Site details

Report title: Archaeological evaluation and updated project design for further work

at Netherhills Quarry, Frampton on Severn Gloucestershire

Site address: Netherhills Quarry, Frampton on Severn, Gloucestershire

OS NGR: 376615 206613

Project type: Evaluation and UPD

Client: English Heritage (Project Number 5171)

GSMR No: 28716

GCCAS site code: NHQ 06

GCC file ref: 493.20

Planning ref: S97/188

Date of fieldwork: 6th-10th November, 2006

Date of Report: 17th November, 2006, revised after EH comments 18.12.06

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Recipient museum: Museum in the Park, Stroud

Archived finds: Yes

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Summary

Gloucestershire County Council Archaeology Service were commissioned by English Heritage to carry out an archaeological evaluation of land at Netherhills Quarry. Cleaning the site subsequent to stripping with a mechanical excavator revealed evidence for a series of linear features crossing the site, curvilinear features, a circular possible ring ditch and a series of pits. Sample excavation of the pit fills recovered Neolithic worked flint within a fill containing burnt material in one pit and Beaker pottery, worked flint and small amounts of cremated bone from another. The work revealed a multi-period prehistoric landscape of great regional significance, elements of which are nationally rare. Further work in the form of targeted archaeological excavation is proposed.

1 Introduction

- **1.1** Gloucestershire County Council Archaeology Service (GCCAS) were commissioned by English Heritage to carry out an archaeological evaluation of land at Netherhills Quarry, Frampton on Severn, Gloucestershire. Works were undertaken with English Heritage PPG16 Assistance funding.
- 1.2 The site is located 13.5km to the south of Gloucester and c. 2km to the south east of the village of Frampton on Severn. It lies on the west side of the A38 road and south of the lane 'Perry Way' that leads from the A38 to Frampton on Severn (Fig. 1). The evaluation covered the north eastern part of a former arable field that is currently being extracted and which is centred on OS NGR 376615 206613. The geology of the area is 3rd terrace sand and gravel deposits of the River Frome, overlying Blue Lias clay (BGS 2006).
- **1.3** The evaluation was completed in accordance with the Project Design (Catchpole 2006). The evaluation was also carried out in accordance with the *'Standards and Guidance for Archaeological Field Evaluations'* produced by the Institute of Field Archaeology.
- **1.4** Thanks are due to: Buzz Busby, English Heritage Project Officer for his help and advice, to Roger N. Cullimore, Managing Director of the Cullimore Group of companies for permitting access and kindly allowing use of his mechanical excavator to re-clean the evaluated area and to Dave Maslen, Phil Whitman, Barbara Wood and Tim the machine driver all of Moreton C. Cullimore (Gravels) Ltd. for their assistance.

2 Background to the evaluation

2.1 Planning background

- **2.1.1** The current planning permission for extraction at Netherhills dates to 22 June 1953, although extraction is known to have been on-going to the north of Perry Way at least as early as 1948, as Richard Atkinson was brought in to excavate at that date. The area on the north side of Perry Way has long been worked out but the field nearest the A38 on the south side of Perry Way remained unworked at the start of 2006.
- **2.1.2** The site operator, Moreton C. Cullimore (Gravels) Ltd. first applied for determination of new conditions for this site in c. January 1997 (planning ref. S97/188). New conditions are yet to be determined but the easternmost field to the south of Perry Way was stripped of topsoil in March 2006. Gravel extraction commenced in the south eastern part of the field during 2006.

- **2.1.3** As no appropriate archaeological condition was agreed there had been no opportunity to evaluate the presence of archaeology within the site, with the result that significant remains may have been destroyed without record. At a site meeting on 16th August 2006 Charles Parry, Senior Archaeological Officer at Gloucestershire County Council, recommended that the remaining area in the NE corner of the field be machine cleaned under archaeological supervision and that any features revealed should be investigated.
- **2.1.4** In August 2006 a letter was written to Mr. Cullimore requesting that the team undertaking the Archaeological Landscape of Frampton survey (English Heritage project no. 4625) be allowed to visit the stripped field to examine the evidence for surviving archaeology. The team visited and met with Mr. Cullimore on 3.10.06. The eastern half of the field, except the northernmost part, had already been worked out to the upper surface of the Lias Clay, a depth of several metres.
- **2.1.5** The north eastern part of the field had been left at topsoil strip level and a bund created along Perry Way, potentially over the southern extent of Atkinson's Netherhills Site 1 (see 2.2.2 below). Several darker areas were visible but further cleaning was required to positively identify these as archaeological features. The remaining parts of the site consist of very clean gravel, lying below approximately 0.50m of topsoil. Mr. Cullimore recognised the potential archaeological significance of the area and was prepared to allow access and provide a 360° excavator but no funds. Consequently an application for PPG16 Assistance funding was made to English Heritage in October 2006 and a staged approach was agreed, commencing with the machine cleaning of the identified area and an evaluation of the nature and date of any archaeological deposits present. The fieldwork for the evaluation was undertaken from the 6th to 10th November 2006 and the results are presented below.
- **2.1.6** The field to the west of that currently stripped is not included in the 1953 permission but is due to be quarried at an unknown future date. It currently contains visible ridge and furrow earthworks. The area has also not been subject to archaeological evaluation.

2.2 Archaeological background

- **2.2.1** The area around Frampton-on-Severn is currently subject to an on-going archaeological survey funded by English Heritage through the Aggregates Levy Sustainability Fund (project no. 4625). Major elements of the survey are to publish the results of 1948 excavations undertaken by Richard Atkinson in the fields on the north side of Perry Way and to include coverage of the area in the English Heritage National Mapping Programme (NMP). The UPD resulting from stage I of that project (Mullin 2006) and the NMP report (Dickson 2006) contain detailed background information regarding the Frampton area and were appended as supporting background information to the application for funding for the evaluation. A brief summary of pertinent archaeological information is presented here.
- **2.2.2** The stripped field is located immediately to the south west of that excavated by Atkinson and the perimeter of Site 1 (a ring ditch associated with Beaker material) possibly extended across the road and into the northern part of this field (Fig. 2). Two further ring ditches are located c.150m to the north west of the stripped area.
- **2.2.3** The site is c.500m to the south west of Eastington Gravel pit from which archaeological material dating from the Palaeolithic, Mesolithic, Iron Age, Roman and Medieval periods was recovered in the 1930s. Further archaeological material, including human burials of probable Roman date, were recovered in the 1920s from the area to the east of Frampton Court, c.1000m to the west of the site.

2.2.4 Although no cropmarks or other features were noted during the NMP mapping of the area, the field being extracted is located within an area of high potential for archaeology dating from the Palaeolithic period to the present day. It lies within the environs of the only ring ditch cemetery within the Severn Vale in Gloucestershire and is adjacent to a major Roman road (now the A38). Previous archaeological work in the immediate area has recovered extensive evidence for the Roman occupation of the area between the A38 and Frampton on Severn, as well as Anglo-Saxon material potentially representing settlement.

3 Aims and objectives of the evaluation

3.1 Aim

 The aim of the project was to investigate the survival and significance of archaeological deposits and structures at Netherhills Quarry and to place these in the context of the known archaeology of the area.

3.2 Objectives

- To establish whether archaeological deposits and structures survive within the active area of Netherhills Quarry.
- To establish whether Atkinson's Site 1 extends to the south of Perry Way.
- The establish the archaeological significance and date of any deposits and structures present.
- To assess the likely archaeological impact of gravel extraction in the field to the west of the currently stripped area.

4 Methodology of the evaluation

4.1 Stage I

- **4.1.1** The evaluation commenced by machine cleaning of the area shown on Fig. 3. The area has been agreed as the part of the field having the highest archaeological potential by the County Archaeologist, although if significant features had been seen to continue further west then it could have been extended, in agreement with English Heritage and the site owner. A strip c.30m in width was machine cleaned to the west of ditch [1010] but no further features were revealed.
- **4.1.2** The site strip was carried out using an 360° mechanical excavator (provided by the quarry) equipped with a toothless ditching bucket and all excavation was carried out under archaeological supervision. Machine excavation included removal of a section of the bund along Perry Way to investigate whether Atkinson's Site 1 continued to the south of the road. The machine cleaning of the site was carried out on the 6th and 7th November.
- **4.1.3** Once the machine clean was completed limited hand cleaning was undertaken where necessary to confirm the presence and extent of archaeological features. As there are no clear fixed points in the area and those on the public roads are obscured by earth bunds and hedges, a professional surveyor was employed to locate the cleaned area, survey archaeological features and lay out a base line for a site grid (Fig. 3). As large numbers of features were identified within the relatively small stripped area, two pits were half sectioned and slots were excavated across two ditches in an attempt to characterise and date the

features. Hand cleaning, recording and limited excavation was undertaken on 8-10th November.

4.1.4 At the end of the stage I fieldwork the English Heritage Project Officer (Buzz Busby) and Charles Parry visited the site with Dave Maslen and the work necessary to complete recording of the site was agreed (stage II, see sections 7-10 below). No analysis of finds has been carried out prior to the production of this updated project design, although they have been provisionally identified in-house.

5 Results of the evaluation

5.1 Fourteen cut features comprising pits and ditches were identified, planned and recorded within the cleaned area. Two pits and a single ditch were part excavated. A number of post-holes were also identified, planned and recorded but not individually issued with context numbers and recorded. Contexted features are shown and located against OS National Grid on Fig.3. The natural sand and gravel deposits were variable in colour and in sand and clay content across the site. Only definite archaeological features were surveyed but other less distinct features are likely to be present.

Recorded contexts are shown on the following table:

Context No.	Part excavated?	Description
1000	machined	Topsoil
1001	Y	Cut for pit, SE corner of site
1002	N	Cut for pit NW of [1001]
1003	Y	Cut for pit NW of [1002]
1004	N	Cut for large circular feature ditch
1005	N	Cut for linear feature S of [1009]
1006	Y	Cut for linear feature running N/S across W end of site
1007	N	Cut for curvilinear feature W of [1005]
1008	N	Cut for curvilinear feature ?cutting [1006]
1009	N	Cut for ?post medieval gravel pit
1010	N	Cut for linear feature to W of [1006]
1011	N	Cut for linear feature running E/W to S of [1009]
1012	N	Cut for ? pit to S of [1007]
1013	N	Cut for linear running N/S to S of [1009] and E of [1005]
1014	Y	Upper Fill of pit [1001]
1015	Y	Lower Fill of [1001]
1016	Y	Upper fill of pit [1003]
1017	N	Fill of ?recut within [1003] (uncertain)
1018	N	?recut of [1003] (uncertain)
1019	N	Cut for pit cutting [1008]
1020	N	Fill of [1019]
1021	Y	Fill of linear cut [1006]

5.2.1 Features are described below from west to east. Context numbers representing cuts are shown in square brackets, fills and deposits are shown in rounded brackets.

- **5.2.2** Two parallel linear ditches [1010] and [1006] were recorded towards the west side of the evaluated area. Ditch [1010] may represent the western boundary of activity as no features were encountered to its west during the evaluation. It is represented by a series of survey points taken along its centre on Fig. 3. A narrow slot was excavated across ditch [1006] which continued to the north and south beyond the evaluated area. Where excavated it was 3m in width and 0.15m in depth with very shallow sloping sides to an even base. Its fill (1021) comprised silty clay and gravel with very few intrusions. No finds were retrieved from the fill.
- **5.2.3** Ditch [1006] was cut near to the northern bund by what appeared to be a curving linear feature [1008]. During hand cleaning after the survey had been carried out however, it became apparent that [1008] was cut by a post-medieval pit [1019] (not illustrated) adjacent to the northern edge of the evaluated area. The fill (1020) of [1019] produced post-medieval window glass as well as a small unidentified sherd of probably earlier prehistoric pottery, a fragment of Roman or post-medieval tile and a struck flint. The stratigraphic relationships around the junction of features [1008] and [1006] were left to be properly resolved at a later date.
- **5.2.4** Much of the central northern part of the evaluated area was taken up by what appeared to be a relatively recent gravel borrow pit [1009]. The feature was not hand excavated and thus produced no finds but its very mixed fill of mixed topsoil and dirty gravel suggested a use for gravel extraction in the recent past.
- **5.2.5** Borrow pit [1009] cut a third linear ditch [1005] which ran approximately north to south roughly parallel to ditches [1006] and [1010]. The feature was not further investigated. It appeared to cut another ditch [1011], although the relationships between these ditches were not explored. Both [1005] and [1011] appeared to cut a curving ditch [1007] which appeared to have an entrance in its western side. The southern extent of [1007] was unclear but it appeared to continue beyond the southern extent of the evaluated area. A small unexcavated pit [1012] was present in the area between ditches [1005] and [1007]. A further small linear feature [1013] was present to the east of and parallel with ditch [1005].
- **5.2.6** The eastern part of the evaluated area contained several definite features but also many potential features that require excavation to determine whether they are of archaeological significance or just discolorations within the natural sand and gravel deposits. A feature of particular note was a circular ditch [1004] c. 2m in width, enclosing an area no more than c.4m in diameter. The polygonal feature shown on Fig. 3 represents survey points taken around the centre of the ditch. Two post holes were present outside the eastern side of the ditch, possibly representing an entrance structure. The feature was deemed too archaeologically sensitive to investigate in the very short time available.
- **5.2.7** In order to establish the nature of the archaeological deposits present on the eastern part of the site, two obvious pits were half-sectioned (Fig. 4). Pit [1003] was oval in plan, measuring 1.00m across its N-S axis and c. 0.16m in depth. Its north side sloped at approximately 45° to an uneven base possibly containing two post holes. The south side was far more gently sloping. The pit contained a single fill (1016), a compact clean silty clay which produced seven sherds of decorated Beaker pottery probably representing fragments of two pots, together with other small sherds of probable Beaker, small fragments of cremated bone, charcoal and struck flint.
- **5.2.8** Pit [1001] was also oval in plan but much deeper, measuring c. 1.2m across its N-S axis and 0.58m in depth. It sloped steeply to a bowl shaped base. The sides of the pit were unweathered suggesting rapid backfilling. The lower fill (1015) was a black silty clay with a high charcoal content containing much Neolithic worked flint, bone, burnt bone, burnt stone, large fragments of charcoal and burnt hazelnut shell. A bulk sample was taken of this fill. The upper fill (1014) was a dark brown silty clay containing less charcoal, but higher quantities of

worked flint. The flint from both (1014) and (1015) is dominated by narrow blade technologies and appears to be Early Neolithic in date.

5.2.9 A further pit [1002] and two groups of post holes were planned but not excavated in the area to the south of [1004]. After the survey was carried out a number of additional post holes and possible amorphous features were noted in the north eastern part of the evaluated area.

6 Significance of the evaluation results

6.1 Achievement of project objectives

- **6.1.1** To establish whether archaeological deposits and structures survive within the active area of Netherhills Quarry.
 - The evaluation has clearly established that archaeological deposits and structures survive within the active area of Netherhills Quarry.
- **6.1.2** To establish whether Atkinson's Site 1 extends to the south of Perry Way.
 - A slot c. 3.75m in width was excavated through the bund along Perry Way as far north
 as the hedge that bordered the south side of the road. The slot was located just to the
 east of the point where Atkinson's Site 1 should have been at its southernmost extent
 (Fig. 2), at the east side of a post-medieval borrow pit [1009], but no sign of the ditch or
 of any other archaeological features was noted in the excavated area.
- **6.1.3** To establish the archaeological significance and date of any deposits and structures present.
 - The worked flint from (1014) and (1015) consists of waste, core related pieces and retouched items and is apparently of Early Neolithic date. Early Neolithic pits are extremely rare from Gloucestershire, and none are known from the Severn Vale in the county.
 - A single pit containing Beaker pottery, cremated human bone and flint was excavated by Atkinson from Site 1 at Netherhills in 1948. Pit [1003] in the evaluation area contained similar material, but does not appear to be related to a ring ditch as at Site 1. Beaker pits are rare from the Severn Vale, although a single example is known from Tewkesbury, c. 35km to the north of Frampton.
 - The circular ditch [1004] is morphologically very similar to a ring ditch excavated at Shorncote Quarry and two examples from Huntsman's Quarry, although, as it remains unexcavated, its date remains open to question. A possibly similar feature at Thornhill Farm produced probably Iron Age pottery from its upper fill.
 - The majority of the linear features remain unsampled and the negative evidence from a single, small evaluation trench should not be taken as characterising these features. The relationships between the north-south linears [1010], [1006], [1005] and [1013] and the east-west linear [1011] should be explored further, as should the relationship between these linears and the curvilinear features [1008] and [1007]. These relationships offer good potential for discerning the sequence of activity on this part of the site, which is likely to be comprise several phases or periods of activity.

- Although the curvilinear features remain unsampled, there is a strong possibility that they relate to prehistoric structures, although [1008] may have been truncated by later activity.
- Although a large gravel extraction pit [1009] has removed much of the central area of the northern part of the site, the other features are relatively well preserved with high potential for the preservation of significant archaeological material.
- **6.1.4** To assess the likely archaeological impact of gravel extraction in the field to the west of the currently stripped area.
 - A strip 30m in width was machine cleaned to the west of ditch [1010] and no archaeological features were noted. Although this may indicate an absence or lower density of archaeological features in the north western part of the field currently being stripped it cannot be assumed that no archaeology is present in the next field to the west. Evidence of prehistoric activity is often encountered as groups of features at intervals rather than extending continuously over large areas. Significant archaeology was encountered to the west of Netherhills at Perry Way in 1928, at Townfield Farm in 1953 and 1968 (Fig. 1) and continued westwards on the north side of Perry Way at Netherhills (Figs. 1 & 2). The archaeological potential of field to the west of the evaluation remains high and can only be accurately determined by appropriate forms of field evaluation.

6.2 Regional and national context

- **6.2.1** Early Neolithic pits similar to [1001] are rare from the county, and, although other examples are known, these occur on the Cotswold hills (for example Duntisbourne Grove (Mudd *et al* 1999) or in the Upper Thames Valley and none are known from the Severn Vale in this part of the region. Indeed, no sites of Neolithic date were recorded in the Severn Vale in *The Aggregate Landscape of Gloucestershire: Predicting the Archaeological Resource* (Mullin 2005). The burnt lower fill of [1001] contained carbonised plant remains and charcoal and has very high potential for yielding palaeoenvironmental data. Such data of Neolithic date is extremely rare from the county. At a national level, Early Neolithic pits are far from common. Thomas (1991: 69) lists a total of 34 Early Neolithic pits from southern England, with Later Neolithic pits being more numerous.
- **6.2.2** A Beaker pit containing charcoal, cremated human remains, animal bone, Beaker pottery and worked flint was excavated from the centre of a ring ditch at Netherhills Site 1, immediately to the north of the evaluation area. Pit [1003] contained a very similar fill, although it does not appear to be related to a ring ditch. Although other pits containing Beaker material are known from Gloucestershire these again tend to be located on the Cotswolds or in the Upper Thames Valley. A single sherd of Beaker was recovered from a pit at Mitton Road, Tewkesbury (Barrett 2004) and a Beaker burial was recovered from Barnwood Gravel Pit (Clifford 1930), but no other material of this date is known from the Severn Vale. Thomas (1991, 69) lists fewer Beaker pits than Neolithic pits from southern England and Beaker is, perhaps better known from formal inhumation burials below round barrows.
- **6.2.3** The circular ditch [1004] is similar, on morphological grounds, to excavated examples at Shorncote Quarry (Barclay & Glass 1995) and Huntsman's Quarry (Patrick Foster Associates 2000). The latter two sites returned radiocarbon dates of between 1220 and 890 cal BC and represent very rare examples of Late Bronze Age monument construction. Although the phenomenon of late monumental construction is beginning to be recognised nationally (Richard Bradley, pers com), there are very few sites which have been excavated

under modern conditions and subjected to radiocarbon dating programmes. Excavation of this feature at Netherhills would allow a better understanding of this phenomena at both regional and national levels.

7 Aims and objectives of stage II

7.1 The archaeological significance of the site as demonstrated above indicates that further recovery of information is essential in order fully realise its potential. It is proposed that stage II of this project comprises further archaeological excavation, recording and sampling within the area already stripped and cleaned during stage I.

The aims and objectives of the further work will be:

7.2 Management aim and objectives

Aim

7.2.1 To provide a greater understanding of the archaeology of the gravel deposits of the upper Severn Estuary to underpin future strategic planning and to inform individual planning decisions in the vicinity of Frampton on Severn.

Objectives

- **7.2.2** To preserve by record the archaeological deposits and structures identified at Netherhills Quarry, and to retrieve finds and environmental information from them, in advance of their destruction through gravel extraction.
- **7.2.3** To provide information that will assist Gloucestershire County Council curatorial archaeologists in advising strategic and development control planners on the nature and significance of the archaeology of the area, in the context of future allocation of land for minerals extraction.

7.3 Research aim and objectives

Aim

7.3.1 To investigate the structures, features and deposits uncovered at Netherhills and to place the evidence in its wider context by comparison with similarly dated landscapes elsewhere in Southern Britain.

Objectives

- **7.3.2** To collect material which will advance archaeological knowledge regarding the Neolithic and Bronze Age of Western England through the application of modern dating and analysis techniques, which were not applied to previous material recovered from the area.
- **7.3.3** To facilitate integration of the results of the project with the results of Atkinson's and other earlier excavations as described in "The Archaeological Landscape of Frampton on Severn" (PNUM 4625 and 2.2 above).

- **7.3.4** To investigate the nature, form and function of circular feature [1004] and thereby help in the interpretation of a little understood class of monument.
- **7.3.5** To prepare an updated project design for the MAP2 assessment and analysis of the materials recovered.

8 Purpose of the proposed excavation

- **8.1** The evaluation at Netherhills Quarry has demonstrated that nationally rare archaeological remains of prehistoric date are present and threatened by gravel extraction. It is therefore proposed that these are archaeologically excavated so that they are preserved by record (objective 7.2.2). From the material already recovered, it appears that there is a long chronology to pit digging at the site, spanning the Neolithic and Early Bronze Age with later construction of ring ditches and a potential Late Bronze Age monument (the excavation of which will meet objective 7.3.4). The date and nature of the enclosures represented by the linear features remains to be determined. The significance and context of the archaeology, as far as can be understood after a brief evaluation, is described at 6.1 and 6.2 above.
- **8.2** The collection of archaeological features so far recorded from Frampton on Severn represent a complex, multi-period landscape to date rare within the Severn Vale and thus of great regional significance. Preservation at the site appears to be very good, with limited truncation from modern activities such as ploughing. The finds and environmental assemblages also offer high potential for yielding radiocarbon dates and an understanding of the environment and diet during the prehistoric period. The site at Netherhills therefore offers an outstanding opportunity to improve knowledge of the prehistoric period in the region and to compare and contrast results with similar landscapes in the upper Thames Valley and elsewhere in southern Britain (objective 7.3.2).
- **8.3** The archaeological deposits present within the gravel deposits of the Upper Severn Estuary have not been subject to modern excavation and post-excavation techniques. The archaeology of the area is under immediate threat from gravel extraction and other development pressures, and potentially in the longer term from sea level rise but there is little up to date information available to curatorial archaeologists (objective 7.2.3). This project would significantly enhance the information available from the various early excavations in the area particularly those undertaken by Richard Atkinson in 1948, by providing modern excavation and analysis (objectives 7.3.3 and 7.3.5).

9 Methods statement

9.1 Excavation

- **9.1.1** The proposed archaeological excavation will comprise targeted excavation of the non-recent archaeological features identified during the evaluation and of any others identified during stage 2. All work will be carried out in accordance with *Standards and Guidance for Archaeological Excavation* produced by the Institute of Field Archaeologists (IFA 2001). The Archaeology Service is an Institute of Field Archaeologists, Registered Archaeological Organisation (IFA RAO 42).
- **9.1.2** The various types of features and deposits revealed following the removal of non-significant overburden will be subject to the following minimum sampling levels:
 - Any deposits relating to funerary/ritual activity (e.g., burials, pits containing cremated bone) and domestic/industrial activity (post-holes, hearths, floor surfaces/floor make-up deposits) will be investigated by removing a 100% sample of the deposit from each feature.
 - Features relating to agricultural and other activities will be subject to the following sampling levels. Pits will require a minimum of a 50% sample of the deposits from each feature but where finds, structured deposits and/or environmental evidence are present the feature will be 100% excavated. Linear features (e.g., ditches/gullies, paths/tracks) will require a minimum of a 20% sample of the deposits from each feature.
 - There may be cases when individual features do not merit these sampling levels. Any sampling variation would need to be approved by the English Heritage Project Officer.
- **9.1.3** The upper surface of features will be cleaned using appropriate hand tools. All investigation of archaeological levels will be by hand, with cleaning, examination and recording both in plan and section.
- **9.1.4** Burnt bone was present in the features sampled during the evaluation. A Home Office Licence will be applied for before excavation commences given the high probability that human bone will be encountered.
- **9.1.5** Any finds of precious metals or other items covered by the Treasure Act will be removed to a safe place. Preliminary records will be made and the finds dealt with in accordance with the Treasure Act.

9.2 Recording

- **9.2.1** A unique site code (Glos 28716) has been agreed with the County Sites and Monuments Officer.
- **9.2.2** A site location plan based on the Ordnance Survey 1:2500 map will be prepared.
- **9.2.3** All archaeological deposits will be recorded on a pro-forma context sheet. Recording conventions will be those detailed in the Museum of London Manual (MOL 1994).
- **9.2.4** A record of the full extent in plan of all archaeological deposits encountered will be made on drawing film, at a scale of 1:10 or 1:20. Single context and multi-context plans will be

produced as appropriate. Multi-context plans will only be considered where the interpretation of stratigraphy is not compromised by this method of recording. A site grid will be established and located. All plans will be related to the site grid. The height above Ordnance Datum (OD) of all principal strata and features will be calculated and indicated on the appropriate plans and sections. The OS bench mark at 14.16m OD located on Frome Bridge will be used to provide the level for an on-site temporary bench mark.

- **9.2.5** Sections of all individual layers or features will be drawn. All sections will be located by site grid references and a level above Ordnance Datum.
- **9.2.6** The Harris matrix stratification diagram will be employed to display stratigraphic relationships. This record will be compiled and checked during the course of the evaluation.
- **9.2.7** A photographic record of the investigations will be prepared. It will include digital and film black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation. The transparencies will be mounted in suitable frames.
- **9.2.8** Registers of contexts, plans, sections, samples, finds requiring special treatment and photographs will be kept.

9.3 Treatment of finds and samples

All finds will be collected. Different environmental sampling strategies may be employed according to the perceived importance of the strata under investigation. Sampling for potential radiocarbon dating will be a priority. Advice will be taken from Vanessa Straker, English Heritage Regional Science Advisor regarding appropriate sampling strategies and these will confirm to English Heritage guidelines on sampling and storage (EH 2002). A high priority will be given to the sampling of deposits where organic materials may be preserved. All bulk environmental samples will be 40 litres in size or where the deposit is smaller in volume a 100% sample will be taken. Organic samples will be subject to the appropriate specialist analysis. The location of the site on gravels indicates that there is a low chance of encountering waterlogged deposits.

9.4 Updated Project Design production

- **9.4.1** The written, drawn and photographic record will be ordered and catalogued to completion of archive stage. The archive will conform to standards defined in MAP2 at 5.4 and Appendix 3 (EH 1991). It will be quantified, ordered, indexed and internally consistent. An OASIS form will be completed in line with current English Heritage requirements.
- **9.4.2** Non-metallic finds will be washed, marked and quantified. No other post-excavation tasks will be carried out before the approval of an updated project design. Advice will be sought from the English Heritage Project Officer on whether specialist assessment reports will be obtained from English Heritage or external specialists on the collected finds and environmental material and on conservation requirements.
- **9.4.3** The updated project design for assessment will summarise the archaeological sequence and include an updated statement on the significance of the archaeology of the site. Costed recommendations for assessment will be made in line with the aim and objectives outlined above and in accordance with MAP2 appendix 4.

9.4.4 The Gloucestershire County Council Archaeology Service ("GCCAS") will retain copyright and ownership of all written, drawn, photographic and other materials produced by GCCAS staff ("the Documentary Archive"). The Documentary archive will be deposited with the finds archive, the location of which cannot presently be stated. A copy of the digitally available material within the archive will be submitted to ADS (costs to be agreed with English Heritage).

10 Resources and programming

- **10.1** The staff and transport elements of the tasks outlined below are to be mostly funded by English Heritage. A 10% contribution in kind has been offered by the minerals operator Moreton C. Cullimore (Gravels) Ltd.
- **10.2** The project will be managed by Toby Catchpole, Senior Project Officer (TC). The fieldwork will be supervised and the updated project design produced by David Mullin, Project Officer (DM) of the Archaeology Service, Gloucestershire County Council, aided by 2 Senior Archaeological Assistants (SAA) and 1 Archaeological Assistant (AA).

10.3 Project tasks: Stage II

The following table summarises tasks to be undertaken during Stage II of the project.

Task No.	Objective	Task	Staff member	Days
1	all	Preliminary tasks Organisation of fieldwork, pre-site meetings, risk assessment, EH monitoring meetings.	TC DM	3 2
2	1, 2	Excavation Fieldwork and site meetings	TC DM SAA 1 SAA 2 AA	1.5 15 15 15 15
3	3, 4	Completion of site archive and updated project design for assessment	TC DM AA	1.5 4 3

For detailed costing and breakdown of operators contribution see Appendix A

10.4 Timetable and basis of cost

Staff costs are based on the figures detailed in Appendix A. Figures are for the financial year 2006/7. An increment of 2.5% (compound) is added for each financial year in line with current English Heritage guidelines on inflation calculations on *Historic Environment Enabling Programme* Grants (EH 2002).

The identified key tasks for the project are tabulated at 9.3. A Gantt Chart of proposed progress is presented as Appendix B. Within the detailed work programme there is a time allowance of 1 calendar week per 5 calendar weeks per person for annual leave/sickness and sundry absences.

The Gantt chart has been drawn up with the assumption that the project commences on 2nd January 2007. Gravel extraction is due to commence on 29th January 2007 and a later start date would not allow the proposed works to be undertaken.

11 Health and Safety

- **11.1** All relevant health and safety legislation and regulations will be followed. The SCAUM manual (SCAUM 1997) will be used as a source of general guidelines to ensure that this provision is adhered to. General safe practice provisions outlined in *Gloucestershire County Council, Archaeological Fieldwork, Health and Safety Policy, Procedures and Generic Risk Assessments* will be followed.
- **11.2** Quarry rules will be followed. All staff will wear high visibility clothing, hard hats and steel toe capped boots whilst on site. All staff will sign in and out on every occasion they arrive at or leave the quarry. Any other health and safety instructions issued by quarry staff will be followed.
- **11.3** No personnel are to work in deep unsupported excavations. Trenches deeper than 1.21m will be stepped, battered back or shored. Spoil will be stored at a safe distance from trench edges.
- **11.4** The person responsible for overall management of Health and Safety will be Toby Catchpole, Archaeology Service, Gloucestershire County Council (01452) 425681. David Mullin will be the senior archaeologist on site responsible for day to day implementation of Health and Safety provisions. All Archaeological Assistants will be required to abide by Health and Safety provisions and instructions.
- **11.5** An appropriately equipped first aid kit will be available and its location indicated to all staff. A mobile phone will also be provided for emergency use. No staff will work alone on the site.

12 References

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A1.2 Further costing details

A1.2.1 Timing and duration of works

The site owner has stated that extraction works will commence on 29th January 2006 and therefore works should commence as soon as possible. The start date on site has been agreed with Mr. Cullimore. Three weeks are required on-site for completion of stage II.

A1.2.2 Contribution by the minerals operator

Roger Cullimore Managing Director of the Cullimore Group of Companies has agreed to make the following contributions to the project on behalf of Moreton C. Cullimore (Gravels) Ltd.:

- · Site office and toilet facilities at Netherhills Quarry,
- due to the two months since the evaluation and the frequent spells of bad weather in November and December 2006 a 360° mechanical excavator will be available to reclean areas containing archaeological features,
- in order to keep site vehicles away from archaeological features and for the safety of archaeological staff, high visibility mesh fencing will be installed along the western edge of the area of archaeological interest,
- extraction of the area of archaeological interest has been postponed from August 2006 until 29th January 2007.

A1.2.3 Delays to/cancellation of fieldwork

The success of the project depends on the continuing goodwill of the landowner which is not entirely within the control of the Archaeology Service. In the event of work being delayed or cancelled for whatever reason we would look to recover costs incurred up to the date of cancellation or incurred due to delays out of our control.

A2 Phase III (post-excavation assessment)

On completion of phase II the scope and nature of the required post-excavation assessment will be detailed in the updated project design. This will be prepared in consultation with the English Heritage Project Officer to ensure that all aims and objectives are met and where necessary updated. It is hoped that when necessary the expertise of English Heritage staff at the Centre for Archaeology will be available to assist in the post-excavation process. A fully considered programme with associated costs will accompany the updated project design for stage III.

Appendix B: Gantt chart

Dates shown as week beginning (Monday). Based on commencement date for stage II of 2nd January 2007, excavation to start 3rd January 2007. Completion date of UPD for assessment is dependent on receipt of costing for specialist assessments (estimated completion date 17th February). No staff are available week beginning 25th December. Lighter shading indicates tasks on-going throughout the project.

Task	Who	Days	JAN	07				FEB	
			1	8	15	22	29	5	12
1	TC	3	3						
	DM	2	2						
2	TC	1.5	1.5						
	DM	15	3			2			
	SAA x2	15	3			2			
	AA	15	3			2			
3	DM	4							
	TC	1.5							
	AA	3							
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				_	_	_		_	_