Case study 627

Dewatering scheme enables construction

Construction dewatering is a technique deployed on building sites where high surface water is removed before a project can commence. This is normally achieved by using pumping equipment and is necessary due to an accumulation of water below and above ground level — often in areas with inadequate drainage slopes or high water tables. Precautions must be taken to select the best location for discharge in order to reduce the risk of soil erosion and flooding elsewhere.

Finding a suitable release point can often be the most difficult aspect of a job, and this was perfectly highlighted when Sykes Pumps were summoned to a caravan park in Hertfordshire. A high water table – approximately 12 inches below ground level – was causing delays to the excavation and concrete laying scheme, so equipment was needed to help get the development back on schedule.

Interestingly, another Pump Hirer had originally provided 3 pumps to the client, but these had been unable to make an impact. As experts specialising in this particular field, we were able to come up with a much more effective arrangement which would divert water to a designated discharge point some 500 metres away from the problem area.

Our proposed hire package included two 8" super-silenced diesel pumps, along with two settlement tanks, four 6" Y pieces and approximately 550 metres of hosing. The pumps were stationed as close to the suction point as possible, while hoses ran alongside the river point with Y pieces attached – allowing water and silt to soak into the ground away from the main site. This solution worked perfectly and facilitated the required excavation ahead of concrete bases being laid.







Performance Max head: 43 m, Max flow: 161 l/s, Max solid: 75 mm
Weight 2390 kg with fuel, 2200 kg without fuel
Weight 2610 x 1250 x 1535
Noise level 65 dBA @ 7 m
Fuel tank capacity 207 litres. Max 24 hours
Pipe conections Suction: 8" Table D,

Pipe conections Suction: 8" Table D, Discharge: 8" Table D, Bauer couplings option Fuel consumption Full load @ 1800 rpm: 17 litres/hour

Energy Efficient duty point Fuel consumption @ 7.3 litres/hour





