

ackworth storm attenuation box culverts case study

“To build such a large storm attenuation tank in any other material would be both costly and impractical. Precast concrete is a durable, long-life option that requires little to no maintenance in this type of drainage management scheme.”

Strata Homes



Project Overview

As part of a new housing development by Strata Homes, civil engineering group VHE, has been awarded a £0.6 million contract by Strata Homes to undertake earthworks, remediation and roads and sewers infrastructure on former industrial land in Ackworth, West Yorkshire.

The main standard drainage network consists of some 200 metres of DN 1500 storage pipes, but to meet excess storm water run-off for the site, there is a requirement for a large attenuation tank, capable of storing 1.25 million litres of flood water.

After looking at a number of options, VHE chose precast concrete box culvert sections to build the huge tank.

Scheme Details

FP McCann supplied 92 box culvert sections each measuring 4.4m wide x 2.4m high, with each unit weighing some 14 tonnes. The sections are being installed and jointed within a 4 metre deep excavation using a drag box trench reinforcement system and once complete, will form a 120 metre long attenuation tank. Each section has been cast at the Company's Telford facility.



Site: Ackworth Storm Attenuation
Contractor: VHE Civil
Client: Strata Homes
Products supplied: 92 no. Box Culverts 4.4m wide x 2.4m high

FP McCann offers a bespoke box culvert design service from its Alfreton Office and Telford Precast factory.

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