

Geophysical Survey of land to the East of Bakers Lane, Doveridge, Derbyshire



Northern field looking south-west

ARS Ltd Report 2015/62
May 2015

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EXECUTIVE SUMMARY

This report presents the results of a geophysical survey undertaken on land to the east of Bakers Lane, Doveridge in Derbyshire. An archaeological desk-based assessment (DBA) compiled in 2015 concluded that there is medium to low potential for archaeological remains to survive within the proposed development area.

A geophysical survey was carried out between 21st and 24th April 2015 using a Bartington 601 dual sensor fluxgate gradiometer. Approximately 4.5ha. was included in the survey. The results have not revealed any definite evidence of any previously unknown significant sub-surface archaeological remains within the survey area although a small number of anomalies with some potential to be of archaeological origin have been identified.

The geophysical survey also confirmed that large parts of the survey area appear to be devoid of detectable archaeological features other than surviving remains that are agricultural in origin and which possess historical value of negligible significance. Vague traces of the upstanding medieval ridge and furrow appear in the data and these suggest that in the northern field the ridge and furrow follows two alignments and is therefore, possibly, multi-phase. As the anomalies associated with the medieval ridge and furrow are vague in the dataset or have been removed at the data processing stage the results suggest that it is unlikely that any archaeological features have been masked by the ridge and furrow.

1.0 INTRODUCTION

1.1 Background

- 1.1.1 Planning Design Practice Ltd appointed Archaeological Research Services Ltd (ARS Ltd) to undertake a geophysical survey on land to the east of Bakers Lane, Doveridge in Derbyshire. The survey was carried out in advance of a planning application for *circa* 75 dwellings.
- 1.1.2 The purpose of the survey was to determine the potential for sub-surface archaeological remains to survive at the site, to provide sufficient information to enable the Local Planning Authority to make an informed decision on the archaeological implications of the proposed development, together with any appropriate mitigation works.
- 1.1.3 The objective was to carry out a non-intrusive survey to identify whether any anomalies of possible archaeological origin, including below the medieval ridge and furrow, could be identified within the survey area which may be affected by the proposed development and which, consequently, may require further evaluation and/or specific mitigation.
- 1.1.4 This report presents the results of the geophysical survey.

1.2 Location, Topography and Geology

- 1.2.1 The geophysical survey area is centred on NGR SK 12294 34001 and comprises two agricultural fields with a total approximate area of 4.5 hectares. The survey area is bounded to the north and east by Derby Road, to the south by Bell Lane and to the west by Bakers Lane. The outer extents of the fields are enclosed by mature hedgerows and are separated into a northern and southern field by a central hedgerow on an east/west alignment. The survey area slopes gently from north to south (approximately 94m AOD to 88m AOD).
- 1.2.2 The underlying solid geology of the survey area comprises the Mercia Mudstone Group consisting of sedimentary mudstone. This is overlain by a superficial deposit of Mid-Pleistocene Glaciofluvial Terrace Deposits of sand and gravel (British Geological Survey 2015).

2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has been the subject of a recent archaeological desk-based assessment (DBA) (Tong 2015). This assessment identified two historic assets within the proposed development area (PDA): a demolished building and medieval ridge and furrow. The early 19th century structure is considered to be of negligible archaeological significance as the structure has been demolished and little is likely to survive below ground. The fossilised remains of medieval ridge and furrow visible in the fields of the proposed development area are part of an extensive series of fields within the wider study area which exhibit medieval ridge and furrow earthworks.
- 2.2 There is some slight evidence for Bronze Age activity within the area, given Doveridge's riverine location, which may have presented a potentially attractive location for prehistoric or medieval settlement and activity. The assessment identified a medium-low potential for archaeological remains to survive within the PDA as buried features, with

any potential remains pre-dating the medieval period likely surviving only as truncated features.

3.0 METHODOLOGY

- 3.1 Magnetometry is a non-intrusive scientific prospecting technique that is the preferred geophysical technique used to determine the presence or absence of buried archaeological features when site and geological conditions are favourable. It is an efficient and effective method for locating anomalies corresponding with archaeological features. The instrument chosen for this survey was a Bartington Grad 601 dual sensor fluxgate gradiometer which can detect weak changes in the Earth's magnetic field caused by buried features.
- 3.2 All fieldwork and reporting was undertaken following English Heritage and Chartered Institute for Archaeologists (CIfA) standards and guidance (Gaffney *et al.* 2008; CIfA 2013; CIfA 2014).
- 3.3 The 30m by 30m survey grids were located to cover the entire site (Figure 2). In total 59 survey grids (including partial grids) were set out on site using a hand-held GPS unit which was accurate to less than +/- 2m. Each grid was then surveyed at 1m traverse intervals with the sampling at 0.250m (4 readings per metre) intervals. The survey was carried out in 'zig-zag' mode with each alternate traverse walked in opposite directions. The range of the instrument was set at 100nT (0.01nT resolution).
- 3.3 In order to achieve the objective of identifying if any archaeological features survive below the medieval ridge and furrow the survey grids were set out on the same alignment as far as this was practical using satellite imagery as a guide (2015 Getmapping). This would allow the anomalies associated with the ridge and furrow to be removed or minimised by utilising a direction filter at the data processing stage.
- 3.4 The survey was carried out by ARS Ltd on the 21st, 22nd and 24th April 2015. Throughout the survey the weather was warm and dry. The ground conditions in the survey area were firm underfoot and in that respect ideal for geophysical survey. At the time of the survey the northern field was under a crop of mowing grass and was clear of obstructions. The southern field was under rough pasture with a number of areas overgrown with nettles. The southern field also contained a number of large mature trees, a large steel framed barn, an L-shaped ditched boundary including a metal fence and a metal livestock feeder all of which restricted the survey (areas shown as unsuitable for survey in figure 3)
- 3.5 Prior to commencing the survey each day the gradiometer was balanced and calibrated to the local conditions and this was repeated regularly throughout each day. At the end of each day, the data was downloaded into a computer, checked and archived on the ARS Ltd server. The data was downloaded using Bartington Instruments' *Grad 601 Communication Application*.

4.0 GEOPHYSICAL SURVEY RESULTS

4.1 Introduction

- 4.1.1 The data was processed using Geoplot software. The data was “clipped” (clipping parameters selected on the mean and standard deviation data values), random iron spikes were removed by setting the “despike” function to 2.5 and the striping that can often appear in gradiometer data and any traces of the upstanding ridge and furrow were removed by utilising the “zero mean traverse” function. Some minor staggering in the data, a consequence of the ground conditions, was removed by using the “de-stagger” function and finally the data was interpolated.
- 4.1.2 Occasionally processing the data to compensate for directional sensitivity or to remove iron spikes caused by miscellaneous ferrous objects can also inadvertently disguise anomalies that may be of archaeological origin, particularly long linear features in the direction of the traverses. The data have, therefore, been analysed in a number of different formats and at each stage of processing.
- 4.1.3 The data analysis is presented graphically in figures 3 to 6. A greyscale shade plot of the processed gradiometer data is presented in figure 3 and trace plots of the northern and southern fields in figures 4 and 5 respectively. An interpretative plan is presented in figure 6.
- 4.1.4 Not all anomalies have been included in the results and discussion. The data were characterised by discrete widely dispersed anomalies that are common on most sites and almost certainly relate to bedrock fragments in the topsoil, natural variations in the soils and geology, agricultural disturbance and miscellaneous ferrous litter on the surface of the field.

4.2 **Northern Field**

- 4.2.1 The northern field comprises an area of approximately 2.3 hectares. Upstanding ridge and furrow on an approximately east-north-east/west-south-west alignment and also possibly on a north-north-east/south-south-west alignment is evident within the field.
- 4.2.2 Anomaly N1 corresponds to a pond on the 1881 and 1901 Ordnance Survey maps and the geophysical response is typical of that associated with a modern backfilling event. Anomaly group N2 is also typical of the geophysical response associated with buried field drainage and therefore anomalies N1 and N2 have been interpreted as a modern pond and associated field drainage. Anomaly N3 has registered a very similar response to anomaly N1 and appears to be of similar size and therefore it is not unreasonable to assume that this anomaly also represents an in-filled pond or natural depression, although a pond was not mapped in this exact location. Discrete anomaly N4 is likely to represent a natural soil-filled depression although an archaeological origin cannot be ruled out.
- 4.2.3 In the south-west corner of the field a collection of minor discrete/linear anomalies (N5 and N6) without any recognisable form may represent truncated archaeological cut features. The anomalies are located in close proximity to the ends of the back gardens of the houses on Bakers Lane and also close to the farm gate between the northern and southern fields and therefore modern disturbance or a fairly ordinary agricultural event may explain the anomalies, however an archaeological origin should not be discounted.
- 4.2.4 Approximately 25m to the north of anomaly group N6 a further, but in this case extremely weak, anomaly group was recorded (N7). The anomaly group describes a sub-

circular feature of *c.* 6m diameter. Once more an archaeological origin cannot be discounted but it is equally feasible that the anomaly has a natural origin, possibly representing a topographical feature or tree bowl.

- 4.2.5 Anomaly N8 represents an area of disturbance which the geophysical response, and the location next to the boundary, suggest will almost certainly be modern. Anomaly N9 represents a further area of disturbance which in this case corresponds to the location of the demolished building identified in the DBA (Tong 2015).

4.3 Southern Field

- 4.3.1 Anomaly S1 corresponds to the location of a former field boundary indicated on all editions of the Ordnance Survey maps up to 1921 and which was a continuation of the extant boundary in this part of the field. The geophysical response is the result of disturbance associated with the removal of the boundary and modern/ferrous material used in or alongside the boundary. Anomaly S2 also appears to be modern in origin and may represent a buried pipe. Anomaly S3 corresponds to the location of a former open water course or stream indicated on all editions of the Ordnance Survey maps up to 1971. The stream has now been in-filled or culverted and this will account for the geophysical response. The anomalies S1 to S3 represent agricultural features that are likely to be of local historical interest only.
- 4.3.2 Anomaly S4 represents an isolated possible pit feature but in the absence of any definite evidence for surviving archaeology in the vicinity this is more likely to be a natural soil filled depression, or be associated with anomalies S1 to S3. Two extremely weak linear anomalies S5 and S6 were recorded on an approximate north-south alignment towards the centre of the field. In particular anomaly S5 appears to originate close to the corner of the extant boundary where a ditched watercourse is still visible and therefore is likely to be associated with this watercourse in respect of a possible culvert or pipe, or even possibly an area of colluviation associated with a former channel or area of flooding. Anomaly S6 also appears to be typical of a natural or agricultural feature, however in the case of both anomalies S5 and S6 an archaeological origin cannot be completely ruled out.
- 4.3.4 Anomalies S7 and S8 are the result of the highly ferrous materials in the steel framed barn and metal livestock feeder respectively.

5.0 DISCUSSION AND CONCLUSIONS

- 5.1 The results of the geophysical survey were generally good and the raw data only required minimal processing to produce clear images and plots. The results have not revealed any definite evidence for any previously unknown significant sub-surface archaeological remains within the survey area although a small number of anomalies with some potential to be of archaeological origin have been identified, namely N4 to N7 and S5 and S6.
- 5.2 The geophysical survey also confirmed that large parts of the survey area appear to be entirely devoid of previously unknown features of archaeological origin other than surviving remains that are agricultural in origin which possess historical value of negligible significance. Only vague traces of the upstanding medieval ridge and furrow appear in the data. The reasons for this are twofold: upstanding ridge and furrow often

does not record well in gradiometer survey because there is a lack of contrast between the surrounding topsoil and the topsoil within the furrows (Gaffney *et al.* 2008) and traces of the ridge and furrow have been removed at the processing stage. Consequently the results suggest that no archaeological features have been masked by the ridge and furrow however they also suggest that the ridge and furrow in the northern field follows two different alignments and is therefore, possibly, multi-phase.

- 5.8 The results of this geophysical survey should be considered in conjunction with the DBA (Tong 2015).

6.0 PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

- 6.1 Any publicity will be handled by the client.
- 6.2 Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

7.0 STATEMENT OF INDEMNITY

- 7.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

8.0 ACKNOWLEDGEMENTS

- 8.1 Archaeological Research Services Ltd would like to thank those involved in the project for their help and assistance. In particular we would like to thank Richard Pigott of Planning Design Practice Ltd for commissioning the survey, Jonathan Wilson for arranging access and for his advice and Steve Baker, Development control Archaeologist at Derbyshire County Council for approving the Written Scheme of Investigation.

9.0 REFERENCES

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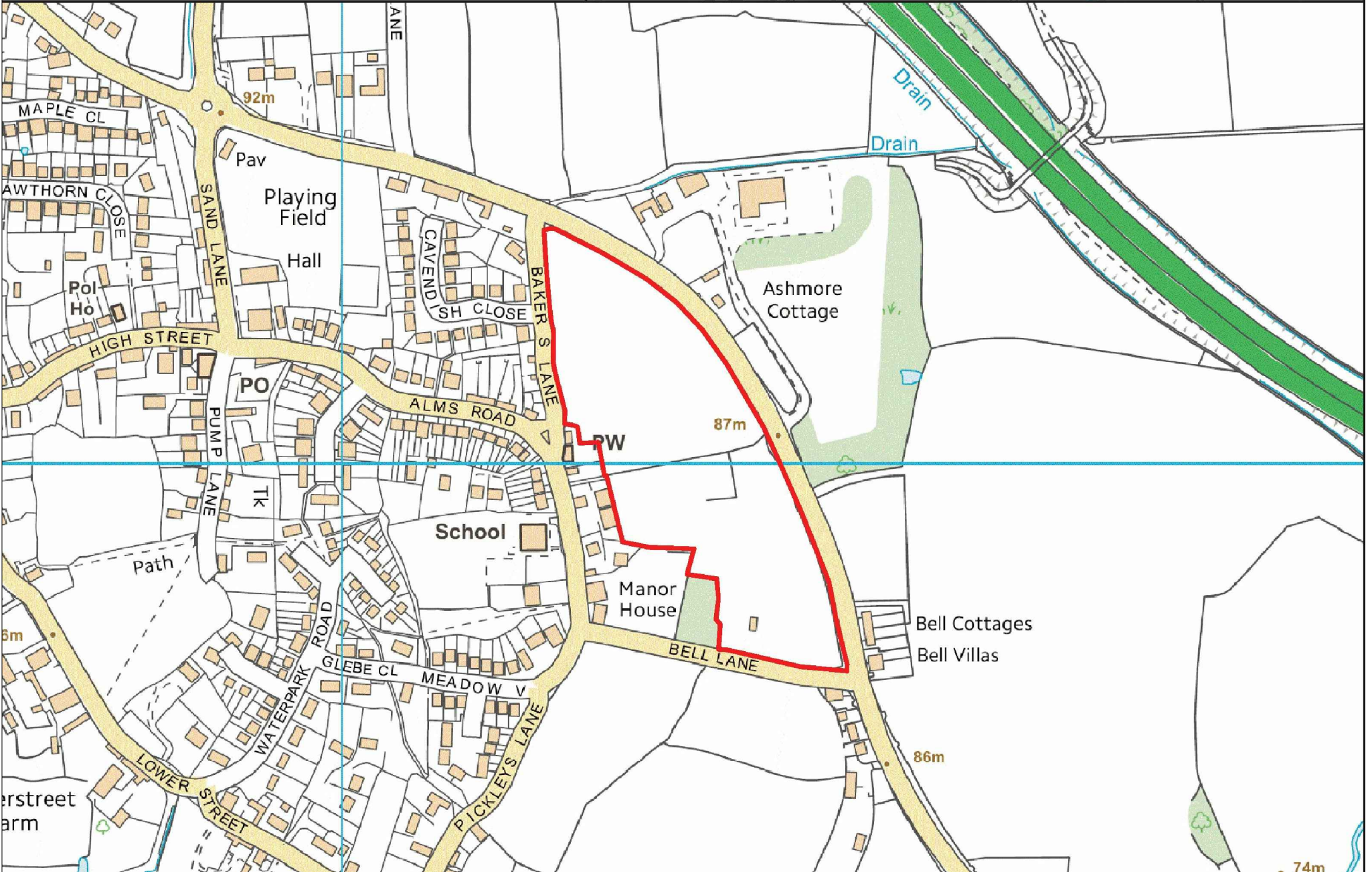
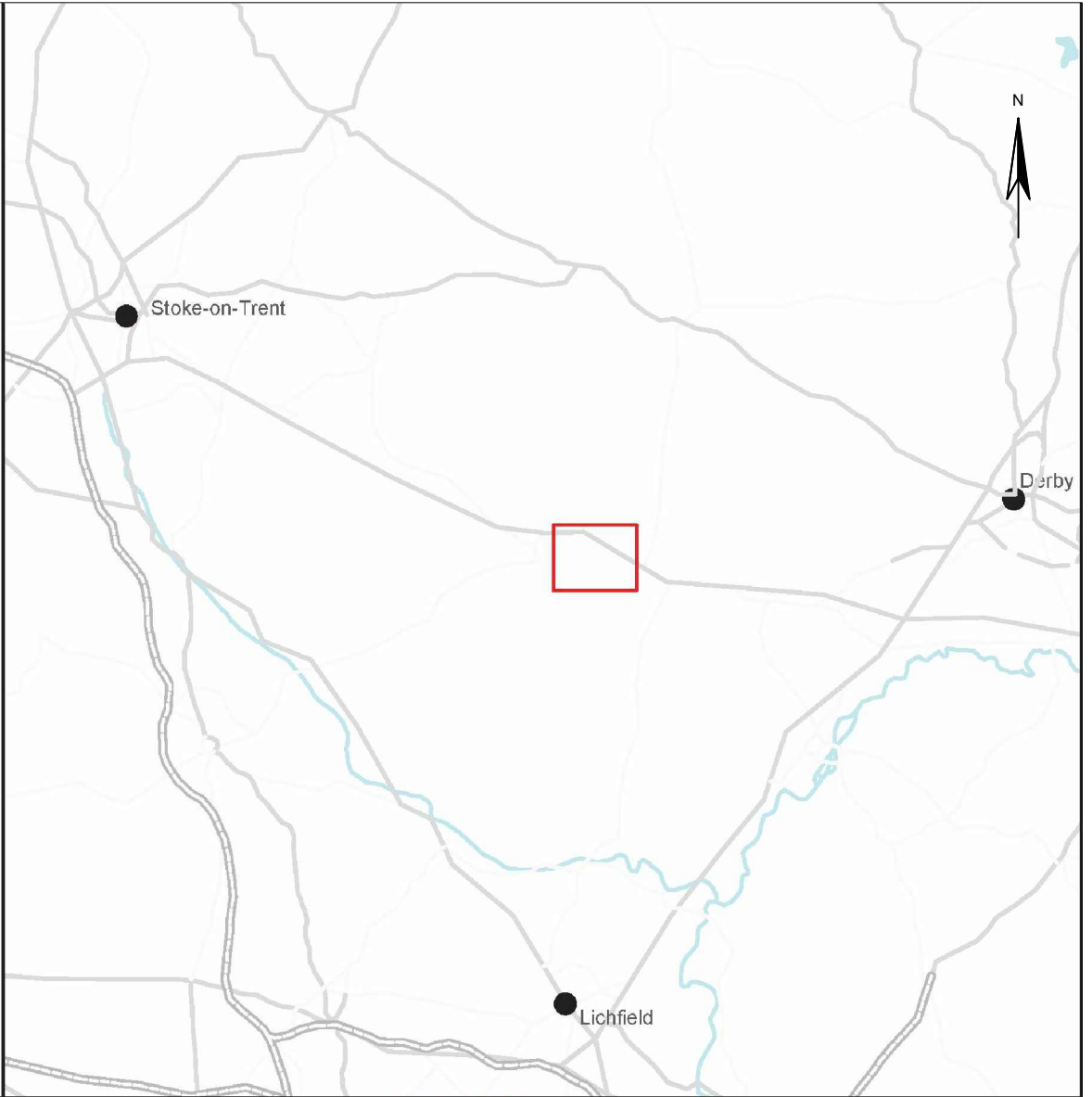
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Appendix 1: Figures



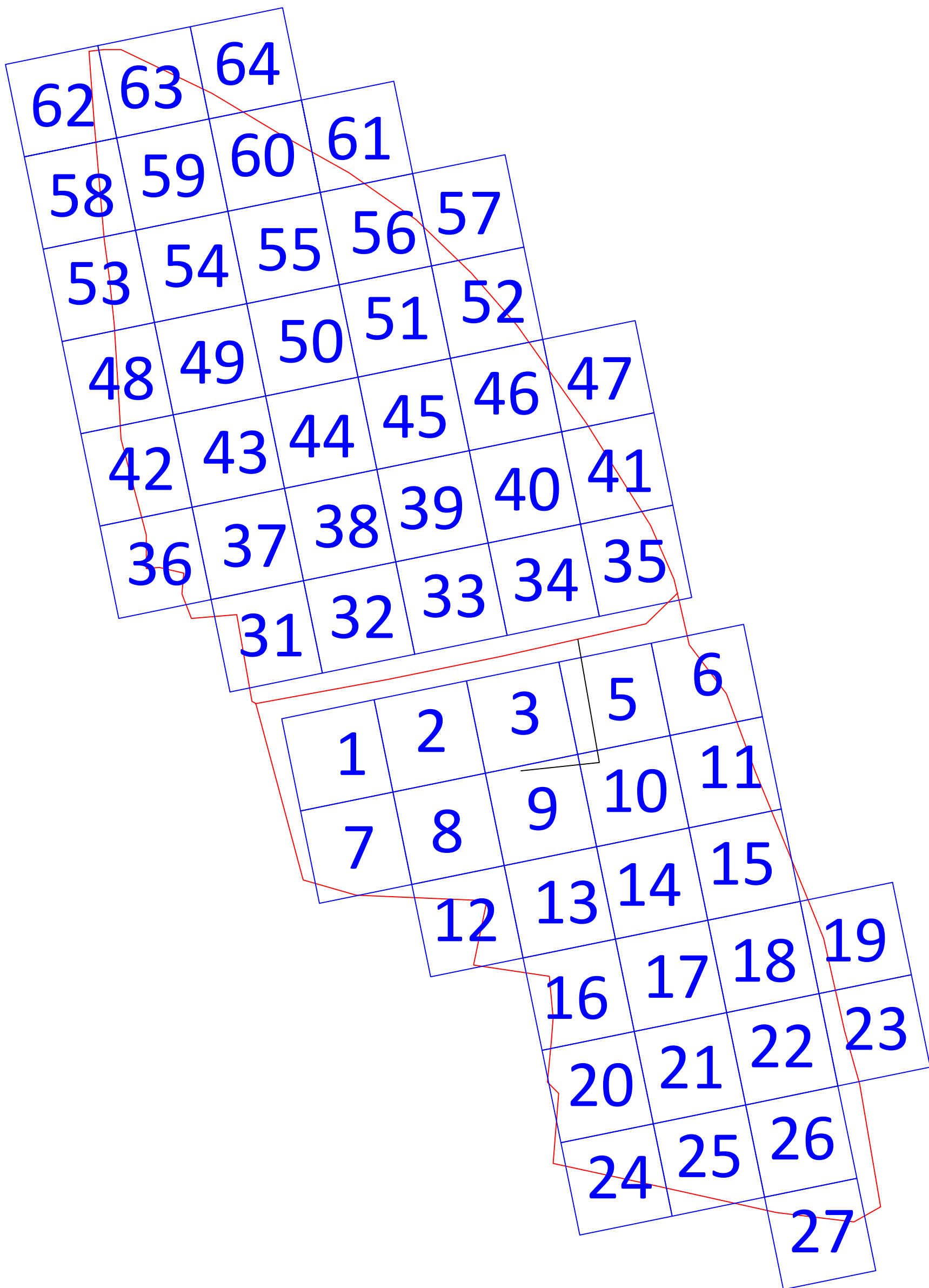
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 Drawn: RD
 Scale: As shown

Figure 1
Site Location

 Geophysical survey area



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Figure 2
Location of survey grids





-  Geophysical survey area
-  30m x 30m survey grid

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Figure 3
Greyscale shade plot of processed gradiometer data

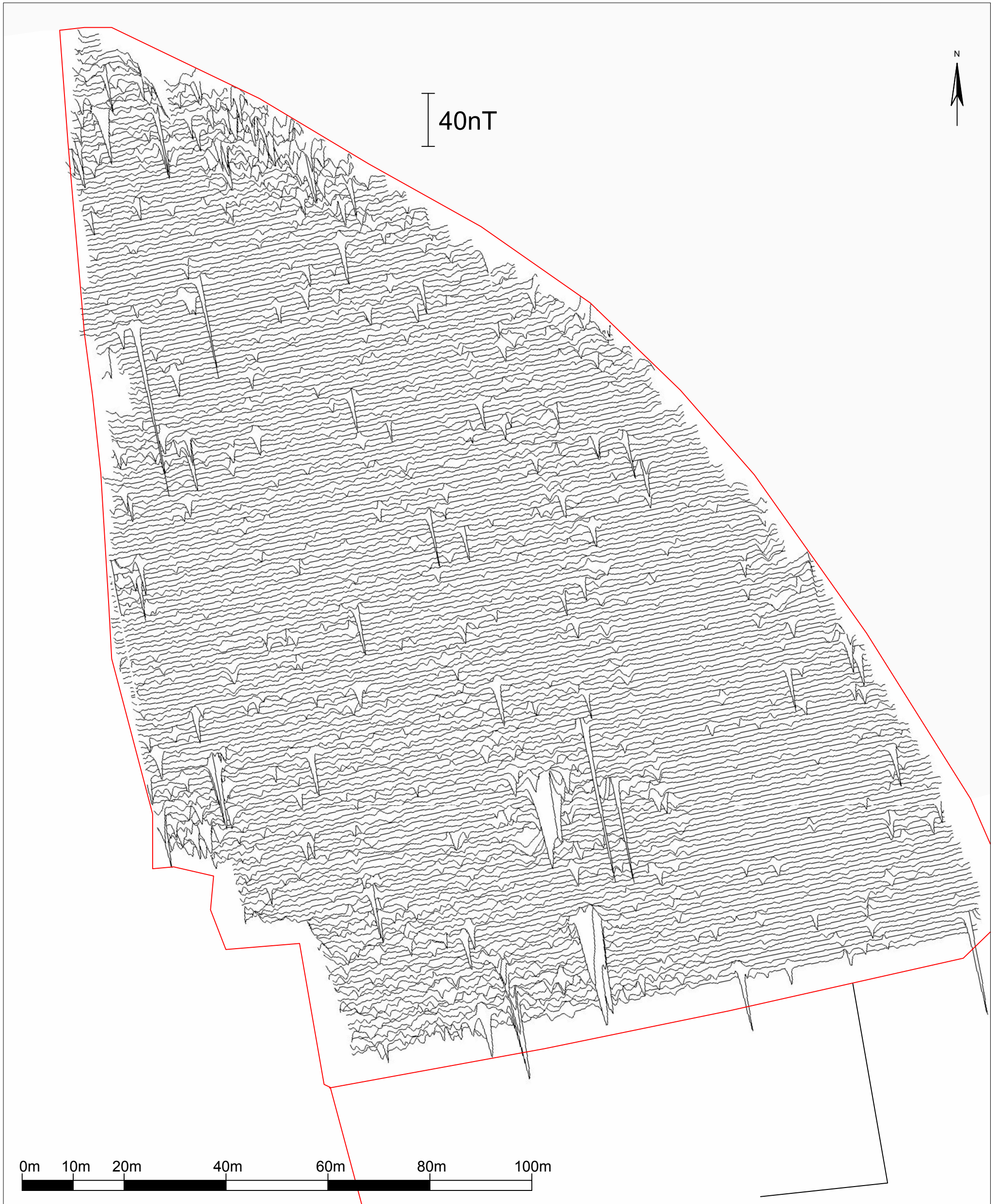
-  Geophysical survey area
-  Unsuitable for survey
-  Northern field
-  Southern field

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Site Code: Doveridge
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Figure 4
 Northern field - trace plot



Geophysical survey area

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Figure 5
 Southern field - trace plot

 Geophysical survey area

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<p>Archaeological Research Services Ltd Angel House Portland Square Bakewell Derbyshire DE45 1HB</p>	<h3>Figure 6 Interpretative Plan</h3>	<p>Copyright/Licencing: This drawing © A.R.S. Ltd</p> <p>Ordnance Survey data if applicable © Crown Copyright, all rights reserved reproduced with permission. Licence No. 100022432</p>																			
<p>Site Code: Doveridge Drawing Ref: Figure 1 Date: May 2015 Drawn: RD Scale: As shown</p>	<table border="0"> <tr> <td></td> <td>Geophysical survey area</td> <td></td> <td>N4 S4</td> <td>Natural or agricultural feature (possible archaeology)</td> </tr> <tr> <td></td> <td>In-filled pond (N3 probable)</td> <td></td> <td>N8-N9</td> <td>Modern disturbance</td> </tr> <tr> <td></td> <td>Probable field drainage</td> <td></td> <td>S1-S3</td> <td>Modern disturbance pipe/culvert</td> </tr> <tr> <td></td> <td>Natural or agricultural feature (possible archaeology)</td> <td></td> <td>S5/6</td> <td>Natural/agricultural feature (possible archaeology)</td> </tr> </table>			Geophysical survey area		N4 S4	Natural or agricultural feature (possible archaeology)		In-filled pond (N3 probable)		N8-N9	Modern disturbance		Probable field drainage		S1-S3	Modern disturbance pipe/culvert		Natural or agricultural feature (possible archaeology)		S5/6
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	Probable field drainage		S1-S3	Modern disturbance pipe/culvert																	
	Natural or agricultural feature (possible archaeology)		S5/6	Natural/agricultural feature (possible archaeology)																	

Appendix 2: Written Scheme of Investigation



Land East of Bakers Lane, Doveridge, Derbyshire

Written Scheme of Investigation for a Geophysical Survey

April 2015

1 Introduction

1.1 Project Background

- 1.1.1 This document comprises a Written Scheme of Investigation (WSI) for a geophysical survey of land east of Bakers Lane and west of Derby Road, Doveridge, Derbyshire. It outlines the proposed method of investigation to be used by Archaeological Research Services Ltd (ARS Ltd) for surveying the c.4.5 ha site.
- 1.1.2 Planning Design Practice Ltd is preparing a planning application on behalf of Jonathan Wilson to develop the land east of Bakers Lane, Doveridge. In consultation with the Derbyshire Development Control officer, the site should be assessed for potential archaeological remains by geophysical (magnetometry) survey.

1.2 Location and Land-Use

- 1.2.1 The site comprises a single field to the east of Bakers Lane and west of Derby Road Doveridge, Derbyshire and is centred at NGR 12290 34014 (Figure 1: see below).
- 1.2.2 The underlying solid geology comprises sandstones of the Mercia Mudstone Group consisting of sedimentary mudstone. This is overlain by a superficial deposit of Mid-Pleistocene Glaciofluvial Terrace Deposits of sand and gravel (British Geological Survey 2015).

2 Archaeological Background

- 2.1 The site has been the subject of a desk-based assessment by ARS Ltd in February 2015 and the following summary of the archaeological background is extracted from the 'An Historic Environment Desk-Based Assessment of Land to the East of Bakers Lane, Doveridge, Derbyshire (Tong, 2015). This assessment identified two historic assets within the proposed development area: a demolished building and medieval ridge and furrow. The early 19th century structure is considered to be of negligible archaeological significance as the structure has been demolished and little is likely to survive below ground. The fossilised remains of medieval ridge and furrow visible in the fields of the proposed development area are part of an extensive series of fields within the wider study area which exhibit medieval ridge and furrow earthworks.

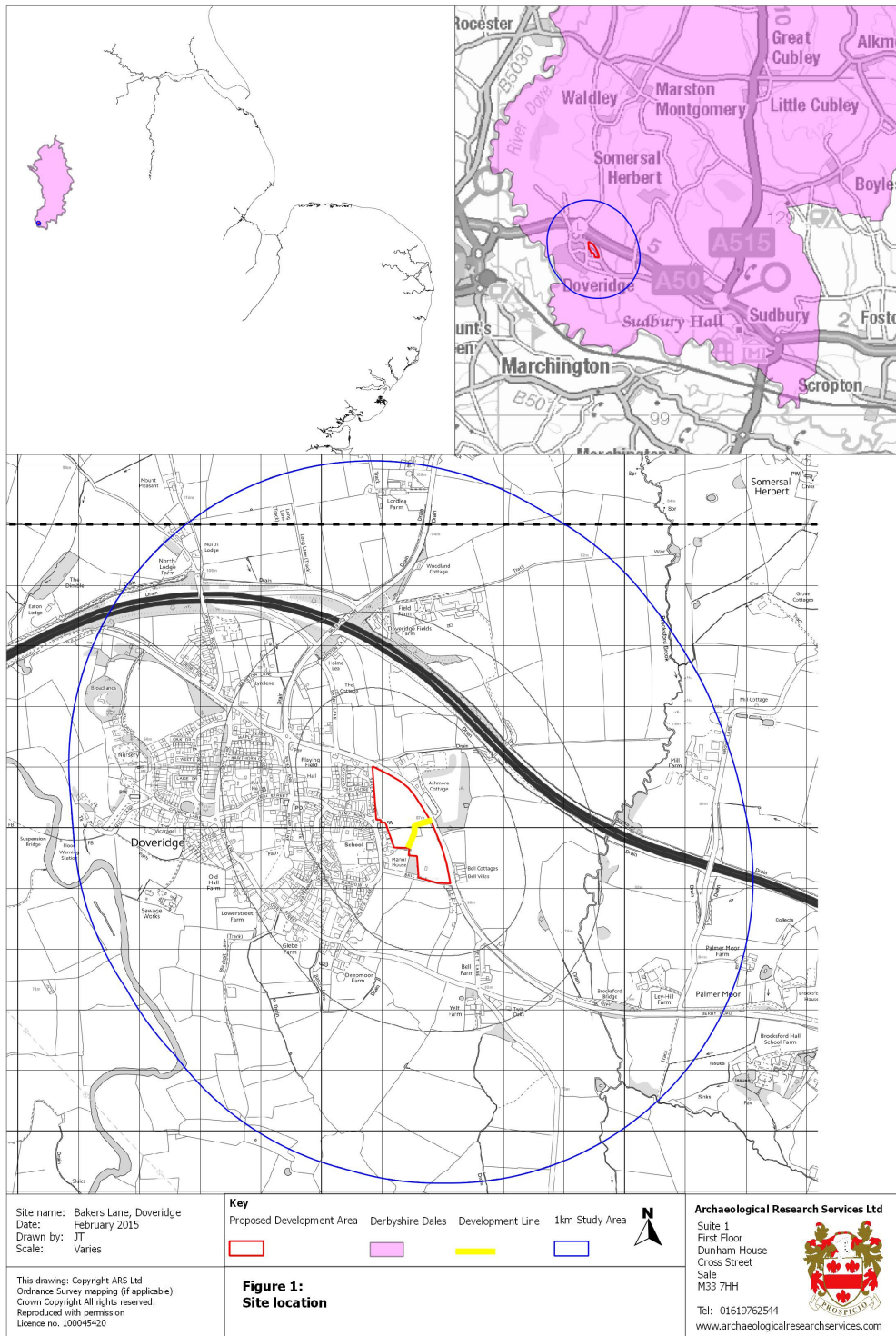


Figure 1. Location of site (highlighted in red)

- 2.2 There is some slight evidence for Bronze Age activity within the area, given Doveridge's riverine location, which may have presented a potentially attractive location for prehistoric or medieval settlements and activity. The assessment identified a medium-low potential for archaeological remains to survive within the PDA as buried features, with any potential remains pre-dating the medieval period likely surviving only as truncated features.

3 Objectives

- 3.1 The objective of the gradiometer survey is to identify anomalies of possible archaeological origin within the survey area (see Figure 1) in order to identify and record the possible presence/absence, location, nature and extent of prehistoric and later historic archaeological deposits that may exist on the proposed development site.

4 Geophysical Survey

4.1 Coverage

- 4.1.1 It is intended to conduct a geophysical (magnetometer) survey over a c.4.5ha area of the site of the proposed development.

4.2 Selected technique

- 4.2.1 The geophysical survey technique selected for the site is magnetometry. Magnetometry using Fluxgate Gradiometer instruments is the preferred geophysical technique utilised for the detection of buried features such as iron-based features and objects, or those subjected to firing such as kilns, hearths and even the buried remains of brick walls. It is also used to locate more subtle features such as boundary or enclosure ditches, pits and post holes which have been gradually in-filled by 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 features to be detected. In addition to this, variations in the magnetic susceptibility between the topsoil, subsoil and bedrock have a localised effect on the Earth's magnetic field enabling the detection of features such as backfilled ditches or pits due to the fact that the topsoil has more magnetic properties than the subsoil or bedrock, resulting in a 'positive' magnetic anomaly. Conversely, earthwork or embankment features can also be identified as 'negative' magnetic anomalies due to the action of placing less magnetic subsoil on top of more magnetic top soil.

4.3 Methodology

- 4.3.1 A survey grid comprising 30m x 30m individual grids will be set up over the selected survey areas. The survey will use a temporary survey grid accurately positioned using a suitable DGPS system. The temporary grid will be co-registered to the Ordnance Survey National Grid using digital tiles provided by ARS Ltd or suitable digital map tiles provided by the client.
- 4.3.2 These grids will then be surveyed using a Bartington Grad 601-2 gradiometer. The Grad 601-2 has two gradiometer sensors and therefore collects two lines of data during each traverse. Data are collected in a zigzag fashion within the grid starting in the north-west corner, facing east. Readings are taken every 0.25m on traverses 1m apart. This equates to 3600 readings in a complete 30mx30m grid. Sensor balance will be checked and adjusted at

regular intervals.

- 4.3.3 At the end of each day the data will be downloaded to a PC or laptop using Geoscan *Geoplot V3*.
- 4.3.4 All staff employed on the geophysical survey will be suitably qualified and experienced for their respective project roles and have practical experience of geophysical survey.
- 4.3.5 All staff will be made aware of the archaeological potential of the area and will be fully briefed on the work required by this WSI.

4.4 Data Processing, Interpretation and Report

4.4.1 Data processing will be undertaken by a geophysicist using Geoscan *Geoplot V3*. Anomalies will be digitised and geo-referenced. They will be colour coded using ARS Ltd's standard scheme to provide the most likely interpretation. Anomalies will be numbered and catalogued as systematic groups or individual anomalies as appropriate. The final report will include a graphical and textual account of the techniques undertaken, the data obtained and an archaeological interpretation of that data and conclusions about any likely archaeology. The report will describe the work undertaken and the results obtained. It will (as a minimum) include the following.

- A Non-technical summary
- Introduction
- Geological and topographical setting
- Methodology
- Discussion of archaeological and historical background
- Discussion on the results of the survey
- Conclusions and recommendations
- Sources
- Copy of brief
- Figure showing location of the site
- Figure showing location of survey grids and referencing
- Figure showing processed data
- Figure showing trace plots of processed data
- Figure showing abstraction and interpretation of anomalies.

4.4.2 The presentation and interpretation of the results will be carried out in accordance with the *Code of Conduct* of the Chartered Institute for Archaeologists (CIfA 2014a) and will follow the English Heritage guidelines (2008) *Geophysical Survey in Archaeological Field Evaluation* and CIfA *Standard and Guidance for archaeological geophysical survey* (2014b). ARS Ltd is a corporate member of the International Society of Archaeological Prospection (ISAP).

5 Project management

5.1 ARS Ltd is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA). Registered Organisations are continuously assessed to ensure that the highest standards of work are carried out, in line with the *Code of Conduct* of the CIfA (2014a). In addition to our key management staff, who have achieved the highest grade of corporate CIfA membership, many of our field staff also hold corporate grade membership.

5.2 All staff employed on the project will be suitably qualified and experienced for their respective project roles and have practical experience of geophysical surveying and reporting. All staff will be made aware of the archaeological importance of the area surrounding the site and will be fully briefed on the work required by this specification. Each member of staff will be fully conversant with the aims and methodologies and will be given a copy of this WSI to read. All members of staff employed by ARS Ltd are fully qualified and experienced archaeologists, this will ensure that appropriate decisions regarding excavation and sampling will be made in the field.

5.3 *Project Team*

Project management: Chris Scott BA, MLitt, MifA (ARS Ltd)

Geophysical surveyors: Richard Durkin BEng (ARS Ltd)

6 Access

6.1 ARS Ltd will give the Derbyshire Development Control Officer at least two weeks (or less if so agreed) notice of the commencement of fieldwork.

6.2 ARS Ltd will liaise with the Derbyshire Development Control Officer at regular intervals throughout the course of the work to ensure that the project aims and objectives are met.

Steve Baker
Derbyshire County Council
Shand House
Dale Road South
Matlock
Derbyshire
DE4 3RY
Tel: 01629 539773

7 Report Deposition

7.1 An OASIS online record <http://ads.ahds.ac.uk/project/oasis/> will be initiated and, as the project proceeds, information will be added to this record. Key fields will be completed on Details, Location and Creators forms. All parts of the OASIS online form will be completed for submission to the HER. This will include an uploaded .pdf version of the entire report (a paper copy will also be included within the archive).

7.2 Copies of the final report will be deposited with the Derbyshire Historic Environment Record in bound and PDF/A format.

7.3 The Derbyshire Development Control Officer will be notified of the final deposition of the report.

8 Changes to Methodology or Work Programme

8.1 Changes to the approved methodology or programme of works will only be made with the prior written approval of the Derbyshire Development Control Officer.

9 Health and Safety

- 9.1 A full health and safety risk assessment will be carried out prior to the survey commencing. All people working on the site will be briefed on the safety requirements whilst working on-site and given access to a copy of the risk assessment and all ARS Ltd staff working on the site will undergo a Health and Safety induction. ARS Ltd maintains a strict health and safety policy, as well as having Contractors Health and Safety Assessment Scheme (CHAS) Accreditation. The appointed Health and Safety Officer for the company is Chris Scott.

10 References

- British Geological Survey. 2015. Geology of Britain viewer. Available online at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [Accessed 17th April 2015].
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Project details

Project name	Geophysical Survey of land to the East of Bakers Lane, Doveridge, Derbyshire
Short description of the project	A geophysical survey was carried out between 21st and 24th April 2015 using a Bartington 601 dual sensor fluxgate gradiometer. Approximately 4.5ha. was included in the survey. The results have not revealed any definite evidence of any previously unknown significant sub-surface archaeological remains within the survey area although a small number of anomalies with some potential to be of archaeological origin have been identified. The geophysical survey also confirmed that large parts of the survey area appear to be devoid of detectable archaeological features other than surviving remains that are agricultural in origin and which possess historical value of negligible significance. Vague traces of the upstanding medieval ridge and furrow appear in the data and these suggest that in the northern field the ridge and furrow follows two alignments and is therefore, possibly, multiphase. As the anomalies associated with the medieval ridge and furrow are vague in the dataset or have been removed at the data processing stage the results suggest that it is unlikely that any archaeological features have been masked by the ridge and furrow.
Project dates	Start: 21-04-2015 End: 24-04-2015
Previous/future work	Not known / Not known
Type of project	Recording project
Monument type	NA Uncertain
Significant Finds	NA Uncertain
Investigation type	"Geophysical Survey"
Prompt	Planning condition
Solid geology (other)	Mercia Mudstone Group
Drift geology	GLACIAL SAND AND GRAVEL
Techniques	Magnetometry

Project location

Country	England
Site location	DERBYSHIRE DERBYSHIRE DALES DOVERIDGE Land East of Bakers Lane, Doveridge
Study area	4.50 Hectares
Site coordinates	SK 12294 34001 52.9029859246 -1.81720099558 52 54 10 N 001 49 01 W Point

Project creators

Name of Organisation	Archaeological Research Services Ltd
Project brief originator	none
Project design originator	none
Project director/manager	Clive Waddington
Project supervisor	Richard Durkin

Project archives

Physical Archive Exists?	No
Digital Archive Exists?	No
Paper Archive recipient	Derbyshire HER
Paper Contents	"none"
Paper Media available	"Report"

Entered by	Richard (admin@archaeologicalresearchservices.com)
Entered on	1 June 2015

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