



900m³ EcoBloc Inspect Flex, Crabtree Manorway North, Belvedere, South East London

Case Study



BACKGROUND

Crabtree Manorway North is a large-scale, new-built industrial estate in Belvedere, South East London. It comprises three industrial units, including offices and a warehouse. The project's contractors, Readie Construction, needed to find an efficient and cost-effective stormwater solution that would not only protect against flooding, but would meet strict run-off criteria set by the London Borough of Bexley. The system also needed to withstand the weight of the heavy lorries operating on the premises daily. Having worked together on previous projects, Readie Construction approached Graf UK for a versatile and sustainable solution.

SOLUTION

The Graf UK team specified, designed and installed a tailor-made 900m³ EcoBloc Inspect Flex system, built from around 4,500 heavy-duty blocs. The project called for a system that could fit around the concrete and metal foundations supporting the units' flooring — and as a made-to-measure, modular solution, the EcoBloc system provided the design flexibility to meet this spec. Buried two metres underground, the EcoBloc modules have a gross volume of 205 litres and are made from 100% recycled plastic. They have a heavy-duty lorry-bearing capacity of up to 60 tonnes, with a dense 1,000mm earth covering. This made them the perfect choice for the busy industrial estate.

RESULTS

The EcoBloc system is now ensuring effective drainage and flood management for the estate, as well as complying fully with local authority discharge requirements of 9.7 litres per second. The system is surrounded by a geomembrane for effective attenuation purposes, providing ultimate control of water back into the natural groundwater reserves. The system was also specified to include three of Graf UK's Vario 800 Flex shaft systems, which serve as in-built inspection channels and allow easy access for Graf UK's advanced camera technology. This ensures optimum performance for the lifetime of the system.

“ We've worked with Graf UK on a number of projects now, and we've consistently been very happy with the results. Due to the nature of the install, it was important to us to work with Graf UK, not only because we trust their expertise, but also because their products offer the greatest degree of flexibility. The modular EcoBloc elements can be made into any shape or size — and that was precisely what we were looking for in this particular case.” Bill Lee, Project Manager at Readie Construction