



**University of
Leicester**

Archaeological Services

**An Archaeological Watching Brief at
Shawell Quarry, Shawell, Leicestershire
NGR: SP 537 814 centre**

Jon Coward



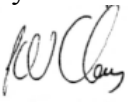
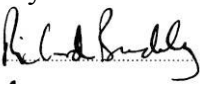
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**An Archaeological Watching Brief
at Shawell Quarry, Shawell, Leicestershire**

NGR: SP 537 814 centre

Jon Coward

For: Lafarge Aggregates Ltd

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An Archaeological Watching Brief at Shawell Quarry, Shawell, Leicestershire SP 537 814

Jon Coward

1. Summary

ULAS have carried out an intermittent Watching Brief between 2007 and 2009 for Lafarge Aggregates Ltd on part of Shawell Quarry extension, Shawell, Leicestershire, SP 537 814. Topsoil was removed in advance of quarrying. A very few finds were recovered from the prehistoric, Roman and early post-medieval periods, which appear to have survived in medieval plough furrows or soil hollows rather than in definable features. In general the area has seen little activity although the eastern area had been subject to some medieval-post-medieval strip field cultivation. The archive will be deposited with Leicestershire County Council under accession number X.A184.2009 in due course.

2. Background

Planning permission has been granted by Leicestershire County Council for an extension to the existing quarry at Shawell, Leicestershire (P/A 2006/1565/03). As a condition of the permission a programme of archaeological investigation has been required by the Senior Planning Archaeologist at Leicestershire County Council as advisor to the planning authority. This followed an agreed written scheme of investigation (Lisboa 2007; Appendix 2)

The development area is located 3.5km south of Lutterworth, 6.5km north of Rugby on land to the west of South Lodge (Figs. 1-2). The development area covers *c.* 38.7 ha. (Figs. 2-3). The current land use consisted of arable, harvested. The site was generally flat at *c.* 130m OD. The Ordnance Survey Geological Survey of Great Britain 170 (Market Harborough) indicated the geology was likely to consist of brown Jurassic rock fragments with lenses of sand and gravel, clay and silty clay, with chalk and flint fragments.

3. Historical Background

The proposed development has been subject to an archaeological desk-based assessment (Thorpe 2003) that concluded that is no evidence from the literary and cartographic sources suggesting the presence of archaeologically important material within the application area. It is suggested that the Roman town of *Tripontium* did not extend into the development area although there was a suggestion that Saxon burials at Gibbet Hall could extend that far. Detailed magnetometry and magnetic susceptibility was also undertaken on the site that identified a few pit like anomalies within the development area, but the lack of additional features could suggest these 'pits' may only represented changes in the natural geology. No significant geophysical anomalies were detected in the area subject to the intermittent watching brief.

4. Aims

The main aims of the watching brief were:

To identify the presence/absence of any archaeological deposits.

To establish the character, extent and date range for any archaeological deposits to be removed by the proposed quarry extension.

To record any deposits found, produce an archive, and report results

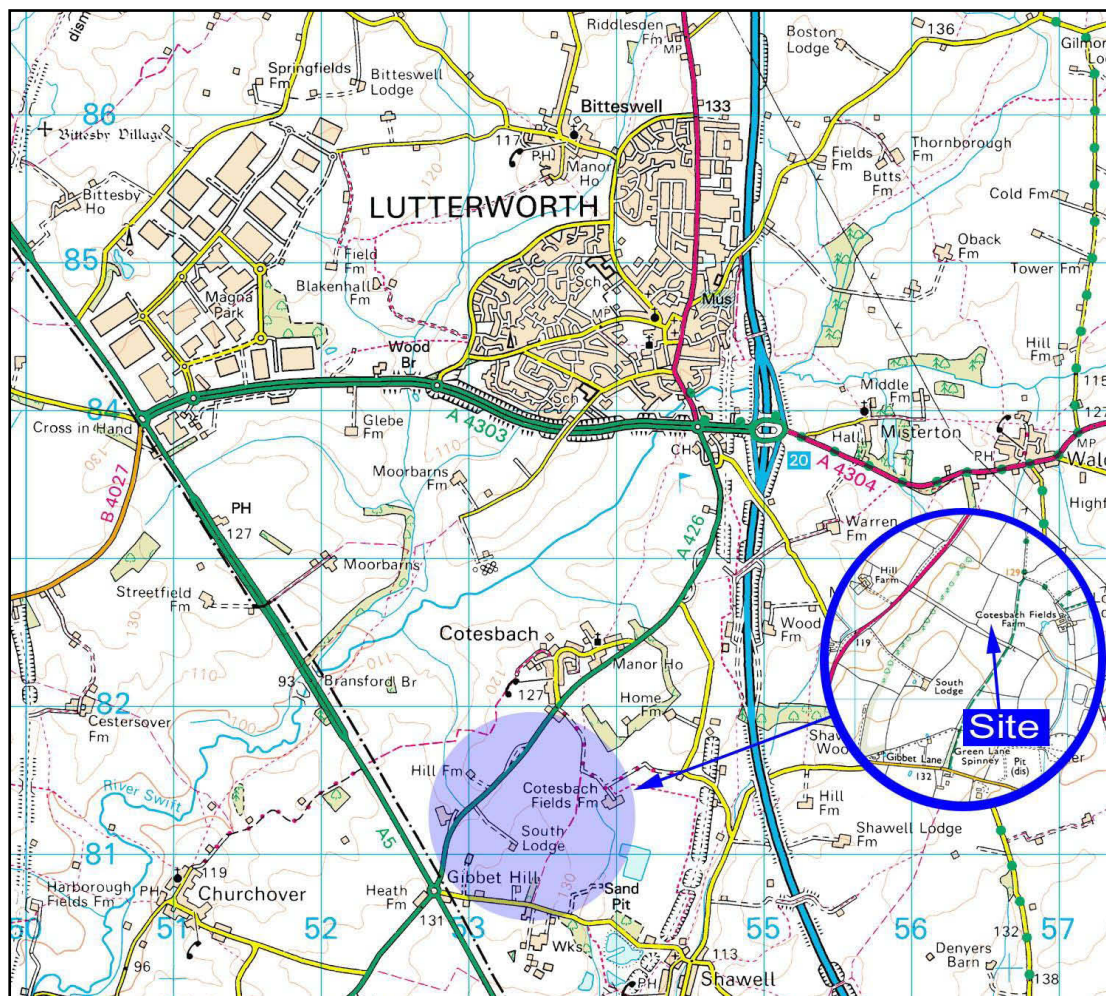


Figure 1. Location of Shawell Quarry, and position of site

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5. Methods

Topsoil was stripped using a 360° excavator with a toothless bucket and removed by trucks running on unstripped areas only. The stripping was being carried out periodically over several weeks, and so when a large enough area had been stripped to warrant it, archaeological inspection was carried out at intervals, as agreed with the Senior Planning Archaeologist (Appendix 2). Twenty-four visits were made for inspection between July 2007 and October 2009. The eastern area is described according the stripping phases indicated in Figure 2 while the western area has been designated Field numbers (Figures 5-6). Where deposits were encountered context fills are shown in round brackets (e.g (1002)) with cuts in square brackets (e.g [1009]).

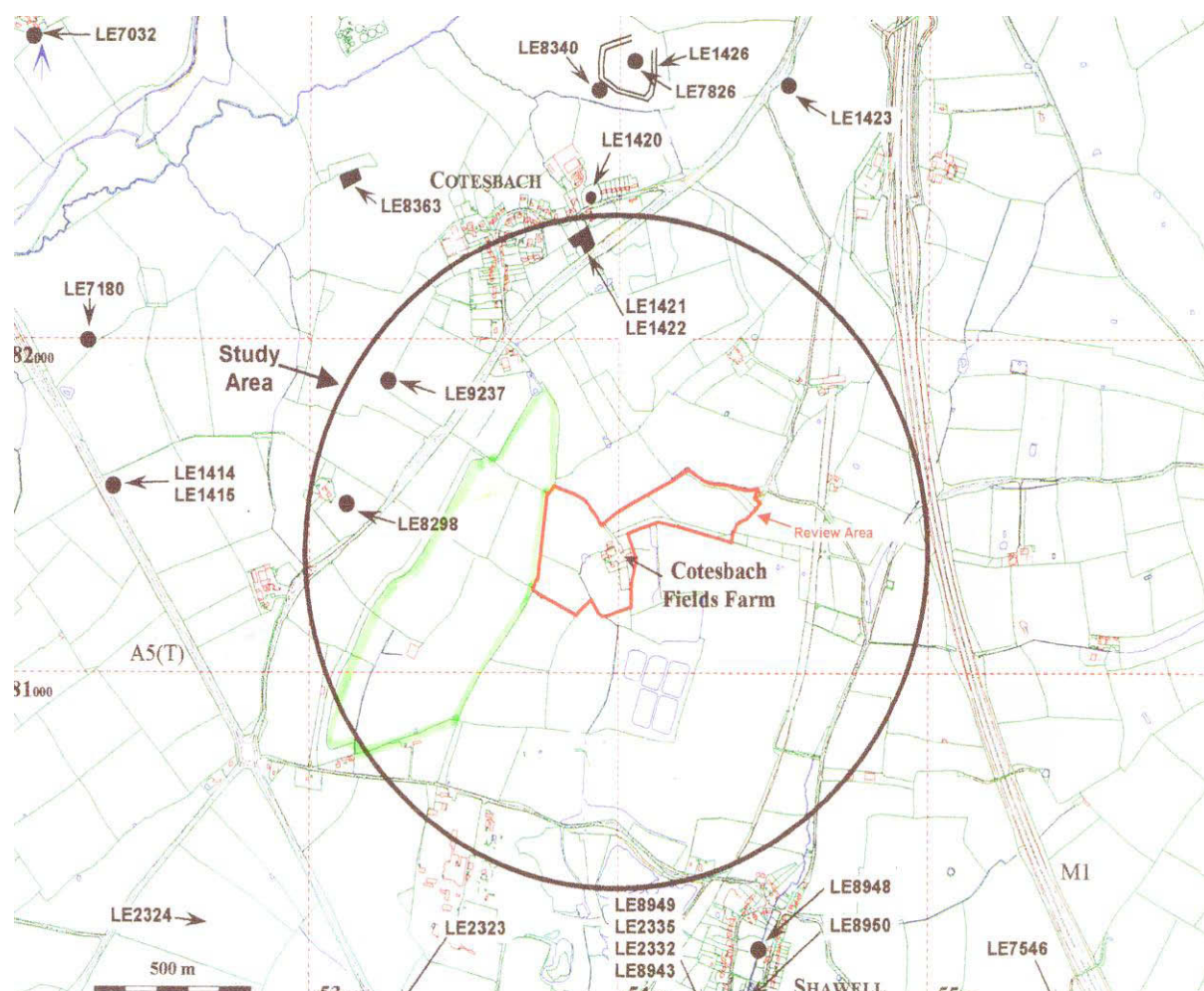


Figure 2. Plan of the areas subject to the watching brief in relation to HER records (western outlined in green; eastern outlined in red). From Lisboa 2007 Fig 2

6. Results

Topsoil across the area was of a reasonably uniform thickness of *c.* 0.30m, and was a greyish silty clay. There was little definable subsoil, with the topsoil overlying a stony orangey grey clayish natural substratum, which exhibited wide variations with large areas having more sand, silt, or stone inclusions.

The Eastern Area (Phases 7-9)

Prior to stripping earthwork remains of ridge and furrow in Phase 9 were surveyed by Souterain Ltd (Figure 4). Phase 9 contained a possible field boundary aligned north-south, and a post-medieval (early 20th century, believed to be *c.* 1917) trackway aligned north-east to south-west. It contained 20th century pottery, nails and wire which were not retained. Field boundary contexts (1003), [1004], (1006), [1007], (1010), [1011]. Track context (1002). There was also a possible furrow running north-south to the west of the field boundary (1008), [1009] which was not visible after heavy rains.

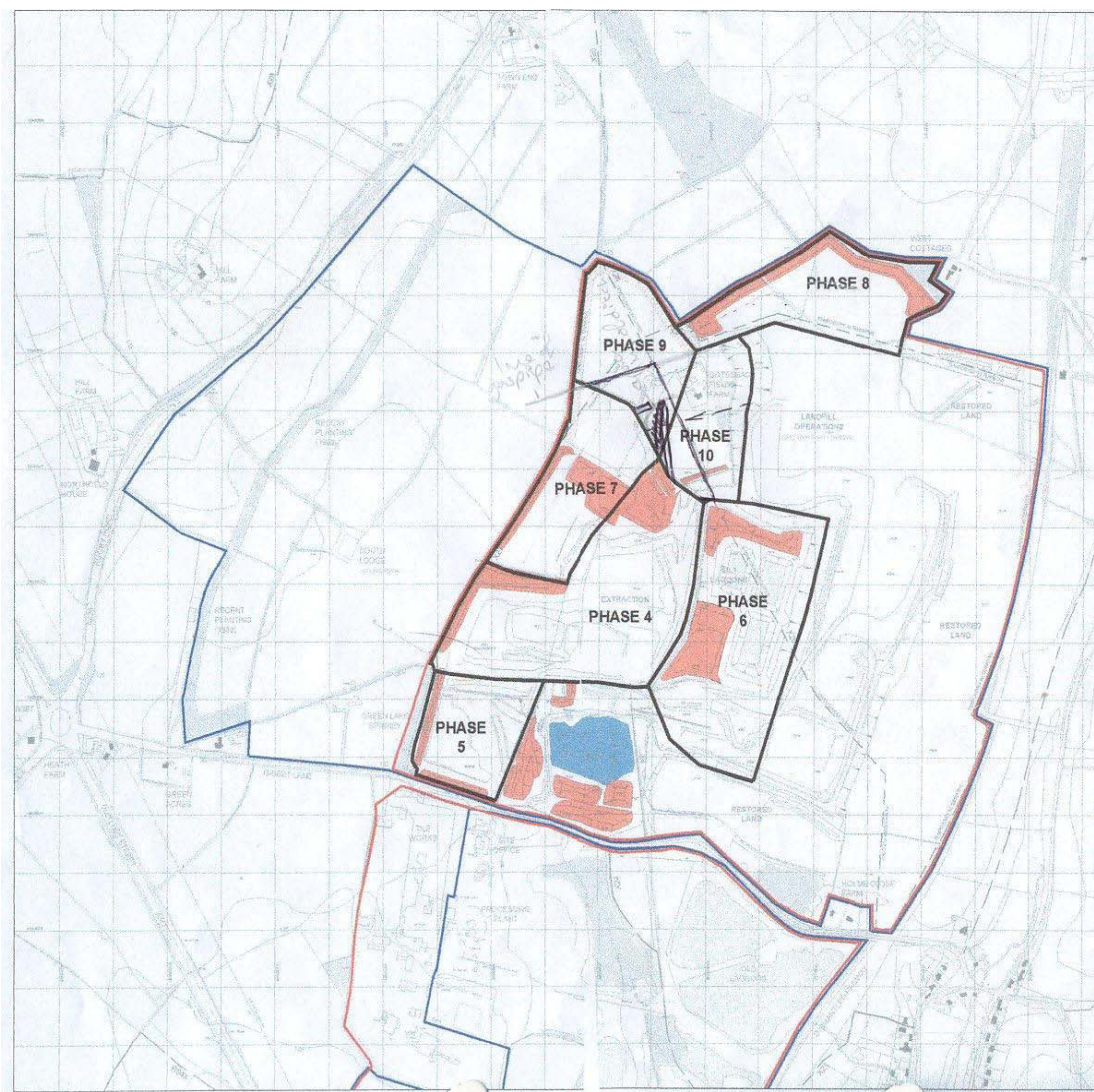


Figure 3 Plan of the areas subject to the watching brief. Phases 7-9 were watched in 2007. The remaining western area was watched in 2008-9 (see also figure 3).

Phase 8 appeared to have been ploughed flat prior to stripping and no ridge and furrow was visible on aerial photographs, but on removing topsoil there were faint traces of some furrows visible aligned north-west to south-east, *c.* 5 metres apart and *c.* 1.2 m wide, parallel to the tree line. Some narrow linear features (probably land drains) were also visible; most were on the same alignment as the furrows, but one was aligned at 90 degrees to these. There was also a slightly wider, darker, linear feature on a north-west to south-east alignment situated towards the west of the stripped area.

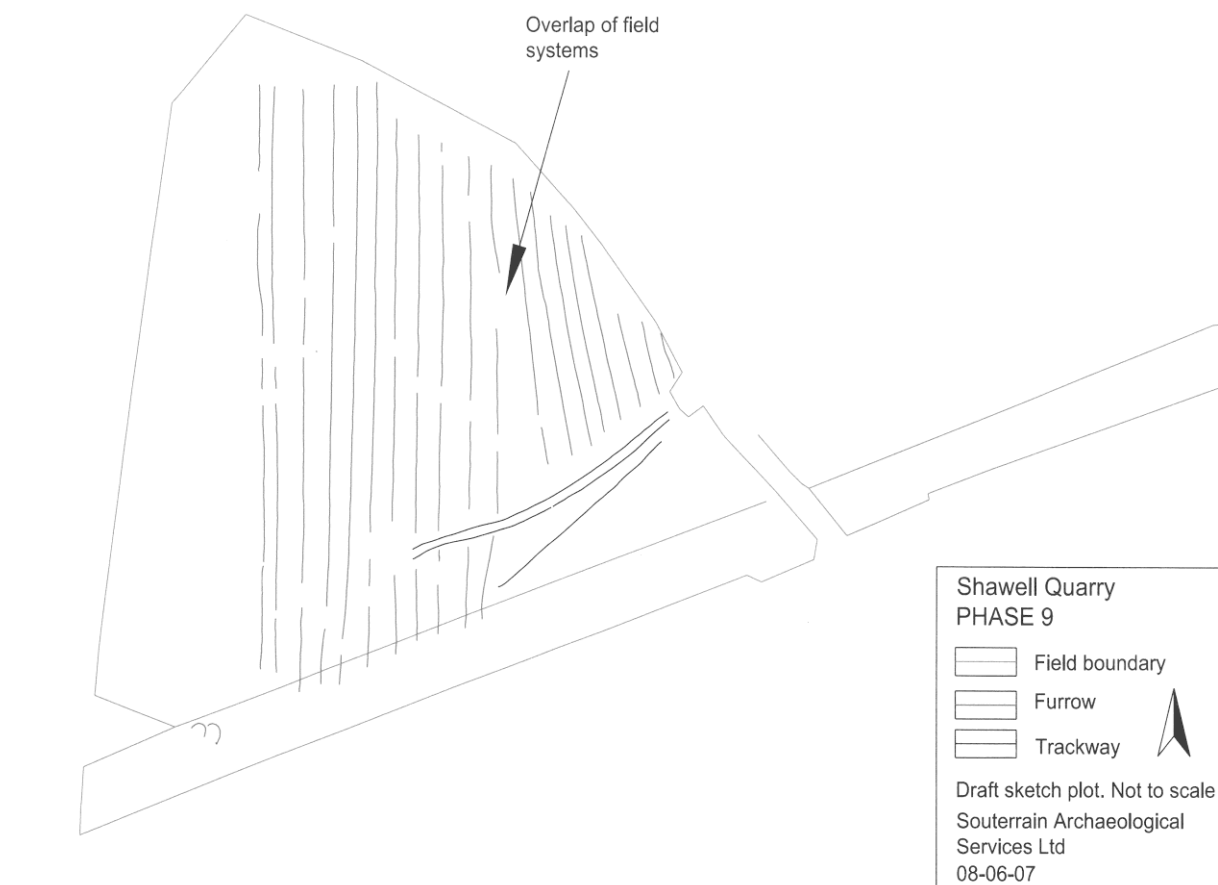


Figure 4 Earthwork survey in Phase 9 by Souterrain Ltd

The Western Area (Fields 1-5)

Negative trial trenching had been undertaken in Fields 4 and 6 (Harvey 2008). Intermittent visits were undertaken during topsoil stripping of Fields 1-3. In general the exposed natural substratum showed very few features of note and no archaeological deposits were located.

A brick-built structure of probable late 19th century date in the south-west corner of field 3 had been removed, leaving some footings (Figure 6). This is a small rectangular building shown on OS 1887, 1904 and 1925 maps (Figure 7). The tops of brick land drains of unusual construction were noted in several places crossing the field, consisting of a continuous run of bricks laid as headers, similar to a brick wall footing. In one place at least, where the top layer had been disturbed by the machining a second layer of stretchers was visible underneath; quite how this design of land drain works is unclear to the author. It may be that the brickwork was to protect an underlying ceramic pipe from plough damage. Being frogless, the bricks would appear to be 19th or earlier 20th century. There was an unusual amount of burnt patches and burnt material across the area as a whole, some of it heat-affected pebbles and stones, but much of it (e.g. furnace clinker and glass) of no great antiquity, and some evidence for a burnt straw-like crop which may be the remnants of a ploughed-in stubble burn in the past.

Adjacent to a bund on the eastern side of the field, three narrow linear features were noted running for approx. 20-30m parallel to the bund, each being 0.15m - 0.40m in width and *c.* 1.5m apart. On excavation the features proved to be only a maximum of 0.10m in depth, with slightly irregular sides and base, filled by a greyish silty clay with some stones and charcoal flecks, very similar to the topsoil. A sherd of modern pottery (SF 2) was present and these appear to be the remnant bases of medieval furrows rather than features of any archaeological significance.

On the eastern side of the stripped field two irregularly-shaped areas of a mid-brown, siltier and sandier deposit appeared anomalous to the variations seen in the natural substrata seen elsewhere. One, of *c.* 6m east-west by 4m north-south, produced a post medieval/modern potsherd (SF 3), the other to the south of it *c.* 8m east-west by 4m north-south, a Mesolithic flint and a medieval sherd. Both ran into the west baulk. A sondage was dug into the second deposit to a depth of 0.30m to test it; the mid-brown silty sand gradually gave way to a more orangey sandy clay towards the base. Common charcoal flecks were noted and some ironpan and/or manganese at the base.

Also noted were occasional small fragments of modern CBM; the features are interpreted as probably natural undulations in the underlying strata, filled by a mixture of subsoil and plough soil. A sherd of abraded Roman grey ware pottery (SF 6) was also recovered.

7. Conclusion

The results from the intermittent watching brief during overburden stripping at Shawell Quarry were very limited. No significant archaeological features were observed and very few finds were recovered. Although the absence of finds may in some way reflect the watching brief methodology this would suggest that very little activity took place within the area. Some medieval ridge and furrow strip field systems were observed in phases 8 and 9 the latter area also showing evidence of a 20th century trackway. The very few finds recovered were from Field 3 in the eastern area and may have been introduced by manuring.

The absence of evidence of archaeological activity is not unexpected in view of the topography of the area with its absence of water sources.

8. Archive

The archive for the western area consists of 13 *pro-forma* watching brief record sheets, 19 context sheets and four permatrace sheets of plans and sections, 22 Black and White negatives with contact sheet and 1 CD of 22 digital photographic images. It will be deposited with LCC under Accession code X.A86.2007.

The archive for the eastern area consists of three *pro-forma* watching brief record sheets, a finds index giving grid references for the finds, 1 CD of 88 digital photographic images, and four finds. It will be deposited with LCC under Accession code X.A184.2009.

9. Acknowledgements

The fieldwork was carried out by Jennifer Richards (eastern area), Greg Jones, Steve Jones and Jon Coward (western area) with project management by Patrick Clay of ULAS. The author would like to thank Isabel Lisboa of Archaeologica Ltd and Adrian Bunyard of Lafarge Aggregates for their help during the project.

10. Bibliography

Harvey, J., 2008 *An Archaeological Evaluation at Shawell Quarry Extension, Shawell, Leicestershire (SP 5315 8100)* ULAS Report 2008-140

Lisboa, I.M.G., 2007. *Written Scheme of Works for Archaeological Mitigation at Shawell Quarry Extension, Shawell, Leicestershire.*

Thorpe, R., 2003. *Shawell Quarry Extension, Shawell, Leicestershire.* Archaeological Desktop Assessment. Bedford : Albion Archaeology

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Appendix 1: The finds

Deborah Sawday and Lynden Cooper

The pottery and tile, four fragments, weighing 61 grams, was catalogued with reference to the ULAS fabrics Series (Connor and Buckley 1999). Two pieces of flint, including one worked example, were also recovered.

The results are shown below

Bibliography

Connor, A., and Buckley, R., 1999 *Roman and Medieval Occupation in Causeway Lane, Leicester*, Leicester Archaeology Mon. 5.

Site/ Parish: Shawell Quarry Extension, Shawell, Leics. Accession No.: XA184 2009 Document Ref: shawell2.docx Material: pottery and flint Site Type: quarry	Submitter: J. Coward Identifier: D. Sawday/L. Cooper. Coward Date of Identification: 22.10.09 Method of Recovery: wb Job Number:
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Small Find#	Fabric/Ware	Nos	Grams	Comments
TILE				
<2>	EA - Earthenware	1	26	Modern .
POTTERY				
<3>	EA2 - Earthenware 2	4	27	Joining sherds, wide mouthed bowl or pancheon rim, black glaze internally, post medieval/modern.
<4>	CS – Coarse Shelly ware	1	5	Abraded upright jar rim, fabric unusual – in that burnt organic material visible in section. 12/13th C.
<6>	GW – Grey ware	1	3	Abraded - Roman
FLINT				
<1>		1	90	Natural
<5>		1	23	Mesolithic core ‘with later removals’.



Figure 5 Position of field 3 within area of interest with location of trenches in Field 5.
Based on a plan supplied by the developer, NTS

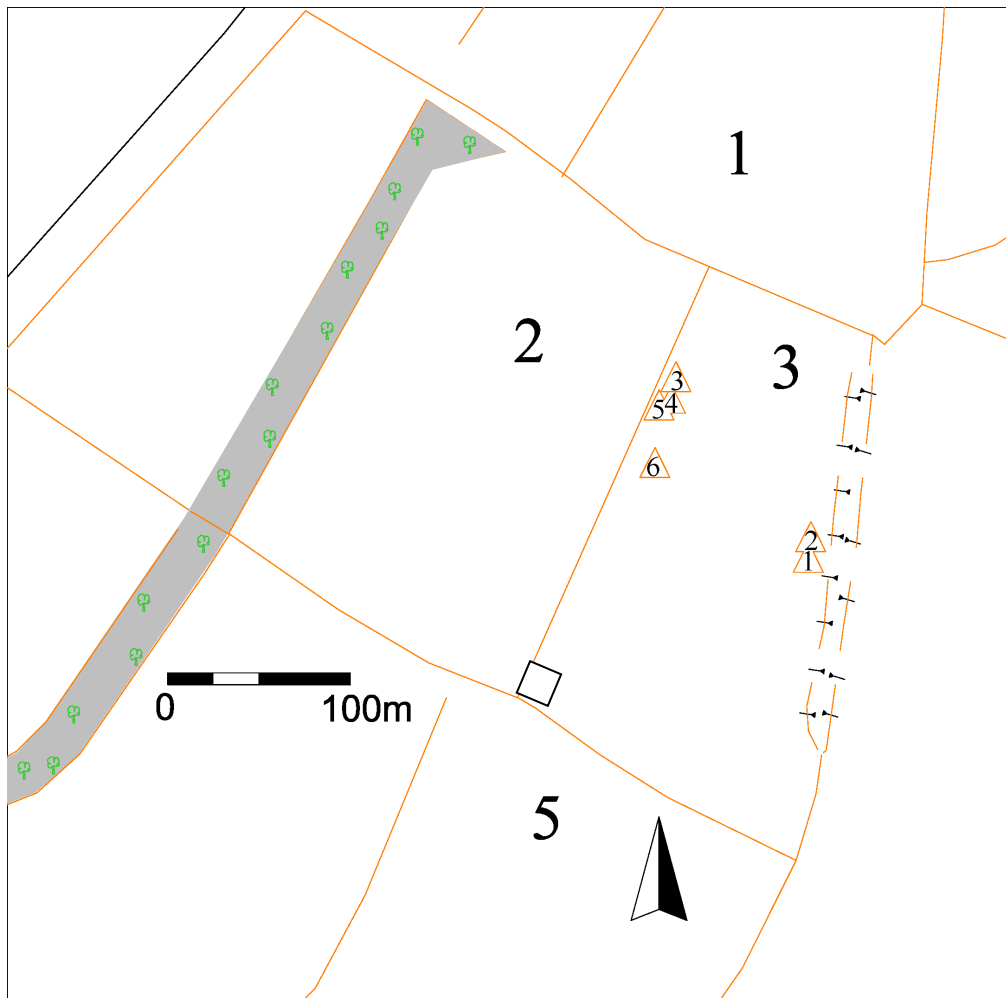


Figure 6 Position of finds within Field 3. Square denotes location of brick footings.

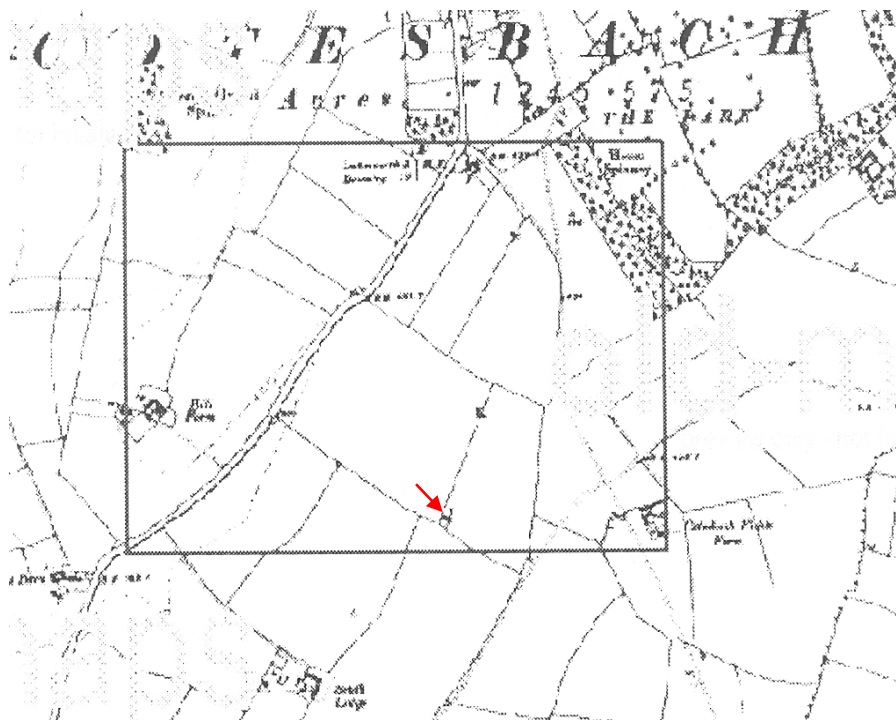


Figure 7 Extract from OS 1st edition 1887 map with brick structure arrowed



Figure 8. Field 3 Looking north



Figure 9 Field 3 looking south-west



Figure 10 Field 3 looking south



Figure 11 Phase 8 showing stripped haul road

Appendix 2 Design Specification



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WRITTEN SCHEME OF ARCHAEOLOGICAL WORKS

Specifications for a programme of earthwork survey and watching brief at

**GIBBET LANE
SHAWELL
LEICESTERSHIRE**

In connection with extraction proposal

AC 3121/D2

On behalf of:

**Lafarge Aggregates Ltd
The Horse Shoe
Mountsorrel Quarry
Mountsorrel
Loughborough
Leicestershire
LE12 7GZ**

by

Isabel M G Lisboa BA PhD

status: for submission to the curatorial authority

May 2007

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- 1.2 In connection with the Present Planning Application

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FIGURES

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- Figure 2** Known archaeology of the site and its surrounds
- Figure 3** ROMPP development works and Phases showing area for archaeological work
- Figure 4** Location of the buildings shown in the late 19th century for standing building recording

1.0 PLANNING BACKGROUND

1.1 Planning background

1.1.1 David Jarvis Associates Ltd carried out a Review of Mineral Planning Permissions (ROMPP) on behalf of Lafarge Aggregates Ltd. A Desktop was undertaken by Albion Archaeology (Hounsell, D. and Abrams, J. 2004) which identified the Site as having low potential.

1.1.2 Following a Review by Ivens and Lisboa in 2005 a meeting was held between Richard Clark and Isabel Lisboa at Leicester County Hall. The meeting was held on the 4th of July regarding confirm the management of the archaeology for the yet unextracted parts of the site:

1.1.3 The conditions set out as part of the agreement and following from the ROMPP review provide for:

- Recording of ridge and furrow
- A permanent watching brief during topsoil stripping
- A metal detecting programme
- Contingency excavation to record any archaeological deposits which are encountered in the course of the watching brief, with excavation to be undertaken where significant archaeological deposits are found.
- Analysis, reporting and archive deposition
- standing building recording for the outbuildings to the north of Cotesbach Field Farm.

1.2 In connection with this document

1.2.1 The measures set out in the section above were to be formally set out in a Scheme of Written Works to be submitted to the Senior Planning Archaeologist prior to the start of Works.

1.2.2 The ROMPP area is shown in **Fig 3**. It includes areas where extraction has already taken place namely the area to the South and west of the farmhouse. Cotesbach Fields Farm, consisting largely of Phase 10.

2.0 THE SITE

2.1 Site location and description

2.1.1 The Review area is centred on NGR 5400 8132 on the southern edge of Leicestershire The centre of the site is occupied by a farmhouse Cotesbach Field farms and its associated buildings. The villages of Cotesbach and Shawell lie approximately 1Km North and South of the Site (**Fig 1**).

2.2 Topography and geology

2.2.1 The land of the review area lies at c 130m OD. It is located on a ridge of high ground which separated the valleys within which the Swift and Avon lie.

2.2.2 The underlying geology of the site consists of boulder clay and glacial moraine drift over Jurassic Lower Lias clays.

2.2.3 The University of Leicester Archaeological Services (ULAS) undertook a programme of field evaluation and archaeological monitoring on land immediately to the east of the review area (Gossip 1999m Meek 1999). The techniques used included geophysical survey earthwork survey and test pitting. the only artifacts recovered were of post-medieval and modern date.

2.2.4 Several fieldwalking surveys have been conducted by Peter Lidlle, Leicestershire County Council on fields within the area but have revealed no archaeological material at all.

2.3 Archaeological and Historical background

Archaeological Background (Fig 2)

- 2.3.1 There are no known sites from the Site or its immediate surrounds
- 2.3.2 The places names of Cotesbach and Shawell imply that a water source was located nearby. *Shawell* is believed to mean boundary spring or stream while *Cotesbach* is believed to mean the stream, or valley of a man called Cott (Honunsell and Abrams 2004). Water seems to be a significant factor in the siting of these clustered settlements and in the absence of archaeological remains in the surrounding area. At the ROMPP quarry, the water table is not reached until 15-16 metres bgl, suggesting that in the area water is difficult to get hold of: there are no stream within the ROMPP and wells would have to be particularly deep.

Historical Map Analysis

- 2.3.3 The Tithe map of 1850 suggest that the review area was divided into several enclosed fields. These include New Meadow, Horse Close, Big Close, Long Close, Barn Close. They suggest a pastoral use for the Site.
- 2.3.4 The geology and topography of the Application Site suggest it is an improbable location for pre-medieval occupation (see Lisboa and Ivens 2005 for a consideration of local settlement models). The extensive recorded ridge-and-furrow which formerly covered most of the site suggests it was part of the medieval open fields and unlikely to be the focus of settlement. Post-medieval usage of the site seems to have been limited to agriculture.

3.0 AIMS, AND OBJECTIVES

3.1 Objectives

- 3.1.1 The aim of the archaeological watching brief is to allow a trained archaeologist to identify record and retrieve archaeological remains that may be uncovered in the course of any operations on the site which may disturb or destroy archaeological deposits.
- 3.1.2 The watching brief should allow the preservation by record of archaeological deposits. Where significant archaeological deposits are present, the watching brief will signal their presence and the need to mobilise resources to record them in an appropriate manner (see para 4.5 Contingency). The Contractor will contact the Client/its advisor immediately so that an agreement can be reached with the Leicestershire County Council Archaeological Advisor and resources mobilised.

4.0 SPECIFICATIONS

4.1 Earthwork survey

- 4.1.1 Earthwork remains, consisting largely of ridge and furrow to be surveyed by EDM or dGPS to produce a contour and interpretative hachure plan prior to the start of topsoil stripping. An earthwork survey should be completed to RCHME Level 2 standard (RCHME, 1999) including the creation of a measured plan of the earthwork at an appropriate scale (1:500) and the examination of the wider context.
- 4.1.2 The survey will comprise sufficient three dimensional observations to record the location and form of the earthworks. All levels will be reduced to Ordnance Datum. In addition to the measured survey a photographic survey including general panoramic photographs of the area surveyed and the detailed photographs of individual areas will be made. The product of the earthwork survey will be a scale contour plan, with contours at appropriate intervals and an annotated interpretative hachure plan. A written commentary and description of the

earthworks identified will also be prepared. The digital survey data will be included in the site archive.

4.2 Standing Building Recording

- 4.2.1 The project should be undertaken in accordance with "Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures" published by the Institute of Field Archaeologists (IFA, 1999a) and *Understanding Historic Buildings: A guide to good practice* (English Heritage 2006). Each assessment project must be governed by a project design which has been agreed in writing by the County Archaeological Service. The Building Survey is to take place on the outbuildings marked in blue in **Fig 4**, to the North of the main farmhouse as these are shown in the Tithe Map and OS 1st edition Survey map.
- 4.2.2 The standing building recording applies for the buildings shown on the Tithe Map and early OS 1st edition map of 1886 which transcribed in **Fig 4**. The buildings should be the subject to a variation of level 2 RCHM(E) (1996) consisting of a photographic record of the buildings. The survey should include an account of the buildings, form, function, age and phasing.,

4.3 Metal detecting

- 4.3.1 A program of metal detecting is to be undertaken for the remaining parts of phases 7, 8, 9 and that area of Phase 10 outside the main farm buildings complex.

4.4 Watching brief

- 4.4.1 The stripping will be undertaken by a contractor appointed by Lafarge Aggregates Ltd. All topsoil is to be effected using a toothless bucket and is to cover the area shown in yellow in **Fig 3**.
- 4.4.2 Topsoil stripping will be subject to a **continuous** watching brief by the Archaeological Contractor in order to identify areas of archaeological interest which will need further investigation. If and where areas of archaeological interest are identified the Archaeologist may request supplementary machine stripping to be undertaken to archaeological standards in the area.
- 4.4.3 For the area of the watching brief a sufficiently experienced archaeologist will be on site to ensure that investigation and recording can be achieved without affecting the programme of development works: this can be done through programming the watching brief in the development work timetable.
- 4.4.4 Areas of archaeological significance are to be protected from quarry activity until they have been hand cleaned and an appropriate contingency salvage excavation undertaken.

4.5 Contingency

- 4.5.1 In the case of unexpected discovered the client and the Archaeological Advisor to the Local Authority must be informed immediately.
- 4.5.2 Areas of Archaeological Significance identified during the Watching Brief or other times will be suitably protected so that a suitable management scheme can be agreed and implemented. The contingency provisions will involve both time and labour resources to allow for the appropriate recording to take place.
- 4.5.3 In the event that more complex archaeological remains are identified during the watching brief which cannot be dealt with by the archaeologist on site and which requires a formal excavation to be undertaken with contingency funding, the Client, the LCC and the Archaeological Contractor will arrange a meeting to define the objectives and methods of the excavation and agree the level of funding. An archaeological team of the appropriate size will need to be assembled by a contractor to the watching brief.
- 4.5.4 The objectives, extent and duration of the contingency recording will be decided after discussion with Lafarge Aggregates Ltd and/or its advisors and the LCC archaeological advisor. These areas are to be hand cleaned and hand excavated. A full written, drawn, and photographic record is to be maintained of all excavated areas. Environmental samples (sediment, plant and animal macrofossil, charred plant remains and absolute dating to be recovered, processed and reported if such material is found.

5.0 MONITORING AND MANAGEMENT

5.1 Monitoring

- 5.1.1 Monitoring arrangements will be agreed with LCC and the *Clients and their advisors*.
- 5.1.2 *Any changes or alterations to the programme must be agreed by LCC, the Client and their advisors who must be informed of these in advance. Alterations must be agreed in writing prior to implementation.*
- 5.1.3 The CAO will be notified in writing at least two weeks in advance of the commencement of the fieldwork.
- 5.1.4 No development can take place until the CAO has conducted a final monitoring of the area affected and given agreement in writing.
- 5.1.5 The LCC and the Client will monitor the field project and post excavation work up to the stage of publication, determine matters of contingency funding and ensure fulfillment of the detailed specification, and adhere to the planning conditions and/or a legal agreement.
- 5.1.6 Archaeological decisions will be made together by:
- The archaeological advisor to the Local Minerals Authority (LCC),
 - the Client (and if required by the Client its consultant)
 - the relevant manager/director of the Archaeological Field Services Contractor.
- 5.1.7 The Client will monitor the use of the project budget and ensure that the Field Contractor fulfills the requirements of the project.

5.2 Liaison

- 5.2.1 The success of the watching brief depends on the effects liaison between the Quarry Manager and the field archaeologist to ensure that the watching brief takes place at appropriate points and that the archaeologist is given the opportunity to undertake the recording effectively.

6.0 METHODOLOGY

6.1 Recording Methodology For the Watching Brief

- 6.1.1 The position of archaeological features as excavated will be accurately surveyed and plotted on a current large scale OS plan and calibrated to the national grid.
- 6.1.2 Drawing in plan and section will be made of all archaeological layers and features at an appropriate scale. Area plans will be produced at 1:100 or 1:50 as appropriate. Significant features will be drawn on drafting film at a scale of 1:30 and sections at 1:10. The OD height of all principal strata and features will be calculated and indicated on appropriate plans,
- 6.1.3 Single context recording will be used. The recording of archaeological strata will be entered into proforma recording sheets.
- 6.1.4 A record of monochrome photographic prints and colours transparencies will be made, illustrating the detail and general context of the site as well as working shots. Digital photographs to be taken with a camera with a field of at least 5MP and images will be archive as uncompressed TIFF's /Lenses and film type will be chosen to suit the prevailing conditions.

6.1.5 Registers of drawings, sections, plans, levels, sample and photograph and slides will be maintained. Each layer, fill and cut will be individually numbered and described in terms of soil colour, textures, stratigraphic, position, dimension, artefact content, samples and interpretation.

6.1.6 Significant individual features will be planned to scale 1:20 and excavated sections to a scale of 1:10

6.4 Finds

6.2.1 Finds will be analysed catalogued and quantified by the main archaeological contractor in accordance to the County artefact series.

6.2.2 All finds and other relevant material will be retained and removed from the site for post-fieldwork analysis.

6.2.3 All finds and samples will be exposed lifted cleaned conserved marked bagged and boxed in accordance with the United Kingdom Institute for Conservation Guidelines no 2

6.2.4 The archaeological contracting organisation will acquire a Home Office Licence in advance of ground disturbance where the discovery of human remains is likely. On the unexpected discovery of such remains, the appropriate licence will be arranged prior to the removal of the remains.

6.2.5 Finds of mainly gold and silver associated artefacts and contexts will be carefully excavated. They will be reported to the Coroner, the developer and the archaeological consultant.

6.2.6 Any human remains encountered will only be removed under a Home Office Licence and in compliance with the relevant environment health regulations. The remains will be fully excavated by hand, drawn and photographed before removal.

6.4.1 Environmental Sampling

6.3.1 Three general aims relating to palaeo-environmental analysis will be considered during the excavation:

- the extent to which environmental remains may assist in the interpretation of the function of specific features, pits or structures uncovered on the site
- samples are to be recovered from deposits that represent the more general rubbish on the site in order to consider the survival and character of domestic and industrial debris.

6.3.2 Most samples will be collected by the field team under the direction of the environmental specialist but it may be more appropriate for some samples to be taken by the environmental specialist who will visit the site and provide guidance on sampling strategy.

6.3.3 Provision for taking the following sample types will be made:

- Wet sieving, 20-30 litres for recovery of charred remains. To be stored in plastic buckets.
- Bone samples except for those recovered from wet sieving will be collected by hand during the excavation of deposits

- 6.3.4 Boulder clay is prone to dissection in the summer which suggests the palaeoenvironmental potential all but the deepest stratified, features is limited. The environmental potential is likely to be limited though carbonised materials such as from kilns survive well, and bone.
- 6.3.5 The proposed work will sample suitable, dated deposits with the objective of establishing the environmental background of associated deposits. An assessment of the environmental potential of the site will be undertaken by the Environmental specialist to the project.

6.4 Health & Safety

- 6.4.1 Health and Safety must take priority. It is essential that all projects are carried out in accordance with safe working practices and under a defined Health and Safety Policy and follows the guidelines issued by SCAUM

7.0 POST-EXCAVATION ANALYSIS PUBLICATION AND ARCHIVE

Report

- 7.1.1 On completion of the fieldwork the site archive will be prepared to ensure accessibility and an interim report prepared. All records will be updated and all plans sections and photographs indexed. A site matrix and sequence plans site will be prepared.
- 7.1.2 A report on the excavations will be prepared by the main field contractor within six weeks of completion of the field work. A combined report including the results of the watching brief will be produced following the end of the watching brief. It will describe the method employed and outline the results in relation to the areas if information required and conform to the standards set out in the Institute of Field Archaeologists Standards and Guidance for excavations.
- 7.1.3 The report will contain sufficient detail to enable the results to be understood without recourse to the site archive. It will include tabulations of contexts and finds by context.
- 7.1.4 The report will contain a consideration of the significance of the results of the evaluation putting them into a local and regional context.
- 7.1.5 A report combining all aspects of the evaluations and further work will be prepared following the requirements of MAP2 Appendix 7, within 3 months of the end of the final archaeological work on site, and will be made available to the Leicestershire County Archaeological Officer as soon as practicable after the completion of the works
- 7.1.6 The combined report will include a non-technical summary of the project and its results.
- 7.1.7 Ultimately and usually after 6 months from the submission of the report, the information it contains will be entered into the SMR

7.2 The archive

- 7.2.1 All finds will be cleaned marked sorted and analysed by the main field contractor in accordance with the practices and standards described in the guidelines for preparation of site archives.
- 7.2.2 All records and materials will be fully archived by the contractor, The archive will conform to the standard outlined in Appendix 3 of the Management of Archaeological Projects (English Heritage). The archive will comprise the material recovered and all the written material appertaining to the archaeological work on site.

- 7.2.3 Six months after submission of the final report, the archive will be deposited with the Leicestershire County Museum, the nominated repository for the County.

7.3 Dissemination and publication

- 7.3.1 Copies of the final report will be presented to the Applicants, two copies will be deposited with the Leicestershire County Archaeological Officer. Brief details of the results are to be sent to the National Archive Record in an appropriate format.
- 7.3.2 An article containing the main findings of the excavation and watching brief will be prepared for inclusion in the County journal, *Transactions of the Leicestershire Archaeological and Historical Society*.

8.0 RESOURCES AND PROGRAMMING

- 8.1. The earthwork, standing building and metal detecting survey are to start as soon as possible. The removal of the existing topsoil should start not earlier than 1 week from the approval of this document by the Leicestershire County Archaeological Officer. Extraction should be scheduled not earlier than 6 weeks from the start of stripping to give archaeologists the chance to deal with archaeological deposits should they turn up in the course of the archaeological watching brief.
- 8.2 Lafarge Aggregates Ltd should set aside a contingency budget for unexpected discoveries.

9.0 METHODOLOGICAL STANDARDS

9.2 General Standards

Throughout the project the standards set out in the following documents will be adhered to:

- IFA's *Codes of Conduct, Standard and Guidance for Archaeological Excavations* (1999) and draft *Standard and Guidance for Archaeological Finds Work* (2000);
- English Heritage's *Management of Archaeological Projects* (1991);
- Society of Museum Archaeologists' *Preparation of Archaeological Archives: Selection Retention and Dispersal of Archaeological Collections* (1993)
- *A Guide to Sampling Archaeological Deposits for Environmental Analysis*, Murphy and Wiltshire (1994)

9.2 Method statement Excavation and recording of archaeological deposits

Archaeological deposits will be excavated in accordance with accepted standards (IFA standards and ACAO).

Removal of topsoil and subsoil

Topsoil and subsoil will be removed to the top of the archaeological deposits with a 360 degree tracked excavator using a toothless bucket. This operation will be undertaken under constant archaeological supervision and spoil will be monitored to retrieve and record any artefacts within it. Mitigation will normally mean investigation and recording as specified for open area excavation but preservation in situ may also be considered following consultation with the Client and its advisors.

Pits and post-holes

Discrete features will be fully excavated if they:

- form part of recognisable structures;
 - contain deposits of particular value (e.g. significant artefactual, industrial or environmental assemblages);
 - appear to date to the early prehistoric period.
- Otherwise, such features will be half sectioned.

Deposits

Specialised deposits and localised dumping will be sampled by 20% excavation of their area.

Linear features associated with settlement or industrial activity

Linear features associated with settlement, industrial structures or areas of specific activity will be partially excavated. Initially they will be excavated along 20% of their length, avoiding intersections with other features or deposits in order to ensure that any material obtained has not been contaminated. A further portion, of up to 20% by length, will be excavated in any of the following circumstances:

- where it is necessary to determine stratigraphic relationships with other features or deposits;
- where insufficient information (e.g. for dating) has been obtained from the initial 20% sample;
- where they contain deposits of particular value (e.g. significant artefactual or environmental assemblages);
- where there is a termination or significant change in alignment;
- where the feature appears to date to the early prehistoric period.

However, a larger percentage of such features may be excavated, if this is required to fulfill the aims of the project.

Linear features interpreted as field boundaries

Linear features that form field boundaries will be partially excavated along 5% of their length, avoiding intersections with other features or deposits in order to ensure that any material obtained has not been contaminated. Intersections will also be investigated where necessary for determining sequential relationships between features.

Deep features such as wells and pits

Deep features will be excavated to their full depth, observing appropriate health and safety precautions.

Prehistoric features associated with funerary or ritual activities

For the excavation of other sites of this period full excavation of discrete features may be required if the remains relate to prehistoric ritual activity (e.g. deposition of the dead).

Palaeotopographical features

It is not expected that palaeochannels are present in the Area. If they are, for naturally formed features, such as old water-courses machine cut sections should be opened at regular intervals to check the quality of the deposits and potential for providing evidence for the establishment of the environmental information. The sections are to be cleaned using hand tools, drawn in section with EDM and sampled. If the deposits are proven to have good environmental potential. For each palaeochannel the sediments of the best section should be analysed.

Artefacts

All artefacts revealed during fieldwork will be retained by context, with the exception of those recovered from topsoil (which will only be kept if they are of intrinsic interest). To maximise the metallic artefact assemblage a metal detector will be used routinely, both to check spoil and to locate metal artefacts in advance of the excavation of features. Finds will be appropriately cleaned and marked for future reference.

Environmental indicators

Environmental samples will be taken from the following deposits:

- those visibly containing charred plant remains

- the fills of hearths or ovens
 - those where a significant animal bone assemblage has been recovered

 - waterlogged deposits or where anaerobic conditions are possible
 - those appropriate for pollen analysis and soil micromorphology
 - pre-medieval contexts suitable for radiocarbon analysis
- Samples will also be taken from a representative range of features and deposit types for control purposes.
Articulated animal bones will be exposed in their entirety and, if appropriate, will be recorded as an 'animal skeleton' in line with the *Procedures Manual*.

References

- Gossip J A 1998 *An archaeological evaluation and earthwork survey at Shawell* University of Leicester Archaeological Service 98/142
- IFA, 1999 *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures*
- IFA 1999 *Standard And Guidance For Archaeological Watching Briefs*
- Hounsell, D. and Abrams, J. 2004. *Shawell Quarry ROMPP Review, Shawell, Leicestershire: Archaeological Desk-based Assessment* (Albion Archaeology Client Report 2004/45). *Investigation and Recording of Standing Buildings or Structures*
- Lisboa, I. and Ivens R. J. 2005 *Rompp Review At Gibbet Lane Shawell Leicestershire* Archaeologica Client Report 3121/D1
- Lisboa, I. and Ivens R. J. 2005 a. *Archaeological desk-based assessment at Grindal Land, Shawell, Leicestershire* (Archaeologica Ltd Client Report).
- Meek J 1999 *An archaeological watching Brief at Shawell Leics* University of Leicester Archaeological Service 99/113
- RCHME 1999 *Recording Archaeological Field Monuments: A Descriptive*

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