Polypipe Supplies Bespoke Manhole Solution for Residential Development

Polypipe designed and fabricated a bespoke sealed manhole solution for 400-home residential development in Weston-Super-Mare.



Poor ground conditions combined with a high water table presented main contractor CJL Construction with a significant challenge when it required a foul sewer application for the large residential development on behalf of its client, Persimmon Homes. A large number of manholes were required on the project as part of the overall foul sewer system adopted by Wessex Water. CJL required a solution which reduced the potential for leakage and groundwater contamination.

Traditional concrete manholes often contain more joints than plastic systems and can be more time consuming to install due to their construction and weight. Polypipe approached CJL with the capability to design a bespoke manhole solution to meet the needs of the project.

Working closely with both CJL and Wessex Water, Polypipe supplied over 70 bespoke sealed manholes in 1200mm diameter for the foul water drainage scheme. Constructed off-site at Polypipe's Fabrications Department in Loughborough, each unit was prefabricated so it arrived on-site, ready to install.

The design developed by Polypipe incorporated a pre-formed and pre-benched manhole with a complete shaft.

The lack of joints within the manhole construction significantly reduced the number of potential leakage points, which was a clear benefit to both CJL and Wessex Water. Installed with a concrete bed and surround, each manhole is capable of resisting floatation caused by the high water table.

Robin Milliner, Senior Contracts Manager at CJL Construction commented: "We had worked closely with Polypipe on this project for over 2 years, so we've seen the designs and requirements of the product change significantly to meet the project requirements. Polypipe's capability to produce a bespoke product for a particularly demanding site and the off-site construction element of the manholes has certainly been a major benefit at the installation stage."



CASE STUDY

Project Bespoke Manholes for foul sewer system

Client Persimmon Homes

Application

Products Fabricated Ridgistorm-XL Manholes

Polypipe

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