GEOPHYSICAL SURVEY REPORT

Two Village Bypass, Sizewell, Suffolk

Client

Cotswold Archaeology

For

EDF Energy

Survey Report

14282B V3

Date

March 2020

Survey Report 14282B V2: Two Village Bypass, Sizewell, Suffolk

Survey dates	12 - 13 February 2019 4 - 7 March 2019 7 - 8 May 2019 9 - 12 December 2019 16 -19 March 2020
Field co-ordinators	[redacted]
Field Team	[redacted]
Report Date	24 March 2020
CAD Illustrations	[redacted]
Report Authors	[redacted]
Project Managers	[redacted]
Report approved	[redacted]

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2. SURVEY TECHNIQUE

Detailed magnetic survey (magnetometry) was chosen as the most efficient and effective method of locating the type of archaeological anomalies which might be expected at this site.

Bartington Grad 601-2 Traverse Interval 1.0m Sample Interval 0.25m

3 SUMMARY OF RESULTS

3.1 A magnetic survey, in advance of a proposed bypass to the south of Farnham, Suffolk, covered over 56ha and was carried out in several phases. The survey has recorded anomalies of possible archaeological interest which includes field systems, possible enclosures and a number of ditch and pit like responses; some of these may be associated with recorded features within the HER. Several uncertain responses have also been detected, some of which are likely to be due to modern processes; however, the regular anomaly in Area 9 could be of archaeological origin. Anomalies due to modern agricultural practices are visible and the locations of several service pipes have been marked. Natural responses associated with varying local geology is also visible in the data.

4 INTRODUCTION

4.1 **SUMO Geophysics Ltd** were commissioned to undertake a geophysical survey of an area outlined for road improvements. This survey forms part of an archaeological investigation being undertaken by **Cotswold Archaeology** on behalf of **EDF Energy**.

4.2 Site details

This report comprises the results from 14502A and 14502B Two Village Bypass, Sizewell, Suffolk and an additional 30ha of survey that has been carried out subsequently (SOR14292, SOR14502 and SOR15113).

NGR / Postcode	Easterly extent: TM370 604 / IP17 1JX Westerly extent: TM353 595 / IP17 1LF	
Location	The site is located 3.5km south of Saxmundham and 6km north-east of Wickham Market. The proposed road corridor starts at Friday Street, extends south-westwards, south of Farnham, and terminates at Stratford St Andrew.	
HER	Suffolk	
HER Code	FNM030, SSA 027	
OASIS Ref.	sumogeop1-342879	
District	East Suffolk	
Parishes	Farnham Stratford St. Andrew	
Topography	Flat	
Current Land Use	Farmland	
Geology (BGS 2020)	Bedrock:	Crag group - sand. Chillesford church sand member - sand. Crag Formation - sand
	Superficial:	Lowestoft formation - sand and gravel. Lowestoft formation - diamicton Alluvium - clay, silt, sand and gravel
Soils (CU 2020)	Soilscape 8: Slightly acid loamy and clayey soils with impeded drainage. Soilscape 10: Freely draining slightly acid sandy soils. Soilscape 27: Fen peat soils	
Archaeology (Wood [E&IS] 2018)	Within the study area surrounding landscape lies:	
	MSF13451	Widespread scatter of worked and burnt flint over an area c 200 x 100 m.
	MSF13452	Widespread scatter of worked and burnt flint over an area c 200 x 80 m.
	MSF11207	Roman artefact scatter of pottery and metalwork.

MSF13435	Medieval scatter.
MSF13453	Widespread scatter of worked and heavily burnt flints over an area c 180 x 120m.
MSF13455	Widespread lithic scatter over c 260 x 160m.
MSF25883	Crop marks showing a possible old field system.
MSF33814	Prehistoric and Saxon/medieval field systems at Land off Hill Farm.
MSF11779	Blade end of socketed axe.
MSF12793	Two gold angels of Henry VIII found 8m apart. (PostMed).
MSF19452	Ancient Woodlands.
MSF15049	Small area with cropmarks, including probable field boundaries, on different alignments, and a possible causewayed ring ditch.
391335	3 Neolithic sherds found.
391336	AS Whetstone found.
ESF23208	Two phases of field systems dating from the Bronze
ESF25706	Age and Iron Age; including boundary ditches and possible causewayed ring ditch.
Survey Methods	Magnetometer survey (fluxgate gradiometer)
Study Area	56 ha

4.3 Aims and Objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

5 RESULTS

The survey has been divided into 23 survey areas (Areas 1-23) and specific anomalies have been given numerical labels [1] [2] which appear in the text below, as well as on the Interpretation Figure(s).

5.1 *Possible Archaeology*

5.1.1 A number of discrete anomalies and linear trends [1] have been recorded in Area 2 which correspond with observations made in the DBA (MSF 25883); anomalies in the east of Area 2 appear to form part of a field system. It is difficult to give a precise interpretation for anomalies found in the west of Area 2 as background noise (likely to be modern or natural in origin) has partially masked the data.

5.1.2 A potential, partial enclosure [2] has been detected in the west of Area 3 and may be associated with some of the possible archaeological responses recorded in Area 2 (see 5.1.1). An area of increased magnetic response has also been detected within the confines of the two ditches which could be indicative of localised activity, i.e. settlement activity. Hence, these responses have been assigned to the category of *Possible Archaeology*.

5.1.3 Several strong and well-defined anomalies [3] have been recorded in Areas 17 and 18 which are ditch and pit like in from. These responses are in close proximity to archaeological features that have been excavated during trial trenches, which included ditches dating to the Bronze and Iron Ages (ESF23208 & ESF25706). It is possible that the responses detected in the survey are associated as they appear morphologically similar. Therefore, the anomalies have been categorised as *Possible Archaeology*.

5.2 ***Uncertain***

5.2.1 Several linear, discrete anomalies and trends across the survey areas have been classified as *Uncertain.* Linear and curvilinear responses could be archaeological, but they are more likely to be due to agricultural effects or a consequence of the natural soils / geology. Isolated responses can be particularly difficult to interpret; although some may appear pit-like in form, they could be natural pockets of magnetic soil or even deeply buried ferrous objects, as these can also result in a similar signature.

5.2.2 A number of discrete and linear anomalies [4] have been recorded in Area 9. These responses are located within a band of natural alluvium (see 5.5.3) and share a similar magnetic signature; however, the anomalies appear to form a rectilinear enclosure and are regular in form. This has led to the responses being categorised as *Uncertain*.

5.3 ***Former Field Boundary / Trackway***

5.3.1 Anomalies in Area 23 correspond to the line of a trackway used for car boot sales which take place on the site.

5.3.2 A number of linear responses visible in the magnetic data in Areas 9, 10, 13 and 22 correlate to the locations of former field boundaries shown on historic mapping. Two linear anomalies have been recorded in Area 12, though these are not recorded on historic mapping as field boundaries. There magnetic signature is not too dissimilar to the other recorded field boundaries; hence, they have been categorised as conjectural field boundaries.

5.4 ***Agricultural – Ploughing / Land Drains***

5.4.1 Numerous magnetically weak closely spaced parallel linear responses are due to relatively recent ploughing. Headlands or tractor lines adjacent to field edges are visible throughout the dataset.

5.4.2 Several linear responses recorded in Areas 16 and 17 are due to land drains.

5.5 ***Natural / Geological / Pedological***

5.5.1 A zone of variable and ill-defined anomalies in the south-west of Area 20 has been assigned to the category *Natural* as it is characteristic of responses caused by increased levels of geological or pedological background variation. There are several ponds in the vicinity, but none are shown on historic OS mapping in this location; old sand pits are depicted c.100m east of Area 2 on the 1883 edition OS map and these could be an alternative explanation.

5.5.2 Anomalies consistent with natural soil variations are present in Areas 20 and 21; most comprise zones of stronger or weaker mottling and weak amorphous sinuous trends.

5.5.3 A large band of alluvium has been recorded in the west of the road corridor. The anomalies area sinuous in form but are magnetically strong and coincide with alluvium noted by the British Geological Survey (see Figure 08). These responses may have obscured any weaker archaeological anomalies, if present.

5.6 *Service Pipes*

5.6.1 Three strong dipolar linear anomalies have been recorded in Areas 2, 9, 10, 11, 13 and 22 and mark the location of service pipes.

5.7 *Ferrous / Magnetic Disturbance*

5.7.1 Magnetically strong isolated anomalies in Areas 19 and 20 are due to electricity poles.

5.7.2 Magnetic disturbance recorded in Area 23 is thought to be directly related with consolidation material used for the Friday Street car boot sale.

5.7.3 Ferrous responses close to boundaries are due to adjacent fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and are characteristic of small pieces of ferrous debris (or brick / tile) in the topsoil; they are commonly assigned a modern origin. Only the most prominent of these are highlighted on the interpretation diagram.

6 DATA APPRAISAL & CONFIDENCE ASSESSMENT

6.1 Historic England guidelines (EH 2008) Table 4 states that the typical magnetic response on the local soils / geology is variable. The results from this survey indicate the presence of possible ditches and pits; as a consequence, the survey is deemed to have worked well. However, any weaker archaeological anomalies may have been masked by the magnetically strong natural deposits.

7 CONCLUSION

7.1 The magnetometer survey has detected a number of anomalies that have been classified as being of possible archaeological origin. Several anomalies and trends in Area 2 appear to form a series of field systems and a possible partial enclosure has been recorded in Area 3. A series of responses in Area 17 could be associated with Bronze Age and Iron Age ditches that were recorded during excavation due south-west of the area. Uncertain responses have been detected throughout the dataset, which include a large rectangular feature in Area 9; however, the majority of these responses are probably due to modern or agricultural processes. A couple of former field boundaries have been recorded; modern ploughing and land drains are also visible in the data. Large bands of magnetically strong but sinuous anomalies have been assigned to the category of natural and reflect alluvial deposits. Service pipes have been located along with areas of modern magnetic disturbance.

8 REFERENCES

BGS 2020 British Geological Survey, Geology of Britain viewer [accessed 24/03/2020] *website*: (http://www.bgs.ac.uk/opengeoscience/home.html?Accordion1=1#maps)

CIfA 2014 *Standard and Guidance for Archaeological Geophysical Survey.* Amended 2016. CIfA Guidance note. Chartered Institute for Archaeologists, Reading http://www.archaeologists.net/sites/default/files/CIfAS%26GGeophysics_2.pdf

CU 2020 The Soils Guide. Available: www.landis.org.uk. Cranfield University, UK. [accessed 24/03/2020] *website: http://mapapps2.bgs.ac.uk/ukso/home.html*

EAC 2016 *EAC Guidelines for the Use of Geophysics in Archaeology,* European Archaeological Council, Guidelines 2.

EH 2008 *Geophysical Survey in Archaeological Field Evaluation.* English Heritage, Swindon https://content.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/geophysics-guidelines.pdf/

Wood [E&IS] 2018 *Two Village Bypass - Archaeological Desk Based Assessment*. Wood Environment & Infrastructure Solutions UK Limited. 2018. Ref: 40345-007i2.

Appendix A - Technical Information: Magnetometer Survey Method, Processing and Presentation

Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage), the Chartered Institute for Archaeologists (CIfA 2014) and the European Archaeological Council (EAC 2016).

Grid Positioning

For hand held gradiometers the location of the survey grids has been plotted together with the referencing information. Grids were set out using a Trimble R8 Real Time Kinematic (RTK) VRS Now GNSS GPS system.

An RTK GPS (Real-time Kinematic Global Positioning System) can locate a point on the ground to a far greater accuracy than a standard GPS unit. A standard GPS suffers from errors created by satellite orbit errors, clock errors and atmospheric interference, resulting in an accuracy of 5m-10m. An RTK system uses a single base station receiver and a number of mobile units. The base station re-broadcasts the phase of the carrier it measured, and the mobile units compare their own phase measurements with those they received from the base station. This results in an accuracy of around 0.01m.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1m	0.25m

Instrumentation: Bartington *Grad* 601-2

Bartington instruments operate in a gradiometer configuration which comprises fluxgate sensors mounted vertically, set 1.0m apart. The fluxgate gradiometer suppresses any diurnal or regional effects. The instruments are carried, or cart mounted, with the bottom sensor approximately 0.1-0.3m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is measured in nanoTesla (nT). The sensitivity of the instrument can be adjusted; for most archaeological surveys the most sensitive range (0.1nT) is used. Generally, features up to 1m deep may be detected by this method, though strongly magnetic objects may be visible at greater depths. The Bartington instrument can collect two lines of data per traverse with gradiometer units mounted laterally with a separation of 1.0m. The readings are logged consecutively into the data logger which in turn is daily down-loaded into a portable computer whilst on site. At the end of each site survey, data is transferred to the office for processing and presentation.

Data Processing

Zero Mean Traverse	This process sets the background mean of each traverse within each grid to zero. The operation removes striping effects and edge discontinuities over the whole of the data set.
Step Correction (De-stagger)	When gradiometer data are collected in 'zig-zag' fashion, stepping errors can sometimes arise. These occur because of a slight difference in the speed of walking on the forward and reverse traverses. The result is a staggered effect in the data, which is particularly noticeable on linear anomalies. This process corrects these errors.

Display

Greyscale/ Colourscale Plot	This format divides a given range of readings into a set number of classes. Each class is represented by a specific shade of grey, the intensity increasing with value. All values above the given range are allocated the same shade (maximum intensity); similarly, all values below the given range are represented by the minimum intensity shade. Similar plots can be produced in colour, either using a wide range of colours or by selecting two or three colours to represent positive and negative values. The assigned range (plotting levels) can be adjusted to emphasise different anomalies in the data-set.

Presentation of results and interpretation

The presentation of the results includes a ‘minimally processed data’ and a ‘processed data’ greyscale plot. Magnetic anomalies are identified, interpreted and plotted onto the ‘Interpretation’ drawings.

When interpreting the results, several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to other existing evidence, the anomalies will be given specific categories, such as: Abbey Wall or Roman Road. Where the interpretation is based largely on the geophysical data, levels of confidence are implied, for example: Probable, or Possible Archaeology. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification Possible.

Interpretation Categories

In certain circumstances (usually when there is corroborative evidence from desk-based or excavation data) very specific interpretations can be assigned to magnetic anomalies (for example, *Roman Road, Wall,* etc.) and where appropriate, such interpretations will be applied. The list below outlines the generic categories commonly used in the interpretation of the results.

Archaeology / Probable Archaeology	This term is used when the form, nature and pattern of the responses are clearly or very probably archaeological and /or if corroborative evidence is available. These anomalies, whilst considered anthropogenic, could be of any age.
Possible Archaeology	These anomalies exhibit either weak signal strength and / or poor definition, or form incomplete archaeological patterns, thereby reducing the level of confidence in the interpretation. Although the archaeological interpretation is favoured, they may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.
Industrial / Burnt-Fired	Strong magnetic anomalies that, due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.
Former Field Boundary (probable & possible)	Anomalies that correspond to former boundaries indicated on historic mapping, or which are clearly a continuation of existing land divisions. Possible denotes less confidence where the anomaly may not be shown on historic mapping but nevertheless the anomaly displays all the characteristics of a field boundary.
Ridge & Furrow	Parallel linear anomalies whose broad spacing suggests ridge and furrow cultivation. In some cases, the response may be the result of more recent agricultural activity.
Agriculture (ploughing)	Parallel linear anomalies or trends with a narrower spacing, sometimes aligned with existing boundaries, indicating more recent cultivation regimes.
Land Drain	Weakly magnetic linear anomalies, quite often appearing in series forming parallel and herringbone patterns. Smaller drains may lead and empty into larger diameter pipes, which in turn usually lead to local streams and ponds. These are indicative of clay fired land drains.
Natural	These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions.
Magnetic Disturbance	Broad zones of strong dipolar anomalies, commonly found in places where modern ferrous or fired materials (e.g. brick rubble) are present.
Service	Magnetically strong anomalies, usually forming linear features are indicative of ferrous pipes/cables. Sometimes other materials (e.g. pvc) or the fill of the trench can cause weaker magnetic responses which can be identified from their uniform linearity.
Ferrous	This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes, or above ground features such as fence lines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.
Uncertain Origin	Anomalies which stand out from the background magnetic variation, yet whose form and lack of patterning gives little clue as to their origin. Often the characteristics and distribution of the responses straddle the categories of *Possible Archaeology* / *Natural* or (in the case of linear responses) *Possible Archaeology* / *Agriculture*; occasionally they are simply of an unusual form.

Where appropriate some anomalies will be further classified according to their form (positive or negative) and relative strength and coherence (trend: weak and poorly defined).

Appendix B - Technical Information: Magnetic Theory

Detailed magnetic survey can be used to effectively define areas of past human activity by mapping spatial variation and contrast in the magnetic properties of soil, subsoil and bedrock. Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.1 nanoTeslas (nT) in an overall field strength of 48,000 (nT), can be accurately detected.

Weakly magnetic iron minerals are always present within the soil and areas of enhancement relate to increases in *magnetic susceptibility* and permanently magnetised *thermoremanent* material.

Magnetic susceptibility relates to the induced magnetism of a material when in the presence of a magnetic field. This magnetism can be considered as effectively permanent as it exists within the Earth's magnetic field. Magnetic susceptibility can become enhanced due to burning and complex biological or fermentation processes.

Thermoremanence is a permanent magnetism acquired by iron minerals that, after heating to a specific temperature known as the Curie Point, are effectively demagnetised followed by re-magnetisation by the Earth's magnetic field on cooling. Thermoremanent archaeological features can include hearths and kilns; material such as brick and tile may be magnetised through the same process.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement allowing assessment and characterisation of subsurface features. Material such as subsoil and non-magnetic bedrock used to create former earthworks and walls may be mapped as areas of lower enhancement compared to surrounding soils.

Magnetic survey is carried out using a fluxgate gradiometer which is a passive instrument consisting of two sensors mounted vertically 1m apart. The instrument is carried about 30cm above the ground surface and the top sensor measures the Earth's magnetic field whilst the lower sensor measures the same field but is also more affected by any localised buried feature. The difference between the two sensors will relate to the strength of a magnetic field created by this feature, if no field is present the difference will be close to zero as the magnetic field measured by both sensors will be the same.

Factors affecting the magnetic survey may include soil type, local geology, previous human activity and disturbance from modern services.

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: sumogeop1-342879

Project details

Project name	Two Village By-Pass, Farnham
Short description of the project	Geophysical (magnetometer) survey.
Project dates	Start: 12-02-2019 End: 13-02-2109
Previous/future work	Not known / Not known
Any associated project reference codes	14502A - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	NONE None
Monument type	NONE None
Significant Finds	NONE None
Significant Finds	NONE None
Methods & techniques	"'Geophysical Survey'"
Development type	Road scheme (new and widening)
Prompt	Environmental (unspecified schedule)
Position in the planning process	Not known / Not recorded
Solid geology (other)	Chillesford Church Sand Member - sand.
Drift geology (other)	Lowestoft Formation - Diamicton
Techniques	Magnetometry

Project location

Country	England
Site location	SUFFOLK SUFFOLK COASTAL STRATFORD ST ANDREW Two Village By Pass,farnham
Site location	SUFFOLK SUFFOLK COASTAL FARNHAM Two Village By Pass,farnham
Site location	SUFFOLK SUFFOLK COASTAL BENHALL Two Village By Pass,farnham
Study area	24 Hectares
Site coordinates	TM 367 597 52.18408484357 1.462988045408 52 11 02 N 001 27 46 E Point

Project creators

Name of Organisation	Sumo Geophysics

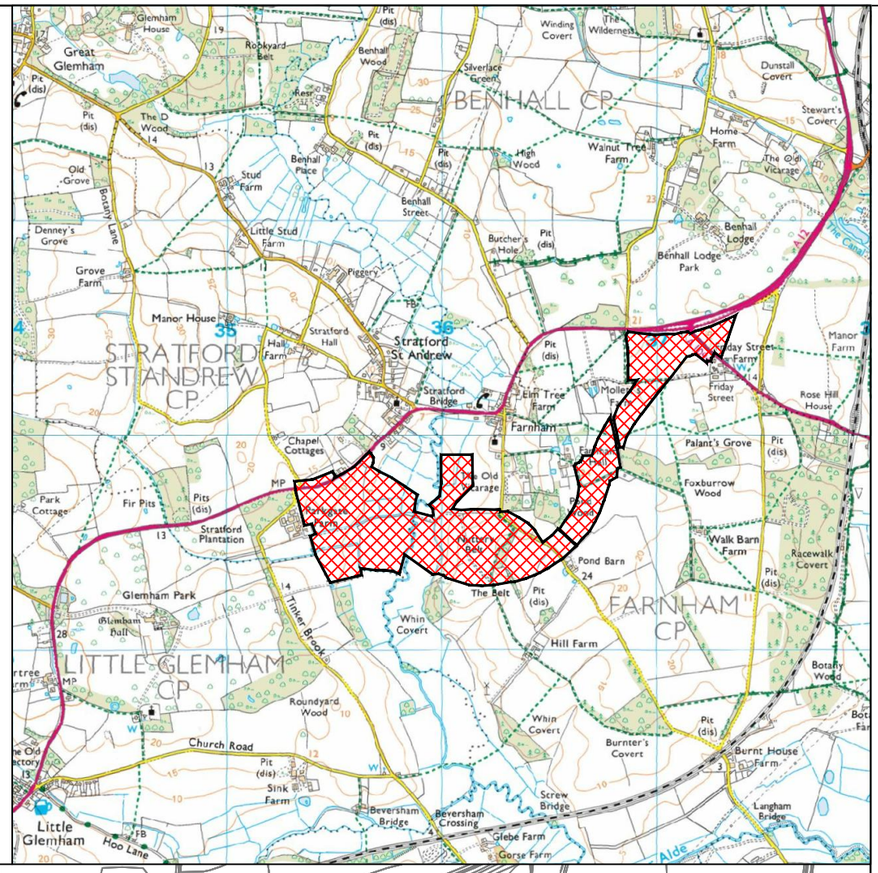
Project brief originator	Consultant
Project design originator	Sumo Geophysics
Project director/manager	Sumo Geophysics
Project supervisor	Sumo Geophysics
Type of sponsor/funding body	Not known

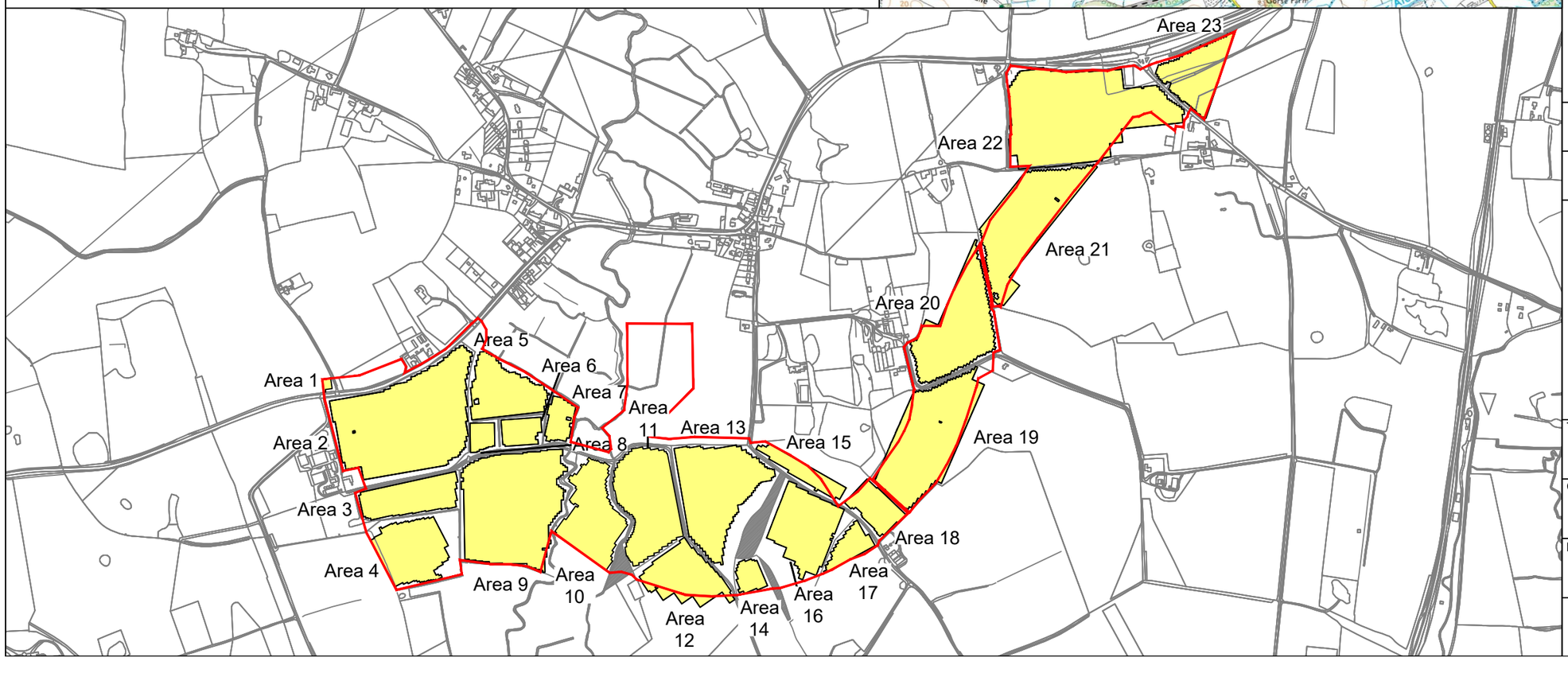
Project archives

Physical Archive Exists?	No
Digital Archive recipient	Suffolk HER
Digital Contents	"Survey"
Digital Media available	"Geophysics"
Paper Archive recipient	Suffolk HER
Paper Contents	"Survey"
Paper Media available	"Report","Survey "

Entered by	Sumo Services Ltd (Bradford) (info@gsbsumo.com)
Entered on	11 July 2019

OASIS:





N

Site Location

Magnetometer Survey

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title: Site Location

Client: Cotswold Archaeology

Project: 14282B V3 Two Village ByPass
Sizewell, Suffolk

not to scale

Fig No: 01

Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
Area 9
Area 10
Area 11
Area 12
Area 13
Area 14
Area 15
Area 16
Area 17
Area 18
Area 19
Area 20
Area 21
Area 22
Area 23

2
nT
-1

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey Greyscale Plots

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 350
1:7000 @ A3

Fig No:
02

Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
Area 9
Area 10
Area 11
Area 12
Area 13
Area 14
Area 15
Area 16
Area 17
Area 18
Area 19
Area 20
Area 21
Area 22
Area 23

KEY

	Possible Archaeology (Discrete / Trend / Zone of Increased Response)
	Uncertain (Discrete / Trend)
	Former Field Boundary (Corroborated / Conjectural)
	Ploughing
	Land Drain
	Natural (Discrete / Zone)
	Service Pipe
	Ferrous / Magnetic Disturbance

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey Preliminary Greyscale Plots

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 350
1:7000 @ A3

Fig No:
03

Area 1

Area 2

Area 3

Area 4

Area 5

Area 6

Area 7

Area 8

Area 9

Area 10

Area 11

Area 12

Area 13

Area 14

Area 15

Area 16

Area 17

2
nT
-1

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey [Areas 1 - 17]
Greyscale Plots

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
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1:5500 @ A3

Fig No:
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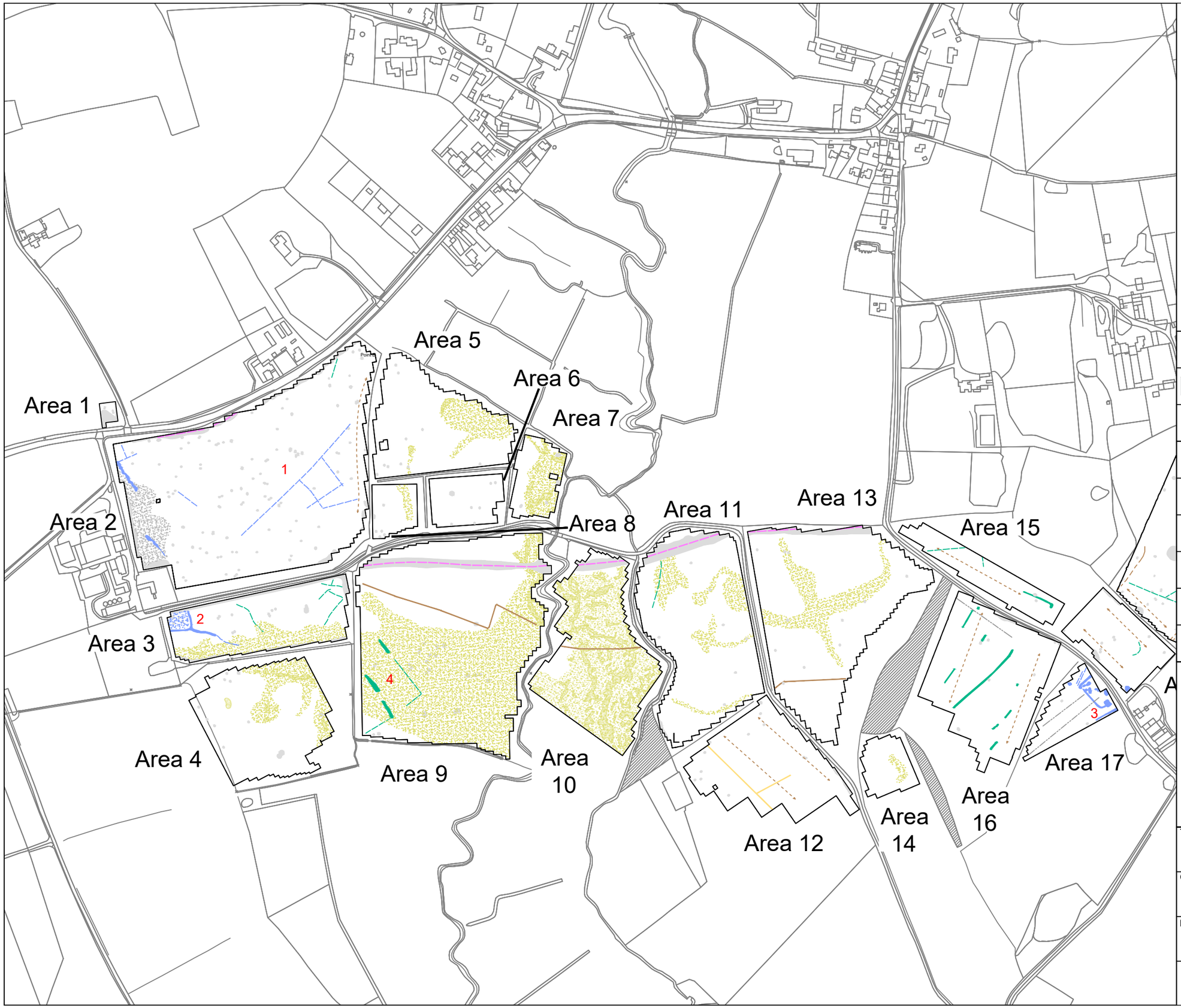

KEY

	Possible Archaeology (Discrete / Trend / Zone of Increased Response)
	Uncertain (Discrete / Trend)
	Former Field Boundary (Corroborated / Conjectural)
	Ploughing
	Land Drain
	Natural (Discrete / Zone)
	Service Pipe
	Ferrous / Magnetic Disturbance

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey [Areas 1 - 17]
Interpretation

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 225
1:5500 @ A3

Fig No:
05

Area 23

Area 22

Area 21

Area 20

Area 19

a 13

Area 15

Area 18

2

nT

-1

sumo Survey

GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey [Areas 15 - 23]
Greyscale Plots

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 225
1:5500 @ A3

Fig No:
06

Area 23

Area 22

Area 21

Area 20

Area 19

Area 15

Area 18

3

KEY

	Possible Archaeology (Discrete / Trend / Zone of Increased Response)
	Uncertain (Discrete / Trend)
	Former Field Boundary (Corroborated / Conjectural)
	Ploughing
	Land Drain
	Natural (Discrete / Zone)
	Service Pipe
	Ferrous / Magnetic Disturbance

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Magnetometer Survey [Areas 15 - 23]
Interpretation

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
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1:5500 @ A3

Fig No:
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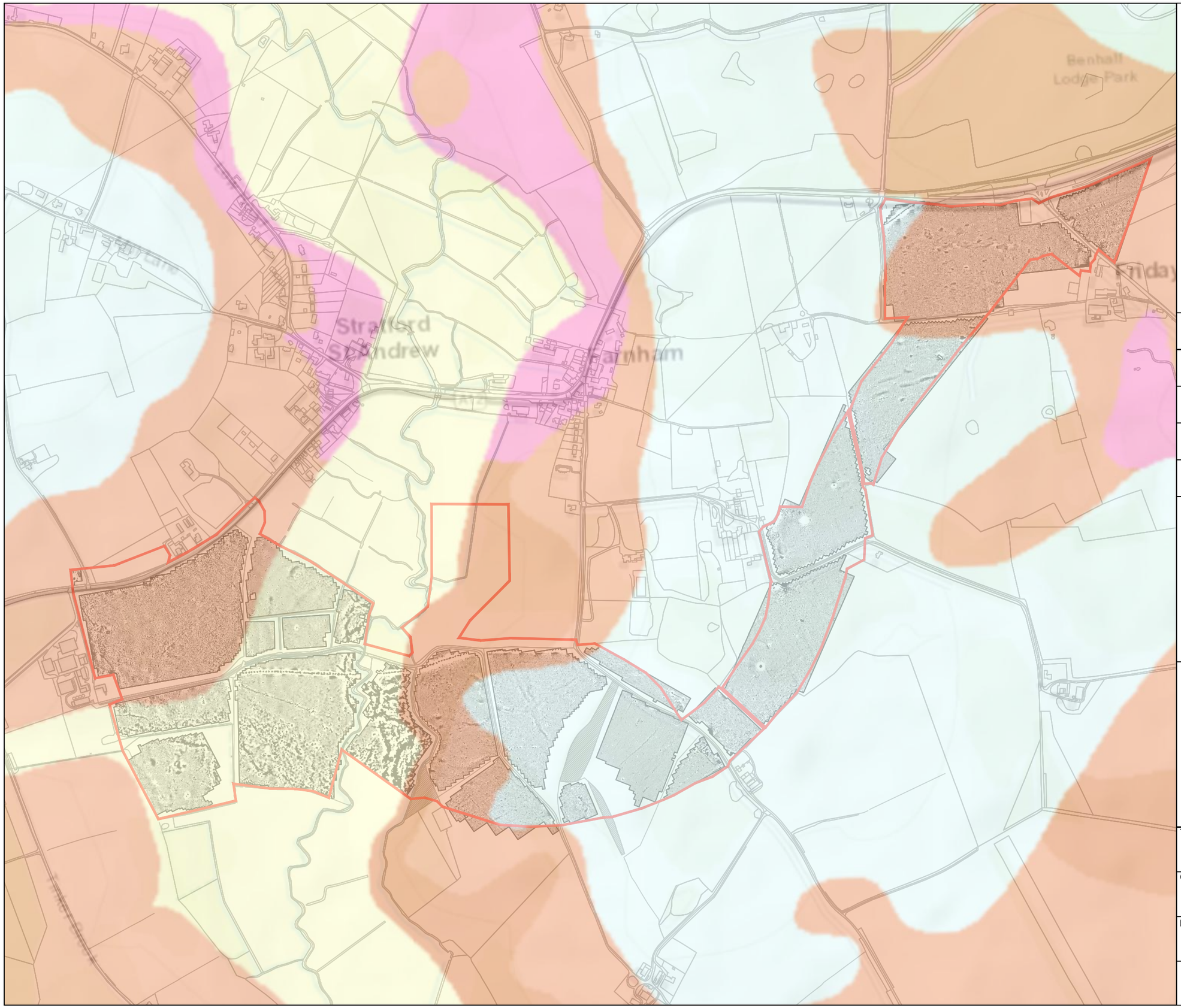


KEY

	Lowestoft Formation - Diamicton
	Alluvium - Clay, Silt, Sand and Gravel
	Lowestoft Formation - Sand and Gravel
	None Recorded

2
nT
-1

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

Title:
Superficial Deposits

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 350
1:7000 @ A3

Fig No:
08

Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
Area 9
Area 10
Area 11
Area 12
Area 13
Area 14
Area 15
Area 16
Area 17
Area 18
Area 19
Area 20
Area 21
Area 22
Area 23

10
nT
-10

sumo Survey
GEOPHYSICS FOR ARCHAEOLOGY & ENGINEERING

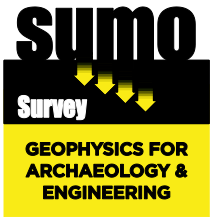
Title:
Magnetometer Survey [Minimally Processed]
Greyscale Plots

Client:
Cotswold Archaeology

Project:
14282B V3 Two Village ByPass
Sizewell, Suffolk

Scale:
0 metres 350
1:7000 @ A3

Fig No:
09



- Archaeological
- Geophysical
- Laser Scanning
- Measured Building
- Topographic
- Utility Mapping

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