

Polypipe attenuation systems reduced on-site installation time at Wynyard Park

Polypipe supplied two attenuation systems for a new residential development at the growing Wynyard Park development, County Durham.



Exclusive housing community located in historic country estate



Close to the A19, north of Teesside, Wynyard Park is an exclusive community of new housing and amenities located within the historic grounds of Wynyard country estate. The original attenuation specification for the site included a box culvert design, however Polypipe was able to provide a more cost-efficient, site-specific solution that reduced installation time and material wastage.

Polypipe worked closely with the project's contractor and consultant engineer to deliver an intelligently engineered solution using its Ridgistorm-XL large diameter plastic pipe system, pre-fabricated C sections, and twin leg runs.

The first attenuation system has a capacity to hold a stormwater volume of 159m³. Fourteen 6m and two 3m lengths of 1,500mm diameter Ridgistorm-XL, with a SN2 stiffness class, were

positioned at a depth of 1.5 metres with a twin pipe run of 42.5 metres in length. The second larger system included nineteen 6m lengths and two 3m lengths of the 1,800mm diameter Ridgistorm-XL, with a SN2.8 stiffness class, providing a 320m³ capacity.

With Polypipe's technical support and flexibility, the contractor was able to achieve an exceptionally quick turnaround.

This system was installed with a longer twin pipe run of 60.5m. Both systems had spigot socket push-fit joints and sealing rings for speed of installation on-site and were installed beneath a public open space.

CASE STUDY

Project

Wynyard Park

Application

Stormwater attenuation

Product

Ridgistorm-XL



Ridgistorm-XL is designed as a flexible structure to minimise the effects of ground movement, differential settlement and deformation. The pipes are manufactured to meet specific stiffness classes between SN1 and SN8, which was determined following detailed analysis of the site conditions. This flexibility at the manufacturing stage ensured that the delivered pipes will stand the test of time once in position.

As the client required an exceptionally quick turnaround for the manufacturing and delivery of the solution for the Wynyard Park site. Polypipe was able to meet this challenge by providing the contractor with high levels of technical and pricing support, working together to ensure that the solution was delivered on time and within budget.



Rosie Cheetham, Marketing Manager at Polypipe:

“Polypipe offers UK housebuilders the most comprehensive range of thermoplastic drainage and water management systems. Using the expertise of our team and the capabilities of our Ridgistorm-XL system, we were able to provide the Wynyard Park site with a solution that was more cost-effective, quicker to install, and created less waste than the original Box Culvert system specified.”