PFLW22

PARK FARM, LOUDHAM, WOODBRIDGE, SUFFOLK

GEOPHYSICAL SURVEY REPORT

for RSK ADAS Limited

December 2022

HEADLAND ARCHAEOLOGY

REGISTERED ORGANISATION CIfA

PARK FARM, LOUDHAM, WOODBRIDGE, SUFFOLK

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This report adheres to the quality standard of ISO 9001:2015

PROJECT INFO:

HA Project Code **PFLW22** / HER Event No **PTR 071** / NGR **TM 30937 54839** / Parish **Pettistree** / Local Authority **Suffolk** / Fieldwork Date **19/04/2022 – 22/04/2022** / OASIS Ref. **headland1-506006**

PROJECT TEAM:

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HEADLAND ARCHAEOLOGY

part of the RSK Group

REGISTERED ORGANISATION CIfA

PROJECT SUMMARY

Headland Archaeology (UK) Ltd was commissioned by RSK ADAS Limited (the Client), to undertake a geophysical (magnetometer) survey, covering approximately 32 hectares, survey north-west of Park Farm, Loudham, near Woodbridge, Suffolk where a solar farm is being proposed. This geophysical survey report will accompany a Desk-based Assessment (RSK ADAS 2021), with both documents being submitted as part of a planning application for the proposed Park Farm Solar Photovoltaic (PV) array and associated infrastructure development. The results will also inform future archaeological strategy, if required.

The survey has identified anomalies consistent with modern activity and agricultural usage of the PDA over the past 150 years as indicated on historic mapping. Anomalies indicative of former boundaries and modern cultivation have been recorded throughout the proposed development area (PDA). Five possible former extraction pits have been recorded throughout the site as well as two discrete areas of burning. An enclosure of unknown date has been recorded in the south of the PDA, along with several linear ditch-type anomalies. Additional possible settlement activity has been recorded parallel to Loudham Hall Road in the south of the PDA, where discrete and linear anomalies may indicate archaeological activity such as croft and toft medieval settlement. Based on the geophysical survey results the archaeological potential of the PDA is assessed as low except for F5 where the potential is moderate to high.

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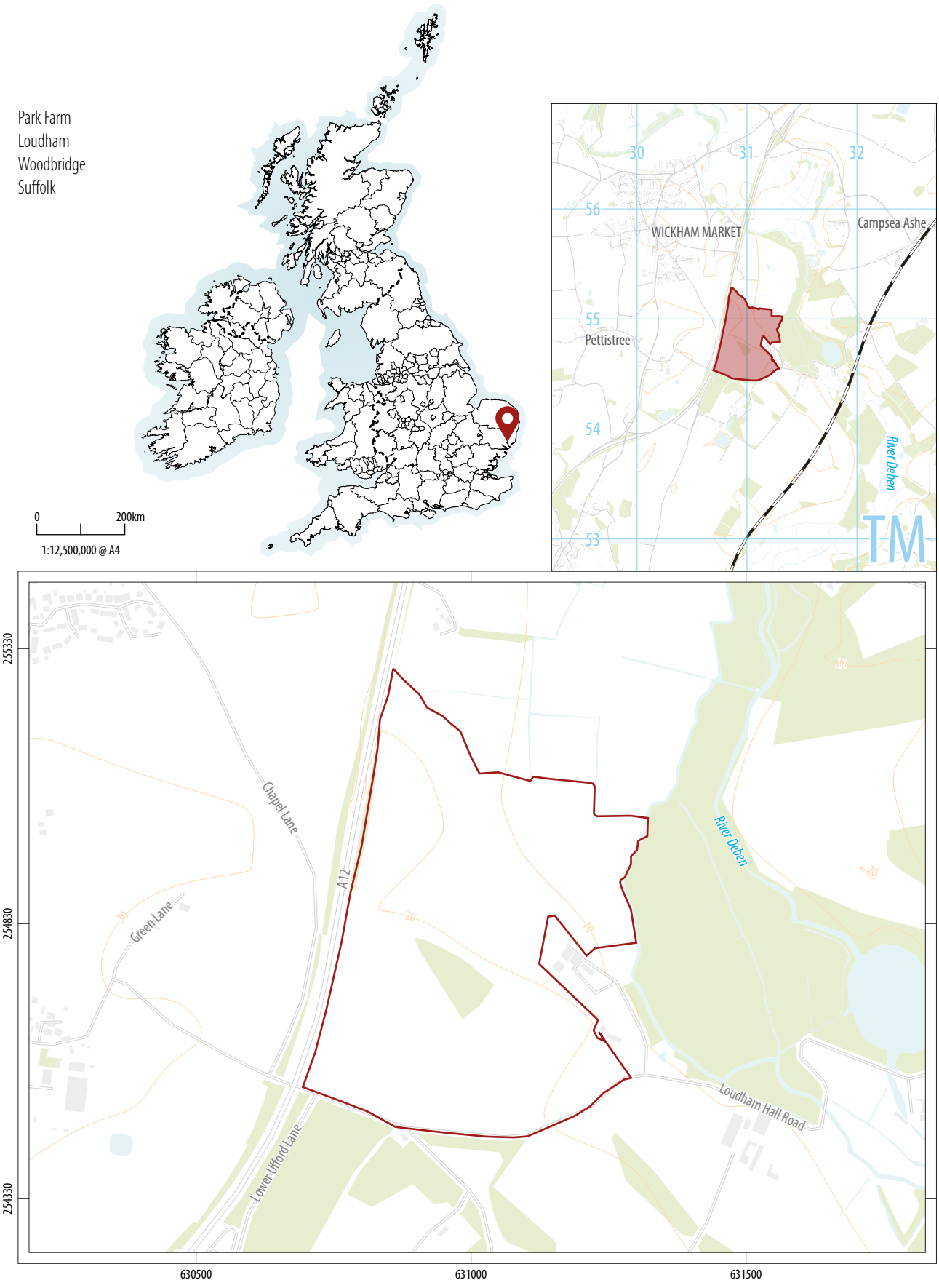

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ILLUS 1 Site location

PARK FARM, LOUDHAM, WOODBRIDGE, SUFFOLK

GEOPHYSICAL SURVEY REPORT

1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by RSK ADAS Limited (the Client), to undertake a geophysical (magnetometer) survey north-west of Park Farm, Loudham, Suffolk (Illus 1) where a solar farm is being proposed.

This geophysical survey report will accompany a Desk-based Assessment (RSK ADAS 2021), with both documents being submitted as part of a planning application for the proposed Solar Photovoltaic (PV) array and associated infrastructure development. The results will also inform future archaeological strategy, if required.

The scheme of work was undertaken in accordance with the requirements of the National Planning Policy Framework (MHCLG 2021) and with the Written Scheme of Investigation for Geophysical Survey (WSI) (Headland Archaeology 2022).

The WSI was produced to the standards laid down in the European Archaeological Council's guideline publication EAC Guidelines for the Use of Geophysics in Archaeology (Europae Archaeologia Consilium 2016), the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Geophysical Survey (CIfA 2014) and the Suffolk County Council's Requirements for a Geophysical Survey (SCC 2021). The survey was also carried out in line with the same best practice guidelines.

The survey was carried out between April 19th and April 22nd, 2022

1.1 SITE LOCATION, TOPOGRAPHY AND LAND-USE

The Proposed Development Area (PDA) is centred at TM 30937 54839 and covers an area of approximately 32 hectares. It lies to the north-west of Park Farm, Loudham and comprises an irregularly shaped parcel of land, covering five arable fields (Illus F1 to F9 inclusive). The PDA is bound the A12 to the west, Loudham Hall Road to the south and woodland and agricultural land to the north and east. An area of woodland in the centre of the site is excluded from the PDA.

The PDA is located on a slight north facing slope which reduces in height from the south at 27m Above Ordnance Datum (AOD) to 12m AOD in the north.

1.2 GEOLOGY AND SOILS

The bedrock geology is recorded as Red Crag Group – Sand, a sedimentary bedrock formed between 3.6 and 2.1 million years ago during the Neogene and Quaternary periods. Superficial deposits across the PDA are recorded as Alluvium (Clay, Silt, Sand, and Gravel) in the east, with alternating bands of Diamicton and Sand and Gravel to the west; both the latter being classified as Lowestoft Formation (UKRI 2021).

The soils are classified in the Soilscape 10 Association, these are classified as freely draining slightly acid sandy soils (Cranfield University 2021).

ILLUS 2 F1, looking north-east

2 ARCHAEOLOGICAL BACKGROUND

A Desk-based Assessment (RSK ADAS 2021) undertaken for the PDA has identified that there are no known heritage assets within the PDA. A single find spot of a bird-shaped copper alloy mount has been recorded on the Portable Antiquities Scheme (PAS) in the south-west of the PDA.

The DBA concluded that there is moderate to high potential for unknown buried archaeological deposits dating from the prehistoric to post-medieval periods within the landscape surrounding the PDA.

3 AIMS, METHODOLOGY & PRESENTATION

3.1 AIMS & OBJECTIVES

The principal aim of the geophysical survey was to gather information to establish the presence/absence, character, and extent of any archaeological remains within the PDA. This will enable an assessment to be made of the impact of the proposed development on any sub-surface archaeological remains, if present, and thereby inform any further investigation strategies, as appropriate.

The specific archaeological objectives of the geophysical survey were:

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

3.2 METHODOLOGY

Magnetic survey methods rely on the ability of a variety of instruments to measure very small magnetic fields associated with buried archaeological remains. A feature such as a ditch, pit or kiln can act like a small magnet, or series of magnets, that produce distortions (anomalies) in the earth's magnetic field. In mapping these slight variations, detailed plans of sites can be obtained as buried features often produce reasonably characteristic anomaly shapes and strengths (Gaffney & Gater 2003). Further information on soil magnetism and the interpretation of magnetic anomalies is provided in Appendix 1.

Magnetometry is the most widely used geophysical survey technique in archaeology as it can quickly evaluate large areas and, under favourable conditions, identify a wide range of archaeological features including infilled cut features such as large pits, gullies and ditches, hearths, and areas of burning and kilns and brick structures. It is therefore good at locating settlements of all periods, prehistoric

ILLUS 3 F2, looking north

field systems and enclosures and areas of industrial or modern activity, amongst others. It is less successful in identifying smaller features such as post-holes and small pits (except when using a non-standard sampling interval), unenclosed (prehistoric) settlement sites and graves/burial grounds. However, magnetometry is by far the single most useful technique and was assessed as the best non-intrusive evaluation tool for this site.

The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10-15cm sample interval) on roaming traverses (swaths) 4m apart (Illus 6). These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point.

MLGrad601 and MultiGrad601 (Geomar Software Inc.) software was used to collect and export the data. Terrasurveyor V3.0.37.0 (DWConsulting) software was used to process and present the data

3.3 DATA PRESENTATION & TECHNICAL DETAIL

A general site location plan is shown in Illus 1 at a scale of 1:10,000. Illus 2 to Illus 5 inclusive are site condition photographs. Illus 6 shows the GPS swaths and the location and direction of the site condition photograph at 1:5,000. The fully processed (greyscale) data and interpretative plot overviews of the whole of the PDA are presented, also at 1:5,000, in Illus 7 and Illus 8. Fully processed (greyscale) data, minimally processed data (XY trace plot) data and interpretative plots are presented, by Sector, at a scale of 1:2,500, in Illus 9 to Illus 14 inclusive.

Technical information on the equipment used, data processing and magnetic survey methodology is given in Appendix 1. Appendix 2 details the survey location information and Appendix 3 describes the composition and location of the site archive. Data processing details are presented in Appendix 4.

The survey methodology, report and any recommendations comply with the Written Scheme of Investigation (Headland Archaeology 2022), guidelines outlined by Europae Archaeologia Consilium (EAC 2016) and by the Chartered Institute for Archaeologists (CIfA 2014). All illustrations from Ordnance Survey (OS) mapping are reproduced with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

ILLUS 4 F5, looking south-east

The illustrations in this report have been produced following analysis of the data in 'raw' (minimally processed) and processed formats and over a range of different display levels. All illustrations are presented to display and interpret the data to best effect. The interpretations are based on the experience and knowledge of Headland management and reporting staff.

4 RESULTS AND DISCUSSION

4.1 SITE CONDITIONS

Magnetometer survey is generally recommended over any sedimentary bedrock (English Heritage 2008; Table 4) although the presence of overlying superficial deposits (as is the case here) can lead to variability of results. Nevertheless, magnetometry was still the most appropriate non-intrusive geophysical technique for evaluating the PDA, taking account of the limitations noted in Section 3.2 above.

Surface conditions were good across the PDA being germinating arable crops or pasture (Illus 2 to Illus 4) with a single field of potato ridges (Illus 5). Data quality was also good with only minimal post-processing required. No problems were encountered during the fieldwork. Two pylons in F2 and F3 prevented survey in these locations with a small woodland in the west of F2 also preventing survey.

The presence of differing types of superficial deposits across the PDA meant that there was a variability in the magnetic background. The data is much more homogenous (resulting in a 'smoother' appearance to the data) in the east of the PDA, in F2, where alluvial deposits overlie the bedrock. There is a much greater degree of variability evident in the data across the western part half of the PDA in F1 and F3 to F5 where the Quaternary deposits are recorded.

Against this magnetic background numerous anomalies of geological, agricultural, modern, and archaeological origin have been recorded (Illus 8). This confirms that the soils and geology were suitable for magnetometry and that the results likely provide a reasonably good indication of the extent of sub-surface archaeological features within the PDA notwithstanding the limitations of magnetometer survey to identify the types, sizes, and period of archaeological feature described in Section 3.2.

The anomalies are discussed below according to their interpreted origin.

4.2 FERROUS AND MODERN ANOMALIES

Ferrous anomalies, characterised as individual 'spikes', 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 is common on most sites, often being introduced into the topsoil during

ILLUS 5 F4, looking south

manuring or tipping/infilling. There is no obvious clustering to the ferrous anomalies across the PDA more generally which might indicate an archaeological origin. Far more probable is that the 'spike' responses are likely caused by the random distribution of ferrous debris in the upper soil horizons.

Five areas of possible extraction (Q?1-Q?5 – Illus 7, 11 and 14) have been identified. The variable magnetic response from these anomalies is indicative of a non-ferrous backfill of extraction pits. Credence to this interpretation is given in the name of Sandpit House to the south-east of the PDA.

A cluster of strong magnetic anomalies (MD1 – Illus 14) has been identified within the smooth data set of the alluvial deposits. The cause of these anomalies is unknown, although a modern or natural cause is deemed more likely, with the location being to lowest part of the site and prone to flooding.

A spread of disturbed responses (Illus 11 – DB1) on the eastern boundary of F1 likely identifies fragmentary demolition material associated with former buildings recorded on historic mapping.

Bands or small areas of magnetic disturbance are also recorded along or adjacent to some of the current and former field boundaries and entrances. This disturbance is typically due to the accumulation of ferrous debris around field margins, or to barbed wire or mesh in the boundary itself and to the tipping of material in gateways to improve access to/from fields.

4.3 AGRICULTURAL ANOMALIES

By far the most numerous recorded anomalies have an agricultural origin. Historic mapping shows that several field boundaries have been removed from the 19th century onwards across the whole of the PDA. These former boundaries are clearly recorded in the data as linear anomalies (Illus 8 – FB1 to FB10 inclusive) confirming that several of the current fields have been rationalised from the amalgamation of several smaller fields, most notably F1 and F2 which both result from the removal of at least four former boundaries.

Other linear anomalies and trends in the data reflect the direction of cultivation.

4.4 ANOMALIES OF NATURAL/ GEOLOGICAL ORIGIN

Discrete anomalies and vague linear trends in the data are recorded across all parts of the site. These are interpreted as of natural origin being indicative of variation in the soils and superficial deposits.

4.5 ANOMALIES OF PROBABLE OR POSSIBLE ARCHAEOLOGICAL ORIGIN

A single possible enclosure has been recorded to the south of the woodland in F5 (E1 – Illus 8 and Illus 14), which has several discrete and linear anomalies within, that indicate possible internal activity and sub-division. Associated with E1, are a series of interconnected linear and curvilinear anomalies, that are evident in F4 and F5. These linear ditch-type anomalies do not form a coherent pattern of enclosure.

A further ditch-type anomaly (D1 – Illus 8 and Illus 14) is identified in the south of F5. This anomaly is approximately 30m north and parallel to Loudham Hall Road. Discrete and linear anomalies between D1 and Loudham Hall Road may be indicative of possible archaeological activity, such as croft and toft medieval settlement. These anomalies are not marked on any historical mapping.

In the north of F5, two discrete anomalies indictive of burning have been recorded (B1 and B2 Illus 8 and Illus 14). These anomalies exhibit characteristics which may be indicative of burning or fired material. It is uncertain whether these anomalies are associated with any possible industrial activity in the immediate area or just to modern tipping or infilling.

5 CONCLUSION

The survey has identified anomalies consistent with modern activity and agricultural usage of the PDA over the past 150 years as indicated on historic mapping. Anomalies indicative of former boundaries and modern cultivation have been recorded. Five possible extraction pits have also been identified in the data as well as well as two discrete areas of burning.

Within F5, a probable enclosure has been recorded south of the current woodland. Anomalies within the enclosure are indictive of possible archaeological activity and sub-division. Outlying the enclosure are linear ditch-type anomalies that are possibly associated.

Further potential settlement activity has been identified parallel to Loudham Hall Road in the south of F5. Again, discrete and linear anomalies in this area may represent archaeological activity, such as croft and toft medieval settlement.

Based on the geophysical survey results the archaeological potential of the PDA is assessed as low except for F5 where the potential is moderate to high.

6 REFERENCES

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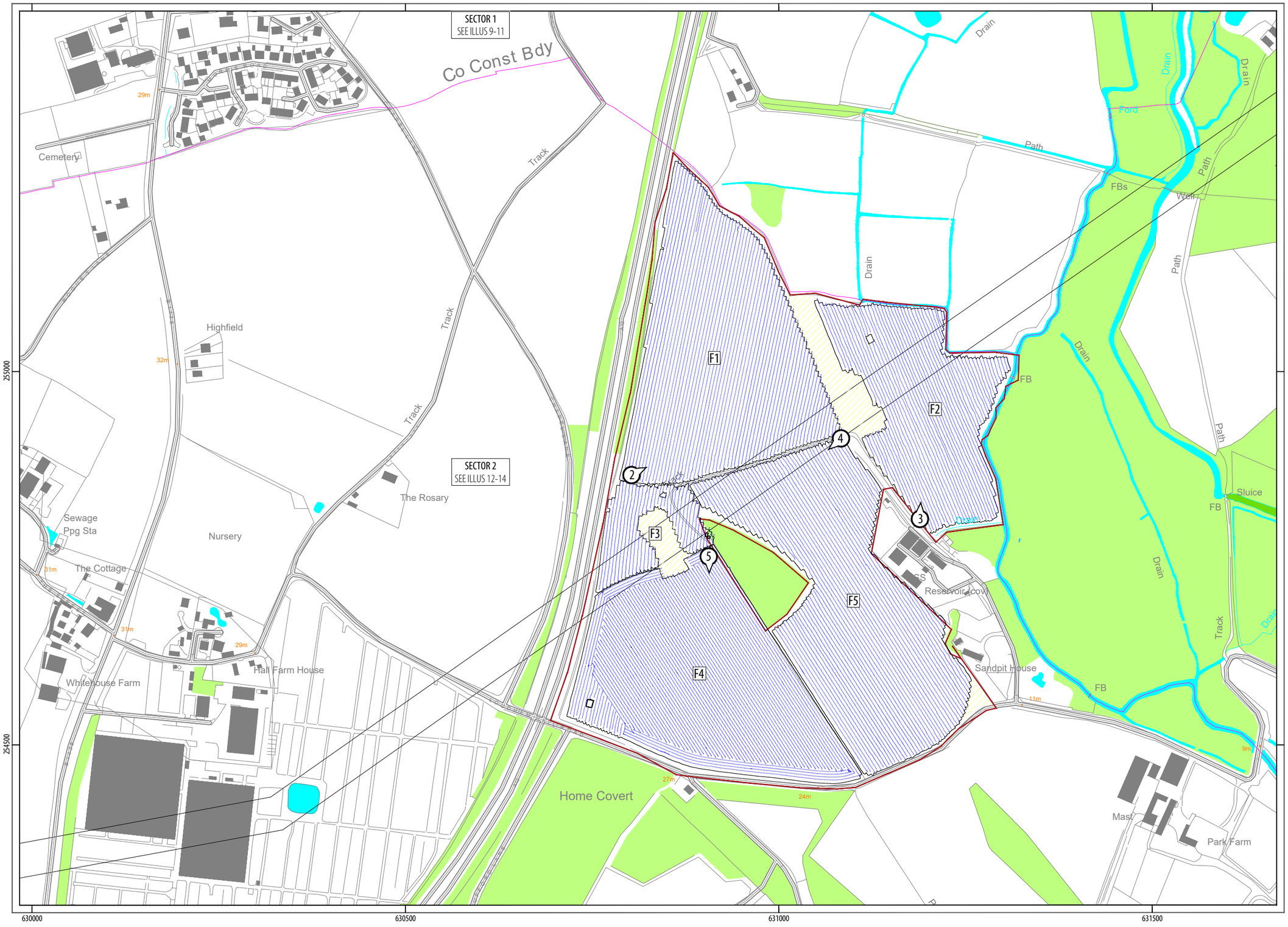

proposed development area
GPS swaths
area unsuitable for survey
location and direction of ILLUS 2-5

0 100m
1:5,000 @ A3

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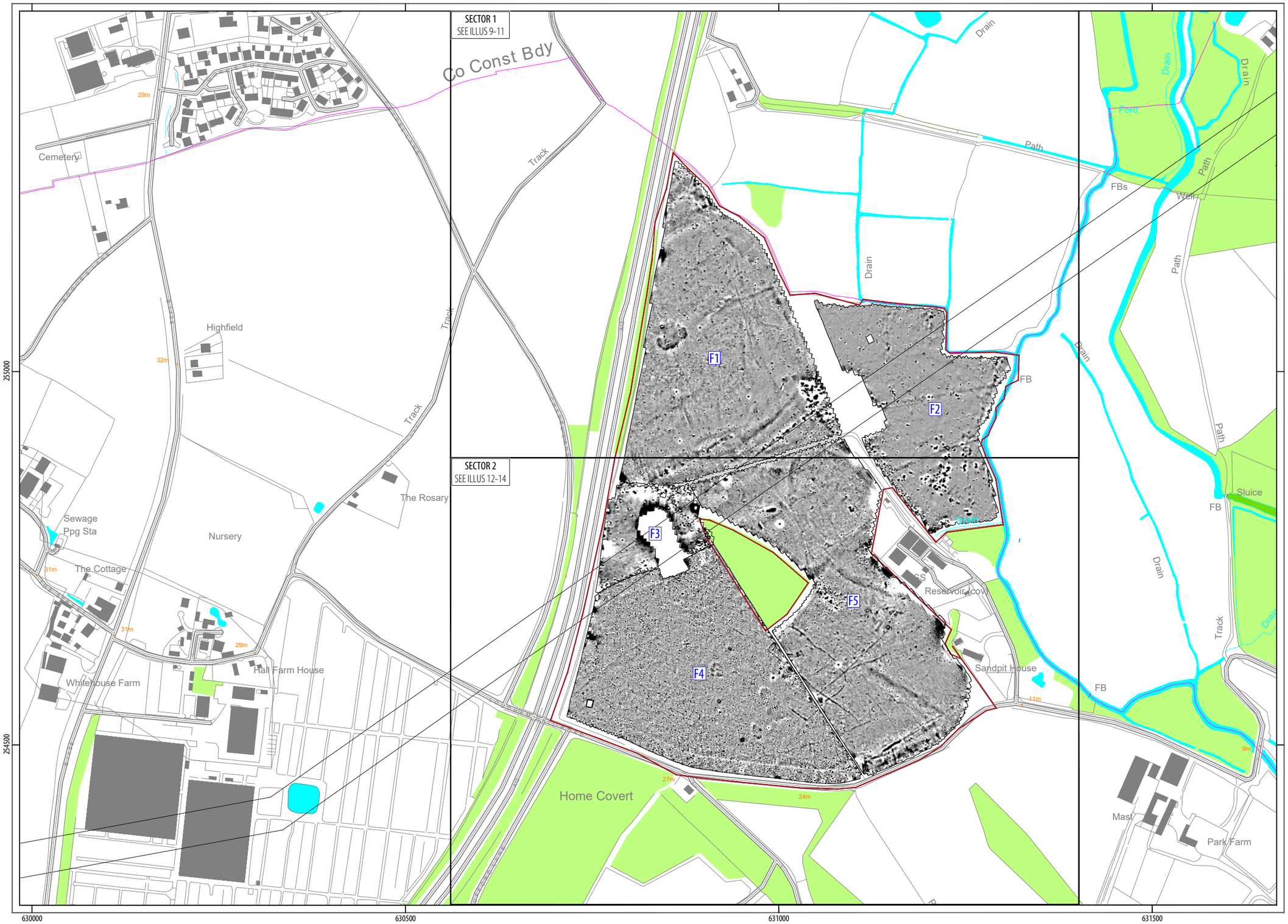
ILLUS 6 Survey location showing GPS swaths and photo locations



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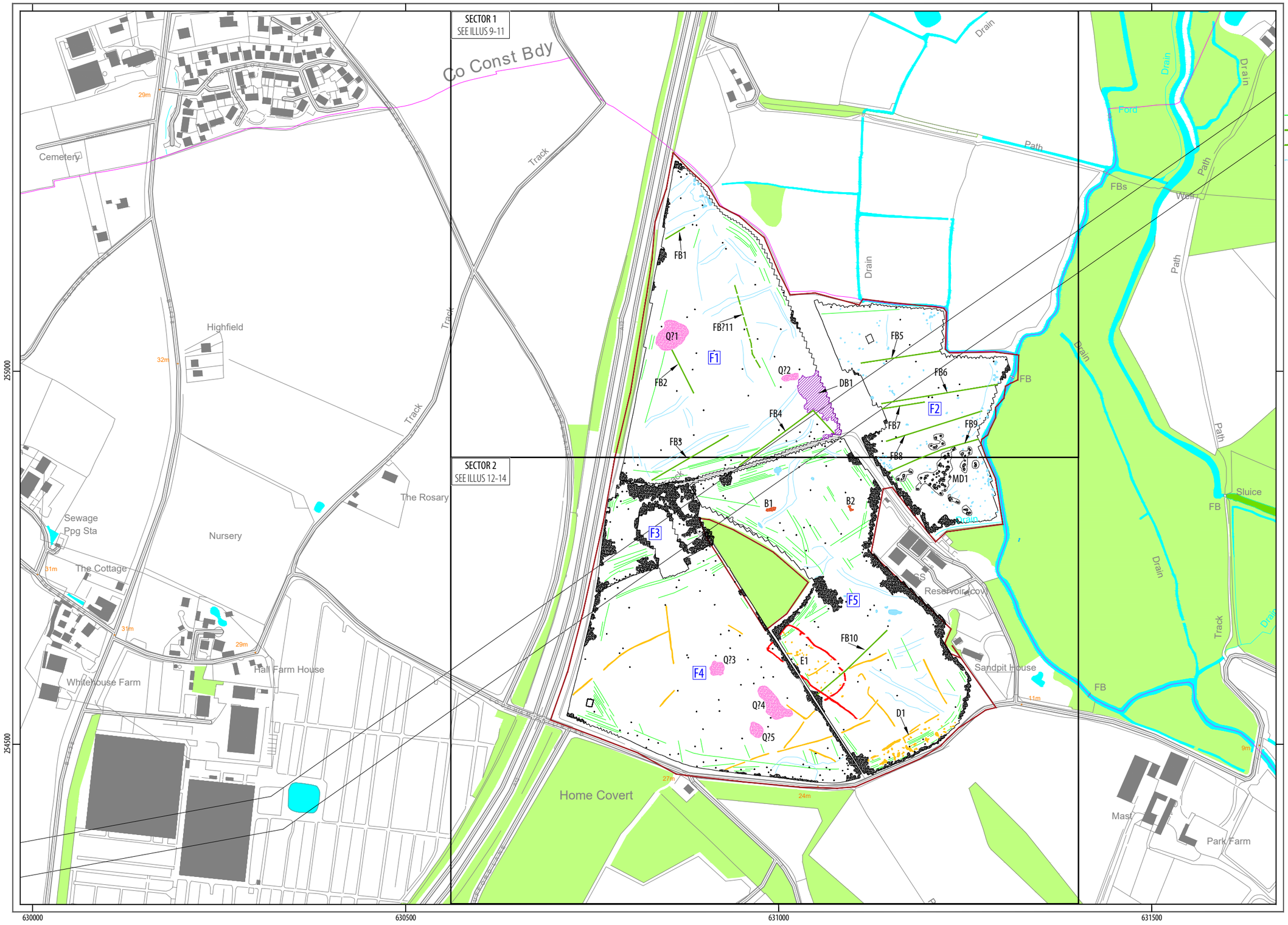
ILLUS 7 Overall processed magnetometer data



proposed development area

TYPE OF ANOMALY	INTERPRETATION
dipolar isolated	ferrous material
magnetic disturbance	ferrous material
magnetic disturbance	quarrying
magnetic disturbance	former building
linear trend	agricultural
linear	former field boundary
linear	former field boundary?
linear trend	geological variation
magnetic enhancement	geology
magnetic enhancement	archaeology?
magnetic enhancement	archaeology
magnetic enhancement	burning

ABBREVIATIONS

B - burning
D - ditch
DB - demolished building
E - enclosure
FB - former boundary
FB? - former boundary?
MD - magnetic disturbance
Q? - quarry pit?

0 100m
1:5,000 @ A3

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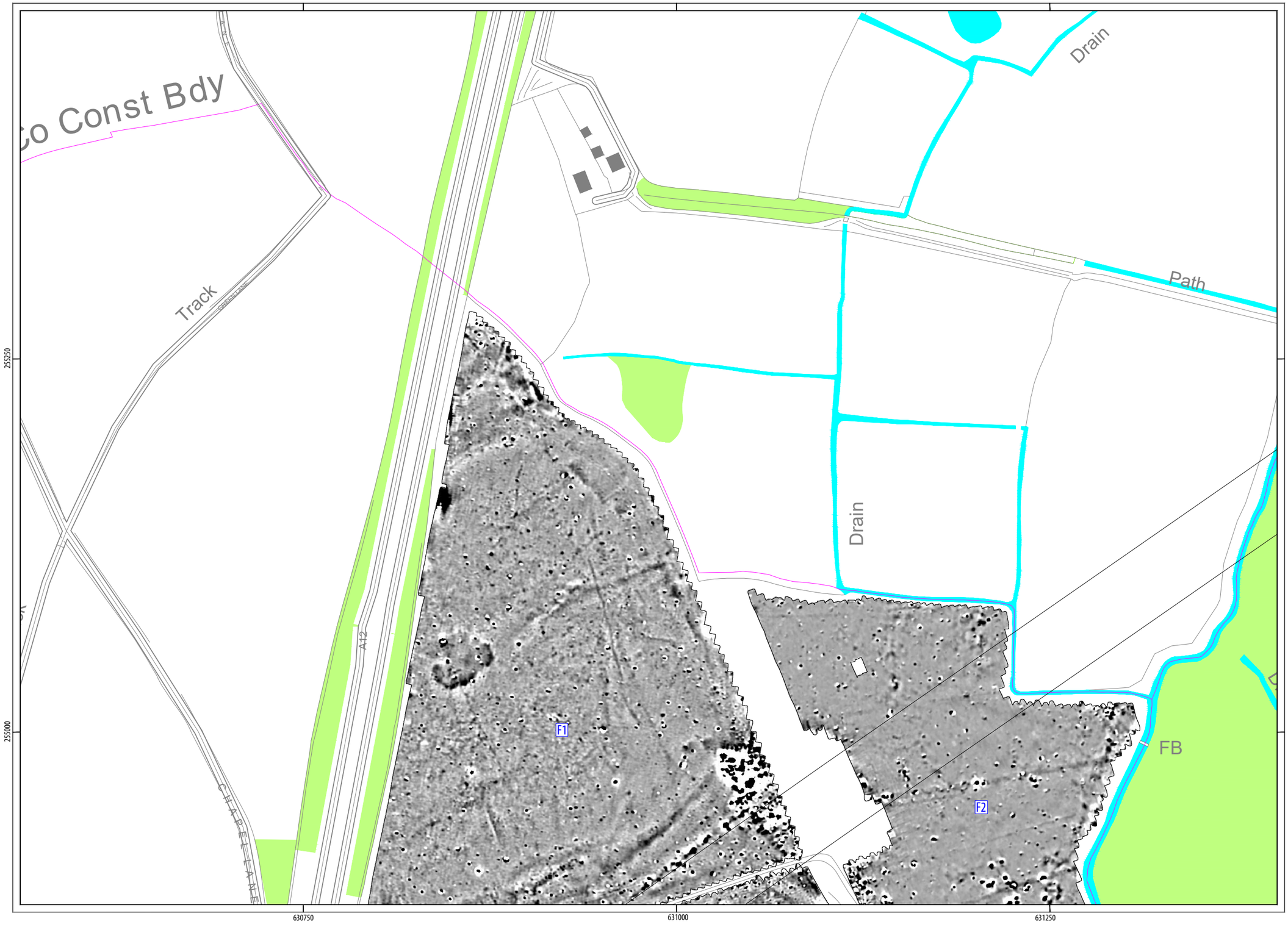
ILLUS 8 Overall interpretation of magnetometer data



-1.0 nT 2.0

0 50m
1:2,500 @ A3

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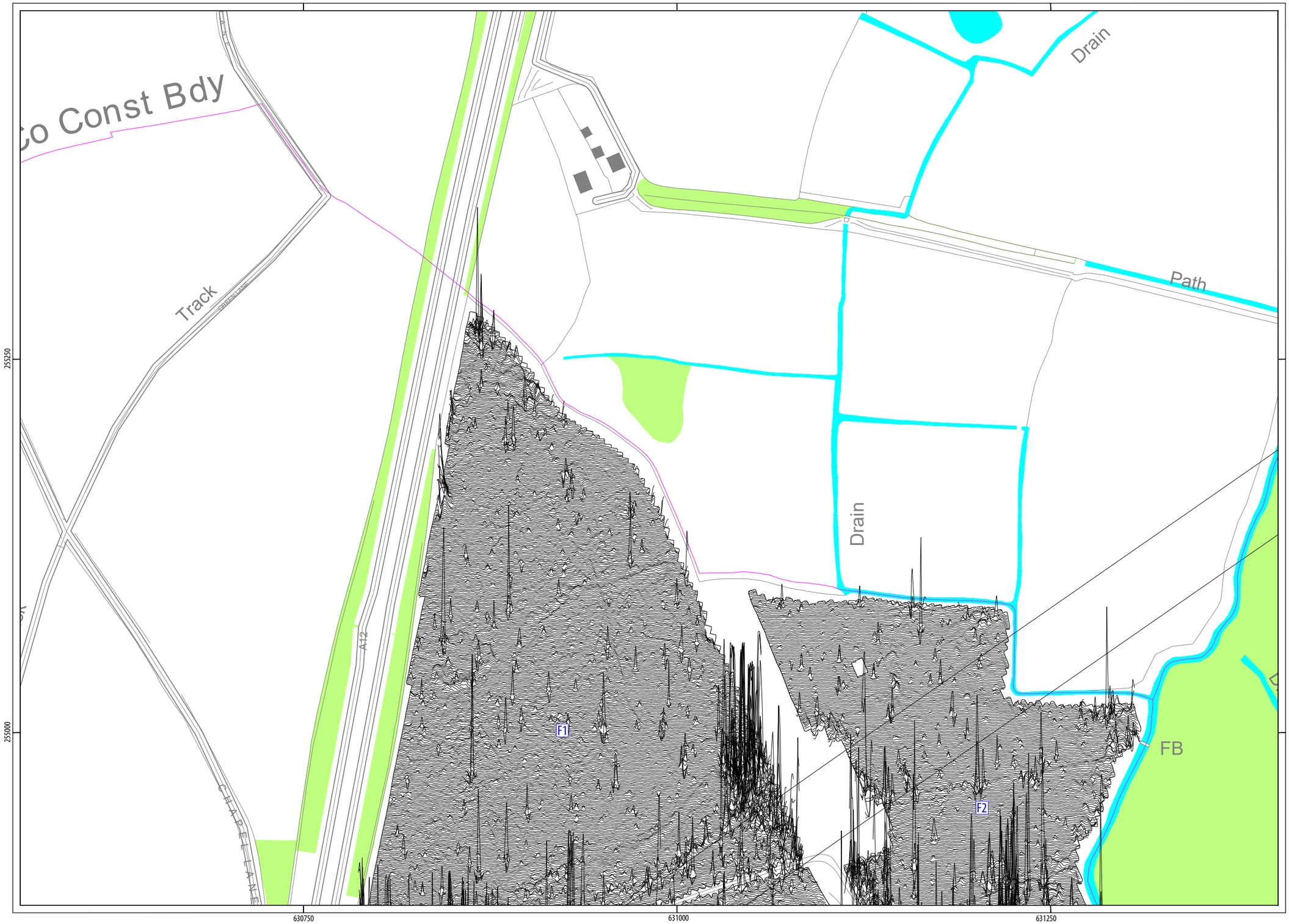
ILLUS 9 Processed greyscale magnetometer data: Sector 1



25.0nT/cm

0 50m

1:2,500 @ A3

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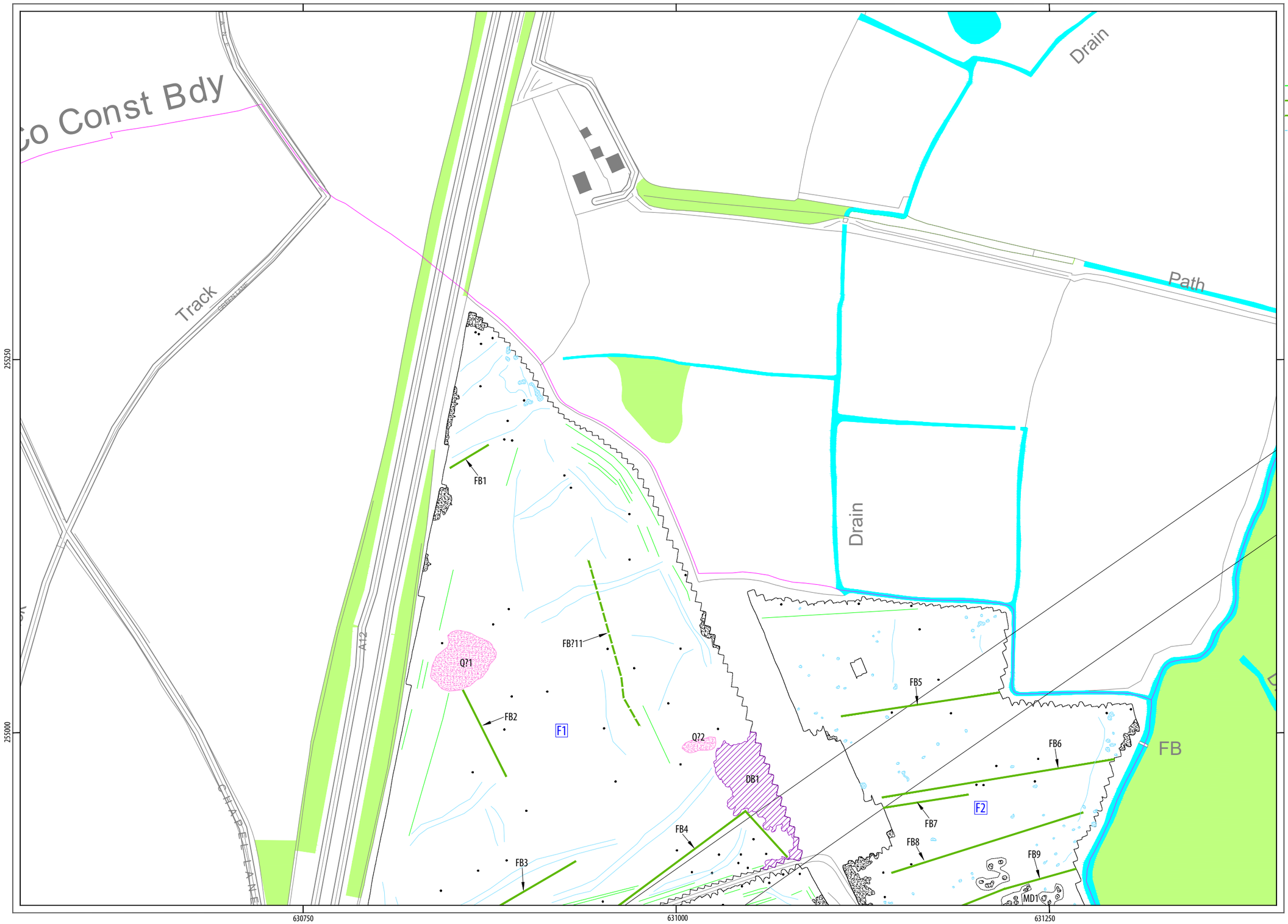
ILLUS 10 XY trace plot of minimally processed magnetometer data; Sector 1



TYPE OF ANOMALY	INTERPRETATION
dipolar isolated	ferrous material
magnetic disturbance	ferrous material
magnetic disturbance	quarrying
magnetic disturbance	former building
linear trend	agricultural
linear	former field boundary
linear	former field boundary?
linear trend	geological variation
magnetic enhancement	geology

ABBREVIATIONS

DB - demolished building
FB - former boundary
FB? - former boundary?
MD - magnetic disturbance
Q? - quarry pit?

0 50m
1:2,500 @ A3

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ILLUS 11 Interpretation of magnetometer data; Sector 1

nT
-1.0 2.0

0 50m
1:2,500 @ A3

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ILLUS 12 Processed greyscale magnetometer data: Sector 2

25.0nT/cm

0 50m

1:2,500 @ A3

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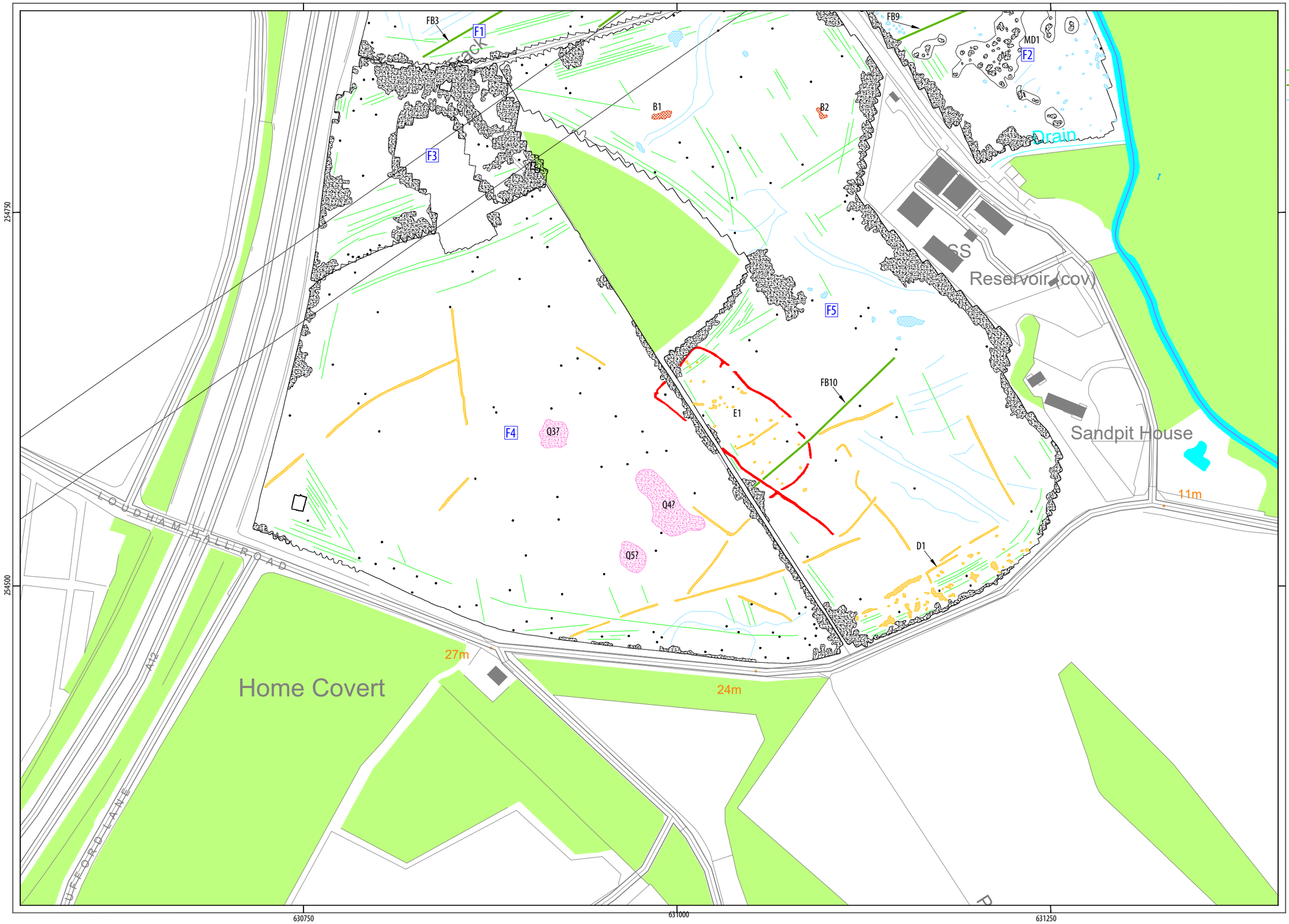
ILLUS 13 XY trace plot of minimally processed magnetometer data: Sector 2



TYPE OF ANOMALY	INTERPRETATION
dipolar isolated	ferrous material
magnetic disturbance	ferrous material
magnetic disturbance	quarrying
linear trend	agricultural
linear	former field boundary
linear trend	geological variation
magnetic enhancement	geology
magnetic enhancement	archaeology?
magnetic enhancement	archaeology
magnetic enhancement	burning

ABBREVIATIONS

B - burning
D - ditch
E - enclosure
FB - former boundary
MD - magnetic disturbance
Q? - quarry pit?

0 50m
1:2,500 @ A3

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ILLUS 14 Interpretation of magnetometer data: Sector 2

7 APPENDICES

APPENDIX 1 MAGNETOMETER SURVEY

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 haematite. 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 so that by measuring the magnetic susceptibility of the topsoil, areas where human occupation or settlement has occurred can be identified by virtue 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 the topsoil, subsoil, and rock, 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. This effect can lead to the detection of features such as hearths, kilns, or areas of burning.

Types of magnetic anomaly

In most 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 introduced into the topsoil during 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 and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Lightning-induced remnant magnetisation (LIRM) LIRM anomalies are thought to be caused in the near surface soil horizons by the flow of an electrical current associated with lightning strikes. These observed anomalies have a strong bipolar signal which decreases with distance from the spike point and often appear as linear or radial in shape.

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 (sometimes only visible on an XY trace plot) 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.

APPENDIX 2 SURVEY LOCATION INFORMATION

An initial survey base station was established using a Trimble VRS differential Global Positioning System (dGPS). The magnetometer data was georeferenced using a Trimble RTK differential Global Positioning System (Trimble R8s model).

Temporary sight markers were laid out using a Trimble VRS differential Global Positioning System (Trimble R8s model) to guide the operator and ensure full coverage. The accuracy of this dGPS equipment is better than 0.01m.

The survey data were then super-imposed onto a base map provided by the client to produce the displayed block 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 coordinates are measured off hard copies of the mapping rather than using the digital coordinates.

Headland Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

APPENDIX 3 GEOPHYSICAL SURVEY ARCHIVE

The geophysical archive comprises an archive disk containing the raw data in XYZ format, a raster image of each greyscale plot with associate world file, and a PDF of the report.

The project will be archived in-house in accordance with recent good practice guidelines (http://guides.archaeologydataservice.ac.uk/g2gp/Geophysics_3). The data will be stored in an indexed archive and migrated to new formats when necessary.

APPENDIX 4 DATA PROCESSING

The gradiometer data has been presented in this report in processed greyscale and minimally processed XY trace plot format.

Data collected using RTK GPS-based methods cannot be produced without minimal processing of the data. The minimally processed data has been interpolated to project the data onto a regular grid and de-striped to correct for slight variations in instrument calibration drift and any other artificial data.

A high pass filter has been applied to the greyscale plots to remove low frequency anomalies (relating to survey tracks and modern agricultural features) to maximise the clarity and interpretability of the archaeological anomalies.

The data has also been clipped to remove extreme values and to improve data contrast.

APPENDIX 5 OASIS DATA COLLECTION FORM: ENGLAND

OASIS ID (UID): headland1-506006

Project Name:	Magnetometry Survey, Geophysical Survey at Park Farm, Loudham, Woodbridge
Activity type:	Magnetometry Survey, Geophysical Survey
Project Identifier(s):	P22-129
Planning Id:	[no data]
Reason for Investigation:	Planning: Pre application
Organisation Responsible for work:	Headland Archaeology (UK) Ltd
Project Dates:	9-Apr-2022 - 22-Apr-2022
HER:	Suffolk HER
HER Identifiers:	HER Event No - PTR 071
Project Methodology:	The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10-15cm sample interval) on roaming traverses (swaths) 4m apart. These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point. MLGrad601 and MultiGrad601 (Geomar Software Inc.) software was used to collect and export the data. Terrasurveyor V3.0.37.0 (DWConsulting) software was used to process and present the data.
Project Results:	Headland Archaeology (UK) Ltd was commissioned by RSK ADAS Limited (the Client), to undertake a geophysical (magnetometer) survey, covering approximately 32 hectares, survey north-west of Park Farm, Loudham, near Woodbridge, Suffolk where a solar farm is being proposed. This geophysical survey report will accompany a Desk-based Assessment (RSK ADAS 2021), with both documents being submitted as part of a planning application for the proposed Park Farm Solar Photovoltaic (PV) array and associated infrastructure development. The results will also inform future archaeological strategy, if required. The survey has identified anomalies consistent with modern activity and agricultural usage of the PDA over the past 150 years as indicated on historic mapping. Anomalies indicative of former boundaries and modern cultivation have been recorded throughout the proposed development area (PDA). Five possible former extraction pits have been recorded throughout the site as well as two discrete areas of burning. An enclosure of unknown date has been recorded in the south of the PDA, along with several linear ditch-type anomalies. Additional possible settlement activity has been recorded parallel to Loudham Hall Road in the south of the PDA, where discrete and linear anomalies may indicate archaeological activity such as croft and toft medieval settlement. Based on the geophysical survey results the archaeological potential of the PDA is assessed as low except for F5 where the potential is moderate to high.
Keywords:	Curvilinear Enclosure: UNCERTAIN , FISH Thesaurus of Monument Types
Archive:	Digital Archive - to be deposited with Archaeology Data Service Archive;
Reports in OASIS:	Webb, A., (2022). Magnetometry Survey, Geophysical Survey at Park Farm, Loudham, Woodbridge. Edinburgh: Headland Archaeology (UK) Ltd

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