Vital road improvement project relies on Ridgistorm-XL

Polypipe's Ridgistorm-XL large diameter piping system has been specified for use in an essential surface water drainage system as part of wider highways improvement works on the A5.



The A5 Highway Infrastructure Improvements near Hinckley, Leicestershire, had originally specified a concrete system to provide surface water drainage for the busy highway, as part of wider improvement works.

Having successfully used plastic piping systems for previous large scale projects, main contractor Galliford Try tasked Polypipe with providing an appropriate alternative solution that would meet the demands of the project, but would also prove quicker, safer and easier for contracting teams to install beside the busy highway.

Utilising the popular Ridgistorm-XL piping system, Polypipe's design team engineered a solution to match the original 750mm diameter pipe specified to incorporate a single pipe run to sit beneath the road's verge, complimented by two separate twin runs, with a combined length of more than 400m.

Polypipe provided structural calculations and assisted consultant engineer Milestone by engineering a reduction in the pipe stiffness from the original specification. This was accepted for use, allowing works to commence as scheduled.

With Ridgistorm-XL being up to 94% lighter in weight than alternative concrete products, it is easier to handle and reduces the need for heavy plant machinery, allowing benefits to the project including reduced time and costs of the installation.

The installation time was reduced further still by Polypipe supplying Ridgistorm-XL in 6 metre lengths with ring seal joints.

This limited the number of joints required and ensuring that each jointing process was as quick as possible – a vital consideration within a live highways environment.

The pipes were engineered to the exact strength required to meet the ground conditions and installation parameter, in this case stiffness classes 2.67kN/m², 3.056kN/m² and 6kN/m², allowing pipe to withstand external loading during the installation process.

The project also included a holistic range of highways solutions from Polypipe, including three Stormcheck flow control chambers, the popular Ridgidrain surface water drainage system in sizes 100mm – 600mm, Ridgistorm-XL saddles for the connection of Ridgidrain to the Ridgistorm-XL pipe system, type 8 Linflex land drainage 100mm-160mm and Ridgiduct cable protection for street lighting.

Ridgistorm-XL quick to install



CASE STUDY

Project A5 Highway Infrastructure Improvements — Hinckley, Leics.

Application Surface Water Drainage

Products

Ridgistorm-XL Ridgistorm-XL saddles Ridgidrain Stormcheck Flow Control Ridgiduct Type 8 Linflex

Polypipe

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