LONG LANE CHAPEL-EN-LE-FRITH, DERBYSHIRE

Landscape and Geophysical Survey Project Design

Oxford Archaeology North

November 2012

Seddon

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 An area off Long Lane, Chapel-en-le-Frith, Derbyshire (SK 055 801) is proposed for a housing development by Seddon. The Derbyshire Historic Environment Record includes an earthwork bank (HER 3588) running adjacent to Long Lane and curving towards the south-west where it is cut by the railway. While the date of the feature is unknown, it appears to be a former land boundary, and could potentially be of medieval date. Given that there is a single documented feature within the study area, there is also the potential for other associated features which may only survive below ground.

1.1.2 The development control officer for Derbyshire County Council (Steve Baker) has recommended that an archaeological survey be undertaken to record the earthwork and any other associated features (Level 2 - English Heritage 2007). In addition it is also required that a magnetometry geophysical survey be undertaken across the area. The extent of the study area is approximately 2.4ha.

1.1.3 The present project design provides for a methodology to undertake the archaeological recording and investigation within the extent of the study area.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 ***Knowledge of Landscape Archaeology:*** OA North has particular and extensive expertise in landscape archaeology. Since 1982 we have undertaken 38 major landscape field surveys covering 1007sqkm of uplands across England and Wales, which has comprised the recording of over 21,600 sites and monuments. Few archaeological organisations have a comparable track record and OA North can justifiably claim to be one of the foremost specialists in the field of upland / moorland landscape recording. Since 1984 all the surveys have been directed or managed by the OA North survey manager (Jamie Quartermaine, BA, DipSurv, MIFA) who has ensured consistently high quality and expert approach to the surveys undertaken.

1.2.2 The surveys range from basic identification management surveys intended to identify the character and location of the archaeological resource, to the increasingly detailed landscape analysis surveys which enable an understanding of the development of the landscape.

1.2.3 Recently OA North has undertaken a major programme of identification survey across the uplands of North Wales, on behalf of the Royal Commission of the Ancient and Historical Monuments of Wales (RCAHMW). This has entailed the survey of 230 sqkm of unenclosed upland, and has recorded over 3,000 sites.

1.2.4 In particular OA North has undertaken on behalf of the National Trust, surveys of many of the Lake District radial valleys: Nether Wasdale, Buttermere, Borrowdale, and Ennerdale which were examined from their watershed down; and have included boundary surveys, detailed documentary studies, together with palaeoenvironmental evidence. This has enabled the reconstruction of the development of settlement and land use in the respective valleys since their earliest exploitation. The valley survey for Buttermere, included Crummock

Water and the Scale Beck settlement, albeit at an identification level. OA North has therefore familiarity with the site and has undertaken a documentary survey on the site.

1.2.5 ***Geophysical Surveys:*** our senior geophysicist, **Karl Taylor**, has considerable experience of undertaking geophysical surveys of all types from across the country and over an extended period. He used to be a project manager for Stratascan and more recently Phase Site Investigations and has undertaken numerous magnetometry surveys of the type proposed at Long Lane.

2. METHOD STATEMENT

2.1 THE PROJECT TEAM

2.1.1 The project will be under the management of **Jamie Quartermaine** BA (OA North senior project manager) to whom all correspondence should be addressed. Jamie has been recording archaeological landscapes across the north-west since 1984 both as project officer and as project manager.

2.1.2 The geophysical survey would be undertaken by **Karl Taylor** BSc (OA North Project Officer) (see full CV below). Karl is a very experienced geophysicist, and has worked as a project manager for Stratascan and Phase Site Investigations, and also has undertaken numerous geophysical surveys for Archaeological Research Services and Oxford Archaeology North. He is presently working again for OA North.

2.1.3 The topographic survey would be undertaken by **Peter Schofield** BA (OA North Project Officer) who has considerable experience of field survey work, including prehistoric and medieval landscapes, and has undertaken considerable survey work throughout Cumbria and was a team leader on the recent major survey of the Northern Welsh Uplands. He undertook the recent surveys for the National Trust at Ennerdale in West Cumbria, the Borrowdale completion survey, the Buttermere survey, the Nether Wasdale and also at St Catherines, Windermere. He recently supervised the Windermere Reflections fulling mills and woodlands survey for the National Trust.

2.2 TOPOGRAPHIC SURVEY

2.2.1 It is proposed that a detailed topographic survey be undertaken of the site at English Heritage Level 2 (Ainsworth *et al* 2007), which will provide for a general topographic survey at 1:250 of the study area. It is proposed that the wider topographic survey, which would include the linear boundary bank, be undertaken using survey grade GPS.

2.2.2 ***GPS Survey***: all features will be surveyed by means of a survey grade GPS, and is a Leica 1200 differential system that uses Ordnance Survey base stations in conjunction with a roving station to correct the raw data with corrections transmitted by mobile phone. The OA North GPS system is capable of accuracies of +- 0.02m and provides for an effective means of recording the detail of the features and also establishing any survey control if required.

2.2.3 ***Reconnaissance:*** initially a process of reconnaissance will be undertaken to identify the boundary bank and other surface features. The reconnaissance will consist of close field walking, varying from 10m to 20m line intervals dependent on visibility and safety considerations. The survey will aim to identify, locate and record archaeological sites and features on the ground and thus all sites noted will be recorded. All sites identified from the Historic Environment Record and also the OS first edition maps will be investigated.

2.2.4 ***Detail Survey:*** it is proposed to provide detailed recording of the sites identified by the reconnaissance. The detailed survey will generate detailed points defining the outline of all features, and the survey points will be marked on the ground using spray paint to enable drawing up.

2.2.5 ***Drawing Up:*** the raw data from the total station and the GPS will be combined within a CAD system, and then plots will be generated to enable the drawing up of the sites within the field. The archaeological detail is drawn up in the field as a dimensioned drawing on the plots with respect to survey markers. On completion of the field survey the drawings will be enhanced within the CAD environment to produce the final drawings. The survey will record all pertinent archaeological detail, which will include walls, any breaks of slope, earthworks and changes of topography; the topographic survey will be superimposed on OS 1:10,000 mapping. It will also include general topographic features and will provide a detailed context for the geophysical surveys.

2.2.6 ***Photography:*** in conjunction with the archaeological survey a photographic archive will be generated, which will record significant features as well as aspects of the general landscapes. This photographic archive will be maintained using black and white 35mm film and also using a digital camera with 12 mega pixel resolution. The use of a digital camera provides very effective manipulation of photographic images, and these will be used in the report. The use of photography in this way considerably enhances the usability of a database and greatly assists the analysis of the landscape.

2.2.7 ***Description:*** it is intended to create a descriptive record of the individual elements and monuments that make up the wider site. These individual elements will be incorporated with the more generalised site descriptions. The descriptive entries will be input directly into a Psion palm computer, for subsequent incorporation into the project report.

2.3 GEOPHYSICAL SURVEY

- ***Magnetic Survey:*** a magnetometer, survey is usually the first choice for a geophysical survey owing to its ability to be carried out relatively quickly (due to recent improvements in commercially available instruments), and is therefore more cost effective. Consequently, magnetometry is a very efficient technique and is recommended in the first instance by the English Heritage Guidelines (2008) for such investigations.
- Magnetometry will easily locate 'positively magnetic' material such as iron-based features and objects, or those subjected to firing such as kilns, hearths, and even the buried remains of brick walls. Therefore, this technique is suitable for the detection of features associated with industrial activity. This technique can also be

widely used to locate the more subtle magnetic features associated with settlement and funerary remains, such as boundary or enclosure ditches and pits or postholes, which have been gradually infilled with more humic material. The breakdown of organic matter through microbiotic activity leads to the humic material becoming rich in magnetic iron oxides when compared with the subsoil, allowing the features to be identified. Conversely, earthwork or embankment remains can also be identified with magnetometry as a 'negative' feature due to the action in creating the earthwork of upturning the relatively low magnetic subsoil on to the more magnetic topsoil. This technique is classed as a passive technique as it relies on measuring the physical attributes, or the magnetic field, of features that exist in the absence of a measuring device, such as a kiln or ferrous object (Schmidt 2001, 6).

- ***Method Statement:*** a detailed magnetic survey will be carried out using a Bartington Grad601-2 gradiometer which has an internal data logger. Data will be collected in zig-zag mode over the same 30m by 30m grids, the magnetic data being collected at 0.25m intervals on profiles 1m apart (3600 readings per grid).
- The survey grid will be staked out and surveyed using either the survey grade GPS system or total station to Ordnance Survey co-ordinates to at least 0.05m accuracy. Bamboo canes will be placed at grid node points and survey ropes and canes will be used to mark out the survey traverses.
- All data will be downloaded immediately following collection using specialist survey software (Archaeosurveyor) and will be minimally processed where applicable. Raster images will be exported, usually in .png or .jpg format for presentation and dissemination. These images will be imported into CAD software and overlain on a geo-referenced base plan. An interpretation of the anomalies will be presented in CAD and a non-technical summary and discussion of the results will be included in a report which will accompany the interpretation.
- The survey will be carried out in accordance with English Heritage guidelines, 'Geophysical Survey in Archaeological Field Evaluation', 2008 and Institute for Archaeologists standards, 'Standard and Guidance for archaeological geophysical survey', 2010.

2.4 REPORT

2.4.1 ***Digital Presentation:*** the survey data will be collated within a CAD environment and will combine the geophysics, topographic and survey data. A digital copy of the archive can be provided in shape file format alongside the final report. Digital photography will be provided, and will be appropriately indexed.

2.4.2 ***Reporting:*** the report will include the results of the survey and will present, summarise, and interpret the results of the programme, and will include a full index of archaeological features identified in the course of the project. The reports will consist of an acknowledgements statement, lists of contents, summary, introduction summarising the brief and project design and any agreed departures from them. The report will also include sections on the following:

- Archaeological background

- Methodology
- Survey Results, incorporating a description of the extant remains and the geophysics data
- Outline of the landscape development and an assessment of the archaeological significance
- Lists of any finds identified
- Index to the archive
- Bibliography
- Copies of project brief and project design

2.4.3 The report will incorporate appropriate illustrations, including copies of the site plans, landscape survey mapping, all reduced to an appropriate scale. The site mapping will be based upon the CAD base. The report will be accompanied by photographs and historic illustrations illustrating the principal elements of the landscape.

2.4.4 ***Editing and submission:*** the report will be subject to the OA North's stringent editing procedure and then a draft will be submitted to the client for consultation. Following acceptance of the report ten bound copies of the report will and a PDF copy will be submitted.

2.4.5 ***Output:*** two hard and one digital copies and of the full report will be submitted to the client. Each report will be illustrated by a selection of prints and maps.

2.4.6 ***Publication:*** a summary report of the results will be submitted to a regional journal, and information from the project will be fed into the OASIS project (On-line Access to Index of Archaeological Investigation).

3. OTHER MATTERS

3.1 ACCESS

3.1.1 It is assumed that OA North will have unrestricted pedestrian and vehicular access to the study area for the duration of the survey.

3.2 HEALTH AND SAFETY

3.2.1 Full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The OA North Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual, as well as the OA Health and Safety Statement. Risk assessments are undertaken as a matter of course for all projects, and will anticipate the potential hazards arising from the project.

3.3 INSURANCE

3.3.1 The insurance in respect of claims for personal injury to or the death of any person under a contract of service with the Unit and arising in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OA North in respect of personal injury or damage to property by negligence of OA North or any of its employees there applies the insurance cover of £10m for any one occurrence or series of occurrences arising out of one event.

3.4 WORKING HOURS

3.4.1 Survey works will be undertaken on the basis of a five day week, within daylight hours only.

3.5 PROJECT MONITORING

3.5.1 OA North will inform the client of all significant developments, and any potential departures from the agreed programme will be discussed and agreed with them prior to implementation.

4. WORK TIMETABLE

4.1 The phases of work will comprise:

4.1.2 ***Topographic Survey***
One day will be required for the identification survey

4.1.3 ***Geophysical Survey***
One day will be required for the field survey

4.1.4 ***Archive and Reporting***
15 days would be required to complete this element.

4.1.5 The project can be undertaken at short notice, subject to the requirements of the client.

5. REFERENCES

Association of County Archaeological Officers (ACAO), 1993 Model briefs and specifications for Archaeological Assessments and Field Evaluations, Bedford

Countryside Commission, 1998 *Countryside character, Volume 2: North West,* Cheltenham

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English Heritage, 2007 Understanding the archaeology of landscapes, a guide to good recording practice,

COSTING

LONG LANE, CHAPEL-EN-LE-FRITH, DERBYSHIRE: LANDSCAPE SURVEY

Introduction

The cost quoted is a fixed price, and provides for an English Heritage (2007) survey of the study area and a geophysical (magnetometry) survey.

Topographic Survey: the topographic survey will provide for an outline survey of the visible remains and will also entail a close examination of the rest of the area for any other features.

Magnetometry Survey: the magnetometry survey will examine the study area and would be in conjunction with the topographic survey.

Costing

All prices quoted are inclusive of management, overheads, and other disbursement costs (travel and expenses), to undertake the programme of work as defined in this project design. Any other variations from this programme of work at the client's direction will require recosting.

Field Survey (inc report)	£ 885.00
Geophysics Survey (inc report)	£ 846.00
Total Costs	**£ 1731.00**

Normal OA North working hours are between 9am and 5pm, Monday to Friday, though adjustments to hours maybe made to maximise daylight working time in winter and to meet travel requirements. It is not normal practise for OA North staff to be asked to work weekends or bank holidays and should the client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.

Costs are inclusive travel costs

Notes:

1. COMMERCIAL IN CONFIDENCE
2. Salaries and wages inclusive of NI, Superannuation and overheads
3. Total costs exclusive of VAT
4. All costs at 2012/2013 prices

CONTACTS

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APPENDIX 1
PERSONNEL CVS

CURRICULUM VITAE

Jamie Quartermaine MIFA

Senior Project Manager

ACADEMIC QUALIFICATIONS

BA (Hons) Archaeology and Ancient History, Nottingham University, 1982

Topographic Sciences (Land Survey) Diploma, Glasgow University, 1984

Professional Qualifications

Member of The Institute of Field Archaeologists

Employment History

1981-1982	Survey Officer and Roman Finds Specialist for the Glamorgan and Gwent Archaeological Trust
1983-1984	Assistant Director for Braintree Roman Town Excavations for Braintree District Council
1984-	Project Officer and Project Manager for Lancaster University Archaeological Unit (now Oxford Archaeology North)

PRESENT POST - SENIOR PROJECT MANAGER FOR OA NORTH

Project Officer: Jamie's experience and training in land survey techniques led to his appointment at the Lancaster University Archaeological Unit as a Project Officer with overall responsibility for all landscape and building survey work. He has endeavoured to develop the Unit's survey capability, and has sought to introduce new techniques as available and appropriate. He was involved in the development of total station digital recording, surface modelling, GPS (Global Positioning System) survey and CAD draughting; the first use of GPS techniques within archaeology in the UK was by LUAU (on the Arnside Silverdale AONB survey in 1993). He has innovated with and published on the use of LiDAR for landscape recording. Within building recording he has been able to develop innovative techniques that have improved the quality and cost-effectiveness of surveys, particularly the use of semi-oblique rectified photography, reflectorless total stations (REDM) and laser scanning techniques to provide detailed 3D mapping of buildings.

Senior Project Manager: since 1995 Jamie has been a project manager which has enabled him to develop the recording of archaeological landscapes. He has been involved in the management of over 400 projects, and has been able to develop research topics into the development of the upland landscapes of Northern England and North Wales. He has considerable experience in training unit personnel in the varied aspects of digital recording and was involved in the training of a Nepalese

survey team to undertake a comprehensive recording programme of a large seventeenth century palace on the outskirts of Kathmandu. He has recently trained an Iraqi survey team in building survey techniques at Erbil, Northern Iraq.

Research Interests: his particular expertise is in landscape archaeology, and particularly into the development of the upland landscapes of northern Britain, as well as designed landscapes. This was initiated with the surveys of the Lake District National Park Survey and the surveys of the Langdale Axe Factories in 1984, he has continued to undertake extensive surveys and publish the results over the subsequent period. All landscape surveys undertaken by OA North have been either directed or managed by Jamie and to date OA North has recorded by field survey over 900sqkm of uplands across Northern England and North Wales.

Industrial Archaeology: Jamie also has particular experience of the recording of industrial sites from around the region, which include the Maryport Ironworks, Backbarrow Ironworks, Hotties glassworks (St Helens), the Lead mines and smelt mills of Greenside, Nenthead (both in Cumbria), Grassington (North Yorkshire) and Snailbeach (Shropshire) and the lime industry of Craven (North Yorkshire). With the latter he has produced detailed surveys of the Langcliffe and Mealbank Hoffman lime kilns, and associated quarry complexes. He has produced a book on the archaeology of Thomas Telford's Holyhead road through North Wales (Quartermaine *et al* 2003).

Jamie has managed a programme of investigation into the docklands of Liverpool, which has involved extensive excavations of the Old Dock, the Dry Dock, Canning Dock, Manchester Dock, Chester Basin, Trafalgar Dock and Georges Dock. This has culminated in the construction of a visitor centre to celebrate Liverpool's maritime history.

Building Survey: Jamie has had considerable involvement with the recording, interpretation and analysis of buildings from around the region, in some instances this has been limited to the design, and setting up of recording systems for major building projects, in others it has entailed the directing of surveys and more recently the management of building survey projects.

Projects that entailed the development of recording systems include Kendal Castle, Castle Bolton, Piel Castle, and Furness Abbey. In others he was directing the surveys such as at Pendragon Castle, Lancaster Castle, Maryport Iron Works, Rufford Old Hall, and the Hotties, and others he managed such as Wigmore Castle, Samlesbury Hall, Calder Abbey, Jervaulx Abbey, Clitheroe Castle, Backbarrow Iron Works, Liverpool Docks, and Lyme Park.

GIS Landscape Projects: recently Jamie has managed a series of major GIS landscape projects principally for English Heritage. These include an important study into the Upland Peats of North West England as a pilot study for developing a strategy for the management of high altitude peatlands across the country. A further study examined the impact of potential aggregate extraction across the extent of the Ribble Valley, Lancashire. This project entailed the development of the use of LiDAR techniques for the detailed recording of landscape surfaces which was able to precisely map even the most subtle earthworks. At present we are in the final stages of completing the Lancaster Urban Archaeological Database, which is a GIS compilation of all archaeological investigations within the historic city of Carlisle.

Outreach: Jamie is heavily involved in the dissemination of all aspects of archaeology to the wider public. This takes many forms, from talking to local societies to the

submission of press releases and corresponding broadcasts on television and radio. More specifically Jamie has initiated a number of Local Heritage Initiative projects with local groups, which have entailed the recording of Lathom Park, the excavation of a complex enclose settlement near Ingleton (North Yorkshire), the mapping of nineteenth century parkland near Windermere, and the mapping of a deserted medieval settlement at Muncaster (West Cumbria). These projects have required considerable interaction with the community groups, entailing training of archaeological techniques and site identification, and the wider dissemination of the results. In the case of the Lathom Park, Jamie was invited to be a trustee for the Lathom Park Trust which was set up to record and manage the nationally important fourteenth century park and palace.

Exhibition Design: Jamie has considerable involvement in the design and implementation of exhibition panels to provide an appropriate outreach to the wider public. Examples include coke ovens at Maryport, a ropewalk in Ulverston and a round house settlement at Lancaster University. Recently he has completed the production of a permanent exhibition around a preserved section of the Old Dock, Liverpool. Jamie was involved, not only in the excavation and conservation of the dock wall, but also in the design of the exhibition fit out and he managed the design and production of the exhibition materials. This included a large animated, computerised reconstruction of the Old Dock extending across one wall of the visitor chamber.

SELECTIVE PROJECTS MANAGED OR DIRECTED

- **Backbarrow Ironworks, Cumbria** - the detailed fabric survey and evaluation of a major blast furnace and ironwork complex. Recent work includes a detailed study of the Pug Mill. Key elements of the complex including the engine house and extant steam engine were recorded by laser scanning techniques.
- **Pendragon Castle Cumbria -** this was a structural survey of the Norman keep (EH funded) which entailed the production of detailed photogrammetric elevations and accurate plans in advance of a major consolidation programme. This was one of the first structures to be entirely draughted within a CAD format.
- **Victoria Cave, North Yorkshire** - this was a full computer modelled survey of an early cave site using a reflectorless total station, and entailed a programme of analysis re-examining the stratigraphy of nineteenth century excavations. Following on from this was a programme of excavation of Neolithic and Roman deposits.
- **Liverpool Docks**: a major programme of excavation and recording of the historic Liverpool docks. This included the Old Dock, which was the worlds first commercial wet dock. All the dock structures were recorded in considerable detail using laser scanning techniques. A section of the Old Dock has now been preserved within a visitor centre.
- **Old Dock, Liverpool** - an extensive evaluation and excavation into the worlds first wet dock. Jamie was involved in the successful submission for World Heritage Status for Liverpool. This has culminated with the excavation for the establishment of a major visitor centre celebrating the Old Dock and Jamie undertook the design of the exhibition. In addition he has been involved in the recording of a number of Liverpool's other docks (Canning, Dry, Manchester, Chester, George's, Trafalgar).

- **Hotties Glass Furnace Merseyside -** this was a major structural survey and excavation of a standing 19th century glass furnace (EH funded). Jamie was responsible for the initial surveys of the building and its regenerators.
- **Lancaster Castle, Lancashire -** the generation of a comprehensive 3-dimensional, stone by stone record of the Witches Tower of the castle. It entailed a detailed instrument survey of the internal elevations, building plans, and cross sections, and integrated these with a photogrammetric survey of the external elevations
- **Lyme Park, Cheshire** - an extensive survey, and management study of the park, gardens and buildings of this historic park. This entailed a survey of all park buildings (with the exception of the Mansion House), and was linked in to a landscape survey of the park.
- **Vale Royal Abbey, Cheshire** - an extensive fabric survey of the Great House that was built from the post-Dissolution fabric of the former abbey.
- **Samlesbury Hall, Lancashire** - a survey of the medieval timber hall and associated garden by means of instrument techniques.
- **Rufford Old Hall:** a detailed reflectorless instrument survey of the medieval timber framed hall on behalf of the National Trust, resulting in the production of very detailed elevations and drawings of the trusses and timberwork.
- **Calder Abbey:** a detailed photogrammetric survey of the abbey, linked into a programme of conservation on behalf of English Heritage.
- **Greenside, Cumbria** – the survey, and excavation of the largest lead mining, refining and smelting complex in the Lake District.
- **Lowther Park, Cumbria** - a major documentary and landscape survey of Lowther Park, dealing with the very rich pre-park landscape, and the development of the parklands landscape from its earlier deer park origins through to the present. It is one of the richest, and most complex parkland landscapes in the region, and an area of considerable archaeological importance.
- **Langcliffe and Mealbank Hoffman limekilns, North Yorkshire** - surveys of two nineteenth century Hoffman limekilns and associated quarries. These used what was at the time revolutionary technology to create commercial quantities of lime. The surveys have served as the basis for subsequent conservation management plans.
- **Patan Durbar Temple complex, Nepal** - a detailed fabric survey of the very large world heritage palace complex site in Patan, near Kathmandu. This entailed teaching a Nepali survey team instrument and photogrammetric survey techniques to enable a very detailed record of the palace complex.
- **Erbil, Iraq:** a recent training programme on the 8000 year old Erbil tel, to train an Iraqi survey team in the use of building recording techniques for a complex of vernacular buildings that cover the top of the tel.
- **Maryport, West Cumbria:** the survey and excavation of the blast furnace and the adjacent coke ovens at Maryport. This has culminated in the conservation and presentation of the coke ovens.

- **Thomas Telford's Holyhead Road** - a major innovative survey of the Welsh section of Telford's Holyhead Road.
- **Upland Peats, North-West** – a major innovative, and exploratory programme to investigate survey techniques for the investigation of the archaeological resource beneath upland peatlands. This is a major GIS landscape project for English Heritage to develop strategies for managing the upland peats.
- **Carlisle UAD** - a GIS based project to compile all archaeological information and explorations across the extent of historic Carlisle. This is extremely important as it provided the opportunity to compile into a usable form the results of 20 years of exploration by the former Carlisle Archaeological Unit.

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CURRICULUM VITAE

Karl Taylor Bsc (Hons) AIfA

Project Officer

Personal

Date of Birth 03/07/1971

Education

University College Worcester, PGCE Primary (Later Years) 1999-2000

University of Bradford BSc (Hons) Archaeology, 1994-1997

University of Durham BSc (Hons) Archaeology; Geology subsidiary, 1993-1994

Professional Memberships

Associate Member of the Institute for Archaeologists (IfA)

Member of International Society for Archaeological Prospection (ISAP)

Member Society of Architectural Historians of Great Britain (SAHGB)

Key experience

Karl has a large amount of fieldwork experience on archaeological sites of various periods and types in both the UK and abroad. His career has focused mainly on historic building survey and geophysical survey and but he also has some experience of archaeological intervention, including watching briefs, evaluations and excavations

together with a large amount of desk-based research and report writing experience. Karl has considerable knowledge of various specific and general software packages including AutoCAD (all versions up to and including 2012), GIS software and all Microsoft Office components (up to and including 2010). He is also proficient in using specialist software such as photographic rectification packages and laser scanning manipulation software. He is skilled in a wide range of geophysical survey equipment and general survey equipment, such as Leica and Topcon total stations (including robotic) and various makes and models of survey grade GPS systems including Leica, Magellan and Sokkia Topcon systems. He is also particularly familiar with TheoLT software.

Karl is an experienced photographer, using digital and film 35mm SLRs, and medium format and view cameras, as well as being proficient in the use of specialist equipment, such as perspective control lenses. He has a high degree of expertise in image manipulation software, such as Adobe Photoshop CS (up to versions 5.5 and 6) and Kubit PhoToPlan, as well as Microsoft Photosynth, Autodesk123d Catch and Agisoft Stereoscan.

In short, Karl is an archaeologist with technical experience, and has both specialist and general all round archaeological skills, being able to work across many different aspects of archaeological practice.

Employment

08/2012- **Project Officer, Oxford Archaeology North, Lancaster**

08/2011-08/2012 **Project Manager, Phase Site Investigations, Darlington, County Durham**

As Project Manager, Karl was responsible for managing Phase Site Investigation's historic building survey and archaeological geophysics departments. This involved undertaking the geophysical surveys but also carrying out duties in all aspects of project management from tendering to final reporting and invoicing. Karl's other duties included marketing, which involved sourcing and developing new clients as well as promoting the company's survey services. A key area of Karl's role was the development of the company's technical capability, which included researching new and more streamlined geophysical survey methodologies.

01/2011- 08/2011 **Project Officer, Archaeological Research Services, Sale, Cheshire**

Karl managed an in house archaeological geophysical survey capability, the main scope of which involved both managing and carrying out surveys from tender stage to final completion. Karl was part of the team charged with developing and extending ARS' survey operations in the North West of England, which involved liaising with clients and curators and identifying new business opportunities.

Karl was also responsible for much of the geomatics capability and worked on the initial phase of the North West Rapid Coast Zone Assessment survey. This involved GPS mapping (into GIS) intertidal archaeological sites along the coast from Cheshire to North Cumbria. Karl was then responsible for producing GIS data in the required

format for all the Historic Environment Record databases that were within the scope of the North West Coast. survey area.

Also part of Karl's remit was to manage, carry out and report on much of the company's archaeological fieldwork in the North West. This included all aspects of archaeological interventions on various types of sites, including watching briefs, evaluations and excavations. Karl was also responsible for managing historic building surveys and successfully tendered for and won a number of large mill surveys in the Greater Manchester area.

06/2003 – 01/2011 **Project Officer, Oxford Archaeology North, Lancaster**

Karl's primary role was as an historic building surveyor, working on a wide variety of building types. This work often required documentary research to provide information to aid interpretation of the buildings, their development and function, their position within their landscape context, and assessment of their significance. Karl also contributed towards the tendering for all manner of building investigations.

Karl undertook historic building recording according to English Heritage guidelines using a variety of instrument survey techniques, such as Reflectorless Total Station survey using the TheoLT AutoCAD interface. He manipulated the data collected in the field to produce report quality drawings. Karl gained much experience of manipulating the 3d laser scanning data using software packages such as Pointools.

Karl also fulfilled the role of Project Officer within the Geomatics Department at OA North, and carried out a wide range of duties, including topographic surveys of landscapes utilising both Total Stations and the latest GPS. Karl was responsible for the production of or contribution to, the fieldwork reports and the dissemination and interpretation of the collected data, both to the client and wider audiences.

Karl also had key role within OA's geophysical survey capability and both organised and carried out archaeological geophysical surveys. Due to his extensive geophysical survey experience, Karl provided valuable in-house consultancy and advice.

1998-2003 **Stratascan Ltd, Upton-upon-Severn, Worcestershire**

Karl's position as Junior Project Manager involved managing UK projects and surveys from inception to completion. This involved client liaison, as well as assisting with quotations and tenders. It was within the scope of his work to ensure that surveys were carried out efficiently, properly resourced and completed within strict deadlines and timescales. The supervision and training of less experienced members of staff was also a vital component of his duties. Karl was responsible for the production of final reports and presenting the results to clients. Karl primarily focused upon Ground Penetrating Radar, which requires high levels of technical skill to carry out and interpret effectively. He was experienced in working on projects as varied as archaeological investigations through to large-scale utility mapping and engineering geophysical surveys. Karl also carried out surveys on historic buildings, for example the detection of voids in the fabric of church walls and foundations

1997 **Archaeological Prospecting in the Milfield Basin, Northumberland**

1996 **Fieldwork (test pitting) in the Later Prehistoric Landscape of the Milfield Basin, Northumberland**

1996 **Excavation of a Bronze Age Round Barrow, Guiting Power**, **Gloucestershire**

1996 **Fieldwork in Later Prehistoric Landscape of the Milfield Basin, Northumberland**

1995 **Coupland Enclosure Preliminary Excavation, Milfield, Northumberland**