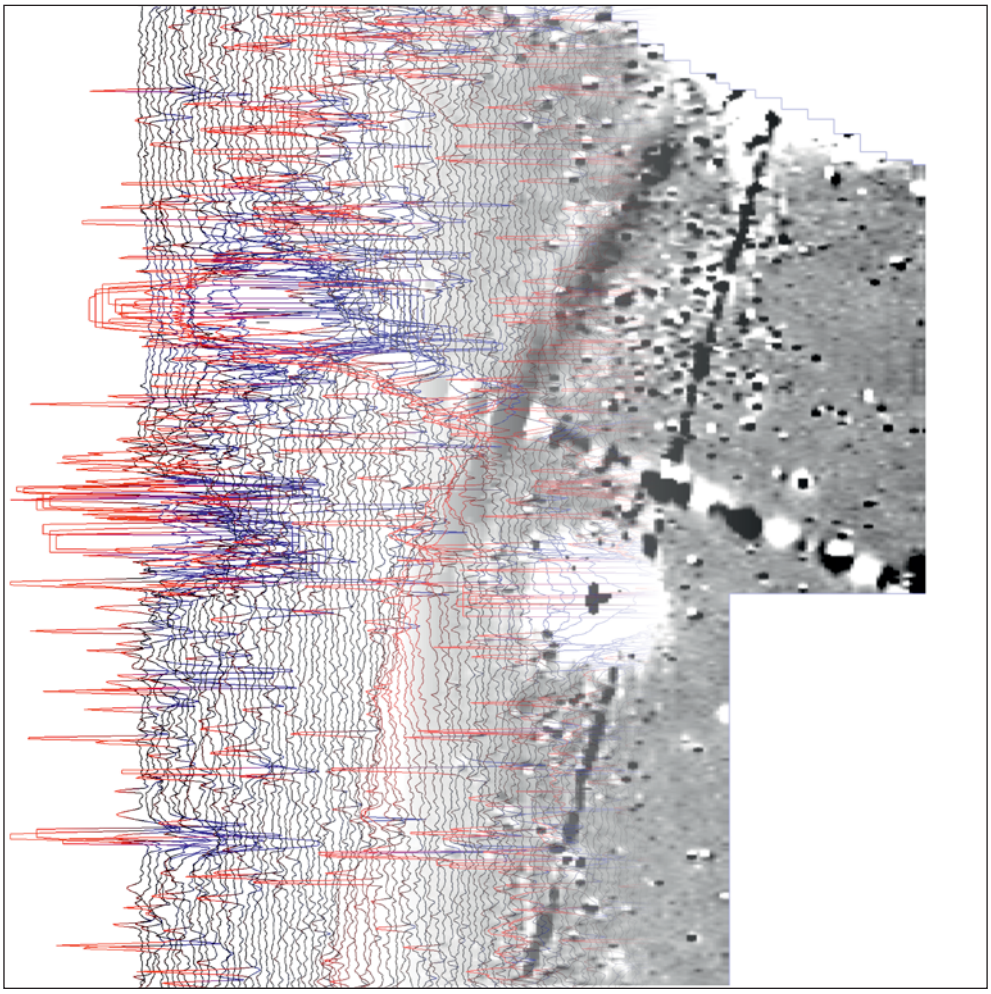
making sense of heritage

Land West of Rayleigh, Essex

Phase 2 Geophysical Survey (Areas E to J)



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April 2013

geoservices

Land West of Rayleigh, Essex
Phase 2 Geophysical Survey (Areas E to J)

Recorded Scanning and Detailed Gradiometer Survey Report

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Land West of Rayleigh, Essex
Phase 2 Geophysical Survey (Areas E to J)

Recorded Scanning and Detailed Gradiometer Survey Report

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Recorded Scanning and Detailed Gradiometer Survey Report

Summary

A recorded scanning and detailed gradiometer survey was conducted over land between London Road and Rawreth Lane, near Rayleigh, Essex. The project was commissioned by Countryside Properties (UK) Limited with the aim of establishing the presence and significance, or otherwise, of detectable archaeological features within the proposed development area. This information is intended to inform discussions on the nature and extent of any potential future development of the site and highlight any potential archaeological issues.

The site comprises several arable fields to the north of London Road, approximately 2.5km northwest of Rayleigh. The site spans a broad gently sloping valley formed by a tributary of the River Crouch. The scanning survey covered 32.9ha and the detailed gradiometer survey covered 7ha and has demonstrated the presence of anomalies of definite, probable and possible archaeological interest within the survey area, along with regions of increased magnetic response and one modern service.

Towards the northern extent of the survey area, a curvilinear ditch was identified, along with several probable former field divisions. Towards the centre of the survey area, linear trends appear to relate to a former field boundary. In the southern portion of the survey area, a sub-annular anomaly is consistent with a large pit or possible quarry. Three parallel linear anomalies towards the southern extent of the site are likely to relate to former field divisions or drainage channels. Similar linear anomalies were seen in the southwestern field. Elsewhere, numerous isolated pit-like anomalies and linear trends are visible, although their origins are largely unclear. Whilst many are of agricultural origins, some are of possible archaeological interest.

A modern service was identified near the northern extent of the site, oriented parallel with Rawreth Lane. Magnetic disturbance is evident in close proximity to this service, the farm buildings and electricity pylons. Numerous small-scale ferrous responses were seen throughout the dataset, which are presumed to be modern or agricultural in origin.

Land West of Rayleigh, Essex
Phase 2 Geophysical Survey (Areas E to J)

Recorded Scanning and Detailed Gradiometer Survey Report

Acknowledgements

The detailed gradiometer survey was commissioned by Terence O'Rourke on behalf of their client Countryside Properties (UK) Limited. The assistance of John Trehy is gratefully acknowledged in this regard.

The fieldwork was directed by Laura Andrews and assisted by Clara Dickinson, Jennifer Smith and Alistair Black. Laura Andrews and Clara Dickinson processed and interpreted the geophysical data and Ross Lefort wrote this report. The geophysical work was quality controlled by Ben Urmston. Illustrations were prepared by Linda Coleman. The project was managed on behalf of Wessex Archaeology by Caroline Budd.

Land West of Rayleigh, Essex
Phase 2 Geophysical Survey (Areas E to J)

Recorded Scanning and Detailed Gradiometer Survey Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Terence O'Rourke on behalf of their client Countryside Properties (UK) Limited to carry out a geophysical survey of land between London Road and Rawreth Lane, Rayleigh, Essex (**Figure 1**), hereafter "the Site" (centred on NGR 579000, 192500). The survey forms part of an ongoing programme of archaeological works being undertaken to inform decisions regarding potential future development at the Site, and follows previous geophysical survey and archaeological evaluation at the Site (WA 2012).

1.1.2 The aim of the geophysical survey was to establish the presence/absence, extent and character of detectable archaeological remains within the survey area.

1.1.3 This report presents a brief description of the methodology followed, the detailed survey results and the archaeological interpretation of the geophysical data.

1.2 The Site

1.2.1 The current survey area comprises three arable fields between London Road and Rawreth Lane, some 2.5km northwest of the centre of Rayleigh (**Figure 1**). A recorded scanning survey covering the total area of the Site (32.9ha) was undertaken followed by a detailed gradiometer survey in targeted regions of the site totalling 7ha.

1.2.2 The Site spans a gently sloping valley of a small tributary of the River Crouch; the watercourse is aligned roughly northwest to southeast and passes through the middle of the survey area. The highest point of the site lies towards the north with a height just over 20m above Ordnance Datum (aOD) and this slopes to below 10m aOD at the centre before rising to over 10m aOD in the south. The survey area lies 2.5km northwest of the centre of Rayleigh, with the extents of the survey area defined by London Road to the south, Rawreth Lane to the north and field boundaries to the west and east.

1.2.3 The bedrock geology on site is recorded as clay formation (clay, silt and sand) of the Palaeogene period. There are superficial deposits recorded running northwest-southeast through the middle of the Site including head and alluvial deposits (clay, silt, sand and gravel) that date to the Quaternary period. The soils underlying the far north and south of the Site are likely to be pelo-stagnogley soils of the 712c (Windsor) association and the soils running through the middle of the site are likely to be stagnogleyic argillic brown earths of the 572r (Ratsborough) association (SSEW 1983). Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

2 METHODOLOGY

2.1 Introduction

2.1.1 The detailed magnetometer survey was conducted using a Bartington Grad601-2 dual fluxgate gradiometer system. The survey was conducted in accordance with English Heritage guidelines (2008).

2.1.2 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team from 11th to 22nd March 2013. Field conditions at the time of the survey were variable, with snow slowing the progress of the scanning survey and wet conditions slowing the detailed survey. These issues did not have a significant impact on the quality of the data collected.

2.2 Method

2.2.1 Individual survey grid nodes were established at 30m x 30m intervals using a Leica Viva RTK GNSS system, which is precise to approximately 0.02m and therefore exceeds English Heritage recommendations (2008).

2.2.2 The magnetometer survey was conducted using a Bartington Grad601-2 fluxgate gradiometer instrument, which has a vertical separation of 1m between sensors. Detailed gradiometer survey data were collected at 0.25m intervals along transects spaced 1m apart. The recorded scanning survey differed in that transects were spaced 10m apart. The system used has an effective sensitivity of 0.03nT, in accordance with EH guidelines (2008). Detailed data were collected in the zigzag method.

2.2.3 Data from the survey was subject to minimal data correction processes. These comprise a zero mean traverse function (±5nT thresholds) applied to correct for any variation between the two Bartington sensors used, and a de-step function to account for variations in traverse position due to varying ground cover and topography. These two steps were applied to all survey areas, with no interpolation applied.

2.2.4 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

3 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

3.1 Introduction

3.1.1 The gradiometer survey has been successful in identifying anomalies of possible archaeological interest across the Site, together with a number of modern services. Results of the recorded scanning survey are presented as a series of greyscale plots at 1:2,500 (**Figures 2** and **3**). Results of the detailed survey are presented as a series of greyscale and XY plots, and archaeological interpretations, at a scale of 1:2,000 (**Figures 4** to **10**). The data are displayed at -2nT (white) to +3nT (black) for the greyscale image and ±25nT at 25nT per cm for the XY trace plots.

3.1.2 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous/burnt or fired objects, and magnetic trends. Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.

3.1.3 Numerous ferrous anomalies are visible throughout the detailed survey dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.

3.2 Recorded Scanning Survey Results and Interpretation

3.2.1 In the northern portion of the survey area (**Figure 2**), strong magnetic disturbance is seen in close proximity to the farm buildings and Rawreth Lane; strong responses associated with the extant electricity pylons are visible along the eastern extent of the survey area, with the existing farm track visible to the west of the pylons. A broad positive anomaly oriented approximately NE-SW at the northern extent of the survey extends southwards across the Site, and was considered to be of possible archaeological interest; Area E was positioned to investigate this anomaly. Areas F and G were located to evaluate a region of increased response and a linear trend respectively.

3.2.2 Within the southern portion of the Site (**Figure 3**), an apparent sub-circular anomaly lies north of centre with three clearly defined linear anomalies towards the southern extent of the field; whilst these latter anomalies were considered to be agricultural, it was considered possible that they were archaeological in origin. Strong magnetic disturbance can be seen adjacent to the southern and southeastern boundaries, and around the extant pylons. Area H has located to investigate regions of increased response to the south of the stream, with Area I extending N-S to cover the pit-like and linear anomalies. Area J targeted a number of anomalies in the southwesternmost field.

3.3 Detailed Gradiometer Survey Results and Interpretation

3.3.1 **Area E** was targeted over a broad curvilinear positive anomaly observed in the scanning data that was close to areas of increased response and smaller positive responses. The detailed survey showed that this curvilinear feature is likely to be archaeological and revealed several other features of probable archaeological origin.

3.3.2 The main feature of interest is a curvilinear anomaly that is present at **4051** to **4053**; it has diffuse edges and a variable width across the length of the feature measuring 8.5m at the widest point. The magnetic values also vary across its length with +5nT measured at the strongest points and values less than +1nT at the weakest points. The anomaly is aligned roughly NNE to SSW and is interpreted as archaeology. It is considered to represent a cut feature such as a ditch; the diffuse edges of the anomaly may indicate that the sides of this ditch could have a gentle slope.

3.3.3 There are two narrower positive anomalies either side of this ditch at **4055**, **4057** and **4058** that measure around 2m in width. They have differing magnetic values with weaker values of +3nT for **4055** and much stronger values of +6nT for **4057** and **4058**. The two ditches are near parallel and are both thought to represent relatively modern agricultural ditches and have been classed as probable archaeology to reflect this. Another short linear positive is present to the northeast of **4054**; it has similar values to **4055** and appears to link up to it so may be related.

3.3.4 There are a number of trends running through the data that may prove to be archaeological. Some of these such as the trend west of **4054** are aligned with field boundaries and are likely to be agricultural; other examples such as at **4056** and **4057** are set at varying alignments and these may prove to be archaeological.

3.3.5 Apart from a modern service running southeast from **4059** the remaining anomalies are either large ferrous anomalies (**4060**) or are small positive anomalies with typical magnetic values ranging from +2nT to +5nT. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution.

3.3.6 **Area F** was targeted over an area of increased magnetic response observed in the scanning data. The detailed survey revealed the areas of increased response related to ferrous anomalies although one small feature of archaeological interest was detected within this area.

3.3.7 The only anomaly of potential interest is a small sub-oval shaped positive anomaly at **4061**; it measures 3.3m in diameter with magnetic values in excess of +6nT. This anomaly is interpreted as archaeology and is considered to represent a cut feature such as a pit. As was mentioned above the increased magnetic response observed in the scanning data emerged as concentrations of ferrous responses (**4062**, **4063** and **4064**).

3.3.8 The remaining anomalies consist of ploughing trends aligned with modern field boundaries, trends of possible archaeological interest (west of **4062** and around **4064**) and small positive anomalies. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution.

3.3.9 **Area G** was targeted as a control block over an area that appeared to contain ferrous responses and faint trends. The detailed survey results revealed several trends and ferrous along with a few small anomalies of archaeological interest.

3.3.10 The anomalies of interest are sub-oval and sub-circular shaped positive anomalies of varying sizes. The anomaly of greatest interest is **4065**; it has magnetic values over +20nT and measures 4.7m in length. This anomaly is interpreted as archaeology and is considered to be a pit. North of this feature are two smaller pit-like anomalies at **4066**; the smaller of the two (around 1.3m in diameter) has values similar to **4065** whereas the larger anomaly (2.4m long) has magnetic values around +6nT. The largest positive anomaly at **4068** measures 6.3m in length but has weak values around +1.5nT at the strongest points. This feature has been interpreted as possible archaeology due to its weak magnetic values.

3.3.11 The remaining anomalies consist of trends and small positive anomalies. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution. The trends may represent archaeological features with two crossing trends at **4067** possibly representing faint shallow ditches and pit alignments; it is likely that **4067** indicates the line of a former boundary, given the orientation of the extant boundary immediately northwest of the survey area.

3.3.12 **Area H** was targeted as a control block over an area of increased magnetic response; the detailed survey results revealed no anomalies of definite or probable archaeological interest.

3.3.13 No anomalies of definite or probable archaeological interest were detected in this survey area. Two positive anomalies at **4069** and **4070** may prove to be archaeological. The remaining anomalies are a mix of ploughing trends, trends of possible archaeological significance (**4071**) and small positive anomalies. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution. The trend running northwest to southeast through the area at **4071** is aligned parallel to another at **4067** in **Area G**, and it is likely to be associated with a former field division or drainage.

3.3.14 **Area I** is the largest detailed survey block and it was targeted on a large positive anomaly in the northern section and some parallel linear anomalies and a second positive anomaly in the south. The detailed survey results revealed the large positive in the north and the linear anomalies in the south to be either definite or probable archaeology. The second positive anomaly observed in the south turned out to be an artefact from the data processing applied to the scanning data and as a result was not present in the detailed data.

3.3.15 A large positive anomaly with a negative shadow is present at **4072**; it has positive values (defined as archaeology) of +3nT and negative values (defined as increased magnetic response) of -1.5nT. The positive area is roughly C-shaped and measures 13.5m in length with the length of the surrounding sub-oval negative area measuring 21.8m in length. This feature has been interpreted as archaeology and is thought to represent a large cut feature such as a pit; it is large enough to be considered a possible quarry pit.

3.3.16 Further to the south, linear trends **4073** are poorly defined from the magnetic background. It is likely that they are associated with agricultural activity, and are possibly associated with former field divisions or drainage.

3.3.17 Three parallel linear ditches have been detected at **4074**, **4075** and **4076**. They measure around 1.6m in width and have magnetic values ranging between +4nT and +9nT with a negative shadow either side measuring around -2.5nT. These ditches are aligned roughly WNW-ESE and are considered to be drainage/boundary ditches relating to fairly recent agricultural activity; they have been interpreted as probable archaeology to reflect this.

3.3.18 The remaining anomalies are a mix of ploughing trends, trends of possible archaeological significance and small positive anomalies. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution.

3.3.19 **Area J** was targeted over an area of increased magnetic response and a few small positive anomalies suspected as archaeological features. The detailed survey revealed several linear and sub-oval shaped features of probable archaeological interest.

3.3.20 There is a linear feature running through the data at **4077** and **4078** at a similar alignment to the three observed in **Area I**, in particular **4076**. The anomaly is less coherent than the other three with a stronger positive area at **4077** with positive values around +5nT and a negative shadow around -1nT and a much weaker area at **4078** with magnetic values around +1nT. The linear appears to line up with **4076** and may serve a similar function. An area of increased magnetic response is present to the northwest of **4077**; this is considered to either be geological or represents a spread of ceramic building material (CBM).

3.3.21 There are several sub-oval to irregular shaped anomalies at **4079**, **4080** and **4081**; the strongest anomaly at **4079** has magnetic values around +10nT whereas **4080** and **4081** have values ranging from +3nT to +4nT. All three of these anomalies are considered to be cut features such as pits.

3.3.22 The remaining anomalies are a mix of ploughing trends, trends of possible archaeological significance and small positive anomalies. These small positive anomalies may represent small pits or postholes but have been termed possible archaeology as there is no clear patterning in their spatial distribution.

4 CONCLUSION

4.1.1 The detailed gradiometer survey has been successful in detecting anomalies of definite, probable and possible archaeological interest within the Site, in addition to regions of increased magnetic response and several modern services.

4.1.2 Several features of definite archaeological interest have been detected including the probable ditch at **4052**, small pits at **4061** and **4065** and a large pit at **4072** that may possibly relate to quarrying. A number of ditches and trends were also detected that are considered to relate to recent agricultural activity. The results suggest that this area may have always served as agricultural land that was managed from nearby farms. The results from the earlier phase (**Figure 10**) show that there is no obvious continuation of any of the features detected previously.

4.1.3 The remaining features detected relate to more recent use of this area with ploughing trends, spreads of magnetic CBM and metallic debris and at least one modern service detected.

4.1.4 The relative dimensions of the modern services identified by the gradiometer survey are indicative of the strength of their magnetic response, which is dependent upon the materials used in their construction and the backfill of the service trenches. The physical dimensions of the services indicated may therefore differ from their magnetic extents in plan; it is assumed that the centreline of services is coincident with the centreline of their anomalies, however. Similarly, it is difficult to estimate the depth of burial of the services through gradiometer survey.

4.1.5 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be encountered than have been identified through geophysical survey.

5 REFERENCES

English Heritage, 2008, *Geophysical Survey in Archaeological Field Evaluation. Research and Professional Service Guideline No 1*, 2nd edition.

Soil Survey of England and Wales, 1983, *Sheet 6, South East England*, Ordnance Survey, Southampton.

Wessex Archaeology, 2012, *Land West of Rayleigh, Essex: Archaeological Evaluation*. Unpublished report 86760.02

APPENDIX 1: SURVEY EQUIPMENT AND DATA PROCESSING

Survey Methods and Equipment

The magnetic data for this project was acquired using a Bartington 601-2 dual magnetic gradiometer system. This instrument has two sensor assemblies fixed horizontally 1m apart allowing two traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 1m separation, and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of 0.03nT over a ±100nT range, and measurements from each sensor are logged at intervals of 0.25m. All of the data are stored on an integrated data logger for subsequent post-processing and analysis.

Wessex Archaeology undertakes two types of magnetic surveys: scanning and detail. Both types depend upon the establishment of an accurate 20m or 30m site grid, which is achieved using a Leica Viva RTK GNSS instrument and then extended using tapes. The Leica Viva system receives corrections from a network of reference stations operated by the Ordnance Survey and Leica Geosystems, allowing positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by English Heritage (2008) for geophysical surveys.

Scanning surveys consist of recording data at 0.25m intervals along transects spaced 10m apart, acquiring a minimum of 80 data points per transect. Due to the relatively coarse transect interval, scanning surveys should only be expected to detect extended regions of archaeological anomalies, when there is a greater likelihood of distinguishing such responses from the background magnetic field.

The detailed surveys consist of 20m x 20m or 30m x 30m grids, and data are collected at 0.25m intervals along traverses spaced 1m apart. These strategies give 1600 or 3600 measurements per 20m or 30m grid respectively, and are the recommended methodologies for archaeological surveys of this type (EH, 2008).

Data may be collected with a higher sample density where complex archaeological anomalies are encountered, to aid the detection and characterisation of small and ephemeral features. Data may be collected at up to 0.125m intervals along traverses spaced up to 0.25m apart, resulting in a maximum of 28800 readings per 30m grid, exceeding that recommended by English Heritage (2008) for characterisation surveys.

Post-Processing

The magnetic data collected during the detail survey are downloaded from the Bartington system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

As the scanning data are not as closely distributed as with detailed survey, they are georeferenced using the GPS information and interpolated to highlight similar anomalies in adjacent transects. Directional trends may be removed before interpolation to produce more easily understood images.

Typical data and image processing steps may include:

- Destripe – Applying a zero mean traverse in order to remove differences caused by directional effects inherent in the magnetometer;
- Destagger – Shifting each traverse longitudinally by a number of readings. This corrects for operator errors and is used to enhance linear features;
- Despike – Filtering isolated data points that exceed the mean by a specified amount to reduce the appearance of dominant anomalous readings (generally only used for earth resistance data)

Typical displays of the data used during processing and analysis:

- XY Plot – Presents the data as a trace or graph line for each traverse. Each traverse is displaced down the image to produce a stacked profile effect. This type of image is useful as it shows the full range of individual anomalies.
- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.

APPENDIX 2: GEOPHYSICAL INTERPRETATION

The interpretation methodology used by Wessex Archaeology separates the anomalies into two main categories: archaeological and unidentified responses.

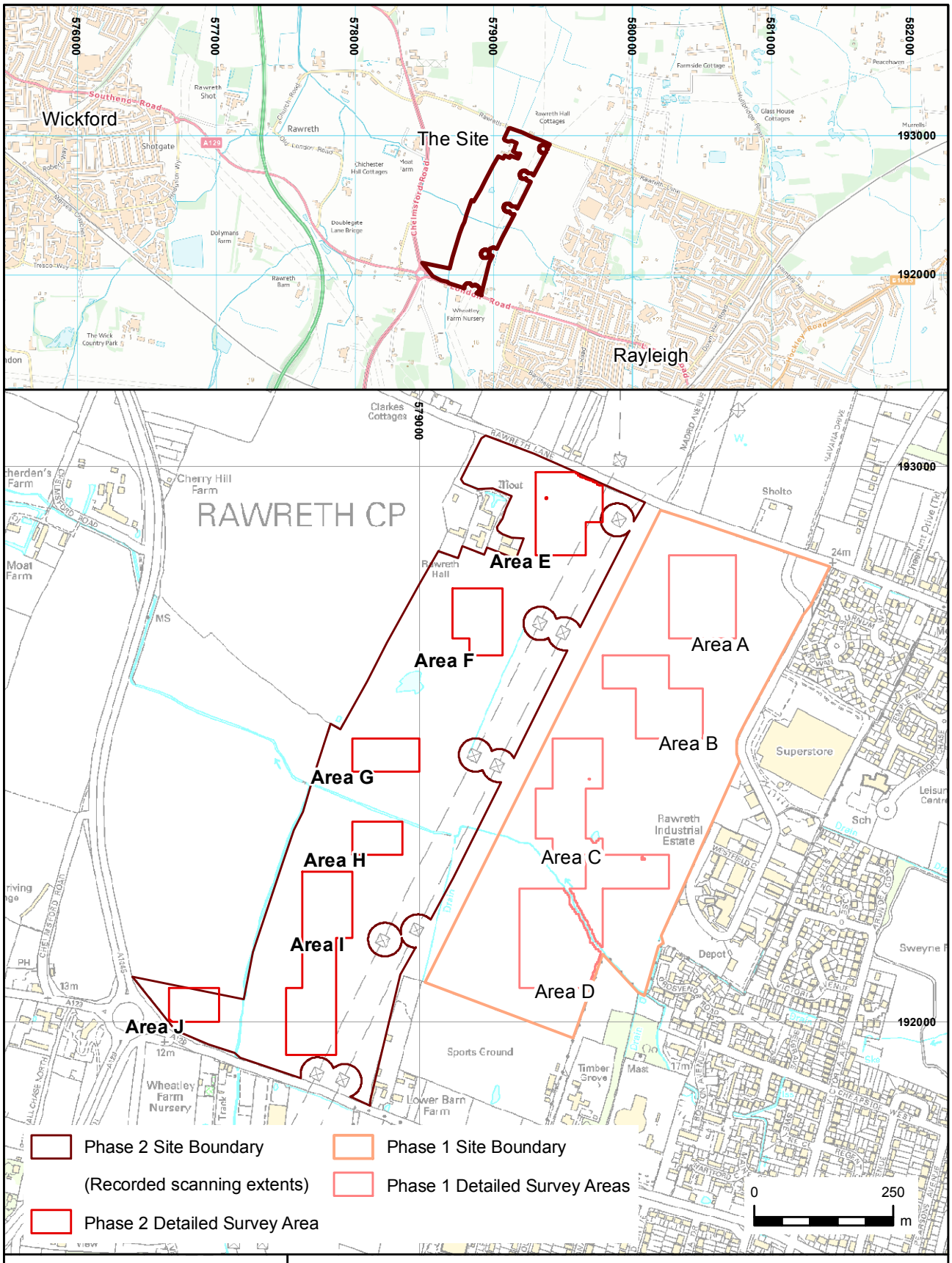
The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Probable archaeology – used for features which give a clear response but which form incomplete patterns.
- Possible archaeology – used for features which give a response but which form no discernible pattern or trend.

The unidentified category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.

Finally, services such as water pipes are marked where they have been identified.



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Site location and survey extents (Site extents for recorded scanning and detail survey extents) Figure 1

Phase 2 Site Boundary

(Recorded scanning extents)

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Results of recorded scanning survey (north)

Figure 2

578500

579000

192500

192000

+3nT

-2nT

0

200

m

Phase 2 Site Boundary

(Recorded scanning extents)

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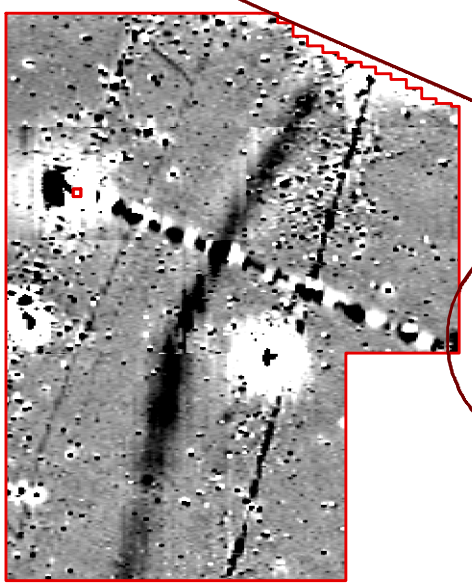
Results of recorded scanning survey (south)

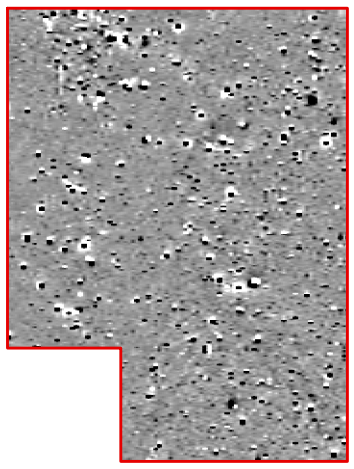
Figure 3

579000

193000

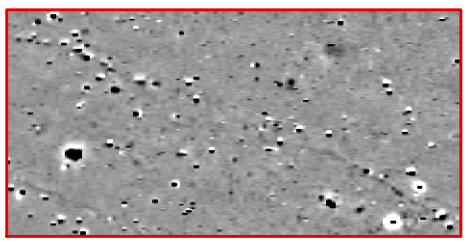


Area E

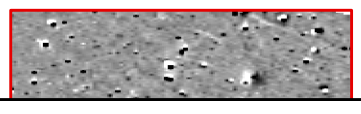


Area F

192500



Area G



+3nT

-2nT

0 100

m

Phase 2 Site Boundary

(Recorded scanning extents)

Phase 2 Detailed Survey Area

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Areas E, F & G: detailed gradiometer survey greyscales

Figure 4

579000

193000

192500

Area E

Area F

Area G

+25nT

-25nT

0 100

m

Phase 2 Site Boundary

(Recorded scanning extents)

Phase 2 Detailed Survey Area

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Areas E, F & G: detailed gradiometer survey XY traces

Figure 5

579000

193000

192500

4054
4051
4057
4059
4055
4052
4060
4056
4053
4058

Area E

4062
4061
4063
4064

Area F

4068
4066
4067
4065

Area G

4069

Phase 2 Site Boundary
Phase 2 Detailed Survey Area
Modern Service
Archaeology
Probable Archaeology
Possible Archaeology
Ferrous
Increased Magnetic Response
Ploughing
Trend

0 100
m

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Areas E, F & G: detailed gradiometer survey interpretation

Figure 6

578500

192000

Area H

Area I

Area J

+3nT

-2nT

0 100

m

Phase 2 Site Boundary

(Recorded scanning extents)

Phase 2 Detailed Survey Area

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Areas H, I & J: detailed gradiometer survey greyscales

Figure 7

578500

Area H

Area I

Area J

192000

+25nT

-25nT

0 100 m

Phase 2 Site Boundary

(Recorded scanning extents)

Phase 2 Detailed Survey Area

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Areas H, I & J: detailed gradiometer survey XY traces

Figure 8

578500

192000

4069

4070

4071

Area H

4072

4073

Area I

4074

4075

4076

4079

4077

4078

4080

4081

Area J

Phase 2 Site Boundary

Phase 2 Detailed Survey Area

Modern Service

Archaeology

Probable Archaeology

Possible Archaeology

Ferrous

Increased Magnetic Response

Ploughing

Trend

0 100

m

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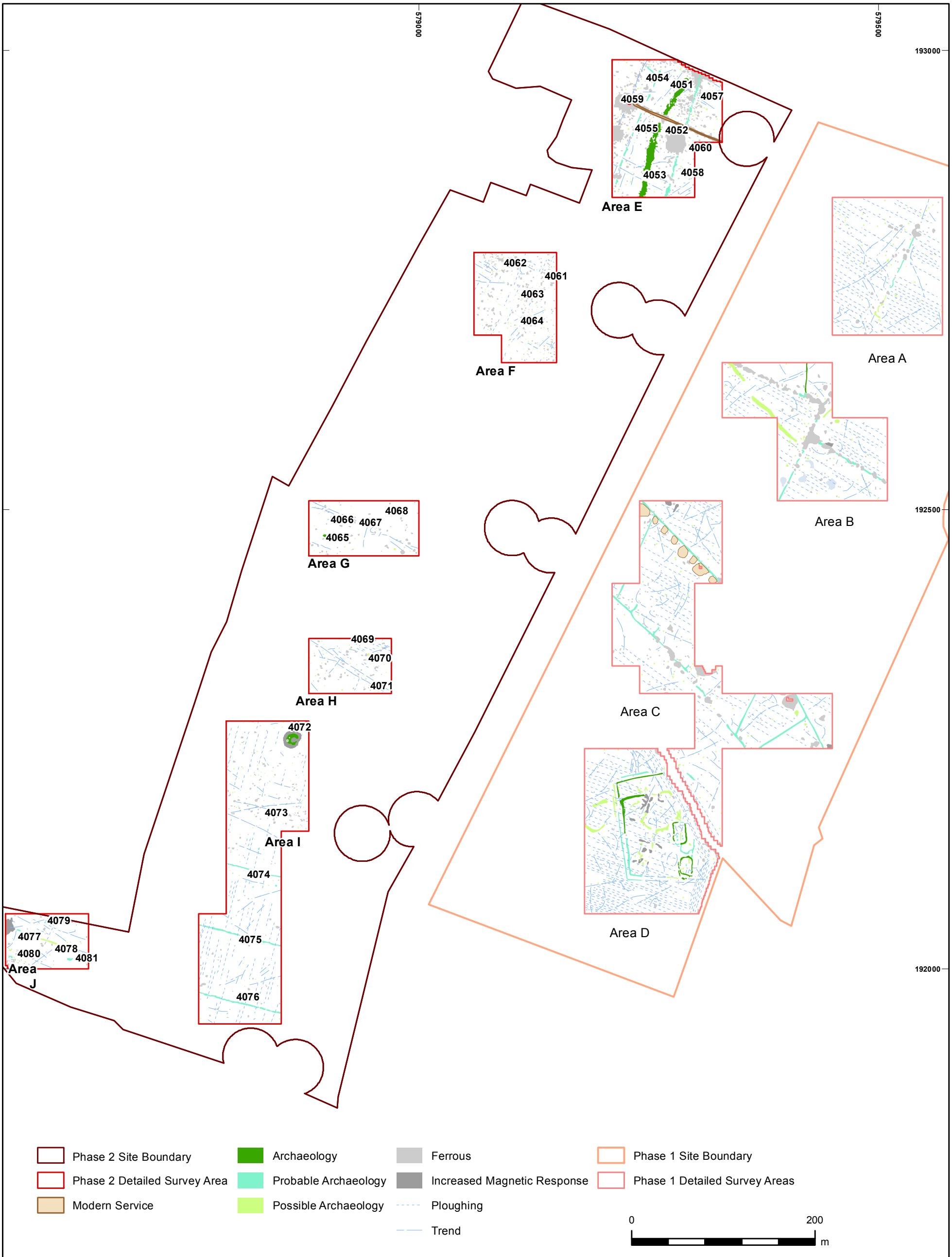
Areas H, I & J: detailed gradiometer survey interpretation

Figure 9



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Phase 2 detailed gradiometer survey interpretation with Phase 1 to the east

Figure 10

wessex archaeology

salisbury rochester sheffield edinburgh

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