

Delamere Forest Brook Dredging

Salix embarked on a project in Delamere Forest, Cheshire, to address serious drainage and flooding concerns.



The Delamere Forest Brook had become heavily silted, restricting water flow and exacerbating flood risks in the surrounding areas. The project aimed to desilt the brook and enhance the outfall structure to manage water flow more effectively. Originally planned for six weeks, the project was completed in just four weeks, demonstrating the team's efficiency.

The primary issue was silt buildup in the brook. Following Salix's application for an Ordinary Water Land Drainage Consent from Cheshire West & Chester Council, ensuring all works were legally compliant, the team began dredging the brook to clear out the sediment and install a new scour apron at the outfall to better control water flow. Additionally, a culvert had to be removed, and the drainage ditch banks required protection to prevent further erosion. Coir rolls were used for reinstatement of habitat along these banks following the work. Sedi-matts and bubble tubing kits were used for effective sediment control which protected the environment during the dredging.

The Salix Spider excavator allowed the team to access difficult areas of the forest with minimal disruption. The Spider, which operates on biodegradable hydraulic oils, was used to access areas with uneven ground and to work over metal railings along a new housing development, eliminating the need for costly and time-consuming removal of the railings. A 12-meter-long reach excavator, also running on biodegradable hydraulic oils, was used for most of the dredging, with dumpers used to transport the waste material and be removed from site.



During the project, opportunities to enhance the overall effectiveness of the drainage system were identified. In addition to the original scope, the team added 20 meters of rock rolls to shore up the ditch banks and installed a rock mat at the outfall to further protect against erosion.

One of the most significant achievements of this project was its early completion within budget even with the additional improvements. Despite the complexities of dredging and removing a culvert, the team completed the project two weeks ahead of schedule. This early completion saved time and costs for the client, L&Q Group, and ensured that Delamere Forest was better protected from flooding sooner than anticipated.