Land to the north of Yarrows Aggregates
Leven, East Riding of Yorkshire
Archaeological Geophysical Survey Report

National Grid Reference Number: TA 11910 44515

AOC Project No: 51330

Date: March 2015

AOC Archaeology Group

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Leven, East Riding of Yorkshire
Archaeological Geophysical Survey Report

Commissioned by:	**Matthew Lambton** **3AD3 Limited** **A331-A339 The Wilton Centre** **Redcar** **Cleveland** **TS10 ARF**
National Grid References (NGR):	**TA 11910 44515**
AOC Project No:	**51330**
Prepared by:	**Clare Leevers**
Illustration by:	**Clare Leevers**
Date:	**March 2015**

This document has been prepared in accordance with AOC standard operating procedures.

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Report Stage: Final Draft	**Date: March 2015**

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Non-Technical Summary

AOC Archaeology Group was commissioned by 3AD3 Limited to undertake an archaeological geophysical survey to investigate the potential for buried archaeological remains on land to the north of Yarrows Aggregates, Leven near Beverley, East Riding of Yorkshire.

The site is located approximately 1.5km to the south-east of the centre of Leven and 1.5km to the south-west of Catwick (centred at TA 11910 44515). The survey area is bordered by the A165 to the west and Catwick Quarry to the east.

A gradiometer survey was undertaken over approximately 3.5ha, which detected several anomalies likely to be of an archaeological nature. The survey results have confirmed the presence of ditches that were part of a previously excavated field boundary complex, with a ring ditched/post-hole structure and associated hearth identified within the northern part of the complex.

1 Introduction

1.1 AOC Archaeology Group was commissioned by 3AD3 Limited to undertake a geophysical (gradiometer) survey to the north of Yarrows Aggregates, Leven, East Riding of Yorkshire in advance of the proposed development of the site.

1.2 The survey was carried out to provide information on the extent and significance of potential buried archaeological remains within the proposed development site, and to inform the scope of any further archaeological evaluation, if required.

Site location and description

1.3 The site is located approximately 1.5km to the south-east of the centre of Leven and 1.5km to the south-west of Catwick (centred at TA 11910 44515). The proposed survey area is bordered by the A165 to the west, Catwick quarry to the south and east and arable fields to the north.

1.4 One field containing crop was targeted with gradiometer survey, which covered a total area of approximately 3.5ha (Figure 2). During the period of the survey, the field was covered with low-lying crop remains.

1.5 The natural topography is generally level, lying at approximately 4.4m above Ordnance Datum (aOD).

Geology and soils

1.6 The bedrock geology within the site is comprised of Flamborough Formation Chalk (BGS 2015) overlain by freely draining lime-rich loamy soil and loamy and sandy soils with naturally high water content and a peaty surface (Soilscapes 2015).

1.7 Gradiometer survey over limestone is suggested to provide a good response and a variable result over sands, but results can vary depending on the formation of the geology (David *et al.* 2008, 15).

2 Archaeological Background

2.1 The following archaeological background is based on information provided by the Humber Sites and Monuments Record (SMR) and East Riding Archaeology (2014).

2.2 The site is located within a major prehistoric landscape, lying directly on top of a major crop-mark complex representing a regionally significant hill-top settlement of probable Iron Age date. Previous archaeological investigations between 1992 and 1995 along the route of the Leven Bypass, which runs close to the western side of the survey area, identified fragments of early Neolithic pottery as well as pottery and flint of a Bronze Age date.

2.3 Directly around the main gravel and sand outcrop at the Catwick Quarry site a large enclosing ditch containing Late Iron Age pottery was found. During these excavations this was shown to have succeeded by two successive Romano-British ladder settlements which lay approximately 100m apart and dated to the 2nd century AD, and the mid 4th to 5th century AD. Work on the bypass garage site in 1994 to 1995 produced yet more evidence of Iron Age and Romano-British occupation, along with evidence of early medieval activity.

2.4 Partial excavation of the Catwick hill-top settlement complex in the mid to late 1990s identified a major complex of hill-top enclosures dating from the late Bronze Age to the early Iron Age, but with prehistoric mortuary enclosures and ring-ditches lower down the slopes that are possibly dated to the later Neolithic or Early Bronze Age. At the base of the slope there is evidence of Iron Age roundhouses and Romano-British and medieval features.

2.5 Works by ARCUS in December 2006 and January 2007 in the vicinity of the survey area identified three ditches, which mark field boundaries associated with the Iron Age and Romano-British settlement. Further excavtaion in April and June 2006 revealed the southern half of a large square-ditched Iron Age enclosure, a series of three circular or partially circular double concentric ring-gullies that are likely to represent earthworks associated with roundhouses or huts, five small square ditched enclosures with rounded corners with possible burials and a track-way that appears to have led inside a smaller ditched enclosure.

2.6 Since 2011 further excavations have been carried out by Humber Field Archaeology and East Riding Archaeology to the east of the survey area and identified various structures, including a Beaker-period (early Bronze Age) working hollow or sunken-floored building, a number of Iron Age round-houses, and various Iron Age and Romano-British enclosures.

2.7 A single poorly preserved human burial was also discovered and osteological analysis suggested the remains belonged to an adult male aged 26-35 years old, or possibly older.

2.8 Previous geophysical survey in 2013 (GSB Prospection Ltd 2013) and trial trenching (Tibbles 2013) within the survey area have revealed substantial later Iron Age to Romano-British age activity. In particular these works have recorded enclosure ditches that were part of a field boundary complex, with a ring-ditched/ post-hole structure and associated hearth within the northern part of the complex Although the function of the buildings is yet to be determined, the ring-ditch/post hole structure appears to have continued in use, with postholes of a later building being cut into the earlier ring ditch.

3 Aims

3.1 The aim of the geophysical survey was to identify any potential archaeological anomalies that would enhance the current understanding of the archaeological resource within the proposed development site.

3.2 The results of the geophysical survey will be assessed and interpreted to gain a clear understanding of potential buried remains within the survey area in advance of development works.

3.3 Specifically the aims of the gradiometer survey were;

- Locate, record and characterise any surviving sub-surface archaeological remains within the site
- Provide an assessment of the potential significance of any identified archaeological remains in a local, regional and (if relevant) national context
- Produce a comprehensive site archive and report

4 Methodology

4.1 The gradiometer survey was carried out using Bartington Grad601-2 fluxgate gradiometer (see Appendix 1 and 2). Parameters were selected that were suitable for the prospective aims of the survey and in accordance with recommended professional good practice (David *et al*. 2008, 8). Data was collected on a north-south alignment using zig-zag traverses, with a sample interval of 0.25m and a traverse interval of 1m.

4.2 A total of 44 complete and partial 30m by 30m grids were surveyed within the proposed site, totalling a surveyed area of approximately 3.5ha. Attention was taken to attempt to avoid metal obstacles

present within the survey area, such as the metal fences used to divide the fields, as gradiometer survey is affected by 'above-ground noise'.

4.3 All geophysical survey work was carried out in accordance with recommended good practice specified in guideline documents published by English Heritage (David *et al.* 2008). Data processing, storage and documentation were carried out in accordance with the good practice specifications detailed in the guidelines issued by the Archaeology Data Service (Schmidt and Ernenwein 2009).

4.4 The data were downloaded using Bartington Grad601 PC Software v313 and processed using Geoscan Geoplot v3.0.

4.5 In order to process the data the survey area was assessed as a single area (Figure 2). Details of processes used can be found in Appendices 3 and 4.

4.6 Interpreted point, polyline and polygon layers were created as layers in AutoCAD and technical terminology used to describe identified features can be found in Appendix 5.

5 Results and Interpretations

5.1 Gradiometer survey results have been visualised as greyscale plots (Figures 4 and 5). In Figure 6 the outline of anomalies has been directly traced and from this a schematic interpretation showing the relationship between different anomalies has been created (Figure 7).

5.2 An individual characterisation of identified anomalies can be found in Appendix 6.

Archaeology

5.3 **(Y1-Y5)** correspond with the positioning of linear and curvilinear anomalies identified during the archaeological investigations in 2013. **(Y1- Y4)** correspond with the patterning and positioning of ditches suggested to belong to a field boundary complex, and **(Y5)** appears to denote the ring-ditched/ pot-hole structure. Given the similarity in alignment and anomalies values of **(Y6)** and **(Y7)** to **(Y3)** it is likely that these anomalies relate to a similar activity.

Discrete archaeology

5.4 **(Y8)** is composed of a similar patterning and value range as **(Y1)** and so is considered to belong to the same feature, but poor patterning or response values make further interpretation difficult.

5.5 There are several curvilinear anomalies within the dataset **(Y9-Y13)** that appear to be composed of a similar patterning and anomaly values as **(Y5)**, a circular structure defined by a large ring ditch/ post holes. Therefore it is likely that **(Y9-Y13)** also denote structural activity, however, poor patterning and poor enhancement in values make the archaeological nature of these linears uncertain, and further investigation is required to fully characterise them.

5.6 **(Y14)** is composed of weak values, but given its positioning possibly relates to a similar activity as **(Y3)**.

5.7 There are two rectilinear anomalies that possibly belong to structural remains **(Y15)** and **(Y16)**. **(Y15)** appears to have common characteristics with, and possibly relates to, linears **(Y3)** and **(Y4)**, but intervening features make this connection indeterminate. **(Y16)** runs on a north-west to south-east alignment (in contrast to the east-west alignment of the linear trend archaeology **(Y6)** and **(Y7)** adjacent to it).

5.8 **(Y17)** appears as a curved segment which may be related to **(Y1)** and indicate the presence of a large curved ditch, however, incomplete patterning makes this interpretation fairly tentative.

5.9 **(Y18-Y20**) are composed of incomplete patterning and consequently detailed interpretation is difficult. It is likely these anomalies denote remains relating to former human activity and possibly indicate buried structural remains. In particular **(Y19)** and **(Y20)** are in part masked by the strong response of **(Y43)** and extend beyond the limits of the survey area, however, it is possible that these anomalies indicate further curvilinear features similar to that of **(Y5)**.

5.10 Several anomalies have increased values compared to background readings **(Y21-Y25)**, but poor patterning and inconsistent signal make detailed interpretation difficult. Due to the tentative nature of the interpretation of these anomalies the nature of any possible archaeology is uncertain and it is unclear as to how they relate to other anomalies identified as belonging to buried archaeological remains.

5.11 A number of anomalies have been identified as possible archaeology **(Y26 – Y40)** but further interpretation is difficult as a consequence of their weak increase in recorded values, or very poor patterning. It is unclear as to whether these anomalies are archaeological in nature, and if so, how they relate to other identified features within the survey area. **(Y26)** has incomplete patterning, but its curvilinear form may suggest it relates to buried structural remains. **(Y27 – Y29)** possibly belong to the network of ditches. **(Y27)** and **(Y28)** are likely to belong to the same feature running perpendicular to **(Y7)**, **(Y29)** appears to cut through the middle of **(Y10)** and it is unclear as to how these two features relate to each other, and **(Y30)** is possibly the continuation of **(Y7)**, but the weaker response values of **(Y30)** make this interpretation fairly tentative. **(Y31)** and **(Y32)** appear to relate to the same rectilinear feature, but this interpretation is tentative as a result of weak patterning. **(Y33)** and **(Y34)** are on the same alignment as **(Y3)** and so possibly denotes further ditches relating to the network of field boundaries. **(Y35 – Y37)** have a similar patterning a weak increase in anomalies values and make belong to similar human activity. The values and patterning of **(Y38)** suggest this anomaly belongs to a separate feature to **(Y19)**, but the archaeological significance, if any, is largely unclear as the anomalies continues beyond the limits of the survey area. **(Y39)** and **(Y40)** are both located to the south-west of the survey area where there is magnetic disturbance caused by modern noise, consequently it is difficult to determine if these anomalies belong to archaeological remains or are associated with modern above the ground noise.

5.12 The north and south-west sections of the survey area contain a series of regular linear anomalies which do not correspond to the modern agricultural system and likely denote the presence of ploughing, possibly relating to archaeological agricultural activity.

Non-archaeology

5.13 Across the data set there are a series of regularly spaced linear anomalies that correspond to the modern layout of the field system and are likely to denote modern agricultural practices such as ploughing.

5.14 The responses of **(Y41-Y46)** indicate these anomalies are associated with modern activity. **(Y41)** marks a very strong magnetic response running along the east boundary of the survey area, and is likely to indicate the presence of modern service. **(Y43-Y46)** relate to above ground ‘noise’ such as agricultural equipment located to the south of the survey area.

5.15 A number of isolated dipolar anomalies have been identified. These are commonly caused by ferrous materials on the surface or within the topsoil of the site and given the agricultural nature of the site are not likely to be archaeological.

6 Conclusion

6.1 The results of the geophysical survey have confirmed the presence of further archaeological remains associated with those discoveries during previous archaeological investigations, including a series of ditches relating to a field boundary complex and a ring-ditch/post-hole structure. The survey results have also identified previously unrecorded linear, curvilinear and rectilinear anomalies that are likely to be archaeological, but incomplete patterning and poor enhancement of anomaly values makes interpretation tentative.

6.2 Various anomalies have been identified by the gradiometer survey, which are likely to relate to agricultural practices within the survey area, such as plough lines. The survey has also identified several anomalies and areas of disturbance of modern origin.

7 Statement of Indemnity

7.1 Although the results and interpretation detailed in this report have been produced as accurately as possible, it should be noted that the conclusions offered are a subjective assessment of collected data sets.

7.2 The success of a geophysical survey in identifying archaeological remains can be heavily influenced by several factors, including geology, seasonality, field conditions, the technique used and the properties of archaeological features being detected. Therefore geophysical survey may only reveal certain archaeological features and not create a complete plan of all the archaeological remains within a survey area.

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Figure 1

N

Site location

0 1km

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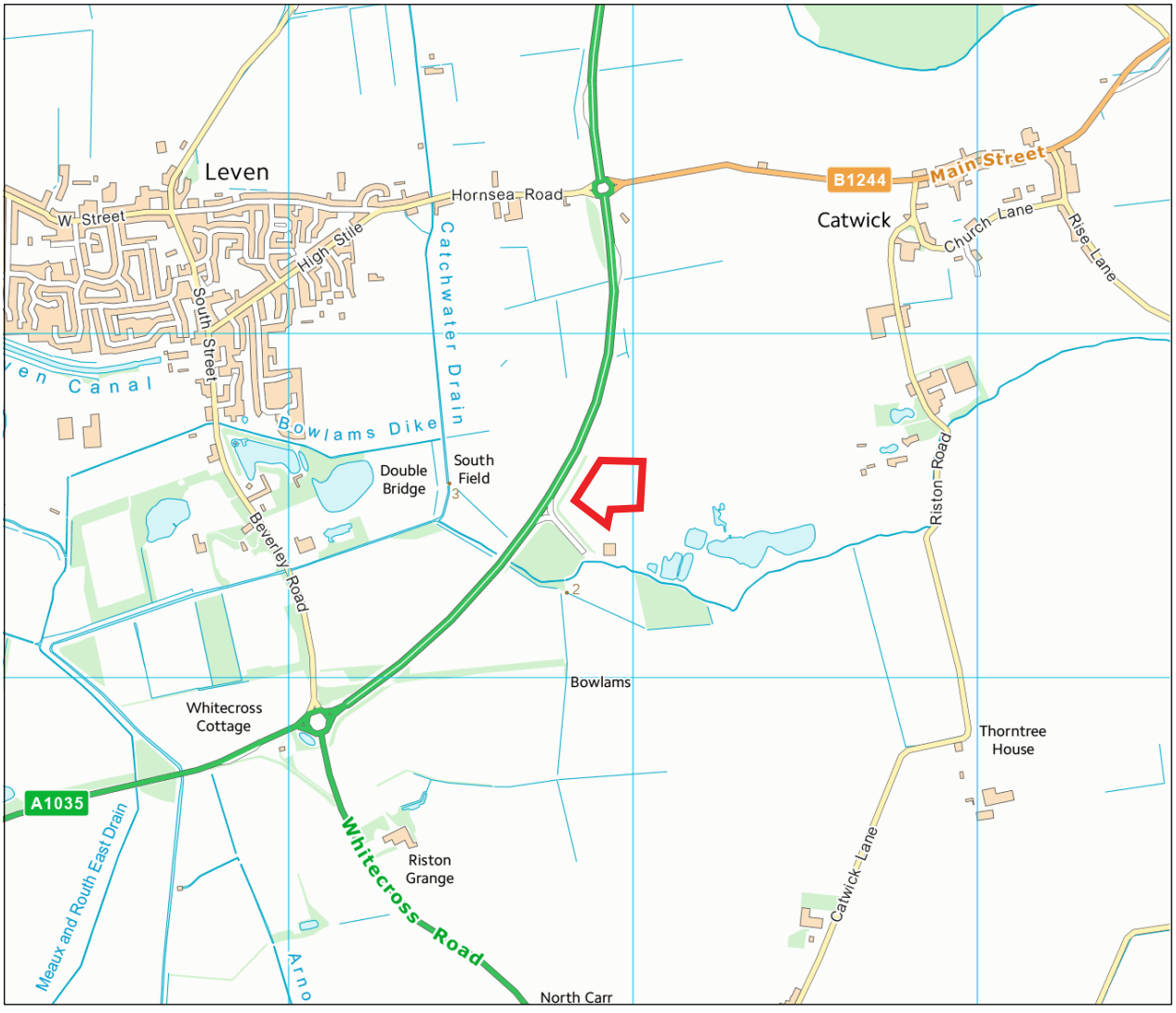
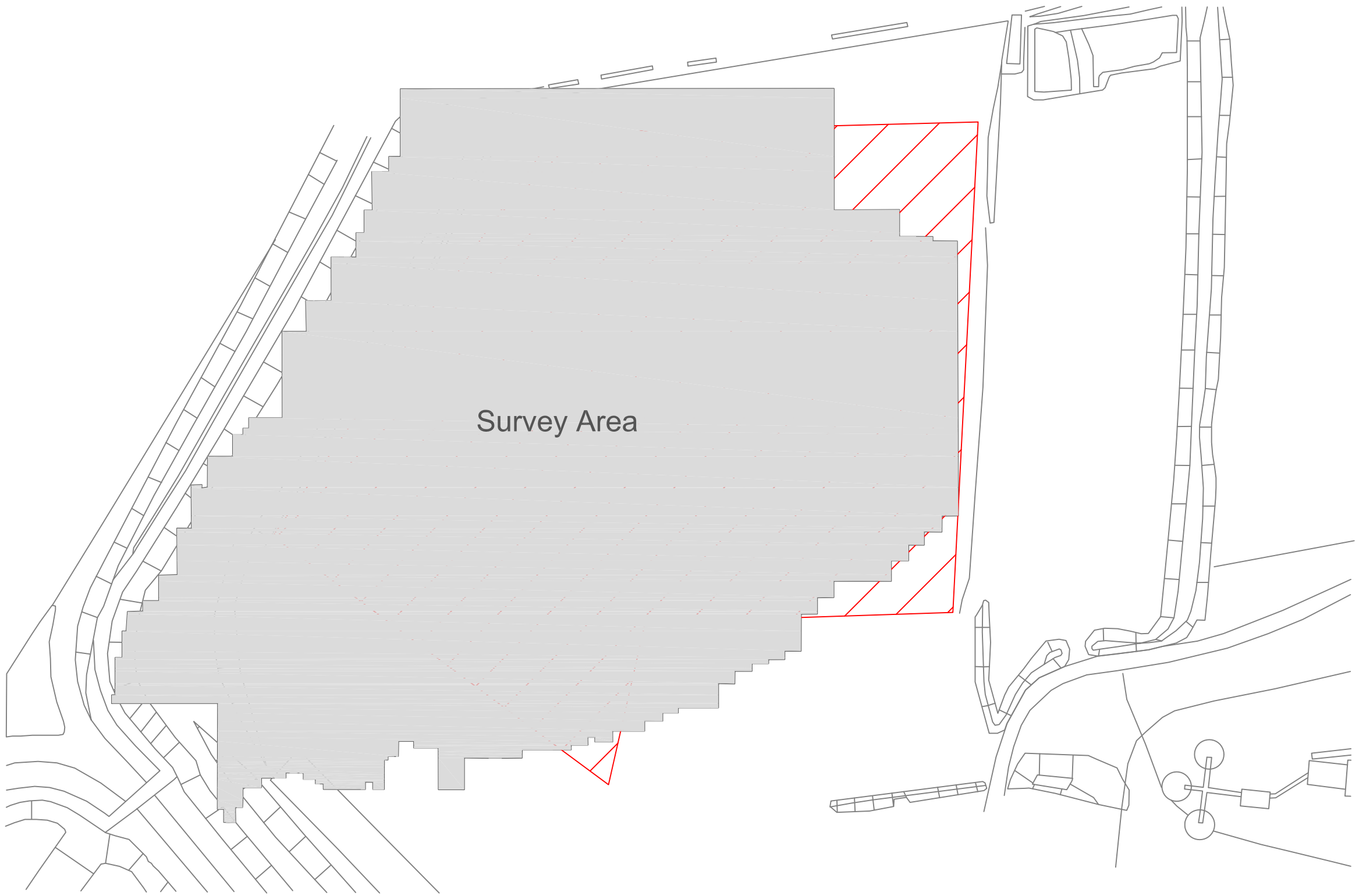


Site boundary

512000



Location of survey areas

Figure 2

N

Survey area

Area unable to be surveyed

0 100m

1:1250 at A3

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Location of plates

Figure 3

N

Survey area

Area unable to be surveyed

0 100m

1:1250 at A3

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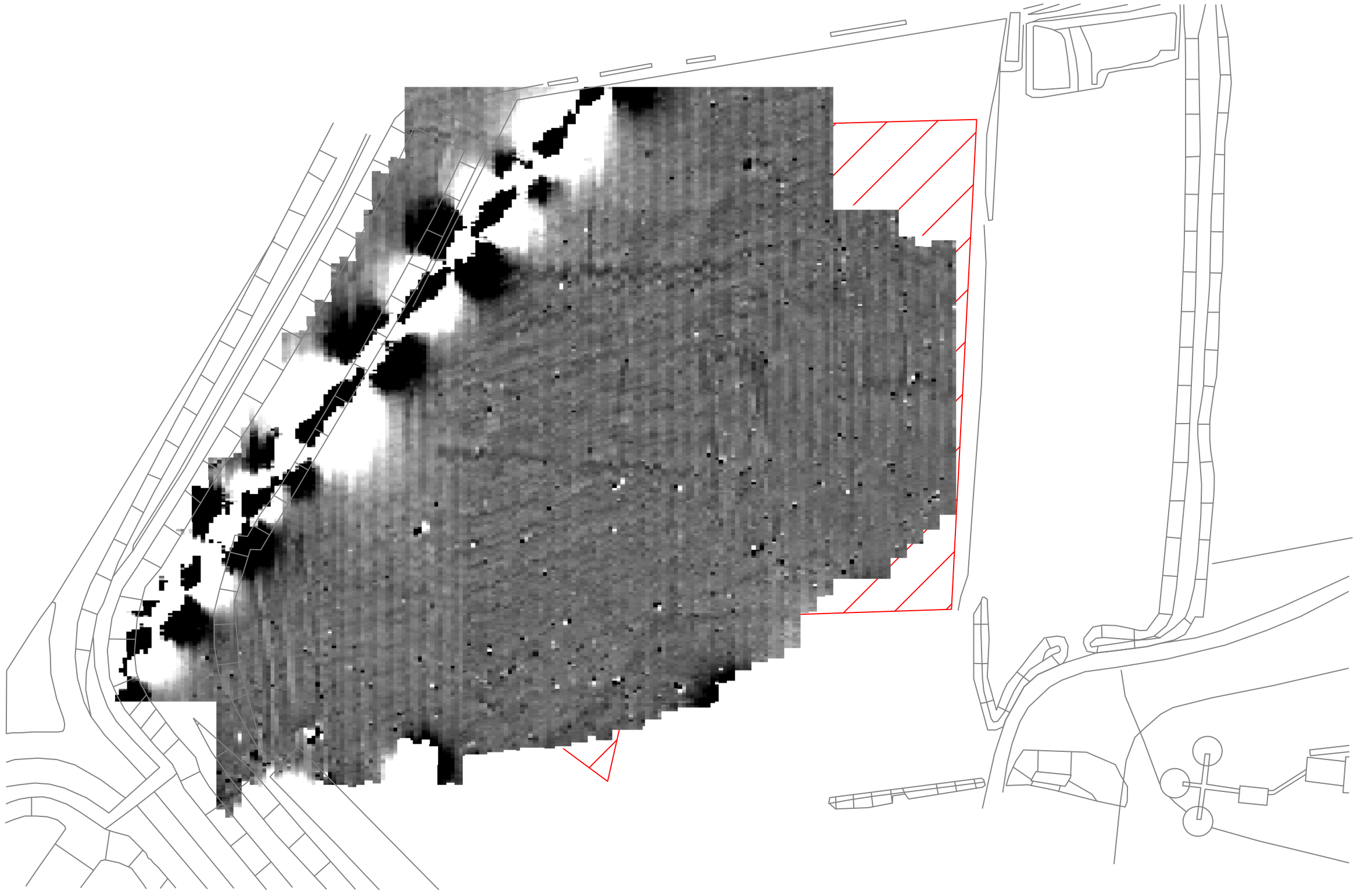
512000



Scale
10
-10

Unprocessed gradiometer survey results greyscale plot

Figure
4

N

Area unable to be surveyed

0 100m
1:1250 at A3

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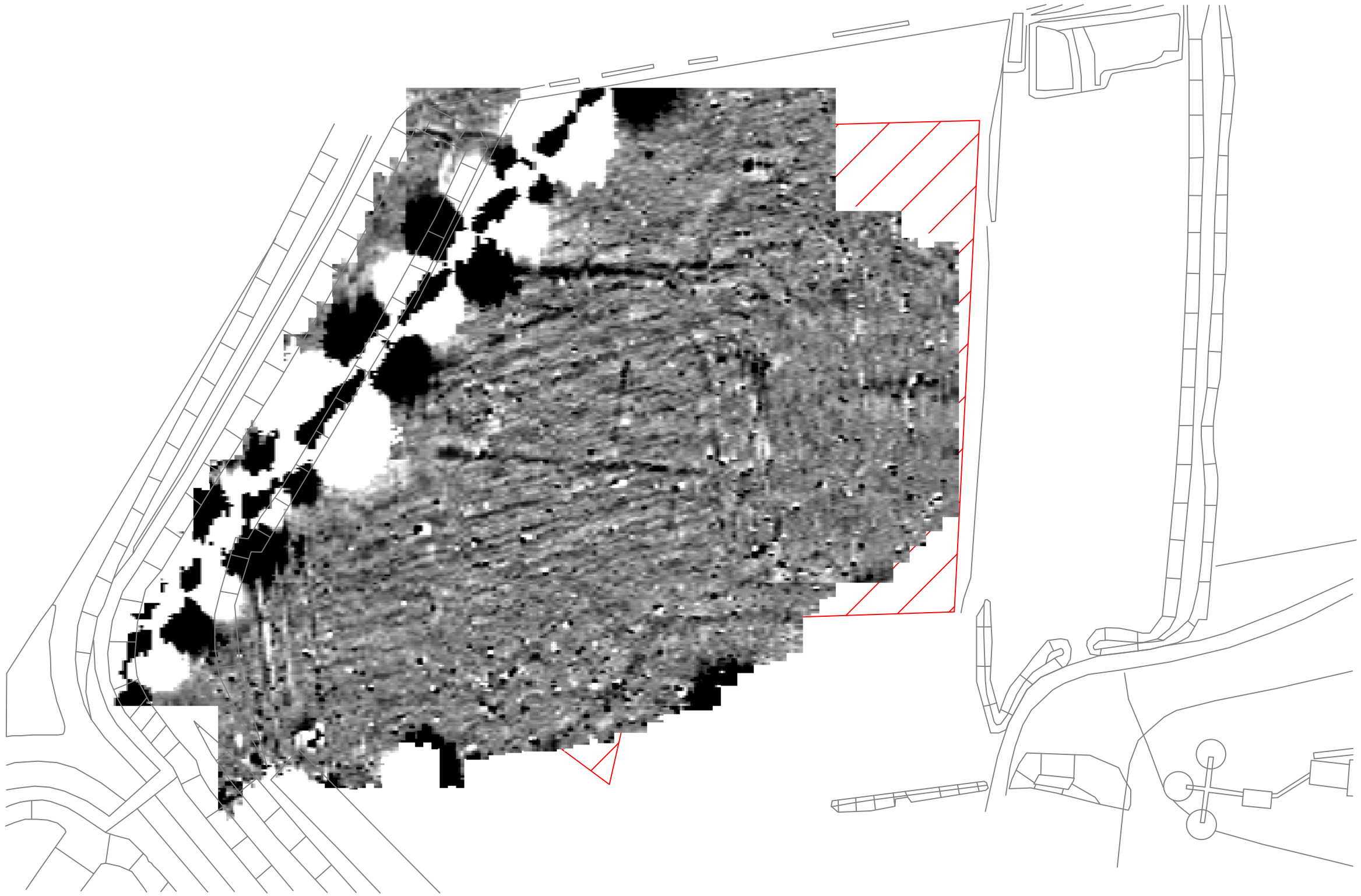
512000



Scale
3
-3

Processed gradiometer survey results greyscale plot

Figure
5

N

Area unable to be surveyed

0 100m
1:1250 at A3

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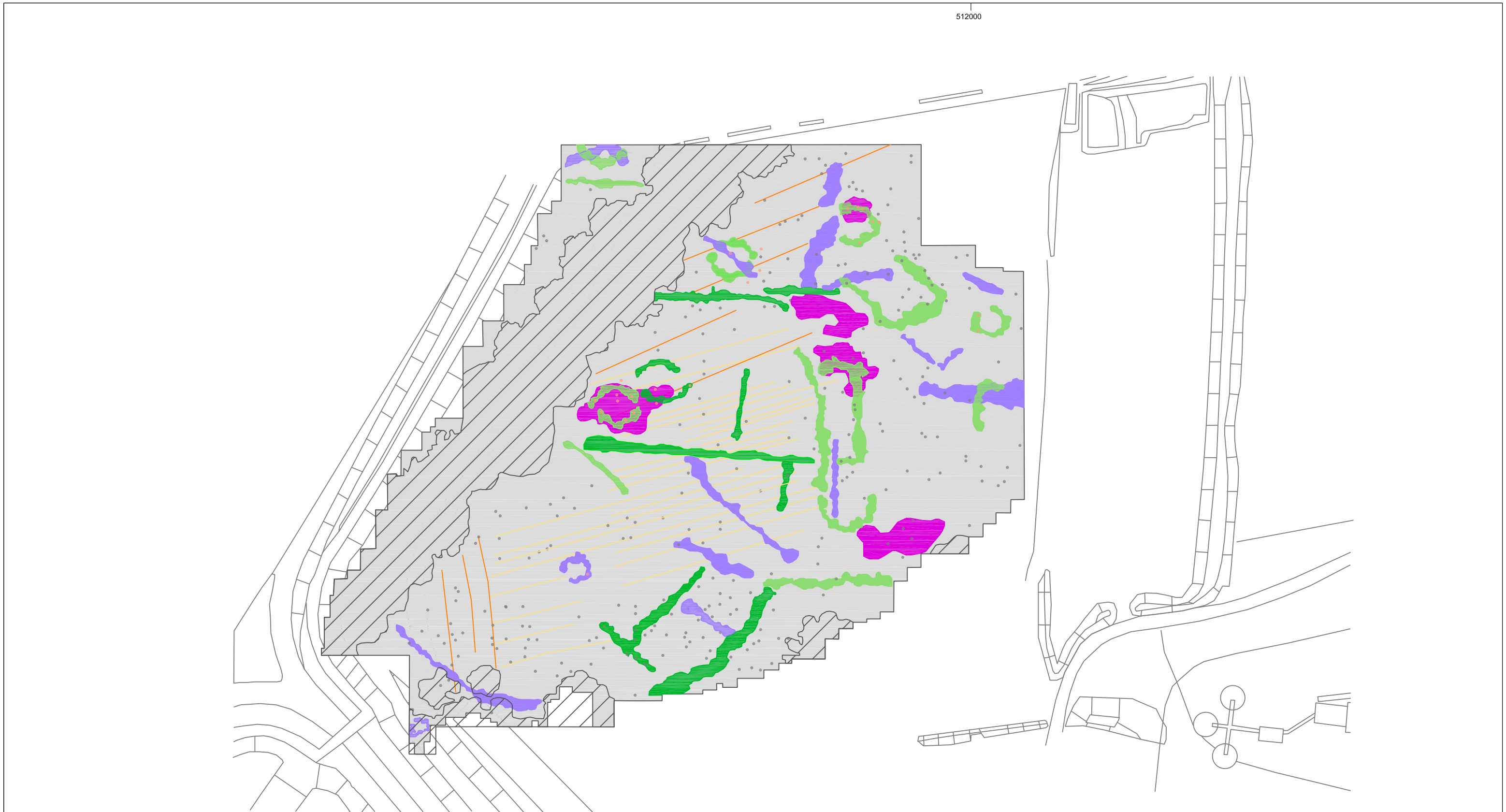

Interpretation of gradiometer survey results

Figure 6

N

- Linear trend (modern plough)
- Linear trend (plough)
- Linear trend (archaeology)
- Linear trend (archaeology?)
- Disturbed area (archaeology?)
- Possible archaeology
- Linear trend (modern)
- Disturbed area (modern)
- Isolated dipolar anomalies (iron spikes)
- Pit?
- Survey area
- Area unable to be surveyed

0 100m

1:1250 at A3

AOC Archaeology Group

512000

Schematic interpretation of gradiometer survey results

Figure 7

N

- Linear trend (archaeology)
- Linear trend (archaeology?)
- Disturbed area (archaeological?)
- Possible archaeology
- Linear trend (plough lines)
- Linear trend (modern plough lines)
- Linear trend (modern)
- Disturbed area (modern)
- Pit?
- Survey area
- Area unable to be surveyed

0 100m

1:1250 at A3

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Plate 1: Survey Area A, before data collection, looking north-east

Plate 2: Survey Area A, after data collection, looking north

Plate 3: Area unable to be surveyed in the north-east corner of Survey Area A, looking east

Appendix 1: Survey Information

Field	Description
Surveyor	AOC Archaeology
Client	3AD3 Limited A331 – A339 The Wilton Centre Redcar Cleveland TS104RF
Site	Land North of Yarrows Aggregates
County	East Riding of Yorkshire
NGR	TA 11910 44515
Solid geology	Flamborough Formation Chalk (BGS 2015)
Soil composition	Freely draining lime-rich loamy soil and loamy and sandy soils with naturally high water content and a peaty surface (Soilscapes 2014).
Historical documentation/ mapping on site	OS County Series: YORKSHIRE 1855 OS County Series: YORKSHIRE 1889-1891 OS County Series: YORKSHIRE 1892 OS County Series: YORKSHIRE 1910 OS County Series: YORKSHIRE 1911 OS County Series: YORKSHIRE 1951 OS Plan 1956 OS Plan 1972 OS Plan1974 – 1983 OS Plan 1983 – 1993
Known archaeology on site	Roman? Archaeology from previous excavations Roman site of Catwick is less than 1km away
Scheduled Ancient Monument	No
Land use/ field condition	Arable
Duration	18/02/2015
Weather	Sunny
Survey type	Gradiometer Survey
Instrumentation	Trimble GXOR system Bartington Grad 601-2
Area covered	Approximately 2Ha
Data collection staffing	Alice James, Clare Leevers
Download software	Grad601 PC Software v313
Processing software	Geoplot v3.0

Visualisation software	AutoCAD LT 2009
Report title	Land to the North of Yarrows Aggregates, Leven, East Riding of Yorkshire
Project number	51330
Report Author	Clare Leevers
Report approved by	Mitchell Pollington

Appendix 2: Archaeological Prospection Techniques, Instrumentation and Software Utilised

Gradiometer survey

Gradiometer surveys measure small changes in the earth's magnetic field. Archaeological materials and activity can be detected by identifying changes to the magnetic values caused by the presence of weakly magnetised iron oxides in the soil (Aspinall *et al.*, 2008, 23; Sharma, 1997, 105). Human inhabitation often causes alterations to the magnetic properties of the ground (Aspinall et al, 2008, 21). There are two physical transformations that produce a significant contrast between the magnetic properties of archaeological features and the surrounding soil: the enhancement of magnetic susceptibility and thermoremnant magnetization (Aspinall *et al.*, 2008, 21; Heron and Gaffney 1987, 72).

Ditches and pits can be easily detected through gradiometer survey as the top soil is generally suggested to have a greater magnetisation than the subsoil caused by human habitation. Also areas of burning or materials which have been subjected to heat commonly have high magnetic signatures, examples include: hearths, kilns, fired clay and mudbricks (Clark 1996, 65; Lowe and Fogel 2010, 24). It should be noted that negative anomalies can also be useful for characterising archaeological features. If the buried remains are composed of a material with a lower magnetisation compared with the surrounding soil, the surrounding soil will consequently have a greater magnetisation resulting in the feature displaying a negative signature. For example stone materials of a structural nature that are composed of sedimentary rocks are considered non-magnetic and so will appear a negative features within the data set.

Ferrous objects- i.e. iron and its alloys- are strongly magnetic and are typically detected as high-value peaks in gradiometer survey data, though it is not usually possible to determine whether these relate to archaeological or modern objects.

Although gradiometer surveys have been successfully carried out in all areas of the United Kingdom, the effectiveness of the technique is lessened in areas with complex geology, particularly where igneous and metamorphic bedrock is present. All magnetic geophysical surveys must therefore take the effects of background geological and geomorphological conditions into account.

Gradiometer Survey Instrumentation

AOC Archaeology's gradiometer surveys are carried out using Bartington Grad601-2 magnetic gradiometers. The Grad601-2 is a high-stability fluxgate magnetic gradient sensor, which uses a 1m sensor separation. The detection resolution is from 0.03 nT/m to 0.1nT/m, depending on the sensor parameters selected, making the Grad601-2 an ideal instrument for prospective survey of large areas as well as detailed surveys of known archaeology. The instrument stores the data collected on an on-board data-logger, which is then downloaded as a series of survey grids for processing.

Software

Following the survey, gradiometer data was downloaded from the instrument using Grad601 PC Software v313. Survey grids were then assembled into composites and enhanced using a range of processing techniques are applied to the data using Geoscan's Geoplot v3.0 (see Appendix 2 for a summary of the processes used in Geoplot and Appendix 3 for a list of processes used to create final data plots).

Appendix 3: Summary of Processes used in Geoplot

Process	Effect
Clip	Replaces data values outside a specified range, in order to display important data with relative values stretched across the display range.
De-spike	Removes exceptionally high values represented in the data that can obscure the visibility of archaeological features. In resistivity survey, these can be caused by poor contact of the mobile probes with the ground; in gradiometer survey, these can be caused by highly magnetic items such as buried ferrous objects.
De-stagger	Counteracts the striping effect caused by misalignment of data when collected on a zig-zag traverse pattern.
Edge Match	Counteracts edge effects in grid composites by subtracting the difference between mean values in the two lines either side of the grid edge.
High pass filter	Removes low-frequency, large scale detail in order to remove background trends in the data, such as variations in geology.
Interpolate	Increases the resolution of a survey by interpolating new values between surveyed data points
Low Pass filter	Uses a Gaussian filter to remove high-frequency, small scale detail, typically for smoothing or generalising data.
Periodic Filter	Used to either remove or reduce amplitudes of constant and reoccurring features that distort other potential patterns. An example of which is plough lines.
Wallis filter	Applies a locally adaptive contrast enhancement filter.
Zero Mean Grid	Resets the mean value of each grid to zero, in order to counteract edge discontinuities in composite assemblies.
Zero Mean Traverse	Resets the mean value of each traverse to zero, in order to address the effect of striping in the data and counteract edge effects.

Appendix 4: Gradiometer Survey Processing Steps

Process	Extent
Area A	
Zero Mean Traverse	All LMS =on Pos. Thresh = 5 Neg. Thresh = -5
Clip	Min = -5 Max = 5
Despike	X=1 Y=1 Th = 3.0 Repl = Mean
Destagger	Grid 15 dir shift = 4 16 = 3 18 = -3 21 = 3 23 = 6 24 = 3 27 = 5 29 = 6 33 = 1 35 = 3 36 = -2 Line Pattern 34-78 Dual-DS
Interpolate	Y, Expand – Linear x2
Low Pass Filter	X=1 Y=1 Wt=G
Raw Palette Scale	Grey55 Min= -10 Max= 10
Palette Scale	Grey55 Min= -3 Max= 3

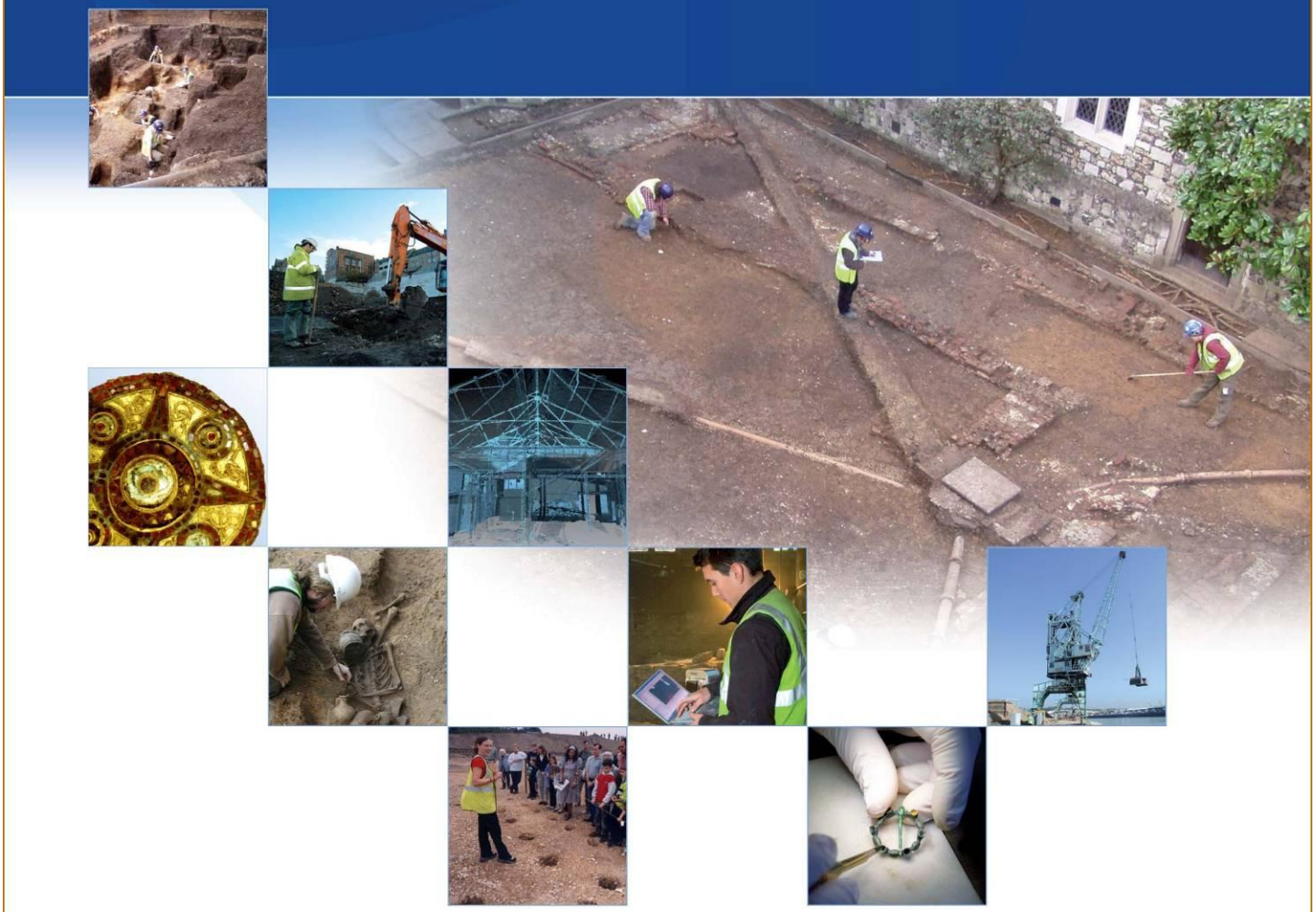
Appendix 5: Technical Terminology

Type of Anomaly	Description
Archaeology	
Linear trend (archaeology)	These can either be isolated linear anomalies or rectilinear in form and often suggest the presence of structural remains. Anomalies are either characterised by an increase or decrease in signal compared to background values depending on the properties of the feature being recorded.
Discrete	
Linear trend (archaeology?)	Anomalies of a linear form either composed of an increased or decreased signal compared to background values. It is possible these anomalies belong to structural remains, but poor patterning or response values makes interpretation difficult.
Disturbed area (archaeological?)	Anomalies with an increase or decrease in values compared with background reading over a localised area. Poor patterning or weak signal changes creates difficulty in defining the nature of the archaeology and so interpretation is fairly tentative. On certain geologies these anomalies could be caused by in-filled natural features, and it would be necessary to undertake intrusive archaeological investigation to establish their form and character.
Possible archaeology (Unclear to origins of the remains)	Anomalies composed of a weak change in signal values compared to background reading or are composed of incomplete patterning. Consequently, interpretation is tentative and it is unclear to whether anomalies belong to an archaeological nature.
Pit?	Isolated circular anomalies composed of an increase in magnetic values with a patterning that may be suggestive of buried remains such as the infill of a pit.
Linear trend (plough lines)	A series of regular anomalies of a linear form either composed of an increased or decreased signal compared to background values. Likely to denote the presence of ploughing and relating to archaeological agricultural activity such as ridge and furrow.
Non- Archaeology	
Linear trend (plough lines)	A series of regular anomalies of a linear form either composed of an increased or decreased signal compared to background values. Likely to denote the presence of ploughing and relating to modern agricultural activity.
Linear trend (modern)	Anomalies of a linear form often composed of contrasting positive and negative values. Such anomalies usually signify a feature with a high level of magnetisation and are likely to belong to modern activity such as pipe lines
Disturbed area (modern)	Area of disturbance that is likely to be caused by modern disturbances and is characterised by significant increases or decreases in values compared with background readings.
Isolated dipolar anomalies (iron spikes)	Response normally caused by ferrous materials on the surface or within the top soil of the site, which cause a ‘spike’ representing a rapid variation in the magnetic response. These are generally not assessed to be archaeological when surveying on rural sites, and generally represent modern material often re-deposited during manuring.

Appendix 6: Individual Characterisation of Identified Anomalies

Anomaly Identifier (Site Name XX)	Type of Archaeology
Y1	Linear trend (archaeology)
Y2	Linear trend (archaeology)
Y3	Linear trend (archaeology)
Y4	Linear trend (archaeology)
Y5	Linear trend (archaeology)
Y6	Linear trend (archaeology)
Y7	Linear trend (archaeology)
Y8	Linear trend (archaeology?)
Y9	Linear trend (archaeology?)
Y10	Linear trend (archaeology?)
Y11	Linear trend (archaeology?)
Y12	Linear trend (archaeology?)
Y13	Linear trend (archaeology?)
Y14	Linear trend (archaeology?)
Y15	Linear trend (archaeology?)
Y16	Linear trend (archaeology?)
Y17	Linear trend (archaeology?)
Y18	Linear trend (archaeology?)
Y19	Linear trend (archaeology?)
Y20	Linear trend (archaeology?)
Y21	Disturbed area (archaeology?)
Y22	Disturbed area (archaeology?)
Y23	Disturbed area (archaeology?)
Y24	Disturbed area (archaeology?)
Y25	Disturbed area (archaeology?)
Y26	Possible archaeology
Y27	Possible archaeology
Y28	Possible archaeology
Y29	Possible archaeology
Y30	Possible archaeology
Y31	Possible archaeology
Y32	Possible archaeology
Y33	Possible archaeology
Y34	Possible archaeology
Y35	Possible archaeology
Y36	Possible archaeology
Y37	Possible archaeology
Y38	Possible archaeology
Y39	Possible archaeology
Y40	Possible archaeology
Y41	Linear trend (modern)
Y42	Disturbed area (modern)

Y43	Disturbed area (modern)
Y44	Disturbed area (modern)
Y45	Disturbed area (modern)
Y46	Disturbed area (modern)



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