

**Chadlington Down Farm,
Chipping Norton, Oxfordshire**

Report on Archaeological Geophysical Survey 2014

Report by:

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for:

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13 June 2014

Land at Chadlington Down Farm, Chipping Norton, Oxfordshire

Report on Archaeological Geophysical Survey, 2014

Introduction

This geophysical survey was undertaken as part of an archaeological field evaluation of a proposed development site at Chipping Norton, Oxfordshire. The survey was commissioned from Bartlett Clark Consultancy, Specialists in Archaeogeophysics of Oxford, by The Environmental Dimension Partnership (EDP) on behalf of Bellway Homes Ltd.

Fieldwork for the survey was done on 2-4 June 2014.

The Site

The site is an area of farmland located immediately to the south of Chipping Norton, and centred approximately at NGR SP 313261. The total extent of the evaluation area (as indicated by the red outline on the location plan inset in figure 1) is 9.25ha, but this was later extended by the inclusion of a small triangular area adjacent to the football ground to the west of the site. The actual survey coverage (as indicated by blue cross hatching) amounted to 9.48ha.

The site is on a Jurassic bedrock, which (on the evidence of other surveys at various sites in north Oxfordshire, and in comparable locations elsewhere) should provide highly favourable conditions for the magnetic detection of archaeological features.

Archaeological background

The following information was supplied to us by EDP, and was previously included in the method statement prepared in advance of the survey [1]. It summarises the known archaeological background to the site, and is based on the information recorded on the Oxfordshire HER.

The site does not contain any known archaeological remains of significance, where this has been recognised by entry on to the Oxfordshire HER. The HER does, however, contain records of prehistoric settlement in the wider area around the site.

An isolated Neolithic flint scraper has been recovered from agricultural fields approximately 1 kilometre to the west of the site, and an isolated Roman coin has also been recovered to the south.

The area to the south of the site is relatively quiet in archaeological terms, but allotments to the north of Burford Road and to the north of the proposed site appear to be more archaeologically active. Flint findspots close to the northern boundary of the site include a Neolithic arrowhead and a small flint assemblage recovered during fieldwork. Iron Age pottery has also been recovered in this area to the north of the site. Iron Age pottery has also been recovered to the east of the site, and may be associated with an undated enclosure.

A potential Romano-British settlement to the east of the site close to Glyme Farm may suggest continuity of settlement well into the Romano-British period. This is reflected in findspots to the north of the site, where Romano-British pottery and coins have been recovered. There is a further indication of Romano-British settlement to the north of the site. Romano-British buildings are marked here on the Ordnance Survey, but there is no record of such buildings on the Oxfordshire HER.

There are limited records on the HER from the medieval period, and equally limited records for the post-medieval period. A sheepwash and decoy pond to the east of the site and a milestone to the south of the site date to this period.

Survey Procedure

The site was investigated by means of a recorded magnetometer survey. Readings were collected along transects 1m apart using Bartington 1m fluxgate gradiometers, and are plotted at 25cm intervals along each transect. The results of the survey are presented at 1:2000 scale as a grey scale plot (figure 1), and as a graphical (x-y trace) plot at 1:1250 (figures 2-3). Comparison of these alternative presentations allows the detected magnetic anomalies to be examined in plan and profile respectively. An interpretation of the findings is shown superimposed on figures 2-3 (which permits the interpreted outlines to be compared with the underlying data), and is reproduced separately to provide a summary of the findings (figure 4).

The graphical plots show the magnetometer readings after minimal pre-processing which includes adjustment for irregularities in line spacing caused by variations in the instrument zero setting, and slight linear smoothing. Additional 2D low pass filtering has been applied to the grey scale plots to adjust background noise levels.

Colour coding has been used in the interpretation to distinguish different effects. The interpretation is intended to be schematic and illustrative, and not to reproduce the detail of the grey scale plots.

Findings as marked include magnetic anomalies which may show characteristics to be expected from features of potential archaeological significance (in red). Stronger (perhaps recent) disturbances are in grey. Cultivation markings are shown as green broken lines, and some of the more conspicuous ferrous objects (identifiable as narrow spikes in the graphical plots) are outlined in light blue.

Survey location

The survey grid was set out and tied to the OS grid using a differential GPS system. The plans are therefore geo-referenced, and OS co-ordinates of map locations can be read from the AutoCAD version of the plans, which can be supplied with this report.

Results

The survey has detected various subsurface features and disturbances, some of which appear to relate to past land use, but they do not appear to include any distinct and unambiguous archaeological findings of the kind often seen in surveys of archaeologically productive sites on similar bedrock in north Oxfordshire.

Findings visible in the survey plots include strong magnetic disturbances (as seen particularly in the graphical plot; figure 3) at the east end on the site (labelled A in figure 4). These could typically represent a former pit or pond filled with strongly magnetic (and probably recent) debris. There is a further scatter of (less concentrated, but probably also recent) disturbances along the eastern site boundary (B). A cluster of similar disturbances in the centre of the survey at C is centred on a stone or concrete-capped inspection chamber.

The disturbances at C interrupt a sequence of parallel linear markings which are visible in the grey scale plot, and are indicated by green broken lines in the interpretation. These must be a cultivation effect, and could perhaps represent traces of ridge and furrow. The magnetic anomalies are relatively weak if so, and fade towards the north of the field. This suggests that any ridge and furrow, if present, is likely to have been substantially eroded by more recent cultivation.

Findings which may display some of the characteristics to be expected from potential archaeological features could include a number of individual pit-like magnetic anomalies which are outlined in red in the interpretation (as at D, E). The smaller features (similar to D) are widely dispersed across the survey, and there are no identifiable groups or clusters of such findings as might be expected at an ancient settlement site. The larger feature outlined at E could be a broad silted pit or hollow (c. 5m across) of uncertain significance. The much stronger magnetic anomalies outlined in grey (as at F) represent marker posts along the proposed site boundary.

The remaining findings are located towards the east of the site (in the direction of the possible Iron Age enclosure and Roman settlement sites mentioned in the HER). They include irregular linear markings visible in the grey scale plot and labelled G and H. There is also a smaller and approximately circular feature at J. These findings are located in an area of the site with a relatively high level of natural background magnetic noise (as indicated by an increased density of small magnetic anomalies outlined in light brown). An increase in background activity of this kind is sometimes seen at locations where there is only a shallow topsoil layer above near-surface bedrock. It could therefore be the case that features G, H, J represent minor or superficial irregularities in soil depth, or they could perhaps be the eroded traces of former ditches or enclosures.

No findings (other than recent disturbances) are identifiable in the additional small triangular area surveyed near to the football ground to the west of the main survey.

Conclusions

Conditions at the site should be favourable for the magnetic detection of archaeological features, and various ground disturbances and cultivation effects were detected. These could include an infilled pit or pond (A) at the east of the survey area.

Findings otherwise are limited to a few widely dispersed pit-like features of uncertain significance, and irregular linear markings towards the east of the site. These indistinct features (G, H, J) do not represent a well-preserved or clearly interpretable field system or group of settlement enclosures, and are located in a part of the site with a high level of natural background magnetic activity. The possibility that they could represent eroded traces of archaeological features cannot, however, be wholly excluded on the survey evidence alone.

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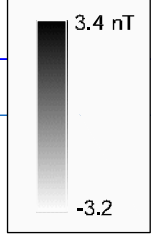
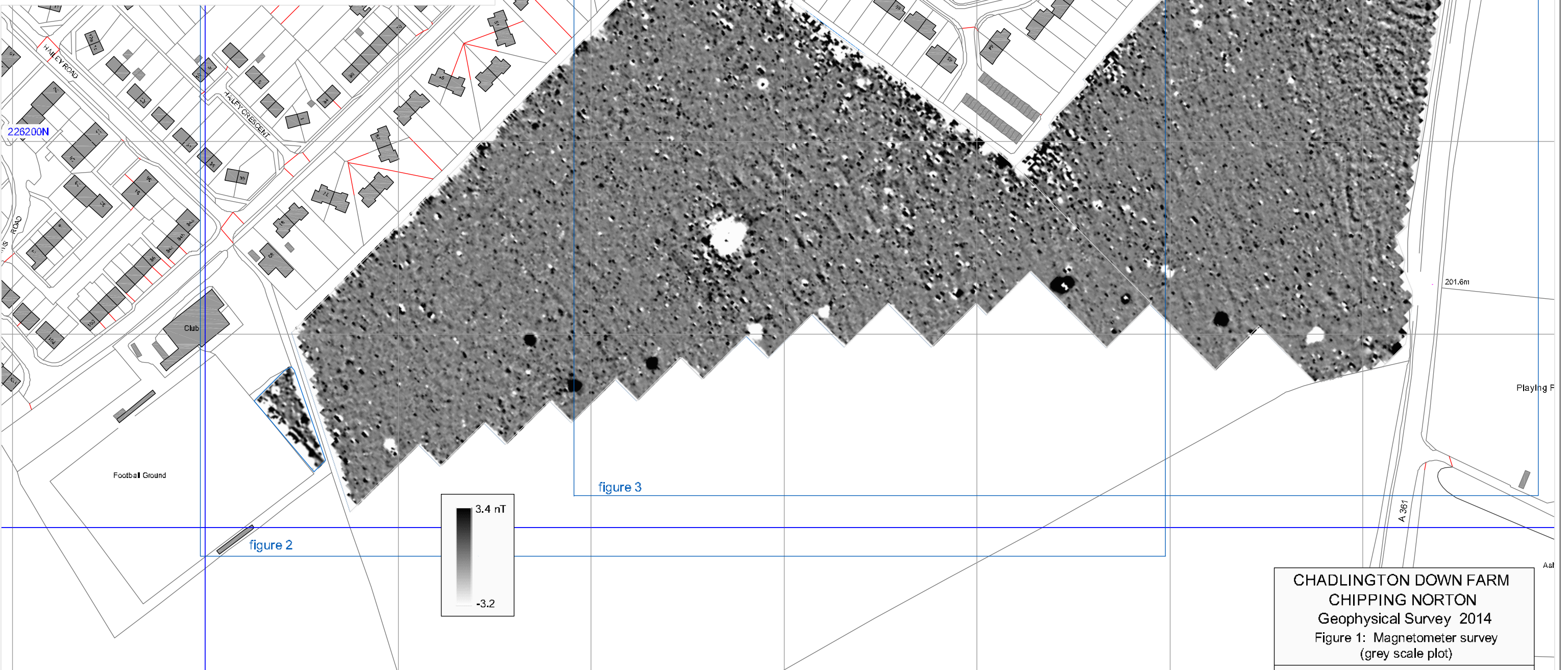
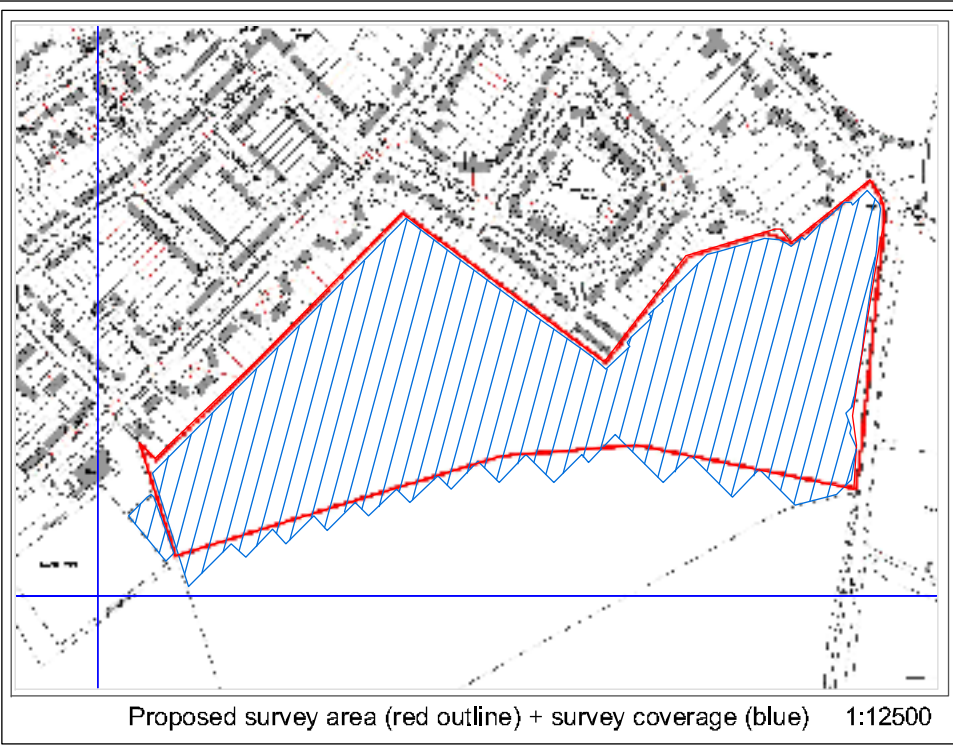
email: bcc123@ntlworld.com

13 June 2014

The fieldwork for the survey was done by N. Paveley and N. Dawson. Data processing was done by C. Oatley.

Reference

- [1] *Chadlington Down Farm, Chipping Norton, Oxfordshire: Method Statement for Archaeological Geophysical Survey.* Document submitted to EDP by Bartlett Clark Consultancy; 29 May 2014.








CHADLINGTON DOWN FARM
CHIPPING NORTON
Geophysical Survey 2014
Figure 1: Magnetometer survey
(grey scale plot)

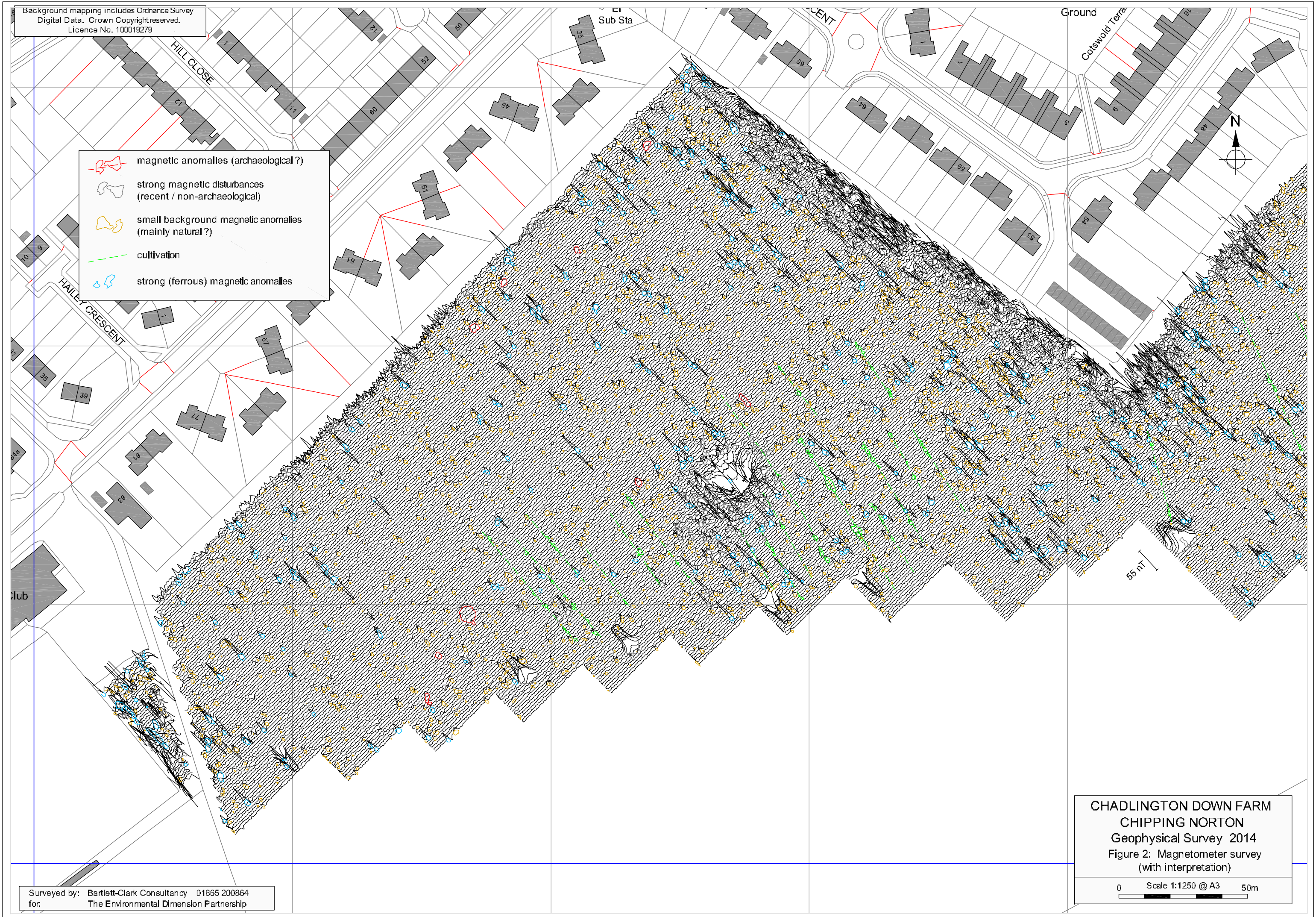
0 Scale 1:2000 @ A3 100m

Playing Field

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for: The Environmental Dimension Partnership

Background mapping includes Ordnance Survey
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-  magnetic anomalies (archaeological ?)
-  strong magnetic disturbances
(recent / non-archaeological)
-  small background magnetic anomalies
(mainly natural ?)
-  cultivation
-  strong (ferrous) magnetic anomalies

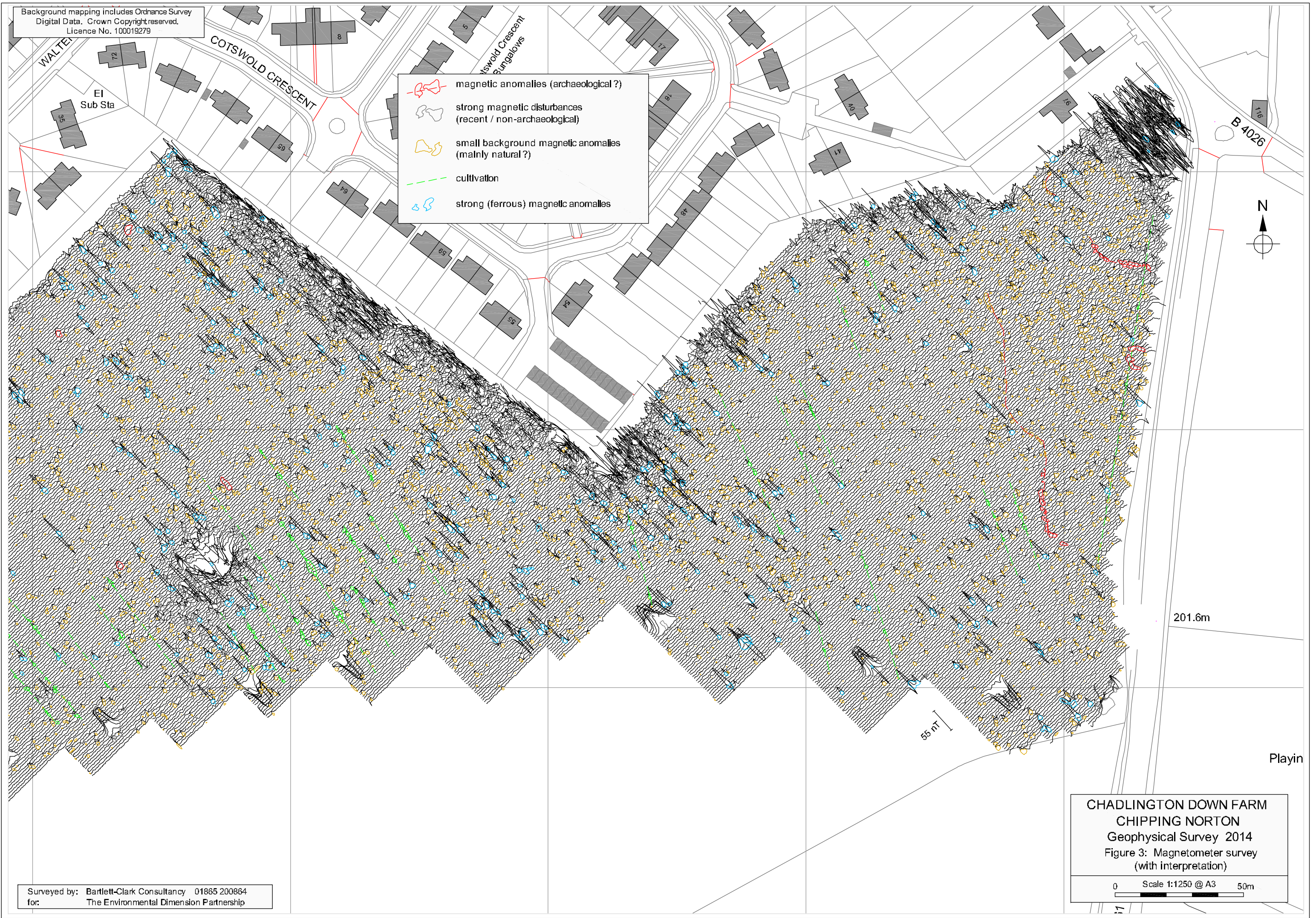


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Figure 2: Magnetometer survey
(with interpretation)

0 Scale 1:1250 @ A3 50m

Background mapping includes Ordnance Survey
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- magnetic anomalies (archaeological ?)
- strong magnetic disturbances (recent / non-archaeological)
- small background magnetic anomalies (mainly natural ?)
- cultivation
- strong (ferrous) magnetic anomalies

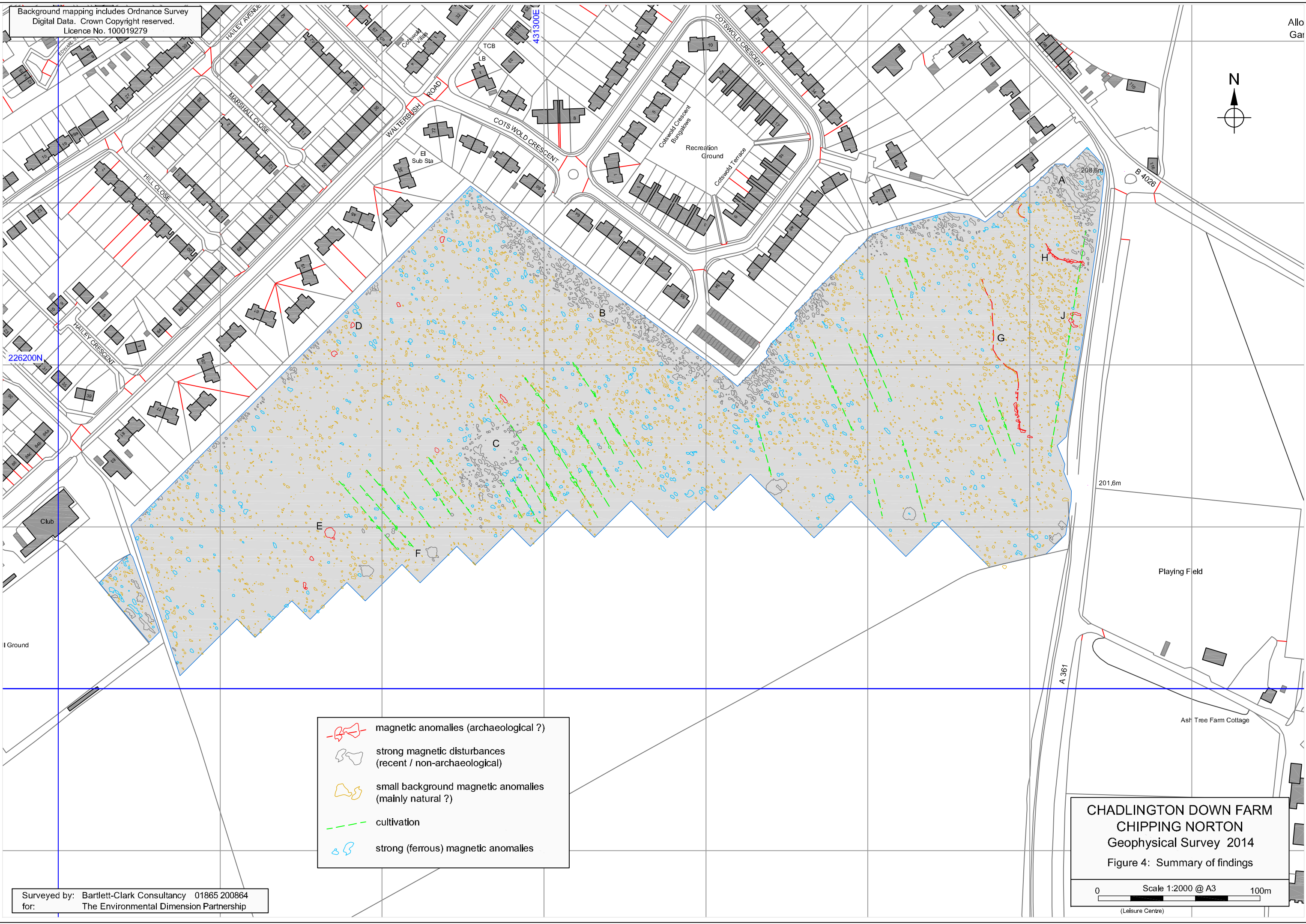
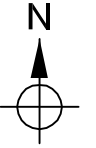
CHADLINGTON DOWN FARM
CHIPPING NORTON
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Figure 3: Magnetometer survey
(with interpretation)






0 Scale 1:1250 @ A3 50m

Surveyed by: Bartlett-Clark Consultancy 01865 200864
for: The Environmental Dimension Partnership

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-  magnetic anomalies (archaeological ?)
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-  cultivation
-  strong (ferrous) magnetic anomalies

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Figure 4: Summary of findings

0 Scale 1:2000 @ A3 100m

(Leisure Centre)

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