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COMPREHENSIVE GEOTECHNICAL & ENVIRONMENTAL ENGINEERING SERVICES
DELIVERED USING OUR OWN DRILLING RIGS / CREWS / SOILS LAB / ENGINEERS

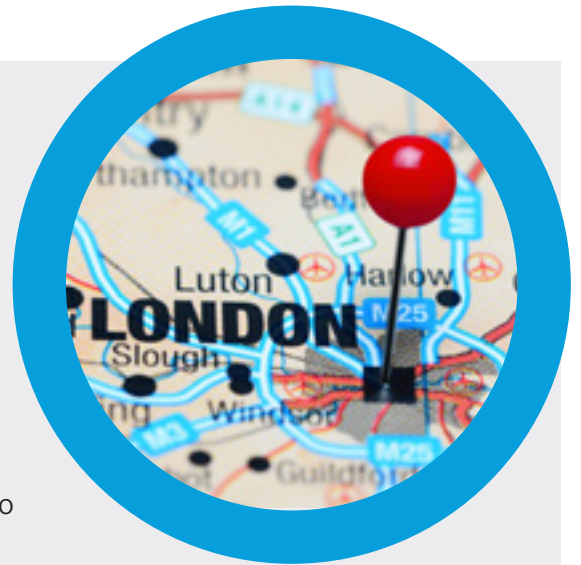
CASE STUDY 01

Medmenham Project

// BACKGROUND

RGS has worked with a major national flood risk consultant to assess the dangers presented at a historic site on the banks of the River Thames in Buckinghamshire.

The assessment was necessary to enable the client to assess the site - which is in close proximity to the river and underlain by an aquifer - and involved installing boreholes, with standpipes, to undertake pumping tests as part of a hydraulic assessment and to assist preparation of a remedial action plan.



Pre-start site visits were undertaken by
RGS Operations Director, Chay Rogers.

// CONTRACT REQUIREMENT

Provide a **cut-down light cable percussive rig** for the second visit due to access restrictions. Pre-start site visits were undertaken by **RGS Operations Director, Chay Rogers**, who liaised with the client to establish access requirements and to establish a detailed knowledge of site characteristics.

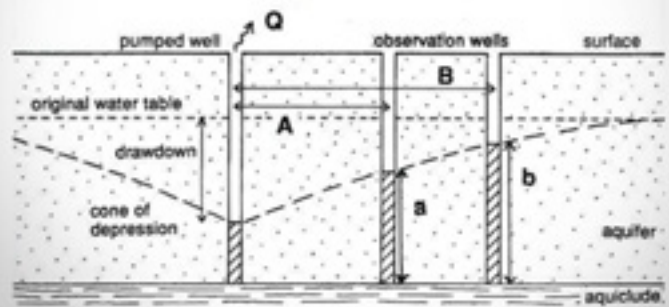
// PROJECT SPECIFICATION:

The technical requirements included provision of:

- 1 pumping well with monitoring standpipes.
- 7 observation wells with monitoring standpipes.
- Full time professional attendance
- Second visit - installation of further monitoring standpipes using a cut-down drilling rig.
- Boreholes were excavated using a light cable percussive drilling rig (cut down rig on the second visit) and standpipes installed at each location.
- Water was pumped from the main well, and levels taken simultaneously from the observation wells, in order to establish the hydraulic gradient, determine the potential yield of the main well and assess the regional permeability of the aquifer.

Pump testing of a well determines its potential yield, and also the regional permeability of the aquifer.

$$K = \frac{Q \cdot \ln(B/A)}{\pi(b^2 - a^2)}$$



// OUTCOME

Successful flood risk assessment that included pump testing of an observation well to determine its potential yield and also the regional permeability of an aquifer.

Our range of services is extensive. We can assist in many ways, **whatever stage your project is at**. So please **don't hesitate** to pick up the phone and speak to us if you require any assistance, advice or information.

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