Heckington Fen Solar Park

EN010123

Environmental Statement | Volume 3: Technical Appendices

Appendix 10.2: Geophysical Survey Results for Energy Park

Applicant: Ecotricity (Heck Fen Solar) Limited

Document Reference: 6.3.10.2

Pursuant to: APFP Regulation 5(2)(a)

February 2023

Planning Act 2008

APPENDIX 10.2 - GEOPHYSICAL SURVEY RESULTS FOR ENERGY PARK

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Rev 1	February 2023	Application Version

magnitude surveys

Geophysical Survey Report

Area 4

Heckington Fen Solar Park,

Lincolnshire.

For

Pegasus Group

On Behalf Of

Ecotricity (Heck Fen Solar) Ltd.

Magnitude Surveys Ref: MSTF1200

HER Event Number: TBC

OASIS Number: TBC

March 2022

magnitude surveys

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Abstract

Magnitude Surveys was commissioned to assess the subsurface archaeological potential of a c.115ha area of land at East Heckington, Lincolnshire, which constitutes roughly a quarter of the proposed Heckington Fen Solar Park site. A fluxgate gradiometer survey was successfully completed across the majority of the survey area; c. 6.3ha was not surveyed due to the presence of a dilapidated building, dirt mound and haybales. The geophysical survey has primarily identified anomalies related to the superficial geology in addition to agricultural features including mapped field boundaries and the remains of a duck decoy visible on aerial photography, and modern ploughing and drains. Anomalies suggestive of archaeological origin were identified. Possible archaeological anomalies were also detected in close vicinity to these. Some anomalies classified as 'Undetermined' were identified within the survey area, and archaeological interpretations for these cannot be excluded. The impact of modern activity on the site is limited to magnetic interference around boundaries and that of a modern service.

Contents

List of Figures

Figures 43-45:	Zone 4 (North-East) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 46-48:	Zone 4 (South-West) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 49-51:	Zone 4 (South-East) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 52-54:	Zone 5 (North-West) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 55-57:	Zone 5 (North-East) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 58-60:	Zone 5 (Centre-West) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 61-63:	[redacted] and XY Trace Plot	1:1,000 @ A3
Figures 64-66:	Zone 5 (South) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 67-69:	Zone 6 and 7 Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 70-72:	Zone 8 (North) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3
Figures 73-75:	Zone 8 (South) Gradient, Interpretation and XY Trace Plot	1:1,000 @ A3

1. Introduction

1.1. Magnitude Surveys Ltd (MS) was commissioned by Pegasus Group on behalf of Ecotricity (Heck Fen Solar) Ltd to undertake a geophysical survey over a c. 115ha area of land near East Heckington, North Kesteven, Lincolnshire (TF 20158 44417).

1.2. The survey Zone known as ' Zone 4', constitutes roughly a quarter of the proposed Heckington Fen Solar Park site. The other quadrants of the development site were subject to geophysical survey by three other contractors. Their results are not discussed in this report.

1.3. The geophysical survey comprised quad-towed GNSS-positioned fluxgate gradiometer survey. Magnetic survey is the standard primary geophysical method for archaeological applications in the UK due to its ability to detect a range of different features. The technique is particularly suited for detecting fired or magnetically enhanced features, such as ditches, pits, kilns, sunken featured buildings (SFBs) and industrial activity (David *et al*., 2008).

1.4. The survey was conducted in line with the current best practice guidelines produced by Historic England (David *et al*., 2008), the Chartered Institute for Archaeologists (CIfA, 2020) and the European Archaeological Council (Schmidt *et al.,* 2015).

1.5. It was conducted in line with a WSI produced by MS (Chmielowska, 2022) and submitted to Jan Allen, Matthew Adams, and Denise Drury, the Archaeological Advisors to Lincolnshire County Council, North Kesteven District Council, and Boston Borough Council.

1.6. The survey commenced on 21/03/2022 and took 5 days to complete.

2. Quality Assurance

2.1. Magnitude Surveys is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA), the chartered UK body for archaeologists, and a corporate member of ISAP (International Society for Archaeological Prospection).

2.2. The directors of MS are involved in cutting edge research and the development of guidance/policy. Specifically, Dr Chrys Harris has a PhD in archaeological geophysics from the University of Bradford, is a Member of CIfA and is the Vice-Chair of the International Society for Archaeological Prospection (ISAP); Finnegan Pope-Carter has an MSc in archaeological geophysics and is a Fellow of the London Geological Society, as well as a member of GeoSIG (CIfA Geophysics Special Interest Group); Dr Paul Johnson has a PhD in archaeology from the University of Southampton, is a Fellow of the Society of Antiquaries of London, a Member of CIfA, has been a member of the ISAP Management Committee since 2015, and is currently the nominated representative for the EAA Archaeological Prospection Community to the board of the European Archaeological Association.

2.3. All MS managers, field and office staff have degree qualifications relevant to archaeology or geophysics and/or field experience.

3. Objectives

3.1. The objective of this geophysical survey was to assess the subsurface archaeological potential of the survey area.

4. Geographic Background

4.1. The survey area was located c. 6.7Km east of Heckington, near the village of East Heckington (Figure 1). Gradiometer survey was undertaken across 8 fields under arable cultivation The survey area was bordered by Six Hundreds Drove to the west, the A17 to the south, Head Dyke to the North, and Holland Dike to the east (Figure 2). A c. 6.3ha area of land was not surveyed due to the presence of a large dirt mound, trees, rubble from a dilapidated building, and haybales.

4.2. Survey considerations:

Survey Zone	Ground Conditions	Further Notes
1	The survey zone consisted of dry, flat arable field with wheat crop present.	The eastern and southern boundaries of the survey area comprised drainage ditches and a stream. The western boundary of the surveyed area was a gravel track.
2	The survey zone consisted of [redacted] crop present.	The northern, eastern and southern boundaries of the survey area comprised drainage ditches and a stream. The western boundary of the survey area was a gravel track.
3	The survey zone consisted of dry, flat arable field with wheat crop present.	The northern, eastern and southern boundaries of the survey area comprised drainage ditches and a stream. The western boundary of the survey area was a gravel track.
4	The survey zone consisted of dry, flat arable field with wheat crop present.	The northern, eastern and southern boundaries of the survey area comprised drainage ditches and a stream. The western boundary of the survey area was a gravel track.
5	The survey zone consisted of dry, flat arable field with wheat crop present.	The northern and eastern boundaries of the survey area comprised drainage ditches and a stream. The western boundary of the survey area was a gravel track. The southern boundary was lined by a grass verge.
6	The survey zone consisted of an overgrown arable field, with consistent overgrown weeds.	The northern and southern boundaries of the survey area was lined by a grass verge. The south-west boundary is defined by an area of unsurveyable land where a number of haybales, a dirt mound, and former building were located. The western boundary of the survey area was a gravel track. The eastern boundary was tree-lined.
7	The survey zone consisted of an overgrown arable field, with consistent overgrown weeds.	The northern boundary of the survey area was lined by a grass verge. The eastern and southern boundaries of the survey area comprised drainage ditches and a stream. The western boundary was lined by trees.
8	The survey zone consisted of dry, flat arable field.	The north-eastern, eastern, and southern boundaries of the survey area comprised drainage ditches and a stream. The north-western boundary was a grass verge, and the

		western boundary of the survey area was formed by a gravel track.

4.3. The underlying geology comprised mudstone of the Ampthill Clay Formation and mudstone and siltstone of the West Walton Formation. The superficial deposits comprised tidal flats deposits comprising clays and silts (British Geological Survey, 2022).

4.4. The soils consist of loamy and clayey soils of coastal flats, with naturally high groundwater (Soilscapes, 2022).

5. Archaeological Background

5.1. The following archaeological background has been provided by Pegasus Group and is informed by an initial high-level review of Lincolnshire Historic Environment Record (HER) data, sourced from a 2km-radius study area measured from the boundaries of the proposed Heckington Fen Solar Park site (hereafter 'the site') .

5.2. Finds recorded c. 0.5–1.5km to the west of the site include a Neolithic polished stone axe [redacted]ts (MLI87872, MLI60936, MLI87875); Iron Age pottery (MLI87874, MLI88029, MLI88049, MLI88094); and fragments of Roman querns (MLI87877, MLI87889) and pottery (MLI91865, MLI60935, MLI87871, MLI88047, MLI88050, MLI88065). This material likely derives from the settlements indicated by cropmarks to the south and north-west of White House Farm (MLI60731, MLI90708), at Garwick (MLI60631), and to the west of Holme House (MLI84683).

5.3. Within the site itself, possible Roman salt-working in the fields extending north of Rectory Farm is indicated by sherds of Roman pottery and briquetage collected after ploughing in 1963 and during observation of the North Sea Gas Pipeline in 1971 (MLI87647, MLI87891, MLI87892). In addition, a geophysical survey carried out for a proposed wind farm identified further possible traces of salt-working in the north-eastern part of the site. More scatters of Roman pottery are recorded to the south-east of the site (MLI12571, MLI12578, MLI12602).

5.4. Also recorded at Garwick to the west of the site is a high-status Anglo-Saxon trading centre, identified primarily through metal-detecting survey (MLI116391). It appears to have been in use from at least the mid-6th century to the mid-8th century and has yielded one of the largest assemblages of finds from this period in the county. The findspot of this assemblage lies c. 800m south-west of the site at its closest point. Further research as part of the forthcoming heritage desk-based assessment will establish the area that was subject to metal-detecting survey and the likelihood of the trading centre, or peripheral activity associated with it, having extended into the site.

5.5. The settlement of East Heckington, located to the south of the site, was in existence by the 18th century (MLI87648). The vast majority of monuments recorded by the HER for the study area comprise 19th-century farmsteads and field barns. Six Hundreds Farm lies within the eastern part of the site (MLI121951), while Elm Grange (MLI121956), Home Farm (MLI121955), and Rectory Farm (MLI121954) lie outside the southern boundary of the site. Four former unnamed farmsteads are recorded in the northern and central parts of the site (MLI121935, MLI121934,

MLI121933, MLI121950). Historic maps and aerial photographs show these buildings, as well as earlier arrangements of the field system within the site.

6. Methodology

6.1. Data Collection

6.1.1. Magnetometer surveys are generally the most cost effective and suitable geophysical technique for the detection of archaeology in England. Therefore, a magnetometer survey should be the preferred geophysical technique unless its use is precluded by any specific survey objectives or the site environment. For this site, no factors precluded the recommendation of a standard magnetometer survey. Geophysical survey therefore comprised the magnetic method as described in the following section.

6.1.2. Geophysical prospection comprised the magnetic method as described in the following table.

6.1.3. Table of survey strategies.

Method	Instrument	Traverse Interval	Sample Interval
Magnetic	Bartington Instruments Grad-13 Digital Three-Axis Gradiometer	1m	200Hz reprojected to 0.125m

6.1.4. The magnetic data were collected using MS' bespoke quad-towed GNSS-positioned system.

6.1.4.1. MS' cart system was comprised of Bartington Instruments Grad 13 Digital Three-Axis Gradiometers. Positional referencing was through a multi-channel, multi-constellation GNSS Smart Antenna RTK GPS outputting in NMEA mode to ensure high positional accuracy of collected measurements. The RTK GPS is accurate to 0.008m + 1ppm in the horizontal and 0.015m + 1ppm in the vertical.

6.1.4.2. Magnetic and GPS data were stored on an SD card within MS' bespoke datalogger. The datalogger was continuously synced, via an in-field Wi-Fi unit, to servers within MS' offices. This allowed for data collection, processing and visualisation to be monitored in real-time as fieldwork was ongoing.

6.1.4.3. A navigation system was integrated with the RTK GPS, which was used to guide the surveyor. Data were collected by traversing the survey area along the longest possible lines, ensuring efficient collection and processing.

6.2. Data Processing

6.2.1. Magnetic data were processed in bespoke in-house software produced by MS. Processing steps conform to the EAC and Historic England guidelines for 'minimally enhanced data' (see Section 3.8 in Schmidt *et al.*, 2015: 33 and Section IV.2 in David *et al.,* 2008: 11).

Sensor Calibration – The sensors were calibrated using a bespoke in-house algorithm, which conforms to Olsen *et al*. (2003).

Zero Median Traverse – The median of each sensor traverse is calculated within a specified range and subtracted from the collected data. This removes striping effects caused by small variations in sensor electronics.

Projection to a Regular Grid – Data collected using RTK GPS positioning requires a uniform grid projection to visualise data. Data are rotated to best fit an orthogonal grid projection and are resampled onto the grid using an inverse distance-weighting algorithm.

Interpolation to Square Pixels – Data are interpolated using a bicubic algorithm to increase the pixel density between sensor traverses. This produces images with square pixels for ease of visualisation.

6.3.Data Visualisation and Interpretation

6.3.1. This report presents the gradient of the sensors' total field data as greyscale images, as well as the total field data from the lower sensors. The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. However, the contrast of weak or ephemeral anomalies can be reduced through the process of calculating the gradient. Consequently, some features can be clearer in the respective gradient or total field datasets. Multiple greyscale images of the gradient and total field at different plotting ranges have been used for data interpretation. Greyscale images should be viewed alongside the XY trace plot (Figures 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72 and 75). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.

6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2022) was also consulted, to compare the results with recent land use.

6.3.3. Geodetic position of results – All vector and raster data have been projected into OSGB36 (ESPG27700) and can be provided upon request in ESRI Shapefile (.SHP) and Geotiff (.TIF) respectively. Figures are provided with raster and vector data projected against OS Open Data.

7. Results

7.1.Qualification

7.1.1. Geophysical results are not a map of the ground and are instead a direct measurement of subsurface properties. Detecting and mapping features requires that said features have properties that can be measured by the chosen technique(s) and that these properties have sufficient contrast with the background to be identifiable. The interpretation of any identified anomalies is inherently subjective. While the scrutiny of the results is undertaken by qualified, experienced individuals and rigorously checked for quality and consistency, it is often not possible to classify all anomaly sources. Where possible, an anomaly source will be identified along with the certainty of the interpretation. The only way to improve the interpretation of results is through a process of comparing excavated results with the geophysical reports. MS actively seek feedback on their reports, as well as reports from further work, in order to constantly improve our knowledge and service.

7.2.Discussion

7.2.1. The geophysical results are presented in combination with satellite imagery and historical maps (Figures 4, 6, 8, 10 and 12).

7.2.2. A fluxgate gradiometer survey was carried out over a 115ha area of land at Heckington, Lincolnshire. An area of c.6.3ha was not surveyed due to the presence of a dilapidated old building, haybales, and a raised dirt mound. The geophysical survey has responded well to the environment of the survey area, primarily detecting anomalies of archaeological, agricultural and natural origin. Magnetic disturbance from modern activity is generally limited to the field edges. Because of the strength and extent of the natural anomalies, some archaeological anomalies may be obscured, if any are present.

7.2.3. The survey zone is dominated by strong and weak anomalies resulting from natural processes, some of which have been interpreted as dendritic palaeochannels. These are likely related to the superficial geology of tidal flat deposits (see section 4.3) and are a result of sea level transgression and the inland movement of tidal channels. Spreads of discrete natural deposits relating to the fluvial conditions under which they were laid down have also been identified across the survey zone.

7.2.4. Evidence of agricultural activity has been detected across the survey area in the form of both mapped and unmapped field boundaries. A duck decoy identified through aerial photography is visible in the survey data, with numerous anomalies corresponding with these. Modern ploughing trends and drainage are also present throughout the survey area.

7.2.5. Probable archaeological features have been identified in the northeast of Zone 2, and possible archaeology has been identified adjacent to the south-eastern boundary of this zone (Figure 6). Rectilinear anomalies consistent with these were previously identified by previous geophysical survey and interpreted as possibly being related to historical salt-working (See Section 5); nevertheless, despite this activity being known to have occurred in the Fenland, there is no confirmed archaeological evidence of salt-working

within the site and so any interpretation from the current (2022) data is speculative. Due to the position by the boundary of the survey zone, it is possible that the features causing these anomalies may continue beyond, into the area covered by another contractor (Headland Archaeology, 2022). Possible circular and linear archaeological features have been identified along the eastern boundary of Zone 3 which may relate to the Probable Archaeology identified in Zone 2.

7.3.Interpretation

7.3.1. General Statements

7.3.1.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.

7.3.1.2. **Ferrous (Spike)** – Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.

7.3.1.3. **Ferrous/Debris (Spread)** – A ferrous/debris spread refers to a concentration of [redacted] usually resulting from highly magnetic material such as rubble containing ceramic building materials and ferrous rubbish.

7.3.1.4. **Magnetic Disturbance** – The strong anomalies produced by extant metallic structures, typically including fencing, pylons, vehicles, and service pipes, have been classified as 'Magnetic Disturbance'. These magnetic 'haloes' will obscure weaker anomalies relating to nearby features, should they be present, often over a greater footprint than the structure causing them.

7.3.1.5. **Undetermined** – Anomalies are classified as Undetermined when the origin of the geophysical anomaly is ambiguous and there is no supporting contextual evidence to justify a more certain classification. These anomalies are likely to be the result of geological, pedological or agricultural processes, although an archaeological origin cannot be entirely ruled out. Undetermined anomalies are generally distinct from those caused by ferrous sources.

7.3.2. Magnetic Results - Specific Anomalies

7.3.2.1. **Probable Archaeology (Strong/Weak) –** In the north of Zone 2, a strong positive, rectilinear, c. 45m wide anomaly has been identified along with a series of both strong and weakly enhanced discrete anomalies within the centre of the feature [**2a**] (Figure 30). It is possible that this anomaly is related to previously identified archaeological features or agricultural activity as discussed in Section 5, and as a result has been characterised as 'Probable Archaeology'. To the south of **[2a]** a series of strong and weak curvilinear and circular anomalies have been identified **[2b].** The morphology of these anomalies is hard to determine, and no conclusive date for these features can be provided on the basis of the geophysical survey alone. As a result of the possible association with salt working, these anomalies have also been characterised as 'Probable Archaeology'.

7.3.2.2. **Possible Archaeology (Strong/Weak)-** Located in the north-eastern corner of Zone 3, is a series of strong and weak rectilinear and discrete anomalies **[3a].** The morphology of these features is hard to determine, and it is possible that they are related to the probable archaeological features in Zone 2, but there is not enough evidence to confidently support this. South of **[3a],** a cluster of weak linear and discrete anomalies are located **[3b].** Similarly, to **[3a],** the morphology of these anomalies is unclear, as is their relationship to the probable archaeology in Zone 2. As such, both of these anomalies have been characterised as 'Possible Archaeology'.

7.3.2.3. **Agricultural (Strong/Weak/Zone)** – In the western half of Zone 3 a series of weak, linear and rectilinear anomalies have been identified [**3c**]. These are likely related to a former duck decoy and its drainage system visible on aerial photography (Collcutt, Johnson and Petchey, 2011). The decoy is not fully visible in magnetic greyscale as opposed to the photographs and this could be caused by agricultural activity or geological interference. Across all areas several strong and weak linear anomalies have been detected. Some of these anomalies appear to align with former field boundaries visible on historical OS Maps [**1a, 2c, 5a, 5b, 6b, and 7a**] (Figure 27, 30, 60, 63, 69). A further linear anomaly has been identified [**6a**] that does not align with these mapped boundaries but does fit in with the wider pattern of boundaries within the landscape and likely reflect further divisions of the land.

7.3.2.4. **Modern/Industrial (Spread)**- In Zones 1, 3, and 8, clusters of strongly enhanced discrete anomalies have been identified. These clusters coincide with former buildings identified on historical OS mapping from the 1880s [**1b, 3d, and 8a**] (Figure 21, 39, and 69).

7.3.2.5. **Drainage (Trend)** – Multiple alignments of weak linear dipolar anomalies have been identified in Zones 1, 3, and 7. This type of anomaly is indicative of modern ceramic field drains.

7.3.2.6. **Undetermined** - Across the survey area, several weak, linear and discrete positive anomalies have been identified and classified as 'Undetermined'. These have no distinctive signal or shape, but are typically distinct in morphology and signal from the surrounding natural or agricultural anomalies. Despite this, they likely relate to natural, agricultural or modern features or objects. An archaeological origin cannot be completely ruled out for a feature in Zone 8 [**8b**], due to its rectangular morphology (Figure 69). The XY traceplots of this area support a suggestion that this c. 18m wide feature could be an agricultural enclosure formed from ditches, though it may also be the result of a coincidence of geological features.

7.3.2.7. **Service**- A strong dipolar linear response has been detected running north to south through survey Zone 8, indicating the path of a buried service. This interpretation is based on the strong positive response clearly visible in the trace-plot along the course of this anomaly.

7.3.2.8. **Natural (Strong/Weak/Spread)** – Dendritic and sinuous anomalies cross much of the survey area and have been interpreted as palaeochannels crossing former tidal flats. These superficial geological features form part of the evolution of the fenland in response to sea level transgression. The presence of these palaeochannels may indicate an increased potential for archaeological activity within this area, although this is not a certainty.

8. Conclusions

8.1. A fluxgate gradiometer survey was successfully completed across all but c. 6.3ha of the c. 115ha survey area. The results primarily reflect the superficial geology and agricultural use of the site, with some magnetic disturbance caused by a service running along the western field edge of Zone 8.

8.2. The geophysical results identified anomalies of both probable archaeological and possible archaeological origin. The probable archaeological anomalies may be related to previously identified archaeological features, but their exact form or function is difficult to determine. Some of the possible archaeological anomalies could also relate to historical salt-working, but in this case that interpretation is difficult to support on the basis of the dataset collected by this survey.

8.3. Strong and weak natural anomalies across the extent of the survey area have been identified as the result of dendritic palaeochannels related to sea level transgression.

8.4. The geophysical results reflect the continued long-term agricultural use of the survey area in the form of former mapped and unmapped field boundaries, the remains of a duck decoy, buildings, enclosures and identified drains.

8.5. A number of anomalies across the survey area were categorised as ‘Undetermined’. These anomalies have an unclear origin due to their lack of a distinct morphology, orientation and magnetic signal.

9. Archiving

9.1. MS maintains an in-house digital archive, which is based on Schmidt and Ernenwein (2013). This stores the collected measurements, minimally processed data, georeferenced and un-georeferenced images, XY traces and a copy of the final report.

9.2. MS contributes reports to the ADS Grey Literature Library upon permission from the client, subject to any dictated time embargoes.

10. Copyright

10.1. Copyright and intellectual property pertaining to all reports, figures and datasets produced by Magnitude Services Ltd is retained by MS. The client is given full licence to use such material for their own purposes. Permission must be sought by any third party wishing to use or reproduce any IP owned by MS.

11. References

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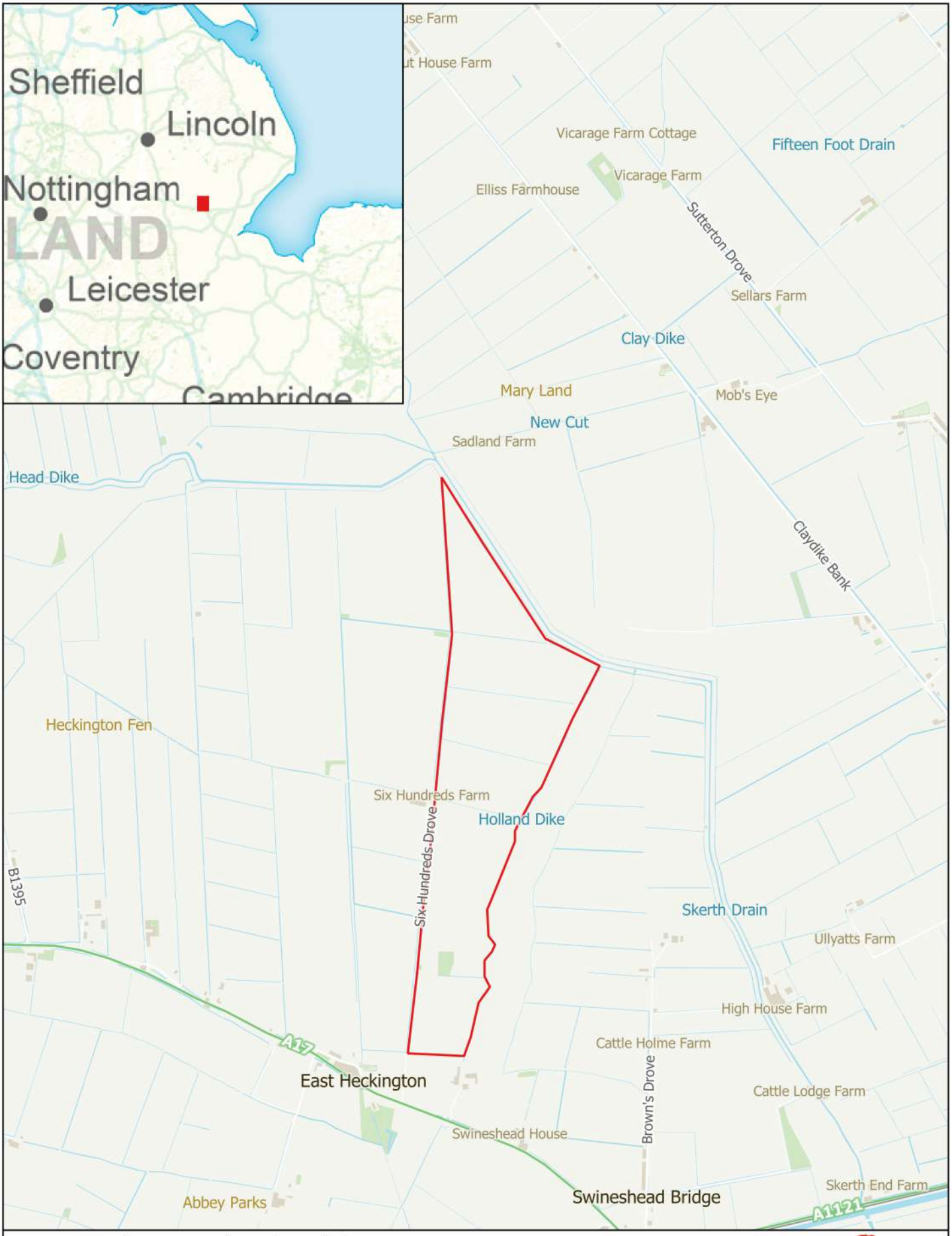
12. Project Metadata

MS Job Code	MSTF1200
Project Name	Heckington Fen Solar Park, Lincolnshire
Client	Ecotricity (Heck Fen Solar) Ltd.
Grid Reference	TF 20158 44417
Survey Techniques	Magnetometry
Survey Size (ha)	115ha (Magnetometry)
Survey Dates	2022-03-21 to 2022-03-25
Project Lead	Dr. Anna Chmielowska PCIfA
Project Officer	Dr. Anna Chmielowska PCIfA
HER Event No	TBC
OASIS No	TBC
S42 Licence No	N/A
Report Version	1.0

13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	LT	AC	04 April 2022
0.2	Changes Following Project Lead Review	AS	AC	04 April 2022
0.3	Changes following Director comments	AS	PSJ	06 April 2022
0.4	Changes following Client's comments	AC	PSJ	08 April 2022
1.0	Report Issued as Final	AC	PSJ	20 May 2022



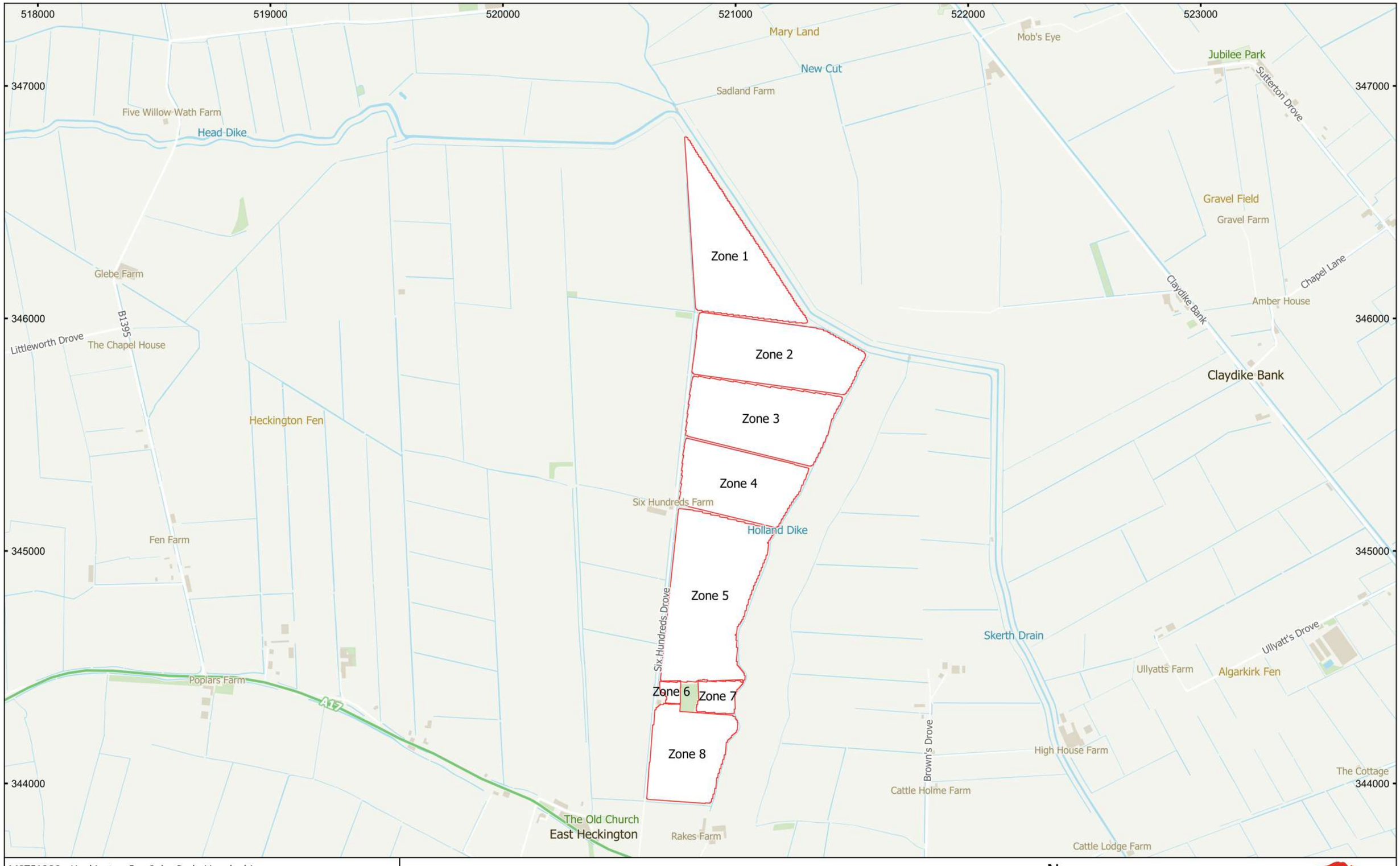
MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 1 - Site Location
1:25,000 @ A4

Site Boundary

N

0 0.5 1 km

magnitude surveys



MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 2 - Location of Survey Area
1:15,000 @ A3

Survey Area

N

0 250 500 750 m

magnitude surveys

346500

346

Zone 1

521000

521000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 3 - Magnetic Total Field (Lower Sensor) (Overview) (North)
1:2,500 @ A3

48,998 nT 49,003

N

0 50 100 150 m

magnitude surveys

346500

346000

Zone 1

C.D.

Saddland Farm

521000

521000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 4 - Magnetic Interpretation Over Historical Maps and Satellite Imagery (Overview) (North)
1:2,500 @ A3

- Agricultural (Weak)
- Industrial/Modern (Spread)
- Undetermined (Weak)
- Magnetic Disturbance
- Natural (Weak)
- Natural (Spread)
- Agricultural (Trend)
- Drainage Feature
- Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

521000

521500

346000

346000

Zone 1

Zone 2

Six Hundreds Drove

Zone 3

345500

345500

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 5 - Magnetic Total Field (Lower Sensor) (Overview) (North-Centre)
1:2,500 @ A3

48,998 nT 49,003

N

0 50 100 150 m

magnitude surveys

521000

521500

Zone 1

346000

346000

Zone 2

Zone 3

Zone 4

345500

345500

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 6 - Magnetic Interpretation Over Historical Maps and Satellite Imagery (Overview) (North-Centre)
1:2,500 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913
Contains satellite imagery © Bing Satellite 2022

- Probable Archaeology (Strong)
- Probable Archaeology (Weak)
- Possible Archaeology (Strong)
- Possible Archaeology (Weak)
- Agricultural (Strong)
- Agricultural (Weak)
- Industrial/Modern (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Magnetic Disturbance
- Natural (Strong)
- Natural (Weak)
- Natural (Spread)
- Agricultural (Trend)
- Drainage Feature
- Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

521000

521500

Zone 3

Zone 4

Six Hundreds Farm

Six Hundreds Drove

Holland Dike

345000

345000

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 7 - Magnetic Total Field (Lower Sensor) (Overview) (Centre)
1:2,500 @ A3

48,998 nT 49,003

N

0 50 100 150 m

magnitude surveys

521000

521500

Zone 3

Zone 4

Zone 5

345000

345000

B.M.10·1

B.M.8·9

8·2

9·2

9·0

8·1

9·2

D r o

D i k e

R A K E

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 8 - Magnetic Interpretation Over Historical Maps and Satellite Imagery (Overview) (Centre)
1:2,500 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

520500

Six Hundreds Drove

Zone 5

Zone 6

Zone 7

344500

344500

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 9 - Magnetic Total Field (Lower Sensor) (Overview) (South-Centre)
1:2,500 @ A3

48,998 nT 49,003

N

0 50 100 150 m

magnitude surveys

520500

521000

344500

344500

Zone 5

Zone 6

Zone 7

Six Hundreds Farm

Sheepfold

B.M.8·9

B.M.10·4

11·0

10·3

8·3

9·8

10·6

9·2

6·8

7·3

7·7

Hundred

Stoke

Wood

Moor

Rd.

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 10 - Magnetic Interpretation Over Historical Maps and Satellite Imagery (Overview) (South-Centre)
1:2,500 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913
Contains satellite imagery © Bing Satellite 2022

Agricultural (Weak)
Industrial/Modern (Spread)
Undetermined (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Service
Drainage Feature
Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

520500

Zone 6

Zone 7

Zone 8

Six Hundreds Drove

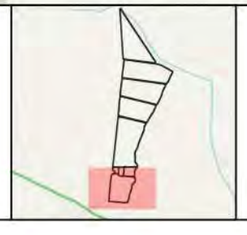
344000

344000

The Old Church

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 11 - Magnetic Total Field (Lower Sensor) (Overview) (South)
1:2,500 @ A3

48,998 nT 49,003



N

0 50 100 150 m

magnitude surveys

520500

521000

Zone 6

Zone 7

Zone 8

Six Hundreds Farm

Sheepfold

344000

344000

St. John the Baptist's Ch.

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 12 - Magnetic Interpretation Over Historical Maps and Satellite Imagery (Overview) (South)
1:2,500 @ A3

Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913
Contains satellite imagery © Bing Satellite 2022

- Agricultural (Weak)
- Industrial/Modern (Spread)
- Undetermined (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Weak)
- Natural (Spread)
- Agricultural (Trend)
- Service
- Drainage Feature
- Ferrous (Spike)

N

0 50 100 150 m

magnitude surveys

520800

521000

346800

346800

Zone 1

346600

346600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 14 - Magnetic Gradient (Zone 1 (North))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

346800

346800

Zone 1

346600

346600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 15 - Magnetic Interpretation (Zone 1 (North))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

346800

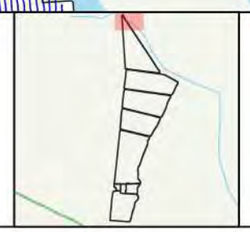
346800

Zone 1

346600

346600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 16 - XY Trace Plot (Zone 1 (North))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

346600

520800

521000

346600

Zone 1

346400

346400

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 17 - Magnetic Gradient (Zone 1 (North-Centre))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

346600
520800
521000
346600
Zone 1
346400
346400
MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 18 - Magnetic Interpretation (Zone 1 (North-Centre))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)
N
0
25
50
75 m
magnitude surveys

346600

520800

521000

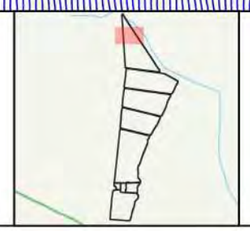
346600

Zone 1

346400

346400

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 19 - XY Trace Plot (Zone 1 (North-Centre))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 1

346200

346200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 20 - Magnetic Gradient (Zone 1 (Centre))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

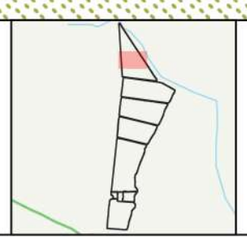
Zone 1

346200

346200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 21 - Magnetic Interpretation (Zone 1 (Centre))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Drainage Feature
Ferrous (Spike)



N

0 25 50 75 m

magnitude surveys

520800

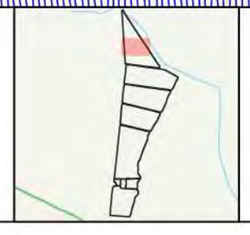
521000

Zone 1

346200

346200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 22 - XY Trace Plot (Zone 1 (Centre))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 1

346000

346000

Zone 2

Six Hundreds Drove

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 23 - Magnetic Gradient (Zone 1 (South-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 1

1b

346000

346000

Zone 2

Six Hundreds Drove

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 24 - Magnetic Interpretation (Zone 1 (South-West))
1:1,000 @ A3

Industrial/Modern (Spread)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Drainage Feature
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 1

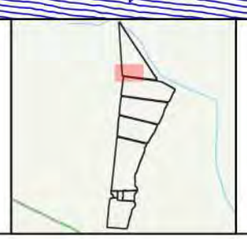
346000

346000

Zone 2

Six Hundreds Drove

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 25 - XY Trace Plot (Zone 1 (South-West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521200

521400

346200

346200

Zone 1

346000

346000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 26 - Magnetic Gradient (Zone 1 (South-East))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

521200

521400

346200

346200

Zone 1

1a

346000

346000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 27 - Magnetic Interpretation (Zone 1 (South-East))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Drainage Feature
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

521200

521400

346200

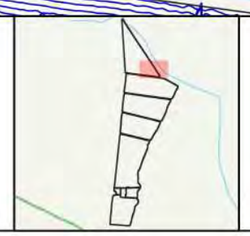
346200

Zone 1

346000

346000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 28 - XY Trace Plot (Zone 1 (South-East))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 2

Six Hundreds Drove

345800

345800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 29 - Magnetic Gradient (Zone 2 (West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 2

Six Hundreds Drove

345800

345800

2c

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 30 - Magnetic Interpretation (Zone 2 (West))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

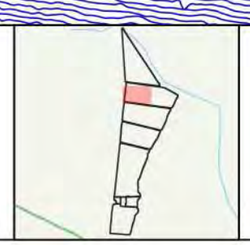
Zone 2

Six Hundreds Drove

345800

345800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 31 - XY Trace Plot (Zone 2 (West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521200

521400

Zone 2

345800

45800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 32 - Magnetic Gradient (Zone 2 (East))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

521200

521400

Zone 2

2a

2b

345800

345800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 33 - Magnetic Interpretation (Zone 2 (East))
1:1,000 @ A3

Probable Archaeology (Strong)
Probable Archaeology (Weak)
Possible Archaeology(Strong)
Possible Archaeology (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

521200

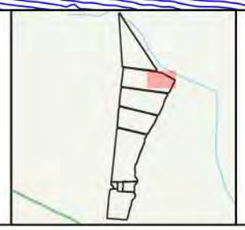
521400

Zone 2

345800

345800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 34 - XY Trace Plot (Zone 2 (East))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

345600

345600

Six Hundreds Drove

Zone 3

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 35 - Magnetic Gradient (Zone 3 (West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

345600

345600

Six Hundreds Drove

3c

Zone 3

3d

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 36 - Magnetic Interpretation (Zone 3 (West))
1:1,000 @ A3

Agricultural (Strong)
Agricultural (Weak)
Industrial/Modern (Spread)
Undetermined (Strong)
Natural (Strong)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Drainage Feature
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

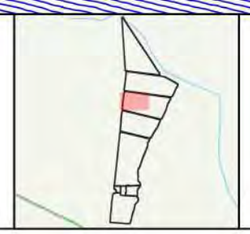
345600

345600

Six Hundreds Drove

Zone 3

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 37 - XY Trace Plot (Zone 3 (West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521200

521400

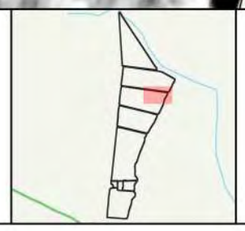
Zone 3

345600

345600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 38 - Magnetic Gradient (Zone 3 (East))
1:1,000 @ A3

-1 nT 2



N

0 25 50 75 m

magnitude surveys

521200

521400

3a

Zone 3

345600

345600

3b

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 39 - Magnetic Interpretation (Zone 3 (East))
1:1,000 @ A3

Probable Archaeology (Strong)
Probable Archaeology (Weak)
Possible Archaeology(Strong)
Possible Archaeology (Weak)
Undetermined (Weak)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

521200

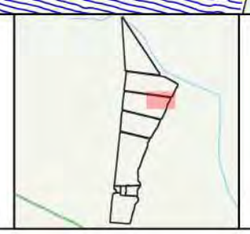
521400

345600

345600

Zone 3

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 40 - XY Trace Plot (Zone 3 (East))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 3

345400

345400

Six Hundreds Drove

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 41 - Magnetic Gradient (Zone 4 (North-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 3

3d

345400

345400

Six Hundreds Drove

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 42 - Magnetic Interpretation (Zone 4 (North-West))
1:1,000 @ A3

Agricultural (Weak)
Industrial/Modern (Spread)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800
521000
345400
345400
Zone 3
Six Hundreds Drove
Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 43 - XY Trace Plot (Zone 4 (North-West))
90nT/cm at 1:1,000 @ A3

N
0 25 50 75 m

magnitude surveys

521200

521400

Zone 3

345400

345400

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 44 - Magnetic Gradient (Zone 4 (North-East))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

521200

521400

345400

345400

Zone 3

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 45 - Magnetic Interpretation (Zone 4 (North-East))
1:1,000 @ A3

Possible Archaeology (Weak)
Undetermined (Weak)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

521200

521400

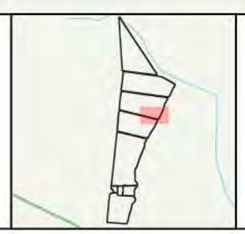
Zone 3

345400

345400

Zone 4

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 46 - XY Trace Plot (Zone 4 (North-East))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 4

345200

345200

Six Hundreds Farm

Six Hundreds Drove

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 47 - Magnetic Gradient (Zone 4 (South-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 4

Six Hundreds Farm

345200

345200

Six Hundreds Drove

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 48 - Magnetic Interpretation (Zone 4 (South-West))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 4

Six Hundreds Farm

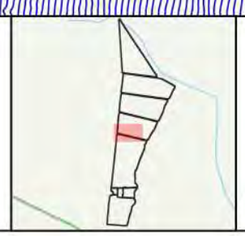
345200

Six Hundreds Drove

345200

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 49 - XY Trace Plot (Zone 4 (South-West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521200

521400

Zone 4

345200

345200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 50 - Magnetic Gradient (Zone 4 (South-East))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

521200

521400

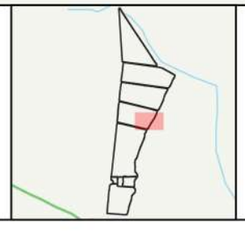
Zone 4

345200

345200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 51 - Magnetic Interpretation (Zone 4 (South-East))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)



N

0 25 50 75 m

magnitude surveys

521200

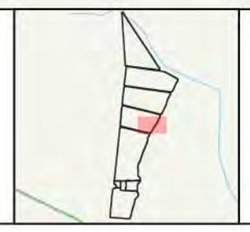
521400

Zone 4

345200

345200

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 52 - XY Trace Plot (Zone 4 (South-East))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 5

Six Hundreds Drove

345000

345000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 53 - Magnetic Gradient (Zone 5 (North-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 5

Six Hundreds Drove

345000

345000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 54 - Magnetic Interpretation (Zone 5 (North-West))
1:1,000 @ A3

Undetermined (Weak)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

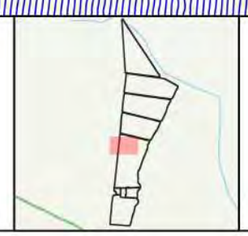
Zone 5

Six Hundreds Drove

345000

345000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 55 - XY Trace Plot (Zone 5 (North-West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521000

521200

Holland Dike

Zone 4

345000

345000

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 56 - Magnetic Gradient (Zone 5 (North-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

521000

521200

Holland Dike

Zone 4

345000

345000

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 57 - Magnetic Interpretation (Zone 5 (North-West))
1:1,000 @ A3

Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

521000

521200

Holland Dike

Zone 4

345000

345000

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 58 - XY Trace Plot (Zone 5 (North-West))
90nT/cm at 1:1,000 @ A3

N

0 25 50 75 m

magnitude surveys

520800

521000

344800

344800

Six Hundreds Drove

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 59 - Magnetic Gradient (Zone 5 (Centre-West))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

344800

344800

Six Hundreds Drove

Zone 5

5a

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 60 - Magnetic Interpretation (Zone 5 (Centre-West))
1:1,000 @ A3

Agricultural (Weak)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

521000

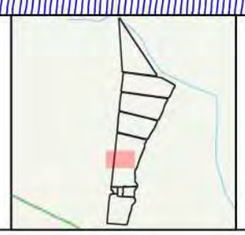
344800

344800

Six Hundreds Drove

Zone 5

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 61 - XY Trace Plot (Zone 5 (Centre-West))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

521000

521200

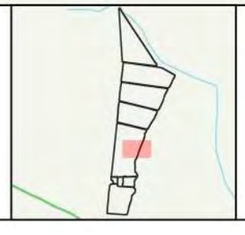
Zone 5

344800

344800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 62 - Magnetic Gradient (Zone 5 (Centre-East))
1:1,000 @ A3

-1 nT 2



N

0 25 50 75 m

magnitude surveys

521000

521200

Zone 5

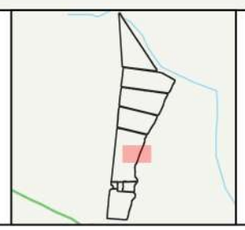
5a

344800

344800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 63 - Magnetic Interpretation (Zone 5 (Centre-East))
1:1,000 @ A3

Agricultural (Weak)
Natural (Spread)
Ferrous (Spike)
Natural (Weak)



N

0 25 50 75 m

magnitude surveys

521000

521200

Zone 5

344800

344800

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 64 - XY Trace Plot (Zone 5 (Centre-East))
90nT/cm at 1:1,000 @ A3

N

0 25 50 75 m

magnitude surveys

Zone 5

520800

521000

Six Hundreds Drove

344600

344600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 65 - Magnetic Gradient (Zone 5 (South))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Zone 5

Six Hundreds Drove

344600

344600

5b

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 66 - Magnetic Interpretation (Zone 5 (South))
1:1,000 @ A3

Agricultural (Weak)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

Zone 5

520800

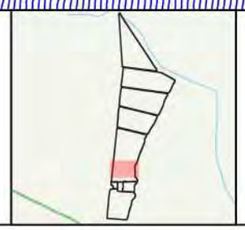
521000

Six Hundreds Drove

344600

344600

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 67 - XY Trace Plot (Zone 5 (South))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520800

521000

Six Hundreds Drove

Zone 5

344400

344400

Zone 6

Zone 7

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 68 - Magnetic Gradient (Zone 6 and 7)
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520800

521000

Six Hundreds Drove

5b

6a

Zone 5

344400

344400

7a

Zone 6

6b

Zone 7

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 69 - Magnetic Interpretation (Zone 6 and 7)
1:1,000 @ A3

Agricultural (Weak)
Industrial/Modern (Spread)
Undetermined (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Service
Drainage Feature
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520800

523000

Six Hundreds Drove

Zone 5

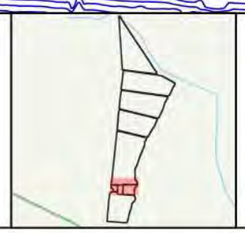
Zone 6

Zone 7

344400

344400

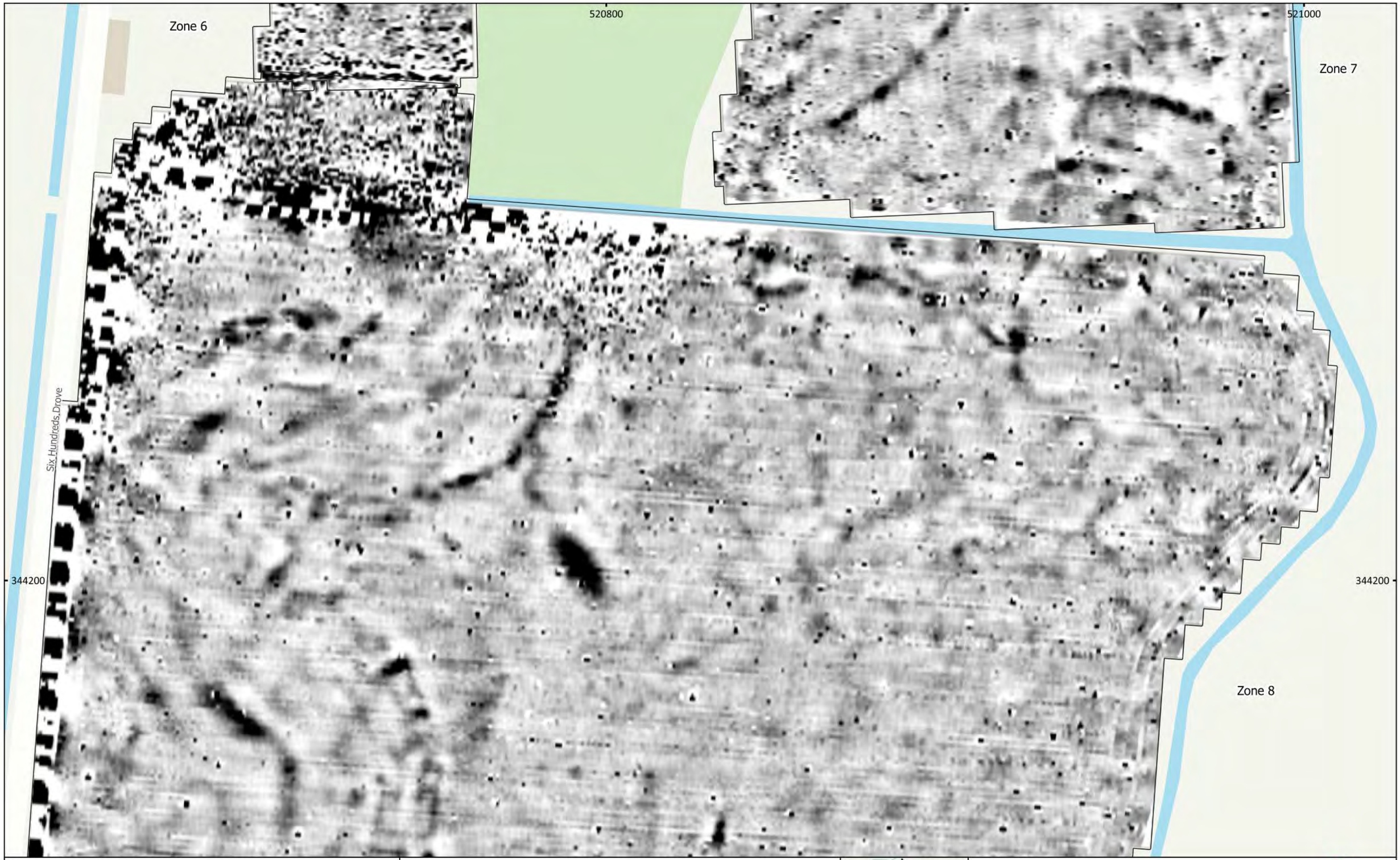
MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 70 - XY Trace Plot (Zone 6 and 7)
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys



MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 71 - Magnetic Gradient (Zone 8 (North))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

Zone 6

6b

520800

521000

Zone 7

8a

Six Hundreds Drove

344200

344200

Zone 8

8b

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 72 - Magnetic Interpretation (Zone 8 (North))
1:1,000 @ A3

Agricultural (Weak)
Industrial/Modern (Spread)
Undetermined (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Service
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

Zone 6

520800

521000

Zone 7

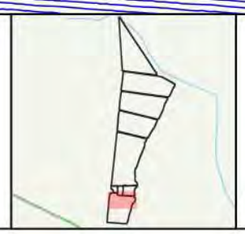
Six Hundreds Drove

344200

344200

Zone 8

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 73 - XY Trace Plot (Zone 8 (North))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys

520600

520800

Zone 8

Six Hundreds Drove

344000

344000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 74 - Magnetic Gradient (Zone 8 (South))
1:1,000 @ A3

-1 nT 2

N

0 25 50 75 m

magnitude surveys

520600

520800

8b

Zone 8

Six Hundreds Drove

344000

344000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 75 - Magnetic Interpretation (Zone 8 (South))
1:1,000 @ A3

Undetermined (Weak)
Magnetic Disturbance
Natural (Weak)
Natural (Spread)
Agricultural (Trend)
Service
Ferrous (Spike)

N

0 25 50 75 m

magnitude surveys

520600

520800

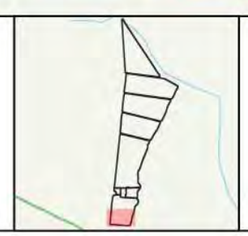
Zone 8

Six Hundreds Drove

344000

344000

MSTF1200 - Heckington Fen Solar Park, Lincolnshire
Figure 76 - XY Trace Plot (Zone 8 (South))
90nT/cm at 1:1,000 @ A3



N

0 25 50 75 m

magnitude surveys