

Polypipe provides SUDS solution for residential development

Polypipe experts helped David Wilson Homes gain Section 104 approval for its new residential development in Essex.



**Bespoke
SUDS solution
for Section 104
adoption**



David Wilson Homes' large-scale Ashcroft Place development in Thundersley, Essex, required a bespoke Sustainable Urban Drainage System (SUDS) to meet Section 104 requirements.

Polypipe was able to provide an effective and easy to install drainage solution for the project's Main Contractor J L Knight, which quickly gained Section 104 approval from the local water authority.

Polystorm-Xtra and Polystorm-R modular cells, Ridgistorm-XL large diameter pipe and a Stormcheck flow control unit were all utilised on the site, forming a number of attenuation tanks to store surface water to ensure it can be gradually released back into the sewer system.

**A total of 2,790
Polystorm-R Cells were
used to create 5 separate
attenuation tanks for the**

**site, with a combined
capacity to store up to
558m³ of stormwater.**

Ridgistorm-XL pipes in 750mm and 900mm diameters were utilised as single straight runs under the road, with 1200mm diameter Ridgistorm-XL pipes installed by the side of the road to form a bespoke multi-leg pre-fabricated attenuation tank.

Polypipe designed and manufactured Ridgistorm-XL in a variety of stiffness classes in order to overcome the issue of varying loading and ground conditions. Taking this approach, and by combining this with Polystorm-Xtra and Polystorm-R cells, means that the site is now protected against both '1 in 30' Ridgistorm-XL and '1 in 100' storm events.

The completed Ridgistorm-XL large diameter pipe system has a total length of 650m and was designed in accordance with the Specification for Highway Works and Sewers for Adoption.

CASE STUDY

Project

Ashcroft Place

Client

David Wilson Homes

Application

SUDS solution for
Section 104 adoption

Product

Polystorm-Xtra
Polystorm-R
Ridgistorm-XL
Stormcheck