

## VANGARDE SHOPPING PARK – NEWT MITIGATION AND MONITORING YORK/UNITED KINGDOM VANGARDE SHOPPING PARK / AECOM

### BIG Biodiversity Challenge Award Category: Monitoring, Maintenance & Management Award

#### Project overview

York's Vangarde Shopping Park works closely with their retained Ecologist from AECOM, in order to further increase wildlife populations in the local area. AECOM and the Vangarde team undertake Great Crested Newt (GCN) and habitat monitoring as part of planning conditions and Natural England GCN licence requirements.

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

As part of the plan during the construction of the shopping park, four bespoke amphibian tunnels were constructed beneath the access road to connect the GCN mitigation area to sensitively designed SUDS ponds. The land Vangarde is built on was home to a population of GCN and, as part of the construction plan, new ponds and rough grassland habitat were created to mitigate for the impacts of the development.

The aims were to:

- Increase the GCN population by 20% compared to the baseline
- Continue to encourage other wildlife into the habitats at the shopping park

#### What were the reasons behind this project ?

The data gathered from the five years of tunnel monitoring is being incorporated into a Natural England-funded research paper with Froglife into amphibian tunnel effectiveness, with the aim of finding the best approach to amphibian tunnel design and monitoring schemes across the UK. The monitoring is vital in improving methods and it is down to joint efforts of all parties to ensure that this is a success. The habitat provided is of much higher ecological value to the resident amphibian population than that lost to



*Vangarde Shopping Park at night, with the ponds in the foreground.*



*A Smooth Newt at Vangarde Shopping Park development, as evidenced by a 111% increase in peak adult GCN counts recorded over the five-year monitoring period to date.*

### What were the biodiversity measures taken?

Over the last few years, it has been both AECOM and Vangarde's aim to further increase the GCN population, as well as other local wildlife populations, through continual monitoring and education. The AECOM team has educated the Vangarde team to ensure that monitoring is consistent and help the team to correctly convey the information about the local habitats and its wildlife populations to the local community.

The ponds also provide habitat for other species such as wetland birds, water vole and otter, which were not present on site prior to development. The records of otters, which were captured on the tunnel camera traps, were rather surprising given the nearest river is over 1km away.

To ensure its carbon footprint is reduced, travel initiatives which include improved public transport access, cycle routes and the promotion of sustainable travelling practices to both staff and customers helps to reduce emissions. Car share parking spaces are also included in the car park to encourage customers to reduce the amount of cars they are using to visit the shopping park.

This project is part of the planning conditions of the shopping park and the licence requirements – these are the only forms of enforceable actions to ensure this work is completed within a certain way. The work completed has gone above and beyond the requirements to result in recognition from Natural England through use in its research paper. The information gained from this monitoring and conservation project has been vital in contributing to the understanding of best practice for the design of amphibian tunnels across the country. The environmentally-friendly ethos of the shopping park is most definitely embraced by the local community and all parties recognise the importance of the work, along with educating others, to ensure the environment continues to benefit for years to come.



*A Great Crested Newt in one of the tunnels*



*Plaques situated across the shopping park inform people of the newts in the area.*



## Further information

As part of the monitoring project, AECOM team has worked closely with the Vangarde team to ensure that monitoring is consistent. The installation of video monitoring has also helped to understand GCN movement between ponds on each side of the road, and monitored the success of mitigation. The monitored GCN population has increased from peak count of 33 in Year 1 to 141 in Year 5. The objectives have been far surpassed. The ponds also have increased the biodiversity of wildlife in the local area, such as wetland birds, water vole and otter, which were not present on site prior to development.

Monitoring will continue over the next few years as part of the plan to further increase and maintain populations so that the local habitat continues to flourish, whilst remaining sustainable for the wildlife. The team has benefitted as this project is part of the planning conditions of the shopping park and the licence requirements – these are the only forms of enforceable actions to ensure this work is completed within a certain way and the results demonstrate the success. The work completed has gone above and beyond the requirements to result in recognition from Natural England through use in its research paper.

## Project Team

The project has been between the Vangarde team, AECOM, Oakgate Group PLC, with the site constructed by Caddick Construction and managed by Workman Retail. The specialist camera deployment and tunnel monitoring has been undertaken by Froglife, as part of the Natural England research project.

## What was the motivation for carrying out the enhancement?

This project has been vital in maintaining and enhancing the local ecosystem. Due to effective planning and monitoring, along with a collaborative effort from all parties, it has ensured that this biodiversity project has thrived.



*The Vangarde site map – demonstrating the mitigation areas*



*Mini metal newts (representing one for each GCN captured & moved for the development) are on the pathways of Vangarde to educate visitors and raise awareness*