Extension to Sevenoaks Quarry, Greatness, Kent

An Archaeological Fieldwalking Survey for Tarmac Ltd

by Steve Ford

Thames Valley Archaeological Services Ltd

Site Code SQK05-124fw

January 2006

Summary

Site name: Extension to Sevenoaks Quarry, Greatness, Kent

Grid reference: TQ 544 575

Site activity: Fieldwalking

Date and duration of project: 16th-18th January 2006

Project manager: Steve Ford

Site supervisor: Steve Ford

Site code: SQK05/124

Area of site: c. 35ha (overall) (c. 19.7ha this project)

Summary of results: A low quantity of struck flint was recovered of Mesolithic and later Neolithic or Bronze Age date. This material is interpreted as representing widespread use of the landscape but without indicating the presence of occupation sites on or near the proposal site. A single sherd of Roman or medieval pottery and a single fragment from an unidentified Bronze object were also recovered and are likely to represent objects spread during manuring of farmland.

Monuments identified: None

Location and reference of archive: The archive is held at Thames Valley Archaeological Services, 47-49 De Beauvoir Road, Reading, RG1 5NR and will be deposited with Sevenaoks Museum in due course.

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Report edited/checked by:	Steve Preston 26.01.06
	Jennifer Lowe ✓ 26.01.06

Extension to Sevenoaks Quarry, Greatness, Kent Fieldwalking Survey

by Steve Ford

Report 05/124

Introduction

This fieldwalking study, commissioned by Mr Andy Josephs, of Andy Josephs Consultants Limited, on behalf of Tarmac Limited, Colchester Quarry, Warren Lane, Stanway, Colchester, Essex, CO3 0NN is part of an assessment of the archaeological potential of the land at Sevenoaks Quarry, Kent (TQ 544 575) (Fig. 1). This report constitutes the second, non-invasive stage of a process to determine the presence/absence, extent, character, quality and date of any archaeological remains that may be affected by development within the area.

This is in accordance with the Department of the Environment's Planning Policy Guidance, Archaeology and Planning (PPG16 1990), and the County's policies on archaeology. The field investigation was carried out to a specification approved by Mr Adam Single, Archaeological Officer with Kent Heritage Service. The fieldwork was carried out during January 2006 by Steve Ford and Danielle Colls and the site code is SQK05-124.

The archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Sevenoaks Museum in due course.

The site

The whole proposal site comprises an irregular parcel of about 35ha, on the northern margins of Sevenoaks. It lies to the north-west of the village of Seal and is bounded to the north by the London–Maidstone railway line and to the south and west by the existing quarry. The parish boundary between Seal and Sevenoaks crosses the site and is partly undefined. The south-east portion of the site lies partly on land that slopes gently to the east with the remaining parts on land steeply sloping to the north and forming the valley side of a tributary of the River Darent. The highest points of the site at *c*. 97m above Ordnance Datum lie to the south-east with the lowest points at *c*. 70m above Ordnance Datum in the north-west. The highest parts of the site are capped by small areas of relict river gravel (3rd and 4th terrace) with the remaining higher areas comprising lower greensand (Folkestone Beds). The sloping northern parts of the site comprise Gault Clay, presumably with some colluvium present on the level ground at the base of the slope (BGS 1971). The gravel and greensand deposits contain small amounts of flint and chert.

Planning background and development proposals

The site is to be promoted for an extension to the existing quarry for mineral (sand) extraction. A desktop study has been prepared for the project and has highlighted the archaeological potential of the site (Josephs 2005). In summary, the site lies in an area from which only a modest number of sites and finds have been recorded, but a number of cropmarks, possibly of archaeological interest, are present on the site.

Objectives and methodology

The fieldwalking took place along north-south lines spaced at 20m intervals and based on the National Grid. Material was collected from units of 20m intervals along these lines with an average search width of 1m. This approximates to a 5% sample of the surface area of the site. The methodology is comparable with that practised in other regions of central southern England (Richards 1990; Ford 1987a, appendix 1). All pre-19th century artefacts (primarily struck flint and pottery) were to be collected and retained. Dense scatters of brick/tile or burnt flint were to be recorded in the field but only a sample of such material collected for dating purposes.

A metal detecting survey took place utilizing the same grid. All pre-19th century artefacts were to be collected and retained. Material was only to be recovered from ploughsoil contexts.

A record was made of conditions which may have influenced recovery rates, such as stoniness of ground, vegetation cover, bright sunlight and which individual walked which line. The topography was also recorded to assist in interpretation of the finds.

Results

A total area of c. 19.7ha was fieldwalked and metal-detected by 2 individuals.

Collection conditions

All of the fieldwalked areas had been ploughed and the whole ground surface was observable. For the southern areas (field 1, and parts of fields 2 and 3; Fig. 2) either the land had been harrowed or the sandy/stony nature of the ground had led to it easily breaking down by weathering. For the northern areas corresponding with the gault clay, parts of this had only been rough ploughed but with other parts harrowed. All of the areas had been allowed to weather for several weeks before fieldwalking.

The site was overcast for all of the time of the survey and the ground damp. Stone (gravel and ferruginous sandstone fragments) was frequent for the southern areas, but rare for the northern areas.

Three areas of soil discoloration (darkening) were noted as shown on Figure 2. These were inspected and did not produce any notable concentrations of finds but small amounts of charcoal were noted. It is considered that these might be the site of bonfires during scrub or woodland clearance.

Finds

Struck flint

In all, just 21 struck pieces were recovered as detailed in Appendix All of the pieces were made of flint but of variable colours (black, honey coloured) and textures with several cherty pieces present. Some, but not all of the material could have been derived from the immediate vicinity of the site. The material was of variable condition with iron stained, patinated and relatively fresh pieces present.

One piece recovered, which was relatively fresh and unstained and unpatinated is considered to either be a modern (plough-struck) flint or accidentally introduced to the site with powdered chalk used to lime clayey or acidic fields. This piece has been excluded from this assessment. It is possible that one or two other flakes are of similar origin. Most pieces were edge damaged (plough retouched) to a greater or lesser extent though it is possible that some of these pieces were originally deliberately retouched in prehistoric times.

The collection comprises 16 flakes, three blades or narrow flakes and a spall (a piece less than 20 x 20mm). The sub-division of blades/narrow flakes from broad flakes was not done metrically but assigned by eye.

Chronology

As a whole, the flint collection contains few chronological indicators with the exception of one blade. This is almost certainly of Mesolithic date. A second broken piece may be of a similar date. For the remaining material a date of later Neolithic or Bronze Age can only be suggested (Ford *et al.* 1984; Ford 1987).

Interpretation of the struck flint distribution

Before the recorded distribution of the lithic material can be interpreted in terms of its archaeological significance and the impact of the proposed development, an assessment of the nature of the use and discard of struck flint and the activity represented by flint scatters is required. In contrast to pottery, which is predominantly used only on occupation sites, struck flint is used (and discarded or lost) on, adjacent to, and away from occupied areas. Procurement of raw materials itself produces further material not necessarily located close to occupied areas, and as for pottery, used flint can end up in middens which are later used to manure arable fields. Durable flint, much of which is not chronologically distinctive, was widely used and discarded during much of prehistory, as settlement patterns and subsistence strategies changed. As such, it should not be surprising that struck flint can be widely distributed across the landscape without marked clustering, or with widespread clusters of higher density material representing repeated use of the same location over many generations (Foley 1981). Coupled to this are taphonomic processes such as ploughing and colluviation (which is of particular relevance on the markedly sloping land here) which can lead to the wide dispersal of originally dense and discrete scatters (Yorston *et al.* 1990). There is a further body of evidence to indicate that much early prehistoric occupation is now represented only by scatters of struck flint within the topsoil (Healy 1987). Large quantities of struck flint need not imply the presence of significant numbers of sub-surface features.

It is clear from the low numbers of struck flints present here and their non-clustered distribution pattern presented in Figure 2 that this is much more likely to reflect casual use/discard across the landscape rather than pinpointing occupation sites. It is acknowledged that occupation sites located at some distance from sources of raw material or sites dating to the end of the Bronze Age when metal tools are more prevalent, can result in a very conservative use and discard of flint tools. In such circumstances, even low densities of struck flint recovered from fieldwalking can be indicative of occupation sites. However, with such low densities of finds as here, it is rarely possible to differentiate random patterns of casually lost items across the landscape from those reflecting discard on or close to occupation sites.

Pottery

The fieldwalking resulted in the recovery of just a single sherd of pre-modern pottery. This abraded body sherd (4g) is thin walled and tempered with sand. It has an oxidized core with grey and black surfaces. It is of either Roman or medieval date. The location of the sherd is shown on Figure 2. It is impossible to determine if this sherd is a rare survival of material in the ploughsoil on or close to a buried occupation site (cf Roberts 1995), or is simply a product of the spreading of manure on farmland into which rubbish has been incorporated.

Metal detecting

The metal detecting survey recorded a moderate number of metal finds, most of which were unambiguously of modern date made from iron, copper alloy and lead. These comprised piping, brackets, handles, washers, miscellaneous machine stamped/cut fragments and a spent bullet. These were not retained. One item of uncertain function and not obviously of modern date was a fragment of copper alloy casting (14g) which appeared to comprise a curving flange around a circular hole. It is possibly something similar to a candlestick.

Conclusion

The fieldwalking has resulted in the recovery of a low quantity of prehistoric lithic material, a single sherd of premodern pottery and a single fragment of pre-modern metalwork. The prehistoric flint finds are best interpreted as representing widespread use of the landscape at different times without obviously indicating occupation sites. The single sherd of pre-modern pottery and fragment of metalwork are likely to represent manuring practice.

References

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APPENDIX 1 Catalogue of struck flint

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Area	Grid East	Grid North	Intact Flake	Intact Blade	Broken Flake	Broken Blade	P.Broken Blade	Spall
1	54560	57480	1					•
1	54540	57380						
1	54500	57280						
1	54480	57300						
1	54480	57300						
1	54600	57460						
1	54500	57420						
2	54460	57680						
2	54500	57730						
2	54420	57740						
2	54420	57760						
2	54420	57620						
3	54120	57640						
3	54200	57800	1					
3	54000	57780	1					
3	53940	57680			1 (plough)			
3	53940	57640						
3	53800	57700						
3	54220	57760						
3	53940	57720						
3	54100	57640						

Kent County Council SMR summary form

Site address: Extension to Sevenoaks Quarry, Greatness

Summary: Fieldwalking recovered a small collection of struck flints, indicative of a normal 'backround' scatter, with no concentration to indicate an occupation site. A single sherd of pottery (Roman or medieval) and a single metal object are also most probably spread via manuring.

District/Unitary:

Parish: Seal and Sevenoaks

Periods: Mesolithic, Neolithic/Bronze Age, Roman/medieval

NGR: TQ 544 575

Type of archaeological work: Fieldwalking survey

Date of Recording: 16th–18th January 2006

Unit undertaking recording: Thames Valley Archaeological Services Ltd

Geology: Gault Clay, river terrace gravels, lower greensand, colluvium

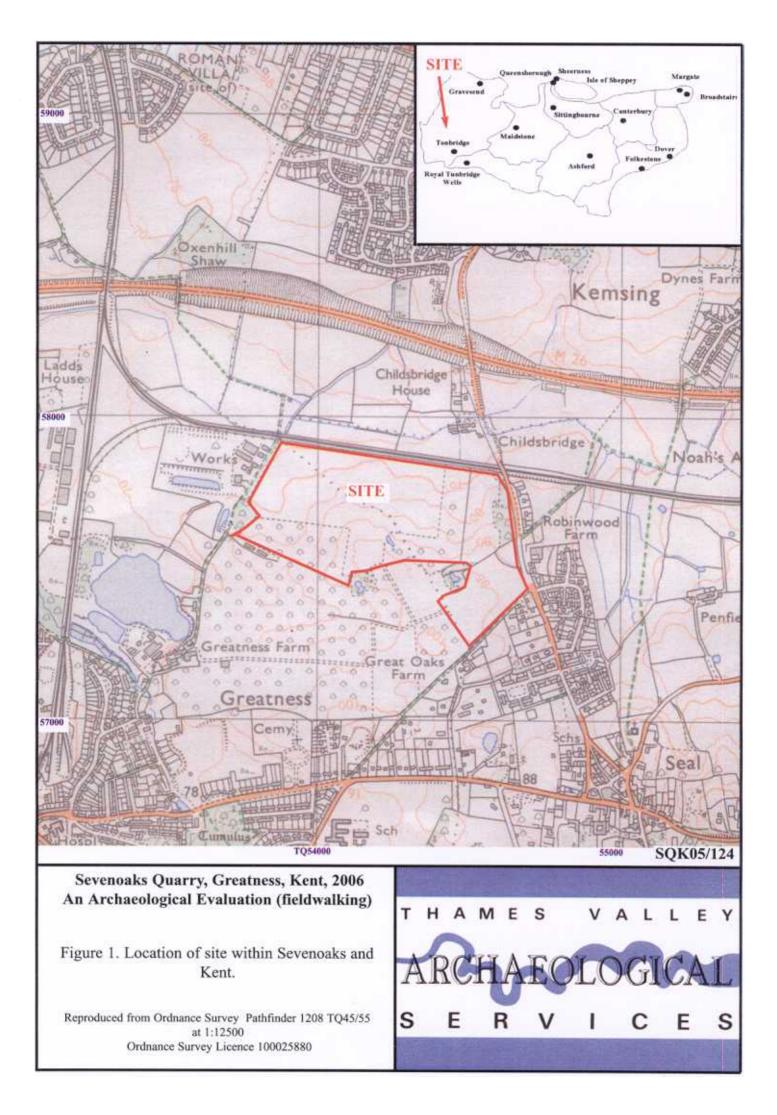
Title and author: Extension to Sevenoaks Quarry, Greatness, Kent, Fieldwalking Survey; by Steve Ford

Summary of results by period (*from bottom up*): Mesolithic flint; later prehistoric flints; Roman or Medieval pottery, unidentified copper ally object.

Location of archive and finds: The archive is presently held at Thames Valley Archaeological Services, 47–49 De Beauvoir Road, Reading RG1 5NR.

Contact at Unit: Steve Ford

Date: 26.01.2006



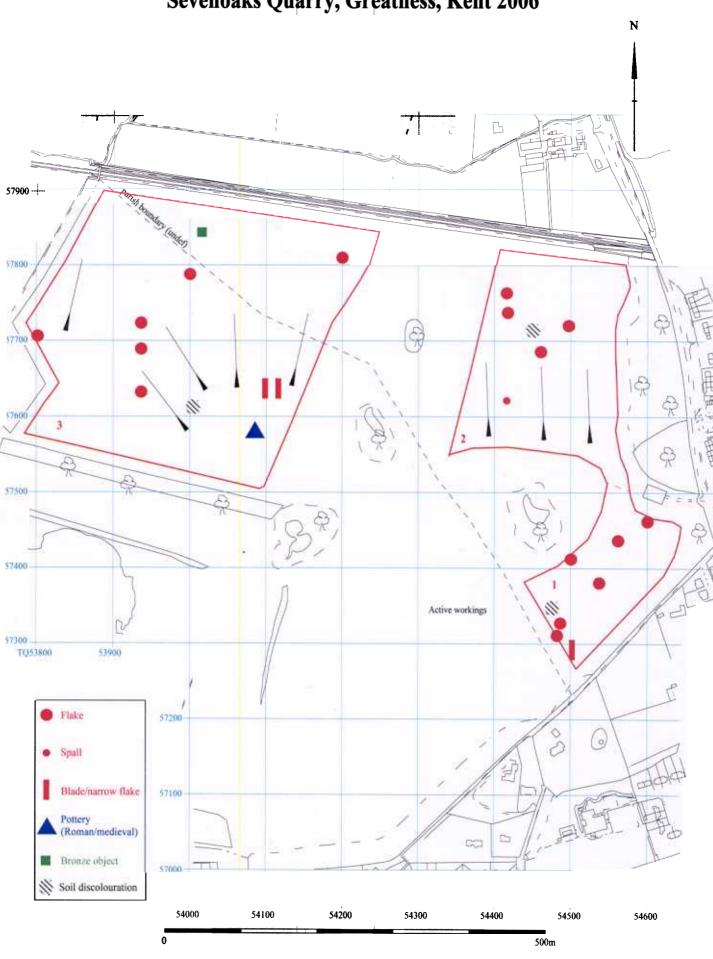


Figure 2. Detailed location of site and areas fieldwalked.

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