

BLOG GRP Segmental Culvert Lining

Trenchless technology comes in many shapes & forms, some new, some old, but none more traditional & effective than GRP segmental lining. The technique has been around for many years, but is only facilitated by the few specialist companies that have the right operational staff, experience & know-how to deliver the right results.

iLine Technologies recently competed in an open tender process for a single 1920 x 1950mm GRP culvert project in the Thames Water region. The client specifically required an arch-type GRP liner, including all the design & feasibility. Having all the relevant technical expertise, iLine were in a very strong position to deliver a suitable solution, that met all the needs of the end user, within the tight programme that was vital to minimize the environmental disruption that was being caused by the failing brick-arch culvert.



Following the rigorous design process, to ensure that the culvert could withstand the eccentric & unpredictable loadings from the surrounding ground, iLine opted for a traditional, thick section GRP arch-liner, manufactured by our partner in the Middle-East; manufacture & shipping time was reduced to 5 weeks, enabling a fast-turnaround scheme, much to the delight of the client.



The GRP sections were delivered to site in Surrey during the latter end of September 2013, and installed using traditional hand methods, which provided a flexible & speedy process. The site team consisted of 5 men, very experienced in all things trenchless, but specialising in GRP. The prefabricated units, each 1768mm x 1798mm x 2.4m long were installed & jointed within a 4 day period. Following joint checking, the segments were grouted into position, using a standard, low-strength cementitious grout, and the culvert tested, commissioned & re-introduced to service. Another successful project from the team at iLine!