

SURVEY RESULTS

95/44 Stanton Harcourt, Oxfordshire

NGR: SP 425 050

Location, topography and geology

Dix Pit gravel pit near Stanton Harcourt, Oxfordshire is located approximately 10km west of Oxford and 5km south of the A40. The geology consists of Oxford Clay directly overlain by Quaternary fluvial gravels approximately 10m in thickness. **Amey Roadstone Company (ARC)** has extracted the gravels to near base level leaving a pit floor some 10m beneath the present-day ground level.

Archaeology

Within the basal gravels deposited during the proposed interglacial period of 200,000 years ago non-articulated bones of mammoth, bison, horse and elephant have been found. One hand axe was previously excavated from within the gravels and its form suggested it had been waterborne for some time.

Aims of Survey

This survey forms part of an investigation of the Quaternary environment at Dix Pit, Oxfordshire for **Channel 4's** third **Time Team** series. The aim of the geophysical survey was to define the course of the river channel within which the prehistoric remains have been found.

Results

1. Two areas were available for survey and were established on the existing site grid system. These areas are shown in Figure 1 at a scale of 1:1000.
2. Field measurements using a Bartington coil over an exposed section of deposits at the north end of the site gave mean readings of 8 SI Units for the Oxford Clay and 5 SI Units for the overlying gravels.
3. A trial transect using a fluxgate gradiometer failed to detect any magnetic anomalies at a known interface of the gravels and clay. Given this fact and the poor ground conditions of spoil heaps and surface ferrous material across the site - no further magnetometry was undertaken.
4. Resistance survey using a Twin Probe configuration proved more successful in that differences in the water content of the clay and the gravels were detectable. Even though the range of resistance readings changed from day to day due to the variable weather conditions, the contrasts remained measurable and any variability could be balanced by data processing. The results of the resistance survey are shown in Figure 2 at a scale of 1:500.
5. Trenches cut through the survey area showed a correlation between the clay / gravel ratio of the material. Lowest values correlate to undisturbed Oxford Clay and the highest readings correlate with material consisting of pure gravel. Intermediate levels depict gravels containing a percentage of reworked Oxford Clay or contain a silty matrix. The interpretation diagram is shown in Figure 3 at a scale of 1:500.
6. The general trend of the anomalies are aligned approximately parallel with the dominant current directions.

Project Co-ordinator: J Gater

Project Assistants:- Dr CR Adam & CE Stephens