

Polypipe benefits new eco home development

Polypipe's Ridgistorm-XL large diameter pipe system has been specifically engineered to provide a water management solution for 80 new eco houses for developer Abel Homes.



Ridgistorm-XL large diameter pipe system



From the initial design stages, Abel Homes identified Polypipe's products as the ideal choice for the water management needs of its site in Watton, Norfolk.

Polypipe's water management solutions experts were able to supply an engineered Sustainable Urban Drainage system (SUDs) to complement the design of a pond included within the development's plans, providing adequate attenuation in the event of both 1 in 30 year and 1 in 100 year storm events.

As the site is on a slope discharging into an open ditch, 900mm Ridgistorm-XL pipe was selected to overcome the limited space available. The inherent strength of the product allowed the required level of soil coverage above the system.

The Ridgistorm-XL tank is capable of storing up to 321m³ of stormwater before releasing it in a steady flow rate into the local sewer network.

The attenuation system was designed with a high level overflow which allows excess water to discharge into the site's pond, itself a purpose-built soft SUDs solution, providing adequate drainage during a 1 in 100 year storm event.

Polypipe was also able to use its unique pre-fabrication abilities to create a number of engineered chambers.

Utilising Ridgistorm-XL in 1500mm diameters, as well as a number of other fittings, all these components were pre-fabricated off-site under controlled conditions at Polypipe's UK manufacturing facilities, and were based on designs and structural calculations made by Polypipe's technical design team.

CASE STUDY

Project

Eco Homes Development

Client

Abel Homes

Application

Attenuation

Water management solutions

Combining engineered and soft SUDs

Products

Ridgistorm-XL large diameter pipe system