



CITR1008

CAMBRIDGE INSITU TECHNICAL REFERENCE

Internal tests carried out in the field at Rectory Farm

Authored by: Robert Whittle, Clive Dalton, Philip Hawkins

Date: 01/03/2004

Cambridge Insitu Limited
Little Eversden
Cambridge
CB23 1HE
United Kingdom

Tel: +44 1223 262361
Fax: +44 1223 263947
Email: cam@cambridge-insitu.com
Web: www.cambridge-insitu.com

The test site at Rectory Farm, Little Eversden, Cambridge, England

The Cambridge Insitu/Eversden test site is located behind the Rectory Farm in the village of Little Eversden, approximately 10km south of Cambridge. The site is an unused field owned by Mr. Clive Dalton of Cambridge Insitu. Some of the early field testing of the SBP (1970's) was conducted here and the site has been used on numerous occasions for SBP demonstrations and other experimental purposes (Whittle, 1998).

The test area is gently sloping, grassed and has numerous existing boreholes as shown on Figures 1 and 2 at the end of this document. Some of the older bore-holes are within the footprint of an old lightweight shed structure. The elevation of the boreholes is approximately 30.8m above sea level. The ground conditions comprise of topsoil over 4.5m of silty clay and gravel (glacial till) overlying about 45m of Gault Clay, which sits on top of the Lower Greensand. The thickness of the Gault Clay here is inferred from old well logs (circa 1934 and 1949). The wells are located approximately 100m from the site and are known as the Public Pump (204/80) and Gorse Cottage (204/207) based on British Geological Survey (BGS) Borehole Records. The water table fluctuates with rainfall between 0.5m and 1.5m below ground surface and the pore water pressure is hydrostatic to at least 15mBGL.

Almost all the works carried out in the field, whether informal or part of a research effort, have been logged and reported. This technical reference document gives access to the databank of tests for interested parties or the merely curious. Data may be downloaded and used at will but if published elsewhere we would appreciate proper accreditation. The majority of the data are self bored pressuremeter tests but in an effort to make the data set more useful we have collected core down to 20 metres from a single rotary hole and used this to obtain index properties. Because of the unspoilt nature of the site it is a valuable source of data for heavily over-consolidated Gault Clay. During July 1999 Building Research Establishment (BRE) visited the site with their cone truck and made three CPT holes as part of their on-going research into the properties of the Gault. These data are also reported. Where possible data have been provided in common formats such as XLS or PDF. Some data however remain in a proprietary format and can only be accessed by Cambridge Insitu software.

The data are available on our website at <http://www.cambridge-insitu.com/technical-reference/internal-tests-rectory-farm>

(It is right to add a cautionary note. Normally people publishing these kind of data stress the care taken to ensure the best quality information. In the case of these tests many instruments were used, an assortment of operators were involved (including trainees) and a number of boring methods tried. The quality of the data are therefore variable. We believe all the data to be useful but take care to read the notes attached to the relevant files before making use of the results.)

Boring method

The majority of the boreholes at the test site were started by cable percussion methods. Each borehole was cased down to 3 metres with 6 or 8 inch water well casing hammered into the ground by the rig. The casing then provided excellent anchorage for the driving part of the self boring system.

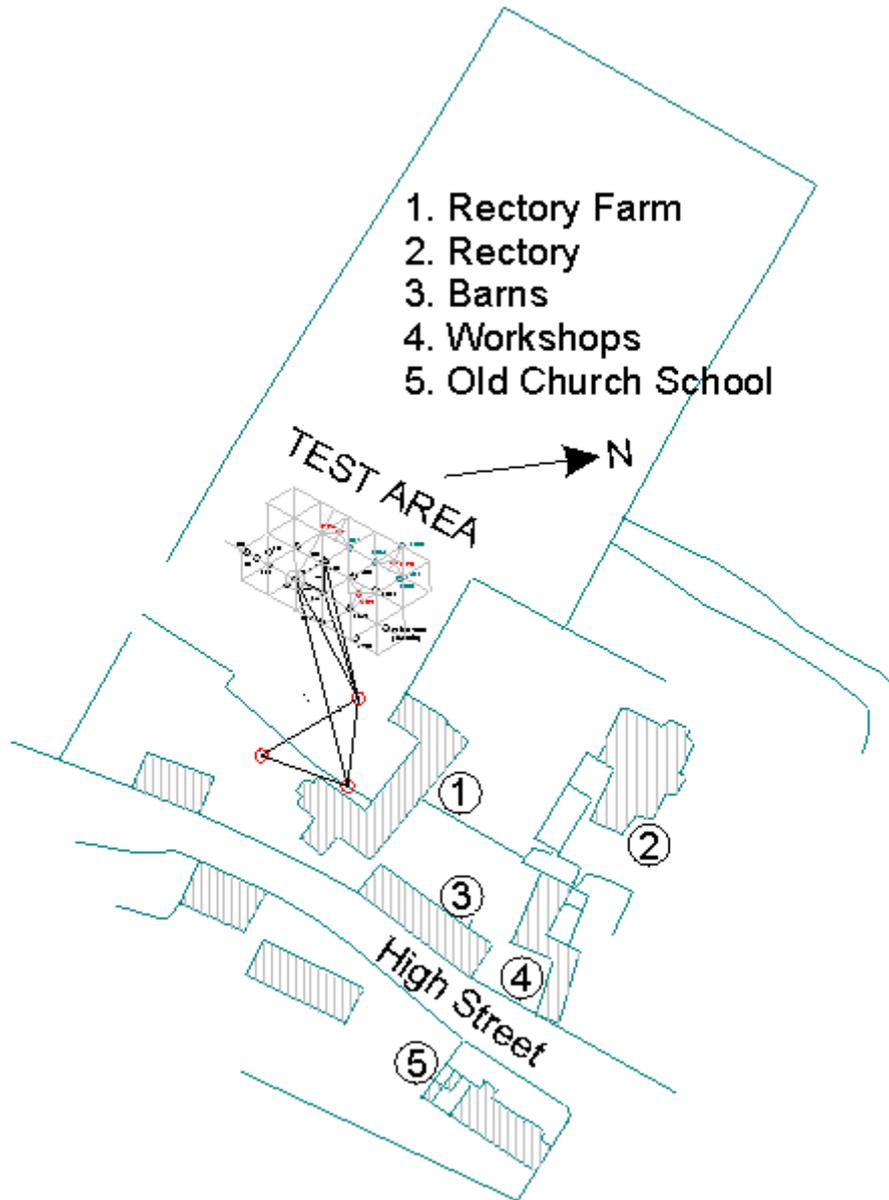


Figure 1, general plan of Rectory Farm and the test area

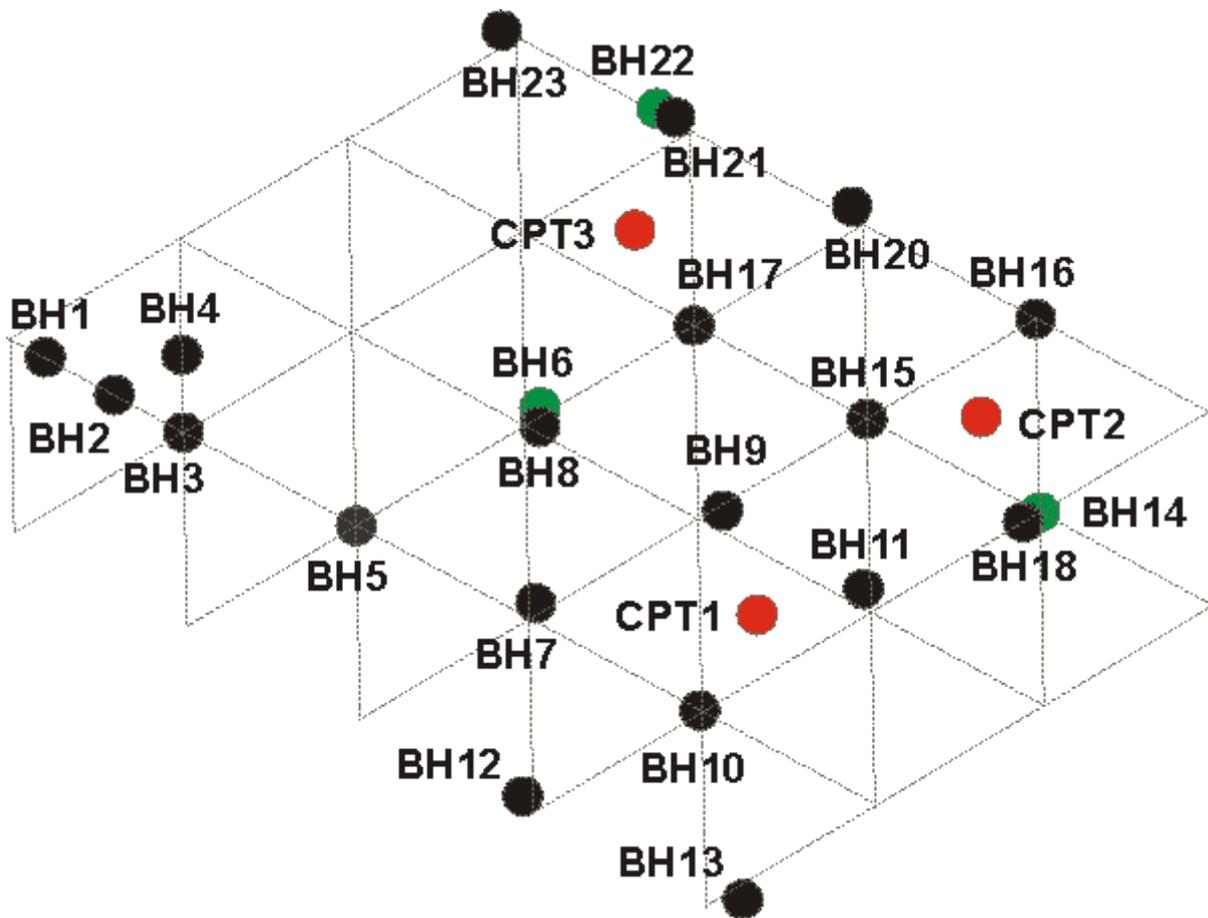


Figure 2, borehole positions within the test area at Rectory Farm