitoring of ecology the school will undertake. An increase in biodiversity is apparent by the fact that a significant amount of planting and seeding has been undertaken.

Local Authority Planning objectives in appreciation of the Bedfordshire Biodiversity Action Plan and Willmott Dixon's Corporate Biodiversity Enhancement Strategy have been met. The legacy being that current and future occupants of the school will enjoy interaction with the enhanced biodiversity and benefit from an increased level of well-being that nature can give. Children will be able to learn new "sustainable" skills as a result of the project that include green space up keep and self sufficiency in terms of crop growth.

Project Team

- Client: Bedford Borough Council
- External Designers: Lungfish and Liz Lake Associates
- Willmott Dixon: Richard Molyneux, Rob Purser, Dave Motton, Nick Baldwin, Steven Roberts, Simon J Wilson, Geoff Pollard, James Whitehouse and Jack Willmott

What was the motivation for carrying out the enhancement?

The motivation was client lead which fitted in perfectly with Willmott Dixon's position as a main contractor with a corporate Biodiversity Enhancement Strategy.



*Wildflower mix amongst new trees and existing hedgerow
Credit: Andrew Gladwin, Willmott Dixon*



*Troughs for the school to grow fruit and vegetables in educating children on how to be sustainable
Credit: Andrew Gladwin, Willmott Dixon*