

**Substrata**

Archaeological Geophysical Surveyors

An archaeological magnetometer survey  
**Coombe Lodge Playing Fields, Croydon**

Centred on NGR 534065,164390

Report: 1801CRO-R-1

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## Contents

|   |    |
|---|----|
| 1. Introduction .....                     | 1  |
| 2. Survey description .....               | 1  |
| 3. Summary .....                          | 1  |
| 4. Aims and objectives .....              | 2  |
| 5. Standards .....                        | 2  |
| 6. Methodology .....                      | 2  |
| 7. Survey Area .....                      | 2  |
| 8. Archaeological background .....        | 3  |
| 9. Results .....                          | 3  |
| 10. Discussion .....                      | 4  |
| 11. Conclusions .....                     | 5  |
| 12. Disclaimer .....                      | 5  |
| 13. Copyright .....                       | 5  |
| 14. Archive .....                         | 5  |
| 15. Acknowledgements .....                | 6  |
| 16. Bibliography .....                    | 6  |
| Appendix 1 Figures .....                  | 7  |
| Appendix 2 Tables .....                   | 14 |
| Appendix 3 Project archive contents ..... | 18 |

## Figures

|  |    |
|--|----|
| Figure 1: location map .....                           | 8  |
| Figure 2: survey interpretation .....                  | 9  |
| Figure 3: shade plot of processed data .....           | 10 |
| Figure 4: contour plot of processed data .....         | 11 |
| Figure 5: shade plot of minimally processed data ..... | 12 |
| Figure 6: survey grid plan and location .....          | 13 |

## Tables

|   |    |
|---|----|
| Table 1: data analysis .....                      | 15 |
| Table 2: methodology information, all areas ..... | 16 |
| Table 3: processed data metadata .....            | 16 |
| Table 4: minimally processed data metadata .....  | 17 |

## 1 Introduction

This report presents the results of an archaeological geophysical survey at Coombe Lodge Playing Fields, to the south of Coombe Road, Croydon centred at NGR: 534068,164282 / TQ 34068 64282 (Figure 1), hereafter referred to as the 'Site'. It was commissioned by SLR Consulting Limited on behalf of Planning and Development Associates as part of a programme of archaeological work covering an application to build a Secondary School.

Historic England has confirmed that the Site lies in a Tier IV area with respect to Archaeological Priority Areas in Croydon. In further consultation with regard to treatment of potential buried archaeological remains specific to the current application, Historic England have agreed that the south part of the Site will not require any further consideration due to the existing ground disturbance there. In the north part of the Site where the buildings and surfaced areas will be constructed they have stated that it is likely that any on-going archaeological interest could be secured by a condition. However a geophysical survey is required prior to determination to establish whether remains of unexpected significance are present. The geophysical survey area, hereafter referred to as the 'Survey Area', is shown in Figure 2.

The survey and report were completed in compliance with a Survey Method Statement (Dean, 2018) which was approved by Historic England.

## 2 Survey description

### 2.1 Survey

|             |                                   |
|-------------|-----------------------------------|
| Method:     | shallow depth magnetometer survey |
| Instrument: | twin-sensor fluxgate gradiometer  |
| Date:       | 8 and 9 May 2018                  |
| Area:       | 3.45ha                            |

### 2.2 Location

|                                   |                             |
|-----------------------------------|-----------------------------|
| Site name:                        | Coombe Lodge Playing Fields |
| Town:                             | Croydon                     |
| London Borough:                   | Croydon                     |
| Ceremonial County:                | Greater London              |
| Nearest Postcode:                 | TQ 34065 64390              |
| NGR:                              | TQ 34065 64390 (point)      |
| NGR (E/N):                        | 534065,164390 (point)       |
| Historic environment designation: | none                        |

### 2.3 Client

SLR Consulting Limited, Aspect House, Aspect Business Park, Bennerley Road, Nottingham, NG6 8WR

## 3 Summary

A magnetometer survey was selected to provide a relatively fast and cost-effective evaluation of any buried archaeology across the Survey Area (see Section 12). The magnetic anomaly groups pertaining to potential buried archaeology were georeferenced to the Ordnance Survey National Grid, mapped, characterised and assigned with an appropriate degree of certainty in conformance with the survey aims and objectives set out in Section 4.

The differences in magnetic responses across the Survey Area were sufficient to be able to differentiate between anomalies representing possible buried archaeology and background magnetic responses.

Five magnetic anomaly groups were mapped as representing potential buried archaeology. Of these, two groups coincide with, and likely represent, field boundaries recorded on historic maps. The third group may represent a linear archaeological deposit such as a ditch, though more likely a relatively recent service trench. Two groups represent ferrous material and

coincide with a pavilion mapped between 1933 and 1983. It is possible that this ferrous material is associated with the former pavilion.

Seventeen anomaly groups representing relatively recently disturbed ground, ferrous cables or pipes, and possible ferrous deposits with unusual magnetic responses were also mapped.

## 4 Aims and objectives

### 4.1 Aims

Within the framework set out in Chartered Institute for Archaeologists (2014a), complete an archaeological geophysical survey and report which will as far as possible inform on the presence or absence, character, extent and, in some cases, apparent relative phasing of buried archaeology in order to make an assessment of its merit. This assessment may lead to the formulation of a strategy to mitigate a threat to any archaeological resource.

### 4.2 Survey objectives

1. Complete a magnetometer survey across agreed parts of the survey area.
2. Identify any magnetic anomalies that may be related to archaeological deposits, structures or artefacts.
3. Within the limits of the technique and dataset, archaeologically characterise any such anomalies or patterns of anomalies.
4. Accurately record the location of the identified anomalies.
5. Produce a report based on the survey that is sufficiently detailed to inform any subsequent development on the survey area about the location and possible archaeological character of the recorded anomalies.

## 5 Standards

The standards used to complete this survey are defined by the Chartered Institute for Archaeologists (2014a) and Historic England (2008). The codes of approved practice that were followed are those of the Chartered Institute for Archaeologists (2014b) and Archaeology Data Service (undated).

## 6 Methodology

The magnetometer survey was undertaken in accordance with a Survey Method Statement (Dean, 2018) to achieve the aims and objectives set out in Section 4 using the standards and guidance specified in Section 5. The survey method was selected to provide a relatively fast and cost-effective evaluation of any buried archaeology across the Survey Area (see Section 12).

Data processing was undertaken using appropriate software (Table 2), with all anomalies being digitised and geo-referenced. The final report (this document) includes a graphical and textual account of the techniques undertaken, the data obtained and an archaeological interpretation of that data and conclusions about any likely archaeology. The survey and report conform to the Chartered Institute for Archaeologists standard for geophysical survey (CIfA, 2014a).

## 7 Survey Area

### 7.1 Location

The Survey Area comprises part of an area of grassed playing fields with a track leading to a small building on the northern side. The field location is provided in Figure 1.

The Survey Area is confined by fenced and hedged boundaries to the north, east and west with roads beyond to the north and west. The remainder of the playing field area lies to the south. There is a terrace of made-up ground on the south-eastern corner of the Survey Area and a large area of raised, level ground bordering the south-western boundary.

### 7.2 Land use

At the time of the survey, the Survey Area was part of an area of playing fields and was under short grass .

### 7.3 Topography

The Survey Area is relatively flat with two terraced areas, one in the north-eastern portion and on the south-western corner.

### 7.4 Geology

The bedrock across the majority of the Survey Area comprises chalk of the Cretaceous Lewes Nodular Chalk Formation, the Seaford Chalk Formation and the Newhaven Chalk Formation (undifferentiated). On the eastern edge of the Survey Area there is a geological boundary with rocks of the Palaeogene Thanet Formation. These comprise glauconite-coated, nodular flint at the base, overlain by pale yellow-brown, fine-grained sand that can be clayey and glauconitic; occasional beds of calcareous or siliceous sandstones are present (British Geological Survey, undated).

### 7.5 Soils

A Phase II Geo-Environmental Assessment Report indicates a deposit sequence of 0.1 to 0.4m of topsoil usually overlying natural deposits of Thanet Sand but with occasional intervening deposits of made ground (SLR 2018, 11 after HSP 2017).

## 8 Archaeological background

### 8.1 Historic Environment Status

None.

### 8.2 Potential buried archaeology

The archaeological context has been set out in a historic environment desk-based assessment (SLR 2018), which considered a study area comprising land within the Site and within 1km of it.

There are no records in the Greater London Historic Environment Record of archaeological features located within the Survey Area.

The remains recorded in the study area beyond the Site (ibid) suggest that there is potential for currently-unknown buried archaeological remains to exist within the Site. The known context does not indicate that remains of high significance are likely to exist within the Site and on the basis of current information the heritage significance of any remains was predicted in the HEDBA to be medium or lower.

The Site's location in Tier IV of the Archaeological Priority Areas system means that while there is considered to be a low level of potential for new discoveries, the Site is not necessarily devoid of archaeological interest.

## 9 Results

### 9.1 Scope and definitions

This survey was designed to record magnetic anomalies. A magnetic anomaly is a local variation in the Earth's magnetic field. Such variations can result from changes in the magnetism of the underlying solid geology, superficial geology and other near-surface deposits including those altered and created by past human activities. Near-surface artefacts can also create magnetic anomalies.

The dimensions of magnetic anomalies mapped as representing potential buried archaeology do not represent the dimensions of any associated archaeology.

The analysis presented below identifies and characterises anomalies and anomaly groups that may relate to buried archaeology.

### 9.2 Analysis

Figure 2 shows the interpretation of the survey data and include the anomaly groups identified as possibly relating to archaeological deposits along with their identifying numbers. Table 1 is an extract of the detailed analysis of the survey data sourced from the attribute tables of the

GIS project provided in the project archive.

Figure 2 along with Table 1 comprises the analysis of the survey data. Figures 3 and 4 are plots of processed data as specified in Table 3. Figure 5 is a plot of minimally processed data as specified in Table 4. Figure 6 shows the location of the survey grid and grid data files.

## 10 Discussion

### 10.1 General points

#### Scope

Not all anomalies or anomaly groups identified in Table 1 are necessarily discussed below. All identified anomaly groups are recorded in the GIS project held in the survey archive.

#### Data collection

Data collection along the survey area edges was restricted as shown in the figures due to the presence of magnetic materials within and adjacent to boundaries. Strong magnetic responses mapped close to the boundaries are likely to relate to these materials except where otherwise indicated in Figure 2 and Table 1.

#### Anomaly characterisation

There are a number of anomaly groups that could be interpreted as relating to large postholes or pits although most will have natural origins. Anomalies of this sort are mapped as potential archaeology when they are associated with other significant anomaly groups or otherwise formed recognisable patterns as listed in Table 1.

Anomalies thought to relate to natural features and recent man-made objects such as manholes, water management equipment, drains, cables and other services are only mapped where they comprise significant magnetic responses across the dataset that need clarification.

Numerous dipole magnetic anomalies are present within the dataset. These are likely to represent recent ferrous objects. They are only mapped if they could influence the analysis of anomaly groups thought to have an archaeological origin.

### 10.2 Data relating to historic maps and other records

Magnetic anomaly groups **1** and **3** coincide with, and likely represent, field boundaries recorded on historic maps as shown in Table 1. Group 1 coincides with a boundary mapped by the Ordnance Survey between 1869 and at least 1935 and removed before 1949. Group 3 coincides with a field boundary mapped between 1933 and at least 1935 and removed before 1949. It also approximately coincides with a field boundary mapped between 1869 and 1872: the group may represent remnants of both but the latter boundary is more likely to dominate the magnetic response.

Groups **4** and **5** represent ferrous material and coincide with a pavilion mapped between 1933 and 1971. The pavilion was expanded into a group of buildings in 1971 which were all removed before 1983. It is possible that this ferrous material is associated with the former pavilion.

### 10.3 Data with no previous archaeological provenance

Anomaly group **2** may represent a disrupted linear archaeological deposit such as a former ditch, though more likely a relatively recent service trench.

### 10.4 Data pertaining to recent deposition or ground disturbance.

Magnetic anomaly group **312** has an unusual pattern which may indicate a grouping of ferrous material of unknown origin.

Groups **301, 302, 304, 305, 309, 310** and **313 to 315** are most likely to represent deposits of ferrous material. The magnetic dipole associated with single ferrous items is lacking, however, which may indicate a relatively complex deposit of ferrous materials in terms of items and/or depth.

## 11 Conclusions

The differences in magnetic responses across the Survey Area were sufficient to be able to differentiate between anomalies representing possible buried archaeology and background magnetic responses.

Five magnetic anomaly groups were mapped as representing potential buried archaeology. Of these, two groups (1 and 3) coincide with, and likely represent, field boundaries recorded on historic maps. The third group (2) may represent a linear archaeological deposit such as a ditch, though more likely a relatively recent service trench. Two groups (4 and 5) represent ferrous material and coincide with a pavilion mapped between 1933 and 1983. It is possible that this ferrous material is associated with the former pavilion.

Seventeen anomaly groups representing relatively recently disturbed ground (groups 303, 307, 308 and 317), ferrous cables or pipes (306, 311 and 316) and possible ferrous deposits with unusual magnetic responses (301, 302, 304, 305, 309, and 312 to 315) were also mapped.

## 12 Disclaimer

The description and discussion of the results presented in this report are the authors', based on their interpretation of the survey data. Every effort has been made to provide accurate descriptions and interpretations of the geophysical data set. The nature of archaeological geophysical surveying is such that interpretations based on geophysical data, while informative, can only be provisional. Geophysical surveys are a cost-effective early step in the multi-phase process that is archaeology. The programme of archaeological work of which this survey is part may also be informed by other archaeological work and analysis. It must be presumed that more archaeological features will be found than those specified in this report.

## 13 Copyright

Substrata Ltd will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79). This report contains material that is non-Substrata Limited copyright or the intellectual property of third parties. Such material is labelled with the appropriate copyright and is non-transferrable by Substrata Ltd.

## 14 Archive

### 14.1 Online Access to the Index of archaeological investigationS (OASIS)

OASIS ID: substrat1-317414

The OASIS entry has been completed and the boundary file and report uploaded with six months delay in publication.

### 14.2 Substrata Limited archive

A full archive of this survey will be held by Substrata Limited on cloud and local hard drive storage as specified in Appendix 3.

### 14.3 Archaeological Data Service (ADS)

Depending on local authority policy, an archive may be deposited with the ADS as specified in Appendix 3.

### 14.4 Historic Environment Record (HER)

Subject to any contractual requirements on confidentiality, a PDF or printed copy of the report will be submitted to the appropriate HER within six months of completion.

## 15 Acknowledgements

Substrata would like to thank Gavin Kinsley, Principal - Archaeology & Heritage, SLR Consulting Limited, for commissioning us to complete this survey.

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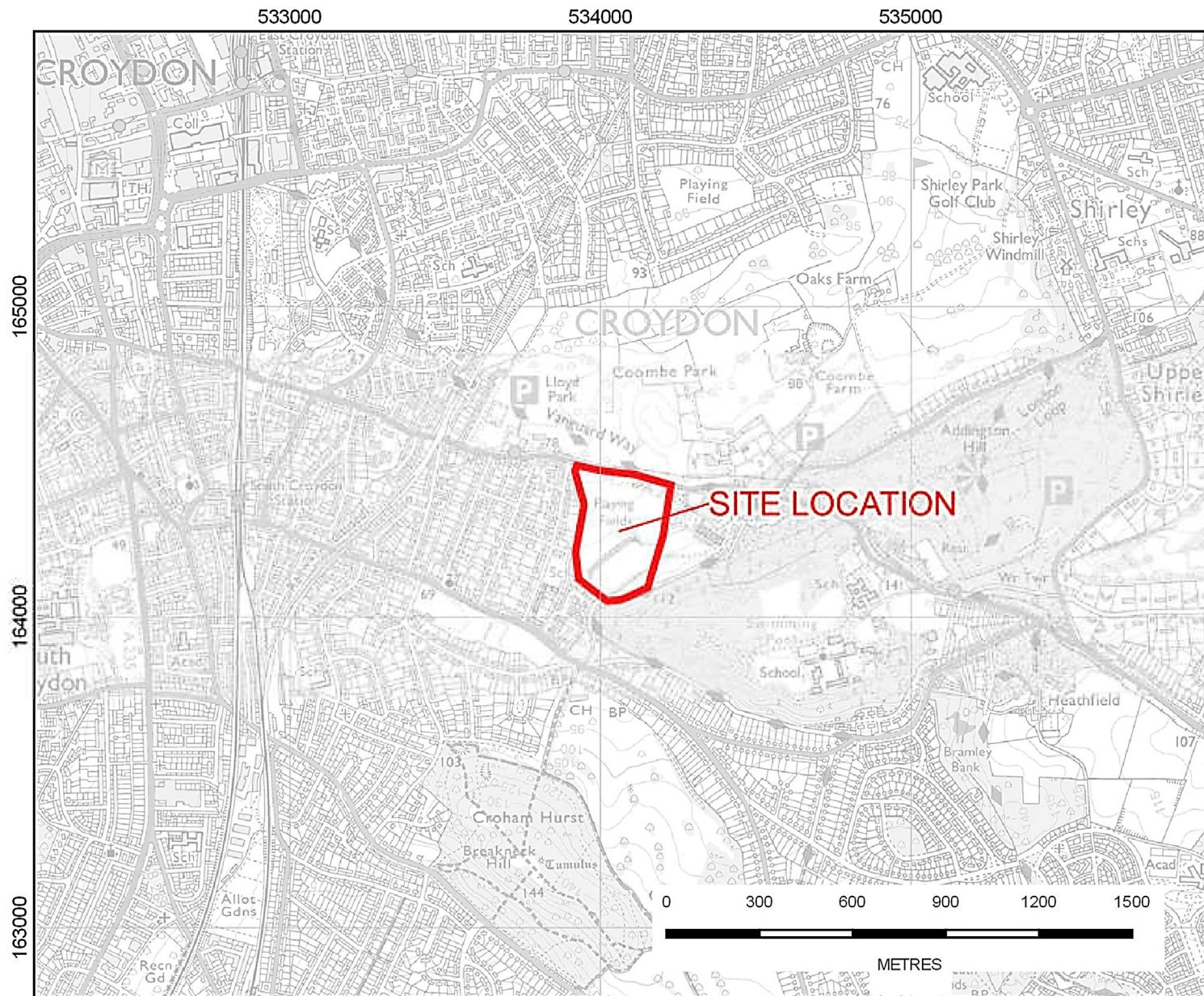


## Appendix 1     Figures

### General Guidance

The anomalies represented in the survey plots provided in this appendix are magnetic anomalies. The apparent size of such anomalies and anomaly patterns are unlikely to correspond exactly with the dimensions of any associated archaeological features .

A rough rule for interpreting magnetic anomalies is that the width of an anomaly at half its maximum reading is equal to the width of the buried feature, or its depth if this is greater (Clark, 2000: 83). Caution must be applied when using this rule as it depends on the anomalies being clearly identifiable and distinct from adjacent anomalies. In northern latitudes the position of the maximum of a magnetic anomaly will be displaced slightly to the south of any associated physical feature.

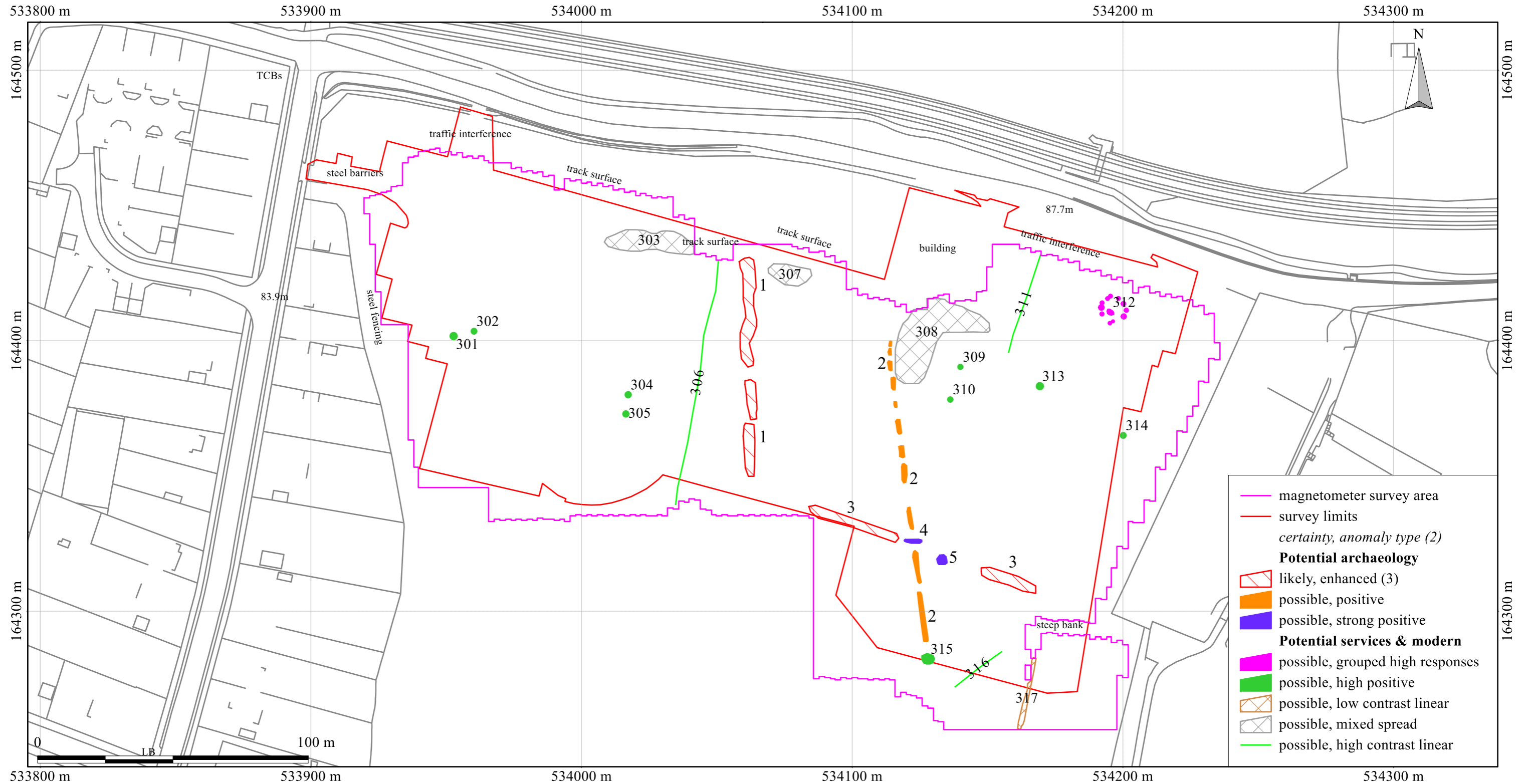


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An archaeological magnetometer survey  
 Coombe Lodge Playing Fields, Croydon  
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Figure 1: location map (after SLR 2018)

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British Grid  
 centre X: 534066.94 m, centre Y: 164380.11 m

Notes: Scale: 1:1400 @ A3. Spatial Units: Meter. Do not scale off this drawing

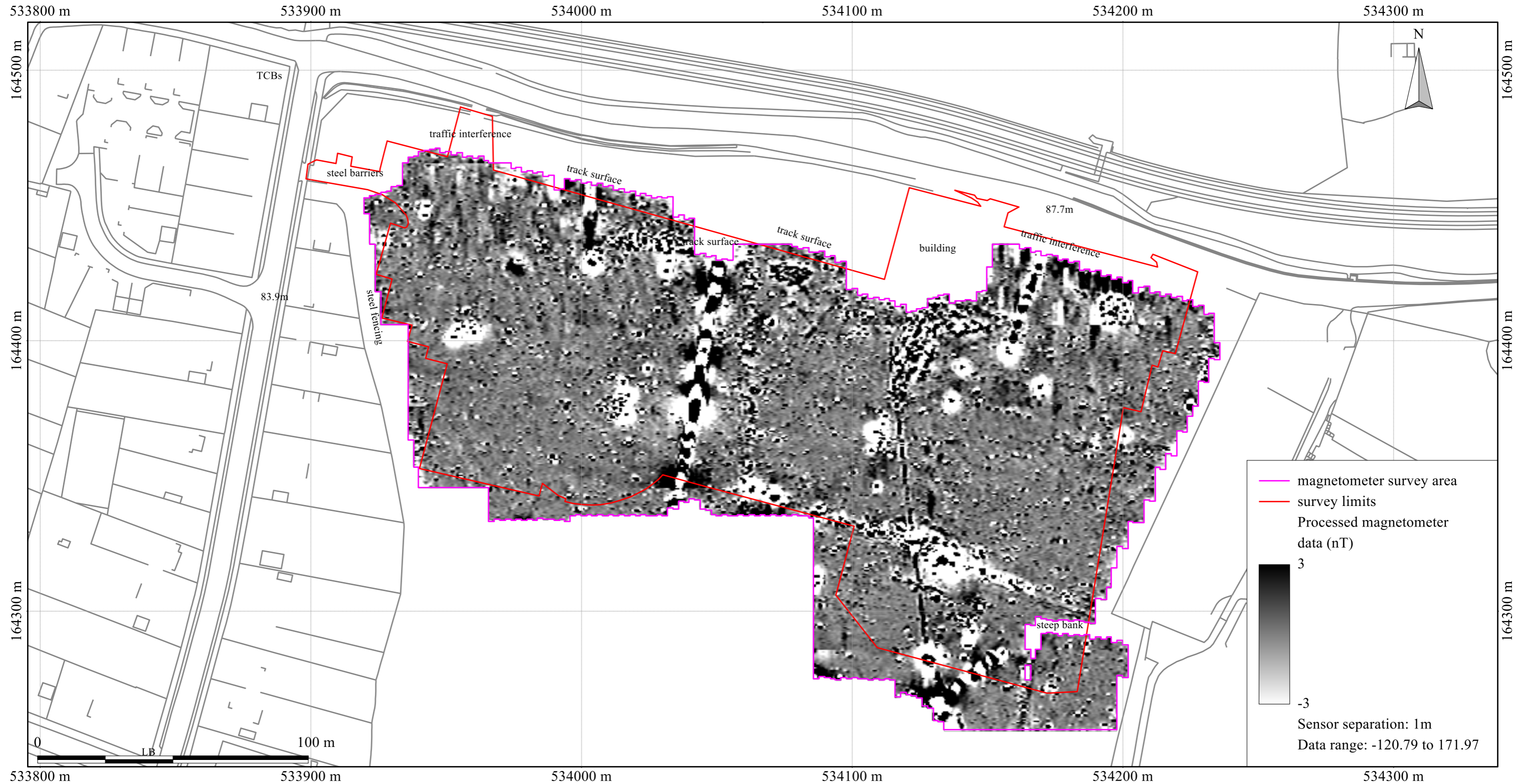
1. All interpretations are provisional and represent potential archaeological deposits.
2. 'Anomaly type' is a description of the magnetic anomaly. See the report text or GIS for an archaeological characterisation.
3. Anomalies designated "likely archaeology" have supporting evidence e.g. historical maps and or visible earthworks.
4. Not all instances are mapped.
5. Anomalies likely to represent recent deposits or ground disturbance, or geological and other natural deposits are not mapped unless relevant to potential buried archaeology.

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Figure 2: survey interpretation

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British Grid  
 centre X: 534066.94 m, centre Y: 164380.11 m

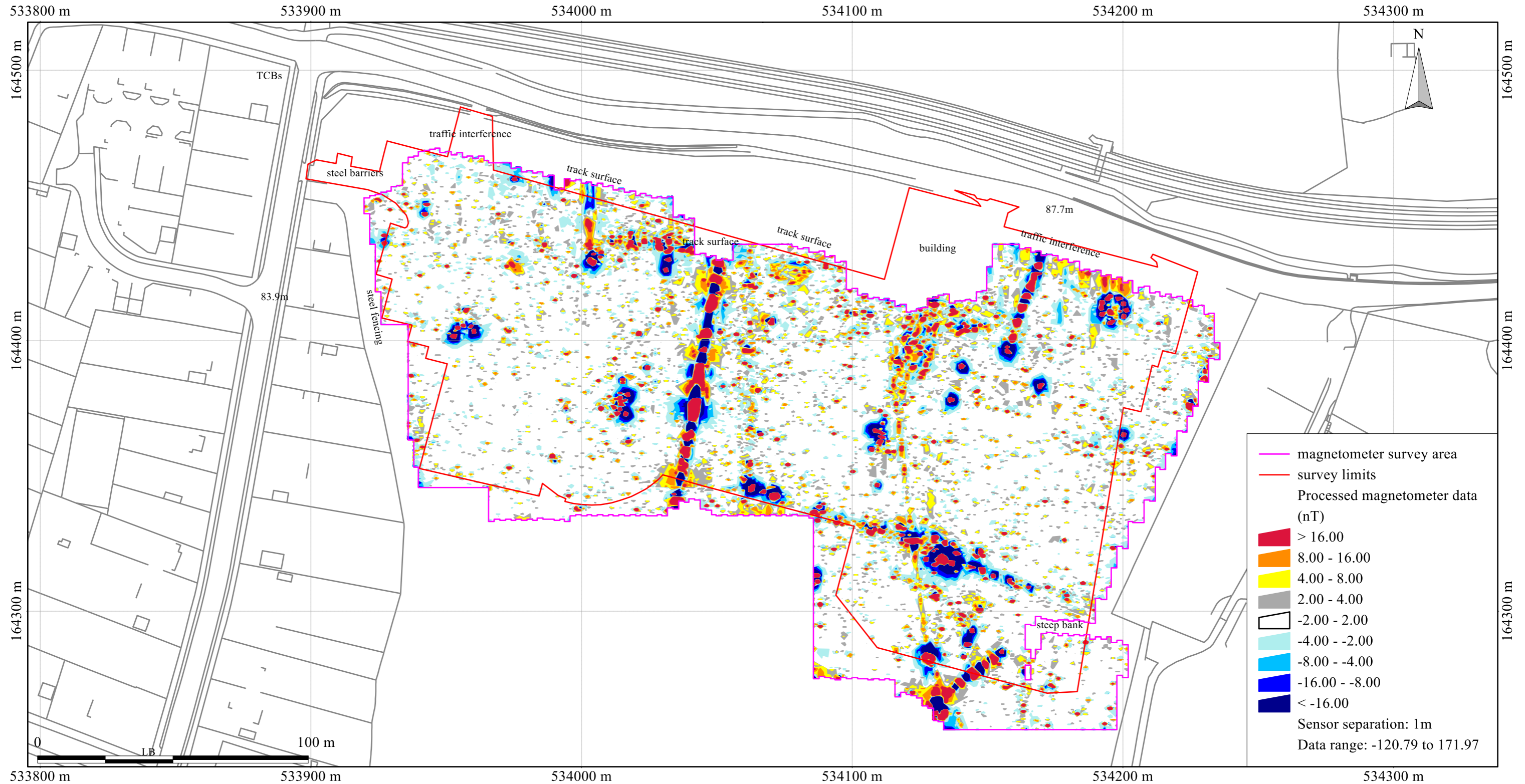
Scale: 1:1400 @ A3. Spatial Units: Meter. Do not scale off this drawing

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Figure 3: shade plot of processed data

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Figure 4: contour plot of processed data

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British Grid  
 centre X: 534066.94 m, centre Y: 164380.11 m

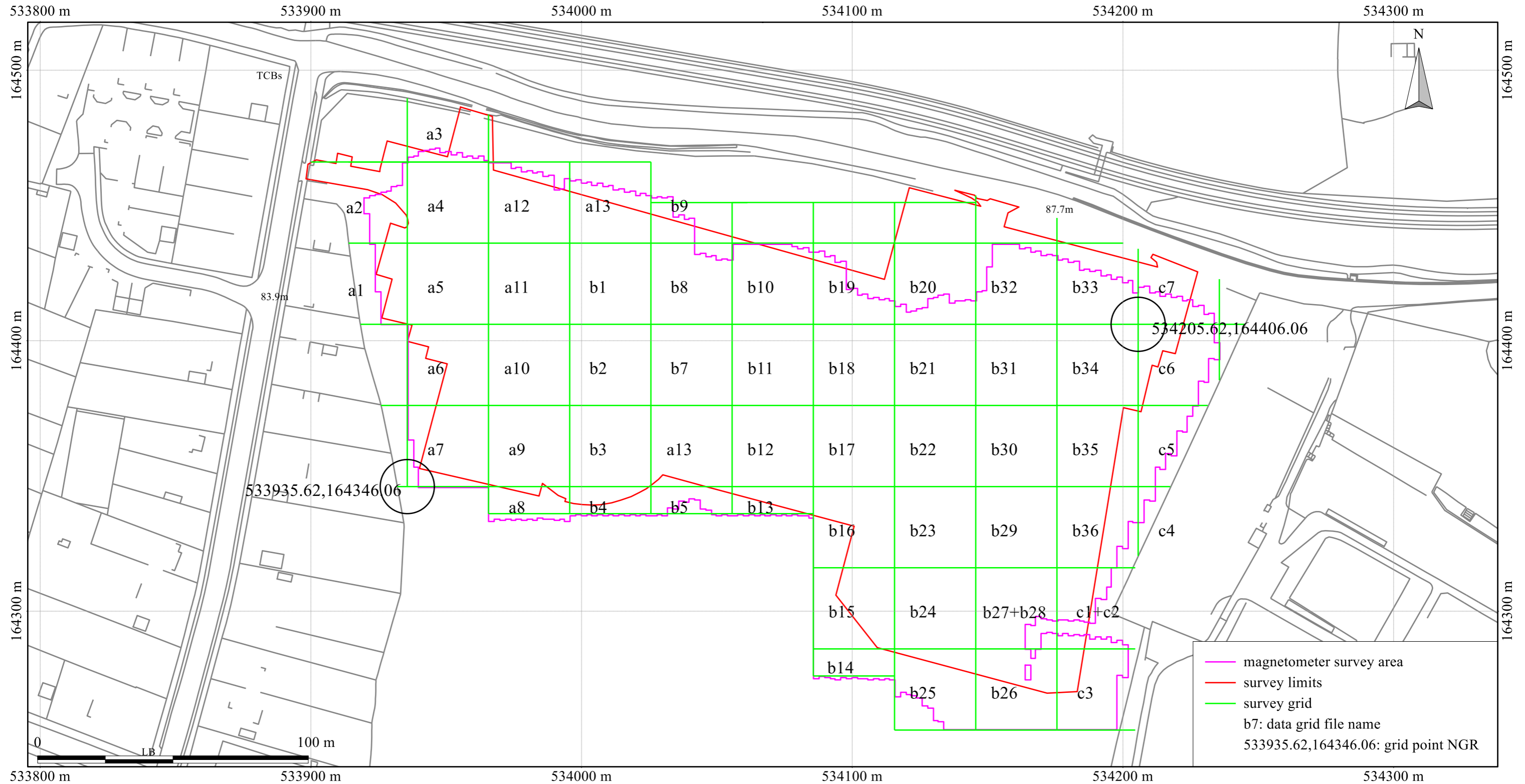
Scale: 1:1400 @ A3. Spatial Units: Meter. Do not scale off this drawing

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Figure 5: shade plot minimally processed data

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— magnetometer survey area  
 — survey limits  
 — survey grid  
 b7: data grid file name  
 533935.62,164346.06: grid point NGR

British Grid  
 centre X: 534066.94 m, centre Y: 164380.11 m

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Scale: 1:1400 @ A3. Spatial Units: Meter. Do not scale off this drawing

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Figure 6: survey grid plan and location

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## Appendix 2 Tables



Site: An archaeological magnetometer survey  
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| anomaly group | anomaly characterisation certainty & class | anomaly form     | additional archaeological characterisation                    | comments  | supporting evidence   |
|---------------|--|------------------|---|---|---|
| 1             | likely, enhanced                           | disrupted linear | field boundary  | anomaly group coincides with a field boundary mapped between 1869 and 1935 (removed before 1949)  | Ordnance Survey 1869 1:2500 to 1949-611:10560                                     |
| 2             | possible, positive                         | disrupted linear | service trench or buried archaeology                          | anomaly group probably represents a service trench but archaeology cannot be entirely ruled out   |   |
| 3             | likely, enhanced                           | disrupted linear | field boundary  | anomaly group coincides with a field boundary mapped between 1933 and 1935 (removed before 1949) and approximately coincides with a field boundary mapped between 1869 and 1872; the group may represent remnants of both but the later boundary is more likely to dominate the magnetic response | Ordnance Survey 1869 1:2500 to 1872 1:10560 and 1933-8 1:10560 to 1949-61 1:10560 |
| 4             | possible, strong positive                  |                  | ferrous material - possibly associated with a former pavilion | anomaly group represents ferrous material and coincides with a pavilion mapped between 1933 and 1971; the pavilion was expanded into a group of buildings in 1971 which were all removed before 1983  | Ordnance Survey 1933-8 1:10560 to 1983-93 1:10,000                                |
| 5             | possible, strong positive                  |                  | ferrous material - possibly associated with a former pavilion | anomaly group represents ferrous material and coincides with a pavilion mapped between 1933 and 1971; the pavilion was expanded into a group of buildings in 1971 which were all removed before 1983  | Ordnance Survey 1933-8 1:10560 to 1983-93 1:10,000                                |
| 301           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 302           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 303           | possible, mixed spread                     |                  | rubble and or mixed fill                                      |   |   |
| 304           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 305           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 306           | possible, high contrast linear             |                  | ferrous cable or pipe   |   |   |
| 307           | possible, mixed spread                     |                  | rubble and or mixed fill                                      |   |   |
| 308           | possible, mixed spread                     |                  | rubble and or mixed fill                                      |   |   |
| 309           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 310           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form of the ferrous material represented  |   |
| 311           | possible, high contrast linear             |                  | ferrous cable or pipe   |   |   |
| 312           | possible, grouped high responses           |                  | uncertain: possibly ferrous deposit                           | anomaly group suggests a grouping of ferrous material; the pattern is unusual and the form and nature of the ferrous deposit is uncertain   |   |
| 313           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form and nature of the ferrous material represented   |   |
| 314           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form and nature of the ferrous material represented   |   |
| 315           | possible, high positive                    |                  | uncertain: possibly ferrous material                          | anomaly group may represent buried ferrous material but response is not a simple dipole and so there is a degree of uncertainty as to the form and nature of the ferrous material represented   |   |
| 316           | possible, high contrast linear             |                  | ferrous cable or pipe   |   |   |
| 317           | possible, low contrast linear              |                  | edge of recent man-made terrace                               |   |   |

Table 1: data analysis

|  |   |
|--|---|
| <p><b>Grid</b><br/> <i>Method of Fixing:</i> DGPS set-out using pre-planned survey grids and Ordnance Survey coordinates.<br/> <i>Composition:</i> 30m by 30m grids<br/> <i>Recording:</i> Geo-referenced and recorded using digital map tiles.<br/> <i>DGPS used:</i> Spectra Precision PM5V2 GPS with external antenna and survey pole and DigiTerra Explorer 7 as the survey control program.</p> |   |
| <p><b>Equipment</b><br/> <i>Instrument:</i> Bartington Instruments grad601-2<br/> <i>Firmware:</i> version 6.1</p>   | <p><b>Data Capture</b><br/> <i>Sample Interval:</i> 0.25m<br/> <i>Traverse Interval:</i> 1 metre<br/> <i>Traverse Method:</i> zigzag<br/> <i>Traverse Orientation:</i> GN</p> |
| <p><b>Data Processing, Analysis and Presentation Software</b><br/> IntelliCAD 8.4<br/> DW Consulting TerraSurveyor3<br/> Manifold System 8 GIS<br/> Microsoft Corp. Office 365: Excel, Publisher, Word<br/> Adobe Systems Inc Adobe Acrobat 9 Pro Extended</p>   |   |

Table 2: methodology information

|   |   |
|---|---|
| <p><b>Instrument</b><br/> Type: Bartington Grad-601 gradiometer<br/> Units: nT<br/> Direction of 1st Traverse: see below<br/> Collection Method: ZigZag<br/> Sensors: 2 @ 1.00 m spacing, each with 1m separation<br/> Dummy Value: 32702</p> |   |
| <p><b>Program</b><br/> Name: TerraSurveyor<br/> Version: 3.0.33.6</p>   |   |
| <p><b>Statistics</b><br/> Max: 171.97<br/> Min: -120.79<br/> Std Dev: 14.30<br/> Mean: -0.39<br/> Median: 0.00<br/> Surveyed Area: 3.78ha</p>   | <p><b>Processing</b><br/> 1 Base Layer<br/> 2 Clip at 1.00 SD<br/> 3 Clip at 4.00 SD<br/> 4 DeStripe Median Traverse: Grids: All<br/> 5 De Stagger: Grids: All By: 0 intervals, 50.00cm<br/> 6 x=y double interpolation imposed on input to GIS</p> |

Table 3: processed data metadata

|                            |  |
|----------------------------|--|
| <b>Instrument</b>          |  |
| Type:                      | Bartington Grad-601 gradiometer                    |
| Units:                     | nT   |
| Direction of 1st Traverse: | see below  |
| Collection Method:         | ZigZag   |
| Sensors:                   | 2 @ 1.00 m spacing, each with 1m separation        |
| Dummy Value:               | 32702  |
| <b>Program</b>             |  |
| Name:                      | TerraSurveyor                                      |
| Version:                   | 3.0.33.6   |
| <b>Statistics</b>          | <b>Processing</b>                                  |
| Max:                       | 3004.00  |
| Min:                       | -3002.90   |
| Std Dev:                   | 269.20   |
| Mean:                      | -3.50  |
| Median:                    | 0.00   |
| Surveyed Area:             | 3.79ha   |
|                            | 1 Base Layer                                       |
|                            | 2 DeStripe Median Sensors: Grids: All              |
|                            | 3 x=y double interpolation imposed on input to GIS |

Table 4: minimally processed data metadata

## Appendix 3 Project archive contents

### A3.1 Substrata Limited archive

A full archive of this survey will be held by Substrata Limited on cloud and local hard drive storage as follows:

|   |  |
|---|--|
| Report:   | Adobe PDF format                                       |
| Raw grid & composite files:   | DW Consulting TerraSurveyor 3 format<br>xyz files      |
| Final data processing composite files:<br>(excluding interpolation processes) | DW Consulting TerraSurveyor 3 format<br>xyz files      |
| GIS project:  | GIS project Manifold 8 .map format<br>ESRI shape files |
| AutoCAD version of the survey interpretation:<br>(if generated)               | AutoCAD DXF  |
| All project working files:  | various (Table 2)                                      |

### A3.2 Online Access to the Index of archaeological investigationS (OASIS)

|                                     |                  |
|-------------------------------------|------------------|
| Metadata:                           | online form      |
| Georeferenced survey boundary file: | ESRI shape file  |
| Report:                             | Adobe PDF format |

### A3.3 Archaeological Data Service

Depending on local authority policy, an archive may be deposited with the ADS as follows:

|                             |                                |
|-----------------------------|--------------------------------|
| Raw data composite file:    | xyz file                       |
| Processed data plot:        | rendered images in TIFF format |
| Survey grid plot:           | image in TIFF format           |
| Details of data processing: | image in TIFF format           |
| Interpretation plot:        | rendered images in TIFF format |
| Metadata:                   | Microsoft Excel format         |

### A3.4 Historic Environment Record (HER)

Subject to any contractual requirements on confidentiality, a PDF copy of the report will be submitted to the appropriate HER within 6 months of the completion of this report via the OASIS process or by other means, depending on the relevant HER process.