Case study 696

Civil engineers require pumping solution to lower water table

The development of an 84-acre plot of land on the outskirts of Cardiff was threatened by lengthy delays due to the area's high water table, promoting the civil engineering company responsible for the project to contact us.

And although excessive groundwater was undoubtedly the primary issue, there were further complications caused by the fact that there were no outlets available nearby for us to responsibly discharge water removed from site.

It goes without saying that a high water table can be extremely inhibiting for building developers, as the flow of any groundwater beneath the surface can affect the strength and compressibility of soil, and thus impact its ability to support structural loads. That's why any sub-surface investigation needs to be thorough and will generally involve the removal of nuisance water.

Normally discharge from such a site would consider a nearby watercourse through settlement tanks and filtration. In this instance, however, there was no natural watercourse within the vicinity.

To get around the issue, we proposed that our client enlist the assistance of a fluid containment solutions expert, who delivered a large water storage container to site.By having this in place, we were able to commission a single GP80 trailer-mounted pump which was used to remove water from damp and fertile moorland. This pump was specifically chosen because of its versatility, allowing it to be constantly relocated at the various points in time where it was required elsewhere.

Our most recent correspondence with the customer revealed their complete satisfaction at both the solution we specified, and the efficient manner in which it was implemented. As such, we anticipate that the project's eventual completion will actually be much closer to the deadline than originally expected.







