Green Hill Solar Farm
EN010170

Environmental Statement
Appendix 12.4: Archaeological Geophysical Survey Reports
Revision A
(Part 8 of 10)

Prepared by: Lanpro

Date: November 2025

Document Reference: EX1/GH6.3.12.4_A

APFP Regulation 5(2)(a)

Schedule of Changes

Revision	Section Reference	Description of Changes	Reason for Revision
A	[cover]	Updated document reference to Revision A	Updated survey results.
	pp.66-104	Changes to survey date information, changes to surveyed area.	Updated survey results based on survey of CR1a.12 undertaken July 2025.
	pp.66-104	Changes to overall plans due to insertion of survey area CR1a.12. Updates to figure schedules and numbering of figures from fig. 27-116	Updated survey results based on survey of CR1a.12 inserted at fig. 24-26.
	p.83	Updated magnetometer survey methodology description.	Updated survey results based on survey of CR1a.12 undertaken July 2025.
	p.85	Insertion of description of uncertain anomalies U18 and U19.	Updated survey results based on survey of CR1a.12 undertaken July 2025.

Blue highlights show additional text and annotations. Yellow highlights show amendments to text and annotations.

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Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 9

Fig. 29

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1500 @ A3

N

550m

2548$_{00}$

4900$_{00}$

4902$_{00}$

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 9

Fig. 30

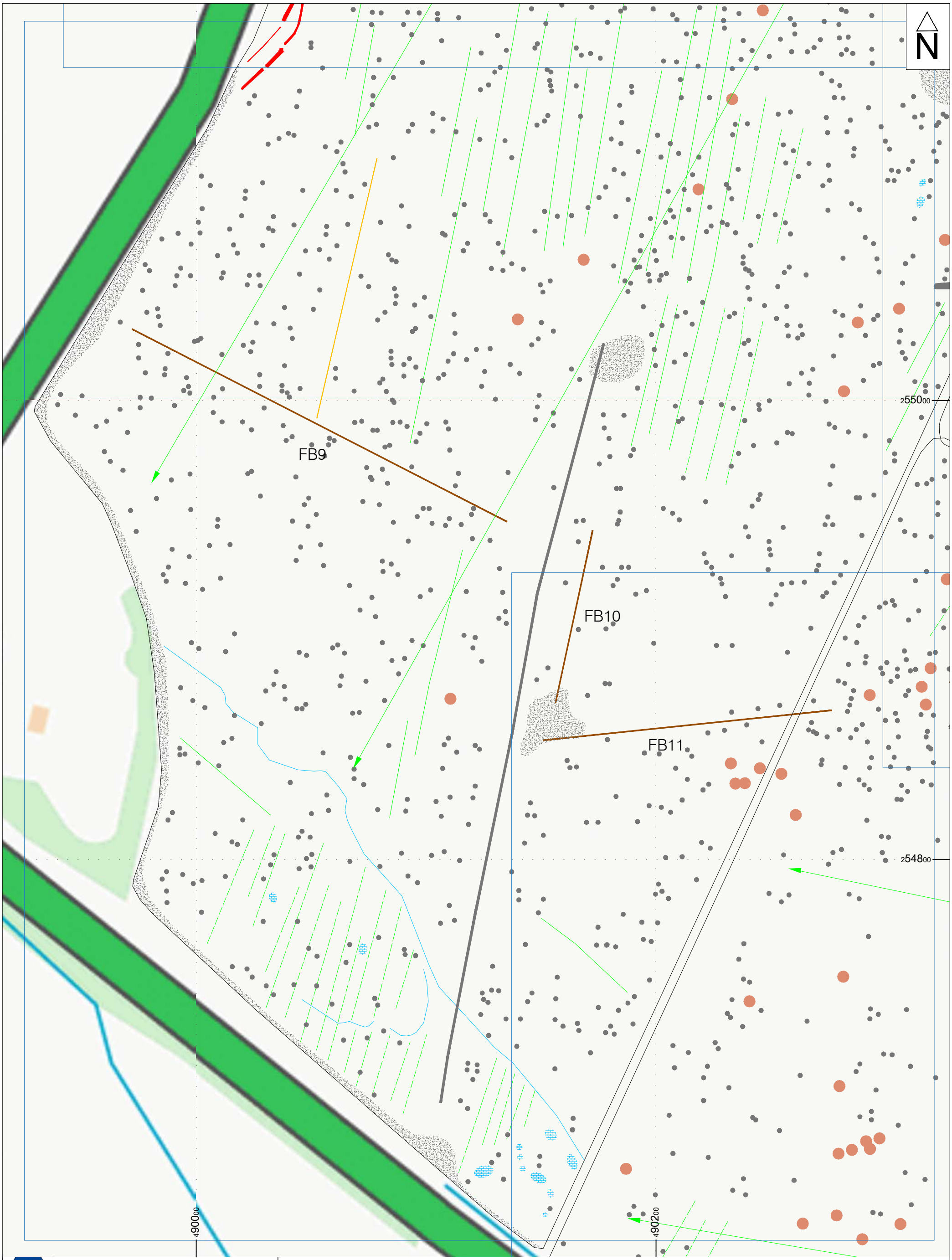
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3



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Interpretation of magnetometer data; Sector 9

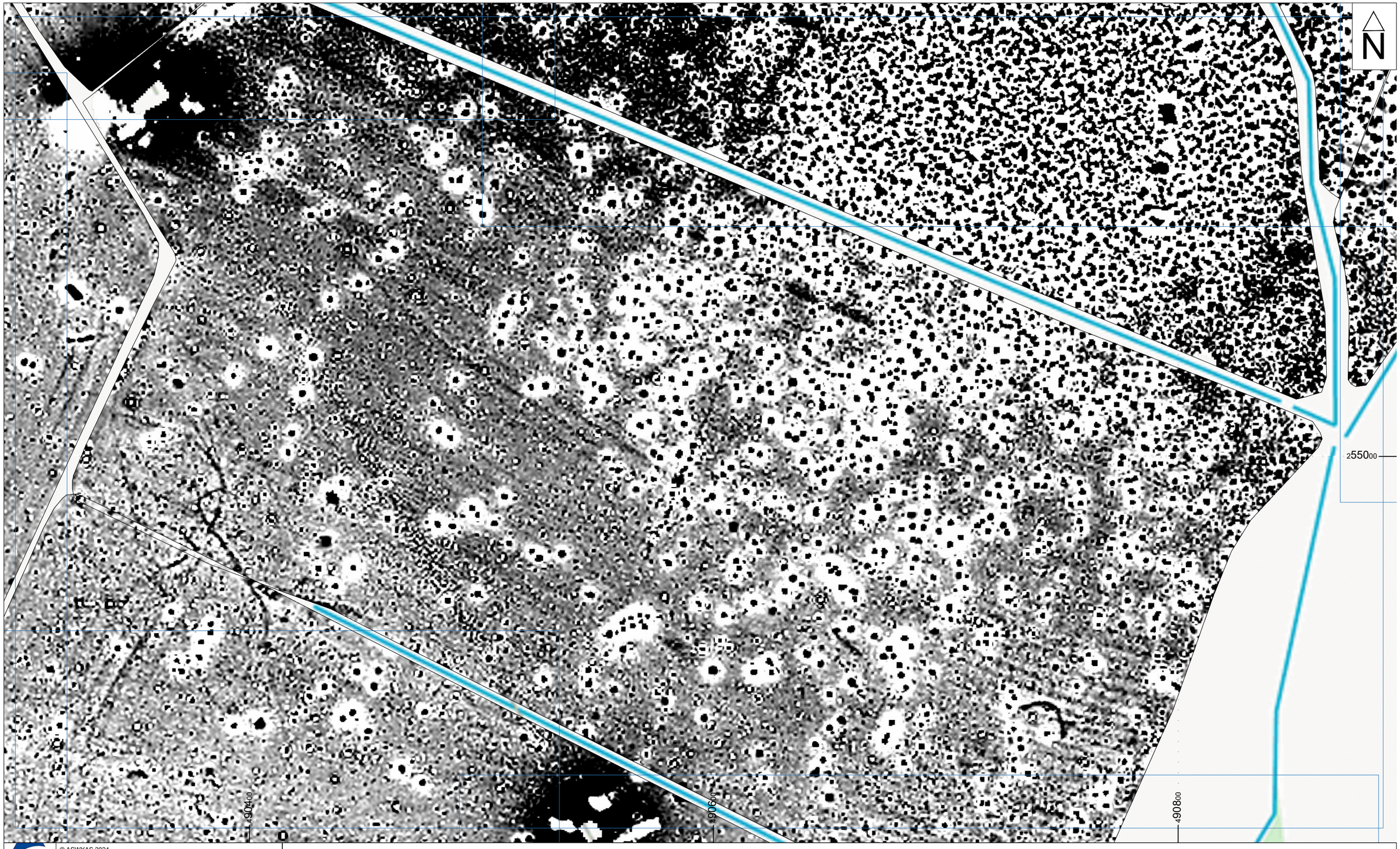
Fig. 31

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- ARCHAEOLOGY?
- ARCHAEOLOGY
- BOMBING

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 10

Fig. 32

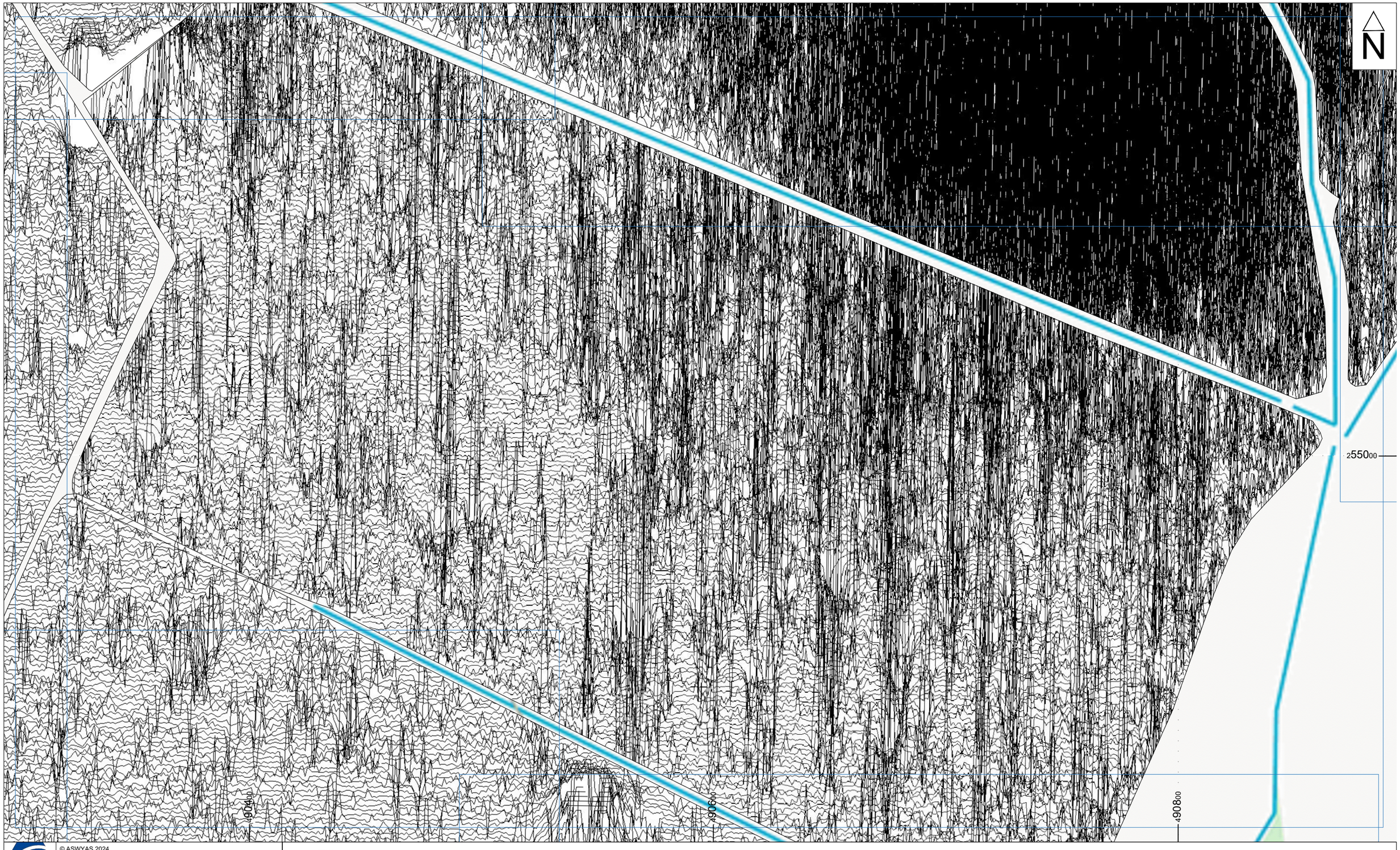
Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 10

Fig. 33

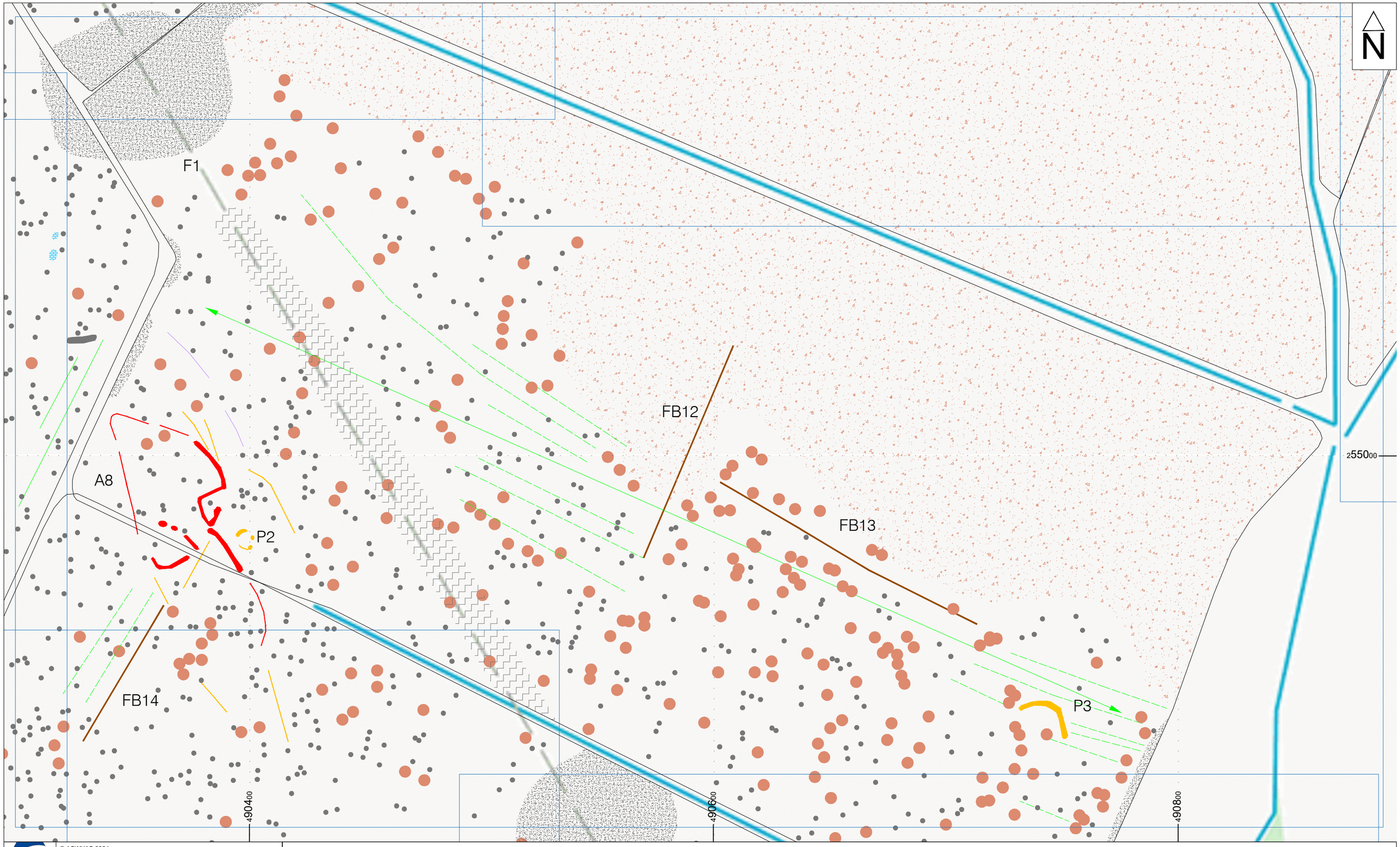
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

Interpretation of magnetometer data; Sector 10

Fig. 34

Title

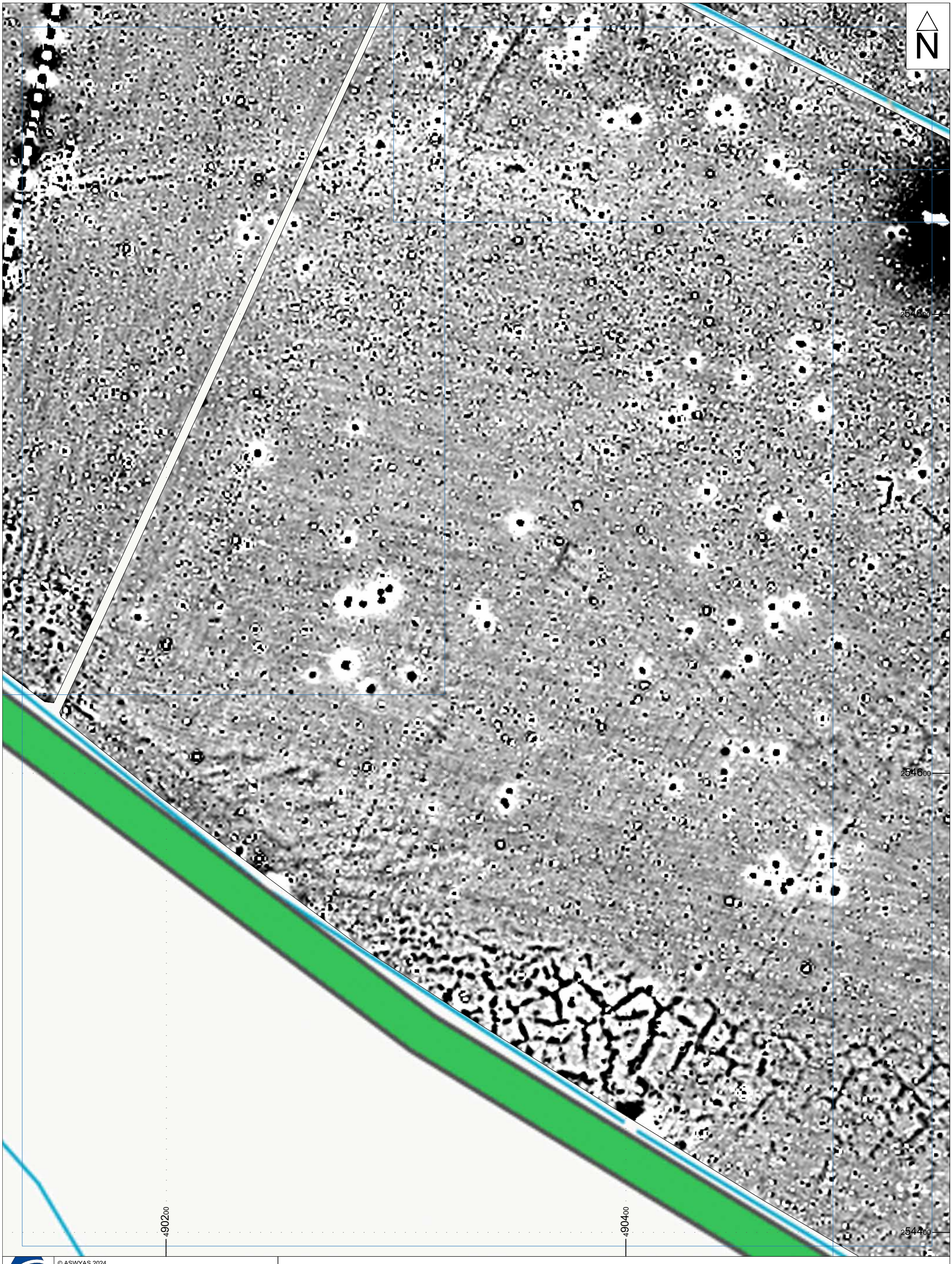
SECTOR BOUNDARY

Interpretation

FERROUS	AGRICULTURAL	ARCHAEOLOGY?
MAGNETIC DISTURBANCE	FORMER FIELD BOUNDARY	ARCHAEOLOGY
OVERHEAD POWER CABLE	GEOLOGY	BOMBING
RIDGE & FURROW	UNCERTAIN	

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 11

Fig. 35

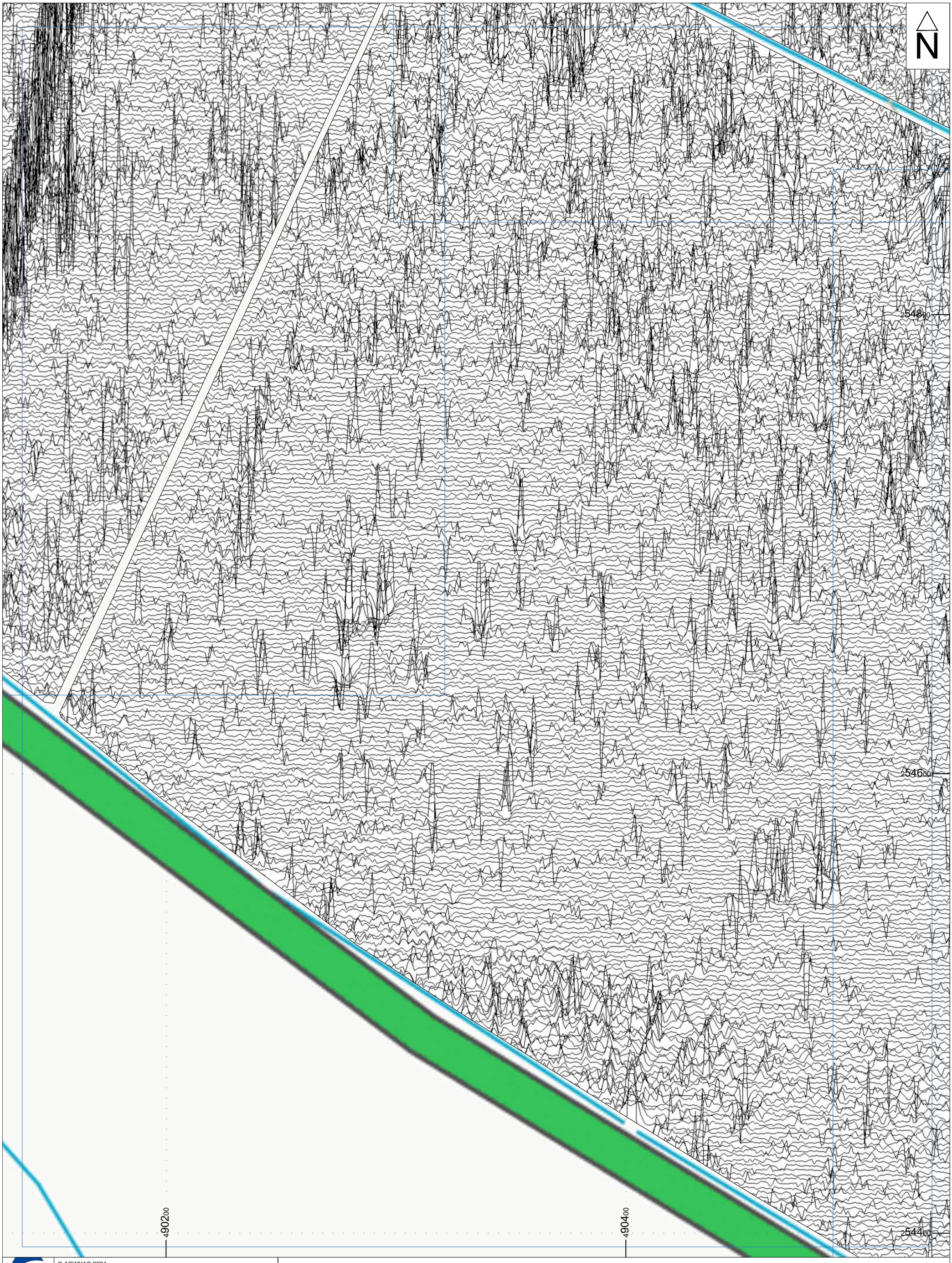
Title

SECTOR BOUNDARY

-1.0 2.0
nT

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 11

Fig. 36

Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3

FB10

FB11

FB14

FB15

FB16

N

2548 00

2546 00

2544 00

4902 00

4904 00

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 Area G

Interpretation of magnetometer data; Sector 11

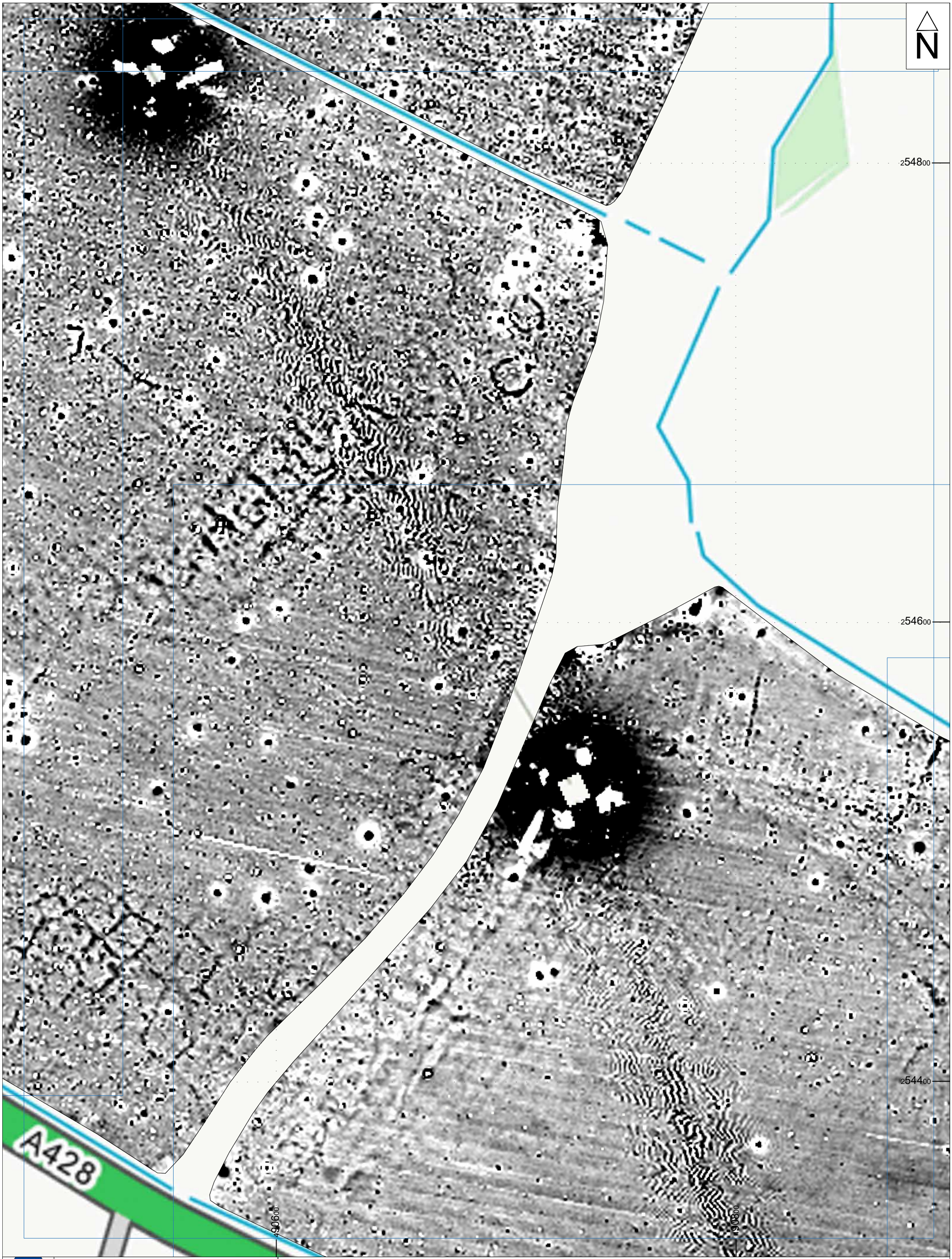
Fig. 37

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- OVERHEAD POWER LINES
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ARCHAEOLOGY?
- ARCHAEOLOGY
- BOMBING

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 12

Fig. 38

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1500 @ A3

N

2548 00

2546 00

2544 00

A428

4906 00

4908 00

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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 12

Fig. 39

Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3

N

F1

A9

U3

FB16

P4

FB17

F1

FB18

A428

2548 00

2546 00

2544 00

4906 00

4908 00

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XK77_EXG23 Area G

Interpretation of magnetometer data; Sector 12

Fig. 40

Interpretation

FERROUS	AGRICULTURAL	ARCHAEOLOGY?
MAGNETIC DISTURBANCE	FORMER FIELD BOUNDARY	ARCHAEOLOGY
OVERHEAD POWER LINES	GEOLOGY	BOMBING
RIDGE & FURROW	UNCERTAIN	

0 50m

1:1500 @ A3

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 13

Fig. 41

Title

SECTOR BOUNDARY

-1.0 2.0
nT

0 50m

1:1500 @ A3

N

2546 00

2544 00

2542 00

4906 00

4908 00

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 13

Fig. 42

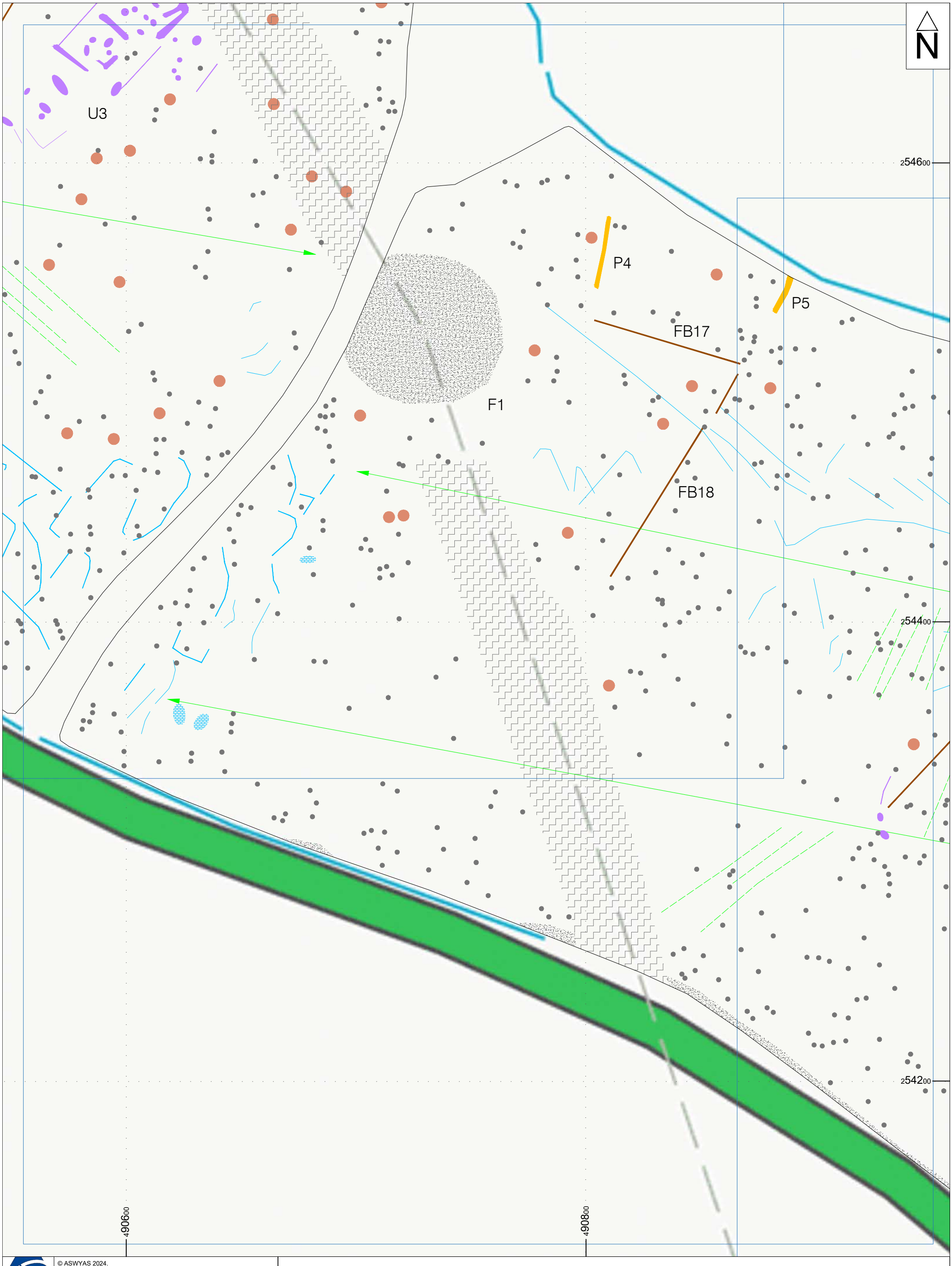
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3



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Project ID: XK77_EXG23 Area G

Interpretation of magnetometer data; Sector 13

Fig. 43

Interpretation

- FERROUS
- AGRICULTURAL
- ARCHAEOLOGY?
- MAGNETIC DISTURBANCE
- FORMER FIELD BOUNDARY
- BOMBING
- OVERHEAD POWER LINES
- GEOLOGY
- RIDGE & FURROW
- UNCERTAIN

0 50m

1:1500 @ A3

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XK77_EXG23 Area G

Processed greyscale magnetometer data; Sector 14

Fig. 44

Title

SECTOR BOUNDARY

-1.0 2.0
nT

0 50m

1:1500 @ A3

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 Area G

XY trace plot of minimally processed magnetometer data; Sector 14

Fig. 45

Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A3

N

P5

FB19

Lower Farm

FB20

2544 00

2542 00

4910 00

4912 00

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XK77_EXG23 Area G

Interpretation of magnetometer data; Sector 14

Fig. 46

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ARCHAEOLOGY?
- BOMBING

0 50m

1:1500 @ A3

Plate 1. General view of Field GF1, looking south

Plate 2. General view of Field GF2, looking east

Plate 3. General view of Field GF2, looking north

Plate 4. General view of Field GF6, looking south

Plate 5. General view of Field GF3, looking south

Plate 6. General view of Field GF5, looking northeast

Plate 7. General view of Field GF10, looking southwest

Plate 8. General view of Field GF9, looking east

Appendix 1: Magnetic survey - technical information

Magnetic Susceptibility and Soil Magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms. Areas of human occupation or settlement can then be identified by measuring the magnetic susceptibility of the topsoil because of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself and spreading by the plough.

Types of Magnetic Anomaly

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

Methodology: Gradiometer Survey

The main method of using the fluxgate gradiometer for commercial evaluations is referred to as ***detailed survey*** and requires the surveyor to walk at an even pace carrying the instrument within a grid system. A sample trigger automatically takes readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation.

During this survey an eight channel Sensys MX V3 system containing eight FGM650 sensors was also used which was towed across the area using an ATV. Readings were taken every 20MHz (between 0.05 and 0.1m). Data was be recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation.

Appendix 2: Survey location information

Data was recorded onto a device, using a Carlson GNSS BRx7 Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. The accuracy of the BRx7 is between 0.15cm – 0.8cm. The BRx7 has a built-in tilt sensor to correct collected point coordinates to within 2cm.

The survey data were then super-imposed onto a base map provided by the client to produce the displayed locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if co-ordinates are measured off hard copies of the mapping rather than using the digital co-ordinates.

Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

Appendix 3: Geophysical archive

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2003), and graphics files (Adobe Illustrator CS6 and AutoCAD 2017) files; and
- a full copy of the report.

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the Buckinghamshire Historic Environment Record).

Appendix 4: Oasis form

OASIS Summary for archaeol11-527357

OASIS ID (UID)	archaeol11-527357
Project Name	Geophysical Survey at Green Hill Solar Project - Area G
Sitename	Green Hill Solar Project - Area G
Sitecode	EXG23
Project Identifier(s)	
Activity type	Geophysical Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Archaeological Services WYAS
Project Dates	16-May-2024 - 04-Jun-2024
Location	Green Hill Solar Project - Area G NGR : SP 90580 55320 LL : 52.18869466211625, -0.676413100407678 12 Fig : 490580,255320
Administrative Areas	Country : England County/Local Authority : Milton Keynes Local Authority District : Milton Keynes Parish : Lavendon
Project Methodology	The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data.
Project Results	A geophysical (gradiometer) survey was undertaken on approximately 168 hectares of land associated with Area G of the Green Hill Solar Project, Warrington, Buckinghamshire. Archaeological and possible archaeological responses have been recorded. These comprise ring ditches, linear ditches and rectilinear enclosures, indicative of settlement activity over a probable prehistoric to medieval timeframe. Uncertain anomalies recorded within the data may also have an anthropogenic origin. A large area of magnetic disturbance in the centre of the Site along with dipolar ferrous responses are associated with a recorded World War II bombing site. Former field boundaries have been recorded along with medieval/post-medieval ridge and furrow cultivation, modern ploughing and land drains. Further magnetic disturbance within the dataset can be attributed to adjacent tracks and metal fencing within field boundaries, whilst disturbance from overhead power lines and electricity pylons have also been recorded. Geological responses seen within the south of the Site are associated with natural cracking to the limestone geology. Based on the geophysical survey, the archaeological potential of this Site is deemed to be high where there are areas of activity and low elsewhere.

Keywords	D Shaped Enclosure - LATER PREHISTORIC - FISH Thesaurus of Monument Types Ring Ditch - LATER PREHISTORIC - FISH Thesaurus of Monument Types Bombing Range - 20TH CENTURY - FISH Thesaurus of Monument Types
Funder	Private or public corporation Island Green Power
HER	Milton Keynes HER - unRev - STANDARD
Person Responsible for work	Emma Brunning
HER Identifiers	
Archives	

Report generated on: 09 Aug 2024, 13:25

Bibliography

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Appendix F

Green Hill BESS Site Geophysical Survey Report

WYAS Archaeological Services

Grendon BESS

Northamptonshire

Geophysical Survey

Report no. 4072
November 2023

Client: Green Hill Solar Project

West Yorkshire Joint Services

Grendon BESS
Northamptonshire

Geophysical Survey

Summary

A geophysical (gradiometer) survey was undertaken on approximately 17.29 hectares of land located to the northwest of Grendon, Northamptonshire. Anomalies of possible archaeological origin were detected in the form of fragmentary linear and curvilinear anomalies. Agricultural responses consistent with medieval ridge and furrow were identified along with evidence of modern cultivation, infilled former field boundaries, and an infilled pond. Sinuous geological responses were detected at the east of the survey area and are likely to represent a former watercourse or palaeochannel, with other areas of geological response likely reflecting variations within in the soil. Patches of magnetic disturbance representing a possible collapsed modern structure have been recorded, in addition to areas of disturbance corresponding to a modern electricity pylon, modern tipping, nearby structures, fencing, and roads. Overall, the archaeological potential of the site is deemed to be low based on the results of the survey.

WYAS
Archaeological
Services

Report Information

Client:	Lanpro Services
Report Type:	Geophysical Survey
Location:	Grendon
County:	Northamptonshire
Grid Reference:	SP 86615 61209
Period(s) of activity:	Medieval / post-medieval
Report Number:	4072
Project Number:	XK77
Site Code:	EXG23
OASIS ID:	archaeol11- 521084
Date of fieldwork:	September 2023
Date of report:	November 2023
Project Management:	Emma Brunning BSc MCIfA
Fieldwork:	Jacob Hurst-Myszor BA
	Cameron Whitley BA
Illustrations:	Jake Freeman BA
Photography:	Cameron Whitley
Research:	Jake Freeman
Report:	Jacob Hurst Myszor, & Jake Freeman

Authorisation for distribution: ----------

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Document Issue Record

Ver	Author(s)	Reviewer	Approver	Date
1.0	JHM, JF	EB	JR	Nov 2023

Contents

List of Figures

List of Plates

1 Introduction

Archaeological Services ASWYAS has been commissioned by Lanpro to undertake a geophysical survey at land northwest of Grendon, Northamptonshire. This survey relates to the proposed Grendon Battery Storage System (BESS). This was undertaken in line with current best practice (CIfA 2020; Schmidt *et al.* 2015). The survey was carried out between the 12th and 13th September 2023 to provide additional information on the archaeological resource of the Site.

Site location, topography and land-use

The Site comprises approximately 24.83ha of arable land across three fields, of which only two fields measuring 17.29ha was surveyed. At the time of survey ground conditions consisted of a young crop (Plates 1-2). The northernmost field was subject to several previous archaeological investigations in advance of gravel extraction in the early 2000s and was therefore excluded from the current geophysical survey.

The site is located to the northwest of the village of Grendon and southeast of Grendon Substation, centred at approximately SP 86615 61209.Elevation at the site lies between 47m above Ordnance Datum (aOD) and 53m aOD.

Soils and geology

Bedrock Geology comprise Whitby Mudstone Formation (mudstone) which is a sedimentary bedrock that formed between 182.7 and 174.1 million years ago during the Jurassic period. Superficial deposits have been recorded as sand and gravel of the Ecton Member in the western field, which formed between 116 and 11.8 thousand years ago during the Quaternary period. The eastern field consists of glaciofluvial deposits of sand and gravel and within the section adjacent to a watercourse consist of alluvium – clay and silts which formed between 11.8 thousand years ago and the present day (BGS 2023). Soils across the Site have been described as freely draining slightly acid loamy soils in the eastern field of the Site, and Slightly acid loamy and clayey soils with impeded drainage within the western field of the Site (CSAI 2023).

2 Archaeological Background

The following archaeological background is primarily derived from a WSI provided by Lanpro Services, and supplemented by wider heritage sources available online, and is not intended to be an exhaustive compendium.

Several phases of archaeological investigation took place between 2001 and 2004 within the northern field excluded from the survey area, in advance of gravel extraction undertaken in the early 2000s. Geophysical survey comprising a sample of 12 blocks of land was

undertaken in 2001 (HER Event ENN101882), and recorded several magnetic anomalies that were interpreted as forming possible pits, linear ditches and ring ditches, as well as a series of geological features, including probable palaeochannels (Jones and Chapman 2005). Evaluation trenching in 2001 only identified minor evidence of archaeological activity. A watching brief was carried out in 2003 and 2004 (HER Event ENN110057) and covered most of the northern area of the scheme. The watching brief identified a gravel island with c.0.5m of overlying alluvium located between two palaeochannels that flanked the north-western and south-eastern edges of the area. A ring ditch (HER 9178/0/2) was identified within the gravel island along with sherds of a single Early Bronze Age food vessel, and to the south of the southeastern palaeochannel, a small pit containing cremated bone was recorded, although too little remained for further analysis (HER 9178/0/3). The watching brief also recorded a 1m wide trackway in the west of the site formed of flat laid large limestone fragments, which was interpreted as being of medieval date (HER 9179/0/2).

An earlier phase of excavations took place in 1974-1975, directly to the north of the previously mentioned areas based on the locations of known cropmarks. The first phase took place prior to the commencement of gravel quarrying and was excavated by Mr A McCormick, during which a number of prehistoric features were encountered. A rectangular mortuary enclosure with associated inhumations and pottery assemblage which has been interpreted as a Neolithic square barrow was excavated, in addition to an unusual pit complex and six ring ditches, some of which had covering mounds, of later prehistoric date. These features have also been interpreted as funerary in context due to associated inhumations and cremations found within these features. The complex appears to have been situated in a clearing in prehistoric woodland and likely has context within the wider setting within the Nene valley (Gibson and McCormick 1985).

The second phase of the same series of works took place between 1976 and 1980 as a series of watching briefs and salvage excavations during active gravel extraction within the area. The principal features located during this latter phase of work included: at least three ring ditches and four Bronze Age vessels found in small pits; a complex of pit alignments and their relationships; an unusual pre-medieval agricultural system consisting of twenty-seven hand dug parallel trenches interpreted as vine orchards, and four Anglo-Saxon sunken-featured structures and associated evidence for ironworking. An Iron Age enclosure and at least three pottery kilns excavated as part of the initial 1974-1975 excavation were also reported on during this phase of works (Jackson 1995). All areas covered by the 1970s excavations have since been destroyed by gravel extraction in the latter half of the 20th century and the subsequent flooding of the excavated cavities to create Grendon Lakes once extraction was concluded.

A possible deserted medieval village has been recorded within a field outside of the survey area directly to the east of Field 2. Multiple earthworks and linear features are visible on aerial photography (Google Earth 2023) within this field including a possible hollow way,

although it is likely that any surviving features have been heavily damaged by modern ploughing regimes. Multiple surface finds consisting of medieval pottery have also been derived from this field further supporting a medieval date for these features.

3 Aims, Methodology and Presentation

The aims and objectives of the programme of geophysical survey were to gather sufficient information to establish the presence/absence, character and extent, of any archaeological remains within the specific area and to inform an assessment of the archaeological potential of the site. To achieve this aim, a magnetometer survey covering all amenable parts of the Site was undertaken (see Fig. 2).

The general aims of the geophysical survey were:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- to therefore determine the presence/absence and extent of any buried archaeological features; and
- to prepare a report summarising the results of the survey.

Magnetometer survey

The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data. Further details are given in Appendix 1.

Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey (OS) mapping, is shown in Figure 1. Figure 2 displays processed magnetometer data at a scale of 1:4000 whilst Figure 3 shows an overview of the interpretation at the same scale. Processed and minimally processed data, together with interpretation of the survey results are presented in Figures 4 to 12 inclusive at a scale of 1:1250.

Technical information on the equipment used, data processing and survey methodologies are given in Appendix 1. Technical information on locating the survey area is provided in Appendix 2. Appendix 3 describes the composition and location of the archive. A copy of the completed OASIS form is included in Appendix 4.

The survey methodology, report and any recommendations comply with guidelines outlined by the European Archaeological Council (Schmidt *et al*. 2015) and by the Chartered Institute for Archaeologists (CIfA 2020). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of His Majesty's Stationery Office (© Crown copyright).

The figures in this report have been produced following analysis of the data in processed formats and over a range of different display levels. All figures are presented to most suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

4 Results and Discussion (see Figures 4 to 12)

Ferrous anomalies and magnetic disturbance

Ferrous anomalies, as individual 'spikes', or as large discrete areas are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris or material is common on rural sites, often being present as a consequence of manuring or tipping/infilling. There is no obvious pattern or clustering to their distribution in this survey to suggest anything other than a random background scatter of ferrous debris in the plough-soil.

An irregular area of magnetic disturbance (**F1**) detected at the southwest of Field 2 corresponds with the location of an infilled pond. The high dipolar responses here are due to the magnetic properties of the material used to fill the pond differing significantly from that of the surrounding area, probably taken from an entirely different geological/magnetic context. A second area of disturbance to its immediate southwest may correspond with the location of what appears to have been a temporary dump of manure or similar farm material (visible on aerial photographs of the site). It is also possible that the anomalies at the field's southwest are caused by patches the same material used to infill the pond.

Magnetic disturbance (**F2**) detected at the northern boundary of Field 2 corresponds with a diffuse area of modern building material and rubble that was observable during survey. That the magnetic disturbance is concentrated towards a single area at the field boundary indicates that the rubble may have originated from a collapsed wall or drain cover, as no archaeological anomalies that could be associated with the rubble were detected within the field proper. No structures are recorded on old OS mapping of this location within the field, nor were the remains of any structure visible during survey. The location of this response does however correspond with the western terminus of a former field boundary.

A large circular ferrous response at the centre of Field 2 can be attributed to an electricity pylon; the linear areas of magnetic disturbance stemming to its north and south are the result of overhead power lines interfering with the local magnetic field, consequently affecting the sensors' readings.

Magnetic disturbance along the limits of the survey areas is due to interference from metal fencing, adjacent roads, and the existing substation.

Geological anomalies

Significant magnetic disturbance interpreted as being of geological origin was detected following the eastern boundary of Field 2. This sinuous response closely follows the course of a brook which flows around the eastern edge of the field; it could indicate a former route of the brook or a palaeochannel.

A narrow band of geological disturbance was detected running east-west through the southern half of Field 2 that did not correlate with any observable topographic features.

Agricultural anomalies

Agricultural anomalies that can be associated with modern farming were detected throughout Field 1, along with evidence of medieval or post-medieval ridge and furrow cultivation. Ridge and furrow responses can also be seen in Field 2, corroborated by LiDAR maps of the area (Environment Agency 2023).

The two linear areas of magnetic disturbance (**FB1** and **FB2**) to the immediate east of the electricity pylon in Field 2 correspond with two former field boundaries shown on OS mapping as late as 1972 (NLS 2023).

Possible and definite archaeological anomalies

Linear and curvilinear anomalies of possible archaeological origin were detected in the southern half of Field 2. It is possible that these features continue north-easterly but are obscured by magnetic disturbance caused by the pylon and overhead powerlines.

A single curvilinear anomaly (**P1**) of possible archaeological origin was identified beneath the course of the electricity pylon near the northern boundary of the eastern field. Whilst an archaeological origin cannot be ruled out, it is possible that this anomaly corresponds with an infilled rut created by agricultural machinery turning, as several circular ruts are visible on aerial photographs of the site at the anomaly's precise location.

5 Conclusions

The geophysical survey detected a handful of magnetic anomalies of possible archaeological origin in the form of discrete linear and curvilinear features within Field 2. Areas of magnetic disturbance believed to be of geological origin were detected within the east of Field 2, likely representing a former watercourse or palaeochannel, with other areas of geological response likely reflecting variations within in the soil. Agricultural responses consistent with modern ploughing and medieval or post-medieval ridge and furrow were detected in both areas.

Magnetic disturbance responses were detected primarily within Field 2 corresponding with an electricity pylon, infilled former field boundaries, an infilled pond, and rubble from a modern brick structure, with boundary disturbance reflecting the proximity to nearby roads and the existing substation. Overall, the archaeological potential of the Site is deemed to be low based on the results of the survey but raised to medium if surrounding archaeological context is considered.

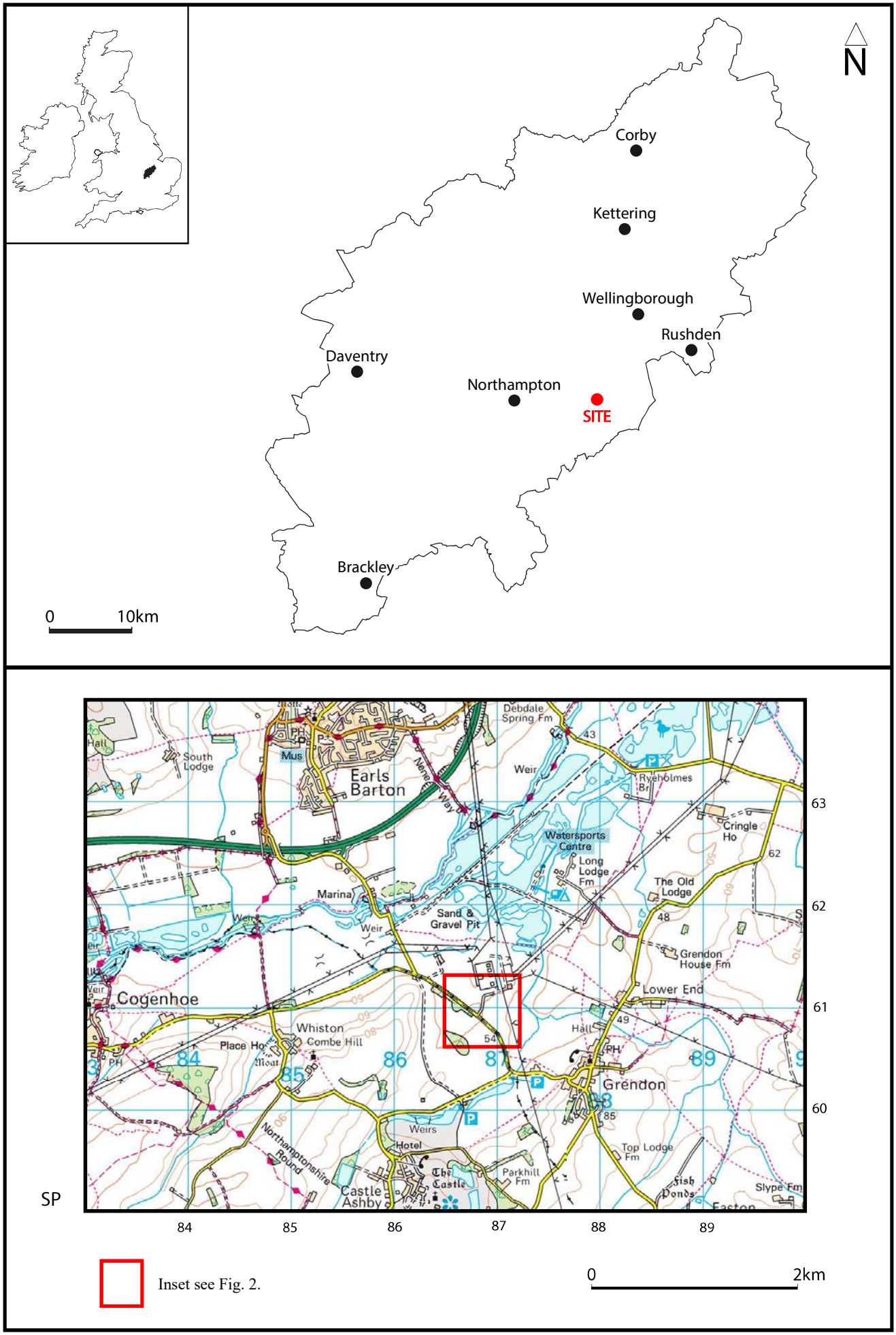

Fig. 1. Site location

SECTOR 1
SEE FIGS 4-6

Pastures Farm

FIELD 1

Porters Lodge

The Station
Lodge

50m

Drain

Track

Drain

53m

Track

SECTOR 3
SEE FIGS 10-12

N

FIELD 2

El Dist Sta

48m STAITHE ROAD

Drain

2610 00

FB

SECTOR 2
SEE FIGS 7-9

Drain

54m

Drain

Track

4870 00

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Project ID: XK77_EXG23 BESS

Survey location showing processed greyscale magnetometer data

Fig. 2

Title

SURVEY AREA

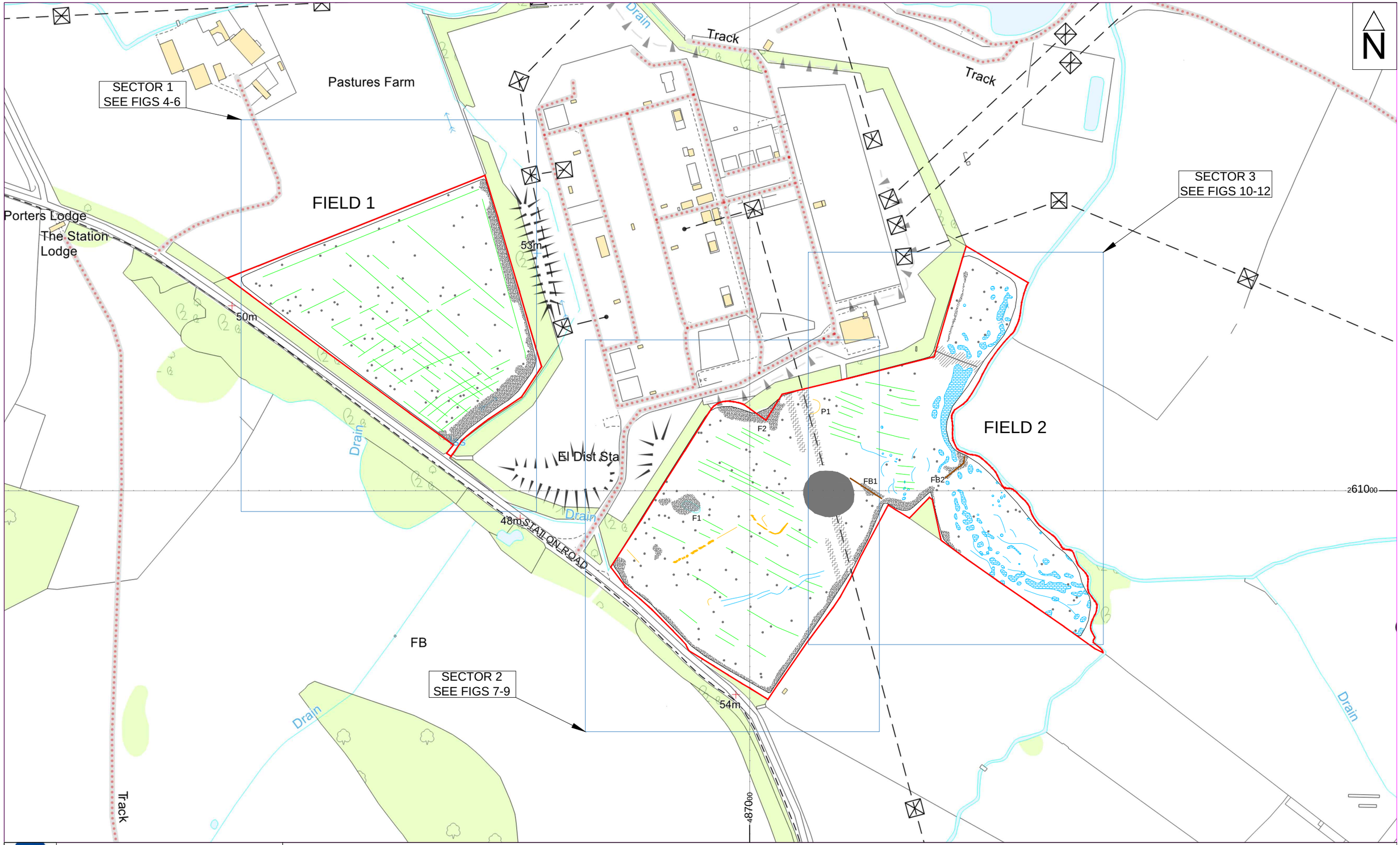
SECTOR BOUNDARY

1 PHOTO LOCATIONS

nT -1.0 2.0

0 200m

1:4000 @ A3



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Overall interpretation of magnetometer data

Fig. 3

Title

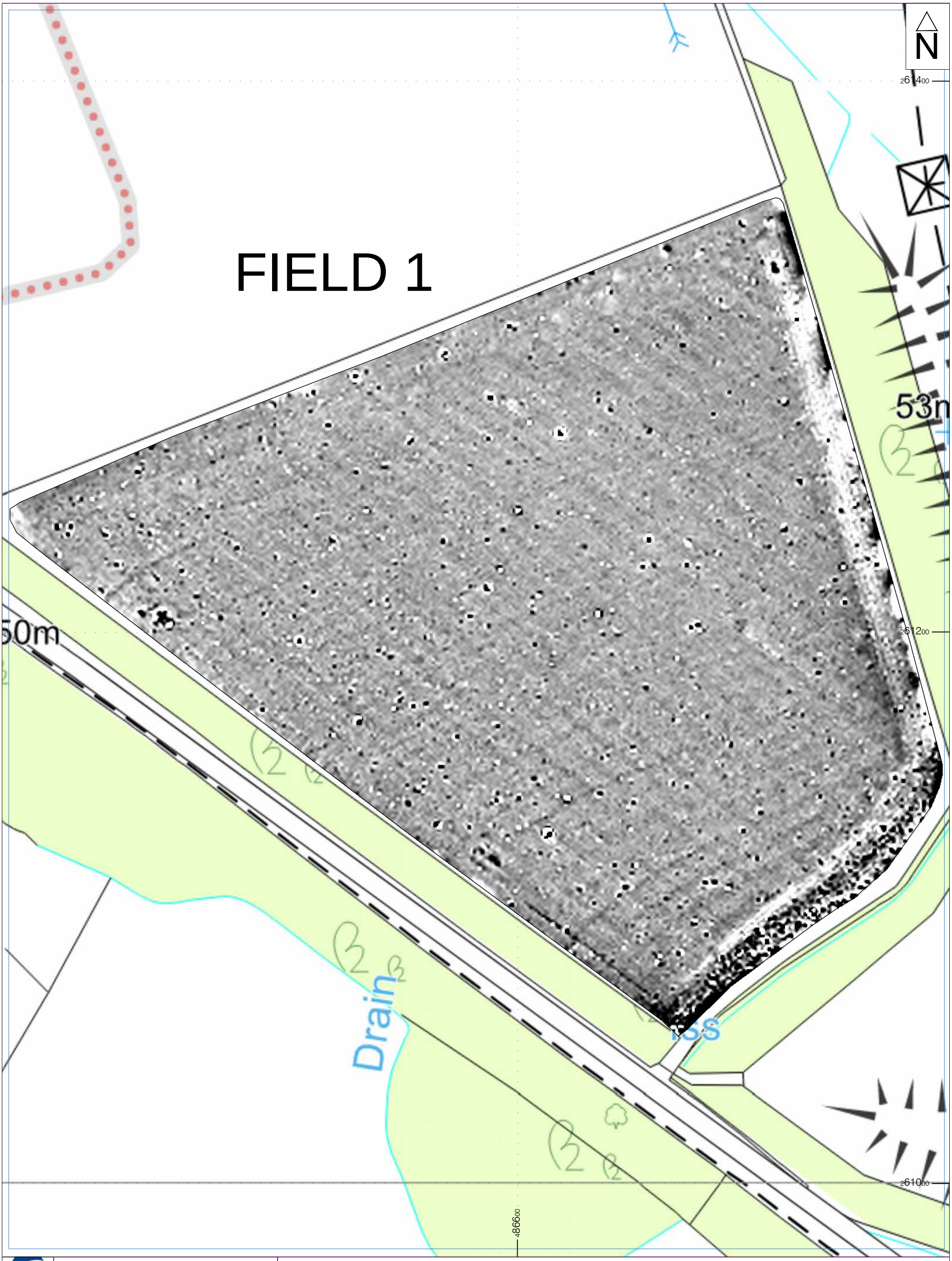
- SURVEY AREA
- SECTOR BOUNDARY

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- OVERHEAD CABLE
- AGRICULTURAL
- RIDGE & FURROW
- FORMER FIELD BOUNDARY
- GEOLOGY
- ARCHAEOLOGY?

0 200m

1:4000 @ A3



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Processed greyscale magnetometer data; Sector 1

Fig. 4

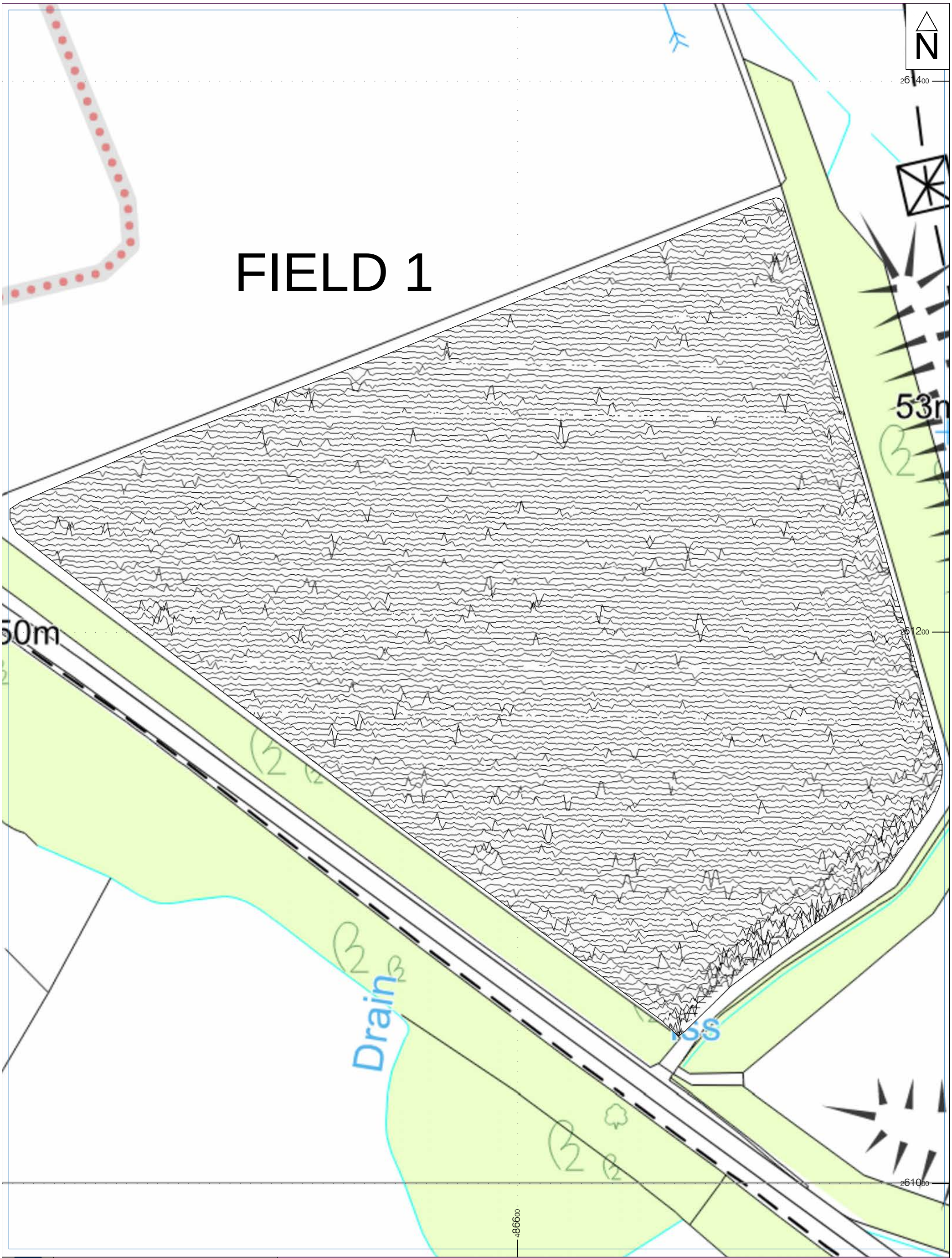
Title

SECTOR BOUNDARY

-1.0 2.0
nT

0 50m

1:1250 @ A3



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XY trace plot of minimally processed greyscale magnetometer data; Sector 1

Fig. 5

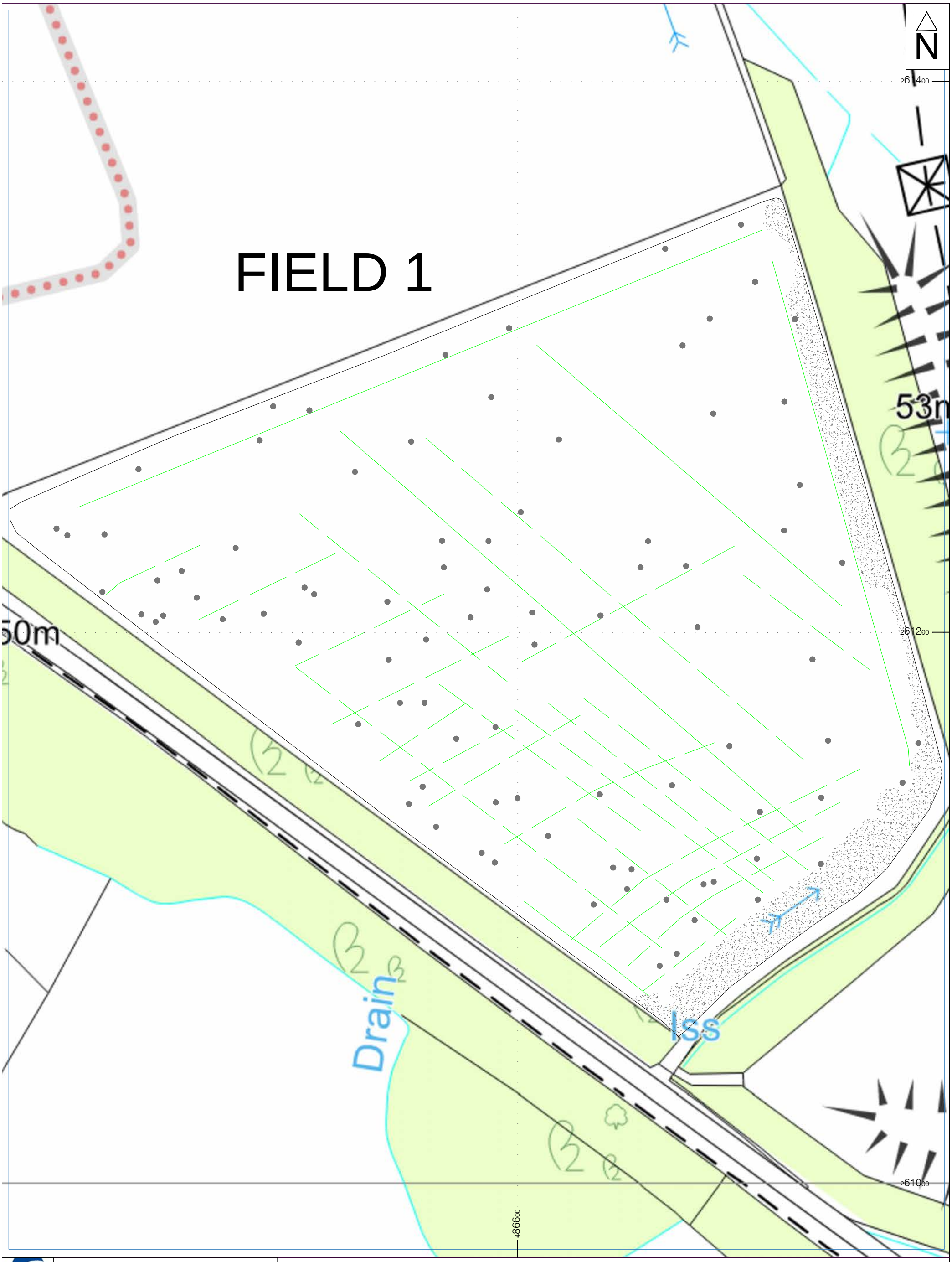
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1250 @ A3



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Interpretation of magnetometer data; Sector 1

Fig. 6

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- RIDGE & FURROW
- AGRICULTURAL

0 50m

1:1250 @ A3

N

ist Sta

ain

54m

608600

487000

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Processed greyscale magnetometer data; Sector 2

Fig. 7

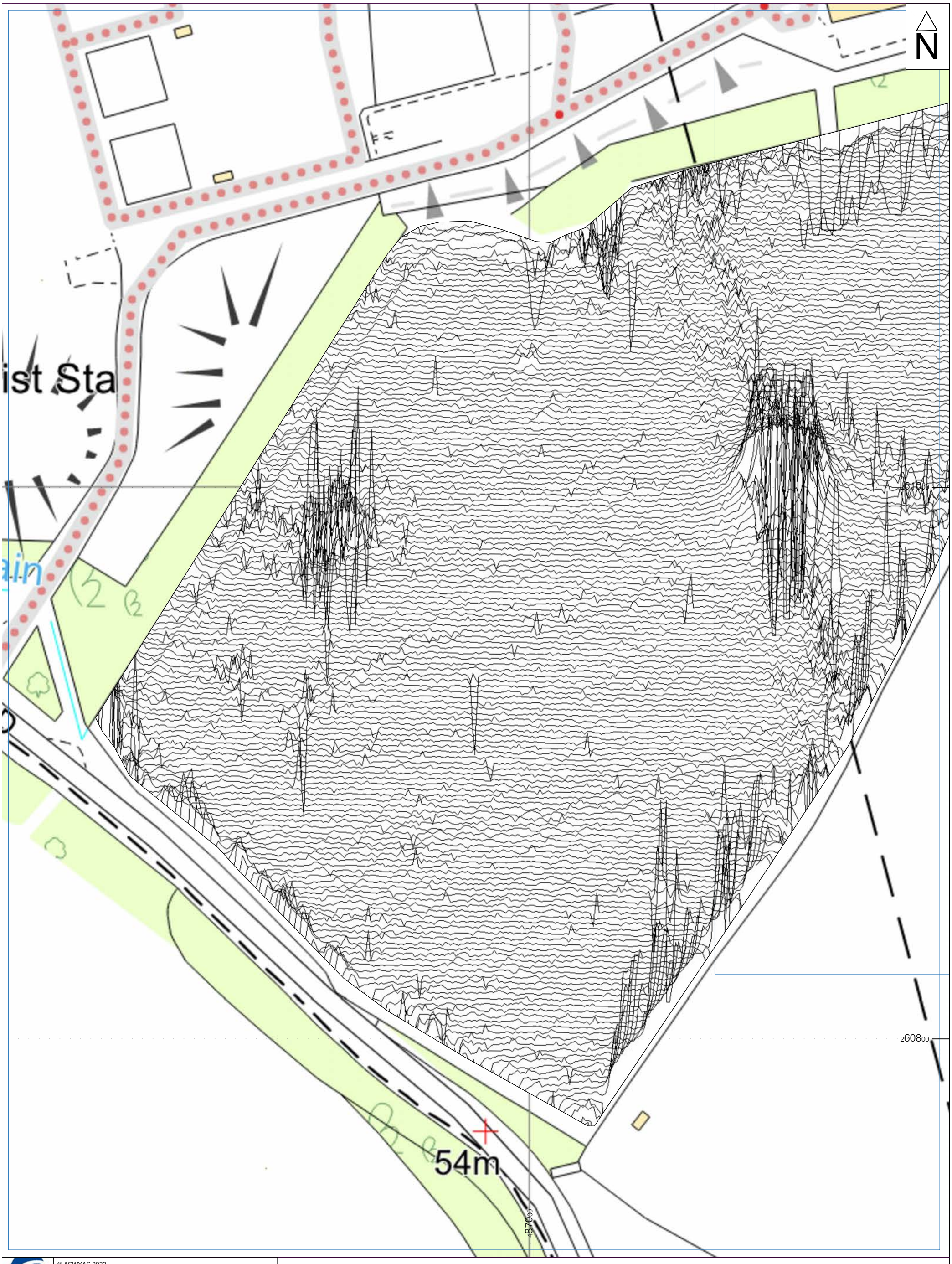
Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1250 @ A3



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XY trace plot of minimally processed greyscale magnetometer data; Sector 2

Fig. 8

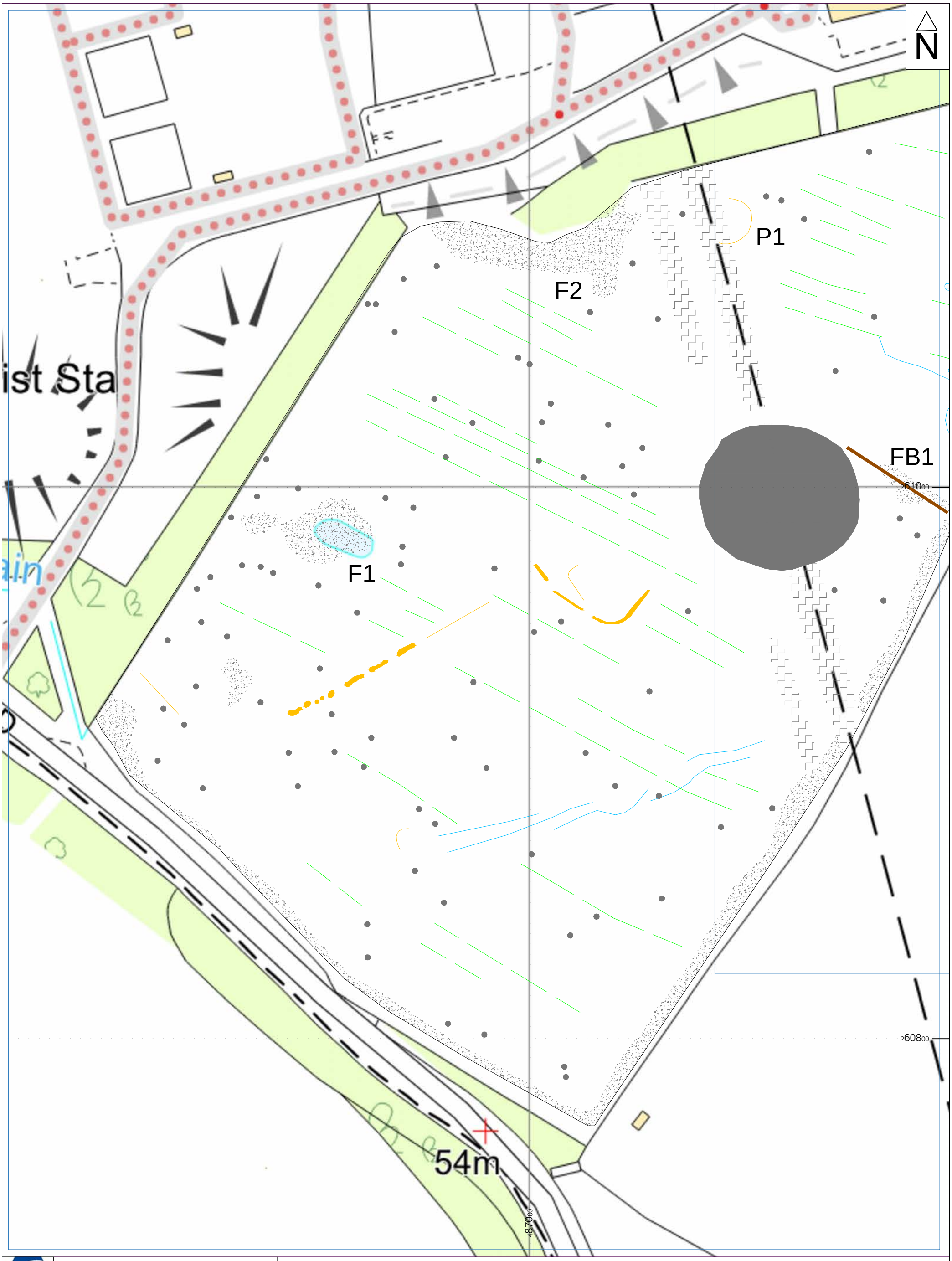
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1250 @ A3



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Interpretation of magnetometer data; Sector 2

Fig. 9

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- OVERHEAD CABLE
- RIDGE & FURROW
- FORMER FIELD BOUNDARY
- GEOLOGY
- ARCHAEOLOGY?

0 50m

1:1250 @ A3

N

FIELD 2

261200

261000

487200

487400

0

50m

1:1250 @ A3

Title

SECTOR BOUNDARY

-1.0

2.0

nT

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Processed greyscale magnetometer data; Sector 3

Fig. 10

N

FIELD 2

2612 00

2610 00

4872 00

4874 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 3

Fig. 11

Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1250 @ A3

N

2612 00

FIELD 2

P1

FB1

FB2

2610 00

4872 00

4874 00

Archaeological Services W Y A S,
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Project ID: XK77_EXG23 BESS

Interpretation of magnetometer data; Sector 3

Fig. 12

Title

- SECTOR BOUNDARY

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- OVERHEAD CABLE
- RIDGE & FURROW
- FORMER FIELD BOUNDARY
- GEOLOGY
- ARCHAEOLOGY?

0 50m

1:1250 @ A3

Plate 1. General view of Field 1, looking north

Plate 2. General view of Field 2, looking east

Appendix 1: Magnetic survey - technical information

Magnetic Susceptibility and Soil Magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms. Areas of human occupation or settlement can then be identified by measuring the magnetic susceptibility of the topsoil because of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself, and spreading by the plough.

Types of Magnetic Anomaly

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

Methodology: Gradiometer Survey

The main method of using the fluxgate gradiometer for commercial evaluations is referred to as ***detailed survey*** and requires the surveyor to walk at an even pace carrying the instrument within a grid system. A sample trigger automatically takes readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation.

During this survey an eight channel Sensys MX V3 system containing eight FGM650 sensors was also used which was towed across the area using an ATV. Readings were taken every 20MHz (between 0.05 and 0.1m). Data was be recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation.

Appendix 2: Survey location information

Data was recorded onto a device, using a Carlson GNSS BRx7 Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. The accuracy of the BRx7 is between 0.15cm – 0.8cm. The BRx7 has a built-in tilt sensor to correct collected point coordinates to within 2cm.

The survey data were then super-imposed onto a base map provided by the client to produce the displayed locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if co-ordinates are measured off hard copies of the mapping rather than using the digital co-ordinates.

Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

Appendix 3: Geophysical archive and metadata

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2003), and graphics files (Adobe Illustrator CS6 and AutoCAD 2017) files; and
- a full copy of the report.

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the Northamptonshire Historic Environment Record).

Appendix 4: Oasis form

OASIS Summary for archaeol11-521084

OASIS ID (UID)	archaeol11-521084
Project Name	Grendon BESS, Northamptonshire, Geophysical Survey
Sitename	Grendon BESS, Northamptonshire, Geophysical Survey
Sitecode	EXG23
Project Identifier(s)	XK77
Activity type	Geophysical Survey, Magnetometry Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning requirement
Organisation Responsible for work	Archaeological Services WYAS
Project Dates	12-Sep-2023 - 13-Sep-2023
Location	Grendon BESS, Northamptonshire, Geophysical Survey NGR : SP 86615 61209 LL : 52.2422621082097, -0.732892266525826 12 Fig : 486615,261209
Administrative Areas	Country : England County/Local Authority : North Northamptonshire Local Authority District : North Northamptonshire Parish : Grendon
Project Methodology	The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data.
Project Results	Anomalies of possible archaeological origin were detected in the form of fragmentary linear and curvilinear anomalies. Agricultural responses consistent with medieval ridge and furrow were identified along with evidence of modern cultivation, infilled former field boundaries, and an infilled pond. Sinuous geological responses were detected at the east of the survey area and are likely to represent a former watercourse or palaeochannel, with other areas of geological response likely reflecting variations within in the soil. Patches of magnetic disturbance representing a possible collapsed modern structure have been recorded, in addition to areas of disturbance corresponding to a modern electricity pylon, modern tipping, nearby structures, fencing, and roads. Overall, the archaeological potential of the site is deemed to be low based on the results of the survey but raised to medium if surrounding archaeological context is considered.
Keywords	Ditch - UNCERTAIN - FISH Thesaurus of Monument Types
Funder	Private or public corporation Lanpro Services
HER	Northamptonshire SMR - unRev - STANDARD
Person Responsible for work	Emma Brunning
HER Identifiers	
Archives	

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Appendix G

Green Hill Cable Route Corridor Geophysical Survey Report

WYAS Archaeological Services

Green Hill Solar Project

Cable Route

Northamptonshire

Geophysical Survey

Report no. 4301
July 2025

Version 2.0

Client: Green Hill Solar Project

West Yorkshire Joint Services

Green Hill Solar Farm
Cable Route
Northamptonshire

Geophysical Survey

Version 2.0

Summary

A geophysical (gradiometer) survey was undertaken on approximately 271.7 hectares of land within the cable route and compound areas of the Green Hill Solar Project, Northamptonshire and the Milton Keynes City unitary authority area in Buckinghamshire. Archaeological and possible archaeological responses have been recorded. These comprise ring ditches, linear ditches, pits and rectilinear enclosures, indicative of settlement activity over a probable prehistoric to medieval timeframe. Uncertain anomalies recorded within the data generally appear to be agricultural or geological in origin. Former field boundaries have been recorded along with medieval/post-medieval ridge and furrow cultivation, modern ploughing and land drains. Magnetic disturbance within the dataset can be attributed to adjacent tracks, metal fencing within field boundaries, electricity pylons, overhead cables, and service pipes. Geological responses seen within the dataset reflect either the topography of the site, discrete pockets of natural variations, possible quarrying, or former watercourses. Based on the geophysical survey, the archaeological potential of this Site is deemed to be high where there are areas of activity and low elsewhere.

WYAS
Archaeological
Services

Report Information

Client:	Green Hill Solar Project
Report Type:	Geophysical Survey
Report Version:	Version 2.0
Location:	Walgrave to Bozeat
County:	Northamptonshire and Buckinghamshire
Grid Reference:	SP 8105 7347(north) - SP 9003 5534 (south)
Period(s) of activity:	Prehistoric - post-medieval
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1 Introduction

Archaeological Services ASWYAS has been commissioned by Lanpro Services Limited on behalf of Green Hill Solar Farm to undertake a geophysical survey on land for the proposed Green Hill cable route, located predominantly within the administrative boundary of Northampton, Northamptonshire and a small section is located within the Milton Keynes City unitary authority area in Buckinghamshire.

This report details the cable route and compounds of the project only, hereafter referred to as the 'Site'. The survey was undertaken in line with current best practice (CIfA 2020; Schmidt *et al.* 2015). Due to the wet weather and young crops, site visits were made as land became available. Survey occurred between September 2024 to April 2025 and July 2025.

This is the second version of the report containing the results of the geophysical survey for the Green Hill cable route and was updated in July following the survey of Area CR1a.12.

Site location, topography and land-use

The cable route corridor traverses through numerous fields totalling approximately 271.7ha of largely arable land (Fig. 2) and has been divided into three sections:

Section 1 – areas between the Green Hill Sites A, A.2, B and C (Fig. 3)

Section 2 – areas between the Green Hill Sites C, D, E and the BESS (Fig. 4)

Section 3 – areas between the Green Hill Bess, Sites F and G (Fig. 5)

Section 1

Section 1 of the Green Hill Cable Route runs southeast from Field AF24 in east of Site A to Field A2F3 in the northwest of Site A.2. It runs southwards from the south-western corner of Field A2F4 towards an unnamed woodland. At which point it turns west running *c.*330m before turning south towards Red House Lane. After Red House Lane it runs south-east towards Kettering Road (A43), which it runs adjacent to heading southwest, initially along the northern edge. It crosses the road to run along the southern edge of the road at an unnamed woodland. For the section running to Site B, from the north of Kettering Road (A43) it heads northwest for *c.* 460m before turning west towards Sywell Road. From Sywell road it heads southwest-west entering Site B at the northeast of Field BF4. The section of cable route heading to Site C runs for *c.*580m southeast before turning north-east-east towards Sywell Wood. It then runs southeast along the western edge of Sywell Wood and north of Sywell Aerodrome to Site C, which it joins at the northwest of Field CF1.

The natural topography in Section 1 is gently undulating and relatively level overall. There is a gradual downward slope from 124m above Ordnance Datum (aOD) at Site A to 109m aOD

at Site A.2. Following this, the terrain rises gradually towards Sites B and C, with elevations varying between 109m aOD and 138m aOD.

Section 2

Section 2 of the Green Hill Cable Route spans four parishes within North Northamptonshire. The corridor runs eastwards from Fields CF6 and CF7 in the east of Site C to Fields DF1 and DF2 in the west of Site D. It runs eastwards from DF3 across Highfield Road across *c*. 330m joining the northwest of Site E at Field EF1. The cable route runs southwards to Main Road from the south-east of Field EF4, in the northeast of Site C. From Main Road it passes to the east of Earls Barton, travelling 1.9km southwards towards the A45, before turning westwards and travelling 1.8km along the north edge of the A45. The cable route crosses the A45 at Grendon Road and Station Road. From there, the corridor turns southwards, at *c*. 580m to the south of Grendon / Station Road it crosses the River Nene and the heads south and then west for *c*. 945m to station Road. It then runs for *c*. 265m along the north of Station Road before entering the northwest of the BESS2 site.

The natural topography of Section 2 gently slopes downwards from the northwest to southeast, varying in height from between 117m aOD to 48m aOD.

Section 3

Section 3 of the Green Hill Cable Route spans five parishes within North Northamptonshire and Milton Keynes. The corridor runs southwards from the southeast of the BESS1 site, travelling *c*. 420m southeast to Station Road. It then runs *c*. 960m south and then southeast to Yardley Road before heading for c.690m southeast to enter the northwest of Site F at Field FF15. The Cable route exits to the south of Field FF15, crossing Easton Land, and runs southward for *c*. 1.14km to Field FF30 in the southeast of Site F. The cable route exits Site F for a second time in the south of Field FF31 and head south and south-east for *c*. 2km toward the A509, which is crosses before entering Site G in the west of Field GO2.

The natural topography of Section 3 gently slopes upwards from the northwest to southeast, varying in height from between 47m aOD to 103m aOD.

Soils and geology

Section 1

The bedrock geology for Section 1 comprises from the Rutland Formation – mudstone; Northampton Sand Formation - ironstone, ooidal ; Stamford Member - sandstone and siltstone, interbedded; Wellingborough Limestone Member - limestone and mudstone, interbedded and the Whitby Mudstone Formation - mudstone. All these formations are sedimentary bedrock which formed sometime between 182.7 and 163.5 million years ago during the Jurassic period (BGS 2025).

Section 2

The bedrock geology for Section 2 comprises from the Stamford Member - Sandstone and siltstone, interbedded; Rutland Formation – mudstone; Blisworth Limestone Formation – limestone; Wellingborough Limestone Member - limestone and mudstone, interbedded; Northampton Sand Formation - ironstone, ooidal and the Whitby Mudstone Formation – mudstone. All these formations are sedimentary bedrock which formed sometime between 182.7 and 163.5 million years ago during the Jurassic period (BGS 2025).

Section 3

The bedrock geology for Section 3 comprises from the Whitby Mudstone Formation – mudstone; Stamford Member - Sandstone and siltstone, interbedded; Blisworth Limestone Formation - limestone. Within the Blisworth formation thin bands of the Wellingborough Limestone Member - limestone and mudstone, interbedded are recorded.

Short band Blisworth Clay Formation - Mudstone are also present and the last recorded geology is the Cornbrash Formation - limestone. All these formations are sedimentary which formed sometime between 182.7 and 163.5 million years ago during the Jurassic period (BGS 2025).

Superficial deposits have been recorded across the whole Site as Oadby Member – diamicton; River Terrace Deposits - Sand and gravel; Alluvium - clay and silt; Ecton Member - Sand and gravel; Ecton Member - Sand and gravel; Bozeat Till – Diamicton; Glaciofluvial Deposits, Mid Pleistocene - sand and gravel. All of these are sedimentary superficial deposits that formed during the Quaternary period (BGS 2025).

Soils at the site comprise Lime-rich loamy and clayey soils with impeded drainage (Soilscape 9), freely draining lime-rich loamy soils (Soilscape 5), slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils (Soilscape 18) and loamy and clayey floodplain soils with naturally high groundwater (Soilscape 20) (LANDiS 2025).

2 Archaeological Background

The following information is a summary of an archaeological background provided by Lanpro Services based on a 250m search area. The reference number relates to the Monument Number as recorded on Northamptonshire's Historic Environment Record (HER), Portable Antiquities Scheme (PAS) and the National Heritage List for England (NHLE).

Prehistoric and Roman periods

Section 1

The Northamptonshire HER contains 22 records, and the PAS database contains four records for prehistoric or Roman period activity within Section 1 of the Site.

Of the 22 HER records, 17 relate to an area of prehistoric settlement activity within the Site in Field CR1b.17, to the east of Site B (HER 5789). The features were seen on aerial photographs as cropmarks and consisted of enclosures and ditches. To the south of Site A in Field CR1a.12, evidence of prehistoric settlement activity has been recorded, including ditches and unstratified prehistoric flints (HER 3830).

At the northern end of the Site, to the south of Site A, an area of Romano-British coins and brooches were recovered (HER 8924) and to the west of Sywell Wood in Fields CR2a.5 and CR2a.6, a findspot of a Romano-British pottery scatter was recorded (HER 7237, 7237/0/0).

The Jurassic Way (HER 195, NRHE 1035203), an important prehistoric routeway connecting the northeast and the southwest of Britain, runs across the search area following a band of Jurassic Limestone that forms the northern boundary of Northamptonshire. Dating from at least the early Bronze Age period, but potentially of an earlier Neolithic date, the ridgeway did not comprise a single defined track but was instead a broad set of routes following the line of the hills across the county. It is suggested that the track become clearly defined during the Iron Age period as a result of increased movement occurring between Yorkshire and Somerset. The location of the route within the search area is questionable. While the NRHE depicts the route running northeast to southwest through Site A, the HER depicts the route running northeast to southwest, through the cable route, to the east of Site B.

Of the four PAS records discovered within the study site, two were found to the south of Kettering Road in Field CR1b.17. A Roman copper alloy barbarous radiate coin (PAS BUC-DD2FE2) and an Iron Age copper alloy ‘Thurrock’ type potin (PAS NARC-A6A128). Another two were found within the study site to the west of Sywell Wood, a worn sestertius possibly of Marcus Aurelius in Field CR2a.5 (PAS SUR-27EF25) and a sestertius of Crispina in Field CR2a.6 (PAS SUR-27D7C6).

Within the 250m search area, there are four HER records that date to the prehistoric or Roman period. Archaeological remains comprising possible Iron Age enclosures and other features were identified within the north of Site C, and a subsequent phase of evaluation trenching was undertaken (ENN108116). These trenches confirmed the locations of two areas of probable Iron Age settlement (HER 1524/0/1 and 1524/0/2). The earliest evidence for prehistoric activity within the search area comprises the numerous worked flints that have been recovered during fieldwalking. These include twelve pieces of worked flint found within the west of Site C (HER 7902/0/0), which has been identified as a possible site of prehistoric activity (HER 7902).

There are 11 PAS records within the 250m search area, including an Iron Age harness fitting (PAS WAW-52F8F4) to the west of Sywell Wood. The remaining ten lie within the northern section of the cable route, to the south of Site A, and are of a Romano-British date. The finds recorded by the PAS in this area include five brooches, a stylus and 14 coins with date ranges

from the 1st to 4th centuries (Trajan to Constantine II), indicating that there was settlement here throughout much of the Romano-British period.

Section 2

The Northamptonshire HER contains four records of prehistoric or Roman period activity within Section 2 of the Site. Possible Iron Age and Roman settlement activity has been identified as cropmarks through aerial photography to the east of Grendon Road across Fields CR6.1, CR6.2 and CR6.3 (HER 3563/2).

Cropmarks of an unknown date have been identified to the south of Earls Barton in Fields CR5a.25 and CR5a.26 (HER 5897/0/1), which are likely to be indicative of settlement activity. While the proximity to cropmarks related to the Barton Thorpe DMV to the south (HER 2682) may suggest these are of a medieval date, there form suggests an earlier late prehistoric or Roman date cannot be discounted.

There are two HER records of a prehistoric date to the east of Site E. These include unstratified Iron Age pottery found in Field CR5a.18 (HER 7354/0/0) and an area of Iron Age pits to the north in Fields CR5a.1 (HER 3864/0/2). Additionally, an area of likely prehistoric / Roman settlement activity was identified west of the BESS site in Field CR6.21, characterised by linear and curvilinear anomalies. This corresponds with an area of unstratified prehistoric finds recorded in the HER (HER 6522/0/0), 10m to the north of the Site.

A possible prehistoric round barrow (HER 3568/1/1) lies within the Site in Field CR6.18, to the west of the BESS site. The feature is recorded as a cropmark, 12m in diameter on aerial photographs.

Within the 250m search area, to the south of Site D, an area of Roman activity has been recorded within Mears Ashby (HER 6116), 140m to the south of the cable route, in close proximity to a probable Romano-British pottery manufacturing site (HER 1994/1/1), where unstratified Roman pottery was also discovered (HER 6116/0/0). The NRHE also contains two records, relating to a Roman poppy head beaker between Site D and Site E, 50m to the south of the cable route (NRHE 968644) as well as cropmarks and finds of Roman pottery, 130m to the east of the cable route, northwest of the BESS site, which indicated a possible settlement site (NRHE 345599). Possible prehistoric settlement, represented by enclosures and ditches (HER 5889), is recorded 35m to the east Fields CR5a.4 and CR5a.6. Adjacent to the study site, a possible prehistoric hut circle has also been identified to the north-east of Field CR5a.1 (HER 3864/0/1) and a flint scatter is located in Field CR5a.7 (HER 3878/0/0).

The HER contains 13 records within the wider search area dating to the prehistoric to Roman period. Four records are located to the west of the BESS site, including an unstratified Palaeolithic flake, 95m to the east of the Site (HER 3554/0/1), an unstratified prehistoric, tanged arrowhead, 270m to the south of the Site (HER 3570/0/0), a cropmark of a possible ditched trackway 90m to the south of the Site (HER 3569/0/1).

Seven records are located to the east of Site E and date to the prehistoric and Roman period, including a Neolithic/Bronze Age axe fragment, 245m to the west of the Site (HER 3866/0/1). Four records of cropmarks of enclosures and ditches of possible prehistoric date are located to the east of Field CR5a.4 (HER 5889), 140m to the east of the cable route (HER 3713), 215m to the west of the cable route (HER 3870) and 100m to the east of the cable route (HER 3557). The last of these (HER 3557) lies in within Field CR5a.18. Additionally, a pipeline trench uncovered Iron Age pits and ditches (HER 3877/0/1, ENN9503), 215m to the west of the cable route. An unstratified Roman coin (HER 461/0/0) is located 30m to the north of the cable route along Doddington Road, on the outskirts or Earls Barton.

A further three records within the wider search area are located to the south of Site E, including Palaeolithic implements found in a gravel pit, 80m to the south of the cable route (HER 3564/0/1). Two records relate to cropmarks of possible prehistoric to Roman settlement activity, including enclosures, ditches, ring ditches, and trackways, 185m to the east of the Site (HER, 3545) and 175m to the west of the Site (HER 3567/0/0).

Section 3

The Northamptonshire HER contains one record within Section 3 of the Site, which relates to cropmarks associated with possible prehistoric or Roman activity. Cropmarks of possible enclosures, ditches, and pits are recorded on the HER in Fields CR7.12 and Cr7.13 (HER 5898). At the end of the cable route, to the west of Site G, a circular anomaly was identified in Field CR9a.6, potentially indicating a ring ditch or round barrow. Within Field Cr9a.7, linear anomalies were identified that may correlate with Iron Age and Roman features identified within the west of Site G (CFA 2025g).

Within the wider 250m search area, there are seven HER records dating to the prehistoric and Roman periods. Unstratified Roman pottery and a coin were found to the west of Grendon (HER 3732/0/0), and cropmarks of a possible curvilinear enclosure, along with other ditches, were identified on aerial photographs south of Grendon, where Roman pottery has also been found (HER 3296).

Within Site G, at the end of the cable route, there are five records relating to cropmarks of Iron Age trackways, enclosures, linears, and field boundaries (HER MMK7962, MMK8011, MMK8030, MMK8049, MMK8112).

Medieval period

The majority of villages located in the vicinity of the study site are likely to have an early medieval origin as demonstrated by their etymology, which is of Old English origin, and many are documented in the Domesday Book of 1086. It is likely that villages grew and contracted during the medieval period as a result in changes in rural economies and associated agrarian administration systems. Earthworks associated with former medieval settlement activity survive at Easton Maudit, Barton Thorpe and Hannington.

The majority of the Green Hill Cable Route Corridor Site is likely to have been in agricultural use throughout the medieval period, as evidenced by ridge and furrow recorded on the HER, the majority of which is no longer extant. LiDAR and geophysical survey has also identified extensive evidence of field systems across the study site indicating that potential buried archaeological features dating to the medieval period are likely to primarily relate to agricultural activity, such as ridge and furrow, field boundaries and drainage.

Section 1

There are four records within the Site. All of which relate to agricultural activity including three records of ridge and furrow (HER 2199/0/10, 5966/0/4 and HER 5966/0/5) in Fields Cr1a.10, CR1a.11, CR1b.3, CR1b.6 and Cr1b.7 and one record of medieval and post-medieval plough headlands (HER 5966/0/6) in Field CR1b.6. Earthworks related to ridge and furrow are present in Field CR1b.7.

The village of Hannington is located 180m to the west of the Site, and the placename of the village means ‘farm/settlement connect to Hana’ (Watts 2004). An area of around two hectares (HER 3653) shows signs of a medieval settlement which appears to have consisted of enclosures or paddocks, formerly part of the village itself. Hannington was mentioned in the 1086 Domesday Survey, within the hundred of Orlingbury. The village had a recorded population of 7 households, putting it in the smallest 40% of settlements in Northamptonshire.

The HER contains an additional 10 records within the wider search area dating to the medieval period. Four records relate to earthworks of surviving ridge and furrow and medieval field boundaries (HER 8440/0/4, 8440/0/5, 2199, 2199/0/4). Additionally, there is a possible medieval moat 165m to the west of the cable route near Site C (HER 2001/0/1) and a possible medieval ditch and bank 20m to the west of the cable route near Site A (HER 3654/0/6).

Section 2

The Northamptonshire HER contains three records within the study site dating to the medieval period, comprising an area of ridge and furrow within CR7.5 and two relating to a medieval pond and water management (HER 3483, 3483/0/1) in Fields CR3a.4 and CR3a.5.

There are two PAS records within the wider 250m search area, to the east of Site E, a copper-alloy buckle (PAS BH-7F8CDE) and a cast lead alloy elliptical seal matrix (PAS NARC-750251).

The placename 'Ashby' is a common one, and means 'Ash-tree farm', the 'by' indicating that this is a placename with Norse origins. The Domesday Book records that at the time of the Norman Conquest Mears Ashby was part of a larger estate held by the Anglo-Saxon thegn Bondi which included Earls Barton, Great Doddington and Wilby (Callis 1991; Williams and Martin 1992, 619-620). Apart from the main two areas of medieval settlement at Mears Ashby and Earls Barton, the search area also contains parts of the medieval parishes of Wilby. The village of Wilby is located just beyond the western edge the search area, but a medieval settlement named Wilby Thorpe, is also referenced in 13th and 14th century documents, and ridge and furrow was discovered through the Wilby Open Field System (HER 8310).

The placename 'Grendon' derives from the Old English grēne and dūn, meaning: 'Green Hill' and this attests to the likely Anglo-Saxon origin of the settlement. Possible early medieval settlement evidence has been identified at one location within the village, c.100m to the east of the Church of St Mary at Hill Farm. The earliest documentary reference to Grendon is in the Domesday Book where it is listed under the lands of Countess Judith, niece of William the Conqueror.

Barton Thorpe DMV is located to the south of Site E (HER 2682). The DMV was identified by air photographs and possible mill buildings depicted on an 18th century map and includes numerous features such as boundary ditches and enclosures (HER 2682/0/2, 2682/0/5, 2682/0/8, 2682/0/7, 2682/0/11, 2682/0/4, 2682/0/13, 2682/0/9, 2682/0/10, 2682/0/15).

Section 3

The Northamptonshire HER contains two records located within Section 3 of the Site dating to the medieval period. This includes blocks of ridge and furrow recorded by the Open Fields Project in 1995-99. One of which relates to ridge and furrow in Field CR7.9 (HER 6521/0/4) that survives as earthworks. Further earthworks of ridge and furrow are present in Fields CR7.6 to CR7.8 directly to the north of Field CR7.9. The Kettering to Newport Pagnell Turnpike toll road (MMK5884) lies within the Site, west of Site G.

The village of Easton Maudit had been established by the time of the Domesday survey in 1086, where William Peverel is recorded as holding 11/2 virgates of land in Estone, described as 'waste'. The placename Estone means 'East settlement' and may have been so named in relation to the settlements to the west at Whiston or Denton or Yardley Chase in general. Fieldwalking in the area immediately to the east of the present village has identified stone rubble, traces of a road and 12th - 14th century pottery (HER 1406/0/2), and to the west of the village further settlement remains survive as earthworks including a possible fishpond (HER 1406/0/2) and a hollow way (HER 1406/0/35) which may attest to the contraction of the medieval village. Further settlement remains of possible medieval date have been identified as earthworks and/or cropmarks/soilmarks extending southwards from the village core along the western side of High Street.

Post-medieval and modern periods

Medieval settlements within the search area may have contracted in size from the 16th century, with areas of former settlement or associated plots transitioning to agricultural use. Earthworks associated with former medieval settlement activity survive at Easton Maudit, Barton Thorpe and Hannington. The study site runs through agricultural land in the hinterland of post-medieval settlements, as demonstrated by the agricultural features that have been detected by the LiDAR data.

The Castle Ashby Registered Park (NHLE 1000385, HER 3321) and Garden lies adjacent to the cable route west of Grendon and was developed from the late 17th century, with major landscaping by Capability Brown in the 1760s–1770s. Originally designed to enhance the estate's grandeur, it evolved from formal gardens to a naturalistic English landscape style. The northern reaches of Castle Ashby Park border the study site, including the Grade II Listed Station Lodge at the northern entrance to the park (NHLE 1294156, HER 3321/0/19), although the estate village of Castle Ashby itself and the majority of the park lie some distance to the south outside of the search area.

Several former trackways, likely providing access to post-medieval farmsteads, are shown to have formerly been located within the Site. In Section 1, the Ordnance Surveyor's Drawing (OSD) for Kettering (1817) depicts a trackway leading from Kettering Road to a barn north of Site A.2 in Field CR1a.4. In Section 2, two former trackways leading to a Lime Kiln to the south of Site E are depicted on the Bryant's map of 1825 leading from Field CR5a.19. In Section 3, to the south of Site F, the Easton Maudit tithe map of 1840 shows a former trackway leading from A509 to a farmstead and woodland to the west in Field CR9a.5.

Ordnance Survey (OS) mapping from the 19th century illustrates the evolving landscape that the Site is located within, documenting the development and removal of field boundaries, ponds, and agricultural features. The 1885 OS map records ponds within Fields CR1a.1, CR1b.17, and CR5a.25, as well as buildings in Fields CR5a.26 and CR5a.27. These features

are still extant on the 1900 OS map, with the addition of a building in Field CR5a.31 that is possibly related to gravel extraction. The 1926 OS map shows new ponds in Fields CR1a.19 and CR1a.20, alongside continued presence of ponds in CR1b.17 and CR5a.25. The ponds are still present on the 1958 OS map, along with buildings in Fields CR5a.26, CR5a.27, and CR5a.31, the latter of which had expanded.

Within the Site, several post-medieval to modern roads cross the cable route. In Section 1 of the Site, the Northampton to Kettering Turnpike (HER 3803/2) runs northeast to southwest to the west of Sywell. In Section 2, the Wellingborough to Northampton Turnpike (HER 7381/1) and the Coventry to Peterborough Road Route (HER 622/1) run east to west to the south of Site E. While the London & North Western Railway (HER 6294/1) runs through the study site to the north of the BESS site. There is also a feature dating to the Second World War within the study site, in Section 1, a WWII search light (HER 7964/0/1) lies to the south of the A43 and Sywell Airfield (HER 8445/1) lies to the west of Site C. The HER records that a civilian airfield run by the Northamptonshire Flying Club was established to the north of Sywell in 1928 and extended in 1932. This became a military airfield during the Second World War but was closed in 1953 (HER 8445/1). Within Section 2, to the south of the BESS Site, extraction pits associated with quarrying lie with Field CR7.5 (HER 5896). These features form part of a broader pattern of mineral extraction linked to the geological resources of the Nene Valley, where extensive quarrying has been undertaken along the River Nene.

3 Aims, Methodology and Presentation

The aims and objectives of the programme of geophysical survey were to gather sufficient information to establish the presence/absence, character and extent, of any archaeological remains within the specific area and to inform an assessment of the archaeological potential of the site. To achieve this aim, a magnetometer survey covering all amenable parts of the Site was undertaken (see Fig. 2).

The general aims of the geophysical survey were:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- to therefore determine the presence/absence and extent of any buried archaeological features; and
- to prepare a report summarising the results of the survey.

Magnetometer survey

The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data. Further details are given in Appendix 1.

Where a cart-based survey was not suitable the survey was undertaken using Bartington Grad601-2 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, resulting in 3600 readings recorded per grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Bespoke in-house software was used to process and present the data. Further details are given in Appendix 1.

Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey (OS) mapping, is shown in Figure 1. Figure 2 displays the survey areas at a scale of 1:40000 whilst Figures 3-5 shows an overview of the three sections at a scale of 1:15000. Processed greyscale and interpretation overviews of the sections are shown in Figures 6-11 at a scale of 1:15000. Processed and minimally processed data, together with interpretation of the survey results are presented in Figures 12 to 116 inclusive at a scale of 1:1500.

Technical information on the equipment used, data processing and survey methodologies are given in Appendix 1. Technical information on locating the survey area is provided in Appendix 2. Appendix 3 describes the composition and location of the archive. A copy of the completed OASIS form is included in Appendix 4.

The survey methodology, report and any recommendations comply with guidelines outlined by the European Archaeological Council (Schmidt *et al*. 2015) and by the Chartered Institute for Archaeologists (CIfA 2020). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of His Majesty's Stationery Office (© Crown copyright).

The figures in this report have been produced following analysis of the data in processed formats and over a range of different display levels. All figures are presented to most suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

4 Results and Discussion (see Figures 12 to 116)

Ferrous anomalies and magnetic disturbance

Ferrous anomalies, as individual 'spikes', or as large discrete areas are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris or material is common on rural sites, often being present as a consequence of manuring or tipping/infilling. There is no obvious pattern or clustering to their distribution in this survey to suggest anything other than a random background scatter of ferrous debris in the plough-soil.

Overhead electricity pylons have been recorded running through Fields CR5a.1, CR5a.4-7, CR5a.12-14, CR7.11 and CR7.12 and has produced a either a 'shimmer' effect or has masked the data completely. Large ferrous responses in the CR2a compound area and Fields CR5a.1, CR6.18, CR7.11 and CR7.12 are associated with pylons.

Magnetic disturbance **F1** in Field CR1a.18, **F2** in Field CR1b.17 correspond with the location of former ponds depicted on historic mapping dating from 1884 (NLS 2025).

Field CR3a.1 is dominated by magnetic disturbance which is likely to be a result of 'green manuring'. The green waste is produced from organic and biodegradable household waste as a fertiliser and soil conditioner. Up to 0.25% of this material, however, can be from non-organic waste including metal fragments and batteries (Gerrard et al. 2015).

Magnetic disturbance (**F3**) in Field CR5a.18 corresponds to a building shown on historic mapping dating from 1884 (NLS 2025), it is also visible on 1945 aerial imagery (GE 2025). Similar responses have been recorded at **F4** in Field CR5a.26 and **F5** in Field CR5a.27 both of which correspond to buildings on the 1884 map.

Linear dipolar trends have been recorded within many of the surveyed areas and relate to service pipes.

Magnetic disturbance along the limits of the survey areas is due to interference from metal fencing and adjacent tracks.

Geological anomalies

The survey has detected anomalies that have been interpreted as geological in origin. It is thought that the responses have been detected because of the variation in the composition and depth of the deposits of superficial material in which they derive.

Fields CR5a.25 - CR5a.31 lie to the north of the A45 and are situated at the base of a slope. The geological responses in these fields are caused by colluvial deposits.

Geological responses are especially evident within Fields CR6.11 - CR6.14 which lie to the south of the River Nene Navigation. There are some stronger curving bands which may suggest former watercourses.

Geological responses in Field CR7.15 which appear to have a low magnetic strength but with clearly defined edges are thought to relate to possible quarrying, however it may also reflect changes to the topography.

Agricultural anomalies

Former field boundaries (**FB1** – **FB10**) have been recorded within Fields CR1a2.1, CR1a.3, CR1a.9, CR1a.10, CR1a.20, CR1b.11, CR1b.15, CR9a.5 and CR9a.6. Most of these boundaries correspond to historic mapping dating from 1884 (NLS 2025).

Medieval or post-medieval ridge and furrow cultivation has been recorded within most of the areas on differing alignments.

Field drains have been recorded in Fields CR1a.8, CR1b,2 - CR1b.6, CR2a.5, CR2a.6, CR3b.2, CR4a.2, CR5a.26 and CR9a.3. These have quite a low magnetic strength, and it is likely that their construction is of a non-fired clay construction.

Other parallel linear trends can be seen within most of the areas and are associated with modern ploughing. Only a selection of these have been highlighted on the interpretation diagrams to show the direction of the plough lines.

Uncertain anomalies

A rectilinear (**U18**) and linear (**U19**) anomaly have been identified in the south of CR1a.12. It is very likely that these responses are anthropogenic given the strength of the anomalies, and alignment with nearby ridge and furrow responses which appear to respect their position. It is likely that these responses are associated with unmapped agricultural activity but an archaeological origin cannot be confidently ruled out.

Two magnetically weak linear anomalies (**U1**) in the CR2a compound field suggest an anthropogenic origin, but no obvious cause is apparent. Other, weak linear anomalies within this field have also been recorded. It is possible they are former boundaries predating the historic mapping.

Weak linear anomalies **U2** in Fields CR2a.1 and 2 roughly correspond to a line of trees on the 1884 historic mapping (NLS 2025) and is likely to represent a former boundary.

A magnetically strong response (**U3**) in Field CR2a.2 lies adjacent to an area of magnetic disturbance. It suggests an anthropogenic origin of a likely modern date.

Circular response (**U4**) in Field CR2a.5 is just visible above the magnetic background levels and could represent a ring ditch. It measures approximately 17m in diameter.

Linear response (**U5**) in Field CR2a.6 may be of some archaeological interest, although as isolated it is difficult to know what it represents. It is also noted that this corresponds with cropmarks of an unknown date (8445/1).

A group of pit-like anomalies (**U6**) in Field CR5a.6 are difficult to interpret. Whilst they are similar to the geological responses to the south, they have a slightly elevated magnetic signature and could be anthropogenic rather than natural features. In the field to the south a double ditch-like response can be seen at **U7** and whilst an archaeological origin is preferred, the ephemeral signature suggests it may be geological. A flint scatter was found to the east of this area (HER 3878/0/0) which adds weight to an anthropogenic origin.

Linear response (**U8**) in Field CR5a.23 may be of some archaeological interest, although as with previous similar anomalies it may be a natural topographical feature.

A magnetically weak double linear response (**U9**) has been recorded in Field CR5a.26. it is possible that this is associated with archaeological features in Field CR5a.25, although **U9** are much weaker but the change in land use (pasture)may be a factor.

In Field CR6.18, magnetically weak double linear response **U10** can just about be seen above the mottling effect from the geology. Cropmarks of a large rectangular medieval enclosure is recorded to the south (HER 2682/0/5) and possible prehistoric/Romano-British activity to the northwest (HER 3562) suggesting that **U10** may be associated.

A very weak rectilinear response **U11** in Field CR7.11 is just about visible above the ridge and furrow cultivation. Measuring approximately 14m by 13m this could represent a small enclosure, although this is tentative at best.

In Field CR7.12 pit-like responses (outlined by **U12**) are like **P11** to the immediate southeast, albeit slightly weaker in strength. Due to this an uncertain interpretation has been reached.

A cluster of anomalies (**U13**) have been recorded along the northern limits of the survey area in Field CR7.13. It is possible they are a continuation of **A14**, but due to their location a cautious interpretation is needed. The responses at **U12** and **U13** correspond with cropmarks of an unknown date (HER 5898).

A series of rectilinear anomalies (**U14**) can be seen in CR7.15, just to the southeast of Yardley Road. It has been difficult to interpret these responses, but an agricultural origin is likely.

A small, magnetically weak, circular feature (**U15**) in Field CR9a.6 measures approximately 10m in diameter and possible represents a ring ditch.

Linear anomalies **U16** and **U17** in Field CR9a.7 may be associated with field systems and a continuation of those seen in Site G to the east (Brunning 2024).

Possible and definite archaeological anomalies

Anomalies of both an archaeological and possible archaeological origin have been recorded within the cable route with areas devoid of (archaeological) anomalies between and/or around them. Some of the features extend out of the cable route buffer which are likely to extend further into the fields.

A small complex of features (**A1**) has been recorded in Field CR1a.3, which as mentioned above extend out of the survey area, it is possible that these features represent settlement activity as are similar in magnetic strength to responses **A2** to the south. To the west of these responses a small weak circular anomaly (**P1**) is visible within the ridge and furrow cultivation and measures approximately 9m in diameter. These lie just to the east of a probable Romano-British settlement recorded on the HER (8924).

Rectilinear enclosures (**A2**) have been recorded in Field CR1a.7. One complete enclosure can be seen whilst the other continues further into the field. The complete enclosure measures approximately 71m by 48m with some weaker internal features. Parallel linear responses **P2** run along the western edge of the enclosures and possibly represent a trackway which lead to a group of anomalies in CR1a.5 which have a possible archaeological origin.

An isolated ring ditch (**A3**) can be seen in the northeast of Field CR1a.9, measuring approximately 14m in diameter.

A group of pit-like anomalies (**P3**) have been recorded in the northeast of Field CR1a.16. It is likely that they are archaeological although due to the incomplete pattern it is difficult to determine a function.

Linear ditch (**P4**) in Field CR1a.19 is likely to be a boundary of some sort. It is not shown on any historic mapping so is either a field boundary predating 1884 or of a much older date.

A complex set of features have been recorded in Field CR1b.17 which comprise multiple ring ditches and enclosures (**A4**) and oval enclosure along with further features at **A5**. The oval enclosure appears to be separated a little from the main complex which may suggest some significance. All these features suggest settlement of a Prehistoric date and likely to relate to a settlement recorded on the HER (5789).

Archaeological responses **A6** and **A7**, again likely to be associated with settlement can be seen in Field CR2a.7. These responses continue towards Sywell Airfield to the west and possibly towards Sywell Wood in the east, although the service pipe has masked the responses along the eastern boundary.

Magnetically strong linear ditches **P5** in Field CR5a.6 and **P6** in Field CR5a.7 are likely to have an archaeological origin. It is possible that they are associated with the complex of Romano-British features recorded to the immediate west in Site E (see Brunning and Freeman 2025).

Within compound 5a the northern section of a presumed rectilinear enclosure (**A8**) has been recorded, measuring approximately 133m along its width. Within and to the north of this enclosure, the magnetic data is enhanced (**P7**) which could suggest a spread of archaeological material. Hints of linear features are also apparent within the noise although difficult to extract.

Linear response (**P8**) has been recorded in Field CR5a.18 and possible represents part of an enclosure, however as only a small section can be seen this interpretation is tentative.

Located in the west of Field CR5a.25 numerous archaeological anomalies (**A9**) can be seen including ring ditches, linear ditches, and pits. It is unfortunate that strong geological responses have masked some of the features, but it is likely they extend to the north and south. Field CR5a.26 to the west has not detected any archaeological anomalies although the weak double linear response (**U9**) may be associated.

Curving ditch-like response (**P9**) in the north of CR6.5 has been interpreted as a possible archaeological origin. It has a slightly elevated magnetic response to the surrounding geological anomalies, hence this interpretation. However, as isolated, it remains cautious.

The HER has recorded a possible ring ditch (HER 3568/1/1) within field CR6.18. No ring ditch has been detected; however, possible archaeological anomalies (**P10**) have been recorded in the southeast of this field.

In the west of Field CR6.21, a group of archaeological features (**A10**) can be seen which suggests enclosures either side of a trackway. At least one ring ditch has been recorded here – possibly indicating the HER entry as mentioned above is in fact the one here. Within the same field, to the south, weak linear responses have been recorded which may be associated with **A10**.

Fields CR7.11 and 12 have recorded further archaeological and possible archaeological features. Anomalies (**A11**) are somewhat weaker than features seen elsewhere across the scheme but show enclosures, ditches, and possible ring ditches. Further south, anomalies **A12** are much stronger, clearly showing at least three ring ditches and also linear ditches.

The electricity pylon and overhead cables have masked some of the features in Field CR7.12, but the ditch from CR7.11 can be seen at **A13** and **A14**. A short ditch length (**A15**) suggests that archaeological anomalies continue out of the survey area. Also, within this vicinity a

group of pit-like anomalies (**P11**) may be of some interest. Cropmarks of an unknown date are recorded by the HER in this area (HER 5898).

A ring ditch (**A16**) has been detected along the northern survey limits in Field CR7.13 and measures approximately 12m in diameter.

A large possible ring ditch (**P12**) can be seen in Field CR9a.6, measuring approximately 25m in diameter. The interpretation is cautious as the response is magnetically weak.

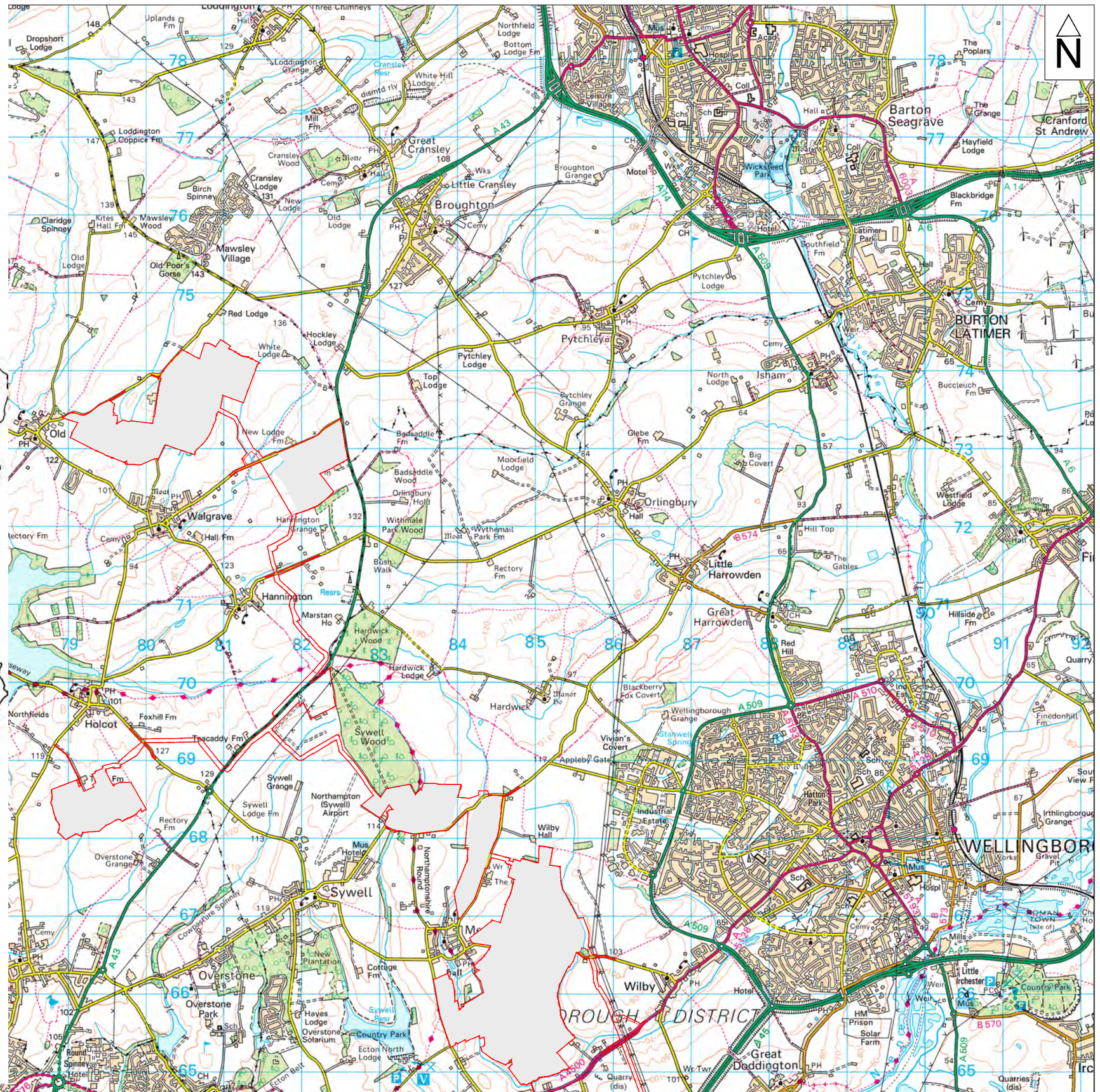
5 Conclusions

The geophysical survey has detected numerous magnetic anomalies associated with an archaeological and possible archaeological origin, comprising ring ditches, linear ditches and rectilinear enclosures, indicative of settlement activity over a probable prehistoric to medieval timeframe. Uncertain anomalies recorded are generally considered to be of an agricultural or geological origin.

Former field boundaries have been recorded along with medieval/post-medieval ridge and furrow cultivation, modern ploughing and land drains. Magnetic disturbance within the dataset can be attributed to adjacent tracks, metal fencing within field boundaries, electricity pylons, overhead cables, service pipes and demolition of former buildings.

Geological responses seen within the dataset reflect either the topography of the site, discrete pockets of natural variations, possible quarrying, or former watercourses.

Based on the geophysical survey, the archaeological potential of this Site is deemed to be high where there are areas of activity and low elsewhere.



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Site location

Fig. 1

Title

	SURVEY AREA
	SOLAR PANEL AREAS

0 2000m

1:50,000 @ A2

N

Section 1

Section 2

Section 3

Site A

Site A.2

Site B

Site C

Site D

Site E

Site F

Site G

BESS

2700 00

2600 00

4800 00

4900 00

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Location of survey areas

Fig. 2

Title

SURVEY AREA	SECTOR BOUNDARY
CR1a FIELD NUMBERS	SOLAR PANEL AREAS

0 2000m

1:40,000 @ A2

N

Site A

Site A.2

Site B

Site C

Site D

SECTOR 1
SEE FIGS 12-14

SECTOR 2
SEE FIGS 15-17

SECTOR 3
SEE FIGS 18-20

SECTOR 4
SEE FIGS 21-23

SECTOR 5
SEE FIGS 24-26

SECTOR 6
SEE FIGS 27-29

SECTOR 7
SEE FIGS 30-32

SECTOR 8
SEE FIGS 33-35

SECTOR 9
SEE FIGS 36-38

SECTOR 10
SEE FIGS 39-41

SECTOR 11
SEE FIGS 42-44

SECTOR 12
SEE FIGS 45-47

SECTOR 13
SEE FIGS 48-50

SECTOR 14
SEE FIGS 51-53

CR1a.1
CR1a2.1
CR1a2.2
CR1a.3
CR1a.4
CR1a.5
CR1a.7
CR1a.8
CR1a.9
CR1a.10
CR1a.11
CR1a.12
CR1a.16
CR1a.17
CR1a.18
CR1a.19
CR1a.20
CR1.1
CR1.4
CR1.5
CR1.6
CR2a.compound
CR2a.1
CR2a.2
CR2a.4
CR2a.5
CR2a.6
CR2a.7
CR1b.2
CR1b.3
CR1b.4
CR1b.6
CR1b.7
CR1b.11
CR1b.12
CR1b.13
CR1b.14
CR1b.15
CR1b.17
CR1b.18
CR3a.1
CR3a.2
CR3b.2

2740 00
2730 00
2720 00
2710 00
2700 00
2690 00
2680 00
2670 00
4790 00
4800 00
4810 00
4820 00
4830 00
4840 00

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Location of survey areas - Section 1

Fig. 3

Title

SURVEY AREA	SOLAR PANEL AREAS
CR1a FIELD NUMBERS	NOT AVAILABLE
SECTOR BOUNDARY	

0 500m

1:15,000 @ A2

N

SECTOR 15
SEE FIGS 54-56

SECTOR 16
SEE FIGS 57-59

SECTOR 17
SEE FIGS 60-62

SECTOR 18
SEE FIGS 63-65

SECTOR 19
SEE FIGS 66-68

SECTOR 20
SEE FIGS 69-71

SECTOR 21
SEE FIGS 72-74

SECTOR 22
SEE FIGS 75-77

SECTOR 23
SEE FIGS 78-80

SECTOR 24
SEE FIGS 81-83

SECTOR 25
SEE FIGS 84-86

SECTOR 26
SEE FIGS 87-89

Site C

Site D

Site E

BESS

CR2a.7

CR3a.1

CR3a.2

CR3b.2

CR4a.2

CR5a.1

CR5a.4

CR5a.5

CR5a.6

CR5a.7

CR5a.12

CR5a.13

CR5a.14

CR5a.15

CR5a.16

CR5a.17

CR5a.18

CR5a.20

CR5a.22

CR5a.23

CR5a.25

CR5a.26

CR5a.27

CR5a.28

CR5a.29

CR5a.31

CR6.5

CR6.7

CR6.8

CR6.9

CR6.11

CR6.12

CR6.14

CR6.16

CR6.17

CR6.18

CR6.21

CR6.24

Compound 5a

Appleby Barn

Appleby Bungalow

Cheesecake Spinney

Wilby Hall

Glebe House

Museum

Christmas Farm

The Grange

Mears Ashby

Sywell Bottom

Hayes Wood

Trafalgar Covert

North Spinney

Sywell Reservoir

Ecton North Lodge

Park View House

Sandwell Spinney

Ecton East Lodge

Ash Spinney

Ecton Lodge

Ecton

The Clump

The Wilderness

South Lodge

Blackthorn Spinney

Ryehill Spinney

Robersacks Spinney

Little Robersacks Spinney

Crow Spinney

Commander's Spinney

Wind Spinney

Earls Barton

Wilby

Springhill

Brookhill Farm

Sandpit Barn

Pastures Farm

The Station Lodge

The Gatehouse

The Mill House

Long Lodge Farm

Hatton Park

Swanspool Brook

River Nene

River Nene Navigation

Oronwell Spinney

Corrie's Spinney

Hatton Park

Swanspool Brook

River Nene

2680 00

2670 00

2660 00

2650 00

2640 00

2630 00

2620 00

2610 00

4830 00

4840 00

4850 00

4860 00

4870 00

4880 00

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Location of survey areas - Section 2

Fig. 4

Title

SURVEY AREA	SOLAR PANEL AREAS
CR1a FIELD NUMBERS	NOT AVAILABLE
SECTOR BOUNDARY	

0 500m

1:15,000 @ A2

BESS

CR6.17
CR6.18
CR6.21
CR6.24
CR7.2
CR7.6
CR7.7
CR7.8
CR7.9
CR7.11
CR7.12
CR7.13
CR7.15
CR8.2
CR8.3
CR8.4
CR8.5
CR8.6
CR9a.1
CR9a.2
CR9a.3
CR9a.4
CR9a.5
CR9a.6
CR9a.7

SECTOR 27
SEE FIGS 90-92

SECTOR 28
SEE FIGS 93-95

SECTOR 29
SEE FIGS 96-98

SECTOR 30
SEE FIGS 99-101

SECTOR 31
SEE FIGS 102-104

SECTOR 32
SEE FIGS 105-107

SECTOR 33
SEE FIGS 108-110

SECTOR 34
SEE FIGS 111-113

SECTOR 35
SEE FIGS 114-116

Site F

Site G

Compound 7

N

2610 00
2600 00
2590 00
2580 00
2570 00
2560 00
2550 00
2540 00

4830 00
4840 00
4850 00
4860 00
4870 00
4880 00

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Location of survey areas - Section 3

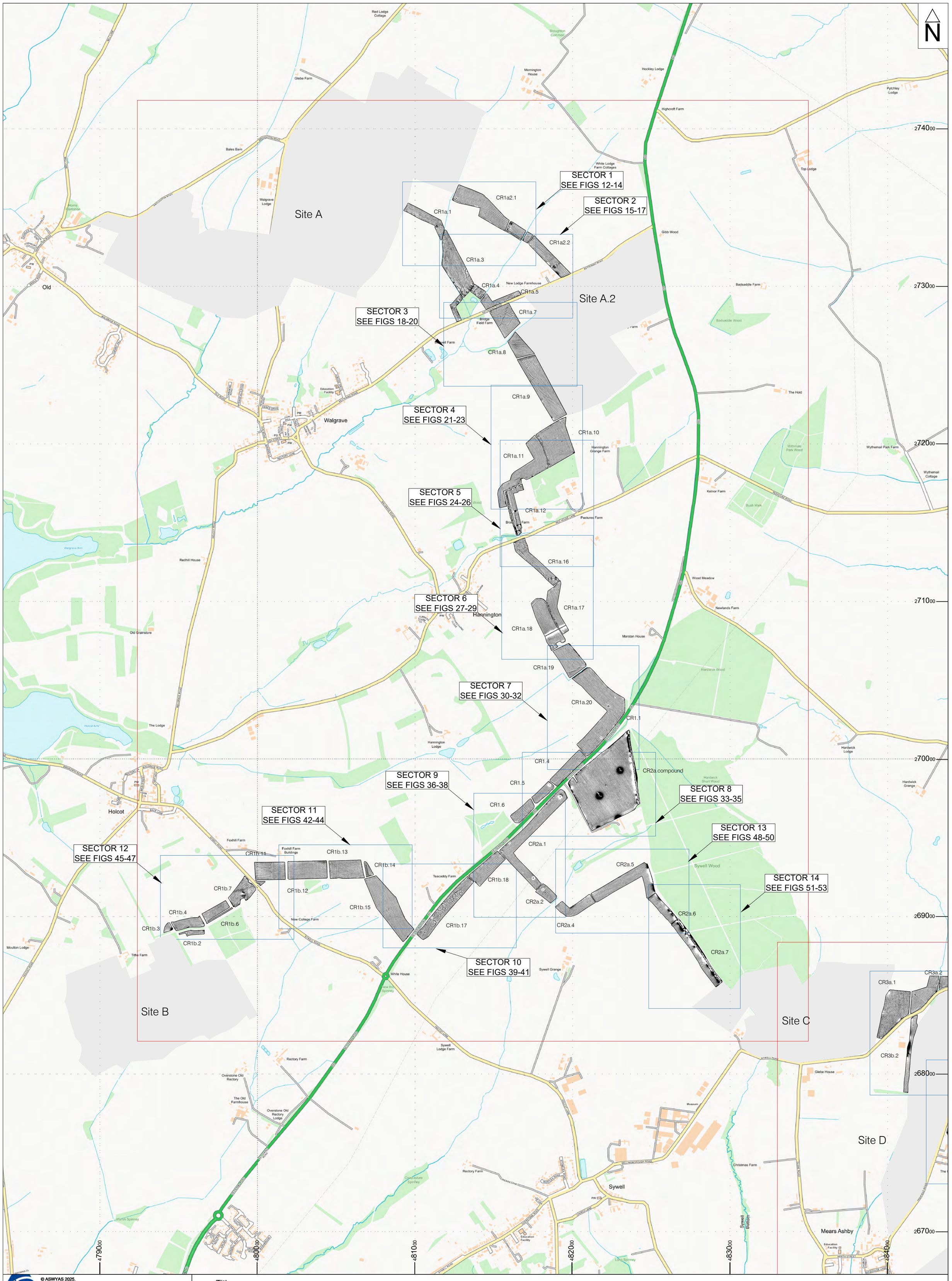
Fig. 5

Title

SURVEY AREA	SOLAR PANEL AREAS
CR1a FIELD NUMBERS	NOT AVAILABLE
SECTOR BOUNDARY	

0 500m

1:15,000 @ A2



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Overall greyscale of processed magnetometer data - Section 1

Fig. 6

Title

	SECTOR BOUNDARY
	SOLAR PANEL AREAS

nT -1.0 2.0

0 500m

1:15,000 @ A2

N

Site A

Site A.2

Site B

Site C

Site D

SECTOR 1
SEE FIGS 12-14

SECTOR 2
SEE FIGS 15-17

SECTOR 3
SEE FIGS 18-20

SECTOR 4
SEE FIGS 21-23

SECTOR 5
SEE FIGS 24-26

SECTOR 6
SEE FIGS 27-29

SECTOR 7
SEE FIGS 30-32

SECTOR 8
SEE FIGS 33-35

SECTOR 9
SEE FIGS 36-38

SECTOR 10
SEE FIGS 39-41

SECTOR 11
SEE FIGS 42-44

SECTOR 12
SEE FIGS 45-47

SECTOR 13
SEE FIGS 48-50

SECTOR 14
SEE FIGS 51-53

CR1a.1
CR1a2.1
CR1a2.2
CR1a.3
CR1a.4
CR1a.5
CR1a.7
CR1a.8
CR1a.9
CR1a.10
CR1a.11
CR1a.12
CR1a.16
CR1a.17
CR1a.18
CR1a.19
CR1a.20
CR1.1
CR1.4
CR1.5
CR1.6
CR2a.compound
CR2a.1
CR2a.2
CR2a.4
CR2a.5
CR2a.6
CR2a.7
CR1b.2
CR1b.3
CR1b.4
CR1b.6
CR1b.7
CR1b.11
CR1b.12
CR1b.13
CR1b.14
CR1b.15
CR1b.17
CR1b.18
CR3a.1
CR3a.2
CR3b.2

2740 00
2730 00
2720 00
2710 00
2700 00
2690 00
2680 00
2670 00
479 000
480 000
481 000
482 000
483 000
484 000

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Overall interpretation of magnetometer data - Section 1

Fig. 7

Title

SECTOR BOUNDARY	
SOLAR PANEL AREAS	
NOT AVAILABLE	

Interpretation

FERROUS	GREEN WASTE	AGRICULTURAL	UNCERTAIN
SERVICE PIPE	FIELD DRAIN	FORMER FIELD BOUNDARY	ARCHAEOLOGY?
MAGNETIC DISTURBANCE	RIDGE & FURROW	GEOLOGY	ARCHAEOLOGY

0 500m

1:15,000 @ A2

N

Site C

Site D

Site E

SECTOR 15
SEE FIGS 54-56

SECTOR 16
SEE FIGS 57-59

SECTOR 17
SEE FIGS 60-62

SECTOR 18
SEE FIGS 63-65

SECTOR 19
SEE FIGS 66-68

SECTOR 20
SEE FIGS 69-71

SECTOR 21
SEE FIGS 72-74

SECTOR 22
SEE FIGS 75-77

SECTOR 23
SEE FIGS 78-80

SECTOR 24
SEE FIGS 81-83

SECTOR 25
SEE FIGS 84-86

SECTOR 26
SEE FIGS 87-89

CR2a.7
CR3a.1
CR3a.2
CR3b.2
CR4a.2
CR5a.1
CR5a.4
CR5a.5
CR5a.6
CR5a.7
CR5a.12
CR5a.13
CR5a.14
CR5a.15
CR5a.16
CR5a.17
CR5a.18
CR5a.20
CR5a.22
CR5a.23
CR5a.25
CR5a.26
CR5a.27
CR5a.28
CR5a.29
CR5a.31
CR6.5
CR6.7
CR6.8
CR6.9
CR6.11
CR6.12
CR6.14
CR6.16
CR6.17
CR6.18
CR6.21
CR6.24

BESS

Appleby Barn
Appleby Bungalow
Cheesecake Spinney
Wilby Hall
Glebe House
Museum
Christmas Farm
The Grange
Comer's Spinney
Cromwell Spinney
Hatton Park
Swanspool Brook
Mears Ashby
Sywell Bottom
Education Facility
Hayes Wood
Trafalgar Covert
North Spinney
Sywell Reservoir
Ecton North Lodge
Park View House
Sandwell Spinney
Ecton East Lodge
Ash Spinney
Ecton Lodge
Wilby
Springhill
Brookhill Farm
Sandpit Barn
Sports/Leisure Centre
The Rookery
Earls Barton
Compound 5a
The Clump
The Wilderness
South Lodge
Ecton
Blackthorn Spinney
Rushell Spinney
Robersacks Spinney
Little Robersacks Spinney
Crow Spinney
Commander's Spinney
Wind Spinney
The Gatehouse
Pastures Farm
The Station Lodge
The Mill House
Long Lodge Farm
River Nene
River Nene Navigation

2680 00
2670 00
2660 00
2650 00
2640 00
2630 00
2620 00
2610 00
4830 00
4840 00
4850 00
4860 00
4870 00
4880 00

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Overall greyscale of processed magnetometer data - Section 2

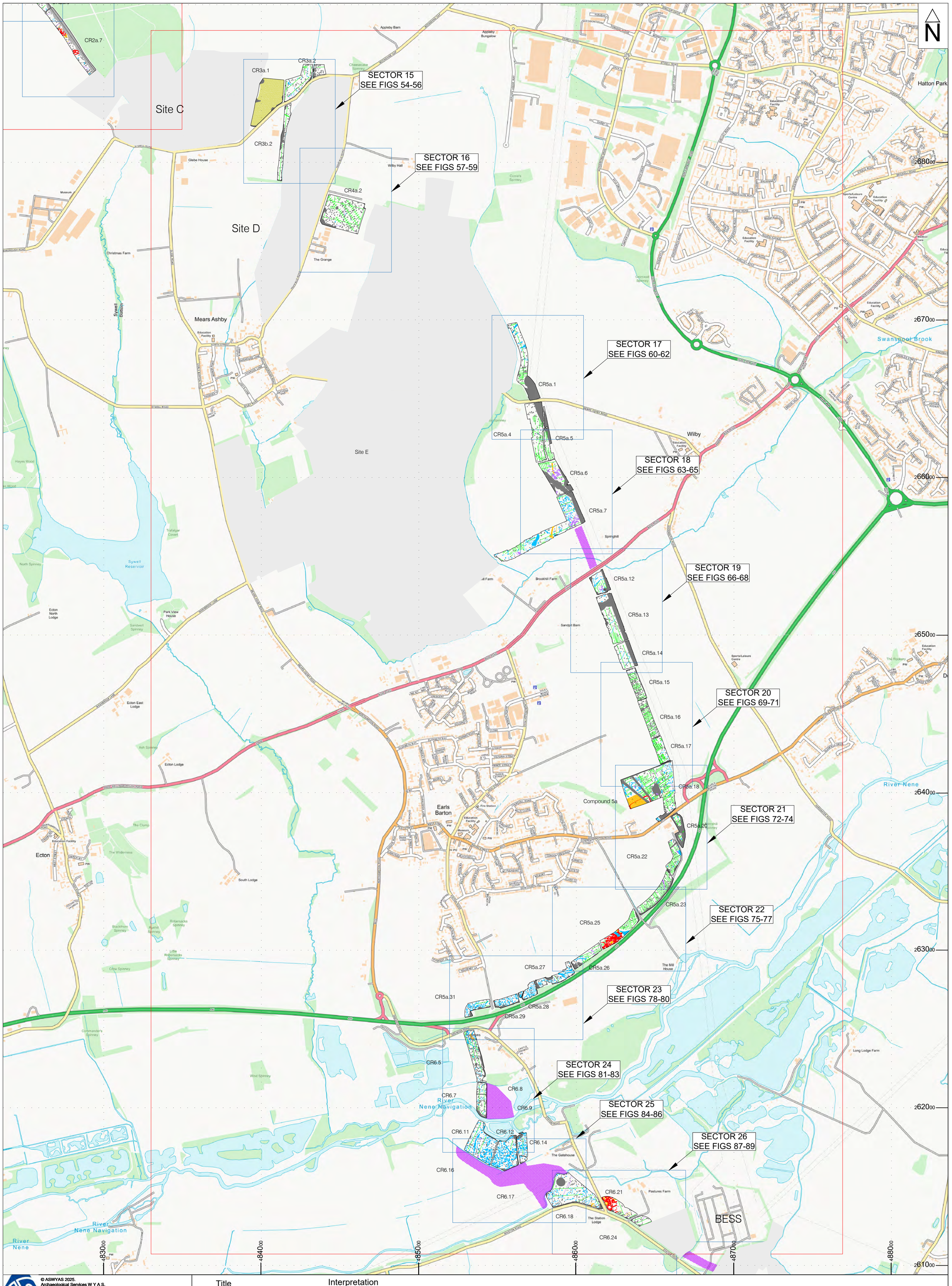
Fig. 8

Title

SECTOR BOUNDARY
SOLAR PANEL AREAS
NOT AVAILABLE

-1.0 2.0
nT

0 500m
1:15,000 @ A2



Project ID: XK77_EXG23 Cable

Overall interpretation of magnetometer data - Section 2

Fig. 9

Title

Interpretation

SECTOR BOUNDARY	FERROUS	GREEN WASTE	AGRICULTURAL	UNCERTAIN
SOLAR PANEL AREAS	SERVICE PIPE	FIELD DRAIN	FORMER FIELD BOUNDARY	ARCHAEOLOGY?
NOT AVAILABLE	MAGNETIC DISTURBANCE	RIDGE & FURROW	GEOLOGY	ARCHAEOLOGY

0 500m

1:15,000 @ A2

N

BESS

Site F

Site G

CR6.17
CR6.18
CR6.21
CR6.24
CR7.2
CR7.6
CR7.7
CR7.8
CR7.9
CR7.11
CR7.12
CR7.13
Compound 7
CR7.15
CR8.2
CR8.3
CR8.4
CR8.5
CR8.6
CR9a.1
CR9a.2
CR9a.3
CR9a.4
CR9a.5
CR9a.6
CR9a.7

SECTOR 27
SEE FIGS 90-92

SECTOR 28
SEE FIGS 93-95

SECTOR 29
SEE FIGS 96-98

SECTOR 30
SEE FIGS 99-101

SECTOR 31
SEE FIGS 102-104

SECTOR 32
SEE FIGS 105-107

SECTOR 33
SEE FIGS 108-110

SECTOR 34
SEE FIGS 111-113

SECTOR 35
SEE FIGS 114-116

The Gatehouse
Pastures Farm
The Station Lodge
Grendon House
Strixton
Strixton Plantation
Lower End
Greenfield Lodge
Grendon
Grendon Quarter Pond
The Fishing Lodge
Scotland Pond
Top Lodge Farm
Engine Pond Cottage
Engine Pond
The Menagerie
Menagerie Pond
Castle Ashby
Par Pond
Chadstone Lodge
Nevitts Lodge
Paradise Farm
Lodge Farm
Easton Maudit
Home Farm
Slype Farm
Bozeat
Education Facility
Low Farm
White House Farm
Stocken Hollow Farm
Hom Wood
The Belts
Forest Lodge
Avenue Lodges
Avenue Villa
Yardley Hastings
Medical Care
Education Facility
Blerley Farm
New Hay Farm
Roundhay Farm
Old Pastures
Hill's Copse
Easton Lodge Farm
Bozeat Grange
Bozeat Wood
Northey Farm
The Oaks Wood
New Pastures Farm
Oak Spinney
Lone Pine Bungalow
Lavendon Lodge Farm
Barsley Spinney
Pastures Farm
Warrington House
Broadlane Spinney
Newland Spinney
Old Pond Close
Deiter House
Newhay Copse
Sane Copse
Artess Copse
Grimpsey Copse
Howbrook Copse
Treetops
Olney Park Farm
Cold Oak Copse
The Lodge
Nuniron Spinney
Brickfield Plantation
The Nest Farm
Warrington

2610 00
2600 00
2590 00
2580 00
2570 00
2560 00
2550 00
2540 00
4830 00
4840 00
4850 00
4860 00
4870 00
4880 00

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Overall greyscale of processed magnetometer data - Section 3

Fig. 10

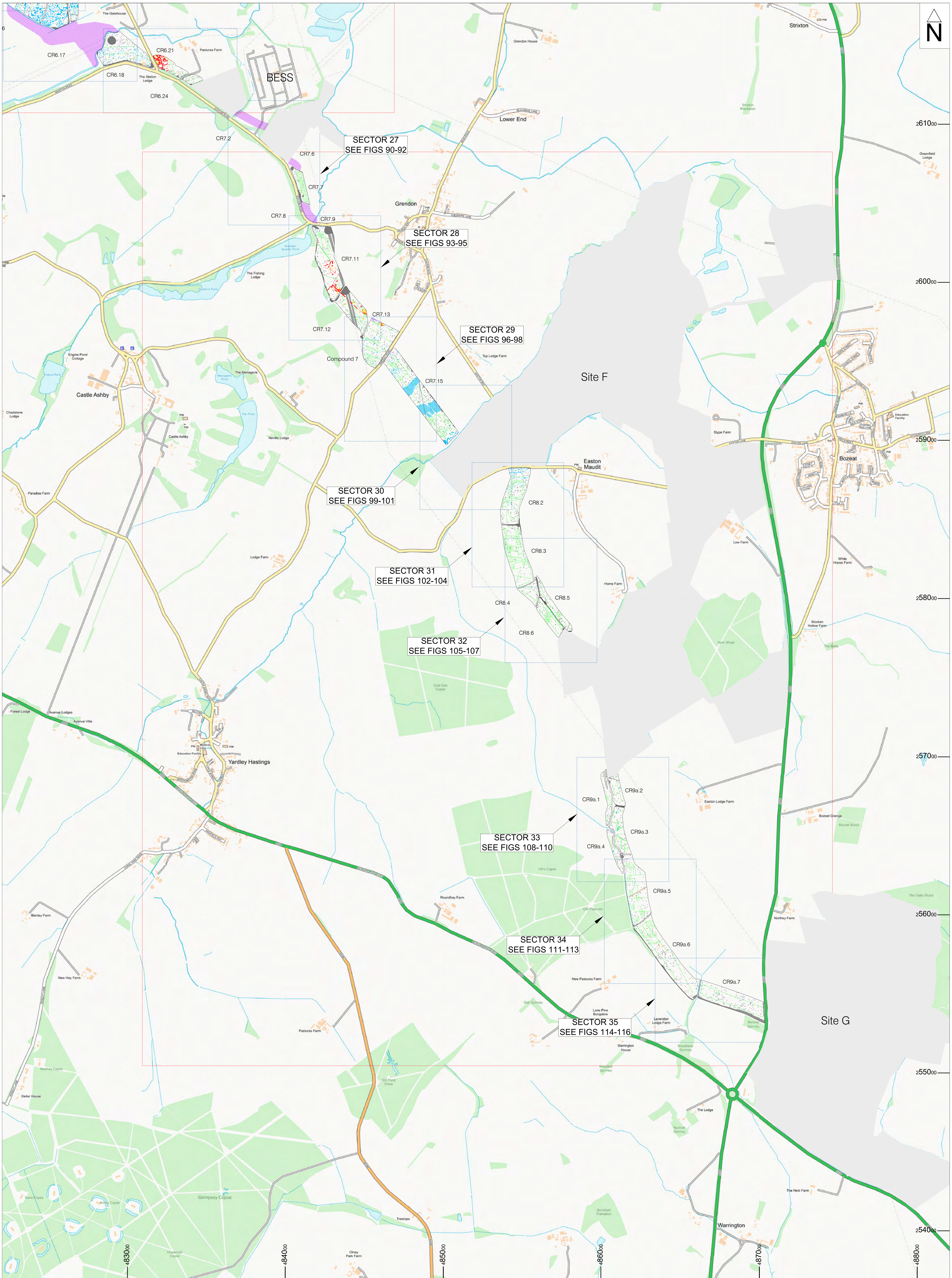
Title

SECTOR BOUNDARY
SOLAR PANEL AREAS
NOT AVAILABLE

nT -1.0 2.0

0 500m

1:15,000 @ A2


N
BESS
CR6.17
CR6.18
CR6.21
CR6.24
The Gatehouse
Pastures Farm
The Station Lodge
CR7.2
CR7.6
CR7.7
CR7.8
CR7.9
CR7.11
CR7.12
CR7.13
CR7.15
Compound 7
SECTOR 27
SEE FIGS 90-92
SECTOR 28
SEE FIGS 93-95
SECTOR 29
SEE FIGS 96-98
SECTOR 30
SEE FIGS 99-101
SECTOR 31
SEE FIGS 102-104
SECTOR 32
SEE FIGS 105-107
SECTOR 33
SEE FIGS 108-110
SECTOR 34
SEE FIGS 111-113
SECTOR 35
SEE FIGS 114-116
CR8.2
CR8.3
CR8.4
CR8.5
CR8.6
CR9a.1
CR9a.2
CR9a.3
CR9a.4
CR9a.5
CR9a.6
CR9a.7
Site F
Site G
Grendon
Grendon House
Lower End
Strixton
Strixton Plantation
Greenfield Lodge
Top Lodge Farm
Easton Maudit
Slype Farm
Bozeat
Education Facility
Low Farm
White House Farm
Home Farm
Stocken Hollow Farm
Horn Wood
The Bells
Easton Lodge Farm
Bozeat Grange
Bozeat Wood
The Oaks Wood
Northey Farm
Grendon Quarter Pond
The Fishing Lodge
Scotland Pond
Engine Pond Cottage
Engine Pond
Castle Ashby
Menagerie Pond
The Menagerie
Par Pond
Nevitts Lodge
Chadstone Lodge
Paradise Farm
Lodge Farm
Cold Oak Copse
Forest Lodge
Avenue Lodges
Avenue Villa
Yardley Hastings
Medical Care
Education Facility
Roundhay Farm
Hill's Copse
Old Pastures
Blenley Farm
New Hay Farm
New Pastures Farm
Oak Spinney
Lone Pine Bungalow
Lavendon Lodge Farm
Warrington House
Broadlane Spinney
Barslay Spinney
Newland Spinney
Pastures Farm
Old Pond Close
Newhay Copse
Deiter House
Grimpsey Copse
Sane Copse
Howbrook Copse
Treetops
Olney Park Farm
The Lodge
Nunnon Spinney
Brickfield Plantation
The Nest Farm
Warrington
261000
260000
259000
258000
257000
256000
255000
254000
483000
484000
485000
486000
487000
488000

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Overall interpretation of magnetometer data - Section 3

Fig. 11

Title

SECTOR BOUNDARY
SOLAR PANEL AREAS
NOT AVAILABLE

Interpretation

FERROUS
SERVICE PIPE
MAGNETIC DISTURBANCE
POWERLINES
FIELD DRAIN
RIDGE & FURROW
AGRICULTURAL
FORMER FIELD BOUNDARY
GEOLOGY
UNCERTAIN
ARCHAEOLOGY?
ARCHAEOLOGY

0 500m
1:15,000 @ A2

N

CR1a.1

CR1a2.1

CR1a.3

2736 00

2734 00

2732 00

4810 00

4812 00

4814 00

4816 00

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Processed greyscale magnetometer data; Sector 1

Fig. 12

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1500 @ A2

N

CR1a.1

CR1a2.1

CR1a.3

2736$_{00}$

2734$_{00}$

2732$_{00}$

4810$_{00}$

4812$_{00}$

4814$_{00}$

4816$_{00}$

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XY trace plot of minimally processed magnetometer data; Sector 1

Fig. 13

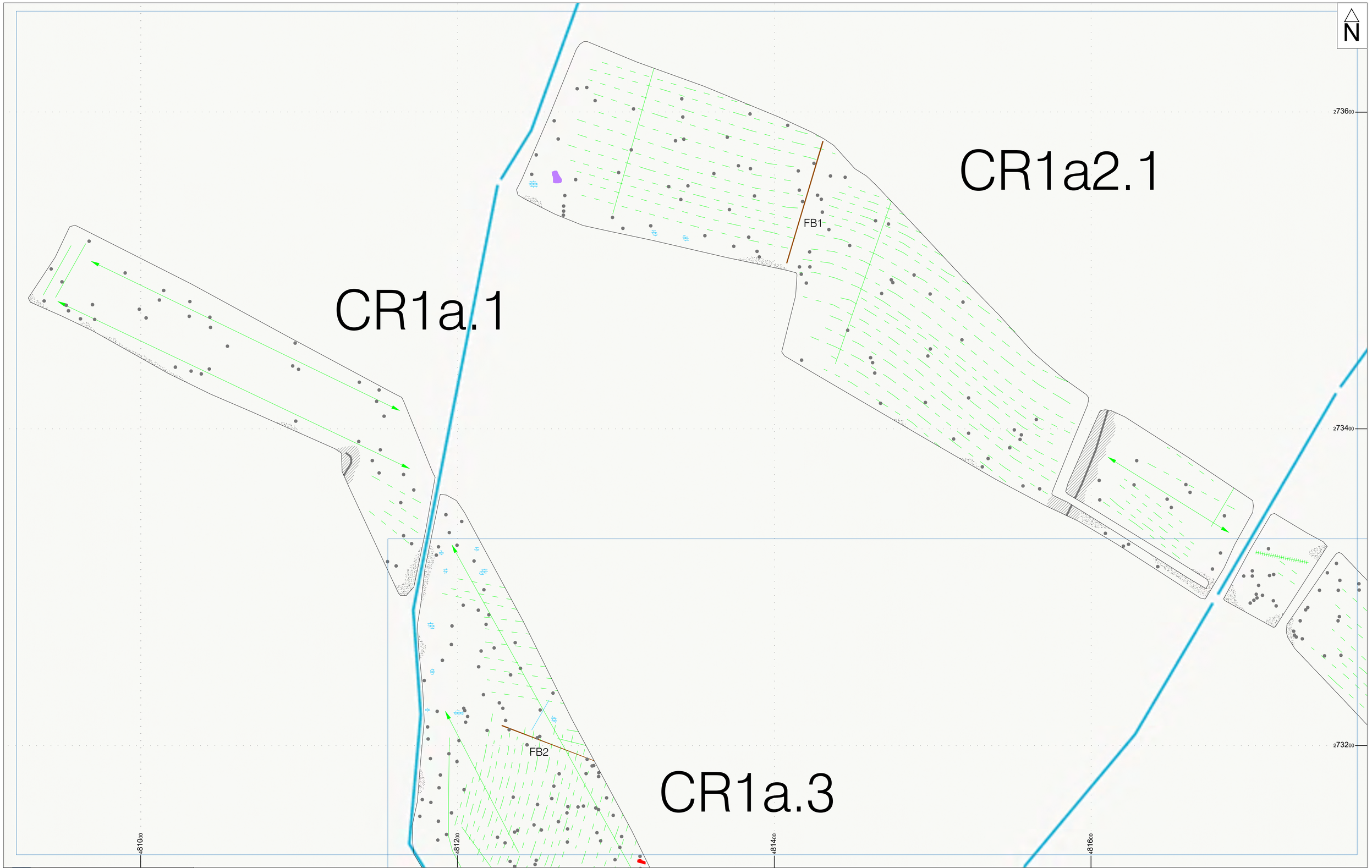
Title

SECTOR BOUNDARY

15.0 nT/cm

0 50m

1:1500 @ A2



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Interpretation of magnetometer data; Sector 1

Fig. 14

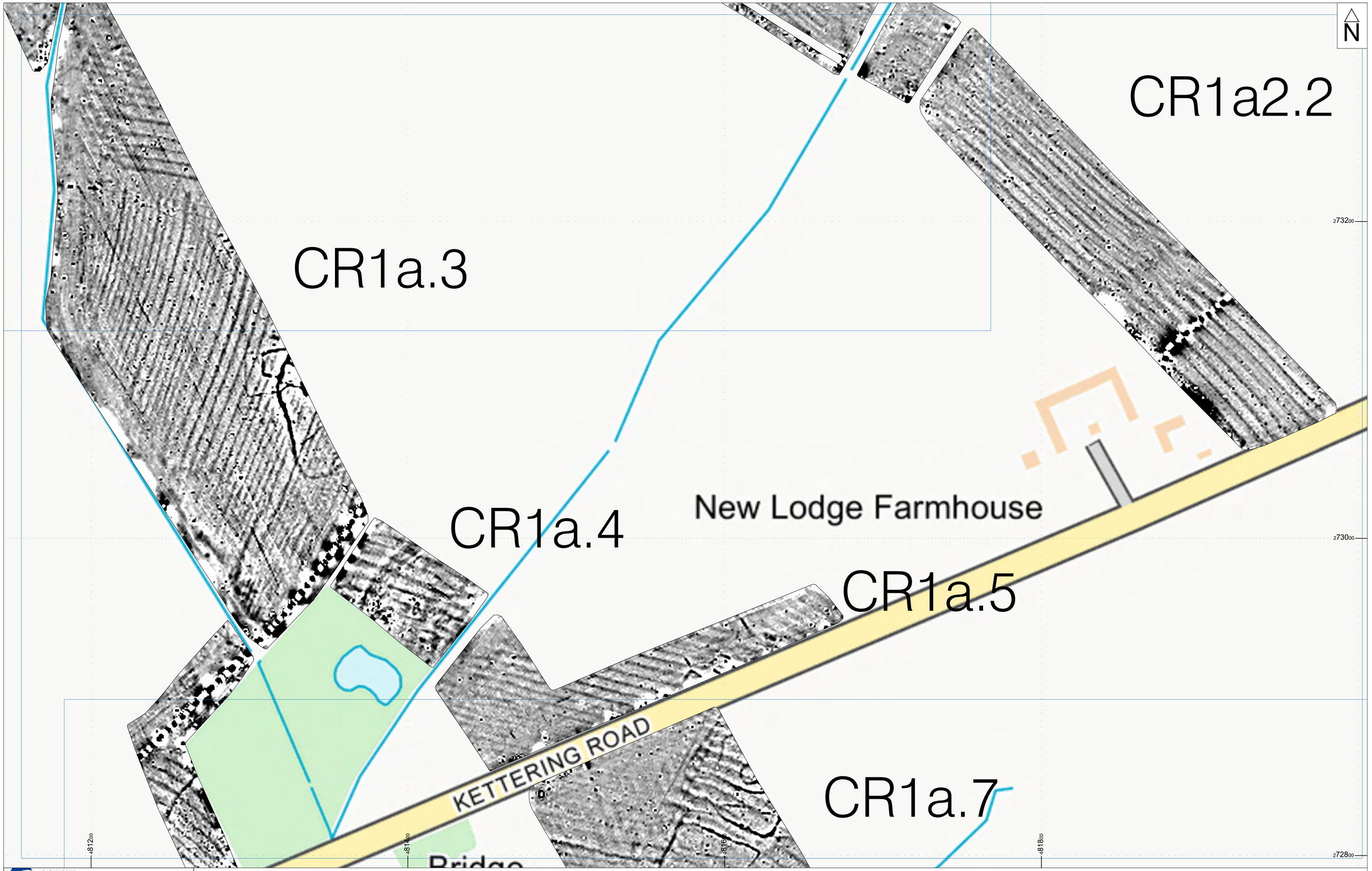
Title

Interpretation

SECTOR BOUNDARY	FERROUS	FIELD DRAIN	FORMER FIELD BOUNDARY
	SERVICE PIPE	RIDGE & FURROW	GEOLOGY
	MAGNETIC DISTURBANCE	AGRICULTURAL	UNCERTAIN

0 50m

1:1500 @ A2



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Processed greyscale magnetometer data; Sector 2

Fig. 15

Title

SECTOR BOUNDARY

nT -1.0 2.0

0 50m

1:1500 @ A2