

# Application Report - No.25

# Dewatering



The solution was to use eight D100 Super Silent Pumps to dewater two boreholes in tandem using “Y” piece flow branches and reduced diameter suction hose.

Sixteen boreholes successfully dewatered into a series of six settlement tanks before discharging into the river.

Selwood installed and commissioned this project and has won work to supply further diesel and electric submersible pumps on site.

The site of the Old Courage Brewery, Finzels Reach, Harbourside, Bristol had been a brewery since 1702 until its recent closure. The original site of Georges Brewery was being redeveloped into grade ‘A’ offices, luxury housing, apartments and leisure facilities.

The existing harbour wall being over 300 years old was unable to support the new structures and a series of twenty four boreholes were drilled to enable a dewatering system to control

the ingress of water whilst piling and reinforcement groundworks were carried out.

The 100mm boreholes were drilled to 6m in depth with an estimated flow of 5 l/s over a distance of 95m. This caused a number of problems due to the borehole size, flow rate, and voltage drop of the electrical supply cable over the distances involved.



**HEAD OFFICE**  
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**Hampshire SO53 3ZL**



|                     | <b>D100</b>          |
|---------------------|----------------------|
| Pump Speed          | 2000rpm              |
| Capacity            | 120m <sup>3</sup> /h |
| Suction Lift        | 9.1m                 |
| Max Solids Size     | 29mm                 |
| Air Handling        | 24 l/s               |
| Inlet / Outlet Port | 100mm                |
| Delivery Head       | 23m                  |
| <b>db(A) at 7m</b>  | <b>58</b>            |