

PINEWOOD STUDIOS DEVELOPMENT FRAMEWORK (PSDF) IVER HEATH, BUCKINGHAMSHIRE

Sir Robert McAlpine Ltd

BIG Biodiversity Challenge Award category: Large Scale Permanent

Project overview

Pinewood Studios is located at Iver Heath in South Buckinghamshire on a former country estate totalling 37 hectares. Pinewood was established in 1936 as a British film studio to rival Hollywood.

The project consisted of the construction of 5 new sound stages, an office building, 22 workshop units, substantial ground works including roads, parking areas, hardstandings, two attenuation ponds and extensive landscaping and ecological mitigation. The client required large open span structures for film and television set construction, including use by live studio audiences to meet growing demand from film and TV productions.

The landscape works were implemented over a six-month period and have created a holistic and sensitive response to the context, through the protection of existing features and introduction of additional zones, variety and visual interest.

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

There were a number of biodiversity characteristics to the sensitive site, which had previously been a mixture of farmland, green belt and brownfield.

These included various species including slowworm, grass snakes, ground-nesting birds, bats, badgers and deer. The intrinsic ecological value of the area holds a high level importance with local residents.

Were there any specific reasons that led to this project?

The biodiversity of the site was of high importance to the client and the local community. The landscape design aimed to ensure that the character and biodiversity of the area was protected, reinforced and enhanced through sensitive interventions.



Photo Description: Aerial impression of PSDF Phase 1 project, showing the extensive green roofs, water bodies and landscaping

What were the biodiversity measures taken?

The project team worked together with the client and local authority to make best use of the site conditions and existing site materials, thus avoiding the extensive import and removal of existing soils. Detailed planning specifications were amended to aid establishment, work with the site-won topsoil and subsoils, and with the site constraints.

The following areas have all been introduced or enhanced:

- 15,000m² of green roofs have been introduced for invertebrates and ground-nesting birds such as skylarks
- Over 4500m² of new native wet woodland
- 900m² of new scattered scrub
- 10,000m² of new species rich neutral grassland
- 10,000m² of slightly acidic species rich grassland
- 7,500m² of species rich native marginal/marshy grassland
- 1,000lin.m of new species diverse native hedgerow
- Enhancement of 9,500m² of existing woodland

Permanent water bodies have been created with reed bed habitat, with ephemeral water bodies for amphibians and to provide sustainable urban drainage. Existing ditches have been enhanced in order to improve their aquatic habitat and make a contribution to bio-filtration. Bird and bat boxes have also been installed to enhance the existing habitats for a variety of bird species.

Reptile hibernacula have been built to increase the capacity of suitable reptile habitats on site. In addition, a reptile underpass has been installed at the main entrance to the new facility in order to maintain the passage corridor for reptiles and thereby minimising the impact of the new facility on local species.



Photo Description: Reptile underpass

What were the biodiversity measures taken? (contd.)

Overall, the biodiversity measures taken have delivered a holistic and sensitive response to the context. The overall rural character of the location has been reinforced and enhanced, with existing features being conserved and protected. Sustainable and biodiverse landscape zones and corridors have been provided to enhance connections with the surrounding areas.

The strong structural landscape framework has also been designed to enable further development over the following phases of the development.

How would you best describe the project?

Mitigation & Enhancement

Further information

Sir Robert M^cAlpine also teamed up with our client Pinewood Studios Group, the PSDF contractors HRG and Arup Associates to have a fun 'Ecology Day' with the local Iver Heath Junior School.

The day started with an engaging ecology lesson at the school, describing what species could be living in the children's surroundings. The session also discussed protected species in the UK such as different types of bats that could be in the area.

Whilst under the guidance of the project's ecologists and our team, the students were then able to put into practice what they had learnt in the classroom by building the school's very own hibernaculum. The children were excited to take part in the activities understanding that by building the hibernaculum they were helping to improve the insects' habitat, which will increase the biodiversity in the area.

With guidance from our ecologist, the pupils used waste materials from the project site to create the hibernaculum. The children were talked through the process step-by-step and took part in a discussion around what wildlife could potentially use it through the seasons and how smaller versions could be created in other locations.

It was a fantastic collaborative initiative from the site's contractors to increase the social value of the project while educating young people on how to create biodiversity in their local habitat.



Photo Description: A local school visit to learn about biodiversity and construct hibernacula

What was your personal motivation for carrying out the enhancement?

Protecting and enhancing the ecology of the site was a key element of the project. Great care was taken by the site team in maintaining the protective measures implemented. Both the design team and client met regularly with the County Ecologist to understand what was important. Of particular note was the detailed requirement for the reptile underpass to be suitably sized and the provision of light within the tunnel, which resulted in a split carriageway to provide a light well.