



ARCHAEOLOGICAL INVESTIGATIONS AT BURNTWOOD QUARRY, BEELEY, DERBYSHIRE

ARCHAEOLOGICAL MITIGATION REPORT

Report Number 2014/22 June 2014



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NON-TECHNICAL SUMMARY

This report present the results of archaeological mitigation fieldwork at Burntwood Quarry, Beeley, Derbyshire. The mitigation was required as a condition of planning consent for the reopening of the quarry to provide stone for conservation work at Chatsworth House and gardens. The fieldwork comprised the archaeological excavation of a trench in the location of a new bat house, and a walkover survey of the quarry area following tree removal. The trench revealed a thin sandy subsoil overlying fractured sandstone blocks in a loose sandy matrix, which continued beyond a depth of 1.8m. This is thought to represent waste material from quarrying activities. The only artefact recorded was a short section of iron tramway rail, not *in situ*. The walkover survey revealed further details of two structures identified during the pre-application archaeological works. No new features were identified.

Project Name	Burntwood Quarry
ArcHeritage Project No.	4104141
Report status	Final
Type of Project	Mitigation
Client	Chatsworth Settlement Trustees
Planning Application No.	NP/DDD/0513/0392; NP/DIS/0214/0214
NGR	SK 2680 6665
OASIS Identifier	archerit1-181397
Author	Rowan May
Illustrations	Rowan May
Editor	Anna Badcock
Report Number and Date	2014/22 16/06/2014 4104141 PQ mitigation.docx

KEY PROJECT INFORMATION

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1 INTRODUCTION

This report presents the results of archaeological mitigation at Burntwood Quarry, Beeley, Derbyshire. The mitigation was required as a condition of planning consent for the reopening of the quarry to provide stone for repairs at Chatsworth House and gardens. The fieldwork comprised the archaeological excavation of a trench in the location of the proposed bat house, and a walkover survey of the quarry area following tree removal. All work was undertaken in line with a Written Scheme of Investigation agreed with Sarah Whiteley of the PDNPA Archaeology Service (see Appendix 3). ArcHeritage were commissioned by Chatsworth Settlement Trustees to undertake the mitigation. A further stage of mitigation, comprising the monitoring of topsoil removal in the extraction area, will be undertaken at a later date and reported on separately.

2 LOCATION, GEOLOGY AND TOPOGRAPHY

Burntwood Quarry (NGR SK 2680 6665) is located near Fallinge Farm, just under 1km to the south of Beeley (Figure 1). The site is within the Peak District National Park and is part of the Chatsworth Estate. The site is 1.7 hectares in extent, of which approximately 0.6 hectares will be subject to extraction. It currently comprises a disused sandstone quarry, with remains of associated quarry working infrastructure, and part of a field to the east, currently under pasture. The underlying bedrock is Ashover Grit sandstone of the Carboniferous period.

3 METHODOLOGY

3.1 Aims

The aims of the investigation were:

- To monitor vegetation removal from the quarry floor and areas where spoil will be deposited in order to identify any new features;
- To survey and evaluate (if required) any new features identified during the vegetation clearance;
- To excavate archaeologically the deposits which will be removed for the bat roost 'cool room'.

3.2 Methodology

The mitigation included both excavation and walkover survey. The work was carried out in line with the methodology outlined in the WSI (Appendix 3), with alterations agreed with the PDNPA Archaeology Service. The originally proposed watching brief on tree removal was replaced with a walkover survey after the vegetation had been cleared, due to health and safety considerations associated with the felling process. The initial intent of the excavation of the trench was to archaeologically excavate the footprint of the bat house cool room. Due to a lack of knowledge of the below-ground conditions, the architects required geotechnical information to assess the extent of the area that would be required to enable the construction of the cellar. The excavation of the trench was therefore undertaken as an evaluation to assist in characterising the nature of the sub-surface deposits. The trench was machine-excavated to the base of the topsoil, hand-cleaned and recorded. Following this, the machine removed the underlying deposits to a depth of 1.8m. The trench was then recorded and backfilled.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

An archaeological desk-based assessment was prepared for the site prior to the deposition of the planning application (ArcHeritage 2012), and the relevant information is summarised below.

Burntwood Quarry is on the Ashover Grit and a quarry has been recorded on this site from the early 19th century. The quarry is said to have supplied stone for the north wing of Chatsworth House, commissioned by the 6th Duke of Devonshire in the 1820s (Thomas and Cooper 2008, 27). John Barnatt has suggested that the various areas of quarrying at Burntwood 'seem to still have been active in 1867' (Barnatt 2000, 235), and the quarried areas that were shown on the 1879 Ordnance Survey map were substantially larger than those that had been marked on an estate map of 1855. Burntwood was marked as an 'Old Quarry' on the 1879 OS map (Figure 3), indicating that the quarry was disused at that date. The map depicted a smithy and two cranes within the quarry, while a second building stood at the southeast end.

Burntwood Quarry was leased by Henry Deeley of Rowsley from 25th March 1882 and it may have been at this point that the quarry acquired its name. Deeley also leased a building with an anvil and hearth that were situated in the quarry. Deeley was listed as a grindstone merchant, suggesting that he was producing finished grindstones rather than building stone at Burntwood during this period. Deeley had extended the quarry to the north and east by the time of the survey for the 1898 OS map, which also depicted a building on the approximate location of the smithy, as well as a new building. John Deeley took over his father's company after Henry's death in 1904. In 1922 he was employing 17 quarry workers, but he gave up the lease in 1924. By 1946 the site was held 'in hand' by the Chatsworth Estate and had not been leased since 1924.

The 1922 OS map depicted a quarry waggonway, commencing in a newly-quarried area at the north of the site and running southeast to the central part of the quarry, before veering southwest, crossing a bridge over the trackway through the woods and terminating at the southwest edge of one of the site's main spoil heaps. Two small, square buildings and a slightly larger rectangular structure were situated in the central part of the quarry. While modified by 1922, the latter is likely to have been the building that had been shown at the quarry on the 1898 OS map.

The 1955 OS map still depicted the waggonway, though an aerial photograph from 1948 suggests that the waggonway rails had been removed by that date. Burntwood Quarry was marked 'disused' on the 1970 Ordnance Survey map and the waggonway was no longer depicted. The bridge over the bridleway and the rectangular quarry building remained extant. Trees had begun to encroach upon the quarry from the wood at the west by this date. Neither the quarry building nor the waggonway bridge were shown on the 1974 Ordnance Survey map.

Three archaeological evaluation trenches were excavated within the quarry in 2013 prior to the deposition of the planning application. The trenches were excavated to assess the extent of survival of deposits associated with the waggonway. No surviving rails or sleepers were found, though evidence for the construction of one of the trackbeds was recorded (ArcHeritage 2013).

5 FIELDWORK RESULTS

5.1 Walkover Survey

A walkover survey was undertaken after tree-felling and vegetation removal activities. The survey was intended to supplement a previous topographic survey, and to identify whether any further features had been exposed by the vegetation removal. Recording comprised digital photography and a sketch plan, reproduced in Figure 3.

The vegetation removal exposed more extensive elements of a feature recorded during the topographic survey. This feature, designated TS11, was initially identified as a possible structure located above the quarry floor on the edge of the spoil heap to the west. At the time of its initial identification, only one wall was visible at the edge of the spoil heap and its identification as a structure was uncertain. Vegetation removal has indicated that it is the remains of a small, rectangular structure, approximately 4m in length by 1.8m in width, with drystone walls surviving to a maximum height of 0.4m on the north, south and east sides (Plate 1; Figure 3). The dimensions are similar to structure TS9, a short distance to the southeast. The interior of structure TS11 is filled with rubble, soil and a tree stump, with the rubble sloping downwards across the location of the western wall. It is possible that an entrance may have been on this western wall, or that it was open-sided to the west. A further spread of rubble covered the area approximately 3m in diameter to the west of the structure.

To the east of this structure, a feature tentatively identified as a machine or crane base (WS12) was also further exposed by the vegetation removal. This feature was constructed of massive sandstone blocks with a level platform at the top and side walls of smaller stones extending to the west (Plate 2). The vegetation removal revealed that the structure was essentially L-shaped, with little evidence for a surviving side wall along the southern edge (Plate 3). No evidence for the purpose of this structure has been revealed.

A wide, shallow hollow to the south of WS12 has been infilled with stone rubble, and this also appears to have obscured the location of structure TS9. No new archaeological features were identified within the cleared area during the walkover survey.

5.1 Evaluation Trench

The evaluation trench was located in the proposed location of the bat house (see Figure 2) and was 5m by 3m in extent (Figure 4). The topsoil (context 100) was a soft dark brown sandy silt with a high organic content, and appeared to be mainly derived from leaf mould. This was between 100-150mm deep, and contained a short section of iron rail with a T-shaped profile. This was initially thought to be possibly *in situ*, and was assigned context number 101, but further excavation indicated that it was loose within the topsoil and no further evidence of continuation of the rail was evident. The rail presumably relates to the dismantling of the quarry waggonway shown on the 1922 OS map. The rail section was 740mm in length, 50mm in width and 60mm high (Plate 4).

The topsoil overlay a thin orange-yellow silty sand subsoil (102), with moderate sandstone inclusions from 30-200mm in size. There were patches of more orange soil within the subsoil, possibly related to root disturbance (Plate 5). The subsoil was generally up to 50mm in thickness with some deeper patches related to root disturbance, assigned context number 103. Most of the roots visible in the trench ran across the top of the subsoil, indicating the

stony nature of the underlying ground. Below the subsoil were weathered and fractured sandstone slabs (104) in a loose yellow silty sand matrix. Subsequent machine-excavation of a sondage through this deposit indicated that the sandstone blocks continued to a depth of at least 1.8m, at which point machining became difficult due to collapsing material from the sides (Plate 6). It was uncertain whether the blocks comprised very weathered bedrock or waste material from quarrying, though the latter is more likely. There was no evidence for dressing of the slabs, and no artefacts were noted within the sandy matrix.

6 CONCLUSIONS

The walkover survey following vegetation removal did not reveal any new features within the cleared area. Further details of two features, a small ruined building and a possible crane base, were recorded and added to the topographic survey plan, but no further information on their purpose could be ascertained. The evaluation trench indicated that there were no remains of working surfaces or archaeological features within the footprint of the bat house, and that the deposits underlying the surface in this area comprises loose, unworked sandstone blocks in a sandy matrix to a depth of at least 1.8m. The only artefact recovered was a section of iron waggonway rail, which was not *in situ* but is likely to relate to the dismantling of the quarry waggonway in the mid-20th century.

7 ACKNOWLEDGEMENTS

ArcHeritage would like to thank Will Kemp and Sean Doxey of Chatsworth Estates for facilitating access to the site, Sarah Ross of Penny Anderson Associates for information on the bat house design and location, and Sarah Whiteley of the PDNPA for monitoring the project.

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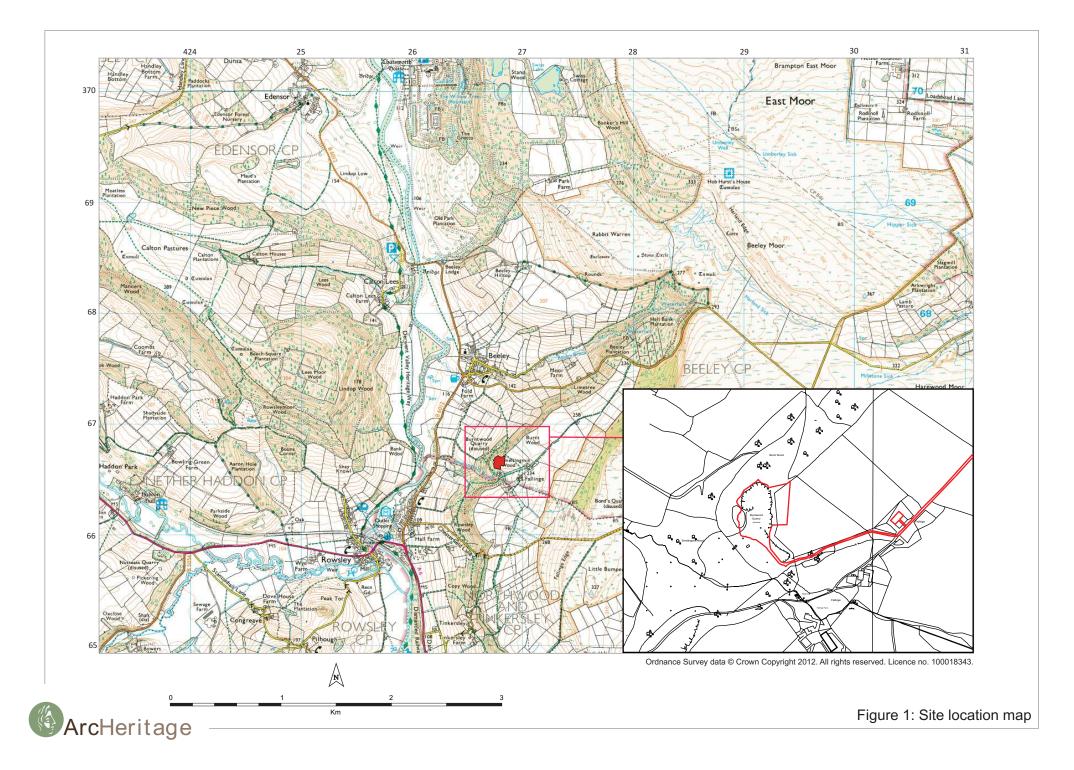
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9 FIGURES





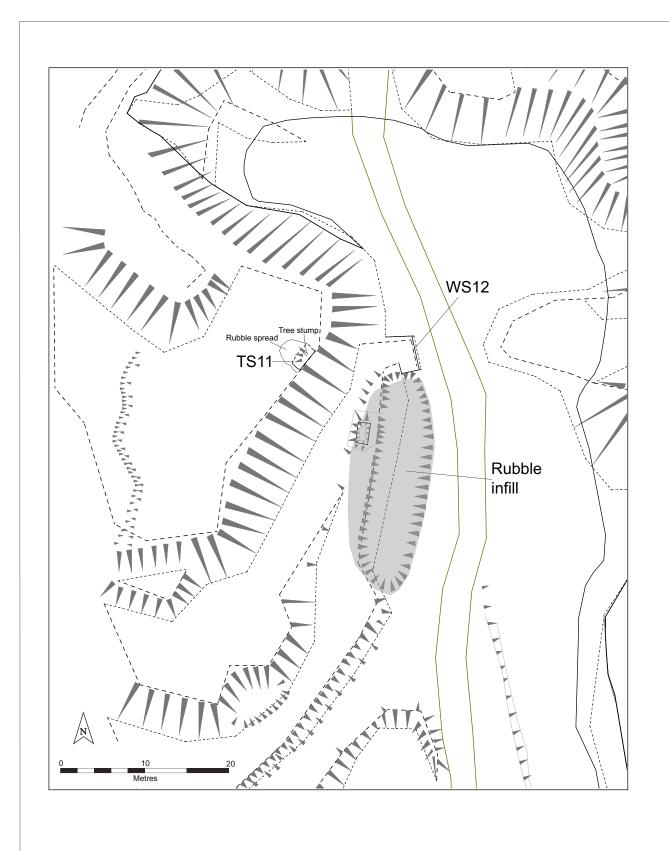
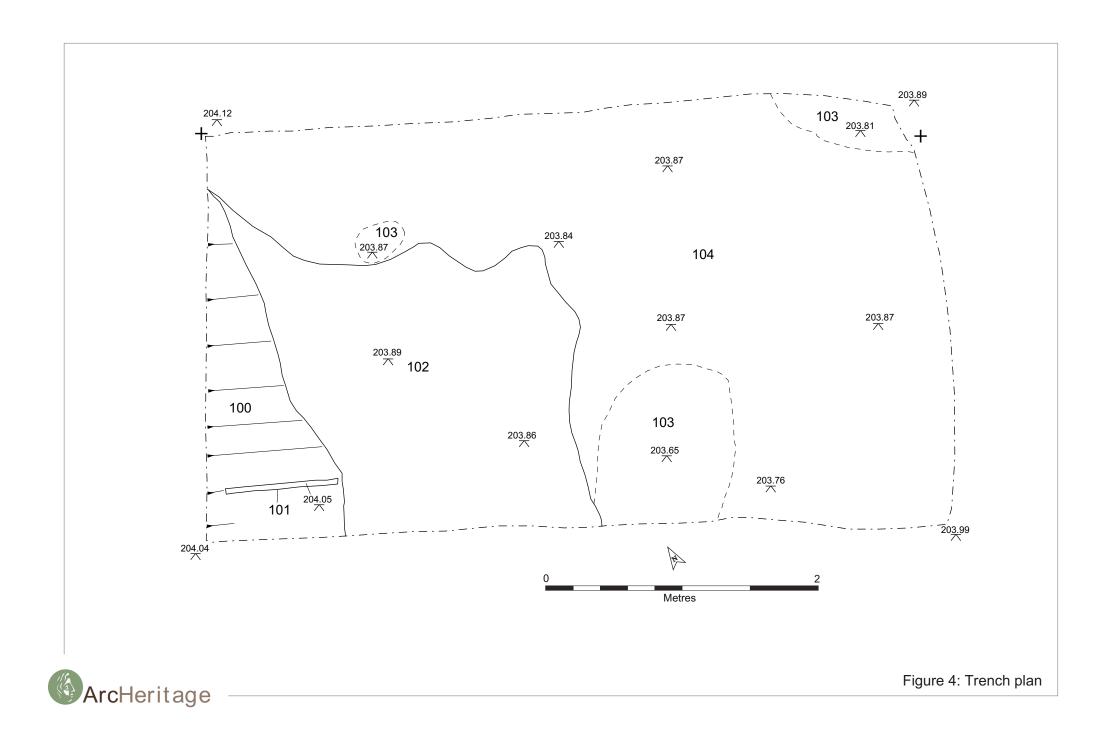




Figure 3: Walkover survey plan



10 PLATES



Plate 1: South wall of structure TS11, viewed facing northeast



Plate 2: Level platform at the top of structure WS12, viewed facing east



Plate 3: South and east faces of structure WS12, viewed facing north



Plate 4: Section of iron waggonway rail found within topsoil 100, viewed facing northwest



Plate 5: View of evaluation trench, facing northwest



Plate 6: Sondage through fractured sandstone blocks 104, viewed facing southeast

APPENDIX 1 – INDEX TO ARCHIVE

Item	Number of items
Context register	1
Context sheets	5
Levels register	1
Photographic register	2
Original drawings	1
B/W photographs (films/contact sheets)	1
Colour photographs (films)	1
Digital photographs	17
Written Scheme of Investigation	1
Report	1
Artefacts: 1 section of iron waggonway rail	1

APPENDIX 2 – CONTEXT LIST

Trench no	Context no	Description
100	Deposit - topsoil	Soft, mid- to dark brown sandy silt topsoil with a high organic content, mainly derived from leaf mould. Many roots run through this deposit. The thickness of the deposit varies between 100mm to 150mm depending on the height of the subsoil, and it is present across the entire trench. The topsoil contains an iron rail (101) in the western corner.
101	Rail (artefact)	An iron rail, 740mm long (within trench), 50mm wide, 60mm high, with a T- shaped profile (place with the bar of the T on the base). It initially looked like it could be in situ, but proved to be an isolated piece sitting within the topsoil and was removed after recording and retained as an artefact.
102	Deposit - subsoil	Orange-yellow sandy silt, fairly compact, with moderate small to medium sandstone inclusions (30-200mm). The upper part of the context has a greyer tinge, close to the interface with the topsoil. In general, the deposit varies in depth but was generally up to 50mm thick. There are some patches of a more orange soil, probably related to root damage.
103	Deposit - root disturbance	Root disturbance represented by loose, darker soil within depressions in the subsoil where tree roots and stump have been removed. Many of the roots run across the top of deposit 104, possibly due to the stoniness and sandy matrix.
104	Deposit – fractured sandstone blocks	Yellow silty sand forming the matrix between frequent (60%) medium to large sandstone blocks. Some of the blocks have relatively straight edges, but this could be natural fracturing rather than a result of quarrying. It is unclear if this is quarry waste or very weathered bedrock. On deeper excavation, the stones are relatively loose within the matrix and collapsed in from the sides of the trench. The matrix appeared to be clean with no artefacts or darker soils visible. The deposit was visible to a depth of 1.8m below the ground surface, at which point machining was stopped due to difficulty of removing further material.

APPENDIX 3 – WRITTEN SCHEME OF INVESTIGATION

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL INVESTGATIONS, BURNTWOOD QUARRY

Site Location:	Burntwood Quarry
NGR:	SK 2680 6665
Proposal:	Re-opening of quarry
Prepared for:	Chatsworth Estate
Status of WSI:	Approved (4/2/14)
Date of WSI:	January 2014
Planning Consent:	Consent granted NP/DDD/0513/0392 17/12/13

1 SUMMARY

1.1 Chatsworth Estate has been granted permission to re-open a stone quarry to provide stone for repairs and conservation at Chatsworth House.

1.2 This Written Scheme of Investigation for archaeological mitigation at Burntwood Quarry has been prepared in response to Conditions 1 & 2 of the planning consent. The work will be carried out in accordance with the Brief and this WSI, and according to the principles of the Institute for Archaeology (IfA) Code of Conduct and all relevant standards and guidance. (IfA) Code of Conduct and all relevant standards and guidance.

2 AIMS

2.1 The aims of the investigation are:

- To monitor vegetation removal from the quarry floor and areas where spoil will be deposited in order to identify any new features;
- To survey and evaluate (if required) any new features identified during the vegetation clearance;
- To monitor the topsoil clearance of the extraction area;
- To excavate archaeologically the deposits which will be removed for the bat roost 'cool room'.

3 ARCHAEOLOGICAL REQUIREMENTS

- 3.1 The investigations will comprise the following elements:
 - Archaeological watching brief on vegetation removal over the features which are to be covered with quarry spoil;
 - Archaeological watching brief on the extraction area (above the quarry face);
 - Excavation of bat roost 'cool room';
 - Contingency feature survey (if additional features are identified during vegetation clearance);
 - Contingency excavate up to a total of 60 sq metres (maximum 4 trenches) across new features (if identified during vegetation clearance;
 - Reporting of all elements.

3.2 A pre-start meeting must be held with the PDNPA Conservation Archaeologist prior to any site works commencing. The purpose of the meeting is to:

• Agree the proposed timetable/phasing of archaeological and quarry works, working practices and contact details/roles to facilitate effective communication;

- Agree which areas will be subject to spoil tipping; these areas may need to be marked out on the ground by the quarry operator;
- Agree an appropriate method of tree clearance in the area for the bat roost;
- Agree best working practice to safeguard archaeological features which are not due to be covered by spoil a written document may need to be prepared (to form a separate piece of work to be commissioned).

4 WATCHING BRIEF

4.1 A watching brief will monitor the removal of vegetation to determine whether unrecorded features are present. Depending upon the methods employed and the duration of the work, the watching brief may be **intermittent**; this will be established with the PDNPA Conservation Archaeologist once the vegetation methodology is clear.

4.2 If any vulnerable features are observed, these will be marked out temporarily on the ground so that any vehicles and machinery can avoid tracking across the area.

4.3 A watching brief will also be carried out on the soil strip of the extraction area (above the quarry face). This will be **continuous**; an archaeologist will be present during all soil stripping activity.

5 EARTHWORK SURVEY

5.1 An earthwork survey was carried out as part of the evaluation in 2013. At this stage there was a fair amount of evergreen vegetation and some areas were not suitable for survey. If during the watching brief additional features are observed, additional measured survey will take place to record these features.

5.2 The measured survey will be carried out using a total station and will conform to Level 2 standard as defined in *Understanding the Archaeology of Landscapes: a guide to good recording practice* (English Heritage 2007).

5.3 Survey control must relate to the previous survey and tied into the national grid and Ordnance Survey datum. All identified features will be surveyed. Where earthwork monuments are encountered, observed bank heights and ditch depths will be recorded; profiles across the earthworks will also be surveyed. Horizontal survey interval will vary according to the complexity of the earthworks being surveyed, but should be sufficient to recover an accurate record of the character of the earthworks. The interval between points will normally be no more than 1m on the upstanding earthworks. Where earthworks have strongly directional components a greater spacing in the direction parallel to those components will be used as appropriate to meet the objectives of the survey.

5.4 Each identified site will be recorded in the following way:

- location will be recorded with an NGR reference centred on the monument, along with the parish, district and county information;
- the monument/feature will be classified using the English Heritage thesaurus of monument types;
- the extents of the monument/feature will be surveyed accurately on the OS National Grid, directional information will be recorded for ridge and furrow, track ways, and avenues;
- photography of the monument/feature will be undertaken to complement the survey;
- details of site ownership and current land use will be noted;
- condition of the monument/feature will be investigated and noted;
- any local features that do not appear on the OS map will be recorded;
- if required, survey control will incorporate permanent features, to enable later revisions or to aid with grid re-establishment for any future survey work.

6 EXCAVATION

6.1 The footprint of the bat roost 'cool room' will be marked out by the client and will be excavated archaeologically, to the base of layers containing archaeological deposits (or potential archaeological deposits). The cool room will eventually be 3m deep; the client will continue the excavations once the layers of potential archaeology have been removed.

6.2 If new earthworks are identified during the vegetation strip which need further investigation, up to 60 sq m (a maximum of four trenches) will be excavated; this will be agreed with the client and the PDNPA Conservation Archaeologist beforehand.

6.3 Overburden such as turf, topsoil or other superficial fill materials will be removed by a machine fitted with a toothless bucket. Mechanical excavation equipment will be used judiciously, under archaeological supervision down to the top of archaeological deposits, or the natural subsoil, whichever appears first. If archaeology is present machining will cease and excavation will normally proceed by hand. Where deep homogenous deposits, or deposits such as rubble infills, are encountered, these may be carefully removed by machine, after consultation with the PDNPA planning archaeologist.

6.4 The use of mechanical, air-powered, or electrical excavation equipment may also be appropriate for removing deep intrusions (e.g. modern brick and concrete floors or footings) or through deposits to check that they are of natural origin, after consultation with the PDNPA planning archaeologist. The machine will not be used to cut arbitrary sondages down to natural deposits.

6.5 The areas will be sufficiently cleaned by hand to enable potential archaeological features to be identified and recorded; areas without archaeological features will be recorded as sterile and no further work will take place in these areas. The stratigraphy of each trench will be recorded on a trench record sheet even where no archaeological features are identified.

6.6 All archaeological features will be fully excavated and recorded using standardised pro forma record sheets. Plans, sections and elevations will be drawn as appropriate and a comprehensive photographic record will be made.

6.7 Archaeological deposits will be planned at a basic scale of 1:50, with individual features requiring greater detail being planned at a scale of 1:20. Larger scales will be utilised as appropriate. Cross-section of features will be drawn to a basic scale of 1:10 or 1:20 depending on the size of the feature. All drawings will be related to Ordnance Datum. Where it aids interpretation, structural remains will also be recorded in elevation.

6.8 Each context will be described in full on a pro forma context record sheet in accordance with the accepted context record conventions. Each context will be given a unique number. These field records will be checked and indexes compiled.

6.9 Photographs of work in progress and post-excavation of individual and groups of features will be taken. This will include general views of entire features and of details such as sections as considered necessary. The photographic record will comprise 35mm format colour slides and black and white film. Digital photography may be used in addition, but will not form any part of the formal site archive. All site photography will adhere to accepted photographic record guidelines.

6.10 All finds will be collected and handled following the guidance set out in the IfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field. Finds of particular interest or fragility will be retrieved as Small Finds, and located on plans. Other finds, finds within the topsoil, and dense/discrete deposits of finds will be collected as Bulk Finds, from discrete contexts, bagged by material type. Any dense/discrete deposits will have their limits defined on the appropriate plan.

6.11 All artefacts and ecofacts will be appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication First Aid for Finds, and recording systems must be compatible with the recipient museum. All finds that fall within the purview of the Treasure Act (1996) will be reported to HM Coroner according to the procedures outlined in the Act, after discussion with the client and the local authority.

6.12 Other samples will be taken, as appropriate, in consultation with ArcHeritage specialists and the English Heritage Regional Science Advisor, as appropriate (e.g. dendrochronology, soil micromorphology, monolith samples, C14, etc.). Samples will be taken for scientific dating where necessary for the development of subsequent mitigation strategies. Material removed from site will be stored in appropriate controlled environments.

6.13 In the event of human remains being discovered during the evaluation these will be left in-situ, covered and protected, in the first instance. The removal of human remains will only take place in compliance with environmental health regulations and following discussions with, and with the approval of, the Ministry of Justice. If human remains are identified, the Ministry of Justice and the PDNPA planning archaeologist will be informed immediately. An osteoarchaeologist will be available to give advice on site.

- If disarticulated remains are encountered, these will be identified and quantified on site. If trenches are being immediately backfilled, the remains will be left in the ground. If the excavations will remain open for any length of time, disarticulated remains will be removed and boxed, for immediate reburial by the Church.
- If articulated remains are encountered, these will be excavated in accordance with recognised guidelines (see 7.10) and retained for assessment.
- Any grave goods or coffin furniture will be retained for further assessment.

6.14 Where a licence is issued, all human skeletal remains must be properly removed in accordance with the terms of that licence. Where a licence is not issued, the treatment of human remains will be in accordance with the requirements of Civil Law, IfA Technical Paper 13 (1993) and English Heritage guidance (2005).

7 SPECIALIST ANALYSIS

7.1 The stratigraphic information, artefacts, soil samples, and residues will be assessed as to their potential and importance for further analysis and study. The material will be quantified (counted and weighted). Specialists will undertake analysis of the material where required. Appropriately detailed specialist reports will be included in the report.

7.2 Materials considered vulnerable should be selected for stabilisation after specialist recording. Where intervention is necessary, consideration must be given to possible investigative procedures (e.g. glass composition studies, residues on or in pottery, and mineral-preserved organic material). Allowance will be made for preliminary conservation and stabilization of all objects and a written assessment of long-term conservation and storage needs will be produced. Once assessed, all material will be packed and stored in optimum conditions, in accordance with Watkinson and Neal (1998), IfA (2007) and Museums and Galleries (1992).

7.3 All finds will be cleaned, marked and labelled as appropriate, prior to analysis. For ceramic assemblages, any recognised local pottery reference collections and relevant fabric Codes will be used.

7.4 Allowance will be made for the recovery of material suitable for scientific dating and contingency sums will be made available to undertake such dating, if necessary. This will be decided in consultation with the PDNPA planning archaeologist.

8 REPORT & ARCHIVE PREPARATION

- 8.1 Upon completion of the site work, a report will be prepared to include the following:
- a) A non-technical summary of the results of the work.
- b) An introduction which will include the planning reference number, grid reference and dates when the fieldwork took place.
- c) An account of the methodology and detailed results of the operation, describing structural data, archaeological features, associated finds and environmental data, and a conclusion and discussion.
- d) A selection of photographs and drawings, including a detailed plan of the site accurately identifying the areas monitored, trench locations, hachured earthwork plan, selected feature drawings, and selected artefacts, and phased feature plans where appropriate.
- e) Specialist artefact and environmental reports where undertaken, and a context list/index.
- f) Details of archive location and destination (with accession number, where known), together with a context list and catalogue of what is contained in that archive.
- g) A copy of the key OASIS form details.
- h) Copies of the Brief and WSI.
- i) Additional photographic images may be supplied on a CDROM appended to the report.

8.2 Three copies of the report will be submitted to the commissioning body. A bound and digital copy of the report will be submitted direct to the Peak District National Park for planning purposes, and subsequently for inclusion into the HER.

8.3 A field archive will be compiled consisting of all primary written documents, plans, sections and photographs. Catalogues of contexts, finds, soil samples, plans, sections and photographs will be produced. ArcHeritage will liaise with the Chatsworth House Archives prior to the commencement of fieldwork to establish the detailed curatorial requirements of the museum and discuss archive transfer and to complete the relevant museum forms. The relevant museum curator would be afforded access to visit the site and discuss the project results.

8.4 The owner of the Intellectual Property Rights (IPR) in the information and documentation arising from the work, would grant a licence to the Local Authority and the museum accepting the archive to use such documentation for their statutory functions and provide copies to third parties as an incidental to such functions. Under the Environmental Information Regulations (EIR), such documentation is required to be made available to enquirers if it meets the test of public interest. Any information disclosure issues would be resolved between the client and the archaeological contractor before completion of the work. EIR requirements do not affect IPR.

8.5 Upon completion of the project an OASIS form will be completed at http://www.oasis.ac.uk/.

9 POST EXCAVATION ANALYSIS & PUBLICATION

9.1 Allowance will be made for the preparation and publication in a local and/or national journal of a short summary on the results of the evaluation and of the location and material held within the site archive.

9.2 The results of the work will be publicised locally e.g. by presenting a paper at the Derbyshire Day and talking to local societies, as appropriate.

9.3 A summary report accompanied by illustrations will be presented in digital format for publication in the appropriate volume of *Archaeology and Conservation in Derbyshire*.

10 HEALTH AND SAFETY

10.1 Health and safety issues will take priority over archaeological matters and all archaeologists will comply with relevant Health and Safety Legislation.

10.2 A Risk Assessment will be prepared prior to the start of site works.

11 PRE-START REQUIREMENTS

11.1 The client will be responsible for ensuring site access has been secured prior to the commencement of site works, and that the perimeter of the site is secure.

11.2 The client will provide ArcHeritage with up to date service plans and will be responsible for ensuring services have been disconnected, where appropriate.

11.3 The client will mark out the location of the bat roost, including the exact location of the area for the cool room.

12 REINSTATEMENT

12.1 Following excavation and recording the spoil from the trenches will be backfilled unless requested otherwise. The backfill material will be levelled and compressed as far as possible with the mechanical excavator bucket, but will not be compressed to a specification. ArcHeritage are not responsible for reinstating any surfaces, including reseeding, unless specifically commissioned by the client who will provide a suitable specification for the work. Large stones etc which have been removed during the excavation will be set aside, and mot backfilled.

13 TIMETABLE & STAFFING

13.1 The fieldwork will be carried out in accordance with the client's timetable. For safety and access reasons it will be preferable to schedule the vegetation clearance and watching brief first, and earthwork survey (if required) and excavations to follow. Reporting will be completed within six weeks of completion of fieldwork, unless specialist reports are awaited.

13.2 Staff available for this work are as follows:

- Site monitoring and excavation Project Archaeologist/Assistant
- Archaeological Surveyor Tudur Davies/Marcus Abbott
- Head of Artefact Research Dr Ailsa Mainman
- Human Remains Malin Holst (York Osteoarchaeology Ltd) & Rebecca Storm (University of Bradford)
- Palaeoenvironmental remains Dr Jennifer Miller
- Head of Curatorial Services Christine McDonnell
- Finds Researcher Nicky Rogers
- Post-medieval Pottery Dr David Barker
- Medieval Pottery Researcher Anne Jenner
- Finds Officers Geoffrey Krause & Rachel Cubitt
- Archaeometallurgy & Industrial Residues Dr Rod Mackenzie & Dr Roger Doonan
- Conservation Ian Panter

14 MONITORING OF ARCHAEOLOGICAL FIELDWORK

14.1 As a minimum requirement, Peak District National Park Authority will be given a minimum of one week's notice of work commencing on site, and will be afforded the opportunity to visit the site during and prior to completion of the on-site works so that the general stratigraphy of the site can be assessed and to discuss the requirement any further phases of archaeological work. ArcHeritage will notify Peak District National Park Authority of any discoveries of archaeological significance so that site

visits can be made, as necessary. Any changes to this agreed WSI will only be made in consultation with Peak District National Park Authority.

14.2 With the client's agreement illustrated notices will be displayed adjacent to a public right of way to explain the nature of the works.

15 COPYRIGHT

15.1 ArcHeritage retain the copyright on this document.

16 KEY REFERENCES

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