General index to the archive

Site/Project Name: **Claydon Starveall Farm**

Site Code: CLSTRL 12

Site/Project Type: Evaluation

Year(s): 2012

Accession Number: 2012.25

Record Group	Contents	Comments	Box/File Number
	INTRODUCTION Written scheme of investigation	 1 copy	Box 1 file 1
A	**REPORT** Evaluation report – http://library.thehumanjourney.net/931	 1 copy	Box 1 file 2
B	**SITE DIARY** Daily journal 16/07/12 - 18/07/12	 3 sheets	Box 1 file 3
B	**PRIMARY CONTEXT DATA** Levels register Trench sheets trenches 1-6	 1 sheet 6sheets	Box 1 file 4
B	**SURVEY REPORTS** Geophysical survey report	 1 bound copy	Box 1 file 5
B	**CATALOGUE OF DRAWINGS** Plan list Section list	 1 sheet 1 sheet	Box 1 file 6
B	**PRIMARY DRAWINGS** Site plans Site sections	 6 sheets 1 sheet	Box 1 file 6
D	**CATALOGUE OF PHOTOGRAPHS** B/W index films 1&2 Original digital image index Revised archive digital index JPG thumbnails	 2 sheets 2 sheets 1 sheet 2 sheets	Box 1 file 7

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:

Classification of material	Tick if present
Index to archive	✓
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: oxfordar1-134924

Project details	
Project name	Trial Trenching at Starveall Farm Claydon Gloucestershire
Short description of the project	Between 12th and 18th July 2012 Oxford Archaeology carried out an evaluation by trenching of the site of a proposed chicken farm at Starveall Farm, Claydon, Gloucestershire (NGR SO 940 317). The site is an open field currently under cultivation, with surviving ridge-and-furrow running east-west across it. Six trenches each 36m long and 1.6m wide were excavated to natural, a 2% sample of the development area. The trenches were laid out to provide overall coverage of the area of the proposed development, and also to take account of a magnetometer survey carried out by Stratascan. This had not found any anomalies definitely of archaeological origin, but had indicated a number of tentative faint anomalies, which were crossed by the line of the trenches.. Excavation of the trenches revealed a topsoil underlain by a subsoil, probably another ploughsoil, overlying the natural. The only archaeological features were the furrows of ridge-and-furrow cultivation. No finds earlier than the 19th century were seen.
Project dates	Start: 12-07-2012 End: 18-07-2012
Previous/future work	Not known / No
Any associated project reference codes	CLSTRL 12 - Sitecode
Any associated project reference codes	2012.25 - Museum accession ID
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	RIDGE AND FURROW Medieval
Significant Finds	POTTEY Post Medieval
Methods & techniques	"Targeted Trenches"
Development type	Rural commercial
Prompt	Not recorded in report
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	GLOUCESTERSHIRE CHELTENHAM OXENTON Starveall Farm, Claydon
Study area	1.67 Hectares
Site coordinates	SO 940 317 51 -2 51 58 59 N 002 05 14 W Point

Project creators

Name of Organisation	Oxford Archaeology
Project brief originator	not known
Project design originator	Oxford Archaeology
Project director/manager	Klara Spandl
Project supervisor	T. Allen
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Burton Knowles .co.uk

Project archives

Physical Archive Exists?	No
Physical Archive recipient	Cheltenham Museum and Art Gallery
Physical Archive ID	2012.25
Digital Archive recipient	Oxford Archaeology
Digital Archive ID	CLSTRL 12
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Cheltenham Museum and Art Gallery
Paper Archive ID	2012.25
Paper Contents	"Stratigraphic","other"
Paper Media available	"Context sheet","Plan","Report","Section","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)

Title	Trial Trenching at Starveall Farm Claydon Gloucestershire
Author(s)/Editor(s)	Leech S
Date	2012
Issuer or publisher	Oxford Archaeology South
Place of issue or publication	Oxford
Description	Client report
URL	http://library.thehumanjourney.net/931
Entered by	Nicola Scott (n.scott@oxfordarch.co.uk)
Entered on	3 October 2012

OASIS:

Please e-mail English Heritage for OASIS help and advice

B

STAVERALL FARM
CLAYDON
CLSTRL 12

BOX IFILE 1

INTRODUCTION

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:

Classification of material	Tick if present
Index to archive	
Introduction	✓
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Trial Trenching at Starveall Farm Claydon Gloucestershire

Written Scheme of Investigation

oxfordarchaeology
southsouth

July 2012

Client: Bruton Knowles

Issue No: 1
OA Job No: 5391
NGR: SO 940 317

Starveall Farm, Claydon, nr Tewkesbury, Gloucestershire

Written Scheme of Investigation for an Evaluation

Centred on SO 940 317

Table of Contents

List of Figures

1 INTRODUCTION

1.1 Project details

1.1.1 Oxford Archaeology (OA), has been commissioned by consultants Bruton Knowles to undertake an evaluation by trenching of the site of proposed chicken sheds. The area covered by the proposed development is 1.67 ha.

1.1.2 The work is being undertaken as part of an Environmental Impact Assessment to inform the Planning Authority prior to the submission of a Planning Application. Although the Local Planning Authority has not set a brief for the work, discussions with Charles Parry, Senior Archaeological Officer for Gloucestershire County Council, have established the scope of work required; this document outlines how OA will implement those requirements.

1.1.3 All work will be undertaken in accordance with local and national planning policies (refs as appropriate).

1.2 Location, geology and topography

1.2.1 The site lies at SO 940 317 at c 28m above OD, on land that slopes gently down to the north-west and up to the south-east. The local topography is dominated by Oxenton Hill which peaks some 3km to the east. The site lies midway between Dean Brook 3km to the south and Carran Brook to the north, both running west to meet the Severn about 5km to the west. There is another smaller stream running parallel to Dean Brook around 1.2km north of it, and two small streams rise at the 30m contour either side of the site and only about 0.5km distant, running NW to the Curran Brook.

1.2.2 The area of proposed development currently consists of open farmland, and lies just south of a small triangle of woodland (Figs 1 and 2).

1.2.3 The geology of the area is weathered clay derived from the Charmouth Mudstone Formation (BGS Sheet 216).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL

2.1 Archaeological and historical background

2.1.1 The archaeological and historical background to the site is described in detail in the accompanying Desk-based Assessment currently being produced by OA, and will not be reproduced in detail here.

2.1.2 To summarise, there is no record of previous archaeological discoveries on or adjacent to the site.

2.1.3 The site was clearly arable farmland in the medieval period, as the remains of ridge-and-furrow cultivation are still evident running east-west across the site.

2.1.4 A geophysical magnetometer survey has been carried out covering the proposed development area, and has been supplemented by an earth resistance survey covering part of the same area. These surveys have not revealed evidence of any definite earlier archaeological features, although faint traces of a few possible features have been noted (see Figures 3 and 4).

2.2 Potential

2.2.1 On current evidence the potential for archaeological remains of later prehistoric, Roman or Saxon date is low. The possible linear and curvilinear features tentatively identified by the geophysical survey may however belong to boundaries of one of these periods.

2.2.2 Earlier prehistoric activity (Mesolithic, Neolithic and Early Bronze Age) is often sparsely scattered, consisting of small numbers of pits and treethrow-holes, and sometimes consists entirely of lithic material deposited on the ancient ground surface. There remains therefore a possibility that remains of any of these periods may be encountered.

3 Project Aims

3.1 General

3.1.1 To determine the presence or absence of any archaeological remains which may survive.

(i) To determine or confirm the approximate extent of any surviving remains

(ii) To determine the date range of any surviving remains by artefactual or other means.

(iii) To determine the condition and state of preservation of any remains.

(iv) To determine the degree of complexity of any surviving horizontal or vertical stratigraphy.

(v) To assess the associations and implications of any remains encountered with reference to the historic landscape.

(vi) To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive.

(vii) To determine the implications of any remains with reference to economy, status, utility and social activity.

3.1.2 To disseminate the results through deposition of an ordered archive at the local museum, the deposition of a detailed report at the Sites and Monuments Record, and (if appropriate) summary publication of the results.

3.2 Specific aims and objectives

3.2.1 The specific aims and objectives of the evaluation are:

(viii) To determine whether the faint linear and other anomalies identified by the geophysical survey are of archaeological origin

(ix) To determine whether the ridge-and-furrow is masking evidence of earlier archaeological activity on the site

(x) To look for artefactual evidence of surface activity in the past, such as spreads of struck flint, burnt flint etc.

(xi) As far as is practicable within the constraints of the trenches, to obtain dating evidence for the ridge-and-furrow cultivation

4 Project Specific Excavation and Recording Methodology

4.1 Scope of works

4.1.1 The evaluation will consist of a 2% sample of the proposed development area, divided between 6 trenches 2m wide and 30m long.

4.1.2 Should significant archaeology be encountered, or should further work be needed in order to achieve the aims and objectives of the evaluation, and following agreement on site between OA, the client's representative and Gloucestershire County Council, a further 2% contingency sample is available for further trenching.

4.2 Programme

4.2.1 It is anticipated that the fieldwork will take 1 week to complete, by a team consisting of a Project Officer Brian Dean, directing two Project Archaeologists, under the management of Tim Allen, Senior Project Manager.

4.2.2 All fieldwork undertaken by Oxford Archaeology (South) is overseen by the Head of Fieldwork, Dan Poore MIFA.

4.3 Site specific methodology

4.3.1 A summary of OA's general approach to excavation and recording can be found in Appendix A. Standard methodologies for Geomatics and Survey, Environmental evidence, Artefactual evidence and Burials can also be found below (Appendices B, C, D and E respectively).

4.3.2 Site specific methodologies will be as follows:

(i) All trenches will be excavated to the surface of the natural, or to the surface of the first archaeological horizon (excluding medieval ridges). Medieval ridges crossing the trench will be removed under close archaeological supervision to expose the underlying ground surface.

(ii) Should significant numbers of archaeological features be evident within the trenches, medieval furrows will be left in *situ*, unless their removal is needed to clarify relationships between features either side.

(iii) If archaeological features are sparse or absent, a selection of medieval furrows will be removed by machine to search for earlier archaeological features, and to establish their depth and the level of truncation of any potential earlier archaeology.

(iv) Should any potentially well-preserved or *in situ* archaeological deposits be found below the medieval ridges, these will be characterised and dated by limited hand-excavation to comprehend their state of preservation and archaeological potential. Further investigation will not be carried out at the evaluation stage, unless agreed between the client, the County Archaeologist and Oxford Archaeology.

(v) Should human remains be encountered, excavation will cease as soon as their identification is secure pending a site meeting with the client and archaeological curator.

5 Project Specific Reporting and Archive Methodology

5.1 Programme

5.1.1 The report will be completed within 4 weeks of the completion of the fieldwork.

5.1.2 Two bound copies of the completed report(s) will be provided to the Gloucestershire Senior Archaeological Officer. A CD containing a copy of the report in Adobe Acrobat (.pdf) format will also be provided.

5.2 Content

5.2.1 The content of this report will be as defined in Appendix F.

5.3 Specialist input

5.3.1 OA has a large pool of internal specialists, as well as a network of external specialists with whom OA have well established working relationships. A general list of these specialists is presented in Appendix G; in the event that additional input should be required, an updated list of specialists can be supplied.

5.4 Archive

5.4.1 The site archive will be deposited with Cheltenham Museum following completion of the project.

5.4.2 A summary of OA's general approach to documentary archiving can be found in Appendix H.

6 Health and Safety

6.1 Roles and responsibilities

6.1.1 The Senior Project Manager, Tim Allen, has responsibility for ensuring that safe systems of work are adhered to on site. He delegates elements of this responsibility to the Site Project Officer Brian Dean, who implements these on a day to day basis.

6.1.2 The Director with responsibility for Health and Safety at OA is Robert Williams (Chief Operations Officer); he is advised by the OA Group Health and Safety Coordinator, Dan Poore (NEBOSH Level 3).

6.2 Method statement and risk assessment

6.2.1 A summary of OA's general approach to health and safety can be found in Appendix I. A risk assessment has also been undertaken and approved and will be kept on site, along with OA's standard health and safety file, which will contain all relevant health and safety documentation.

6.2.2 The H and S file will be available to view at any time.

7 Monitoring of works

7.1.1 At least 5 days notice of the commencement of the evaluation works will be given to Charles Parry, Senior Archaeological Officer for Gloucestershire County Council.

7.1.2 Charles Parry will have free access to the site (subject to H and S considerations) and all records to ensure the works are being carried out in accordance with this WSI and all other relevant standards.

8 References

OA Standard Fieldwork Methodology Appendices

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by the accompanying detailed Written Scheme of Investigation.

Copies of all OA internal standards and guidelines referred to below are available on request.

Appendix A. General Excavation and Recording Methodology

A.1 Standard methodology – summary

Mechanical excavation

A.1.1 An appropriate mechanical excavator will be used for machine excavated trenches. This will normally be a JCB or 360° tracked excavator with a 1.8 m to 2 m wide toothless ditching bucket. For work with restricted access or working room a mini excavator will be used.

A.1.2 All mechanical excavation will be undertaken under direct archaeological supervision.

A.1.3 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.

A.1.4 Following mechanical excavation, all areas of the trench that require examination or recording will be cleaned using appropriate hand tools.

A.1.5 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.

A.1.6 After recording, the trenches will be backfilled with excavated material in reverse order of excavation, but will otherwise not be fully reinstated.

Hand excavation

A.1.7 All investigation of archaeological levels will be by hand, with cleaning, examination and recording both in plan and section.

A.1.8 Within significant archaeological levels the minimum number of features required to meet the aims will be hand excavated. Pits and postholes will usually be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. Features not suited to excavation within narrow trenches will not be sampled. No archaeological deposits will be entirely removed unless this is unavoidable.

A.1.9 It is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the entire site will be assessed. The stratigraphy of all evaluation trenches will be recorded even where no archaeological deposits have been identified.

A.1.10 Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.

Recording

A.1.11 Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.

A.1.12 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.

A.1.13 Plans will normally drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10 or recorded using geo-referenced digital photography.

A.1.14 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.

A.1.15 A register of plans will be kept.

A.1.16 Long sections of trenches showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.

A.1.17 A register of sections will be kept.

A.1.18 Generally all sections will be tied in to Ordnance Datum.

A.1.19 A full black and white and colour (digital) photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.

A.1.20 Photographs will be recorded on OA Photographic Record Sheets.

A.2 Relevant industry standards and guidelines

A.2.1 The Institute for Archaeologists' Standard and Guidance notes relevant to fieldwork are:

- Standard and Guidance for Field Evaluation
- Standard and Guidance for Excavation
- Standard and Guidance for an Archaeological Watching Brief.

A.2.2 These will be adhered to at all times.

A.3 Relevant OA manual and other supporting documentation

A.3.1 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming).

A.3.2 Further guidance is provided to all excavators in the form of the OA 'Fieldwork Crib Sheets - a companion guide to the Fieldwork Manual'. These have been issued ahead of formal publication of the revised Fieldwork Manual.

Appendix B. Geomatics and Survey

B.1 Standard methodology – summary

B.1.1 The aim of OA methodology is to provide comprehensive survey cover of all investigation areas. Additionally, it is designed to provide coverage for any areas, beyond the original scope of the project, which arise as a result of further work. It provides digital plans of all required elements of the project and locates them within an overall grid.

B.1.2 It also maintains all necessary survey data and ensures that the relevant information is copied into the primary record, in order to ensure the integrity of the project archive. Furthermore, it ensures that all core data is securely stored and backed up. It

establishes accurate project reference systems utilising a series of control stations and permanent base lines.

B.1.3 The survey will be conducted using a combination of Total Station Theodolite (TST) survey utilising Reflectorless Electronic Distance Measurement (REDM) where appropriate, hand-measured elements and GPS (Global Positioning System).

B.1.4 Before the main work commences, a network of control stations will be laid out encompassing the area. Control stations will be tied in to known points or existing features using rigorous metric observation. The control network will be set in using a TST to complete a traverse or using techniques as appropriate to ensure sufficient accuracy. A GPS, or other appropriate method, will be used to orientate the control network to National Grid or other recognised coordinate system.

B.1.5 All control stations will be checked by closed traverse and/or GPS, as appropriate. The accuracy of these control stations will be accessed on a regular basis and re-established accordingly. All stations will be recorded on Survey Control Station sheets.

B.1.6 Each control station will be marked with a PGM (Permanent Ground Marker). Witness diagrams will include the full 3-D co-ordinates generated, a sketch diagram and measurements to at least three fixed details, written description of the mark and a photograph of the control point in its environs.

B.1.7 Prior to entry into the field all equipment will be checked, and all pre-survey information will be logged onto the field computer and uploaded onto survey equipment as appropriate. The software in the field computer will be verified and all cabling between the GPS and/or TST and computer will be checked. Prior to conducting the survey the site will be reconnoitred for locations for a viable control network and check the line of sight and any possible hindrance to survey. Daily record sheets will be kept to record daily tasks and conditions.

B.1.8 All spatial data will be periodically downloaded onto a field computer, and backed up onto CD, or DVD. It will be cleaned, validated and inspected.

B.1.9 All survey data will be documented on daily survey record sheets. Information entered on these sheets includes key set up information (Instrument height etc.) as well as daily variables and errors/comments. All survey data will be digitally recorded in a raw format and translated during the download process this shall allow for any errors to be cross referenced with the daily survey record and corrected accordingly.

B.1.10 A weekly summary of survey work will be produced to access development and highlight problems. This information also will be recorded on the weekly survey journal. Technical support for the survey equipment and download software shall be available at all times. In those instances where sites are remotely operated, all digital data will be backed up regularly and a copy returned to Oxford on a weekly basis.

B.1.11 A site plan will initially be created by a rapid survey of relevant archaeological features by mapping their extent using a combination of TST and GPS. This will form the basis for deciding excavation strategy and will be updated as the excavation clarifies the extent of, and relationships between, archaeological features.

B.1.12 Excavated archaeological interventions and areas of complex stratigraphy will be hand drawn. At least two Drawing Points (DPs) will be set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans will be referenced to the digitally captured pre-site plan by measuring in the DPs with a TST or GPS. These hand drawn elements will then be scanned in, geo-referenced using the

DPs as reference points and digitised following OA's digitising protocols. For further details on hand planning procedure please refer to the fieldwork guidelines.

B.1.13 Where appropriate rectified photography may be used to record standing structures or burials. This will be carried out in line with Standard OA procedures for rectified photography.

B.1.14 Survey data recorded in the field will be downloaded using appropriate downloading software, and saved as an AutoCAD Map DWG file, or an ESRI Shapefile. These files will be regularly updated and backed up with originals being stored on an OA server in Oxford.

B.1.15 All drawings will be composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work will normally be carried out at the local OA central office or at on-site remote locations when appropriate. Support for all GIS/CAD work will be available from OA's Oxford Office during normal office hours. The aim of the GIS/CAD work is to produce workable draft plans, which can be produced as stand-alone products, or can be readily converted to GIS format. Any hand-drawn plans will be scanned and digitised on site in the first instance. Subsequent plans will be added to the main drawing as it develops.

B.1.16 All plan scans will be numbered according to their plan site number. Digital plans will be given a standard new plan number taken out from the site plan index.

B.1.17 All digital data will be backed up incrementally on CD or DVD. On each Friday the entire data directory will be backed up and returned to Oxford where it will be copied onto the OA projects server. Each CAD drawing will contain an information layout which will include all the relevant details appertaining to that drawing. Information (metadata) on all other digital files will be created and stored as appropriate. At the end of the survey all raw measurements will be made available as hard copy for archiving purposes.

B.2 Relevant industry standards and guidelines

B.2.1 English Heritage (2009), Metric Survey Specifications for Cultural Heritage

B.2.2 English Heritage (2006), Understanding Historic Buildings A Guide to Good Practise

B.2.3 English Heritage, (2007) Understanding the Archaeology of Landscapes A Guide to Good Recording practise

B.3 Relevant OA manual and other supporting documentation

B.3.1 OA South Metric Survey, Data Capture and Download Procedures

B.3.2 OA South Digitising Protocols

B.3.3 OA South GIS Protocols

B.3.4 These will be superseded by the OA South Geomatics Manual (in progress).

APPENDIX C. ENVIRONMENTAL EVIDENCE

C.1 Summary of Standard methodology

C.1.1 Different environmental and geoarchaeological sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Where possible an environmental specialist(s) will visit the site to

advise on sampling strategies. Sampling methods will follow guidelines produced by English Heritage and Oxford Archaeology. A register of samples will be kept. Specialists will be consulted where non-standard sampling is required (eg. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit the site and take the samples.

C.1.2 Geoarchaeological sampling methods are site specific, and methodologies will be designed in consultation with the geoarchaeological manager on a site by site basis.

C.1.3 Bulk soil samples, where possible of 40 litres or 100% of a deposit if less is available, will be taken from potentially datable features and layers for flotation for charred plant remains and for the recovery of small bones and artefacts. Larger soil samples (up to 100L) may be taken for the complete recovery of animal bones, marine shell and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 10-20 litres will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2L samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments. Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods and foraminifera if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) and possibly for metallurgical analysis in consultation with the appropriate specialists.

C.1.4 Bulk samples from dry deposits will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.25mm (flot) and 0.5 or 1mm depending (residue). Heavy residues will be wet sieved, air dried and sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples (1L sub-sample) and snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.25mm (waterlogged plants) and 0.5mm (snails) respectively; these flots and residues will be sorted by the specialist. Samples specifically taken for insects, pollen, other microflora and microfauna, metallurgy and soil analysis will be submitted as whole earth to the appropriate specialists or processed following their instructions.

C.2 Relevant Industry Standards and Guidelines

C.2.1 English Heritage 2010. Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.

C.2.2 English Heritage 2001. Archaeometallurgy. Centre for Archaeology Guidelines 2001.01.

C.2.3 English Heritage 2011. Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation, (2nd ed)

C.2.4 English Heritage 2004. Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates.

C.2.5 English Heritage 2006. Archaeomagnetic Dating. Guidelines for Producing and Interpreting Archaeomagnetic Dates.

C.2.6 English Heritage 2007. Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record.

C.2.7 English Heritage 2008. Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology.

C.2.8 English Heritage 2008. Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains.

C.3 Relevant OA manual and other supporting documentation

C.3.1 Oxford Archaeology 2005. Environmental Sampling Guidelines, 2nd ed.

APPENDIX D. ARTEFACTUAL EVIDENCE

D.1 Summary of Standard methodology

D.1.1 Before a site begins arrangements concerning the finds will be discussed with the Head of Finds. Information will be provided by the project manager about the nature of the site, the expected size and make-up of the finds assemblage and any site specific finds retrieval strategies. On-site requirements will be discussed and a conservator appointed who can be called on to make site visits if required. Special requirements regarding particular categories of material will be raised at this early stage for instance the likelihood of recovering assemblages of waterlogged material, large timbers, quantities of structural stone or ceramic building material. Specialists may be required to visit sites to discuss retrieval strategies.

D.1.2 The project manager will supply the Head of Finds with contact details of the landowner of the site so that consent to deposit any finds resulting from the investigation can be sought.

D.1.3 The on-site retrieval, lifting and short term packaging of bulk and small finds will follow the detailed guidelines set out in the OA Finds Manual (sections 2 and 3), First Aid for Finds and the UKIC conservation guidelines No.2.

D.1.4 All finds recovered from site will be transported to an OA regional office for processing; local sites will return finds at the end of each day, away based sites at the end of each week. Special arrangements can be discussed for certain sites with the department manager before the start of a project. Larger long running sites may in some instances set up on-site processing units to deal with the material from a particular site.

D.1.5 All finds qualifying as Treasure will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996), and the Treasure (Designation) Order 2002. Where removal can not be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

D.1.6 Each box of finds will be accompanied by a finds context checklist itemising the finds within each box. The number of bags of finds from each context and individual small find from each context will be recorded. A member of the processing team will check the list when it arrives in the department. There are separate forms for finds recovered from fieldwalking.

D.1.7 The processing programme is reviewed on a weekly basis and priorities are worked out after discussions with the Head of Fieldwork and the Head of Post-excavation. Project managers will keep the Head of Finds informed of any pressing deadlines that they are aware of. All finds from evaluations are dealt with as a matter of priority.

D.1.8 All bulk finds are washed (where appropriate), marked, bagged and boxed by the processing team according to the guidelines set out in section 4 and 5 of the OA Finds Manual, First-aid for finds and the UKIC guidelines No.2. They must also take into

account the requirements of the receiving museum. Primary data recording count and weight of fragments by material from each context is recorded on the site database.

D.1.9 Unstable and sensitive objects are recorded onto the database and then packaged and stored in controlled environments according to their individual requirements. The advice of a conservator will be sought for sensitive objects in need of urgent conservation. All metalwork will be x-rayed prior to assessment (and to meet the requirements of most receiving museums).

D.1.10 Finds recovered from the environmental sample processing will be incorporated into the main assemblage and added to the database.

D.1.11 On completion of the processing and data entry a finds file for each archaeological investigation will be produced, a summary of which is available for the project manager. The assemblage is allocated an OA number for storage purposes. Bulk finds are stored on a roller racking system, metals in a secure controlled storage and organic finds are refrigerated where possible.

D.1.12 The movement of finds in and out of the department storage areas is strictly monitored and recorded. Carbon copy transit forms exist to record this information. Finds will not be removed from storage without the prior knowledge of the Head of Finds.

D.1.13 Finds information summarised in the finds compendium is used to assess the finds requirements for the post excavation stages of the project. The Finds department holds a list of all specialists used by OA (see below) both internal and external.

D.1.14 On completion of the post excavation stage of the project the department prepares the finds assemblage for deposition with the receiving museum. Discussions will be held with the museum, the excavator and the head of finds to finalise any selection, retention or discard policy. Most museums issue strict guidelines for the preparation of archives for deposition with their individual labelling, packaging and recording requirements.

D.2 Relevant industry standards and guidelines

D.2.1 UKIC, 1983, Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites. Conservation Guidelines No.2. Archaeology Section, United Kingdom Institute for Conservation.

D.2.2 UKIC, 1988, Excavated Artefacts and Conservation: UK sites Revised Edition. Conservation Guidelines No.1. Archaeology Section, United Kingdom Institute for Conservation.

D.2.3 Society of Museum Archaeologists, 1993, Selection, retention and dispersal of Archaeological Collections. Download available via http://www.socmusarch.org.uk/publica.htm)

D.2.4 Watkinson, D E & Neal, V, 1998, First Aid for Finds (3rd edition). RESCUE & UKIC

D.3 Relevant OA manual and other supporting documentation

D.3.1 Allen, L, and Cropper, C (internal publication only) Oxford Archaeology Finds Manual.

APPENDIX E. BURIALS

E.1 Summary of Standard methodology

E.1.1 Human remains will not be excavated without a relevant licence/faculty and, where applicable (for example, a post medieval cemetery), a risk assessment from the local environmental officer.

E.1.2 All human remains will be treated with due care and regard to the sensitivities involved, and will be screened from the public throughout the course of the works.

E.1.3 Excavation will be undertaken in accordance with IFA (Roberts and McKinley 1993) and English Heritage and The Church of England guidelines (Mays 2005). For crypts and post-medieval burials the recommendations set out by the IFA (Cox 2001) in Crypt Archaeology: an approach, are also relevant.

E.1.4 In accordance with recommendations set out in the English Heritage and Church of England (2005) document Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England, skeletons will not be excavated beyond the limits of the trench, unless they are deemed osteologically or archaeologically important.

E.1.5 Where any soft tissue survives and/or materials (for example, inner coffins, mattresses and other paddings) soaked in body liquor, no excavation or handling of the remains will take place until an appropriate risk assessment has been undertaken. Relevant protocols (i.e. Cox 2001) for their excavation, recording and removal will be adhered to.

E.1.6 OA does not excavate or remove modern burials (post-1907) and does not remove or open sealed lead coffins. Appropriate PPE (e.g. chemical suit, latex gloves) will be worn by all staff when working with lead coffins.

E.1.7 Graves and their contents will be hand excavated in plan. Each component (for example, skeleton, grave cut, coffin (or remains of), grave fill) will be assigned a unique context number from a running sequence. A group number will also be assigned to all of these, and small finds numbers to features such as coffin nails, hobnails and other grave goods (as appropriate).

E.1.8 Soil samples will be taken during the excavation of inhumations, usually from the region of the skull, chest, right hand, left hand, abdomen and pelvis, right foot and left foot. Infants (circa. less than 5 years) will normally be recovered as bulk samples. Soil samples will also be taken from graves that appear to contain no human bone.

E.1.9 Burials (including the skeleton, cremation, coffin fittings, coffin, urn, grave goods / other) will be recorded by photographic and written record using specialised pro forma context sheets, although these records may only include schematic representations of the location and position of the skeletons, depending on the nature and circumstances of the burial.

E.1.10 Where necessary, hand drawn plans (usually at 1:10, sometimes 1:5) will be made, especially of contexts where required details cannot be adequately seen using digital rectified photography (for example, urned cremations; undisturbed hob nails).

E.1.11 Levels will be taken. For inhumations this will be on the skull, pelvis and feet as a minimum.

E.1.12 Human remains that are exhumed will be bagged and labelled according to skeletal region and carefully packed into suitable containers (for example, acid free cardboard

boxes) and transported to a suitable storage location. Any associated coffins and coffin fittings will be contained with the human remains wherever possible.

E.1.13 Unurned cremations will not usually be half sectioned or excavated in spits, but recovered as a bulk sample.

E.1.14 Wherever possible, urned cremations will be carefully bandaged, recovered whole and will be excavated in spits in the laboratory, as per the recommendations of McKinley (2004).

E.1.15 Unless deemed osteologically or archaeologically important disarticuled bone / charnel will be collected and reserved for re-burial if immediate re-internment as close to its original position is not practicable. In some instances, a rapid scan of this material may be undertaken by a qualified osteologist, if deemed relevant.

E.1.16 If undisturbed, pyre sites will normally be excavated in quadrants, at the very least in 0.5 m blocks of 0.5 m spits.

E.1.17 Pyre debris dumps will be half sectioned or quadranted and will be subject to 100% sampling.

E.1.18 Wooden and lead coffins and any associated fittings, including fixing nails will be recorded on a pro forma coffin recording sheet. All surviving coffin fittings will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue that is being compiled by OA. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Biographical details obtained from legible departum plate inscriptions will be recorded and further documentary research will be made.

E.1.19 Funerary structures, such as brick shaft graves and/or vaults will be hand-drawn at a scale of 1:10 or 1:20, as appropriate. Location, dimensions and method of construction will be noted, and the structure added to the overall trench plan.

E.1.20 Memorials, including headstones, revealed within the areas of development will be recorded irrespective of whether they are believed to be in situ.

E.1.21 Where required, memorials will be accorded an individual context number and will also be included as part of the grave group, if the association with a burial is clear.

E.1.22 Memorials will be recorded on pro-forma context sheets, based on and following the guidelines set out by Mytum (2002), and will include details of:

- Shape
- Dimensions
- Type of stone used
- Iconography (an illustration may best describe these features)
- Inscription (verbatum record of inscription; font of the lettering)
- Stylistic type

E.2 Relevant industry standards and guidelines

E.2.1 Cox, M, 2001 Crypt archaeology. An approach. IFA Paper No. 3

E.2.2 Mays, S, 2005 Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England. Church or England and English Heritage.

E.2.3 McKinley, J, and Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains, IFA Technical Paper No. 13

E.2.4 McKinley, J, 2004 Compiling a skeletal inventory: cremated human bone. In Brickley, M, and McKinley, J (eds) Guidelines to the Standards for Recording Human Remains, IFA Technical Paper No. 7. 9-13.

E.2.5 Mytum, H, 2000 Recording and Analysing Graveyards. CBA Handbook No. 15.

E.2.6 Reeve, J, and Adams, M, 1993 The Spitalfields Project. Volume I – The Archaeology Across the Styx. CBA Research Report No. 85

E.2.7 The Human Tissue Act 2004

E.3 Relevant OA manual and other supporting documentation

E.3.1 Loe, L, 2008 The Treatment of Human Remains in the Care of Oxford Archaeology. Oxford Archaeology internal policy document.

E.3.2 Excavating and recording human remains. Oxford Archaeology internal guidelines document.

Appendix F. Reporting

F.1 Summary of Standard methodology

F.1.1 For Watching Briefs and Evaluations, the style and format of the report will be determined by OA, but will include as a minimum the following:

- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

F.1.2 For Excavations, a Post-Excavation Assessment and Project Design will generally be prepared, as prescribed by English Heritage Management of Research Projects in the Historic Environment (MoRPHE) 2006, Section 2.3. This will include a Project Description containing:

- A summary description and background of the project.
- A summary of the quantities and assessment of potential for analysis of the information recovered for each category of site, finds, dating and environmental data. Detailed assessment reports will be contained within appendices.

- An explicit statement of the scope of the project design and how the project relates to any other projects or work preceding, concurrent with or following on from it.
- A statement of the research aims of the fieldwork and an illustrated summary of results to date indicating to what extent the aims were fulfilled.
- A list of the project aims as revised in the light of the results of fieldwork and the current post-excavation assessment process.

F.1.3 A section on Resources and Programming will also be produced, containing:

- A list of the personnel involved indicating their qualifications for the tasks undertaken, along with an explanation of how the project team will communicate, both internally and externally.
- A list of the methods which will be used to achieve the revised research aims.
- A list of all the tasks involved in using the stated methods to achieve the aims and produce a report and research archive in the stated format, indicating the personnel and time in days involved in each task. Allowance should be made for general project-related tasks such as monitoring, management and project meetings, editorial and revision time.
- A cascade or Gantt chart indicating tasks in the sequence and relationships required to complete the project. Due allowance will be made for leave and public holidays. Time will also be allowed for the report to be read by a named academic referee as agreed with the County Archaeological Officer, and by the County Archaeological Officer.
- A report synopsis indicating publisher and report format, broken down into chapters, section headings and subheadings, with approximate word lengths and numbers and titles of illustrations per chapter. The structure of the report synopsis should explicitly reflect the research aims of the project.

F.1.4 The Project Design will be submitted to the County Archaeological Officer or equivalent for agreement.

F.1.5 Under certain circumstances (eg with very small mitigations), and as agreed with the County Archaeological Officer or equivalent, a formal Assessment and Project Design may not be required and either the project will continue straight to full analysis, or a simple Project Proposal (MoRPHE 2006 Section 2.1) will be produced prior to full analysis. This proposal may include:

- A summary of the background to the project
- Research aims and objectives
- Methods statement outlining how the aims and objectives will be achieved
- An outline of the stages, products and tasks
- Proposed project team
- Estimated overall timetable and budget if appropriate.

F.1.6 Once the post-excavation Project Design or Project Proposal has been accepted, the County Archaeological Officer or his appointed deputy will monitor the progress of the post-excavation project at agreed points. Any significant variation in the project design will be agreed with the County Archaeological Officer.

F.1.7 The results of the project will be published in an appropriate archaeological journal or monograph. The appropriate level of publication will be dependent on the significance of the fieldwork results and will be agreed with the County Archaeological Officer. An OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for each project as per English Heritage guidelines.

F.2 Relevant industry standards and guidelines

F.2.1 Oxford Archaeology (OA) adheres to the national standards in post-excavation procedure as outlined in English Heritage's Management of Research Projects in the Historic Environment (MoRPHE; EH 2006). Furthermore, all post-excavation projects take into account the appropriate regional research frameworks as well as national research agendas such as the Framework for Historic Environment Activities & Programmes in English Heritage (SHAPE; EH 2008).

Appendix G. List of specialists regularly used by OA

G.1.1 Below are two tables, one containing 'in-house' OA specialists, and the other containing a list of specialists who are regularly used by OA.

Internal archaeological specialists used by OA

Specialist	Specialism	Qualifications
Lisa Brown	Early Prehistoric pottery	BA, PGDip, Mlitt, MIfA
Paul Booth	Iron Age and Roman pottery	BA, FSA, MIfA
John Cotter	Medieval and Post Medieval pottery, Clay Pipe and CBM	BA (Hon.), MIfA
Cynthia Poole	CBM and Fired Clay	BA (Hon.), MSc
Edward Biddulph	Roman Pottery	BA (Hon.), MA, MIfA
Ian Scott	Metalwork and Glass	BA (Hon.)
Dan Stansbie	Roman Pottery	BA (Hon.), MA, AIfA
Leigh Allen	Metalwork and worked bone	BA (Hon.), PGDip
Dr Ruth Shaffrey	Worked stone artefacts	BA, PhD
Julian Munby	Architectural Stone	BA, FSA
Dr Rebecca Nicholson	Fish and Bird Bone	BA (Hon.), MA, D.Phil, MIfA, FSA Scot
Elizabeth Huckerby	Pollen and waterlogged plant remains	BA, MSc, MIfA
Lena Strid	Animal bone	MA
Dr Wendy Smith	Charred and waterlogged plant remains	BA, MSc, PhD, MIfA
Andrew Bates	Animal Bone	BA, MA
Dr Denise Druce Pollen	Charred plant remains and charcoal	BA, PhD, MIfA
Liz Stafford	Geoarchaeology and land snails	BA, Msc

Specialist	Specialism	Qualifications
Nicola Scott	Archaeological archive deposition	BA
Mike Donnelly	Flint	Bsc, MIfA

External archaeological specialists regularly used by OA

Specialist	Specialism	Qualifications
Lynne Keys	Slag	BA (Hon.)
Quita Mould	Leather	BA, MA
Penelope Walton Rogers, The Anglo Saxon Laboratory	Identification of Medieval Textiles	FSA, Dip.Acc
Dana Goodburn Brown	Conservation	BSc (Hon.), BA, MSc
Steve Allen, York Archaeological Trust	Conservation	BA, MA, MAAIS
Dr Richard McPhail	Soils, especially Micromorphology	BA (Hon.), MSc, PhD
Dana Challinor	Charcoal	MA (Hon.), MSc
Dr Nigel Cameron	Diatoms	BSc, MSc, PhD
Dr David Smith	Insects	BA (Hon.), MA, PhD
Professor Adrian Parker	Phytoliths and pollen	Bsc (Hons.), D.Phil
Dr David Starley	Slag	BSc, PhD
Wendy Carruthers	Charred and waterlogged plant remains	
Dr Sylvia Peglar	Pollen	PhD
Dr John Whittaker	Ostracods and Foraminifera	BA (Hons), PhD
Dr John Crowther	Soil Chemistry	MA, PhD
Dr Martin Bates	Geoarchaeology	Bsc, PhD
Professor Mark Robinson	Insects, molluscs, waterlogged plant remains	MA, PhD
Dr Dan Miles	Dendrochronology	D.Phil, FSA
Dr Jean-luc Schwenninger	Optically Stimulated Luminescence Dating	PhD
Dr David Higgins	Clay Pipe	BA, PhD, MIfA
Dr Hugo Lamdin	Flint	BSc, PhD, FSA Scot, MIfA

Specialist	Specialism	Qualifications
Wymark		

APPENDIX H. DOCUMENTARY ARCHIVING

H.1 Standard methodology – summary

H.1.1 The documentary archive constitutes all the written, drawn, photographic and digital records relating to the set up, fieldwork and post-excavation phases of the project. This documentary archive, together with the artefactual and environmental ecofact archive collectively forms the record of the site. The report is part of the documentary archive, and the archive must provide the evidence that supports the conclusions of the report, but the archive may also include data which exceeds the limitations of research parameters set down for the report and which could be of significant value to future researchers.

H.1.2 At the outset of the project OA Archive department will contact the relevant local receiving museum or archive repository to notify them of the imminent start of a new fieldwork project in their collecting area. Relevant local archiving guidelines will be observed and site codes, which integrate with the receiving repository, will be agreed for labelling of archives and finds.

H.1.3 During the course of the project the Archive department will assist the Project Manager in the management of the archive including the cataloguing and development technique suitable for photographic archive requirements.

H.1.4 The site archive will be security copied either by microfilming and the master sent to English Heritage as part of the National Archaeological Record or it will be digitally scanned and stored in a dedicated archive section of the OA computer network. A copy of the work as microfiche diazo or .pdf/a on disk will be sent to the receiving museums with the hard copy. This will act as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.

H.1.5 Born digital data where suitable will be printed to hard copy for the receiving museum but if the format is such that it needs maintaining in digital form a copy will be sent to the receiving museum by CD. Back-up copies will be stored on the OA digital network and or posted to the ADS in accordance with AAF & ADS guidelines. In most cases a digital copy of the report will be included in the OASIS project library hosted by ADS.

H.1.6 Prior to deposition the Archive department will contact the museum regarding the size and content of the archive and discuss any retention and dispersal policies which may be applicable in line with local and SMA Guidelines ' Selection, Retention & Dispersal of Archaeological Collections' 1993

H.1.7 The site archive will then be deposited with the relevant receiving museum or repository at the earliest opportunity unless further archaeological work on the site is expected. The documentary archive will include correspondence detailing landowner consent to deposit the artefacts and any copyright licences in accordance with the receiving museum guidelines.

H.1.8 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide a licence to the client in all matters directly relating to the project as described in the Written Scheme of Investigation.

H.1.9 OA will advise the client of any such materials supplied in the course of projects which are not OA's copyright.

H.1.10 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. OA further undertake to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

H.2 Relevant industry standards and guidelines

H.2.1 At the end of the project the site archive will be ordered, catalogued, labelled and conserved and stored according to the following national guidelines:

H.2.2 The 2007 AAF guide Archaeological Archives A Guide to best practice in creation, compilation, transfer and curation. Brown D.

H.2.3 The IFA Standard & Guidance for the creation, compilation, transfer and deposition of archaeological archives

H.2.4 The UKIC's Guidelines for the preparation of excavation archives for long-term storage

H.2.5 The MGC's Standards in the museum care of archaeological collections

H.2.6 Local museum guidelines such as Museum of London Guidelines: (http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/DeposResource) will be adopted where appropriate to the archive collecting area.

H.2.7 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, English Heritage 1991.

H.3 Relevant OA manual and other supporting documentation

H.3.1 The OA Archives Policy.

Appendix I. Health and Safety

I.1 Summary of Standard Methodology

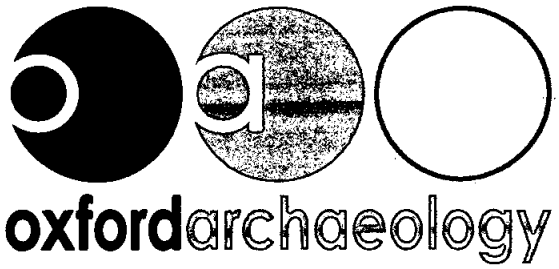
I.1.1 All work will be undertaken in accordance with the OA Health and Safety Policy (Revision 13, August 2009), the OA Site Safety Procedures Manual, a site-specific Risk Assessment and, if required, Safety Plan or Method Statement. Copies of the site-specific documents will be submitted to the client or their representative for approvals prior to mobilisation, and all relevant H and S documentation will be available on site at all times. The Health and Safety documentation will be read in conjunction with the project WSI.

I.1.2 Where a site is covered by the The Construction (Design and Management) Regulations (2007), all work will be carried out in accordance with the Principal Contractor's Construction Phase Plan.

I.1.3 All work will be carried out according to the requirements of all relevant legislation and guidance, including, but not exclusively.

- The Health and Safety at Work Act (1974),
- Management of Health and Safety at Work Regulations (1999),

- Manual Handling Operations Regulations 1992 (as amended in 2002),
- The Construction (Design and Management) Regulations (2007), and
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (1995).



Head Office/Registered Office/
OA South

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263800
f: +44 (0) 1865 793496
e: info@oxfordarch.co.uk
w:http://thehumanjourney.net

OA North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541000
f: +44 (0) 1524 848606
e: oanorth@thehumanjourney.net
w:http://thehumanjourney.net

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: oaeast@thehumanjourney.net
w:http://thehumanjourney.net

CLAYDON
STARVEALL FARM
CLSTRL 12

BOX 1 FILE 3.

B SITE DIARY

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:
Classification of material

	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	✓
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Oxford Archaeology

DAILY JOURNAL

SITE CODE	SITE NAME	DATE
CLSTRL 12	Stanwell Farm Pits	Mon 16/7/12

Project Manager	Visitors	Weather
T. Allen	/	Heavy rain

Area stripped by plant: ..... m^2 Plant type

Task descriptions:
Enter the number of staff days in increments of 0.5 (half) days for each of the tasks used during the day. If task 07 or 08 is used please describe the task done.

Task number and description	Staff days	Task number and description	Staff days
01 General supervision/ management		02 Surface cleaning	
03 Planning		04 Surveying/levelling	
05 Excavation/recording	1	06 Machine supervision	
07 Other		08 Other	

Standing time: list numbers of hours for each member of staff and give full details

Name Steve Leech Details 7:00 → 5:00

On Site 8am - Finished recording trenches

- V. Heavy rain - Tr (1-3) Still flooded (4-6) OK

Comments (continue on reverse if necessary)

Oxford Archaeology

DAILY JOURNAL

SITE CODE	SITE NAME	DATE
CLSTBL 12	Harvell Farm Glos	Tue 17/4/12

Project Manager	Visitors	Weather
Tim Allen	Tim Allen 8:30 → 11:30	Fine

Area stripped by plant: ..... m² Plant type

Task descriptions:
Enter the number of staff days in increments of 0.5 (half) days for each of the tasks used during the day. If task 07 or 08 is used please describe the task done.

Task number and description	Staff days	Task number and description	Staff days
01 General supervision/ management		02 Surface cleaning	
03 Planning		04 Surveying/levelling	
05 Excavation/recording	1	06 Machine supervision	
07 Other		08 Other	

Standing time: list numbers of hours for each member of staff and give full details

Name Dave Leach Details 7:00 → 5:00

On Site 8am - Dial levels on all trenches.
Started pumping Tr 1-3
Marked on R+F on Trench plans
- 3pm all trenches pumped out - but still refilling with Water

Comments (continue on reverse if necessary)

Oxford Archaeology

DAILY JOURNAL

SITE CODE	SITE NAME	DATE
CLSTBL 12	Stanwell Farm Glos	18/7/12

Project Manager	Visitors	Weather
Tim Allen		V. Heavy Rain

Area stripped by plant: ..... m² Plant type

Task descriptions:
Enter the number of staff days in increments of 0.5 (half) days for each of the tasks used during the day. If task 07 or 08 is used please describe the task done.

Task number and description	Staff days	Task number and description	Staff days
01 General supervision/ management		02 Surface cleaning	
03 Planning		04 Surveying/levelling	
05 Excavation/recording		06 Machine supervision + pumping	1
07 Other		08 Other	

Standing time: list numbers of hours for each member of staff and give full details

Name Steve Leach Details 7:00 →

Started pumping Tr 1 - So wet Generator did not restart

Machine arrived + backfilled Tr 4-6 by 11 am

Decided with TA Backfill rest with machine whilst pushing water to end - then remove water with machine + backfill rest of trench - this method employed Tr 1-3

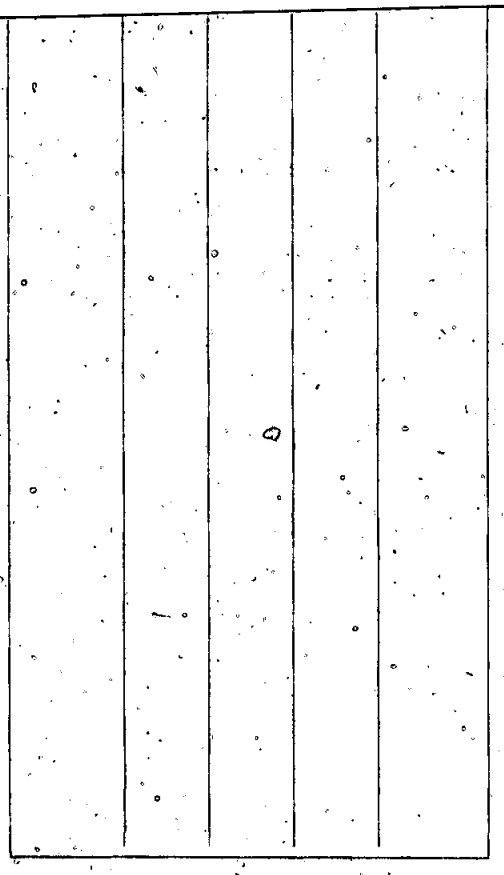
Finished backfilling 4pm

Comments (continue on reverse if necessary)

CLAYDON
STARVE ALL FARM
CLSTRL 12

BOX 1 FILE 4

PRIMARY CONTENT DATA



OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:

Classification of material	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	✓
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Oxford Archaeology

LEVELS REGISTER

SITE CODE CLSTRL12 | SITE NAME Stowell Farm Close | SHEET NO 1

TBM	Backsite	Instrument Height (IH) (TBM+Backsight)	Level number	Foresight	Reduced Level (IH-Foresight)	Comments/Context No(s)/ Small Find No(s)/Plan or Section No(s)
28.88	1.04	~~29.92~~				
			1 (S)	~~1.85~~	28.07	P.100 Tr 1
			2 (S)	~~2.43~~	27.49	↓
			3 (N)	1.88	28.04	
			4 (N)	2.45	27.47	↓
			1 (S)	1.48	28.44	P.200 Tr 2
			2 (S)	1.96	27.96	↓
			3	1.73	28.19	
			4	2.18	27.74	↓
			1	1.52	28.40	P.300 Tr 3
			2	2.03	27.89	↓
			3	1.80	28.12	
			4	2.44	27.48	↓
			1 (N)	1.42	28.50	P.400 Tr 4
			2 (N)	2.07	27.85	↓
			3 (S)	1.07	28.85	
			4 (S)	1.39	28.53	↓
			1 (S)	1.12	28.80	P.500 Tr 5
			2 (S)	1.60	28.32	↓
			3 (N)	~~1.89~~	28.77	
			4 (N)	1.52	28.40	↓
			1 (S)	1.12	28.80	P.600 Tr 6
			2 (S)	1.60	28.32	↓
			3 (N)	0.81	29.11	
			4 (N)	1.35	28.57	↓

Oxford Archaeology

Oxford Archaeology

SITE CLSTRL 12	EVALUATION TRENCH RECORD SHEET	Trench No. 1

Trench orientation NE/SW	Grid reference	Field No.

Length 36m	Width 1.6	Average depth to top of natural 0.55m	Was archaeology present ? No
Plan Nos ? 100		Section Nos ? 100	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(102)	Present topsoil/ploughsoil Grey/brown Silty clay - 0.3m thick
(101)	Subsoil - Orange/brown Silty clay - 0.2m thick
(100)	Natural (describe) Orange clay loam

Brief description of archaeology/comments

Trench devoid of any archaeology. Ridge + furrow earthworks are present in all trenches (1-6) and lay in a roughly E-W direction and formed part of the topsoil/ploughsoil horizon.

Recorder [illegible]

Date 13/7/12

Oxford Archaeology

Oxford Archaeology

SITE CLSTRL 12	EVALUATION TRENCH RECORD SHEET	Trench No. 2

Trench orientation N/S		Grid reference	Field No.
Length 36m	Width 1.6m	Average depth to top of natural 0.45m	Was archaeology present ? No
Plan Nos ? 200		Section Nos ? 200	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(202)	Present topsoil/ploughsoil - Grey brown silty clay - 0.3m thick
(201)	Subsoil - Orange/brown silty clay 0.2m thick
(200)	Natural (describe) Orange clay loam

Brief description of archaeology/comments

Trench devoid of any archaeology
R+F

Recorder S

Date 13/7/17

Oxford Archaeology

Oxford Archaeology

SITE CLSTRL 12	EVALUATION TRENCH RECORD SHEET	Trench No. 3

Trench orientation E/W	Grid reference	Field No.

Length 36m	Width 1.6	Average depth to top of natural 0.5	Was archaeology present ? No
Plan Nos ? 300		Section Nos ? 300	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(302)	Present topsoil/ploughsoil Grey/brown Silty/clay 0.3m thick
(301)	Subsoil - Orange/brown Silty clay 0.2m thick
(300)	Natural (describe) Orange clay bias

Brief description of archaeology/comments

Trench devoid of any archaeology

R+F

Recorder S

Date 16/7/12

Oxford Archaeology

Oxford Archaeology

SITE CLSTRL 12	EVALUATION TRENCH RECORD SHEET	Trench No. 4

Trench orientation NE/SW	Grid reference	Field No.

Length 36m	Width 1.6	Average depth to top of natural 0.7m	Was archaeology present ? No
Plan Nos ? 400		Section Nos ? 400	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(402)	Present topsoil/ploughsoil Dark Grey Brown Silty clay 0.5m thick
(401)	Subsoil - Orange/brown Silty clay - 0.2m thick
-	Bedrock
(400)	Natural (describe) Orange clay Lias overlying Grey Lias

Brief description of archaeology/comments

No archaeology visible in trench
R+F
Natural feature at NE end of trench investigated - pocket of Grey Lias showing through orange Lias

Recorder [illegible]

Date 16/7/12

Oxford Archaeology

Oxford Archaeology

SITE CLSTRL 12	EVALUATION TRENCH RECORD SHEET	Trench No. 5

Trench orientation NE/SW	Grid reference	Field No.

Length 36m	Width 1.6	Average depth to top of natural 0.5m	Was archaeology present ? No
Plan Nos ? 500		Section Nos ? 500	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(502)	Present topsoil/ploughsoil Grey/Brown Silty clay - 0.3m thick
(501)	Subsoil - Orange/Brown Silty clay - 0.2m thick
(500)	Natural (describe) Orange clay loam

Brief description of archaeology/comments

No archaeology visible in trench

R+F

Recorder SL

Date 16/7/12

Oxford Archaeology

Oxford Archaeology

SITE	EVALUATION TRENCH RECORD SHEET	Trench No.
CLSTRL 12		6

Trench orientation NE/SW	Grid reference	Field No.

Length 36m	Width 1.6m	Average depth to top of natural 0.6m	Was archaeology present ? No
Plan Nos ? 600		Section Nos ? 600	Were finds recovered ? No

If a trench contains only a small number of contexts, and requires only one or two plans and sections, list plans and sections on this sheet. If the trench contains large numbers of contexts use a conventional context check list and plan and section list sheets as necessary.

Context check list / Descriptions

Context No.	Description
(602)	Present topsoil/ploughsoil - Dark Grey/Brown Silty clay 0.4m thick
(601)	Subsoil - Orange/Brown Silty clay - 0.2m thick
(600)	Natural (describe) Orange clay loam

Brief description of archaeology/comments

No Archaeology Visible in trench
R+F

Recorder [signature]

Date 16/7/12

CLANDON
STARVEALL FARM
CLSTRL12

Box 1 FILES

B. SURVEY REPORTS.

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:

Classification of material	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	✓
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

STRATASCAN

Geophysical Survey Report

Starvealls Farm, Tewkesbury

for

Oxford Archaeology

July 2012

J3128

Bryony P Marsh BA
Glenn Rose BA (Hons)

REGISTERED ORGANISATION IfA

Document Title:	**Geophysical Survey Report Starvealls Farm, Tewkesbury**
Client:	**Oxford Archaeology**
Stratascan Job No:	**J3128**
Techniques:	**Detailed magnetic survey (gradiometry) Earth resistance survey**
National Grid Ref:	**SO 940 317**

Plate 1: The survey area viewed from the west, looking east.

Field Team:	**Adam Cooper Msc, Tim Lewis BA (Hons)**
Project Manager:	**Simon Haddrell B.Eng (Hons) AMBCS PIFA**
Report written by:	**Glenn Rose BA (Hons) and Bryony P Marsh BA**
CAD illustration by:	**Bryony P Marsh BA & Simon Haddrell B.Eng (Hons) AMBCS PIFA**
Checked by:	**Peter Barker C.Eng MICE MCIWEM MIFA FCInstCES**

Stratascan Ltd.
Vineyard House
Upper Hook Road
Upton upon Severn
WR8 0SA
Tel: 01684 592266
Fax: 01684 594142
Email: ppb@stratascan.co.uk
www.stratascan.co.uk

1 SUMMARY OF RESULTS

The gradiometer and earth resistance data collected across approximately 1.6ha of land at Starvealls Farm in Tewkesbury has identified little evidence of archaeological activity within the survey area. Several positive linear anomalies have been identified and are of possible archaeological origin; most interestingly a sub circular response in the centre of the site, however earth resistance data targeted upon this region has not detected a comparable anomaly in that location. In addition, a scattering of discrete responses are noted within the gradiometer data which may be associated with former archaeological pits. Linear responses of similar orientation are noted in both the gradiometer and earth resistance data sets and are indicative of ridge and furrow agricultural activity.

2 INTRODUCTION

2.1 Background synopsis

Stratascan were commissioned to undertake a geophysical survey of approximately 1.6ha of agricultural land to the south east of Tewkesbury. This survey forms part of an archaeological investigation being undertaken by Oxford Archaeology.

2.2 Site location

The site is located to the south east of Tewkesbury at OS ref. SO 940 317.

2.3 Description of site

The survey area consists of approximately 1.6ha of farmland, in use as pasture during the survey.

The underlying geology is known as the Charmouth Mudstone Formation (British Geological Survey website 2012). No drift geology has been recorded on the site. (British Geological Survey website 2012).

The overlying soils are known as Evesham 2 which are typical calcareous pelosol soils. These consist of slowly permeable calcareous clayey soils, some slowly permeable seasonally waterlogged non-calcareous clayey soils (Soil Survey of England and Wales, Sheet 03, Midland and Western England).

2.4 Site history and archaeological potential

No specific details were made available to Stratascan.

2.5 Survey objectives

The objective of the survey was to locate any anomalies that may be of archaeological significance prior to development.

2.6 Survey methods

Detailed magnetic survey was selected as the most appropriate survey technique for this site. An additional targeted earth resistance data set was also collected across the most interesting gradiometer anomalies. More information regarding these techniques is included in the Methodology section below.

3 METHODOLOGY

3.1 Date of fieldwork

The gradiometer survey was carried out over one day on the 20 June 2012. The subsequent targeted earth resistance data was collected on the 29th June 2012. Weather conditions were wet during the initial fieldwork, but fine during the earth resistance survey.

3.2 Grid locations

The location of the survey grids has been plotted in Figure 1 together with the referencing information. Grids were set out using a Leica Smart Rover RTK GPS.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. A SmartNet RTK GPS uses Ordnance Survey's network of over 100 fixed base stations to give an accuracy of around 0.01m.

3.3 Description of techniques and equipment configurations

Gradiometer
Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument.

The mapping of the anomaly in a systematic manner will allow an estimate of the type of material present beneath the surface. Strong magnetic anomalies will be generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and

ditches can be seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil.

To illustrate this point, the cutting and subsequent silting or backfilling of a ditch may result in a larger volume of weakly magnetic material being accumulated in the trench compared to the undisturbed subsoil. A weak magnetic anomaly should therefore appear in plan along the line of the ditch.

The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The instrument consists of two fluxgates very accurately aligned to nullify the effects of the Earth's magnetic field. Readings relate to the difference in localised magnetic anomalies compared with the general magnetic background. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each gradiometer has a 1m separation between the sensing elements so enhancing the response to weak anomalies.

Earth resistance
This method relies on the relative inability of soils (and objects within the soil) to conduct an electrical current which is passed through them. As earth resistance is linked to moisture content, and therefore porosity, hard dense features such as rock will give a relatively high earth resistance response, while features such as a ditch which retains moisture give a relatively low response.

The resistance meter used was an RM15 manufactured by Geoscan Research incorporating a mobile Twin Probe Array. The Twin Probes are separated by 0.5m and the associated remote probes were positioned approximately 15m outside the grid. The instrument uses an automatic data logger which permits the data to be recorded as the survey progresses for later downloading to a computer for processing and presentation. Though the values being logged are actually resistances in ohms they are directly proportional to earth resistance (ohm-metres) as the same probe configuration was used through-out.

3.4 Sampling interval, depth of scan, resolution and data capture

3.4.1 *Sampling interval*

Gradiometer
Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid. All traverses were surveyed in a "zigzag" mode.

Earth resistance
Readings were taken at 1.0m centres along traverses 1.0m apart. This equates to 400 sampling points in a full 30m x 30 grid. All traverses were surveyed in a "zigzag" mode.

3.4.2 *Depth of scan and resolution*

Gradiometer
The Grad 601 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. The collection of data at 0.5m centres provides an optimum methodology for the task balancing cost and time with resolution.

Earth resistance
The 0.5m probe spacing of a twin probe array has a typical depth of penetration of 0.5m to 1.0m. The collection of data at 1m centres with a 0.5m probe spacing provides an optimum resolution for the task.

3.4.3 *Data capture*

Gradiometer
The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each job, data is transferred to the office for processing and presentation.

Earth resistance
The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each job, data is transferred to the office for processing and presentation.

3.5 Processing, presentation of results and interpretation

3.5.1 *Processing*

Gradiometer
Processing is performed using specialist software known as *Geoplot 3* and in-house software. This can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids.

The following schedule shows the basic processing carried out on all minimally processed magnetometer data used in this report:

1. *Destripe* (Removes striping effects caused by zero-point discrepancies between different sensors and walking directions)

2. *Destagger* (Removes zigzag effects caused by inconsistent walking speeds on sloping, uneven or overgrown terrain)

In addition, the following process was carried out on all the processed gradiometer data included in the report:

3. *Interpolation* (Increases the number of data points within a survey, this has the effect of smoothing the appearance of the data).

Earth resistance
The processing was carried out using specialist software known as *Geoplot 3* and involved the 'despiking' of high contact resistance readings and the passing of the data though a high pass filter. This has the effect of removing the larger variations in the data often associated with geological features. The nett effect is aimed at enhancing the archaeological or man-made anomalies contained in the data.

The following schedule shows the processing carried out on the processed resistance plots.

Despike	*X radius = 1*
	Y radius = 1
	Spike replacement
High pass filter	*X radius = 10*
	Y radius = 10
	Weighting = Gaussian

3.5.2 *Presentation of results and interpretation*

Gradiometer
The presentation of the data for the survey involves a print-out of the minimally processed data both as a grey scale (Figure 3) and colour plot (Figure 4), together with a grey scale plot of the processed data (Figure 5) and the abstraction and interpretation of gradiometer anomalies (Figure 6).

Earth resistance
The presentation of the data for the site involves a print-out of the minimally processed data as a grey scale plot. Anomalies have also been identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing (Figure 7).

4 RESULTS

The following list of numbered anomalies refers to numerical labels on the interpretation plots (Figures 6-8).

Gradiometer data:

Probable Archaeology

1. A series of widely spaced parallel linear anomalies have been noted across the centre of the site and have been classified as probable archaeology relating to ridge and furrow cultivation.

Possible Archaeology

2. A weak sub circular positive linear anomaly has been identified in the centre of the survey area. This type of response is indicative of a former cut feature such as a ditch and is of possible archaeological origin.

3. Two further positive linear anomalies are seen on the eastern field boundary and may also be of archaeological origin.

4. A scattering of discrete positive responses can be seen across the site and provide weak evidence for in-filled anomalies such as archaeological pits, however these responses may also be of natural origin.

5. A large number of magnetic 'spikes' (strong focussed values with associated antipolar response) can be seen across the survey area and indicate ferrous metal objects. Although most of these are likely to be modern rubbish, some may be of archaeological interest. Particular attention may be paid to those found in association with other potentially archaeological anomalies.

Other Anomalies

6. Areas of magnetic disturbance are the result of substantial nearby ferrous metal objects such as fences and underground services. These effects can mask weaker archaeological anomalies, but on this site are only present alongside the northern and south eastern field boundaries and have not affected a significant proportion of the area.

7. Five weak positive linear trends, of an uncertain origin, have been identified in the centre and south east of the survey area.

Earth Resistance data:

Probable Archaeology

8. Regular spaced linear anomalies can be seen in the earth resistance data, following a roughly east west alignment. These anomalies are indicative of agricultural activity – probably ridge and furrow cultivation.

Possible Archaeology & Other Anomalies

No further anomalies of possible archaeological or other origin have been noted within the earth resistance data.

5 CONCLUSION

The gradiometer and earth resistance data collected from Starvealls Farm in Tewkesbury has identified little evidence of anomalies indicative of archaeological activity. Closely spaced linear responses have been identified in both the gradiometry and earth resistance data sets and are indicative of agricultural activity on the site. These responses are seen in a consistent orientation across both plots and are probably associated with ridge and furrow cultivation.

The positive curvilinear response noted in the centre of the site is possibly of archaeological interest, however this response is weak in amplitude and identified in relative isolation, therefore a different origin should not be discounted. Interestingly, the additional earth resistance data set collected across this anomaly has not identified any evidence of this feature. Further positive anomalies have been noted in the form of linear responses and possible former pits; however they are weak evidence of possible archaeological activity.

Five very weak linear trends have been identified in the centre and south of the site, appearing to run in a roughly north west, south east orientation. These responses are of uncertain origin.

6 REFERENCES

British Geological Survey, n.d., *website*: (http://www.bgs.ac.uk/opengeoscience/home.html?Accordion1=1#maps) Geology of Britain viewer.

Soil Survey of England and Wales, 1983. *Soils of England and Wales, Sheet 5 Southwest England.*

APPENDIX A – Basic principles of magnetic survey

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremnant* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremnance is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremnant archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

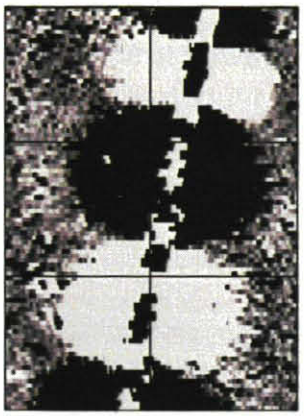
Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically either 0.5 or 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity, disturbance from modern services etc.

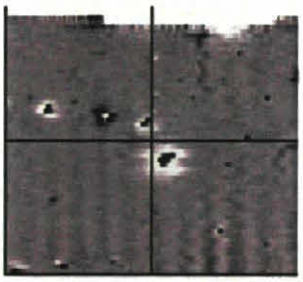
APPENDIX B – Glossary of magnetic anomalies

Bipolar



A bipolar anomaly is one that is composed of both a positive response and a negative response. It can be made up of any number of positive responses and negative responses. For example a pipeline consisting of alternating positive and negative anomalies is said to be bipolar. See also dipolar which has only one area of each polarity. The interpretation of the anomaly will depend on the magnitude of the magnetic field strength. A weak response may be caused by a clay field drain while a strong response will probably be caused by a metallic service.

Dipolar

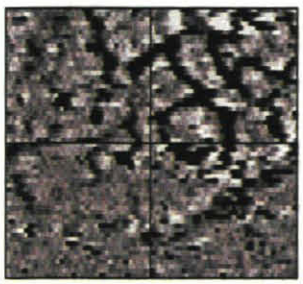


This consists of a single positive anomaly with an associated negative response. There should be no separation between the two polarities of response. These responses will be created by a single feature. The interpretation of the anomaly will depend on the magnitude of the magnetic measurements. A very strong anomaly is likely to be caused by a ferrous object.

Positive anomaly with associated negative response

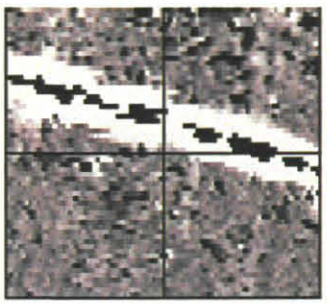
See bipolar and dipolar.

Positive linear



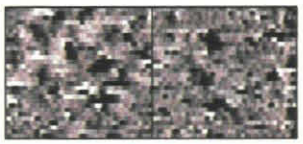
A linear response which is entirely positive in polarity. These are usually related to infilled cut features where the fill material is magnetically enhanced compared to the surrounding matrix. They can be caused by ditches of an archaeological origin, but also former field boundaries, ploughing activity and some may even have a natural origin.

Positive linear anomaly with associated negative response



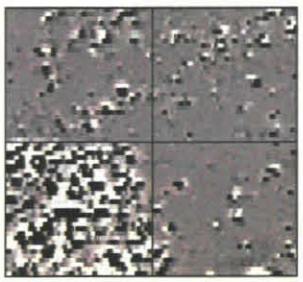
A positive linear anomaly which has a negative anomaly located adjacently. This will be caused by a single feature. In the example shown this is likely to be a single length of wire/cable probably relating to a modern service. Magnetically weaker responses may relate to earthwork style features and field boundaries.

Positive point/area



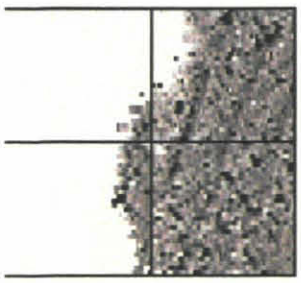
These are generally spatially small responses, perhaps covering just 3 or 4 reading nodes. They are entirely positive in polarity. Similar to positive linear anomalies they are generally caused by infilled cut features. These include pits of an archaeological origin, possible tree bowls or other naturally occurring depressions in the ground.

Magnetic debris



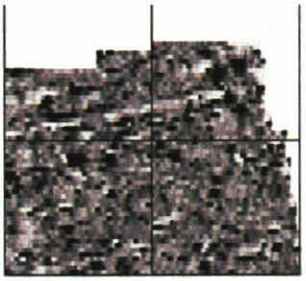
Magnetic debris consists of numerous dipolar responses spread over an area. If the amplitude of response is low (+/-3nT) then the origin is likely to represent general ground disturbance with no clear cause, it may be related to something as simple as an area of dug or mixed earth. A stronger anomaly (+/-250nT) is more indicative of a spread of ferrous debris. Moderately strong anomalies may be the result of a spread of thermoremnant material such as bricks or ash.

Magnetic disturbance



Magnetic disturbance is high amplitude and can be composed of either a bipolar anomaly, or a single polarity response. It is essentially associated with magnetic interference from modern ferrous structures such as fencing, vehicles or buildings, and as a result is commonly found around the perimeter of a site near to boundary fences.

Negative linear

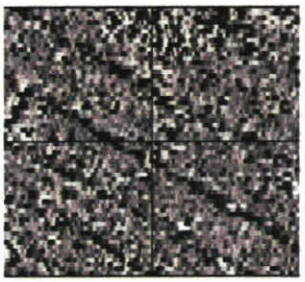


A linear response which is entirely negative in polarity. These are generally caused by earthen banks where material with a lower magnetic magnitude relative the background top soil is built up. See also ploughing activity.

Negative point/area

Opposite to positive point anomalies these responses may be caused by raised areas or earthen banks. These could be of an archaeological origin or may have a natural origin.

Ploughing activity



Ploughing activity can often be visualised by a series of parallel linear anomalies. These can be of either positive polarity or negative polarity depending on site specifics. It can be difficult to distinguish between ancient ploughing and more modern ploughing, clues such as the separation of each linear, straightness, strength of response and cross cutting relationships can be used to aid this, although none of these can be guaranteed to differentiate between different phases of activity.

Polarity

Term used to describe the measurement of the magnetic response. An anomaly can have a positive polarity (values above 0nT) and/or a negative polarity (values below 0nT).

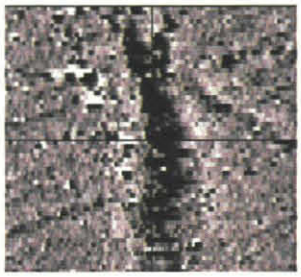
Strength of response

The amplitude of a magnetic response is an important factor in assigning an interpretation to a particular anomaly. For example a positive anomaly covering a $10m^2$ area may have values up to around 3000nT, in which case it is likely to be caused by modern magnetic interference. However, the same size and shaped anomaly but with values up to only 4nT may have a natural origin. Trace plots are used to show the amplitude of response.

Thermoremnant response

A feature which has been subject to heat may result in it acquiring a magnetic field. This can be anything up to approximately +/-100 nT in value. These features include clay fired drains, brick, bonfires, kilns, hearths and even pottery. If the heat application has occurred insitu (e.g. a kiln) then the response is likely to be bipolar compared to if the heated objects have been disturbed and moved relative to each other, in which case they are more likely to take an irregular form and may display a debris style response (e.g. ash).

Weak background variations



Weakly magnetic wide scale variations within the data can sometimes be seen within sites. These usually have no specific structure but can often appear curvy and sinuous in form. They are likely to be the result of natural features, such as soil creep, dried up (or seasonal) streams. They can also be caused by changes in the underlying geology or soil type which may contain unpredictable distributions of magnetic minerals, and are usually apparent in several locations across a site.

CLAYDON
STARVEALL FARM
CLSTRL 12

Box 1 File 6

B CATALOGUE of, & PRIMARY DRAWINGS.

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:
Classification of material

	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	✓
~~B: Site Data – Text:~~ Primary Drawings	✓
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Oxford Archaeology

PLAN RECORD SHEET

SITE CODE CLSTRL12 SITE NAME CLAYDON STARVEALL FARM

Plan number	Context(s)	Scale	Drawn by	Size (A1, A4, etc.)
100	TR 1	1:200	SL	A4
200	TR 2	"	"	"
300	TR 3	"	"	"
400	TR 4	"	"	"
500	TR 5	"	"	"
600	TR 6	"	"	"

Oxford Archaeology

SECTION RECORD SHEET

Site Name: CLAYDON STARVEALL FARM

Site Code: CLSTRL 12

Section No	Context(s)	Scale	Drawn By	Size A1, A4 etc	Plan (Sheet) No
200	200 - 202	1:20	SL	A4	200
100	100 - 102	"	"	"	100
300	300 - 302	"	"	"	300
400	400 - 402	"	"	"	400
500	500 - 502	"	"	"	500
600	600 - 602	"	"	"	600

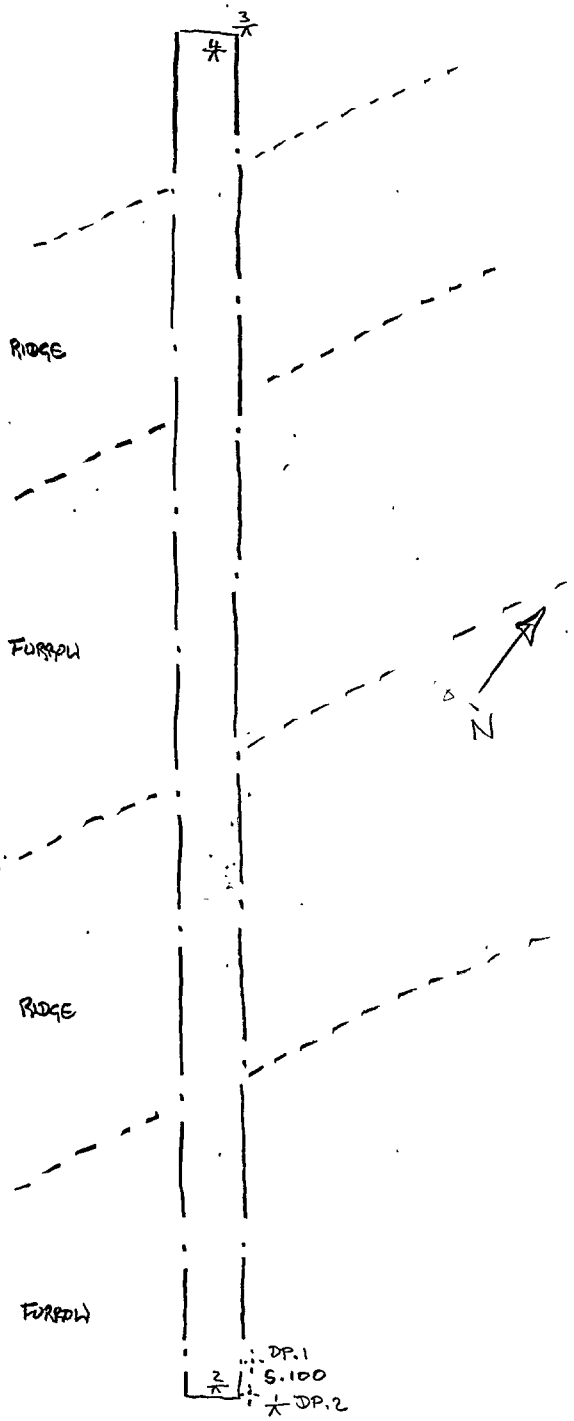
CLSTRL 12
P.100 TRENCH 1
SCALE - 1:200
SB 16/7/12

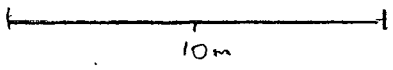
LEVELS - 1/A : 28.07m

2/A : 27.49 m

3/A : 28.04m

4/A : 27.47m





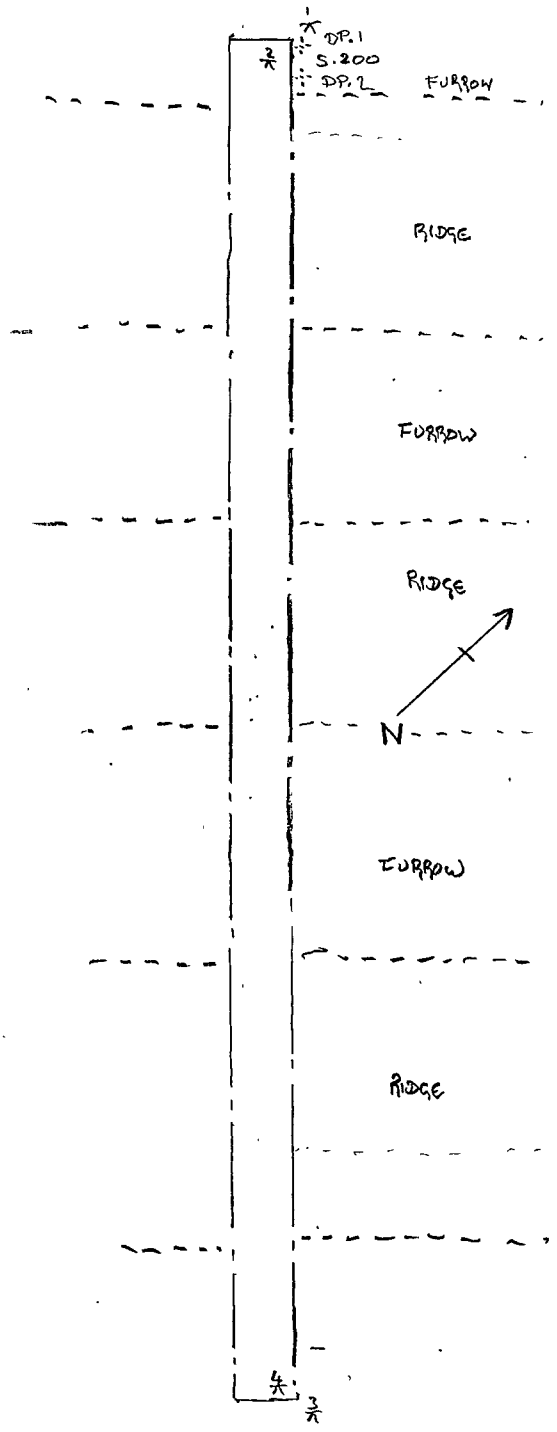
SCANNED
CJM
19/7/2012

CLSTRL 12

P.200 - PLAN OF TRENCH 2

SCALE - 1:200

SL 13/7/12



LEVELS - 1 : 28.44m

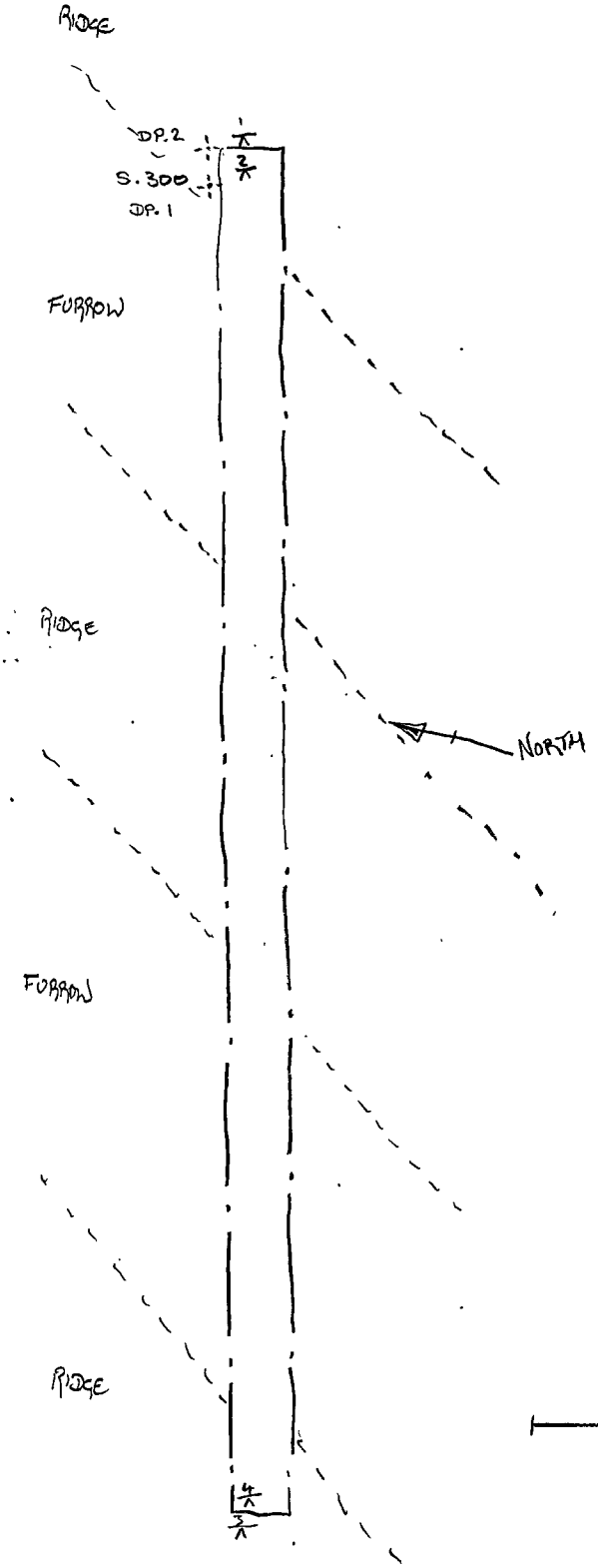
2 : 27.96 m

3 : 28.09 m

4 : 27.74 m

10 m

CLSTRL12
P.300 TRENCH 3
SCALE . 1:200
16/7/12 SL



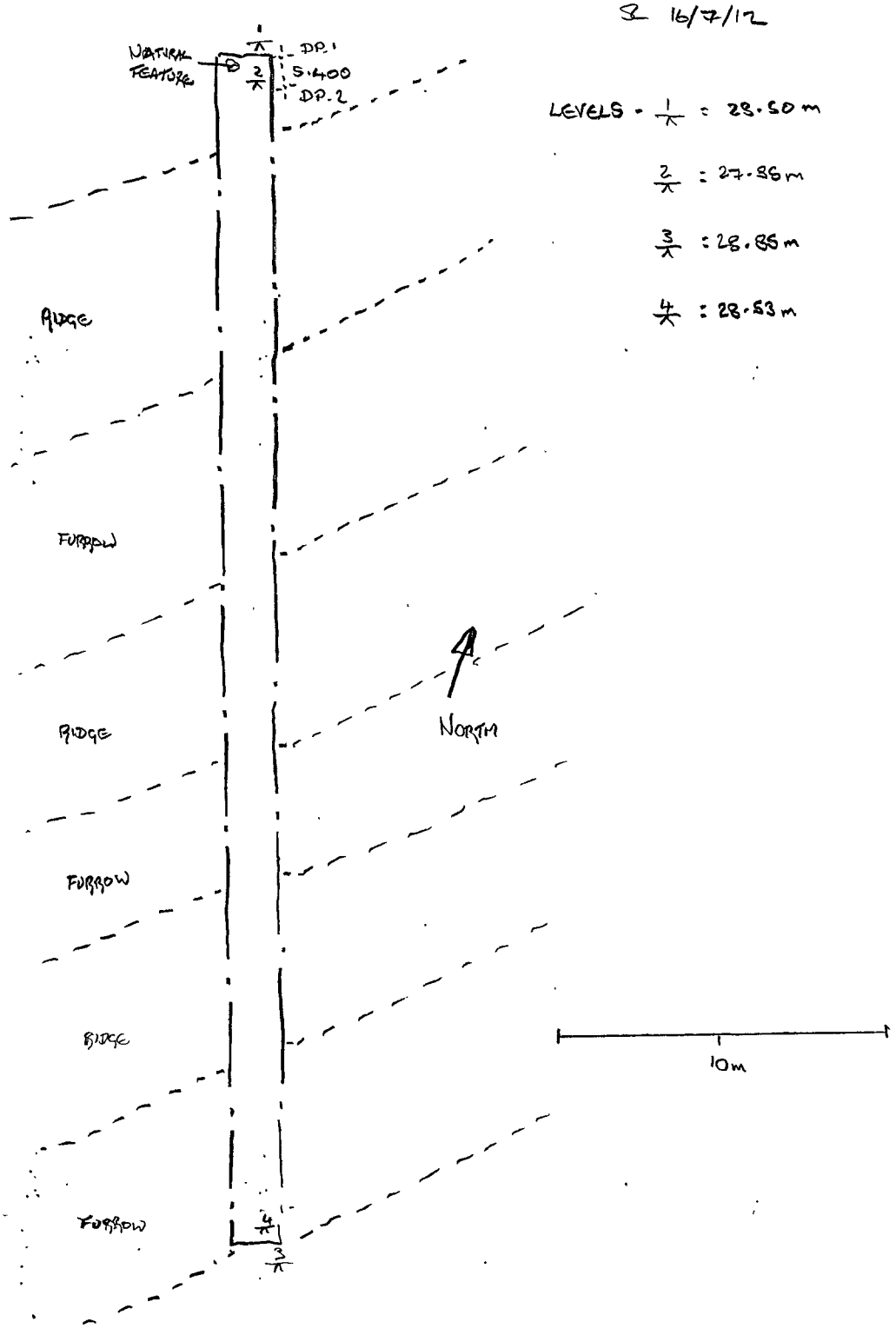
LEVELS - 1 = 28.40m

2 = 27.89m

3 = 28.12m

4 = 27.48m

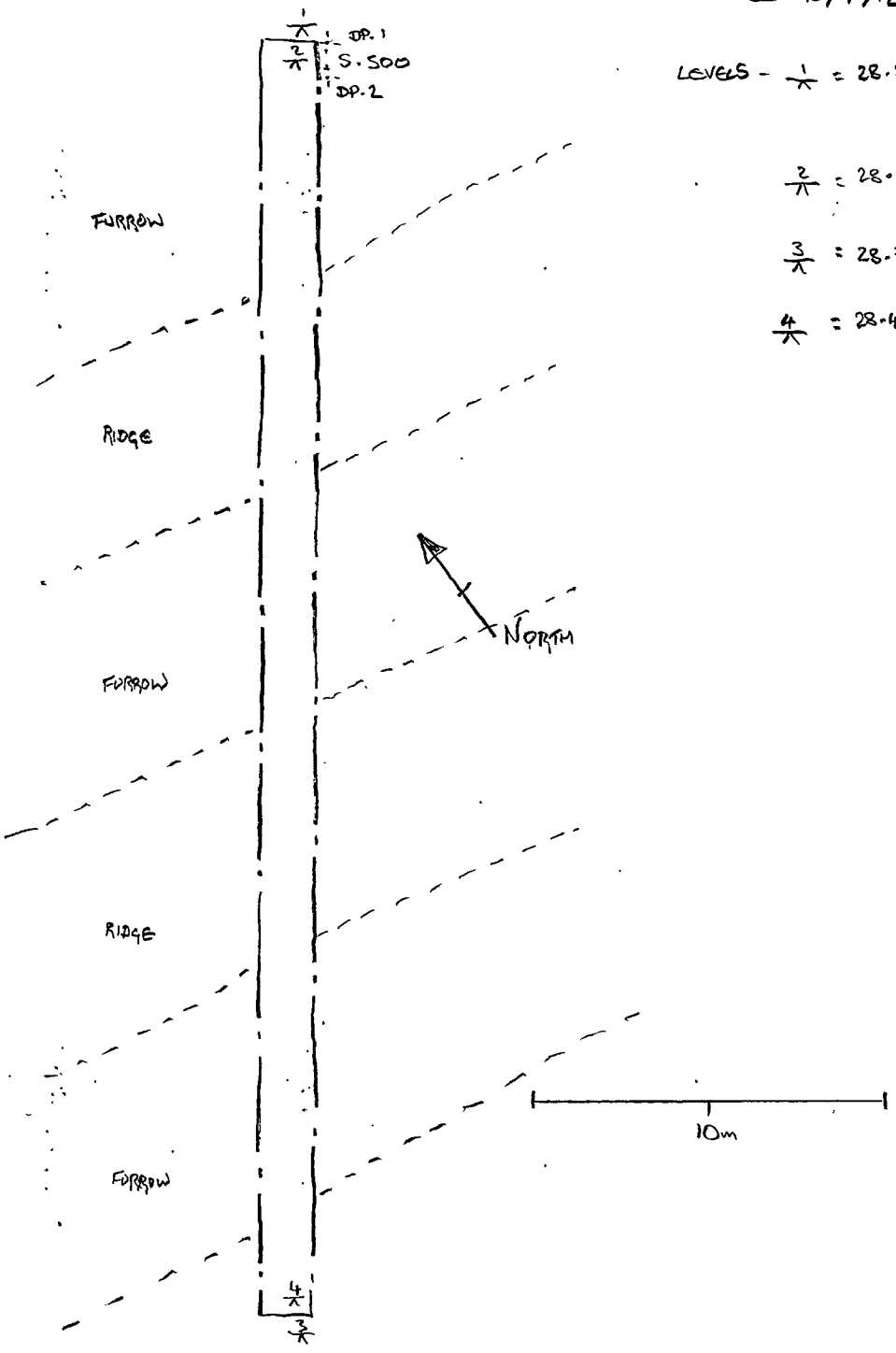
CLSTRL12
P.400 - TRENCH 4
SCALE - 1:200
S 16/7/12



LEVELS - 1 : 28.50 m
2 : 27.86 m
3 : 28.85 m
4 : 28.53 m

SCANNED
ON
19/7/2012

CLSTRL 12
P.500 - TRENCH 5
SCALE - 1:200
& 16/7/12



LEVELS - 1 = 28.20m

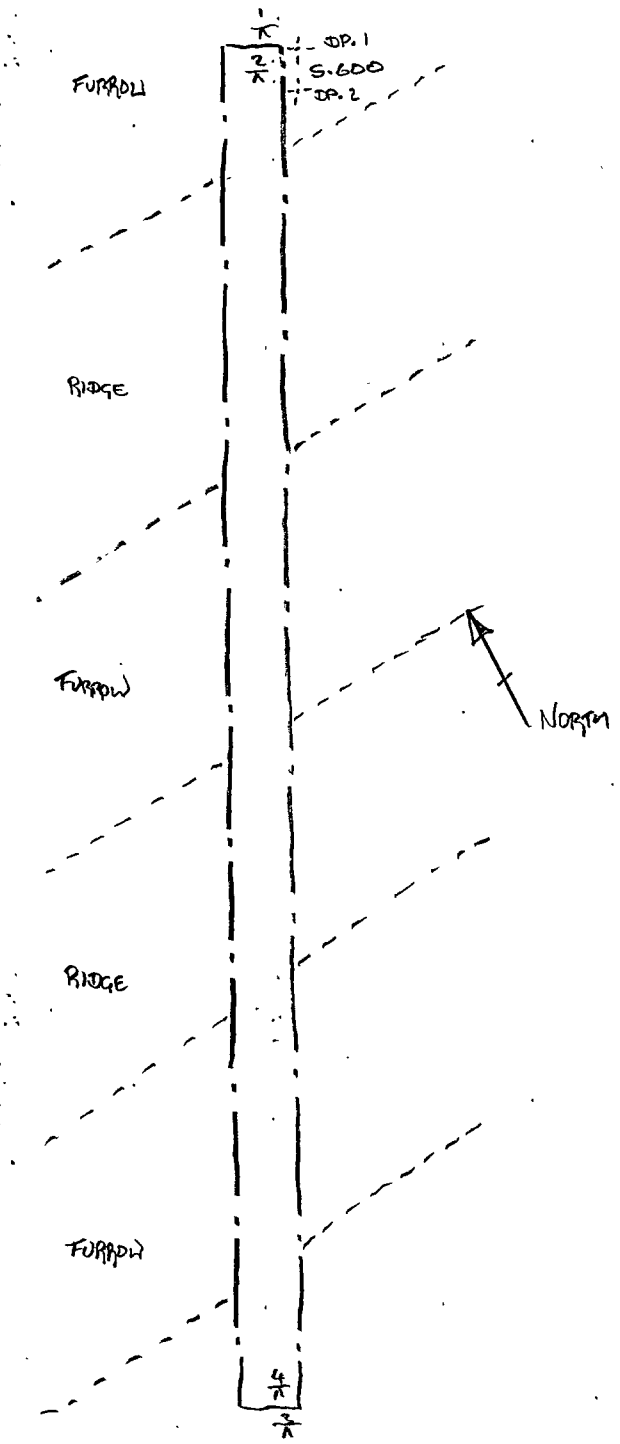
2 = 28.32m

3 = 28.44m

4 = 28.40m

SCANNED
19/7/2012

CLSTRL 12
P.600 - TRENCH 6
SCALE - 1:200
@ 16/7/12



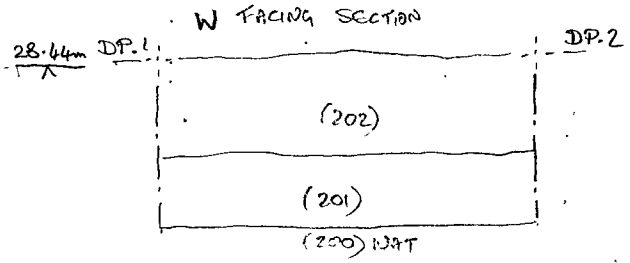
LEVELS - 1/A = 28.80m
2/A : 28.32m
3/A : 29.11m
4/A : 28.57m

1:200

SCANNED
19/7/2012

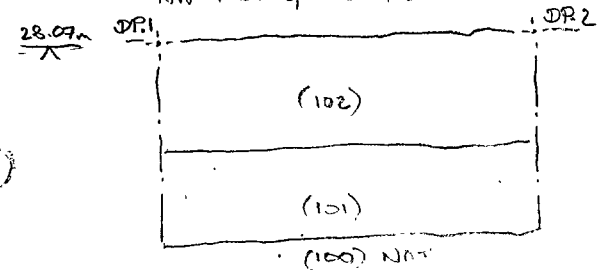
CLSTRL 12 S.100 → S.600

W FACING SECTION



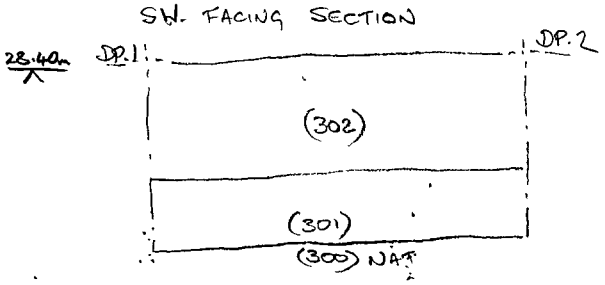
S.200 - TRENCH 2
SCALE - 1:20
@ 16/7/12

NW FACING SECTION



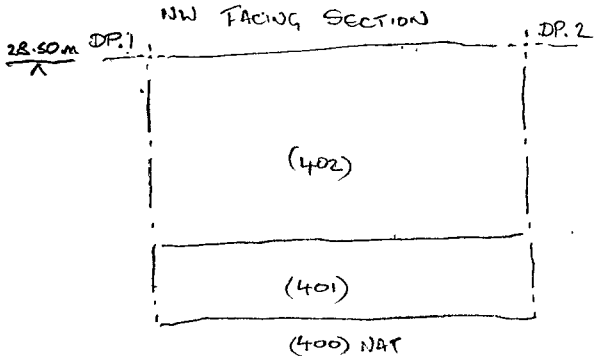
S.100 - TRENCH 1
SCALE - 1:20
@ 16/7/12

SW. FACING SECTION

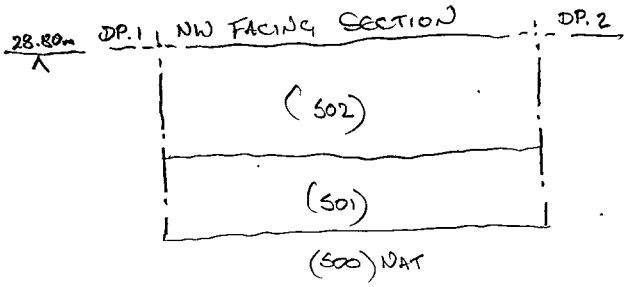


S.300 - TRENCH 3
SCALE - 1:20
@ 16/7/12

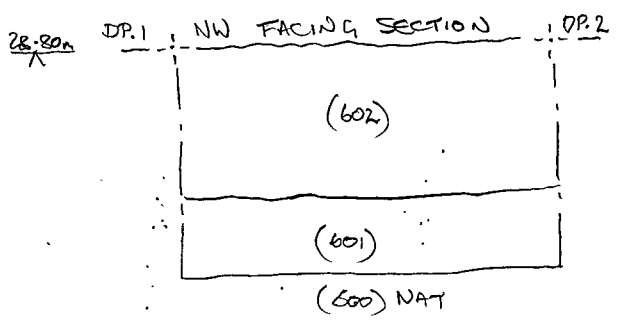
NW FACING SECTION



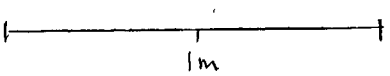
S.400 - TRENCH 4
SCALE - 1:20
@ 16/7/12



S.500 - TRENCH 5
SCALE - 1:20
@ 16/7/12



S.600 - TRENCH 6
SCALE 1:20
@ 16/7/12



SCANNED
CJM
19/7/2012

CLAYDON
STARVEALL FARM
CLSTRL 12

BOX 1 FILE 7.

D. CATALOGUE OF PHOTOGRAPHS.

OXFORD ARCHAEOLOGY, JANUS HOUSE, OSNEY MEAD, OXFORD, OX2 OES

PDF/A SCAN

FILMING INSTRUCTIONS
Submitter OASouth
No. of copies: 2

Headings
Site information
Line 1: [OASouth] County[Gloucestershire] Parish:[Oxenton, Claydon]
Site[Starveall Farm] Site code[CLSTRL 12]
Line 2: Excavators name[T Allen]
Line 3:
Classification of material

	Tick if present
Index to archive	
Introduction	
A:Final Report	
A:Publication Report	
B:Site Data – Text: Diary/Daybook/Fieldnotes	
B: Site Data – Text: General Summaries	
B: Site Data – Text: Primary Context Records	
B: Site Data – Text: Synthesised Context Records	
B: Site Data – Text: Survey Reports	
B: Site Data – Text: Catalogue of Drawings	
B: Site Data – Text: Primary Drawings	
B: Site Data – Text: Synthesised Drawings	
C: Finds Data – Text: Primary Finds Data	
C: Finds Data – Text: Synthesised Finds Data	
C: Finds Data – Text: Specialist Reports	
C: Finds Data – Text: Box/Bag List	
D: Catalogue of Photos/Slides/Videos/X--rays	✓
E: Environmental/Ecofact Data: Primary Records	
E: Environmental/Ecofact Data: Synthesised Records	
E: Environmental/Ecofact Data: Specialist Reports	
F: Documentary	
F: Press and Publicity	
G: Correspondence	
H: Miscellaneous	

Oxford Archaeology

PHOTOGRAPHIC RECORD SHEET

SITE CODE CLSTRL 12 | SITE NAME Stanwell Farm Glos | FILM NO. 1

Camera number 19D | Lens number | Black & white / colour

Date	Negative number	View	Context(s)		Initials
	0				
13/7/12	1	S	Tr 1	1x1m	SE
	2	↓	↓		
	3	↓	↓		
	4	E	S.100 Tr 1	1x1m	
	5	↓	↓		
	6	↓	↓		
	7	NE	Tr 2	1x1m	
	8	↓	↓		
	9	↓	↓		
	10	SE	~~N~~ S.200 Tr 2	1x1m	
	11	↓	↓		
	12	↓	↓		
	13	W	Tr 3	1x1m	
	14	↓	↓		
	15	↓	↓		
	16	N	S.300 Tr 3	1x1m	
	17	↓	↓		
	18	↓	↓		
	19	SW	Tr 4	1x1m	
	20	↓	↓		
	21	↓	↓		
	22	SE	S.400 Tr 4	1x1m	
	23	↓	↓		
	24	↓	↓		
	25	SW	Tr 5	1x1m	
	26	↓	↓		
	27	↓	↓		
	28	SE	~~N~~ S.500	1x1m	
	29	↓	↓		
	30	↓	↓		
	31		ID SHOT		
	32	E	General Shots x3		
	33	↓	↓		
	34	↓	↓		
	35				
	36				
	37				

Oxford Archaeology

PHOTOGRAPHIC RECORD SHEET

SITE CODE CLSTRL 17 | SITE NAME Harvell Farm Quarry | FILM NO. 2

Camera number 19D | Lens number | Black & ~~white~~ / colour

Date	Negative number	View	Context(s)	Initials
16/7/12	0		ID SHOT	
	1	SW	Tr 6 1x1m	
	2	↓	↓	
	3	↓	↓	
	4	SE	S-600 Tr 6 1x1m	
	5	↓	↓	
	6	↓	↓	
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			
	20			
	21			
	22			
	23			
	24			
	25			
	26			
	27			
	28			
	29			
	30			
	31			
	32			
	33			
	34			
	35			
	36			
	37			

Oxford Archaeology

DIGITAL PHOTOGRAPHIC RECORD SHEET

SITE CODE	SITE NAME
CLSTRL 12	Stanwell Farm, Glos Card C21

Date	Shot number	View	Context(s)		Geo-Ref (tick)	Initials
13/7/12	1	S	Tr 1	1x1m		SE
	2	"	"			
	3	S	S.100 Tr 1	1x1m		
	4	"	"			
	5	NE	Tr 2	1x1m		
	6	"	"			
	7	SE	S.200 Tr 2	1x1m		
	8	"	"			
	9	W	Tr 3	1x1m		
	10	"	"			
	11	N	S.300 Tr 3	1x1m		
	12	"	"			
	13	NW	Tr 4	1x1m		
	14		"			
	15	SE	S.400 Tr 4	1x1m		
	16	"	"			
	17	SW	Tr 5	1x1m		
	18	"	"			
	19	SE	S.500 Tr 5			
	20	"	"			
	21	E	General Site Shots			
	22	↓	↓			
	23	↓	↓			
	24	SW	Tr 6	1x1m		
	25	"	"			
	26	SE	S.600 Tr 6	1x1m		
↓	27	"	"			
18/7/12	28		Tr 1			
↓	29		Tr 2			
↓	30		Tr 3			
18/7/12	31	E	Shot of Brick building	1x2m		
↓	32	"	"			
	33	SE				
	34	"				
	35	S				
	36	"				
	37	SW				
↓	38	"	↓			

Oxford Archaeology

DIGITAL PHOTOGRAPHIC RECORD SHEET

SITE CODE	SITE NAME
CLSTRL 12	Stoneall Farm, Glos Card C21

Date	Shot number	View	Context(s)	Geo-Ref (tick)	Initials
18/7/12	37	SW	Birch building		
	38	"	"		
	39	NW			
	40	"			
	41	N			
	42	"			
	43	NW	Tr 6		
	44	E	Tr 5		
	45	N	Tr 4		
	46	E	Tr 3		
	47	S	Tr 2		
	48	SW	Tr 1		
			Backfilled trenches		

	A	B	C	D	E	F
1	**Site Code: CLSTRL12**		Site Name:Starveall Farm, Glos.			
2						
3	**Site shot Number**	**Archive Shot Number**	**View**	**Description**	**Initials**	**Date**
4	0001	0001	S	TR 1 1X1m	SL	13/07/12
5	0002	0002	S	TR 1 1X1m	SL	13/07/12
6	0003	0003	E	S.100 TR 1 1x1m	SL	13/07/12
7	0004	0004	E	S.100 TR 1 1x1m	SL	13/07/12
8	0005	0005	NE	TR 2 1x1m	SL	13/07/12
9	0006	0006	NE	TR 2 1x1m	SL	13/07/12
10	0007	0007	SE	s.200 TR 2 1x1m	SL	13/07/12
11	0008	0008	SE	s.200 TR 2 1x1m	SL	13/07/12
12	0009	0009	W	TR 3 1x1m	SL	13/07/12
13	0010	0010	W	TR 3 1x1m	SL	13/07/12
14	0011	0011	N	s.300 TR 3 1x1m	SL	13/07/12
15	0012	0012	N	s.300 TR 3 1x1m	SL	13/07/12
16	0013	0013	SW	TR 4 1x1m	SL	13/07/12
17	0014	0014	SW	TR 4 1x1m	SL	13/07/12
18	0015	0015	SE	s.400 TR 4 1x1m	SL	13/07/12
19	0016	0016	SE	s.400 TR 4 1x1m	SL	13/07/12
20	0017	0017	SW	TR 5 1x1m	SL	13/07/12
21	0018	0018	SW	TR 5 1x1m	SL	13/07/12
22	0019	0019	SE	s.500 TR 5 1x1m	SL	13/07/12
23	0020	0020	SE	s.500 TR 5 1x1m	SL	13/07/12
24	0021	0021	E	General site shots	SL	13/07/12
25	0022	0022	E	General site shots	SL	13/07/12
26	0023	0023	E	General site shots	SL	13/07/12
27	0024	0024	SW	TR 6 1x1m	SL	13/07/12
28	0025	0025	SW	TR 6 1x1m	SL	13/07/12
29	0026	0026	SE	s.600 TR 6 1x1m	SL	13/07/12
30	0027	0027	SE	s.600 TR 6 1x1m	SL	13/07/12
31	0028	0028		TR 1	SL	17/07/12
32	0029	0029		TR 2	SL	17/07/12
33	0030	0030		TR 3	SL	17/07/12
34	0031	0031	E	Shot of brick building 1x2m	SL	18/07/12
35	0032	0032	E	Shot of brick building 1x2m	SL	18/07/12
36	0033	0033	SE	Shot of brick building 1x2m	SL	18/07/12
37	0034	0034	SE	Shot of brick building 1x2m	SL	18/07/12
38	0035	0035	S	Shot of brick building 1x2m	SL	18/07/12
39	0036	0036	S	Shot of brick building 1x2m	SL	18/07/12
40	0037	0037	SW	Shot of brick building 1x2m	SL	18/07/12
41	0038	0038	SW	Shot of brick building 1x2m	SL	18/07/12
42	0039	0039	NW	Shot of brick building 1x2m	SL	18/07/12
43	0040	0040	NW	Shot of brick building 1x2m	SL	18/07/12
44	0041	0041	N	Shot of brick building 1x2m not taken?	SL	18/07/12
45	0042	0042	N	Shot of brick building 1x2m not taken?	SL	18/07/12
46	0043	0043	NW	TR 6 backfilled	SL	18/07/12
47	0044	0044	E	TR 5 backfilled	SL	18/07/12
48	0045	0045	N	TR 4 backfilled	SL	18/07/12
49	0046	0046	E	TR 3 backfilled	SL	18/07/12
50	0047	0047	S	TR 2 backfilled	SL	18/07/12
51	0048		SW	TR 1 backfilled – not taken??	SL	18/07/12
52						
53						
54						
55						
56						
57						
58						
59						


CLSTRL12_0001.jpg


CLSTRL12_0002.jpg


CLSTRL12_0003.jpg


CLSTRL12_0004.jpg


CLSTRL12_0005.jpg


CLSTRL12_0006.jpg


CLSTRL12_0007.jpg


CLSTRL12_0008.jpg


CLSTRL12_0009.jpg


CLSTRL12_0010.jpg


CLSTRL12_0011.jpg


CLSTRL12_0012.jpg


CLSTRL12_0013.jpg


CLSTRL12_0014.jpg


CLSTRL12_0015.jpg


CLSTRL12_0016.jpg


CLSTRL12_0017.jpg


CLSTRL12_0018.jpg


CLSTRL12_0019.jpg


CLSTRL12_0020.jpg


CLSTRL12_0021.jpg


CLSTRL12_0022.jpg


CLSTRL12_0023.jpg


CLSTRL12_0024.jpg


CLSTRL12_0025.jpg


CLSTRL12_0026.jpg


CLSTRL12_0027.jpg


CLSTRL12_0028.jpg


CLSTRL12_0029.jpg


CLSTRL12_0030.jpg


CLSTRL12_0031.jpg


CLSTRL12_0032.jpg


CLSTRL12_0033.jpg


CLSTRL12_0034.jpg


CLSTRL12_0035.jpg

CLSTRL12_0036.jpg

CLSTRL12_0037.jpg

CLSTRL12_0038.jpg

CLSTRL12_0039.jpg

CLSTRL12_0040.jpg

CLSTRL12_0041.jpg

CLSTRL12_0042.jpg

CLSTRL12_0043.jpg

CLSTRL12_0044.jpg

CLSTRL12_0045.jpg

CLSTRL12_0046.jpg

CLSTRL12_0047.jpg