



BROMSYARD WWTW SHAFT

**Dewatering design for groundwater
control during the construction of a new
shaft**

Tel: 01953 454540
enquiries@stuartwells.co.uk
www.stuartwells.co.uk

Stuart Wells Limited

Dewatering design report including pump test, well drilling and hydrogeological impact assessment



Objective

A new shaft was required as part of an upgrade at a wastewater treatment works. Stuart Wells was engaged to prepare a dewatering design report. This essential document was created by our expert team of engineers to outline the groundwater control measures needed to lower the groundwater levels during construction.



Scope of Works

In order to prepare a dewatering design report a pumping test trial was completed by our expert team. The purpose of the pumping test was to provide additional data on the hydrogeological properties of the superficial Alluvium Deposits.

This information was essential to inform the design of a temporary dewatering system, identify the likely abstracted flows required, and support permit applications. In addition, groundwater level monitoring data and laboratory groundwater quality samples were collected throughout the pumping test.

A Hydrogeological Impact Assessment (HIA) was also submitted on behalf of the client in accordance with the Environment Agency's requirements.



Solution

The groundwater control system designed by Stuart Wells comprised of six abstraction wells installed equidistant from one another around the perimeter of the shaft (~ 10 m centers).

Services	<u>Dewatering design</u> <u>Hydrogeological Impact Assessment</u>
Location	Herefordshire
Industry	Utility