M8/15



# **Geophysical Survey Report**

# LINCOLN EASTERN BYPASS

for ARCHAEOLOGICAL PROJECT SERVICES

NOVEMBER 2008

J2538

RICHARD SMALLEY BA (HONS) AIFA





Document Title: Geop	hysical	Survey
----------------------	---------	--------

11

1

-

U

-

1

Client:	Archaeological Project Services
Stratascan Job No:	J2538
Techniques:	Detailed magnetic survey (gradiometry)
National Grid Ref:	SK 990 664

Report

Field Team:Dave Miller, Alec Phillips, Allen Wright and Mike HartwellProject Manager:Simon Stowe BSc. (Hons)Report written by:Richard Smalley BA (Hons) AIFACAD illustration by:Richard Smalley BA (Hons) AIFAChecked by:Peter Barker CEng MICE MCIWEM MIFA

Stratascan Ltd.

Vineyard House Upper Hook Road Upton upon Severn WR8 0SA

Tel: 01684 592266 Fax: 01684 594142 Email: <u>ppb@stratascan.co.uk</u>

www.stratascan.co.uk

L		FIGURES
1	SUN	MMARY OF RESULTS
2	INT	RODUCTION
	2.1	Background synopsis
	2.2	Site location
	2.3	Description of site
	2.4	Geology and soils
	2.5	Site history and archaeological potential
	2.6	Survey objectives
	2.7	Survey methods
3	ME	THODOLOGY
	3.1	Date of fieldwork
	3.2	Grid locations
	3.3	Survey equipment
	3.4	Sampling interval, depth of scan, resolution and data capture
	3.4.	1 Sampling interval
	3.4.	2 Depth of scan and resolution
	3.4.	3 Data capture
	3.5	Processing, presentation of results and interpretation7
	3.5.	1 Processing7
	3.5.	2 Presentation of results and interpretation
4	RES	SULTS
5	DIS	CUSSION
7	REI	FERENCES
	APPE	NDIX A – Basic principles of magnetic survey13
	APPE	NDIX B – Glossary of magnetic anomalies

-

-

110

100

-

120

11

# LIST OF FIGURES

Figure	1	1:25 000	General location plan
Figure	2	varies	Site plan showing location of grids and referencing
Figure	3	1:4000	Site plan showing location of grids and referencing
Figure	4	varies	Plot of raw magnetometer data- Parcels A1-P
Figure	5	varies	Plot of raw magnetometer data- Parcels Q-W
Figure	6	varies	Trace plot showing positive values- Parcels A1-P
Figure	7	varies	Trace plot showing positive values- Parcels Q-W
Figure	8	varies	Trace plot showing negative values- Parcels A1-P
Figure	9	varies	Trace plot showing negative values- Parcels Q-W
Figure	10	1:1000	Processed magnetometer data- Parcel A1
Figure	11	1:1000	Abstraction and interpretation- Parcel A1
Figure	12	1:1250	Processed magnetometer data- Parcel J (North)
Figure	13	1:1250	Abstraction and interpretation- Parcel J (North)
Figure	14	1:1250	Processed magnetometer data- Parcel J (South)
Figure	15	1:1250	Abstraction and interpretation- Parcel J (South)
Figure	16	1:1000	Processed magnetometer data- Parcel K (North)
Figure	17	1:1000	Abstraction and interpretation- Parcel K (North)
Figure	18	1:1000	Processed magnetometer data- Parcels K (South) and L
Figure	19	1:1000	Abstraction and interpretation- Parcels K (South) and L
Figure	20	1:1000	Processed magnetometer data- Parcel M
Figure	21	1:1000	Abstraction and interpretation- Parcel M
Figure	22	1:1000	Processed magnetometer data- Parcel N (North)
Figure	23	1:1000	Abstraction and interpretation- Parcel N (North)

Stratascan

1

100

100

ΠĒ.

100

ui

10

10

11

al.

-

-

1

.

1

18

R.

N

Figure	24	1:1000	Processed magnetometer data- Parcel N (South)
Figure	25	1:1000	Abstraction and interpretation- Parcel N (South)
Figure	26	1:1000	Processed magnetometer data- Parcel O
Figure	27	1:1000	Abstraction and interpretation- Parcel O
Figure	28	1:1000	Processed magnetometer data- Parcels P and Q (North)
Figure	29	1:1000	Abstraction and interpretation- Parcels P and Q (North)
Figure	30	1:1000	Processed magnetometer data- Parcel Q (South)
Figure	31	1:1000	Abstraction and interpretation- Parcel Q (South)
Figure	32	1:1000	Processed magnetometer data- Parcel R (North)
Figure	33	1:1000	Abstraction and interpretation- Parcel R (North)
Figure	34	1:1000	Processed magnetometer data- Parcel R (South)
Figure	35	1:1000	Abstraction and interpretation- Parcel R (South)
Figure	36	1:1000	Processed magnetometer data- Parcel S (North)
Figure	37	1:1000	Abstraction and interpretation- Parcel S (North)
Figure	38	1:1000	Processed magnetometer data- Parcel S (South)
Figure	39	1:1000	Abstraction and interpretation- Parcel S (South)
Figure	40	1:1000	Processed magnetometer data- Parcel T
Figure	41	1:1000	Abstraction and interpretation- Parcel T
Figure	42	1:1000	Processed magnetometer data- Parcel U
Figure	43	1:1000	Abstraction and interpretation- Parcel U
Figure	44	1:1000	Processed magnetometer data- Parcels V and W
Figure	45	1:1000	Abstraction and interpretation- Parcels V and W

# **1 SUMMARY OF RESULTS**

The geophysical survey undertaken east of Lincoln has identified a number of features of a possible archaeological origin. Positive anomalies indicate the presence of cut features such as ditches and negative anomalies represent possible former earthworks. Discrete positive anomalies have been interpreted as being related to pits of a possible archaeological origin.

# **2** INTRODUCTION

# 2.1 Background synopsis

Stratascan were commissioned to undertake a geophysical survey of an area outlined for development as a bypass east of Lincoln. This survey forms part of an archaeological investigation being undertaken by Archaeological Project Services.

#### 2.2 <u>Site location</u>

The site is located east of Lincoln between the A15 and the A158 Wragby Road at OS ref. SK 990 664.

# 2.3 <u>Description of site</u>

The survey area consists of approximately 27.8ha of agricultural arable land to the east of Lincoln.

# 2.4 <u>Geology and soils</u>

The underlying geology is Inferior Oolite (British Geological Survey South Sheet, Fourth Edition Solid, 2001). The drift geology for the survey area includes sand, mud, silt and clay (British Geological Survey South Sheet, First Edition Quaternary 1977).

The overlying soils are known as Marcham which are typical brown rendzina soils. These consist of shallow well drained calcareous coarse and fine loamy soils over limestone associated with similar deeper soils (Soil Survey of England and Wales, Sheet 4 Eastern England).

# 2.5 Site history and archaeological potential

A desk based assessment provided by the client indicates that sites of a medieval and Roman origin have been identified within or in close proximity to the footprint of the new road alignment. These sites have been identified through aerial photography, trial trenching and consultation of the HER. Fifty sites of cultural heritage importance are located within 200m of the site. These factors all contribute to the potential for the identification of anomalies of an archaeological origin within the gradiometer data.

# 2.6 <u>Survey objectives</u>

The objective of the survey was to locate any features of possible archaeological significance in order that they may be assessed prior to development.

#### 2.7 Survey methods

Detailed magnetic survey (gradiometry) was used as an efficient and effective method of locating archaeological anomalies. More information regarding this technique is included in the Methodology section below.

# **3 METHODOLOGY**

# 3.1 Date of fieldwork

The fieldwork was carried out over 13 days from 27<sup>th</sup> October 2008. Weather conditions during the survey were cold but dry.

#### 3.2 Grid locations

The location of the survey grids has been plotted in Figures 2 and 3 together with the referencing information. Grids were set out using a Leica Smart Rover RTK GPS.

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. A SmartNet RTK GPS uses Ordnance Survey's network of over 100 fixed base stations to give an accuracy of around 0.01m.

#### 3.3 Survey equipment

Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument.

The mapping of the anomaly in a systematic manner will allow an estimate of the type of material present beneath the surface. Strong magnetic anomalies will be generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and ditches can be seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil.

To illustrate this point, the cutting and subsequent silting or backfilling of a ditch may result in a larger volume of weakly magnetic material being accumulated in the trench compared to the undisturbed subsoil. A weak magnetic anomaly should therefore appear in plan along the line of the ditch.

The magnetic survey was carried out using a dual sensor Grad601-2 Magnetic Gradiometer manufactured by Bartington Instruments Ltd. The instrument consists of two fluxgates very accurately aligned to nullify the effects of the Earth's magnetic field. Readings relate to the difference in localised magnetic anomalies compared with the general magnetic background. The Grad601-2 consists of two high stability fluxgate gradiometers suspended on a single frame. Each gradiometer has a 1m separation between the sensing elements so enhancing the response to weak anomalies.

#### 3.4 Sampling interval, depth of scan, resolution and data capture

#### 3.4.1 Sampling interval

Readings were taken at 0.25m centres along traverses 1m apart. This equates to 3600 sampling points in a full 30m x 30m grid.

#### 3.4.2 Depth of scan and resolution

The Grad 601 has a typical depth of penetration of 0.5m to 1.0m. This would be increased if strongly magnetic objects have been buried in the site. The collection of data at 0.5m centres provides an optimum methodology for the task balancing cost and time with resolution.

# 3.4.3 Data capture

The readings are logged consecutively into the data logger which in turn is daily downloaded into a portable computer whilst on site. At the end of each job, data is transferred to the office for processing and presentation.

# 3.5 Processing, presentation of results and interpretation

# 3.5.1 Processing

Processing is performed using specialist software known as *Geoplot 3*. This can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids. 'Despiking' is also performed to remove the anomalies resulting from small iron objects often found on agricultural land. Once the basic processing has flattened the background it is then possible to carry out further processing which may include low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies.

The following schedule shows the basic processing carried out on all processed gradiometer data used in this report:

1. *Despike* (useful for display and allows further processing functions to be carried out more effectively by removing extreme data values)

Geoplot parameters: X radius = 1, y radius = 1, threshold = 3 std. dev. Spike replacement = mean

2. Zero mean traverse

(sets the background mean of each traverse within a grid to zero and is useful for removing striping effects)

*Geoplot parameters:* Least mean square fit = off

A de-stagger has been carried out on a number of grids to correct the displacement of anomalies caused by alternate zigzag traverses which are sometimes observable in gradiometer data.

#### 3.5.2 Presentation of results and interpretation

The presentation of the data for each site involves a print-out of the raw data both as greyscale (Figures 4 and 5) and trace plots (Figures 6, 7, 8 and 9), together with a greyscale plot of the processed data (Figures 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 and 44). Magnetic anomalies have been identified and plotted onto the 'Abstraction and Interpretation of Anomalies' drawing for the site (Figures 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45).

# 4 **RESULTS**

The abstracted anomalies have been divided into varying types. The types have then been tabulated and assessed as to the level of activity in each area according to the following table.

Level of act	ivity
-	None
*	Minimal
**	Moderate
***	Significant

Blue cells	indicate	anomalies	of archaeo	logical	potential
					P

Anomaly Type	Description	PARCEL	PARCEL J	PARCEL K	PARCEL L
1	Discrete positive anomaly – possible pit	**	***	**	**
2	Positive anomaly with associated negative response – ferrous object	***	**	**	*
3	Magnetic disturbance – associated with pipe/cable	**	-	-	-
4	Positive linear anomaly – agricultural mark	**	**	***	***
5	Linear debris – unknown origin	-	-	-	-
6	Positive linear anomaly – cut feature of possible archaeological origin	*	***	**	**
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	-	-	*	-
8	Linear anomaly – possibly related to land drains	-	-	-	-
9	Positive area anomaly – cut feature of possible archaeological origin	-	***	-	**
10	Negative area anomaly – possible bank or earthwork of archaeological origin	-	*	-	-
11	Weak positive area anomaly	-	-	-	-
12	Weak negative area anomaly	-	_	-	-
13	Magnetic disturbance associated with nearby field boundary	**	-	*	-
14	Magnetic disturbance associated with nearby metallic objects	**	*	-	-
15	Magnetic debris	**	**	-	-
16	Area of magnetic variation – possible geological/pedological response	-	**	**	*
17	Thermoremnant anomaly – possible former area of burning such as a bonfire or kiln.	-	-	-	-
18	Strong magnetic debris – probably associated with made or disturbed ground.	-	-	-	-

UE

1

18

10

THE .

13

10

E

1

TTP .

-

THE

-

I

W

-

1

50 50

1

1

-

1

A A

November 2008

Anomaly Description Type			PARCEL N	PARCEL O	PARCEL P
1	Discrete positive anomaly – possible pit	-	*	*	*
2	Positive anomaly with associated negative response – ferrous object	-	*	*	*
3	Magnetic disturbance – associated with pipe/cable	-	**	-	**
4	Positive linear anomaly – agricultural mark	***	**	121	
5	Linear debris – unknown origin	-	-	-	-
6	Positive linear anomaly – cut feature of possible archaeological origin	-	*	-	**
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	-	-	-	-
8	Linear anomaly – possibly related to land drains	-	-	-	-
9	Positive area anomaly – cut feature of possible archaeological origin	*	*	-	*
10	Negative area anomaly – possible bank or earthwork of archaeological origin	-	-	-	-
11	Weak positive area anomaly	-	-	-	-
12	Weak negative area anomaly	-	-	-	-
13	Magnetic disturbance associated with nearby field boundary	-	*	**	*
14	Magnetic disturbance associated with nearby metallic objects	-	*	-	-
15	Magnetic debris	-	-	-	-
16	Area of magnetic variation – possible geological/pedological response	-	**	***	
17	Thermoremnant anomaly – possible former area of burning such as a bonfire or kiln.	-	-	-	-
18	Strong magnetic debris – probably associated with made or disturbed ground.	*	-	-	, <b>-</b>

-

1

-

¥

.

-

.

-

.

.

.

.

-

1

1

1

TE

1

1

Anomaly Type	Description	PARCEL Q	PARCEL R	PARCEL S	PARCEL T
1	Discrete positive anomaly – possible pit	**	**	**	*
2	Positive anomaly with associated negative response – ferrous object	*	*	**	*
3	Magnetic disturbance – associated with pipe/cable		-	-	-
4	Positive linear anomaly – agricultural mark	**	*	***	***
5	Linear debris – unknown origin	-	-	-	-
6	Positive linear anomaly – cut feature of possible archaeological origin	**	***	***	*
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	-	-	-	*
8	Linear anomaly – possibly related to land drains	-		-	-
9	Positive area anomaly – cut feature of possible archaeological origin	-	**	*	*
10	Negative area anomaly – possible bank or earthwork of archaeological origin	-	-	-	-
11	Weak positive area anomaly	-	-	-	-
12	Weak negative area anomaly	-	-	-	-
13	Magnetic disturbance associated with nearby field boundary	-	-	-	*
14	Magnetic disturbance associated with nearby metallic objects	1	-	-	-
15	Magnetic debris	-	-	-	-
16	Area of magnetic variation – possible geological/pedological response	-	-	-	-
17	Thermoremnant anomaly – possible former area of burning such as a bonfire or kiln.	-	-	-	-
18	Strong magnetic debris – probably associated with made or disturbed ground.	-	-	-	-

-

-

1

1.0

end.

E

-

1

Cer

T

C

TIS

U

November 2008

Anomaly Type	Description	PARCEL U	PARCEL V	PARCEL W	
1	Discrete positive anomaly – possible pit	*	**	**	
2	Positive anomaly with associated negative response – ferrous object	*	*	**	ίφ.
3	Magnetic disturbance – associated with pipe/cable	**	o <mark>serj</mark> ad e		d. 
4	Positive linear anomaly – agricultural mark	***	**	*	
5	Linear debris – unknown origin	100 - 10 C	-	- 10 10-00	
6	Positive linear anomaly – cut feature of possible archaeological origin	**	**	-	ine Line
7	Negative Linear anomaly – possible bank or earthwork of archaeological origin	-	-	-	
8	Linear anomaly – possibly related to land drains		-	-	
9	Positive area anomaly – cut feature of possible archaeological origin	*	-	-	
10	Negative area anomaly – possible bank or earthwork of archaeological origin	-	-	-	
11	Weak positive area anomaly	-	-	-	
12	Weak negative area anomaly	-	-	-	
13	Magnetic disturbance associated with nearby field boundary	-	1	*	
14	Magnetic disturbance associated with nearby metallic objects	*	<b>-</b>	-	
15	Magnetic debris	-	-	-	
16	Area of magnetic variation – possible geological/pedological response	-	-	-	
17	Thermoremnant anomaly – possible former area of burning such as a bonfire or kiln.	-	-	-	
18	Strong magnetic debris – probably associated with made or disturbed ground.		-	-	

#### 5 **DISCUSSION**

The gradiometer survey undertaken over the footprint of the proposed Lincoln bypass has identified a number of anomalies of a possible archaeological origin. The data collected is of good quality and only a small number of areas have been affected by magnetic disturbance.

From the above tables it is possible to identify which parcels have the most potential for archaeological deposits. The areas identified to have the most potential include Parcels J, L, Q, R and S.

Parcel J contains a large number of positive anomalies indicating the presence of cut features such as ditches. These anomalies seem to represent former field boundaries; however rectilinear features may indicate the presence of enclosures. A large number of discrete positive anomalies have also been identified in this parcel. These anomalies have been interpreted as pits of a possible archaeological origin.

Parcel L contains two large parallel positive linear anomalies and a number of discrete positive anomalies. These anomalies indicate the presence of cut features such as ditches and pits of a possible archaeological origin.

A number of complex cut features indicating ditches of a possible archaeological origin are evident in Parcels Q and R. These anomalies have been interpreted as being of an archaeological nature however it may be that they are related to geological features such as those identified in other parcels.

A large cut feature is evident in the southern limits of Parcel S. It is interesting to note a small rectilinear enclosure annexed to the south western limits of this anomaly. The majority of anomalies of an archaeological origin in Parcel S are located in its southern most region. This may indicate a centre of activity in this area.

From Parcel O northwards a number of complex patterns of positive linear anomalies can be noted. These anomalies are likely to be of a geological origin such as periglacial cracking. However, it is difficult to differentiate between these cracking patterns and anomalies that may be of an archaeological origin. Therefore it may be prudent to investigate a number of these anomalies further.

# 6 CONCLUSION

The geophysical survey undertaken east of Lincoln has identified a number of anomalies of a possible archaeological origin. The majority of the archaeological features identified within the survey are evident in the central and northern regions of the main survey area suggesting centres of activity in these particular zones, namely Parcels J, L, Q, R and S.

# 7 **REFERENCES**

British Geological Survey, 2001. *Geological Survey Ten Mile Map, South Sheet, Fourth Edition (Solid)*. British Geological Society.

Soil Survey of England and Wales, 1983. Soils of England and Wales, Sheet 5 Southwest England.

**APPENDIX** A – Basic principles of magnetic survey

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.

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

Thermoremnance 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. Thermoremnant archaeological features can include hearths and kilns and material such as brick and tile may be magnetised through the same process.

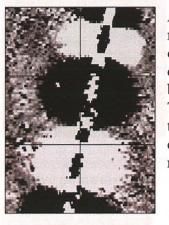
Silting and deliberate infilling of ditches and pits with magnetically enhanced soil creates a relative contrast against the much lower levels of magnetism within the subsoil into which the feature is cut. Systematic mapping of magnetic anomalies will produce linear and discrete areas of enhancement 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 either 0.5 or 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 field. The difference between the two sensors will relate to the strength of a magnetic field created by a buried 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, disturbance from modern services etc.

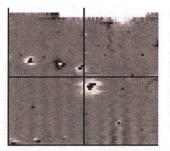
# **APPENDIX B – Glossary of magnetic anomalies**

#### **Bipolar**



A bipolar anomaly is one that is composed of both a positive response and a negative response. It can be made up of any number of positive responses and negative responses. For example a pipeline consisting of alternating positive and negative anomalies is said to be bipolar. See also dipolar which has only one area of each polarity. The interpretation of the anomaly will depend on the magnitude of the magnetic field strength. A weak response may be caused by a clay field drain while a strong response will probably be caused by a metallic service.

#### Dipolar

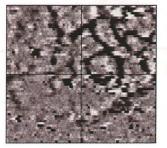


This consists of a single positive anomaly with an associated negative response. There should be no separation between the two polarities of response. These responses will be created by a single feature. The interpretation of the anomaly will depend on the magnitude of the magnetic measurements. A very strong anomaly is likely to be caused by a ferrous object.

# Positive anomaly with associated negative response

See bipolar and dipolar.

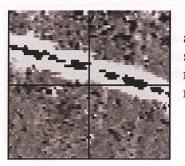
#### **Positive linear**



A linear response which is entirely positive in polarity. These are usually related to infilled cut features where the fill material is magnetically enhanced compared to the surrounding matrix. They can be caused by ditches of an archaeological origin, but also former field boundaries, ploughing activity and some may even have a natural origin.

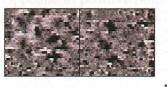
Stratascan

# Positive linear anomaly with associated negative response



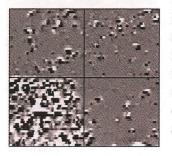
A positive linear anomaly which has a negative anomaly located adjacently. This will be caused by a single feature. In the example shown this is likely to be a single length of wire/cable probably relating to a modern service. Magnetically weaker responses may relate to earthwork style features and field boundaries.

#### **Positive point/area**



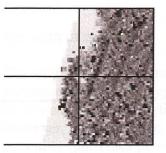
These are generally spatially small responses, perhaps covering just 3 or 4 reading nodes. They are entirely positive in polarity. Similar to positive linear anomalies they are generally caused by infilled cut features. These include pits of an archaeological origin, possible tree bowls or other naturally occurring depressions in the ground.

# Magnetic debris



Magnetic debris consists of numerous dipolar responses spread over an area. If the amplitude of response is low (+/-3nT) then the origin is likely to represent general ground disturbance with no clear cause, it may be related to something as simple as an area of dug or mixed earth. A stronger anomaly (+/-250nT) is more indicative of a spread of ferrous debris. Moderately strong anomalies may be the result of a spread of thermoremnant material such as bricks or ash.

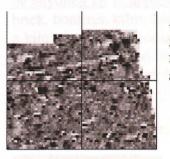
# Magnetic disturbance



Magnetic disturbance is high amplitude and can be composed of either a bipolar anomaly, or a single polarity response. It is essentially associated with magnetic interference from modern ferrous structures such as fencing, vehicles or buildings, and as a result is commonly found around the perimeter of a site near to boundary fences.

#### A HET ARE CHILD BUT IT STOR

#### Negative linear

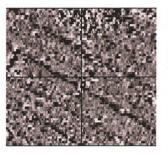


A linear response which is entirely negative in polarity. These are generally caused by earthen banks where material with a lower magnetic magnitude relative the background top soil is built up. See also ploughing activity.

# Negative point/area

Opposite to positive point anomalies these responses may be caused by raised areas or earthen banks. These could be of an archaeological origin or may have a natural origin.

#### **Ploughing activity**



Ploughing activity can often be visualised by a series of parallel linear anomalies. These can be of either positive polarity or negative polarity depending on site specifics. It can be difficult to distinguish between ancient ploughing and more modern ploughing, clues such as the separation of each linear, straightness, strength of response and cross cutting relationships can be used to aid this, although none of these can be guaranteed to differentiate between different phases of activity.

# Polarity

Term used to describe the measurement of the magnetic response. An anomaly can have a positive polarity (values above 0nT) and/or a negative polarity (values below 0nT).

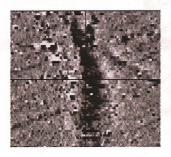
#### **Strength of response**

The amplitude of a magnetic response is an important factor in assigning an interpretation to a particular anomaly. For example a positive anomaly covering a  $10m^2$  area may have values up to around 3000nT, in which case it is likely to be caused by modern magnetic interference. However, the same size and shaped anomaly but with values up to only 4nT may have a natural origin. Trace plots are used to show the amplitude of response.

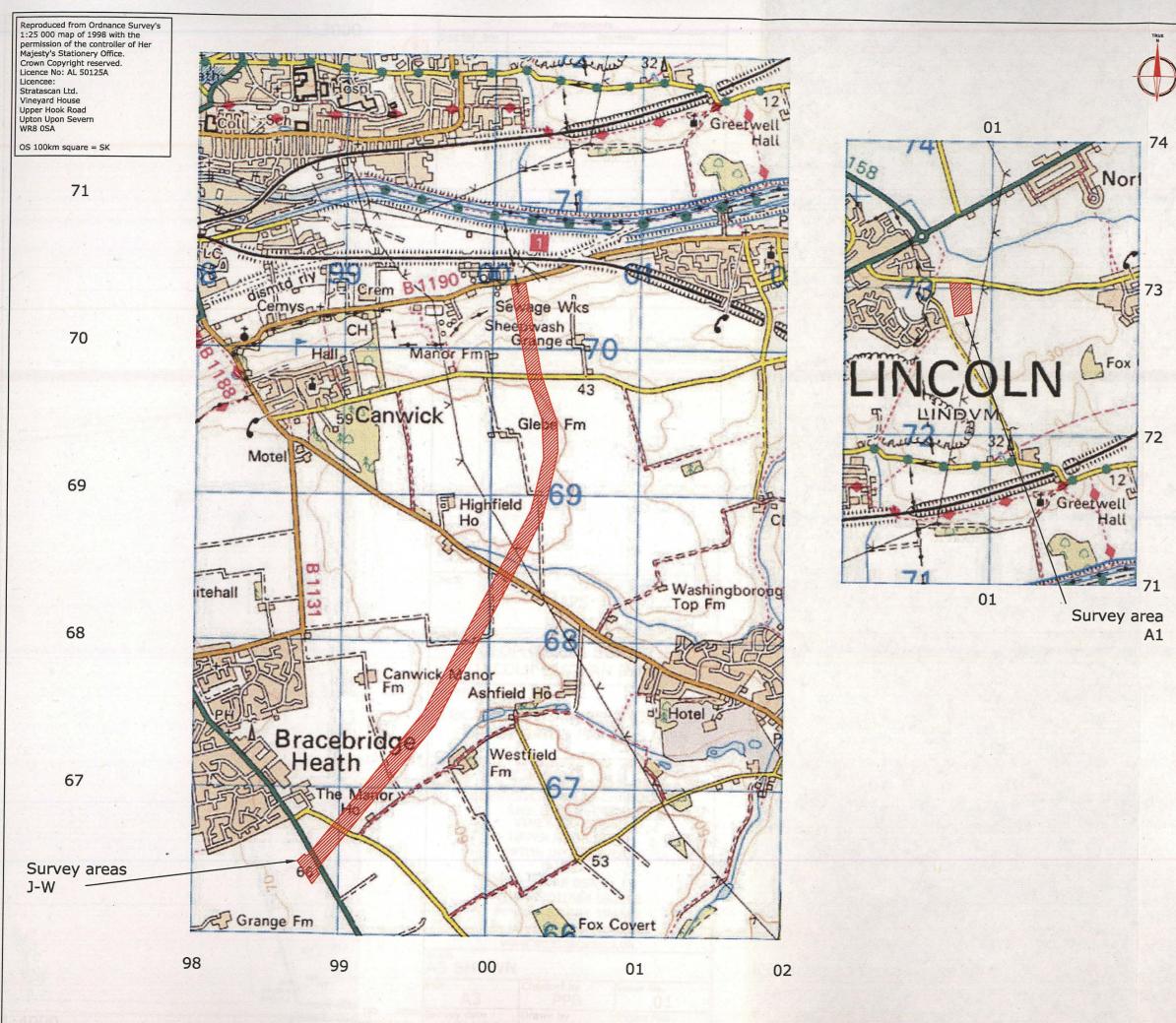
# **Thermoremnant response**

A feature which has been subject to heat may result in it acquiring a magnetic field. This can be anything up to approximately +/-100 nT in value. These features include clay fired drains, brick, bonfires, kilns, hearths and even pottery. If the heat application has occurred insitu (e.g. a kiln) then the response is likely to be bipolar compared to if the heated objects have been disturbed and moved relative to each other, in which case they are more likely to take an irregular form and may display a debris style response (e.g. ash).

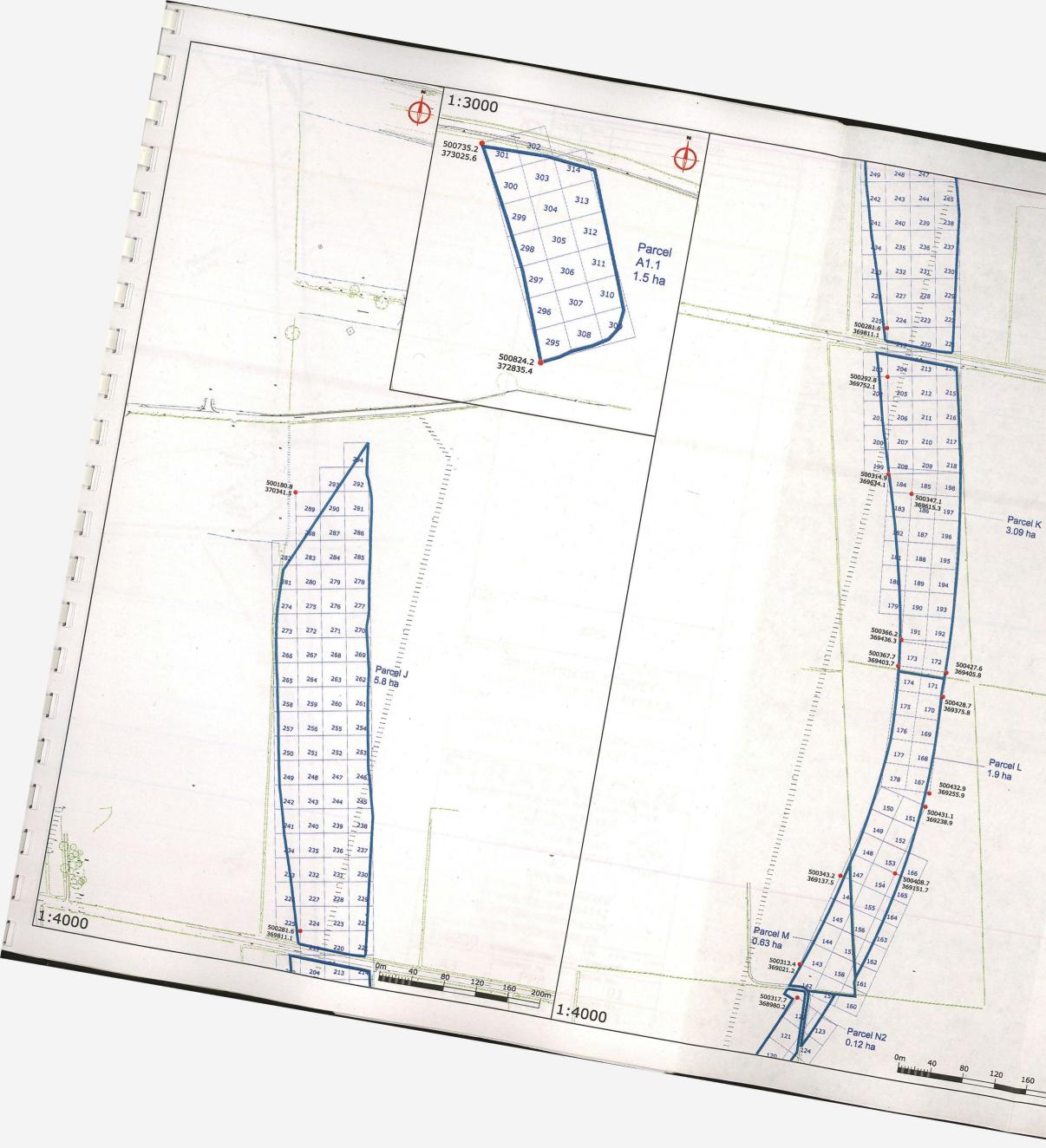
# Weak background variations



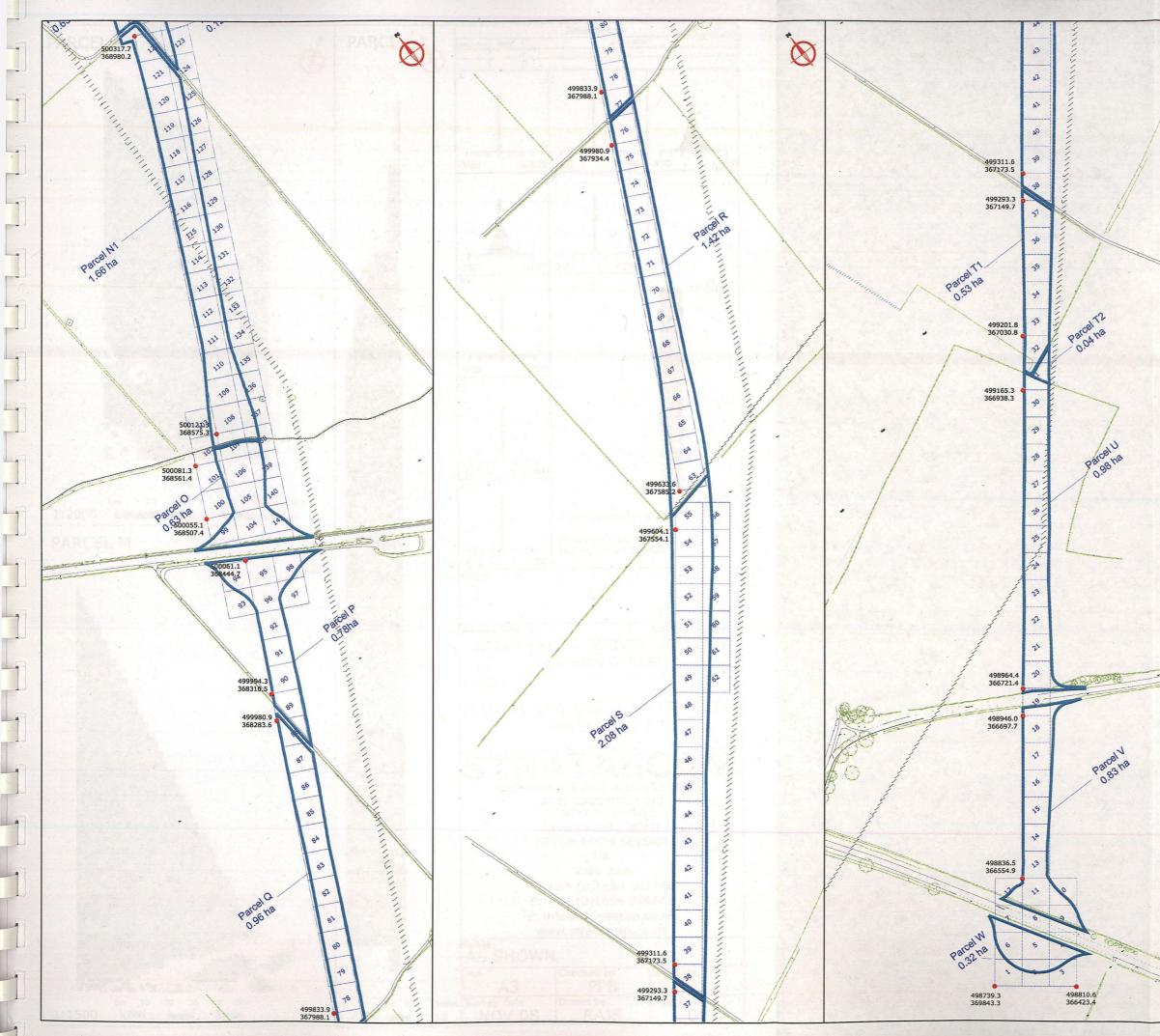
Weakly magnetic wide scale variations within the data can sometimes be seen within sites. These usually have no specific structure but can often appear curvy and sinuous in form. They are likely to be the result of natural features, such as soil creep, dried up (or seasonal) streams. They can also be caused by changes in the underlying geology or soil type which may contain unpredictable distributions of magnetic minerals, and are usually apparent in several locations across a site.



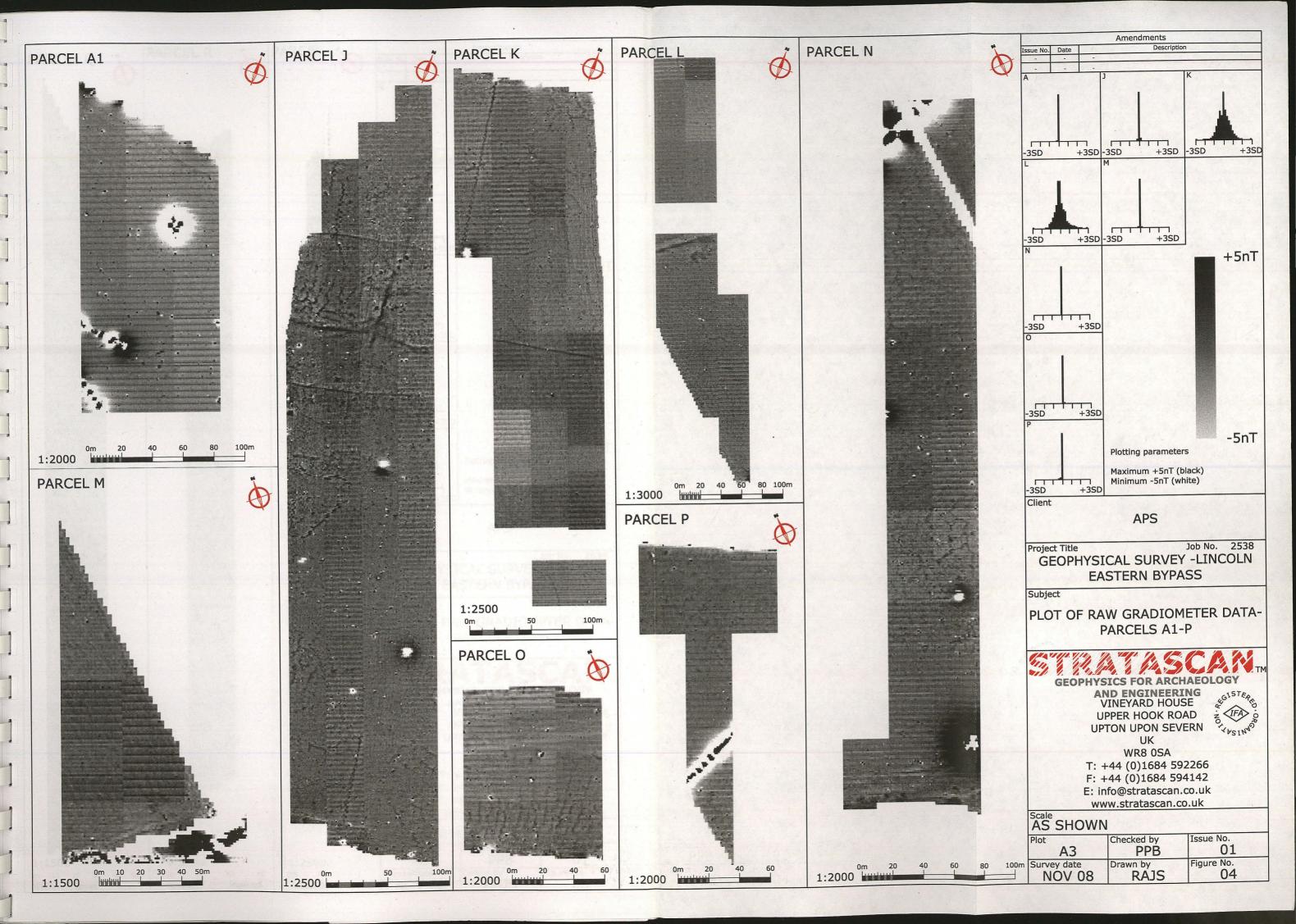
	Amendments			
	-	-	-	
	1 	Date .	Scotland Scotland	Survey area
	Pe Site cer Client Project		NGR SK 9 APS	90 664
	[ Subject	GEC	OPHYSICAL SU DLN EASTERN	BYPASS
	G G G Cale 1:2	EOPH T: F: E:	N PLAN OF SU VINEYARD HOU UPPER HOOK RO UPPER HOOK RO UPPER HOOK RO UK WR8 0SA +44 (0)1684 59 +44 (0)1684 59 info@stratascan.co 0 0 0 0 0 0 0 0 0 0 0 0 0	HAEOLOGY ING SE AD ZERN 20 Vern 22266 4142 co.uk
P	lot A	1000	Checked by PPB	Issue No.
S	urvey d		Drawn by RAJS	01 Figure No.
	1101	00	KAJS	01

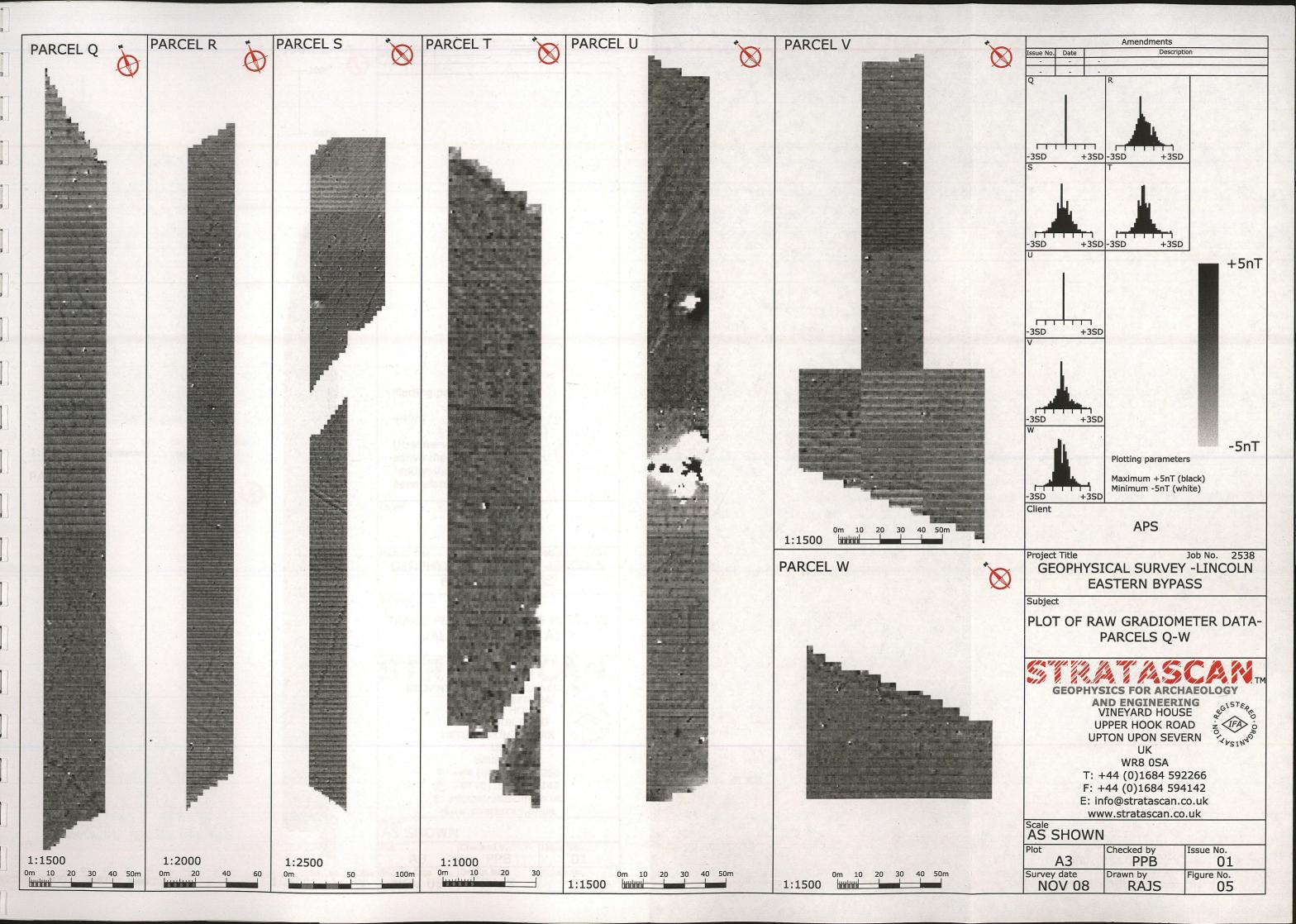


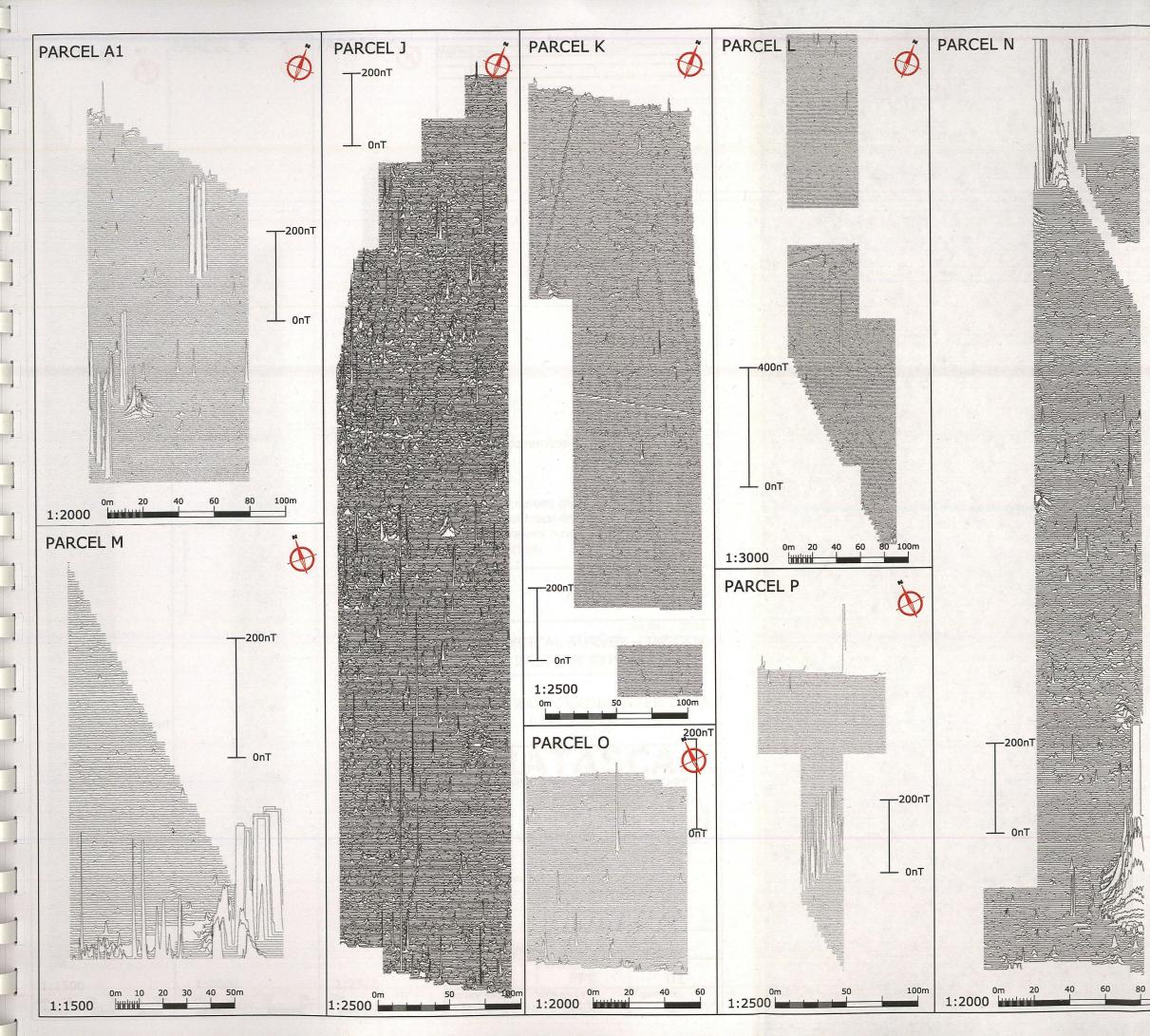
 $\oplus$ ssue No. Date Client APS Project Title GEOPHYSICAL SURVEY LINCOLN EASTERN BYPASS Subject LOCATION AND REFERENCING OF SURVEY GRIDS PARCELS A1-N GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk AS SHOWN Checked by PPB A3 Survey date NOV 08 Issue No. Drawn Figure No. 02 WI by RAJS



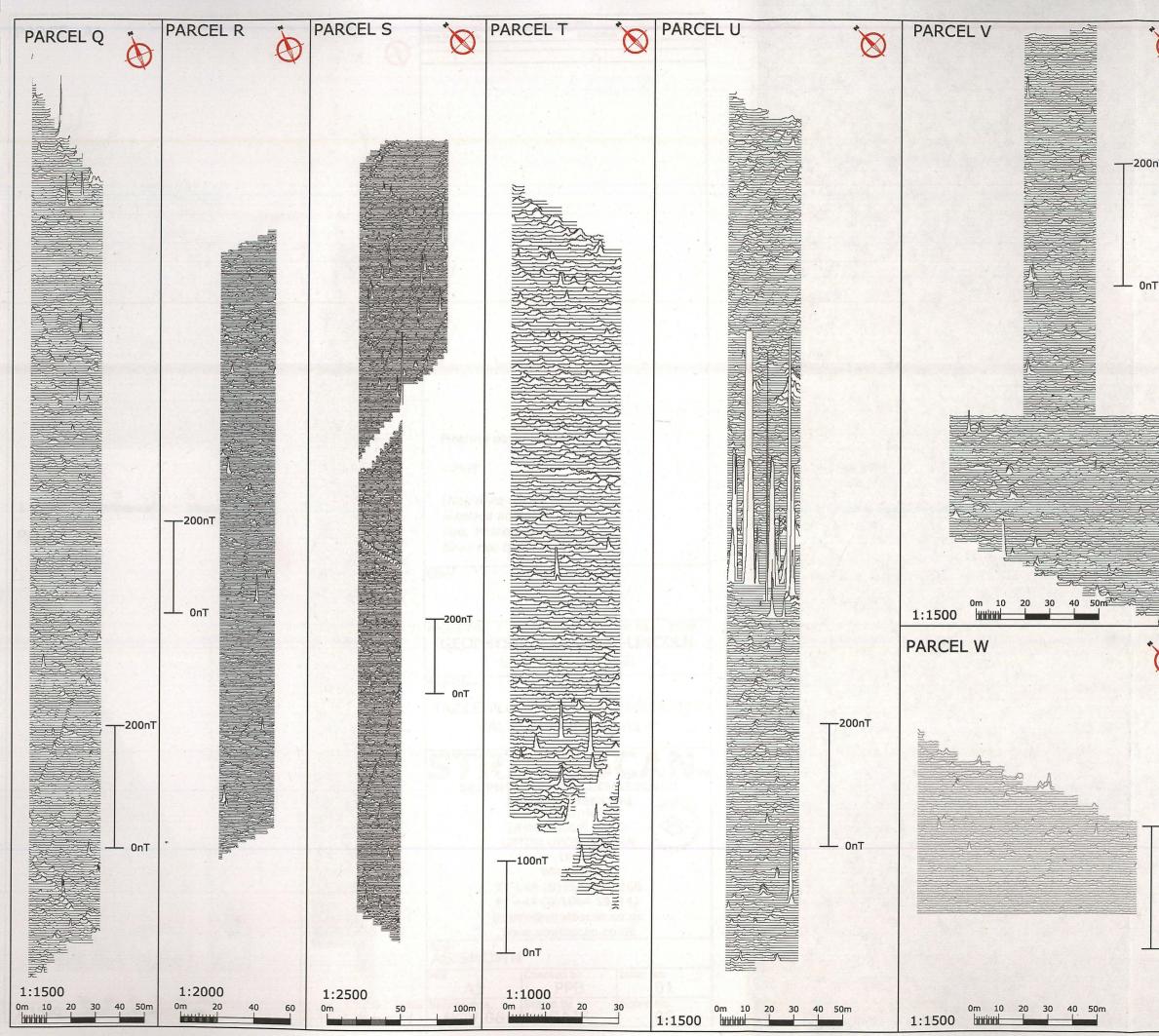
Amendments Description ssue No. Date  $\otimes$ Client APS Job No. 2538 Project Title **GEOPHYSICAL SURVEY -**LINCOLN EASTERN BYPASS Subject LOCATION AND REFERENCING OF SURVEY GRIDS PARCELS N-W GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE #GISTERES UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 OSA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 1:4000 0m 120 160 200m 40 80 Checked by PPB Issue No. Plot A3 01 Survey date NOV 08 Drawn by RAJS Figure No. 03



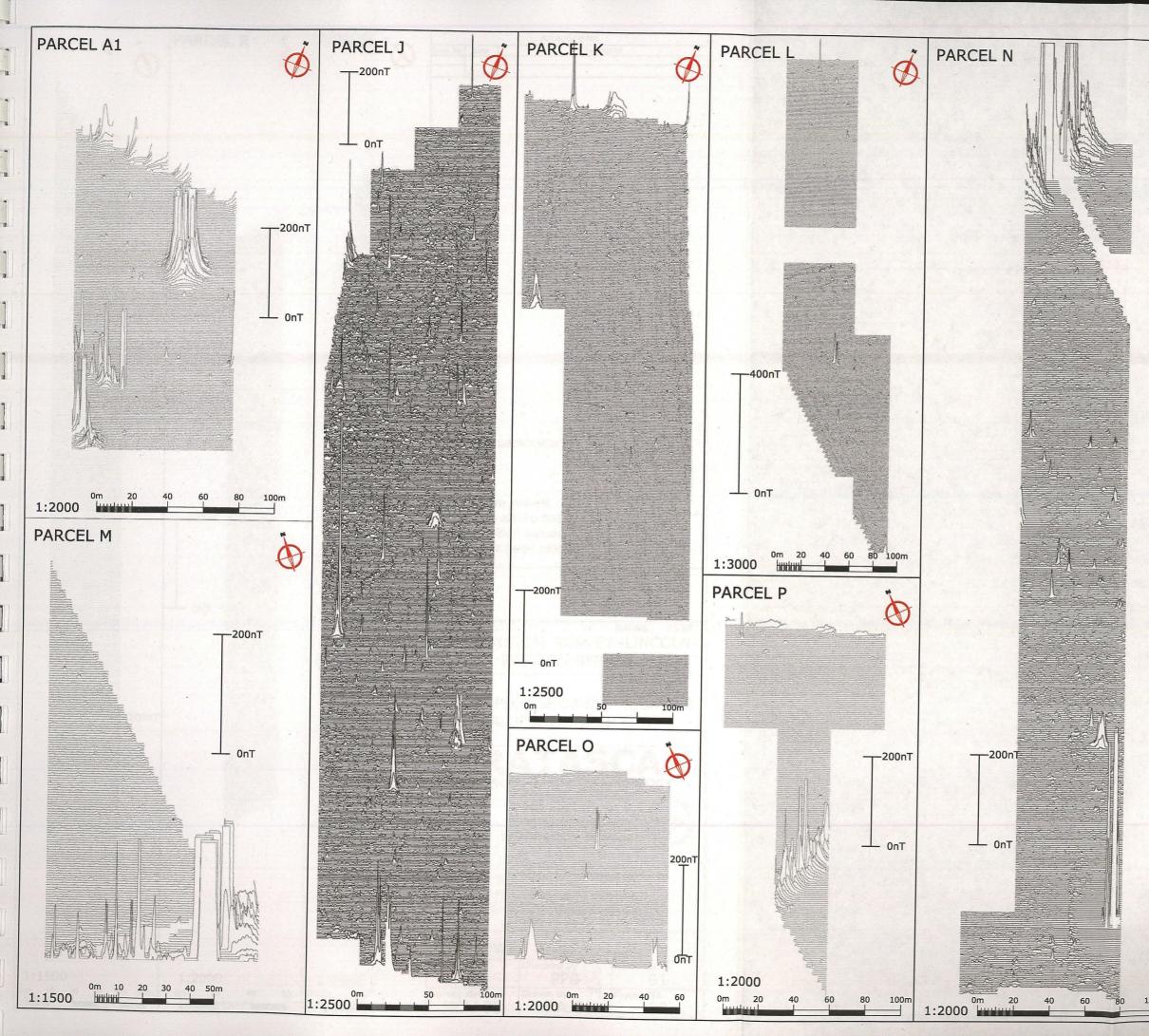




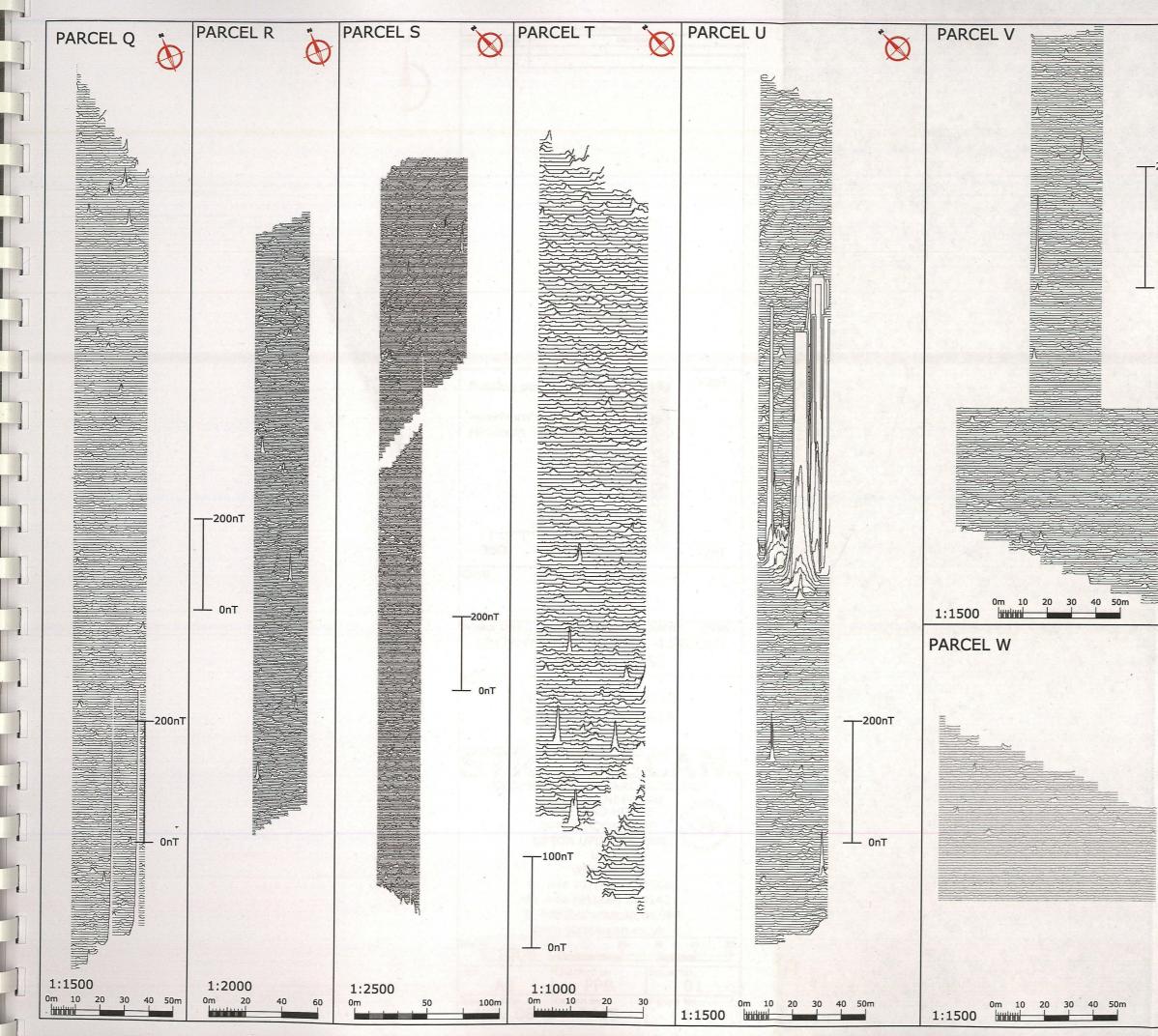
	Tarana Ala	Data		Amendments	ion	
A	Issue No. -	Date -	-	Descript		
	-	-				
					and the second second	
3.7						
					State Card	
					A Contraction	
	Section 44					
	Plo	otting	para	meters		
	+4	10nT				
	(P	ositive	e val	ues displace		
				ace line.	and the second secon	
	1 S. A. C. S.			es have not		
	be	een plo	ottea	1)		
	Client	E. Ser				
				APS		
	Projec	t Title			Job No. 2538	
	G	EOPH		CAL SURVE	A REAL PROPERTY OF A REAL PROPER	
	2 Mary		EA	STERN BYPA	455	
	Subje	ct				
	TRACE PLOTS SHOWING POSITIVE					
	W.	VA	ALUI	ES- PARCEL	SA1-P	
	1					
	111	1	1. 1			
	×11	GEOP	HYS	ICS FOR ARCI	HAEOLOGY	
				D ENGINEER		
	1			INEYARD HOU	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
				TON UPON SEV		
	1123			UK	. VSIN	
	Sec.			WR8 0SA	2266	
	1201			-44 (0)1684 59 -44 (0)1684 59		
				fo@stratascan		
	10			w.stratascan.c		
	Scale	SHO				
	Plot	5110	VIV	Checked by	Issue No.	
		A3		PPB	01	
100m	Sun	ey date	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	Drawn by	Figure No.	
IUUIII	Juive	OV O	0	RAJS	06	



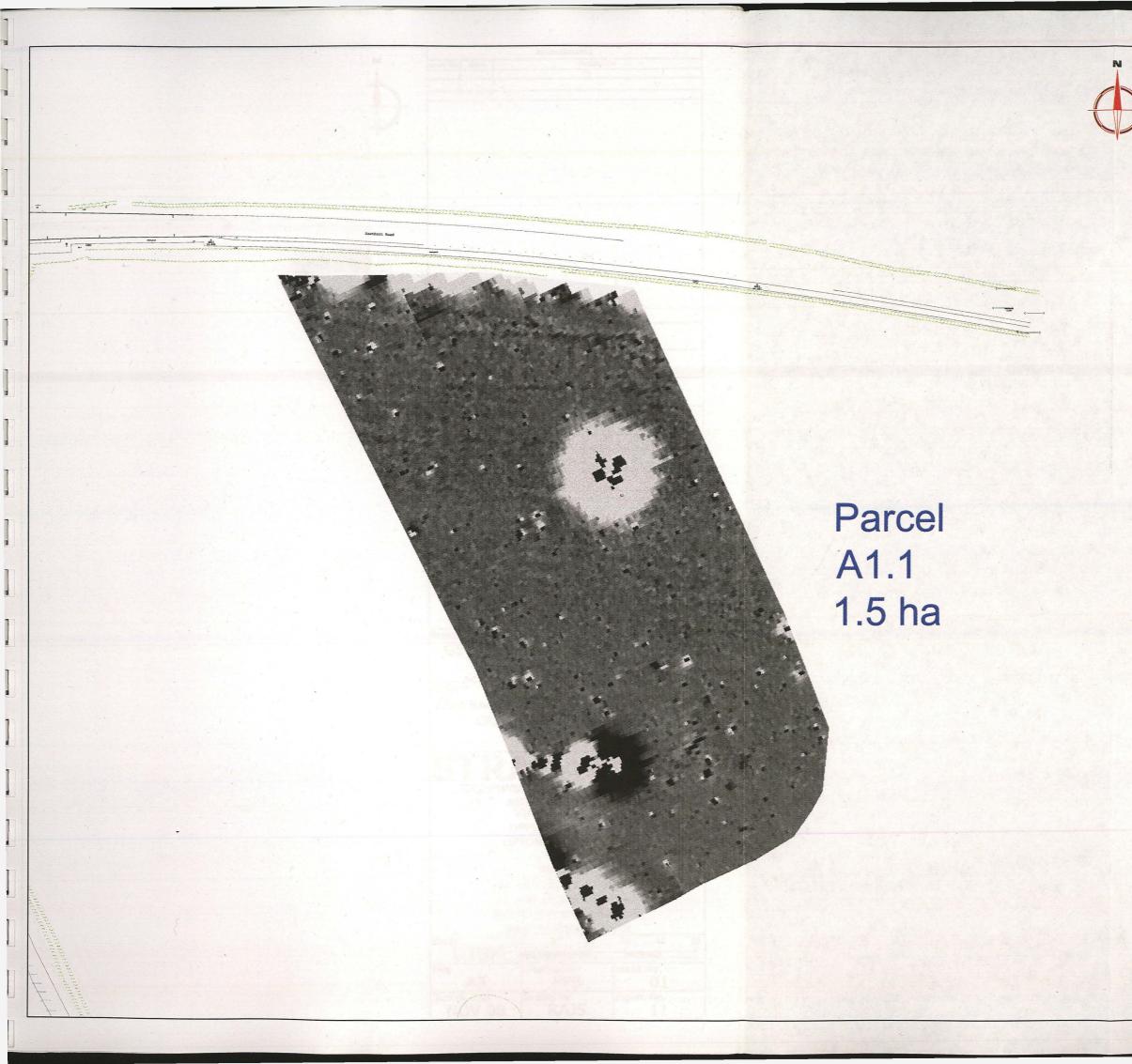
5	Amendments
$\bigotimes$	Issue No.         Date         Description           -         -         -         -
	· · ·
nT	
Г	
	Plotting parameters
	14007
	+40nT
	(Positive values displace
	above the trace line.
	Hidden values have not been plotted)
	Client
	APS
佢	Project Title Job No. 2538
X	GEOPHYSICAL SURVEY -LINCOLN
$\bigotimes$	EASTERN BYPASS
	Subject
	PLOT OF RAW GRADIOMETER DATA-
	PARCELS Q-W
2	
	GEOPHYSICS FOR ARCHAEOLOGY
	AND ENGINEERING VINEYARD HOUSE
-200nT	UPPER HOOK ROAD z < IFA o
	UPTON UPON SEVERN
	UK WR8 0SA
3-1-1-	T: +44 (0)1684 592266
	F: +44 (0)1684 594142
100-00	E: info@stratascan.co.uk www.stratascan.co.uk
– OnT	Scale
	AS SHOWN Plot Checked by Issue No.
	A3 PPB 01
	Survey date Drawn by Figure No.
	NOV 08 RAJS 07

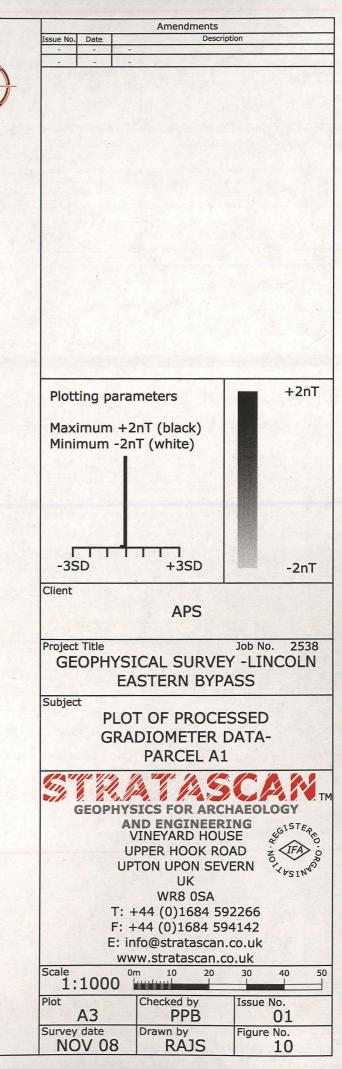


*	Issue No.	Amendments	viation					
A	Issue No. Date	- Desc	ription					
4								
	1.000							
	1							
	Plotting parameters							
	-40nT							
	line. Hidde	ove the trace						
	Client							
		APS						
		ICAL SURVE						
	Subject							
		TS SHOWING						
		17 145	CAN					
	GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING							
		VINEYARD HOUS	SE & CITERED					
	a second second as a second	PPER HOOK ROA						
		UK	ERN YESING					
	T: -	WR8 0SA +44 (0)1684 592	2266					
	F: +	-44 (0)1684 594	142					
		fo@stratascan.co w.stratascan.co						
	Scale AS SHOWN							
	AS SHUWIN	Checked by	Issue No.					
	A3	PPB	01					
00m	Survey date NOV 08	Drawn by RAJS	Figure No. 08					
	and the second							



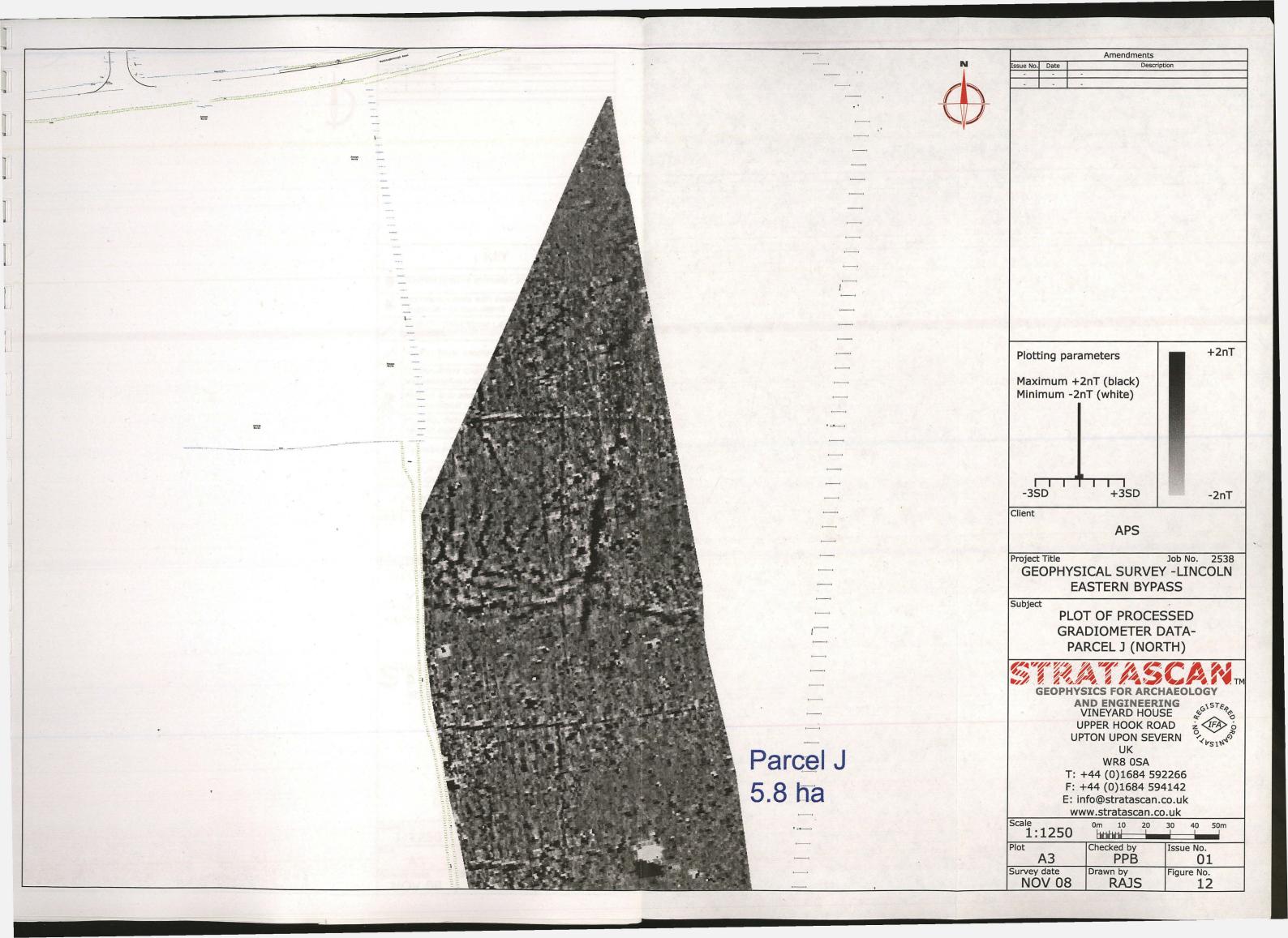
*~		Amendments	
$\infty$	Issue No. Date	Descr	ription
~			
	L'ESCOLO DE		
00nT			
	and a second		
)nT			
	A State of the second		
	Dest for the		
	A State Carlos		
	1.		
	Plotting nor	amotors	Salar Salar
WINN W	Plotting para	ameters	
NNII	-40nT		AN AN AN AN
	(Negative v		
		ove the trace	
	line. Hidden have not be		
	nave not be	en plotted j	
	Client		
		APS	
-			
*	Project Title		Job No. 2538 Y -LINCOLN
$\otimes$		STERN BYP	and it is an
V		STERN DIP	A55
	Subject		
	the second se		G NEGATIVE
	VALU	ES- PARCEL	SQ-W
	11, 1, 11.	1 6 62 5	
	GEOPHYS	ICS FOR ARC	HAEOLOGY
		D ENGINEER	
200nT		INEYARD HOU	
		TON UPON SEV	EDN OF 2
		UK	ERN YESING
1 march		WR8 0SA	22266
		-44 (0)1684 59 -44 (0)1684 59	
		fo@stratascan	
and the second	ww	w.stratascan.c	
	Scale		
L OnT	AS CHOWN		and the second
	AS SHOWN		Tecue No
OnT	AS SHOWN Plot A3	Checked by PPB	Issue No. 01
OnT	AS SHOWN	Checked by	and the second se

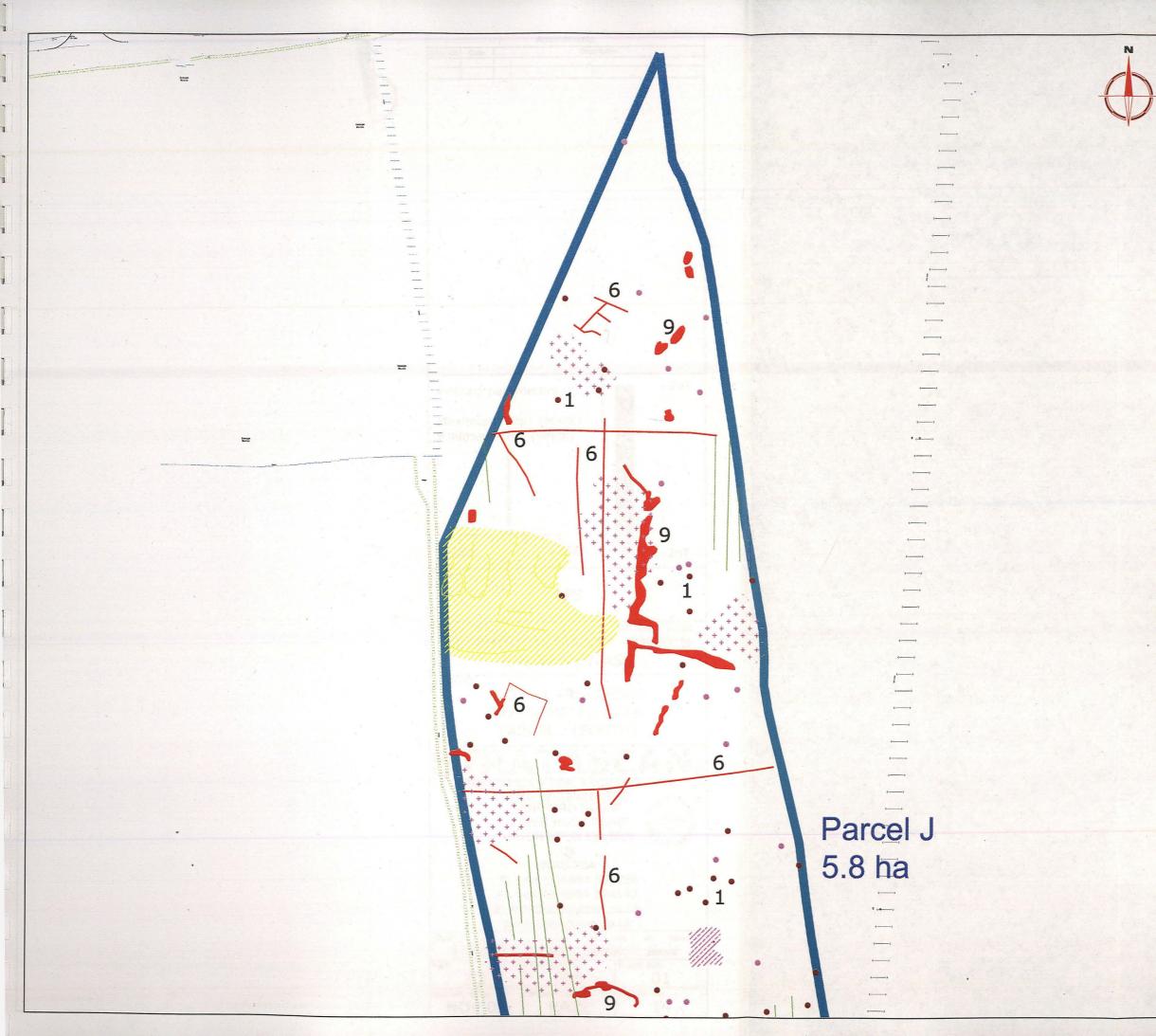




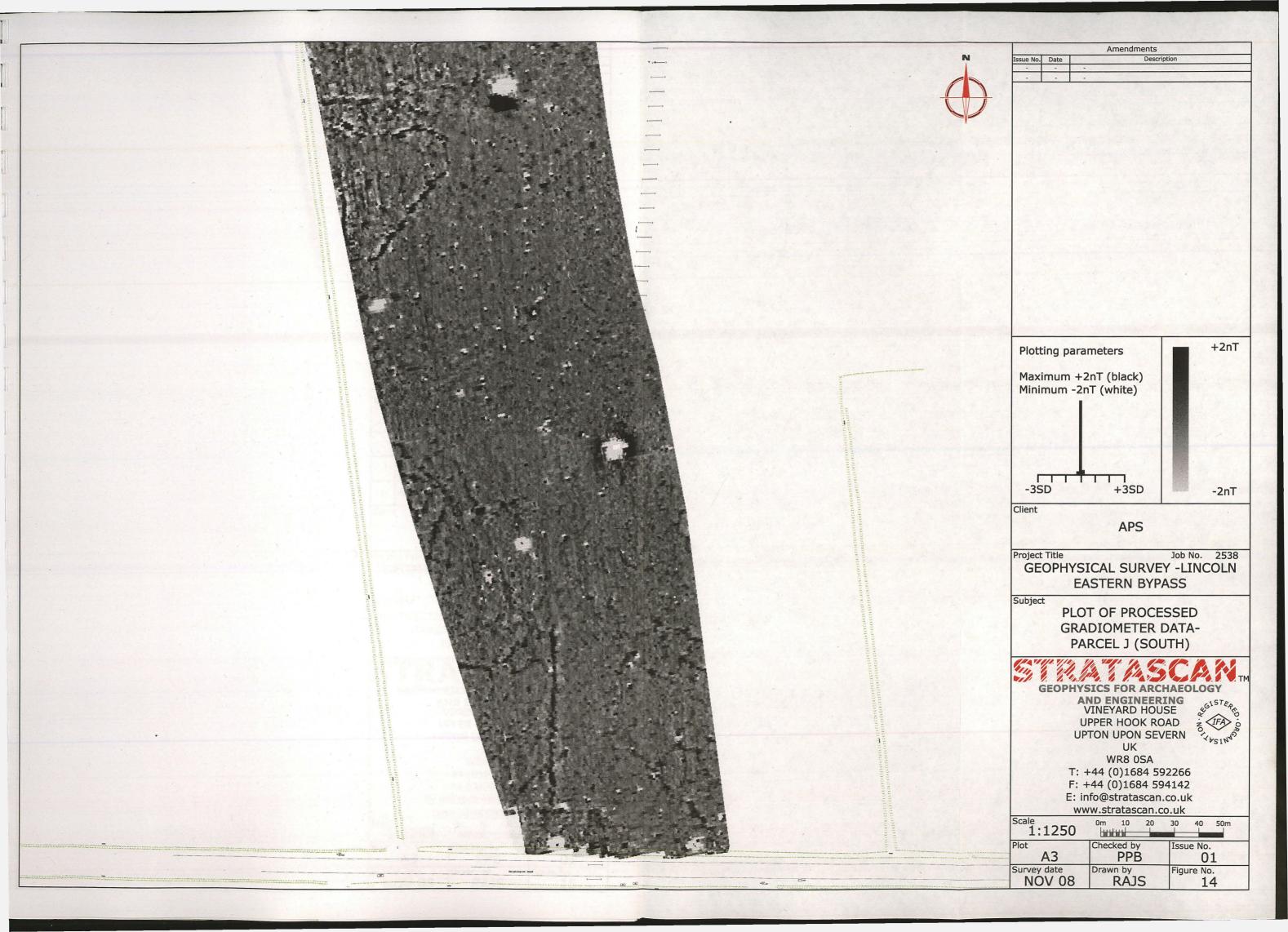


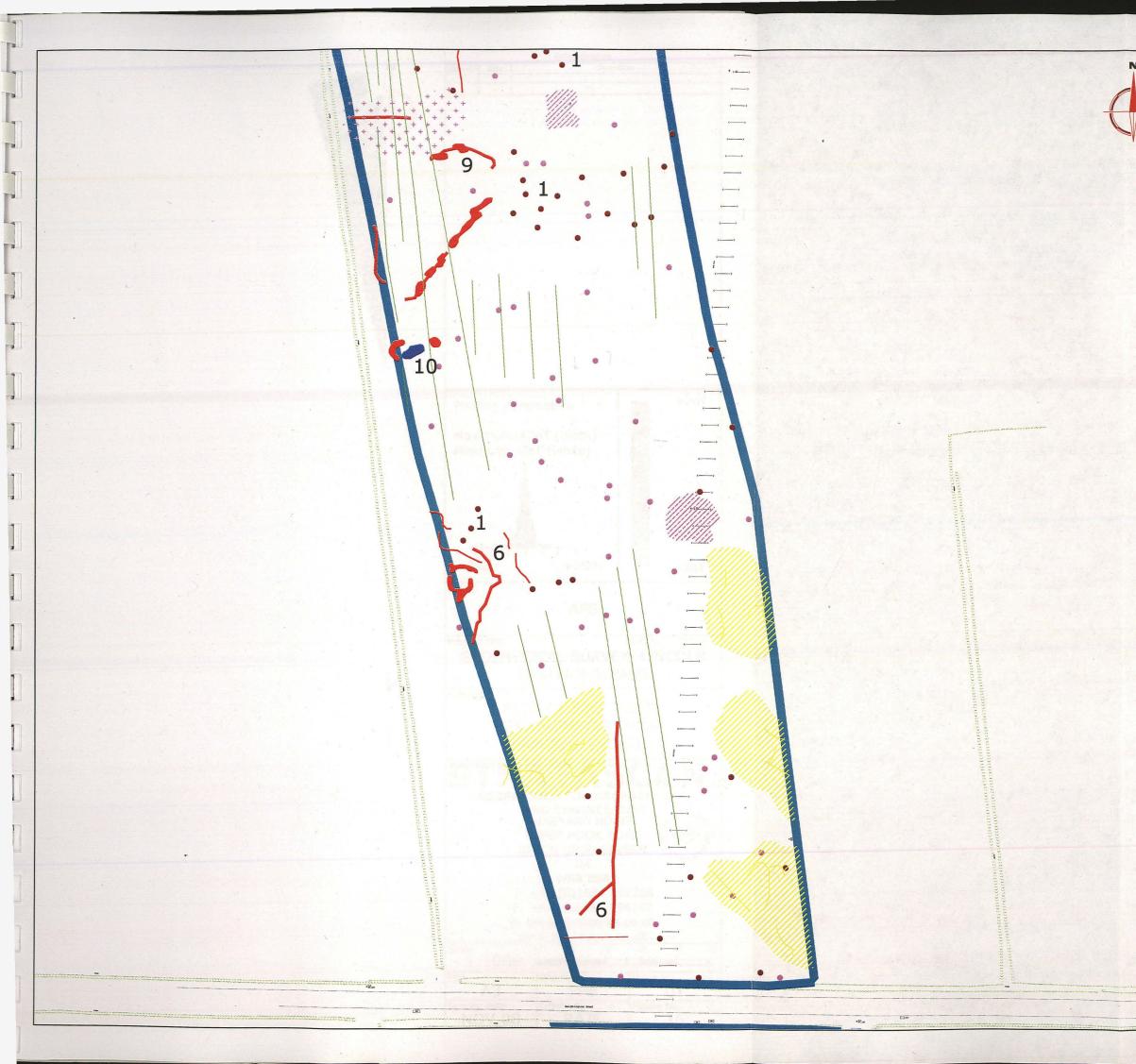
		Amendments	
Issue N	o. Date	- Descri	ption
-	-		
	2. C. S.		
10.00			
		KEY	and the
•	Discrete p	positive anomaly - pos	ssible pit
•		nomaly with associate	ed negative
		<ul> <li>ferrous object</li> <li>disturbance - associat</li> </ul>	ted with
/	pipe/cable		a series
/	Positive li	near anomaly - agricu	ultural mark
1		near anomaly - cut fe	ature of possible
	archaeological origin		
$\bigotimes$	Magnetic disturbance associated with nearby service or field boundary		
<del>XX</del>	Magnetic	disturbance of uncert	ain origin
88	haghetie		
1	Anomaly	type identification nur	nber
Client			
		APS	
<b>D</b>			1.1.1.
-		SICAL SURVE	Job No. 2538
0	and the second second	ASTERN BYP	
Subje			
			PRETATION OF
		DIOMETER ANO	
		PARCEL A1	
6ª'	1. 1/2	1. 1. 1. 6	C & 2.1
	1. 1. 1.	114. 1. 1.4.3	The second second
	GEOPH	YSICS FOR ARC	HAEOLOGY
		VINEYARD HOU	SE 401 PE
		UPPER HOOK RO	
		JPTON UPON SEV	ERN YUSING
		WR8 OSA	
		+44 (0)1684 59	
		+44 (0)1684 59 info@stratascan.	
		www.stratascan.c	
Scale		0m 10 20	30 40 5
Plot	:1000	Checked by	Issue No.
	A3	PPB	01
		Drawn by	Figure Ma
Surve	OV 08	RAJS	Figure No.



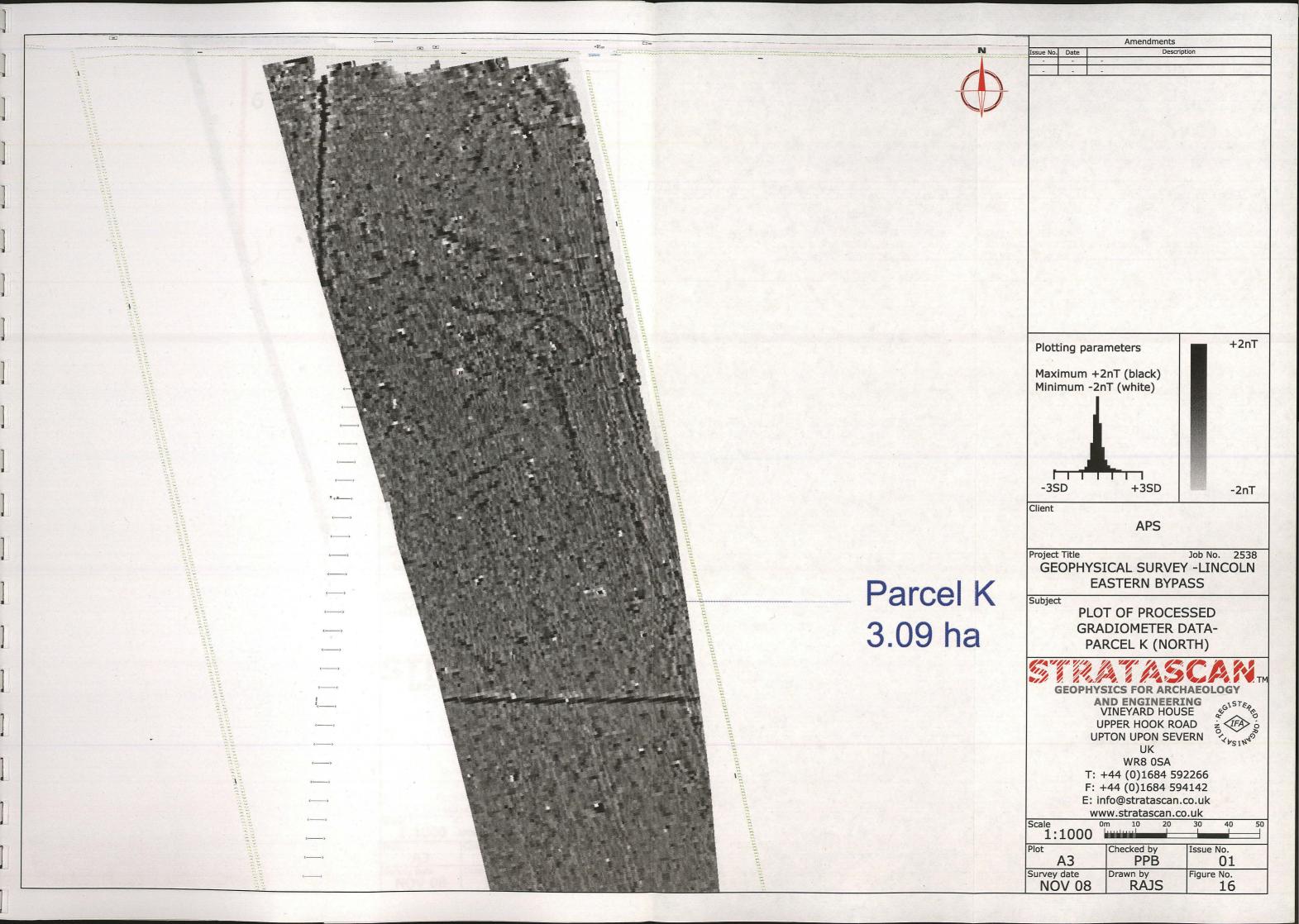


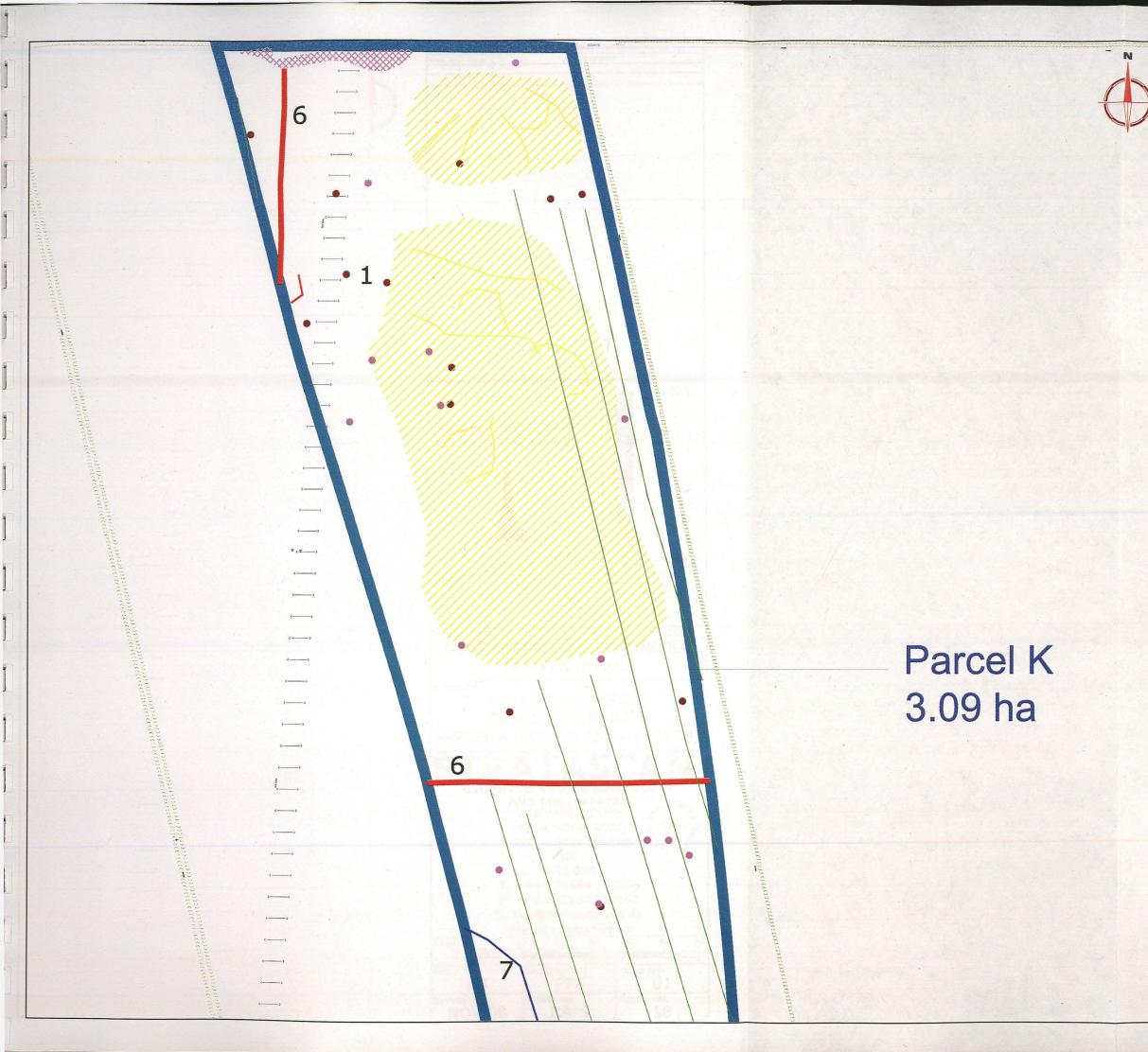
Issue No.	Date	Amendments	ription
-		Desc	TIPLION
-			
		KEY	
	Discrete pos	sitive anomaly - po	ossible pit
	Positive and	maly with associa	
		errous object sturbance - associa	ated with
	pipe/cable	Non-Set. 1	and a fail of
1.		ar anomaly - agric ar anomaly - cut f	
/ 1	archaeologi	cal origin	a share a share a
5	archaeologi		
	Magnetic dis netallic obje	sturbance associat acts	ed with nearby
* * * * * * * * *	lagnetic de	bris	
		netic variation - p edological respons	
1	Anomaly typ	pe identification nu	Imber
Client			
		APS	
Project			Job No. 2538
GE		ICAL SURVE	Y -LINCOLN
Subjec	and have the	SIERN DIP	A55
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TRACTIO		PRETATION O
		OMETER AND	
(PA1)	F		
11	1. 1.1.	4, 1, 1,4,	
		ND ENGINEER	
		VINEYARD HOU PPER HOOK RO	
		TON UPON SE	$\cap \vee \rangle$
		WR8 0SA	00000
		⊦44 (0)1684 5 ⊦44 (0)1684 5	
		nfo@stratascar	n.co.uk
		IN ctratacon	LU.UK
Scale	WW	0m 10 20	30 40 50m
1: Plot	wv 1250	0m 10 20	30 40 50m
1: Plot	ww 1250 A3	0m 10 20	30 40 50m



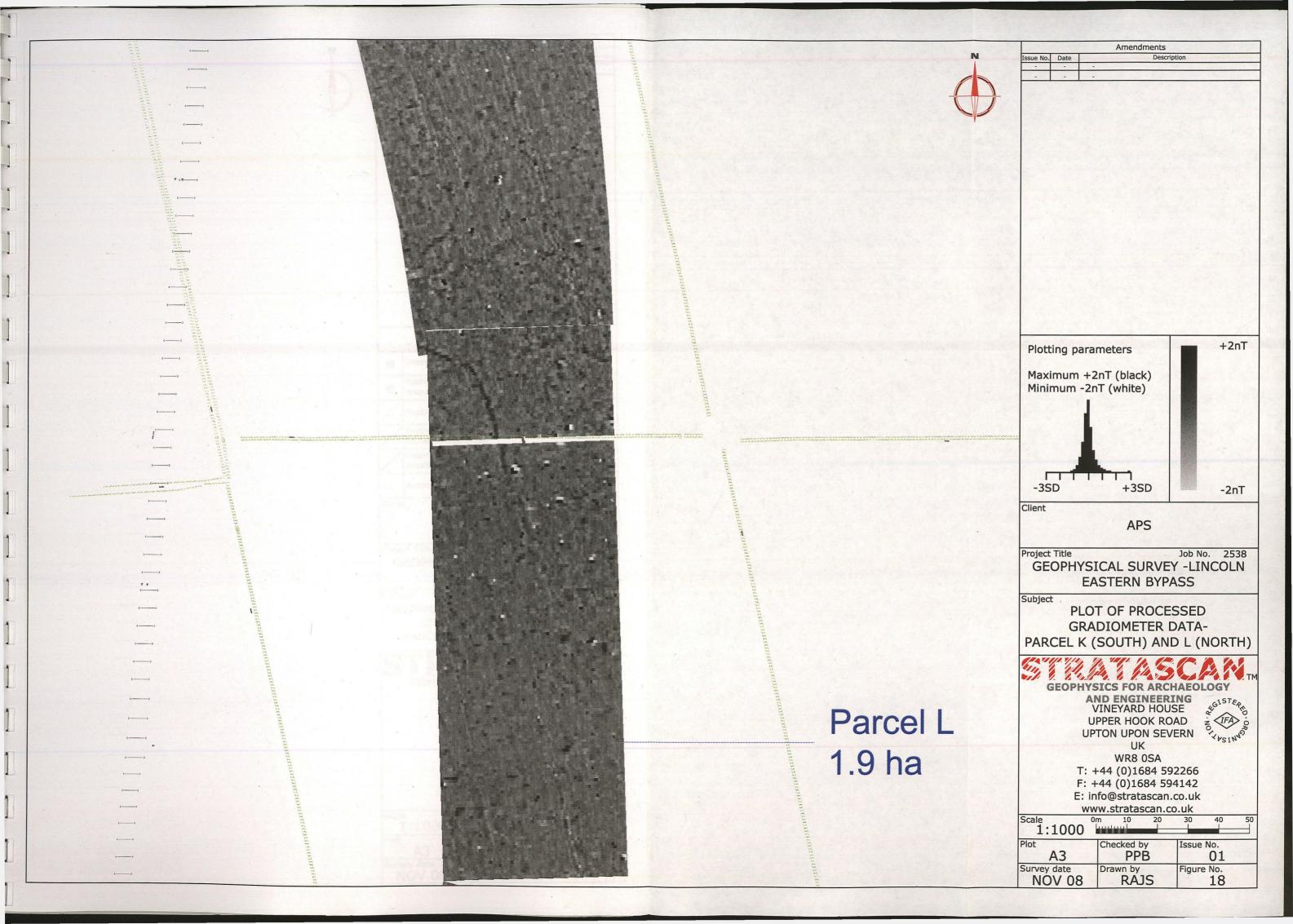


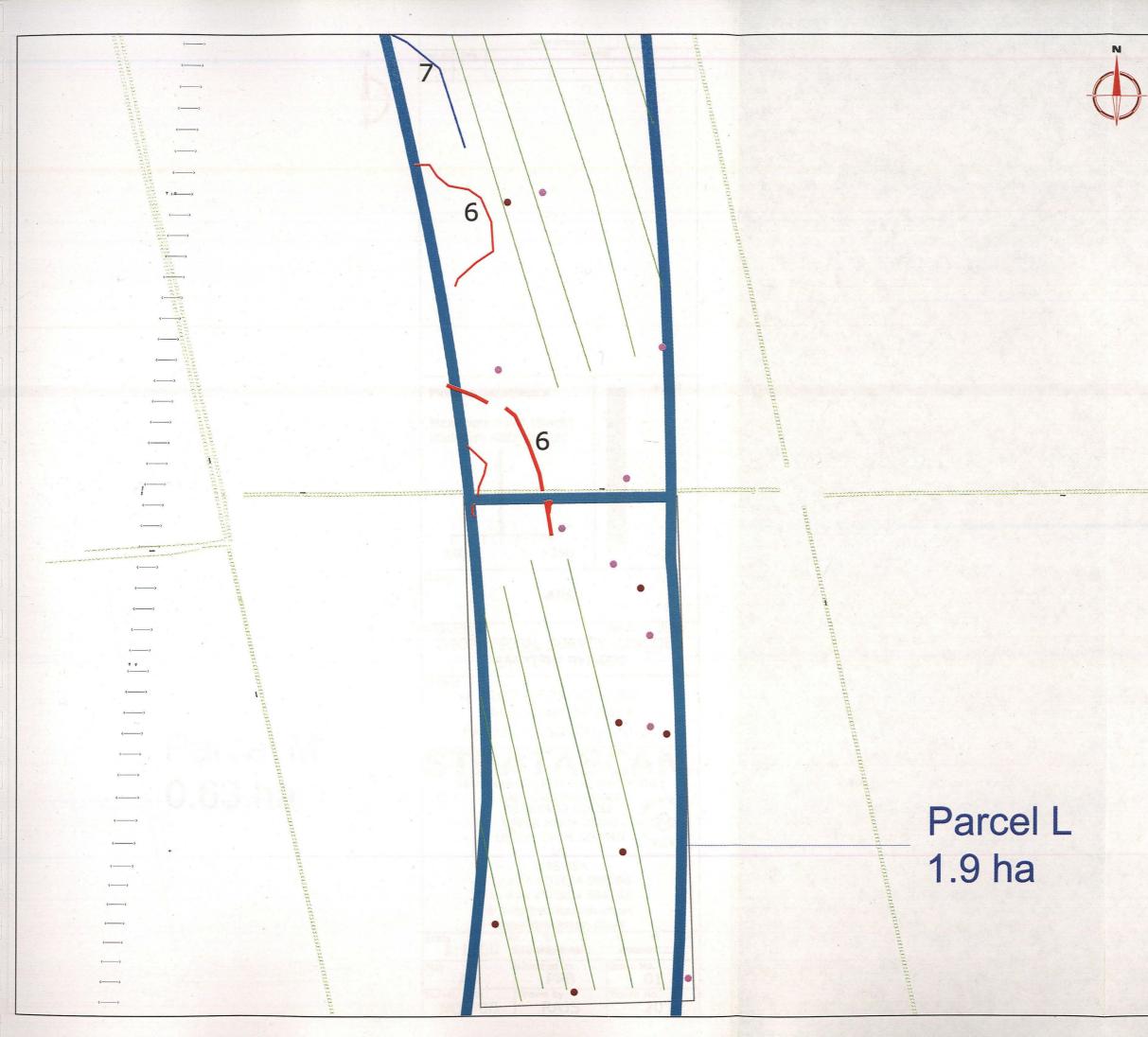
Issue N	o. Date	Amendments Descript	ion
-			
12.0			
AV-			
		KEY	
•	1.1.1.1.1.1.1.1	itive anomaly - poss	and the second second
0		maly with associated errous object	l negative
/	Positive linea	ar anomaly - agricul	tural mark
/	Positive linea archaeologic	ar anomaly - cut fea al origin	ture of possible
8	Positive area archaeologic	a anomaly - cut feat al origin	ure of possible
8		a anomaly - bank o naeological origin	r earthwork of
	Magnetic dis metallic obje	turbance associated	with nearby
+ + + + + + + +	Magnetic del	oris	
Z		netic variation - pos edological response	sible
1	Anomaly typ	e identification num	ber
Client		and a set of the sector	
		APS	
	ct Title		Job No. 2538
G		CAL SURVEY	
Cubia		STERN BYPA	55
Subje	and the second state of the second	N AND INTERP	RETATION O
	GRADI	OMETER ANOM	IALIES-
	P	ARCEL J (SOUT	Ή)
6	1. 41 1	1 1 K. C.	C A M
il.	GEOPHYS	SICS FOR ARCH	AEOLOGY
	A	ND ENGINEERI	
		INEYARD HOUS	
		TON UPON SEVE	
		UK WR8 0SA	
		-44 (0)1684 592	
		44 (0)1684 594	
		fo@stratascan.co w.stratascan.co	
	:1250		30 40 50m
Scale 1			
		Checked by	Issue No.
1 Plot	A3 y date	Checked by PPB Drawn by	Issue No. 01 Figure No.



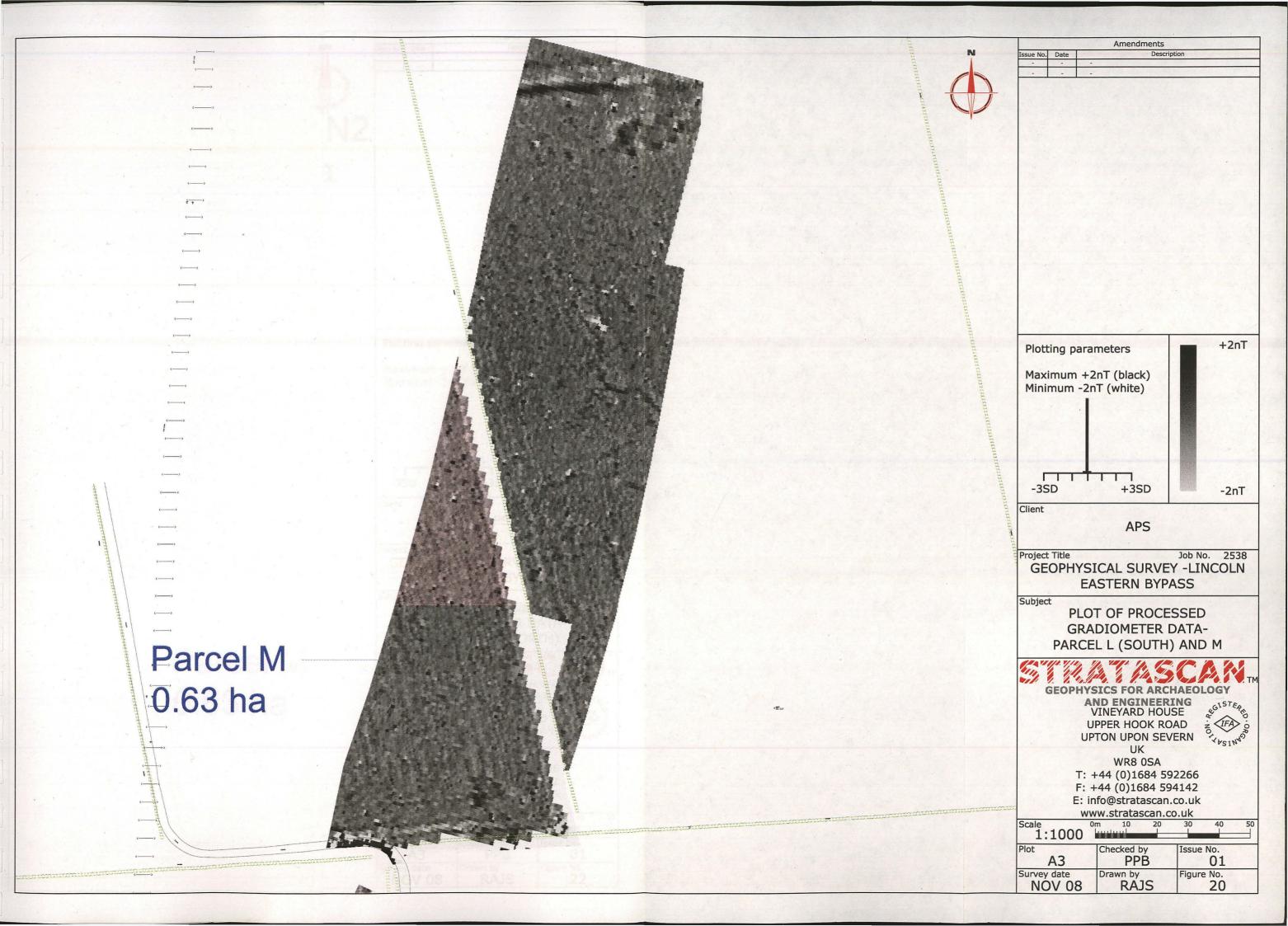


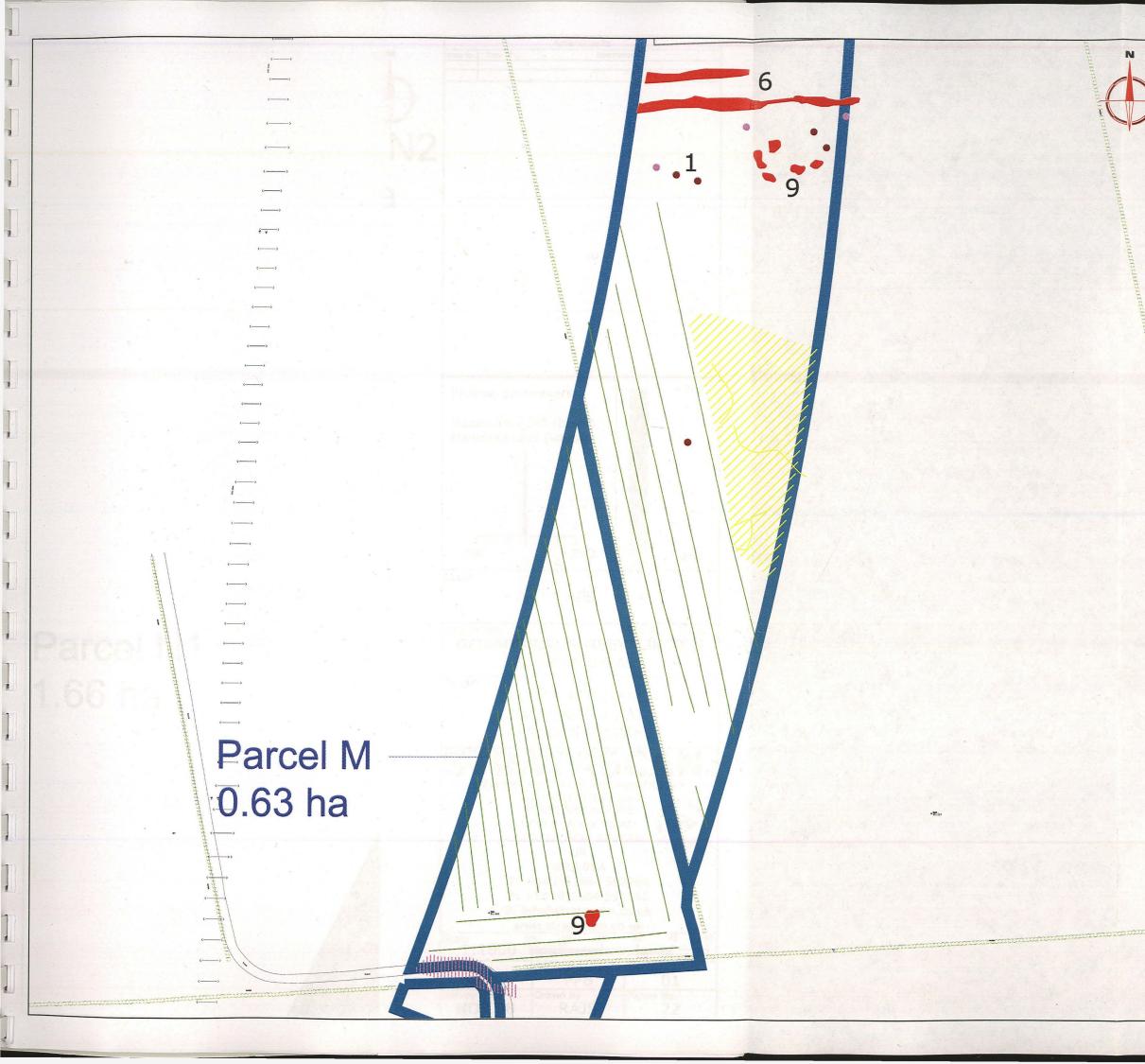
Issue N	o. Date	Amendments	cription
-			
-			
100			
	1. 35 20	KEY	
•	Discrete pos	itive anomaly - p	ossible pit
0		maly with associaterrous object	ated negative
1	an really a set of	ar anomaly - agr	icultural mark
/	Positive linea	ar anomaly - cut	feature of possible
/	archaeologic	- All Training	
/		ear anomaly - ba naeological origin	nk or earthwork of
	and the second state of th	turbance associa	and the second sec
XXX	service or fie		
//		netic variation - edological respor	
<u> </u>		1	
1		e identification n	lumber
Client			
		APS	
Ducia	ct Title		Job No. 253
		CAL SURV	Job No. 253
G		STERN BY	
Subje		STERN BI	
			RPRETATION C
ADC		OMETER AN	
		ARCEL K (NO	
	T 11. 1/10. 1		
111	1 11.1	4 1 14	SCAN
	GEOPHYS	SICS FOR AR	CHAEOLOGY
		/INEYARD HO PPER HOOK R	USE & A
		TON UPON SE	
		UK	EVERN YUSING
		and the second second second second second second	
		WR8 0SA	17766
		-44 (0)1684 !	
	F: +	-44 (0)1684 ! -44 (0)1684 !	594142
	F: + E: in	-44 (0)1684 !	594142 n.co.uk
	F: + E: in ww	-44 (0)1684 5 -44 (0)1684 5 fo@stratasca ww.stratascan	594142 n.co.uk
1	F: + E: in ww	-44 (0)1684 5 44 (0)1684 5 fo@stratasca w.stratascan n 10 20	594142 n.co.uk .co.uk 30 40
Scale 1 Plot	F: + E: in ww :1000	-44 (0)1684 5 44 (0)1684 5 fo@stratasca w.stratascan n 10 20	594142 n.co.uk 30 40 Issue No.
1 Plot Surve	F: + E: in ww	-44 (0)1684 5 44 (0)1684 5 fo@stratasca w.stratascan n 10 20	594142 n.co.uk .co.uk 30 40



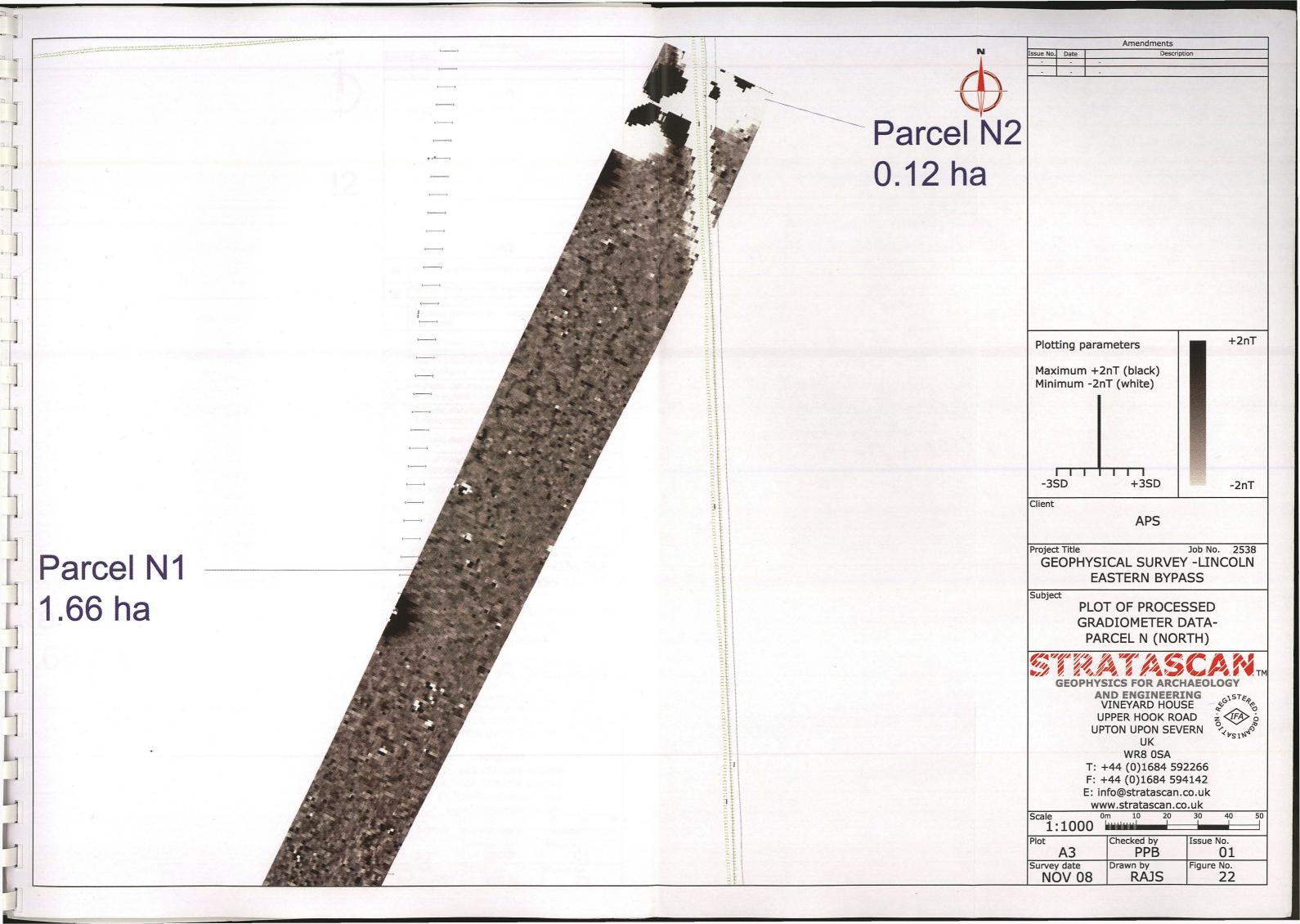


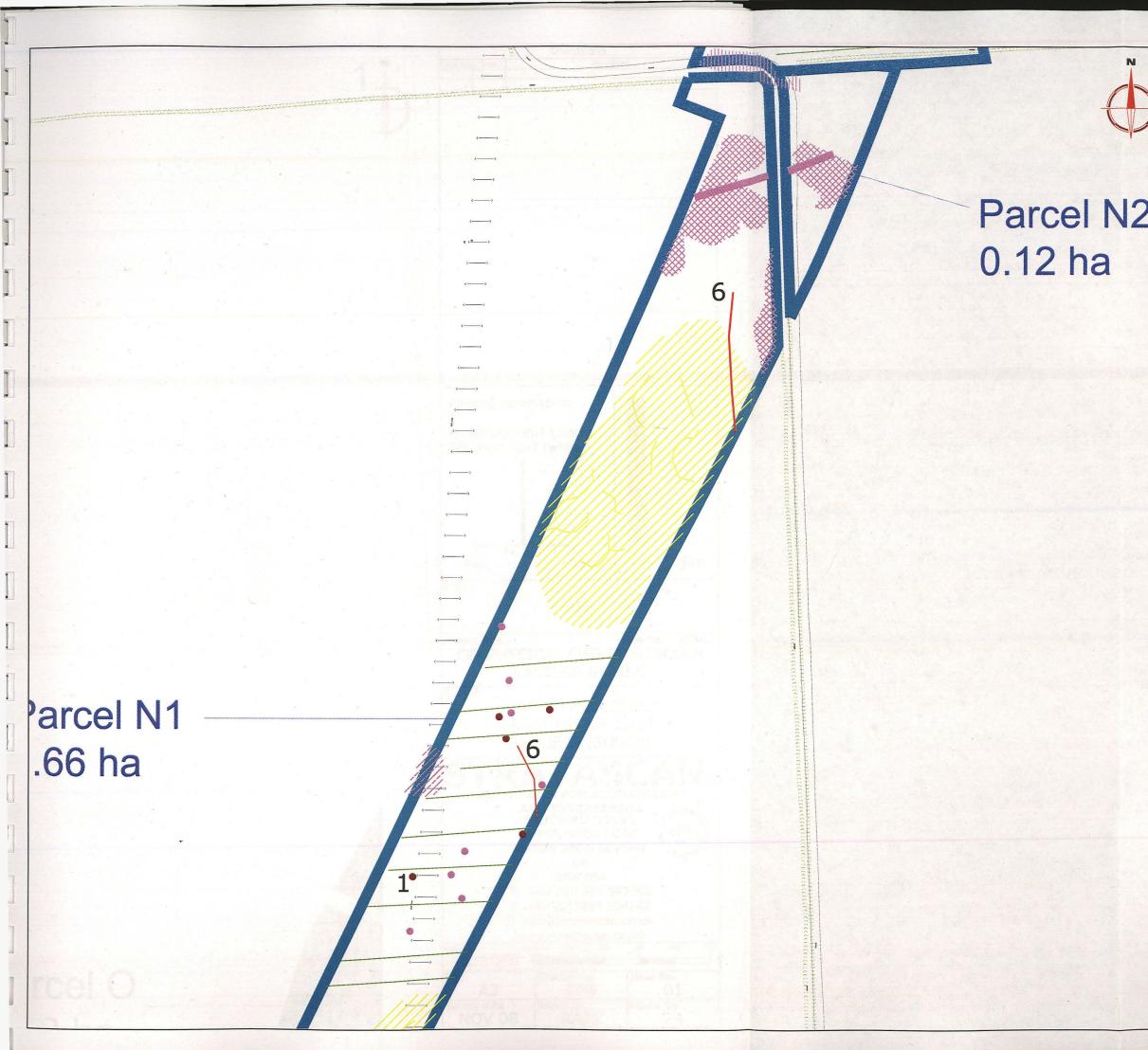
Essue No.       Date       Description         Image: State of the state			Amendments			
KEY         Discrete positive anomaly - possible pit         Positive anomaly with associated negative response - ferrous object         Positive linear anomaly - agricultural mark         Positive linear anomaly - cut feature of possible archaeological origin         1       Anomaly type identification number         Client       APS         Project Title Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         WERGINEERING UPPER HOOK ROAD UPTON UPON SEVERN UK         WR8 0SA       T: +44 (0)1684 592266         F: +44 (0)1684 592166         F: +44 (0)1684	Issue N	o. Date		ion		
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>	-		We want to be			
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>		Star Star	Mar Maria			
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDE</li> <li>O1</li> <li>O1</li> </ul>						
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Negative linear anomaly - bank or earthwork of possible archaeological origin</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ASS</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)</li> <li>MEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>PDI Checked by Issue No.</li> <li>PDI Checked by Issue No.</li> <li>PDI Checked by Issue No.</li> <li>PDI Checked by Figure No.</li> <td></td><td></td><td></td><td></td></ul>						
Positive anomaly with associated negative response - ferrous object         Positive linear anomaly - agricultural mark         Positive linear anomaly - cut feature of possible archaeological origin         Negative linear anomaly - bank or earthwork of possible archaeological origin         1       Anomaly type identification number         Client       APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         Image: the state of the	1.6.1	Contract of	KEY			
response - ferrous object         Positive linear anomaly - agricultural mark         Positive linear anomaly - cut feature of possible archaeological origin         Negative linear anomaly - bank or earthwork of possible archaeological origin         1       Anomaly type identification number         Client       APS         APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         OFFICIENTION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         OFFICIENTION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         OFFICIENTION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         OFFICIENTION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WR8 0SA         CIEFA 00         AND ENGINEERING VINEYARD HOUSE         UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WR8 0SA         CIEFA 00         O 1         O 1	•	Discrete posi	itive anomaly - poss	ible pit		
Positive linear anomaly - agricultural mark Positive linear anomaly - cut feature of possible archaeological origin Negative linear anomaly - bank or earthwork of possible archaeological origin Anomaly type identification number Client APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) Client AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk www.stratascan.co.uk WWW.stratascan.co.uk PDB 01 Survey date Drawn by Figure No.	0			I negative		
Positive linear anomaly - cut feature of possible archaeological origin Negative linear anomaly - bank or earthwork of possible archaeological origin Anomaly type identification number Client APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) COMPARIANCE OF ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592164 F: info@stratascan.co.uk www.stratascan.co.uk Scale 0 m 10 20 30 40 50 1:1000 minut figure No.		response - fe	errous object	No. No. A.		
archaeological origin         Negative linear anomaly - bank or earthwork of possible archaeological origin         1       Anomaly type identification number         Client         APS         Project Title         Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)         OPER HOOK ROAD UPTON UPON SEVERN UK         WR8 0SA         T: +44 (0)1684 592266         F: +44 (0)1684 592266         F: +44 (0)1684 592266         F: +44 (0)1684 592142         E: info@stratascan.co.uk         Www.stratascan.co.uk         Scale         Om         A3         PPB         O1	/	Positive linea	ar anomaly - agricult	tural mark		
Negative linear anomaly - bank or earthwork of possible archaeological origin         1       Anomaly type identification number         Client       APS         Project Title Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES-PARCEL K (SOUTH) AND L (NORTH)         OPER HOOK ROAD UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WR8 0SA         T: +44 (0)1684 592266         F: einfo@stratascan.co.uk         WWW.stratascan.co.uk         Supervey date         Drawn by	1	Positive linea	ar anomaly - cut feat	ture of possible		
Image: possible archaeological origin         1       Anomaly type identification number         Client       APS         APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)         MODE INTERPRETATION OF GEOPHYSICS FOR ARCHAEOLOGY NINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA         UK WR8 0SA         T 444 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk         Scale         Om 10 20 30 40 50         1:1000         MUMUL         Supervey date	/					
1       Anomaly type identification number         Client       APS         APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject       ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)         Subject         AMD ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK         WR8 0SA         T: +44 (0)1684 592266         F: +44 (0)1684 594142         E: info@stratascan.co.uk         WWW.stratascan.co.uk         Scale         Om 10 20 30 40 50         1:1000         MUMUL         PPB 01         Supervey date	/			or earthwork of		
Client APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) COMPANY OF AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 0m 10 20 30 40 50 1:1000 0m 1	-					
APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) COMPANY OF THE ANOMALIES- PARCEL K (SOUTH) ANO L (NORTH) COMPANY OF THE ANOMALIES- PARCEL K (SOUTH) ANO L (NORTH) COMPANY OF THE ANOMALIES- PARCEL K (SOUTH) ANO L (NORTH) COMPANY OF THE ANOMALIES- COMPANY OF T			e identification num	Der		
Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) COMPANY OF THE ADD AND L (NORTH) COM	Client	•				
GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 0 1 10 20 30 40 50 1:1000 10 20 30 40 50 1:1000 0 10 10 10 10 10 10 10 10 10 10 10			APS			
GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 0 1 10 20 30 40 50 1:1000 10 20 30 40 50 1:1000 0 10 10 10 10 10 10 10 10 10 10 10						
EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)         Subject         OPARCEL K (SOUTH) AND L (NORTH)         Subject         AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WR8 0SA         T +44 (0)1684 592266         F: +44 (0)1684 594142         E: info@stratascan.co.uk         WWW.stratascan.co.uk         Scale         Om         111000         Mathematical Scale         On         Plot         Checked by         Issue No.         O1         Survey date			CAL SUDVEY			
Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 0m 10 20 30 40 50 1:1000 10 20 30 40 50 1:1000 0m 10 20 30 40 50 1:1	G					
ABSTRACTION AND INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)	Cubic		SILKN DIFA	33		
GRADIOMETER ANOMALIES- PARCEL K (SOUTH) AND L (NORTH)				DETATION OF		
PARCEL K (SOUTH) AND L (NORTH)	ADS					
GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 0 10 20 30 40 50 1:1000 10 20 30 40 50 1:1000 0 10 10 10 10 10 10 10 10 10 10 10		the second second second second	- the second of the second sec			
AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0m 10 20 30 40 50 1:1000 10 40 40 50 1:1000 10 40 40 50 1:1000 10 40 50 1:1000 10 40 50 1:1000 10 50 50 1:10	48.4					
AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0m 10 20 30 40 50 1:1000 10 40 40 50 1:1000 10 40 40 50 1:1000 10 40 50 1:1000 10 40 50 1:1000 10 50 50 1:10	111	5 61. 1	1 125			
VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>m</sup> 10 20 30 40 50 1:1000 10 20 50		GEOPHYS	ICS FOR ARCH	AEOLOGY		
VINETARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 50 1:1000 10 40 50 1:1000 10 40 50 1:1000 10 50 1:10		AN	D ENGINEERI	NG CISTER		
UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 50 1:1000 10 20 30 40 50 Plot Checked by Issue No. Plot Checked by Issue No.				5 × × 5		
UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 50 1:1000 10 20 50 1:1000 10 50 1:1000 10 50 1:1000 10 50 1:1000 10 50 1:1000 10 50				DNI O V 2		
T: +44 (0)1684 592266         F: +44 (0)1684 594142         E: info@stratascan.co.uk         www.stratascan.co.uk         Scale $0m$ $10$ $20$ $30$ $40$ $50$ 1:1000 $10$ $20$ $30$ $40$ $50$ Plot       Checked by       Issue No.         A3       PPB $01$ Survey date       Drawn by       Figure No.		U		2 PSING		
F: +44 (0)1684 594142         E: info@stratascan.co.uk         www.stratascan.co.uk         Scale       0m       10       20       30       40       50         1:1000       10       20       30       40       50         Plot       Checked by       Issue No.         A3       PPB       01         Survey date       Drawn by       Figure No.						
E: info@stratascan.co.uk www.stratascan.co.uk Scale 0m 10 20 30 40 50 1:1000 Checked by Issue No. A3 PPB 01 Survey date Drawn by Figure No.						
www.stratascan.co.uk       Scale     0m     10     20     30     40     50       1:1000     10     20     30     40     50       Plot     Checked by     Issue No.       A3     PPB     01       Survey date     Drawn by     Figure No.						
Scale     0m     10     20     30     40     50       1:1000     10     10     20     30     40     50       Plot     Checked by     Issue No.     10     10     10       A3     PPB     01     01       Survey date     Drawn by     Figure No.						
Plot Checked by Issue No. A3 PPB 01 Survey date Drawn by Figure No.	Scale	On	n 10 20			
A3 PPB 01 Survey date Drawn by Figure No.		:1000				
Survey date Drawn by Figure No.	Plot	A3		and the second		
	Surve					



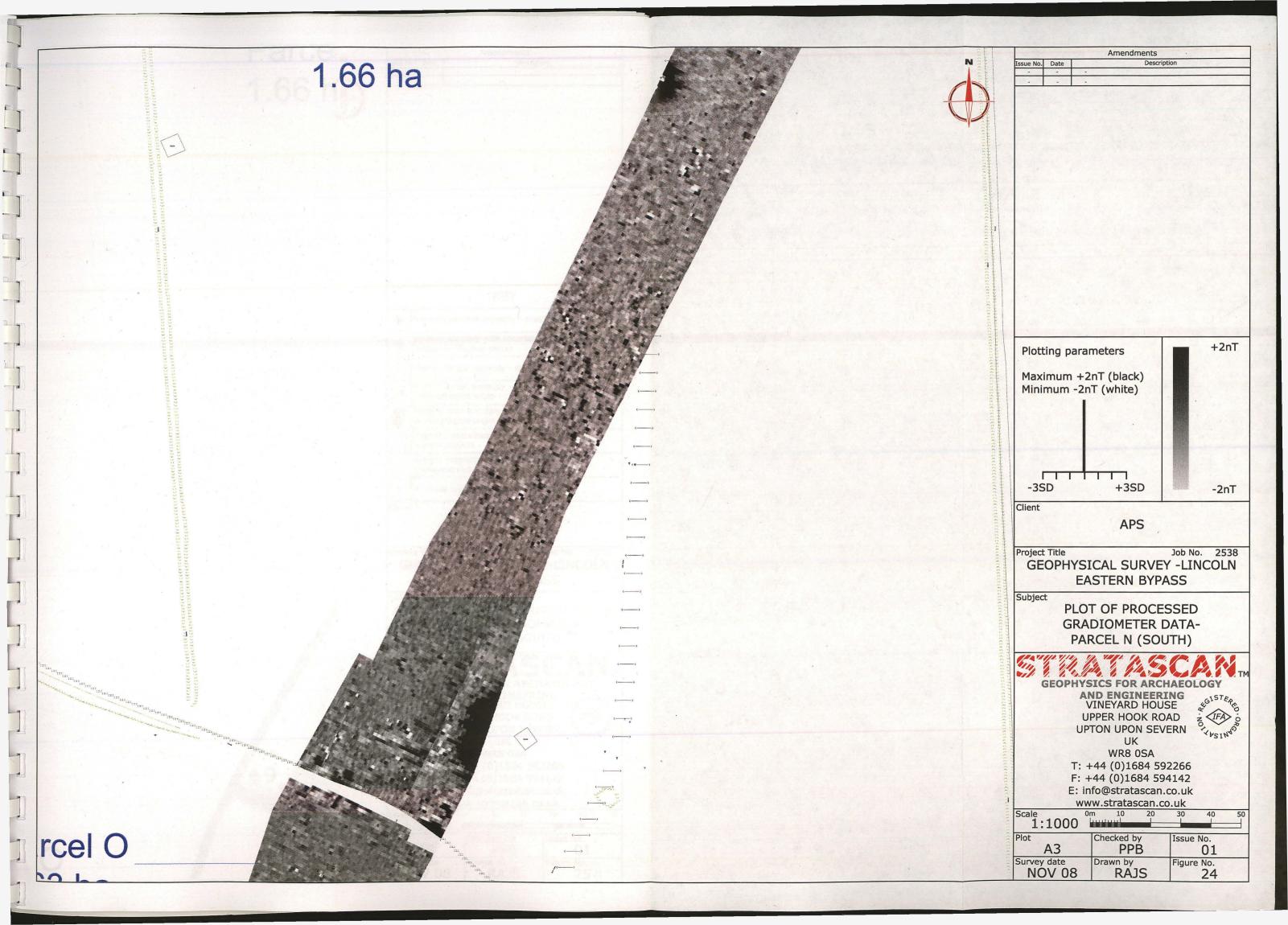


	Trance M		Amendments	los
	Issue N	o. Date	Descript	ion .
	-			
1				
/	in some			
	-			
	-			
	1			
· ·				A CONTRACTOR OF THE OWNER OF THE
	1.5.0			
				A State State
	1			
	Star B	- 19 Jan	KEY	
	16		KL1	
10100	•	Discrete pos	itive anomaly - poss	ible pit
1110			maly with associated	l negative
000		response - fe	errous object	
121712121212121212121212121212121212121	/	Positive linea	ar anomaly - agricul	tural mark
22228	1	Positive linea	ar anomaly - cut feat	ture of possible
\$3.87	/	archaeologic		
1210			anomaly - cut featu	ure of possible
10.0	6	archaeologic	al origin	
		Magnetic dis	turbance related to t	track
	X	Area of mag	netic variation - pos	sible
	2/	geological/pe	edological response	
	1	Anomaly typ	e identification num	ber
	Client			
	1.50		ADC	State State State
	1.23		APS	
				Job No. 2538
	G		CAL SURVEY	
	1.1.1.1	EA	STERN BYPA	SS
	Subje	ect		
	ABS	TRACTIO	N AND INTERP	RETATION OF
			OMETER ANOM	
	1.1.1	PARC	ELL (SOUTH)	AND M
			1. VIII	
	11	1411	1 1 15	
	vil	9. 1. 4.M		AEOLOGY
	120	GEOPHYS	ND ENGINEERI	
			INEYARD HOUS	
		UI	PPER HOOK ROA	D z IFA o
			TON UPON SEVE	0 ~ 2
			UK	-514
			WR8 0SA	
	14		-44 (0)1684 592	
			44 (0)1684 594	
			fo@stratascan.c	
naar			w.stratascan.co	
	Scale 1		n 10 20	30 40 50
	_⊥ Plot	.1000	Checked by	Issue No.
	PIOC	A3	PPB	
	Surve	ey date	Drawn by	Figure No.
		OV 08	RAJS	21
				and the second se



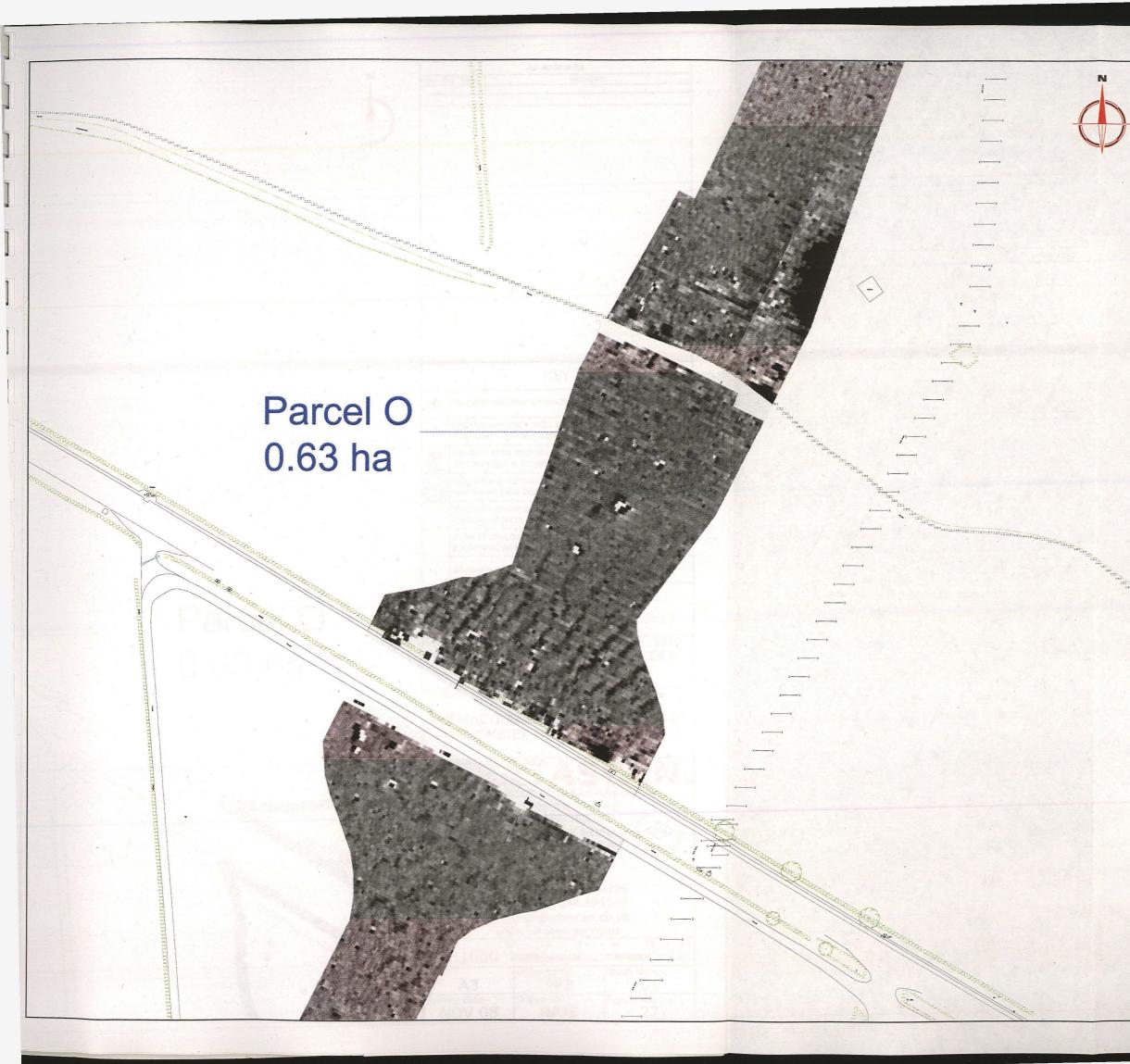


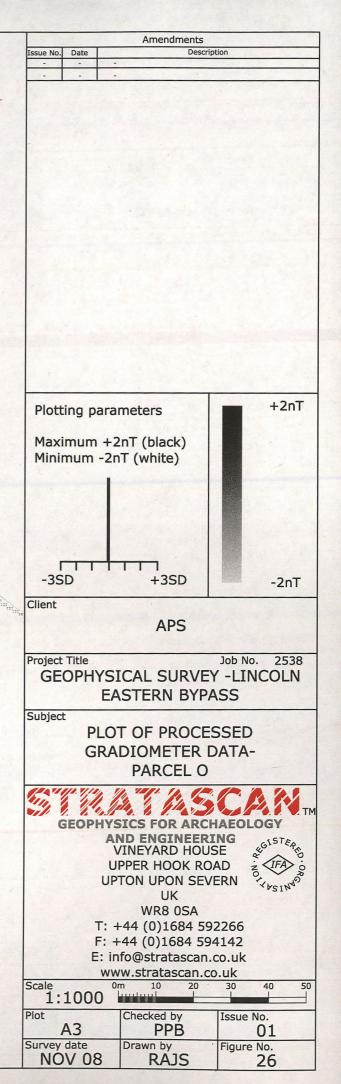
Issue N	Amendments o. Date Description
-	
	KEY
•	Discrete positive anomaly - possible pit
-	Positive anomaly with associated negative
	response - ferrous object
/	Magnetic disturbance - associated with pipe/cable
1	Positive linear anomaly - agricultural mark
1	Positive linear anomaly - cut feature of possible
	archaeological origin
***	Magnetic disturbance associated with nearby service or field boundary
	Magnetic disturbance associated with nearby metallic objects
	Magnetic disturbance related to track
//	Area of magnetic variation - possible geological/pedological response
1	Anomaly type identification number
Client	
	APS
	ct Title Job No. 253 EOPHYSICAL SURVEY -LINCOLN
J	EASTERN BYPASS
Subje	
-	STRACTION AND INTERPRETATION (
	GRADIOMETER ANOMALIES-
	PARCEL N (NORTH)
hin,	A A A SCAA
	GEOPHYSICS FOR ARCHAEOLOGY
	AND ENGINEERING
	UPPER HOOK ROAD
	WR8 0SA
	T: +44 (0)1684 592266
	F: +44 (0)1684 594142
	E: info@stratascan.co.uk www.stratascan.co.uk
Scale 1	E: info@stratascan.co.uk www.stratascan.co.uk 0m 10 20 30 40
	E: info@stratascan.co.uk www.stratascan.co.uk :1000 10 20 30 40 Checked by Issue No.
1 Plot	E: info@stratascan.co.uk www.stratascan.co.uk :1000 <sup>0m</sup> <sup>10</sup> <sup>20</sup> <sup>30</sup> <sup>40</sup>

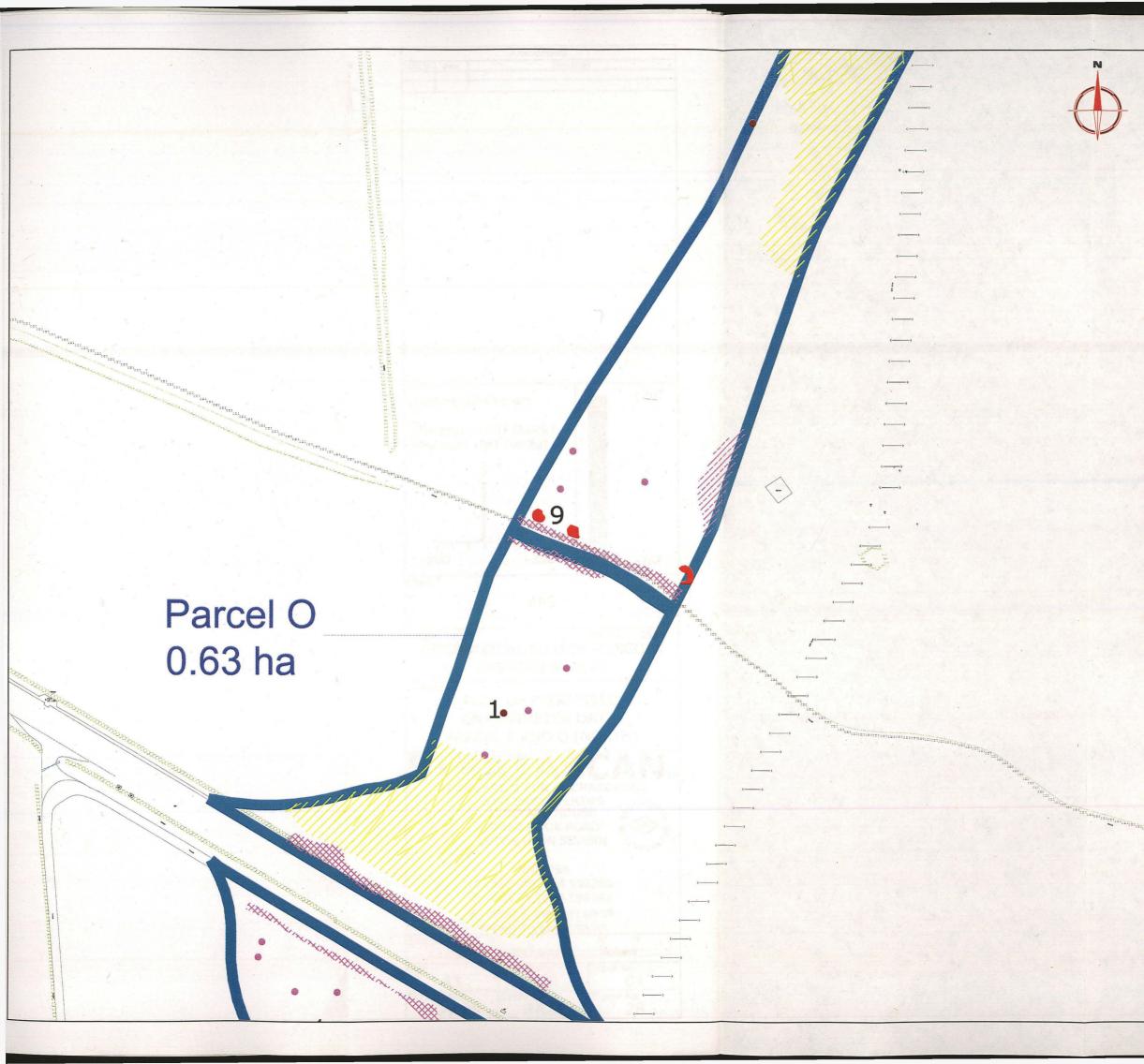




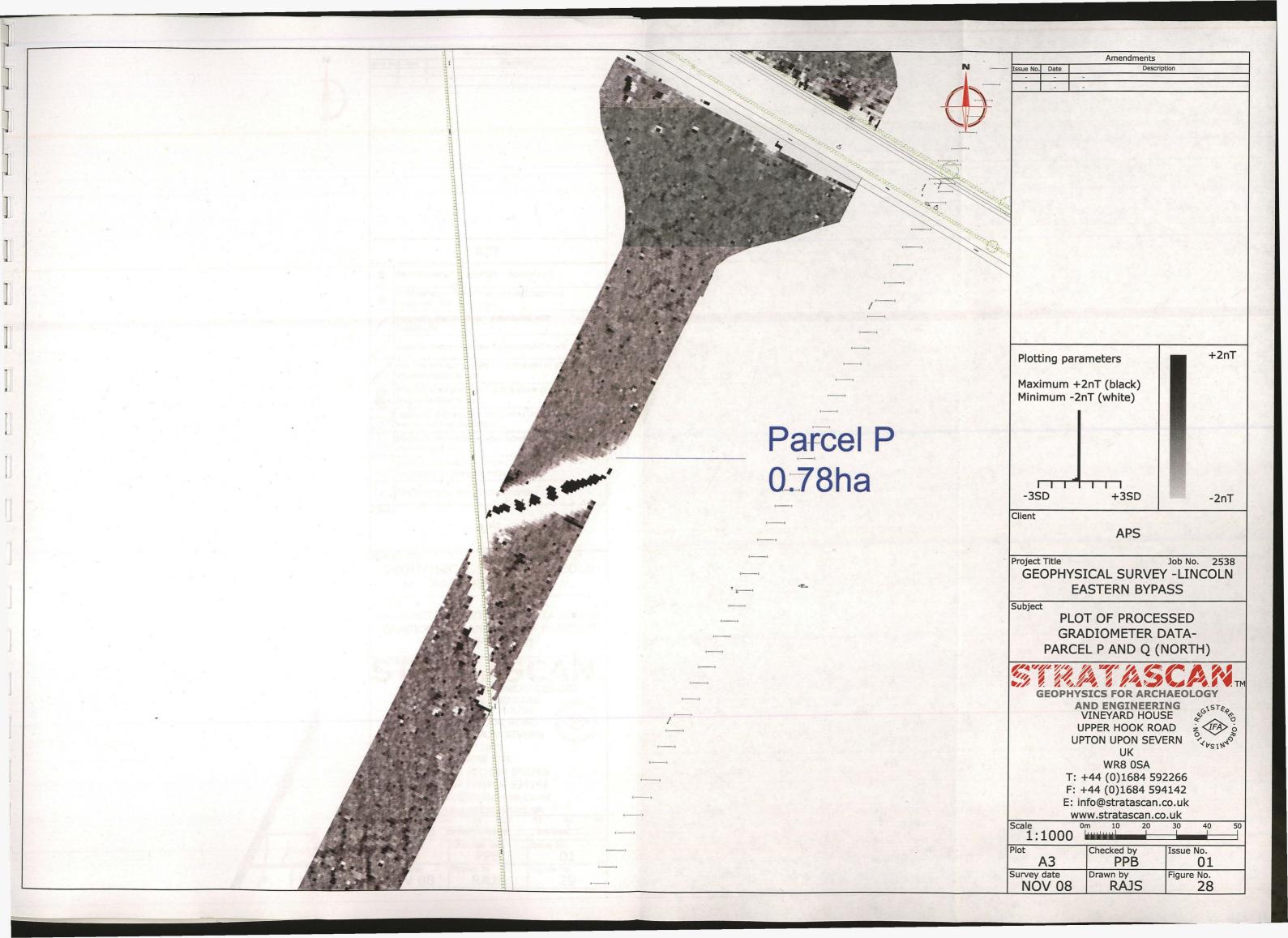
Issue No	Date	Amendments	ion
-		Descript	.011
-			
		KEY	1993
•	Discrete pos	sitive anomaly - poss	sible pit
		maly with associated errous object	d negative
/	Positive line	ar anomaly - agricul	tural mark
	Positive linea archaeologic	ar anomaly - cut fea cal origin	ture of possible
	Positive area archaeologic	a anomaly - cut feat cal origin	ure of possible
	Magnetic dis metallic obje	turbance associated	with nearby
		netic variation - pos edological response	sible
	Anomaly typ	e identification num	ber
Client			
		APS	
Projec	t Title		Job No. 2538
GE		ICAL SURVEY	
	E.	STERN BYPA	SS
		N AND INTERP	
		OMETER ANOM	
	P	ARCEL N (SOU	TH)
(AT	1. 1/2 1	1 1. 6.	( A 14
il	GEOPHYS		A501.00Y
		ND ENGINEERI	AEOLOGY NG (1STE)
		INEYARD HOUS	- ~ ~ 0
		PPER HOOK ROA TON UPON SEVE	
		UK	KIN YUSING
	т	WR8 0SA -44 (0)1684 592	2266
		-44 (0)1684 594	
	E: in	fo@stratascan.c	o.uk
	WW Or	w.stratascan.co	.uk 30 40 5
Scale			
1:	1000		
		Checked by PPB	Issue No.
1: Plot Gurvey	A3 / date 0V 08	Checked by PPB Drawn by RAJS	Issue No. 01 Figure No. 25

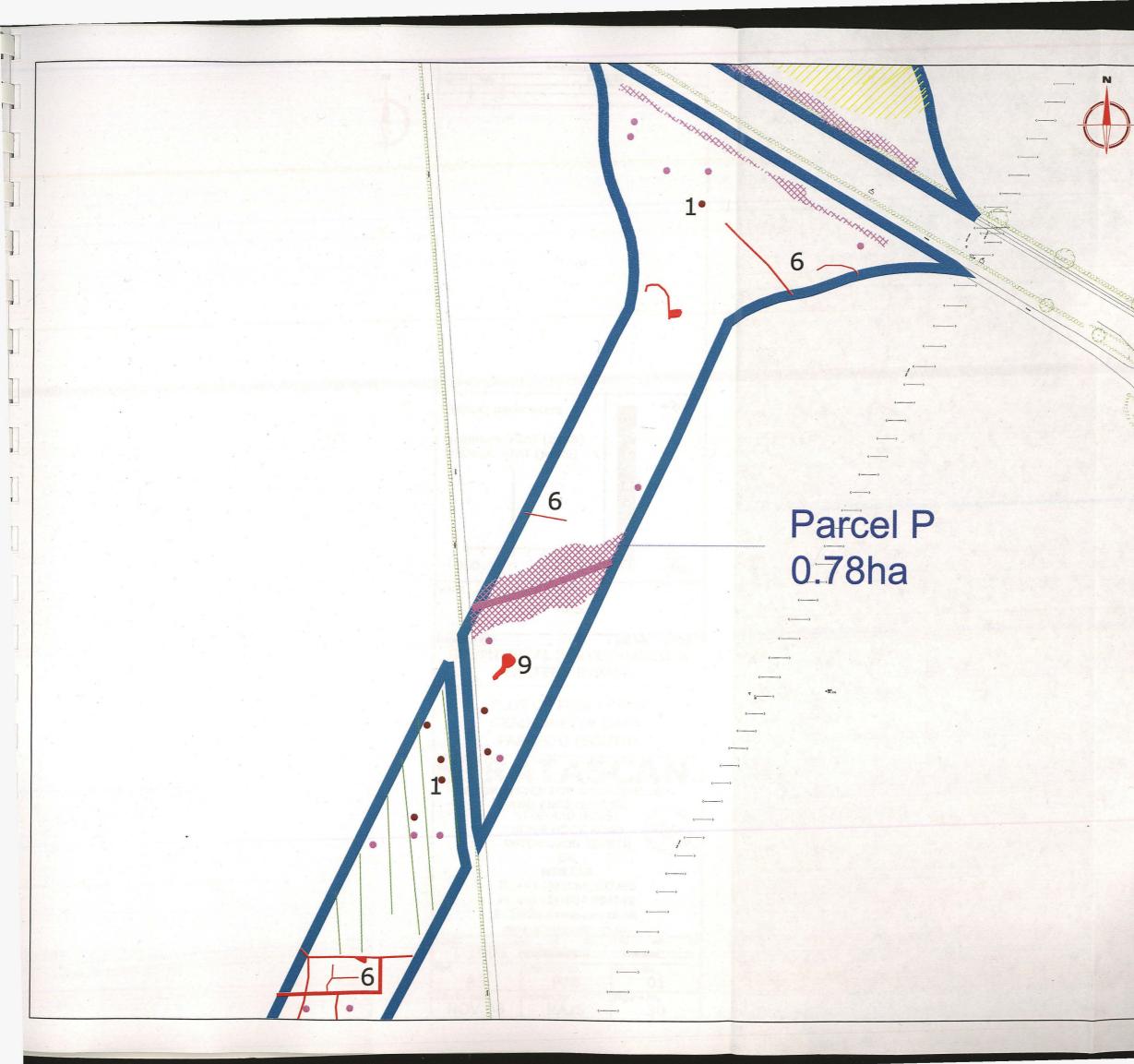




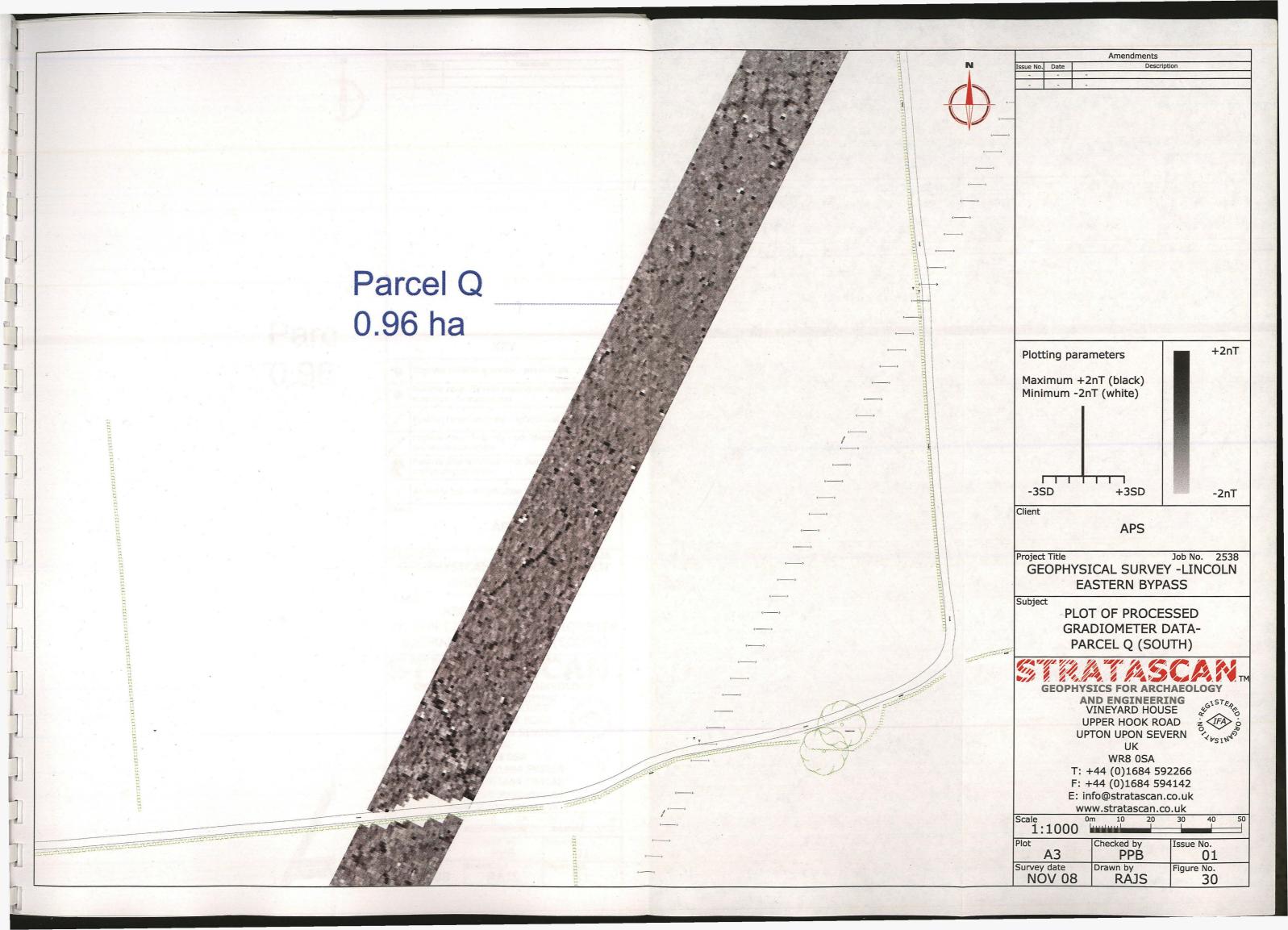


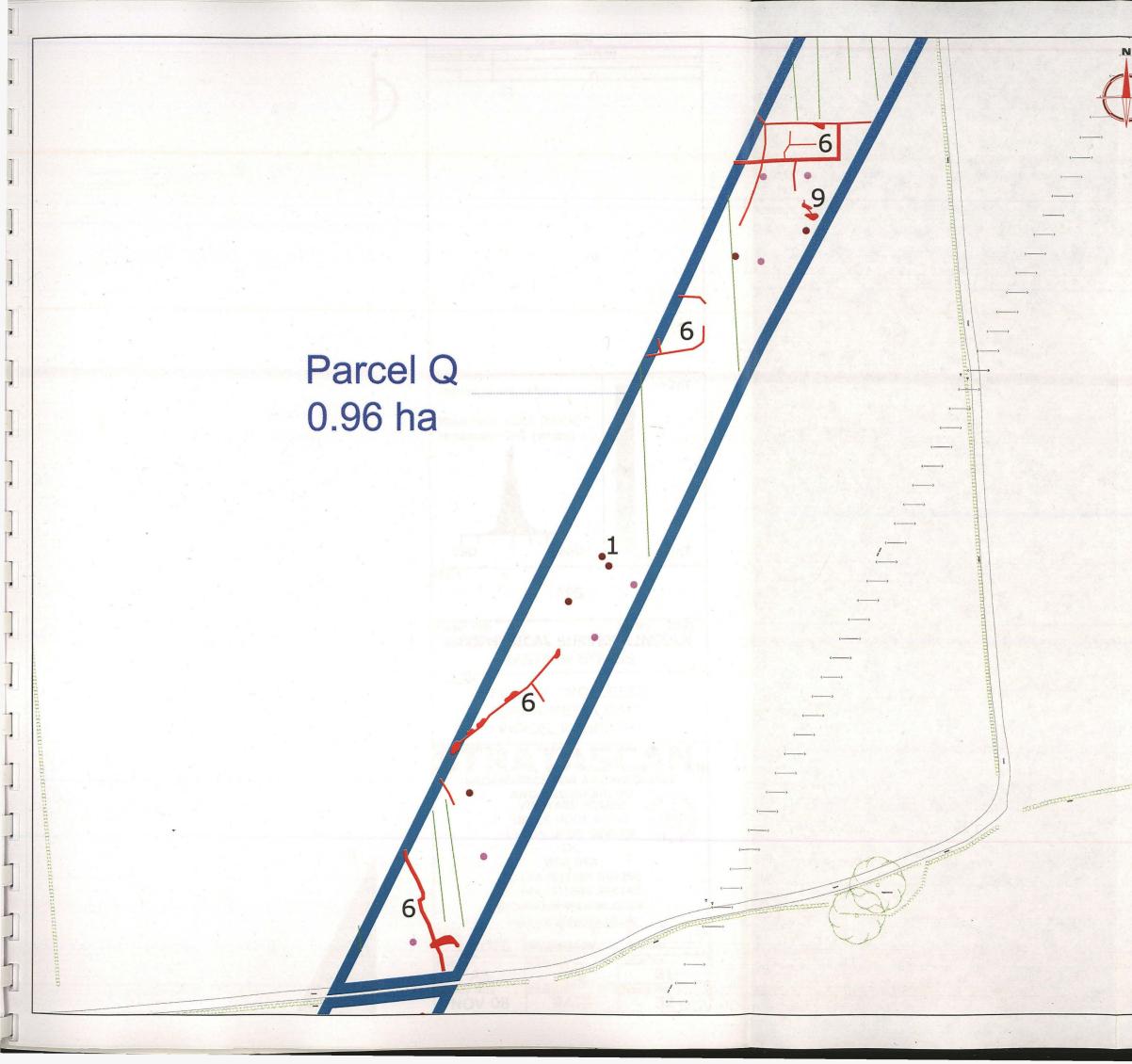
	100 Mar		Amendments	
Issue No	D. Date		Descripti	on
-	-	-		
-	<u> </u>	-		
			· · ·	
				and the second second
a free free				Section 1
1.75				And the second
1.1.24				
in the				
19				
12.13				
-				and the second
-		7		
NO			KEY	
•	Discrete	pos	itive anomaly - poss	ible pit
	Positive	anor	maly with associated	I negative
	response	e - fe	errous object	
2	Positive archaeol		anomaly - cut featu al origin	ure of possible
XXX	1		turbance associated	with nearby
			eld boundary	
11	Magnetic metallic		turbance associated cts	with nearby
8			netic variation - pos edological response	sible
1	Anomaly	typ	e identification num	ber
Client		-/F		
Cherre			100	Sec. As a second
-			APS	
	t Title			Job No. 2538
G	EOPH	YSI	CAL SURVEY	-LINCOLN
		EA	STERN BYPA	SS
Subje	ct	-		
Subje	CL .			ne ( se l'aller
ABS	TRACT	<b>TIO</b>	N AND INTERP	RETATION OF
GR	ADION	1ET	ER ANOMALIES	S- PARCEL O
124	11. 1/1	. 1	1. " IL IA (P.	12. 10. 10. 1
111	6 84	1	4. 4. 44. 3	TM
	GEOP	IYS	ICS FOR ARCH	AEOLOGY
		AN	D ENGINEERI	NG GISTER
		V	INEYARD HOUS	E
			PPER HOOK ROA	
		UP	TON UPON SEVE	RN Typerner
			UK	. 510
			WR8 0SA	
			-44 (0)1684 592	
			44 (0)1684 594	
	E		fo@stratascan.c	
	The March	-	w.stratascan.co	
Scale 1	:1000	On	n 10 20	30 40 50
Plot	.1000	,	Chacked by	Icaus No.
PIOC	A3		Checked by PPB	Issue No. 01
Surve	y date		Drawn by	Figure No.
	OV OE	3	RAJS	27
			1000	21



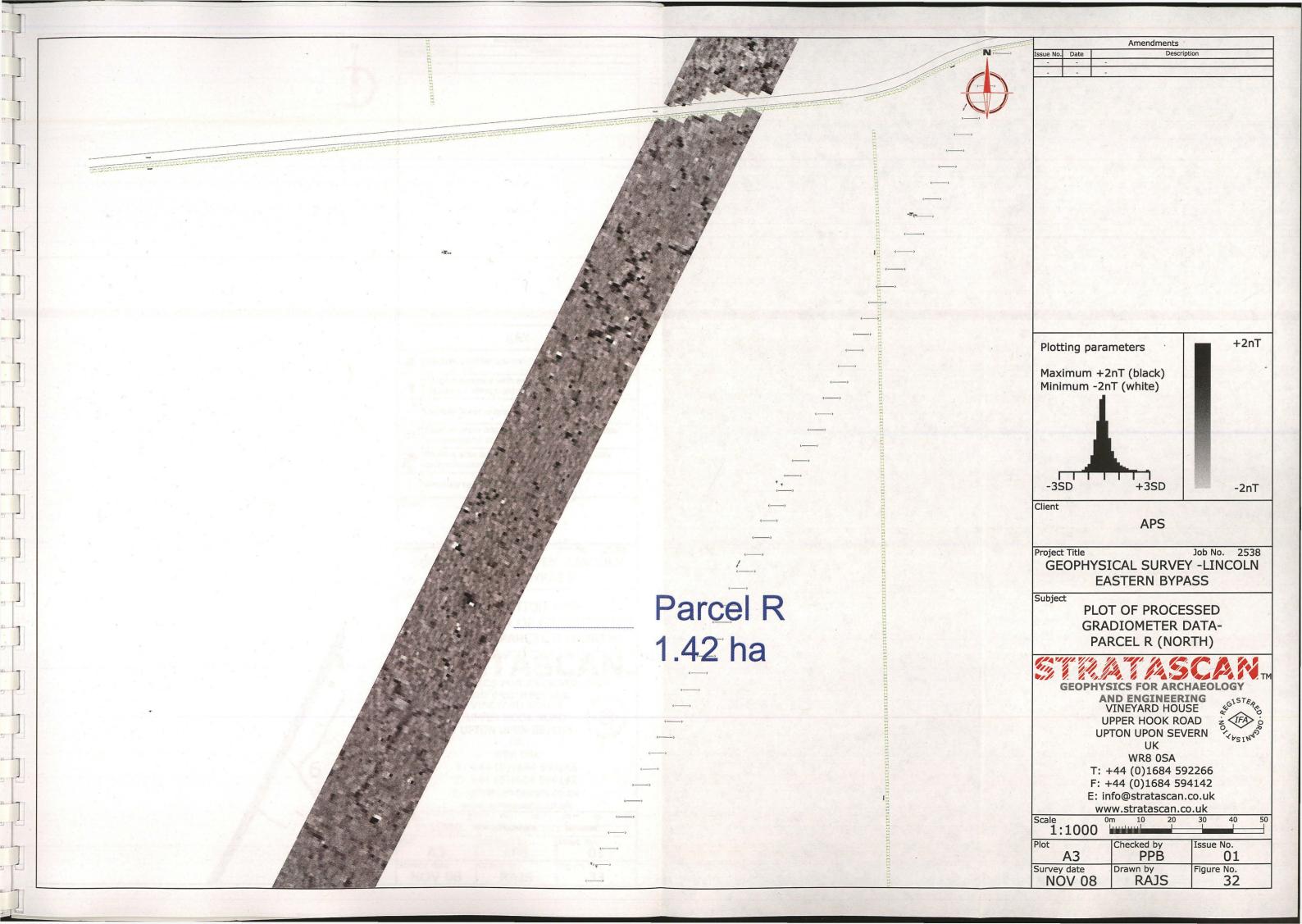


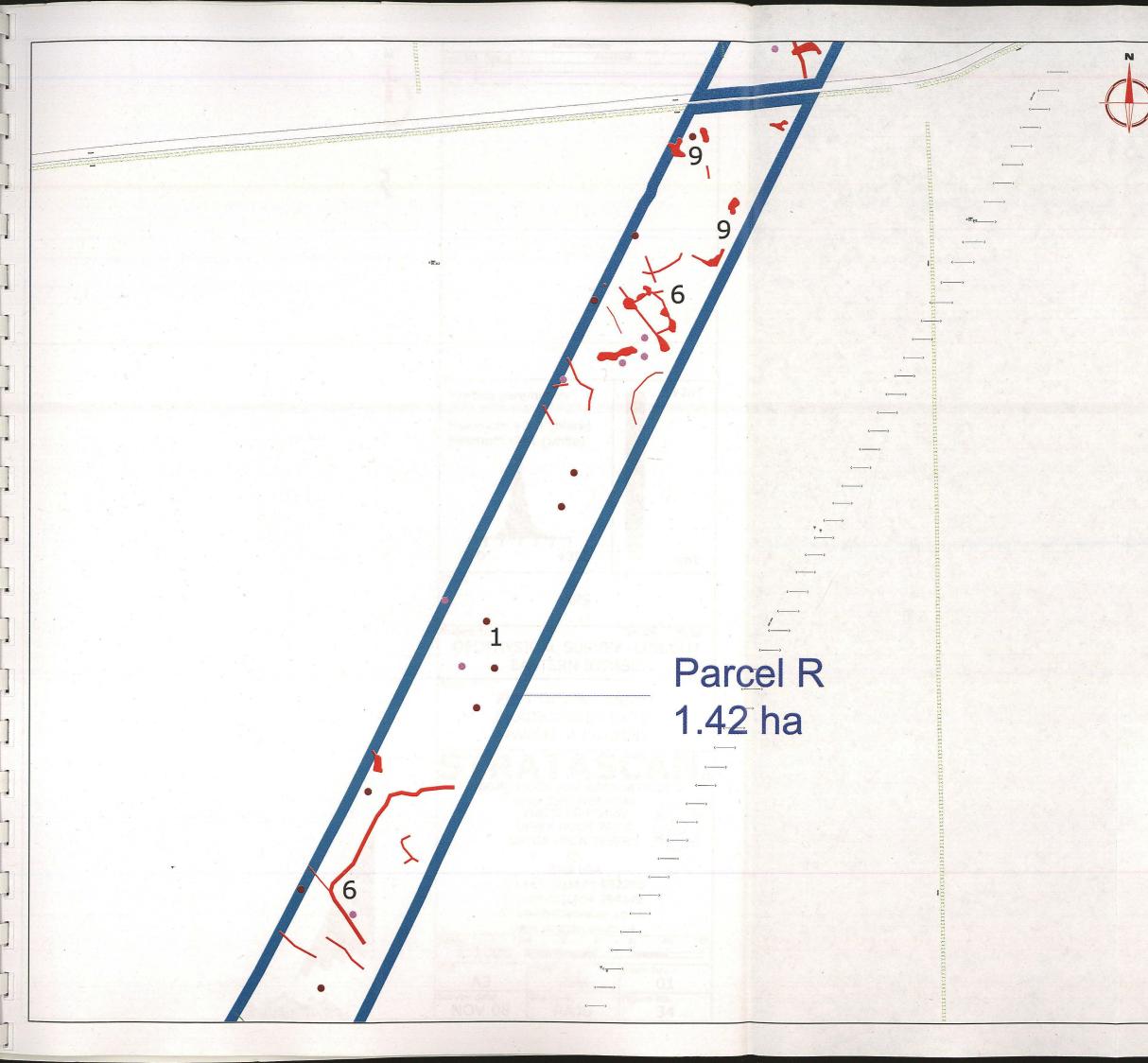
Issue N		Amendments	
	lo. Date	Descrip	tion
		KEY	
•	Discrete pos	sitive anomaly - pos	sible pit
•		maly with associate	d negative
/	Magnetic dis pipe/cable	sturbance - associate	ed with
/	Positive line	ar anomaly - agricul	ltural mark
/	Positive line archaeologie	ar anomaly - cut fea cal origin	ture of possible
8	archaeologi		
	-	sturbance associated eld boundary	l with nearby
11	Magnetic dis metallic obje	sturbance associated ects	l with nearby
		netic variation - pos edological response	sible
1	Anomaly typ	pe identification num	iber
Client		APS	
		ICAL SURVEY STERN BYPA	
	TRACTIO	N AND INTERP FER ANOMALIE AND Q (NORTH	S- PARCEL P
		SICS FOR ARCH ND ENGINEERI /INEYARD HOUS PPER HOOK ROA	
		TON UPON SEVE UK WR8 0SA	
	F: +	+44 (0)1684 592 -44 (0)1684 594 ifo@stratascan.c	142
Scale	Or	w.stratascan.co	.uk 30 40 50
Plot	:1000 A3	Checked by PPB	Issue No. 01
			UI



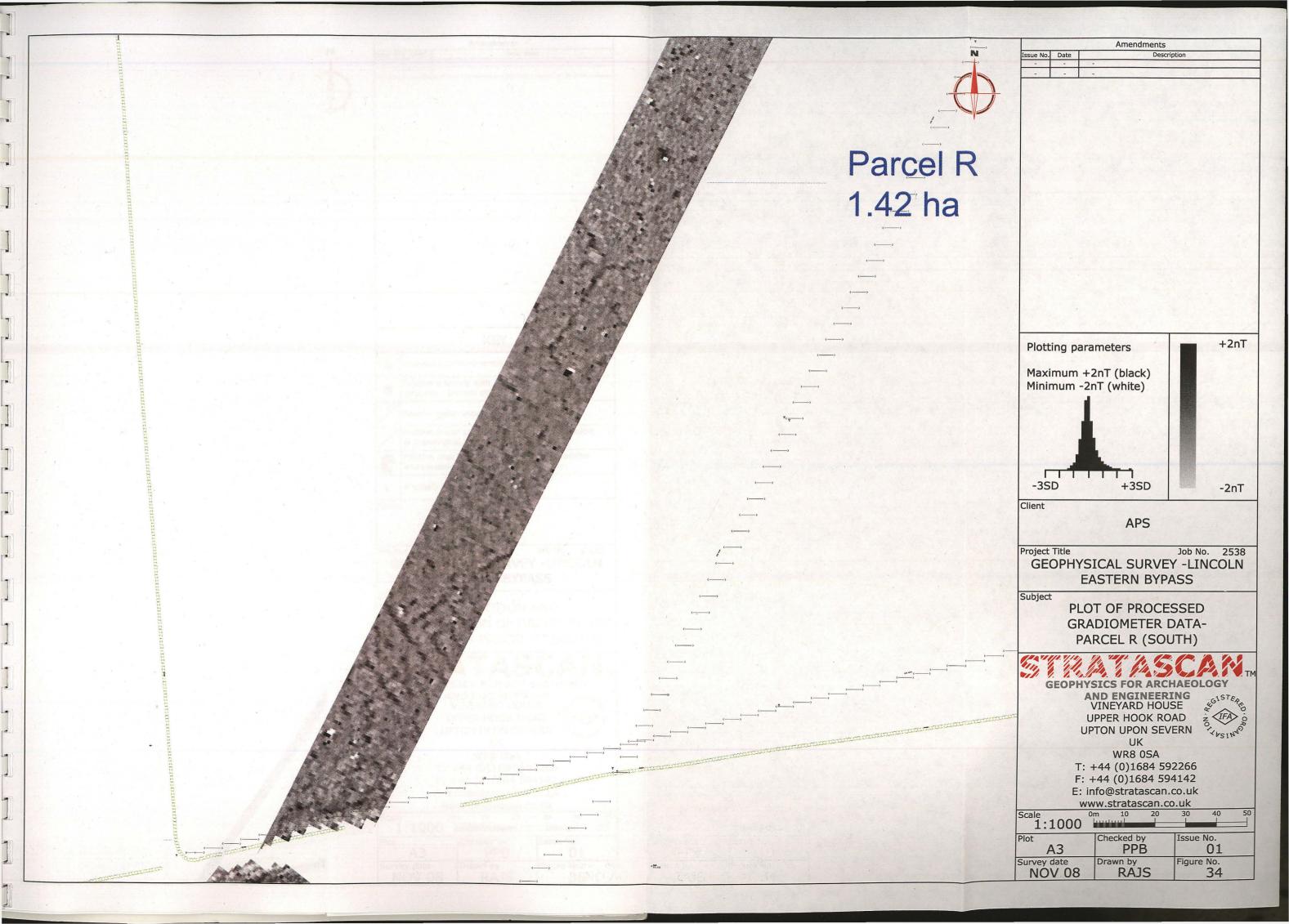


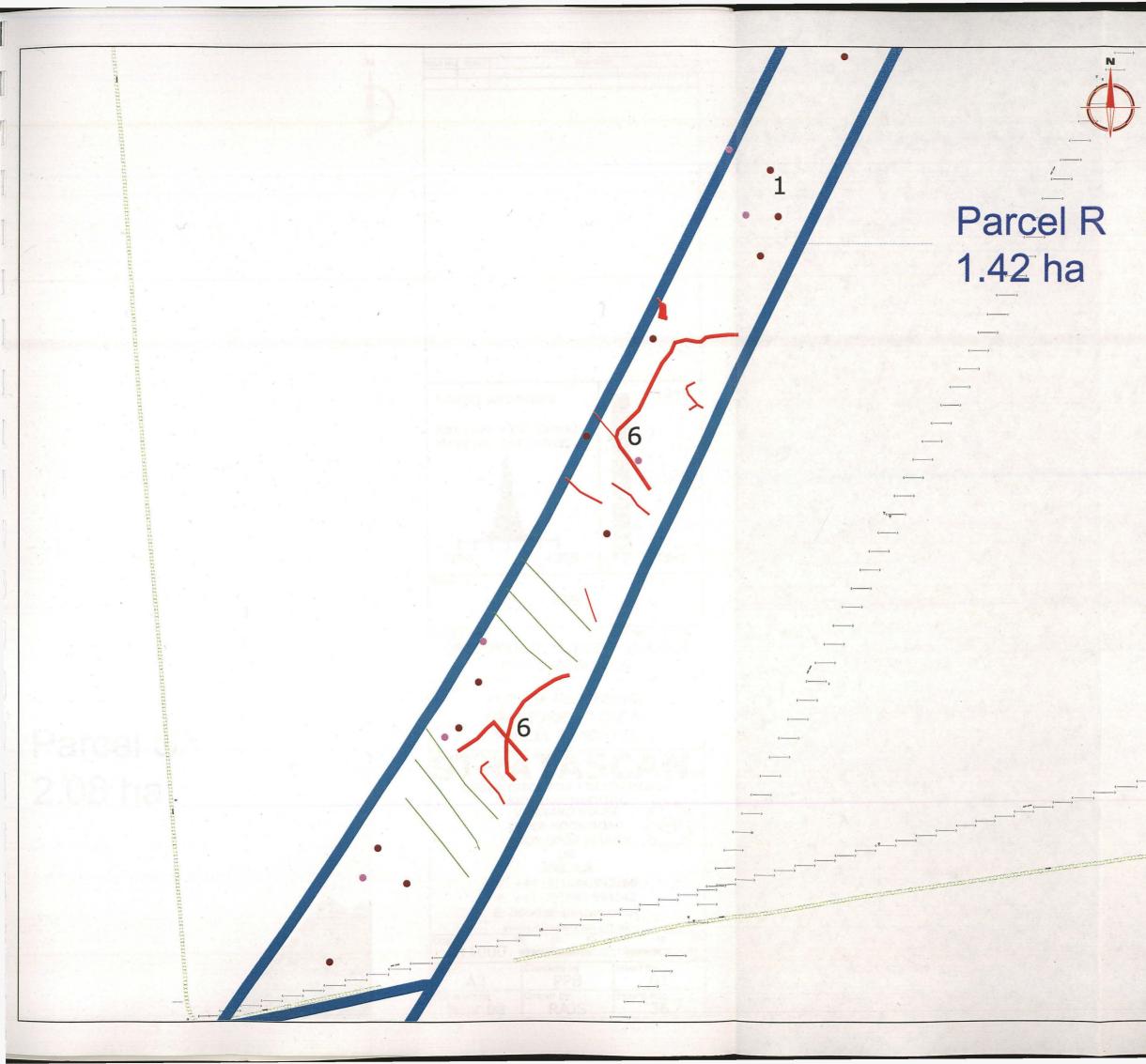
	o. Date	Amendments Descripti	20
ssue N		Descripti	511
-	<u> </u>		
12	1. 19 S. 19		
1. 1.		KEY	
•	Discrete pos	itive anomaly - poss	ible pit
0		maly with associated errous object	negative
1	1		
/	and the state	ar anomaly - agricult	
/	Positive linea archaeologic	ar anomaly - cut feat cal origin	ure of possible
P		a anomaly - cut featu	re of possible
6	archaeologic	cal origin	
1	Anomaly typ	e identification num	per
Clien	t		
		APS	
Proje	ct Title		Job No. 253
G		ICAL SURVEY	
1	and the second of	STERN BYPA	SS
Subje		STRACTION A	ND
		ATION OF GR	
INT			(SOUTH)
	NOMALI	LO TANCLL C	
		1. 145	CAN
	GEOPHYS	SICS FOR ARCH	AEOLOGY
	GEOPHYS	SICS FOR ARCH ND ENGINEERI VINEYARD HOUS	AEOLOGY NG UGISTER
	GEOPHYS AI	A A A A A A A A A A A A A A A A A A A	AEOLOGY NG E D ZO ZO ZO ZO ZO ZO ZO ZO ZO ZO ZO ZO ZO
	GEOPHYS AI	SICS FOR ARCH ND ENGINEERI VINEYARD HOUS	AEOLOGY NG E D Z Z TFA
	GEOPHYS AI U UP	SICS FOR ARCH ND ENGINEERII /INEYARD HOUS PPER HOOK ROA TON UPON SEVE UK WR8 0SA	AEOLOGY NG E ND RN IFA RN IFA
	GEOPHYS AI U UP T: +	SICS FOR ARCH ND ENGINEERI VINEYARD HOUS PPER HOOK ROA TON UPON SEVE UK WR8 0SA H44 (0)1684 592	AEOLOGY NG E LD RN E RN C C SRN C C SRN C C S S S S S S S S S S S S S S S S S
	GEOPHYS AI U UP T: + F: + E: in	SICS FOR ARCH ND ENGINEERI VINEYARD HOUS PPER HOOK ROA TON UPON SEVE UK WR8 0SA H44 (0)1684 592 H44 (0)1684 594 ofo@stratascan.co	AEOLOGY NG E D RN 200 CIFA RN 2266 142 0.uk
A	GEOPHYS AI U UP T: 4 F: 4 E: in WW	A Control of the second	AEOLOGY NG E RN 2266 142 o.uk .uk
A	GEOPHYS AI U UP T: 4 F: 4 E: in WW	A Contraction of the second se	AEOLOGY NG E D RN 200 CIFA RN 2266 142 0.uk
A	GEOPHYS AI V U UP T: 4 F: 4 E: in WM :1000	A Control of the second	AEOLOGY NG E E RN 2266 142 0.uk 30 40 Issue No.
A Scale 1 PPlot	GEOPHYS AI U UP T: + F: + E: in WW	A Contraction of the second se	AEOLOGY NG E E E E E E E E E E



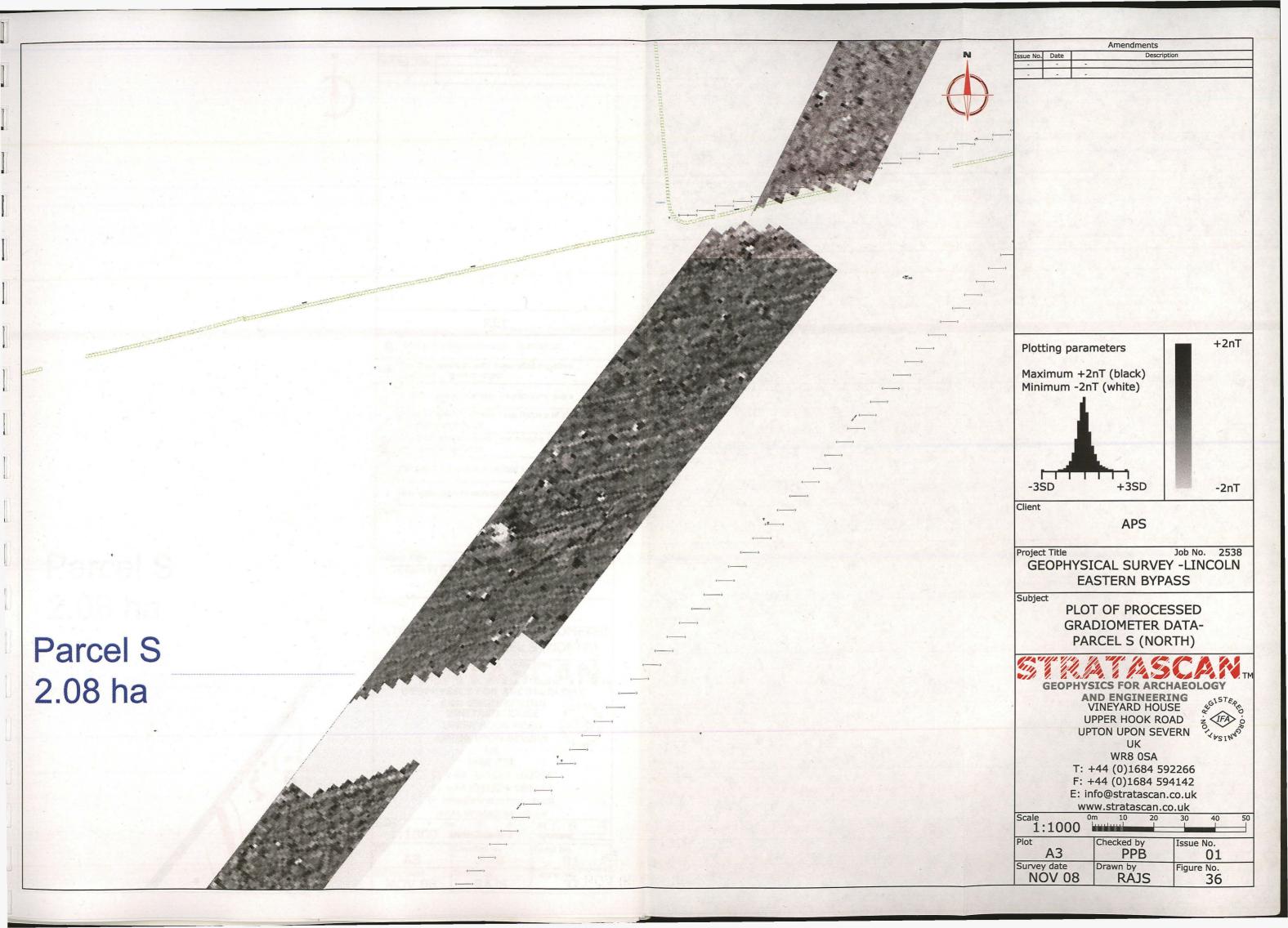


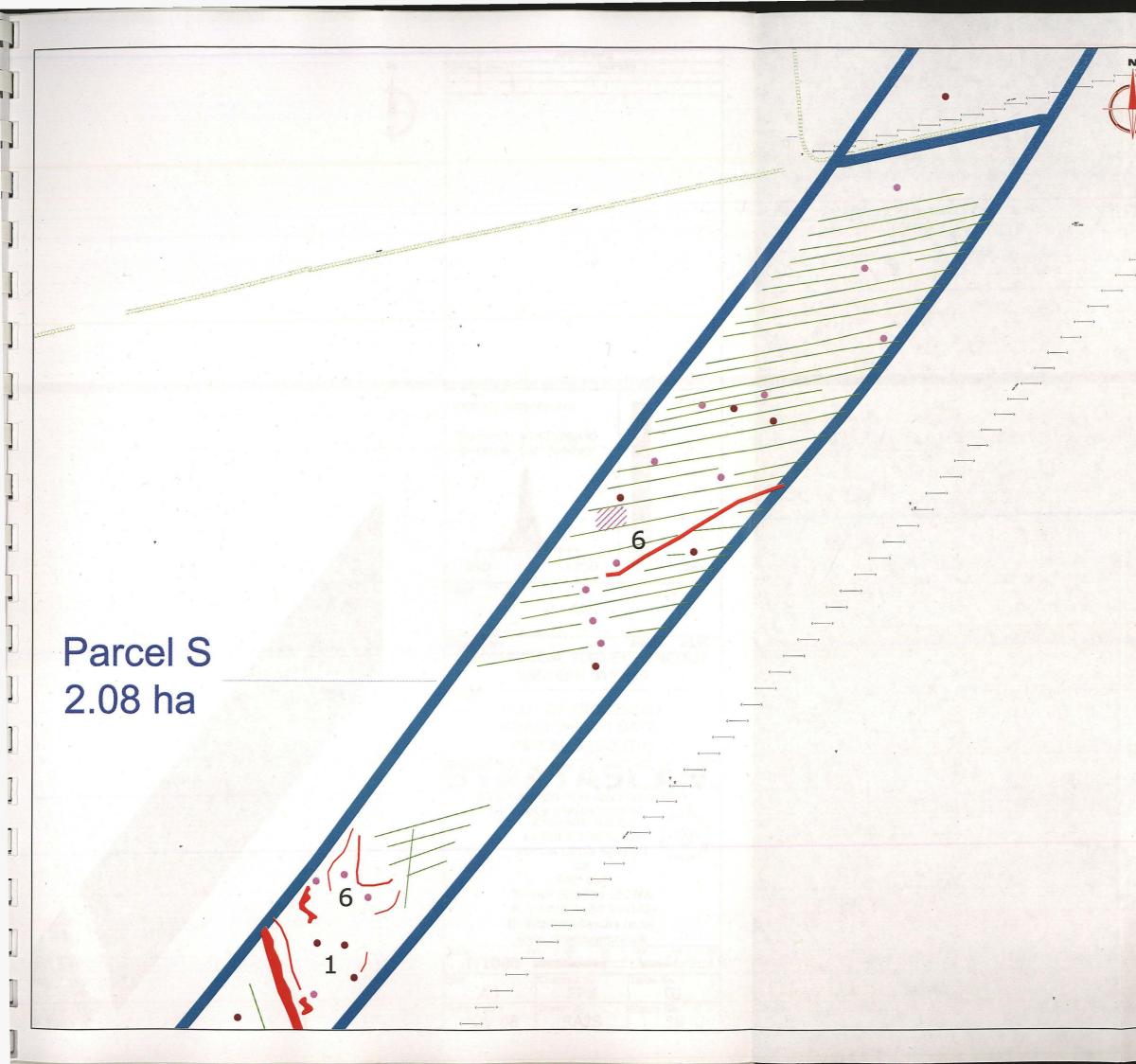
TSSUE ME	Date	Amendments	ion
Issue No	- Jate	- Descript	
-			
		KEY	
	Discrete	the contract of the	tible nit
•		ositive anomaly - poss omaly with associated	
		ferrous object	a negative
/	Positive lin	ear anomaly - agricul	tural mark
1	Positive line	ear anomaly - cut fea	ture of possible
/	archaeolog	ical origin	
	archaeolog	ea anomaly - cut feat ical origin	ure of possible
1	Anomaly ty	pe identification num	ber
Client	Ser States		
		APS	
Projec			Job No. 253
G		SICAL SURVEY	
Subje		ASILKIUDIFA	.55
Jubje		STRACTION /	AND
		ATION OF GR	
A	IOMAL	ES- PARCEL	R (NORTH
Chin .	1. 41	13 1 1. 5	C. N. N.
vil	GEOPHY	STCS FOR APCH	AEOLOGY
	A	ND ENGINEERI	NG ISTE
		VINEYARD HOUS	E & A
		PTON UPON SEVE	
		UK	
	т	WR8 0SA +44 (0)1684 592	2266
		+44 (0)1684 594	142
	F:		o uk
	E: i	nfo@stratascan.o	
Scale	E: i w	nfo@stratascan.c ww.stratascan.cc 0m 10 20	
1	E: i w	ww.stratascan.cc	30 40
1	E: i w	ww.stratascan.cc	30 40 Issue No.
1 Plot Surve	E: i W	ww.stratascan.cc	30 40



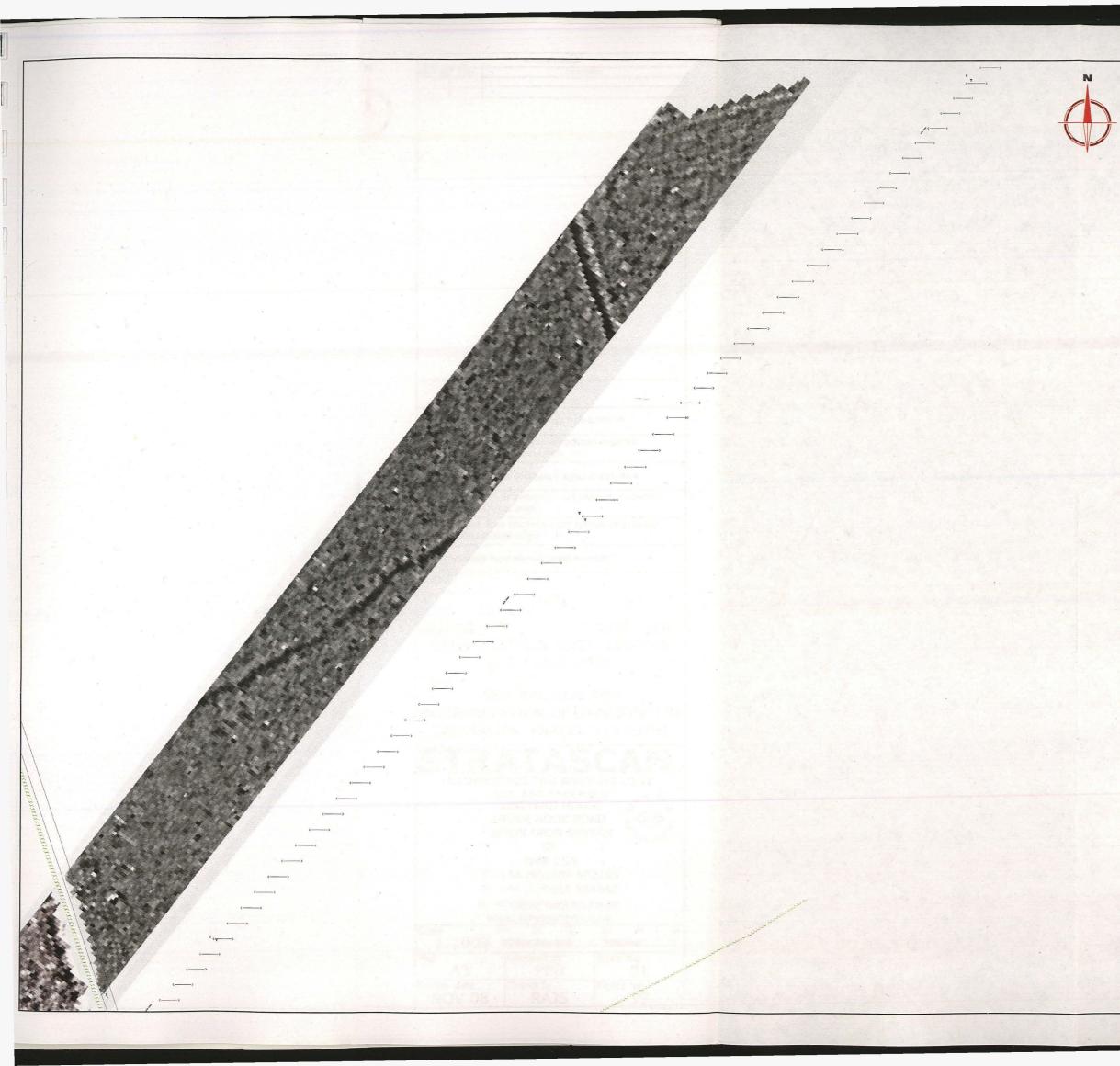


Issue No			Amendme		¥	-	
-	Date	-		Descript	ion		
-	-	-		7			
		1.4					
					-		1
	- 2		KEY	1	124		
•	Discrete	e pos	itive anomaly	- poss	sible pit	t interest	
0			maly with asso errous object	ciated	d negat	tive	
/	and and the second		ar anomaly - a	gricul	tural m	nark	
/			ar anomaly - c	ut fea	ture of	possible	-
-		-	al origin	-		nassible	
			anomaly - cu	t feat	ure of p	possible	
8	archaed	ologic	al origin			possible	
1	archaec Anomal	ologic				possible	
1 Client	archaec Anomal	ologic	al origin e identification				
	archaec Anomal	ologic	al origin				
Client	archaec Anomal	ologic	al origin e identification				8
Client	archaec Anomal	y typ	e identification APS	num	ber Job N ′-LII	0. 253	-
Client Projec Gl	archaec Anomal ct Title EOPH	y typ	al origin le identification APS	num	ber Job N ′-LII	0. 253	-
Client Projec Gl	archaec Anomal ct Title EOPH	y typ YSI EA	al origin le identification APS CAL SUR STERN B	VEY	Job N Job N Job SS	0. 253	-
Client Projec Gl	archaec Anomal ct Title EOPH ect	y typ YSI EA	APS CAL SUR STERN B		Job N ' -LII SS	o. 253 NCOLN	J
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR	YSI EA ABS ETA	al origin le identification APS CAL SUR STERN B		Job N / -LII SS AND ADI	o. 253 NCOLM	ER
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR	YSI EA ABS ETA	APS CAL SUR STERN B STRACTION OF		Job N / -LII SS AND ADI	o. 253 NCOLM	ER
Client Projec Gl Subje	archaec Anomal ct Title EOPH cct ERPR NOMA	y typ YSI EA ABS ETA ALIE	APS APS CAL SUR STERN B STRACTION ATION OF ES- PARC	VEY YPA ON / EL I	Job N ' -LII SS AND ADIC R (SC	o. 253 NCOLM OMETI OUTH)	ER
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR	y typ YSI EA ABS ETA ALIE	APS APS CAL SUR STERN B STRACTION ATION OF ES- PARC SICS FOR A	VEY YPA ON / EL I	Job N ' -LII SS AND ADI R (SO IAEOI	o. 253 NCOLM OMETH OUTH)	
Client Projec Gl Subje	archaec Anomal ct Title EOPH cct ERPR NOMA	YSI EA ABS ETA ALIE	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC SICS FOR A D ENGINE /INEYARD H	VEY YPA ON / EL I SCH	Job N '-LII SS AND ADIC ADIC ADIC ADIC ADIC ADIC ADIC ADIC	o. 253 NCOLM OMETI OUTH)	
Client Projec Gl Subje	archaec Anomal ct Title EOPH cct ERPR NOMA	YSI EA ABS ETA ALIE HYS	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC SICS FOR A D ENGINE INEYARD H PPER HOOK	VEY YPA ON / EL I SCH ERI IOUS RCH	Job N Job N ' -LII SS AND ADI R (SO ADI R (SO NG E AD		
Client Projec Gl Subje	archaec Anomal ct Title EOPH cct ERPR NOMA	YSI EA ABS ETA ALIE HYS	APS APS CAL SUR STERN B STRACTION ATION OF ES- PARC ATION OF ES- PARC ATION OF ES- PARC	VEY YPA ON / EL I SCR RCH ERI IOUS CROASEVE	Job N Job N ' -LII SS AND ADI R (SO ADI R (SO NG E AD	o. 253 NCOLM OMETH OUTH)	
Client Projec Gl Subje	archaec Anomal ct Title EOPH cct ERPR NOMA GEOP	YSI EA ABS ETA ALIII HYS	APS APS CAL SUR STERN B STRACTION ATION OF ES- PARC ATION OF ES- PARC	VEY YPA ON / EL I SEL I SCH ERI OUS RCH ERI	Job N 7 -LII SS AND ADI R (S ADI R (S ADI R ADI R S E AD E R N G E R N		
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR NOMA GEOP	YSI EA ABS ETA ALIII HYS UI UP T: +	APS APS CAL SUR STERN B STRACTION ATION OF ES- PARC ATION OF ES- PARC ATION OF ES- PARC	VEY YPA ON / EL I SEL I SEL I SEL I SEVE A 4 592	Job N -LII SS AND ADI R (S ADI R (S ADI R ADI R ADI R ADI R ADI R ADI R ADI R ADI R ADI R ADI ADI R ADI ADI R ADI ADI ADI ADI ADI ADI ADI ADI		
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR NOMA GEOP	YSI EA ABS ETA ALIE HYSS UU UP T: + F: + E: in	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC ATION OF ES- PARCA ATION OF ES-	VEY YPA ON / EL I SEL I SEVE RCH ERI IOUSS RO/ SEVE A 4 592 A 594 Can.o	Job N Job N -LII SS AND ADI R (SC ADI R (SC) ADI R (SC) ADI ADI R (SC) ADI R (SC) ADI ADI ADI ADI ADI ADI ADI ADI		
Client Projec Gl Subje	archaec Anomal ct Title EOPH ect ERPR NOMA GEOP	YSI EA ABS ETA ALIE HYSS UU UP T: + F: + E: in	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC ATION OF ES- PARCATATATATATATATATATATATATATATATATATATA	VEY YPA ON / EL I SEL I SEVE RCH ERI IOUSS RO/ SEVE A 4 592 A 594 Can.o	Job N Job N -LII SS AND ADI R (SC ADI R (SC) ADI R (SC) ADI ADI R (SC) ADI R (SC) ADI ADI ADI ADI ADI ADI ADI ADI		
Client Projec Subje INT A	archaec Anomal ct Title EOPH ect ERPR NOMA GEOP	YSI EA ABS ETA ALIE HYSS UI UP T: + F: + E: in ww	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC ATION OF ES- PARCA ATION OF ES- PARC ATION OF ES- PARCA ATION OF ATION OF ES- PARCA ATION OF ES- PARCA	VEY YPA ON / EL I SEL I SEVE ROUSS ROUS ROU	Job N -LII SS AND ADI R (SC ADI R (SC ADI ADI R (SC ADI ADI ADI ADI ADI ADI ADI ADI		
Client Projec Gl Subje INT A	archaec Anomal ct Title EOPH ect ERPR NOM/ GEOP	YSI EA ABS ETA ALIE HYSS UI UP T: + F: + E: in ww	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC ATION OF ES- PA	VEY YPA ON / EL I SEL I SEVE ROUSS ROUS ROU	Job N -LII SS AND ADI R (SC ADI R (SC ADI ADI R (SC ADI ADI ADI ADI ADI ADI ADI ADI	o. 253 NCOLN OMETIOUTH) OUTH) LOGY Solution Solu	
Client Projec Gl Subje INT A Subje Subje Subje Subje Subje Subje Subje	archaec Anomal ct Title EOPH ect ERPR NOMA GEOP	YSI EA ABS ETA ALIE HYSS UU UP T: + F: + E: in WW O	APS APS CAL SUR STERN B STRACTIO ATION OF ES- PARC ATION OF ES- PARCA ATION OF ES- PARC ATION OF ES- PARCA ATION OF ATION OF ES- PARCA ATION OF ES- PARCA	VEY YPA ON / EL I SEL I SEVE ROUSS ROUS ROU	Job N Job N C-LII SS AND ADI R (SC ADI R (SC ADI ADI ADI ADI ADI ADI ADI ADI	o. 253 NCOLN OMETIOUTH) OUTH) LOGY LOGY LOGY LOGY LOGY	ER ) TT

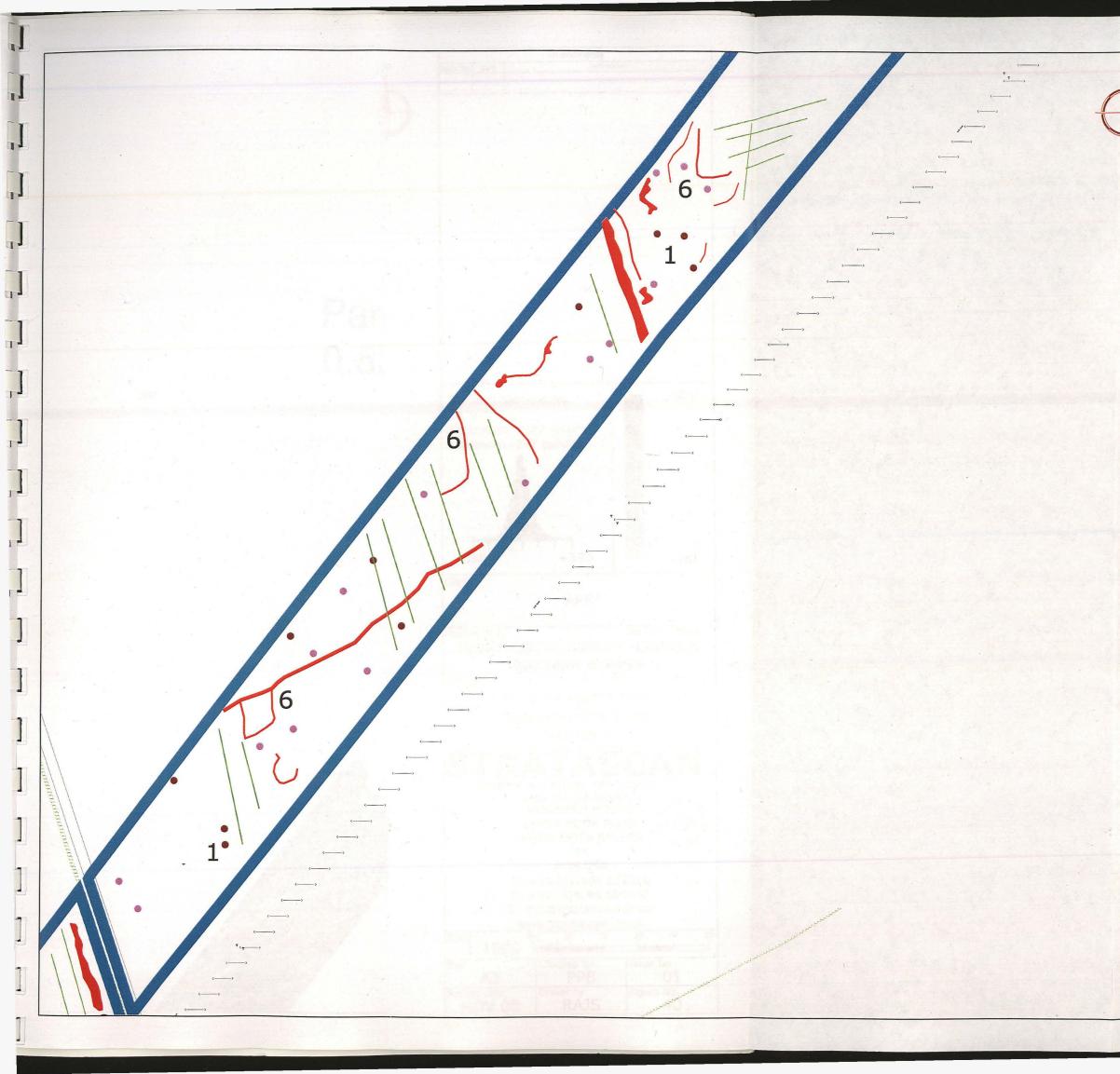




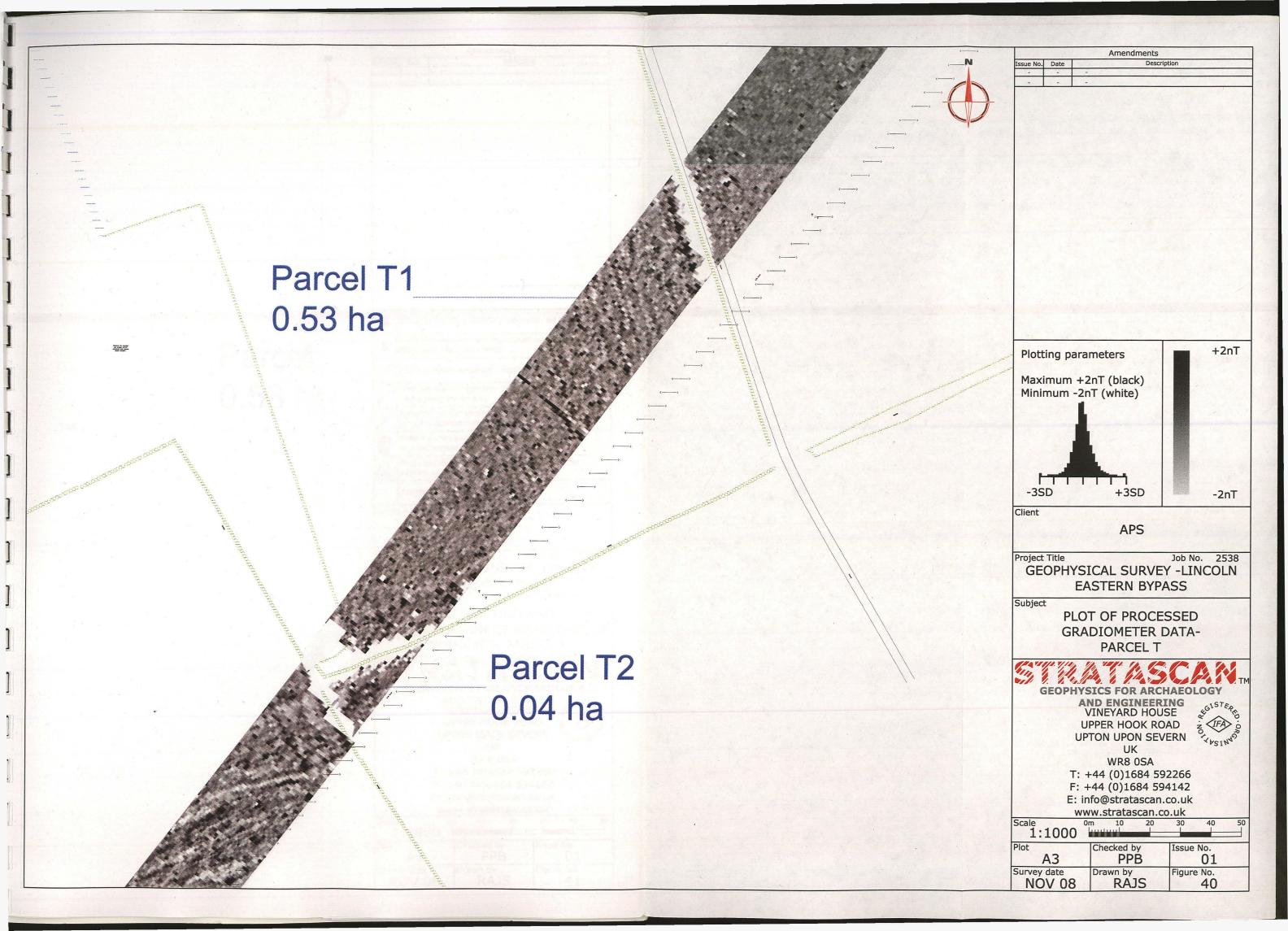
KEY         Discrete positive anomaly - possible pit         Positive anomaly with associated negative response - ferrous object         Positive anomaly with associated negative response - ferrous object         Positive linear anomaly - agricultural mark         Positive area anomaly - cut feature of possible archaeological origin         Magnetic disturbance related to ground disturbar         1       Anomaly type identification number         Client       APS         Project Title       Job No. 2533         GEOPHYSICAL SURVEY - LINCOLN EASTERN BYPASS         Subject       ABSTRACTION AND         INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         Subject       ABSTRACTION AND         AND ENGINEERING UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA       T: +44 (0)1684 592266         F: +44 (0)1684 592266       F: +44 (0)1684 592266         F: +44 (0)1684 592142       E: info@stratascan.couk         Wow stratascan.c	in the			Amendi			
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.	Issue No	Date	-		Descript	ion	
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.	-	-	-	A Carl			
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. PB O1 Discurvey date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.			¢,				
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>ApPS</li> <li>Project Title</li> <li>Job No. 2538</li> <li>GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS</li> <li>Subject</li> <li>ABSTRACTION AND</li> <li>INTERPRETATION OF GRADIOMETE ANOMALIES - PARCEL S (NORTH)</li> <li>MOMALIES - PARCEL S (NORTH)</li> <li>MOMALIES - PARCEL S (NORTH)</li> <li>MUNEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA</li> <li>T: +44 (0)1684 592266</li> <li>F: +44 (0)1684 594142</li> <li>E: info@stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Www.stratascan.co.uk</li> <li>Mww.stratascan.co.uk</li> <li>Mww.stratascan.co.uk</li> <li>Mww.stratascan.co.uk</li> <li>Muturbal</li> <li>PB</li> <li>O1</li> <li>Survey date</li> <li>Drawn by</li> <li>Figure No.</li> </ul>							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.							
<ul> <li>Discrete positive anomaly - possible pit</li> <li>Positive anomaly with associated negative response - ferrous object</li> <li>Positive linear anomaly - agricultural mark</li> <li>Positive linear anomaly - cut feature of possible archaeological origin</li> <li>Positive area anomaly - cut feature of possible archaeological origin</li> <li>Magnetic disturbance related to ground disturbar</li> <li>Anomaly type identification number</li> <li>Client</li> <li>Apps</li> </ul> Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETER AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Www.stratascan.co.uk Time No. POB Olt Checked by Issue No. PDB Olt Divery date Drawn by Figure No.	12.24			-			
Positive anomaly with associated negative response - ferrous object   Positive linear anomaly - agricultural mark   Positive linear anomaly - cut feature of possible archaeological origin   Positive area anomaly - cut feature of possible archaeological origin   Positive area anomaly - cut feature of possible archaeological origin   Magnetic disturbance related to ground disturbar   1   Anomaly type identification number   Client   APS   Project Title   Job No.   2536   GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS   Subject   ABSTRACTION AND   INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)   Magnetic S FOR ARCHAEOLOGY   AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK   WR8 0SA   T: +44 (0)1684 592266   F: +44 (0)1684 592164   Scale   Om   100   Magnetic   20   20	1				1-1-	No seas	
response - ferrous object         Positive linear anomaly - agricultural mark         Positive linear anomaly - cut feature of possible archaeological origin         Positive area anomaly - cut feature of possible archaeological origin         Positive area anomaly - cut feature of possible archaeological origin         Magnetic disturbance related to ground disturbar         1       Anomaly type identification number         Client       APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLNEASTERN BYPASS         Subject       ABSTRACTION AND         INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         Image: Comparison of the system	•		1				
Positive linear anomaly - cut feature of possible archaeological origin Positive area anomaly - cut feature of possible archaeological origin Magnetic disturbance related to ground disturban Anomaly type identification number Client APS Project Title Job No. 2538 GEOPHYSICAL SURVEY - LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES - PARCEL S (NORTH) CIENT ANOMALIES - PARCEL S (NORTH) CIENT ANOMALIES - PARCEL S (NORTH) CIENT AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 5924142 E: info@stratascan.co.uk WWW.stratascan.co.uk PPB 01	0					negative	- Ta
archaeological origin         Positive area anomaly - cut feature of possible archaeological origin         Magnetic disturbance related to ground disturbant         1       Anomaly type identification number         Client       APS         Project Title Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND         INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         OF PROJECT FOR ARCHAEOLOGY         AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WR8 0SA         T: +44 (0)1684 592266         F: +44 (0)1684 592266         F: +44 (0)1684 594142         E: info@stratascan.co.uk         WWW.stratascan.co.uk         WWW.stratascan.co.uk         Of Checked by Issue No.         PPB 01	/	Positive	linea	r anomaly	- agricul	tural mark	
archaeological origin         Magnetic disturbance related to ground disturbance         1       Anomaly type identification number         Client       APS         APS         Project Title       Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         OPER HOOK ROAD UPTON UPON SEVERN UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA         T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk         Scale         Om 10         Om 10         PB         On 10         A3         PPB         On 10	/				- cut fea	ture of possib	le
Magnetic disturbance related to ground disturbance         1       Anomaly type identification number         Client       APS         APS         Project Title         Job No. 2538         GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS         Subject         ABSTRACTION AND         INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH)         OF AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK         UK         WW8 0SA         T: +44 (0)1684 592266         F: +44 (0)1684 594142         E: info@stratascan.co.uk         WWW.stratascan.co.uk         Struct	8				cut feat	ure of possible	9
Client APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) COMPANIES FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk WWW.stratascan.co.uk MU State No. A3 PPB O1 Survey date Drawn by Figure No.			5 514	1	lated to	ground distur	ban
APS Project Title Job No. 2538 GEOPHYSICAL SURVEY -LINCOLD EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) COMPANIES FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk Scale 0m 10 20 30 40 1:1000 MULLION DE SUBSICIAL Scale 0m 10 20 30 40 1:1000 MULLION	1	Anomal	y type	e identifical	ion num	ber	T
Project Title Job No. 2534 GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) COMPANIES FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk MWWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWWW.strata	Client						
GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 1:1000				AP	S		
EASTERN BYPASS Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) COMPANIES FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk T: 1000 Checked by Sourvey date Drawn by Figure No. Figure No.	Proje	t Title				Job No. 2	538
Subject ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 592142 E: info@stratascan.co.uk www.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk MWW.stratascan.co.uk	GI	EOPH					LN
ABSTRACTION AND INTERPRETATION OF GRADIOMETE ANOMALIES- PARCEL S (NORTH) GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 1:1000 40 1:1000 40 Checked by Issue No. 01 Survey date Drawn by Figure No.	0.1.1	1	EAS	SIERN	BYPA	SS	
ANOMALIES- PARCEL S (NORTH)	Subje		ABS	TRACT	ION A	AND	
GEOPHYSICS FOR ARCHAEOLOGY AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>om</sup> 10 20 30 40 1:1000 40 1:1000 10 20 30 40 1:1000 10 10 10 10 10 10 10 10 10 10 10 10							
AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Www.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk	A	NOM	<b>\LIE</b>	S- PAR	CEL S	5 (NORTI	-1)
AND ENGINEERING VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Www.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk WWW.stratascan.co.uk MWW.stratascan.co.uk	En,	1.4	1. 1	11	6	CAI	1
VINEYARD HOUSE UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>m</sup> 10 20 30 40 1:1000 10 20 30 40 1:1		GEOP	HYS	ICS FOR	ARCH	AEOLOGY	
UPPER HOOK ROAD UPTON UPON SEVERN UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale $0^{m}$ 10 20 30 40 1:1000 10 20 30							ERA
UK WR8 0SA T: +44 (0)1684 592266 F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>m</sup> 10 20 30 40 1:1000 10 20 30 40 Checked by Issue No. A3 PPB 01 Survey date Drawn by Figure No.			UP	PER HOO	OK ROA	AD Z IF	
$\begin{array}{c ccccc} & WR8 \ 0SA \\ T: \ +44 \ (0)1684 \ 592266 \\ F: \ +44 \ (0)1684 \ 594142 \\ E: \ info@stratascan.co.uk \\ \hline \\ \hline \\ \hline \\ Scale & 0^m \ 10 \ 20 \ 30 \ 40 \\ \hline \\ 1:1000 \ \hline \\ \hline$			UPT			RN Yesi	NAO
F: +44 (0)1684 594142 E: info@stratascan.co.uk www.stratascan.co.uk Scale 0m 10 20 30 40 1:1000 Checked by Issue No. A3 PPB 01 Survey date Drawn by Figure No.					DSA		
E: info@stratascan.co.uk www.stratascan.co.uk Scale 0 <sup>m</sup> 10 20 30 40 1:1000 Checked by Issue No. A3 PPB 01 Survey date Drawn by Figure No.					04 505	2266	
Scale     0m     10     20     30     40       1:1000     10     20     30     40       Plot     Checked by     Issue No.       A3     PPB     01       Survey date     Drawn by     Figure No.				44 (0)16			
1:1000     Checked by     Issue No.       Plot     A3     PPB     01       Survey date     Drawn by     Figure No.			F: +	44 (0)16 44 (0)16	84 594	142	
A3 PPB 01 Survey date Drawn by Figure No.	Scale		F: +4 E: inf	44 (0)16 44 (0)16 0@strata w.stratas	84 594 ascan.co	l142 co.uk .uk	
Survey date Drawn by Figure No.		E	F: +4 E: inf www 0 0	44 (0)16 44 (0)16 0@strata w.stratas	84 594 ascan.co can.co	4142 co.uk 30 40	
NOV 08   RAJS   37		:100	F: +4 E: inf www 0 0	44 (0)16 44 (0)16 0@strata w.stratas	84 594 ascan.co 20 y	142 co.uk .uk 30 40 Issue No.	:

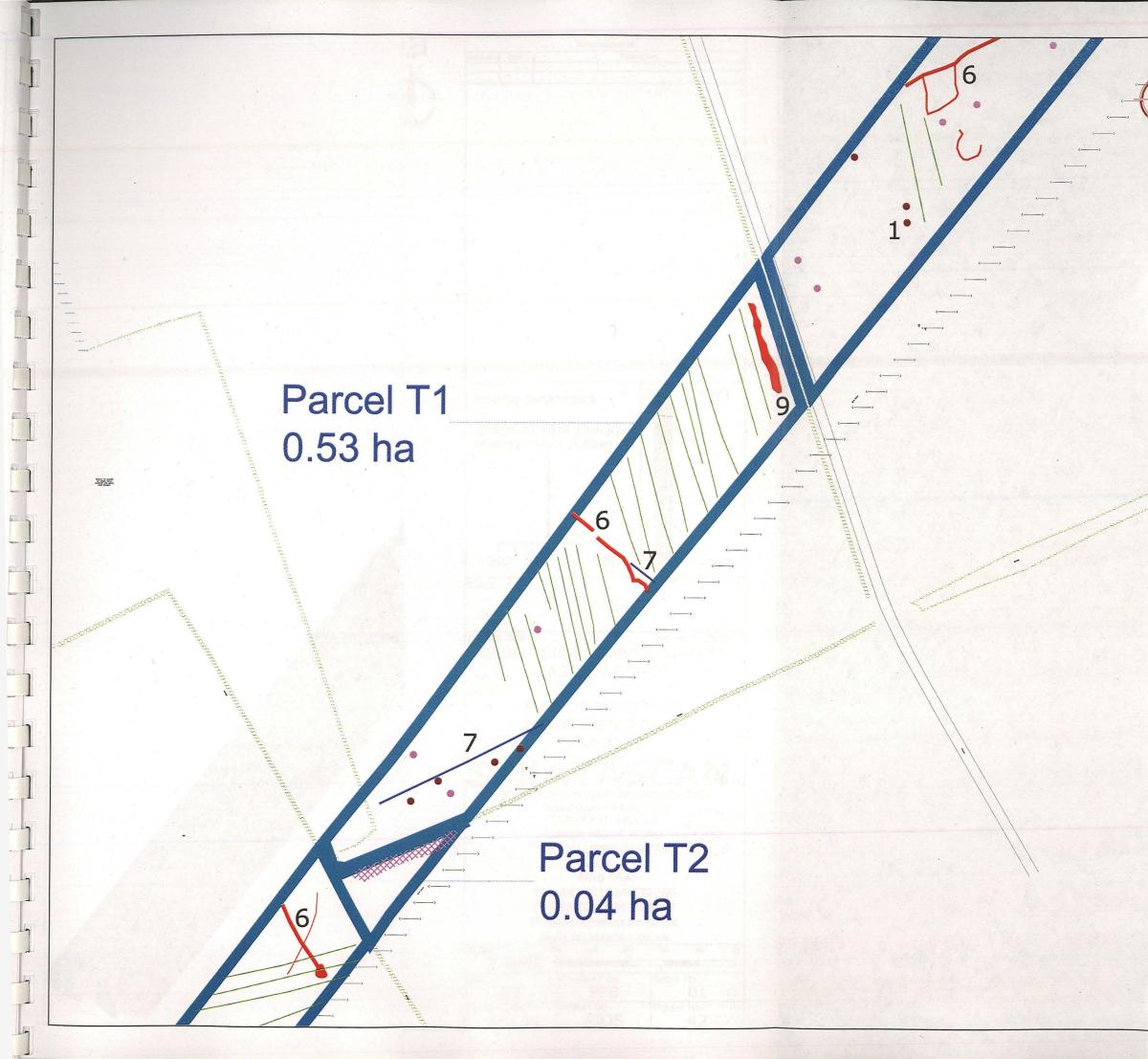


Issue No. Date	Amendments	ription
No.		
14		
1		
2		
1		
	Carlo Carlos	1
Plotting pa	rameters	+2nT
Maximum	1 2pT (black)	
	+2nT (black) 2nT (white)	
	A CARLENTER	
	a star and a second	
-		
-3SD	+3SD	-2nT
Client		1
	APS	
	7.1.0	
Project Title		Job No. 2538
	SICAL SURVE	
	EASTERN BYF	ASS
Subject PI	OT OF PROCI	ESSED
	RADIOMETER	
P	ARCEL S (SO	UTH)
(PA 11/2. 1/10)	11, 14 1 1h OF	
1 1. 1.1	114. 1. 1.4.	
GEOPH	AND ENGINEER	
	VINEYARD HO	
	UPPER HOOK R	
	UPTON UPON SE UK	VERN YESING
	WR8 0SA	
	: +44 (0)1684 5	
	: +44 (0)1684 5 info@stratascar	
	www.stratascan.	
Scale 1:1000	0m 10 20	30 40 50
Plot	Checked by	Issue No.
A3	PPB	01
Survey date NOV 08	Drawn by RAJS	Figure No.

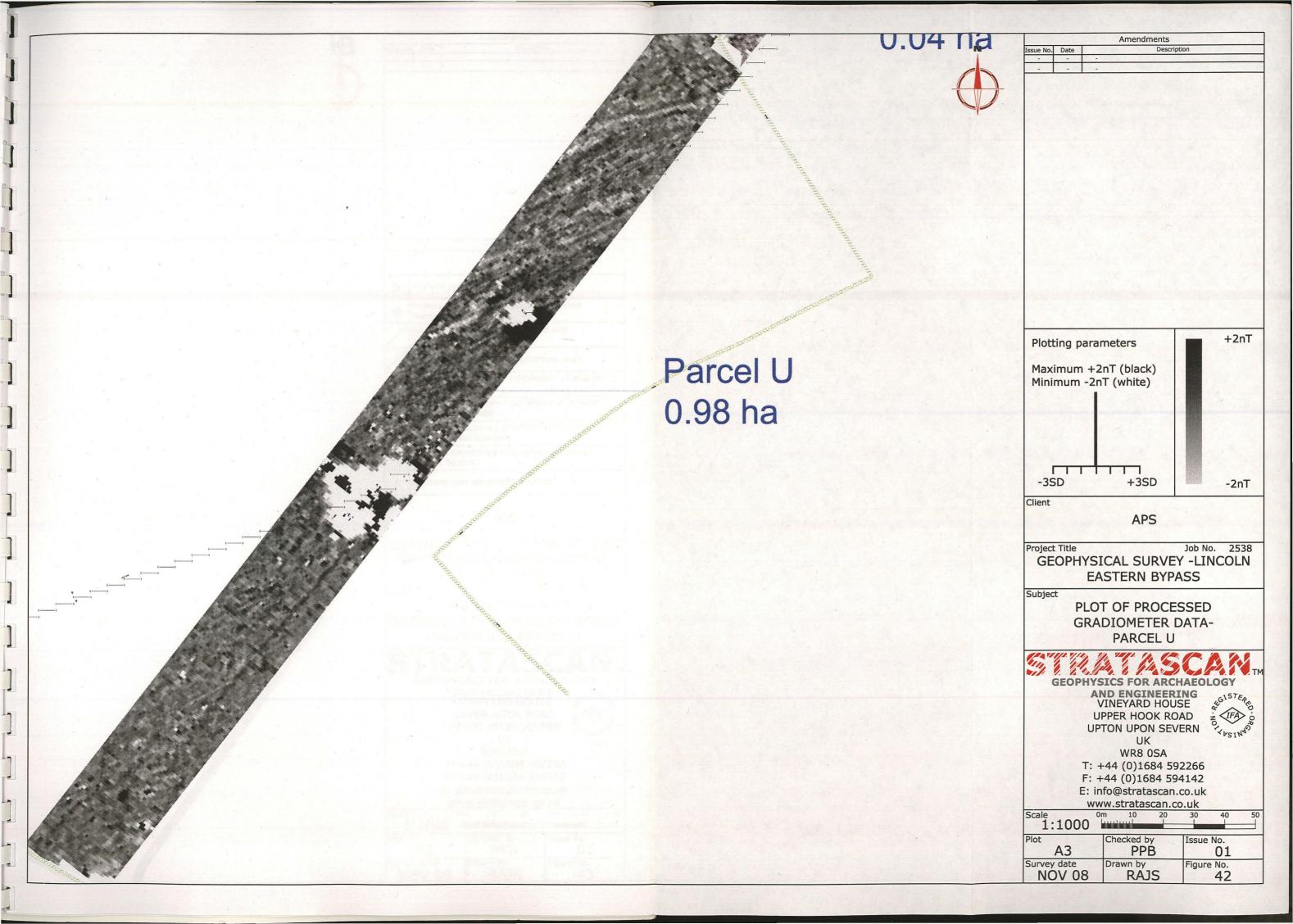


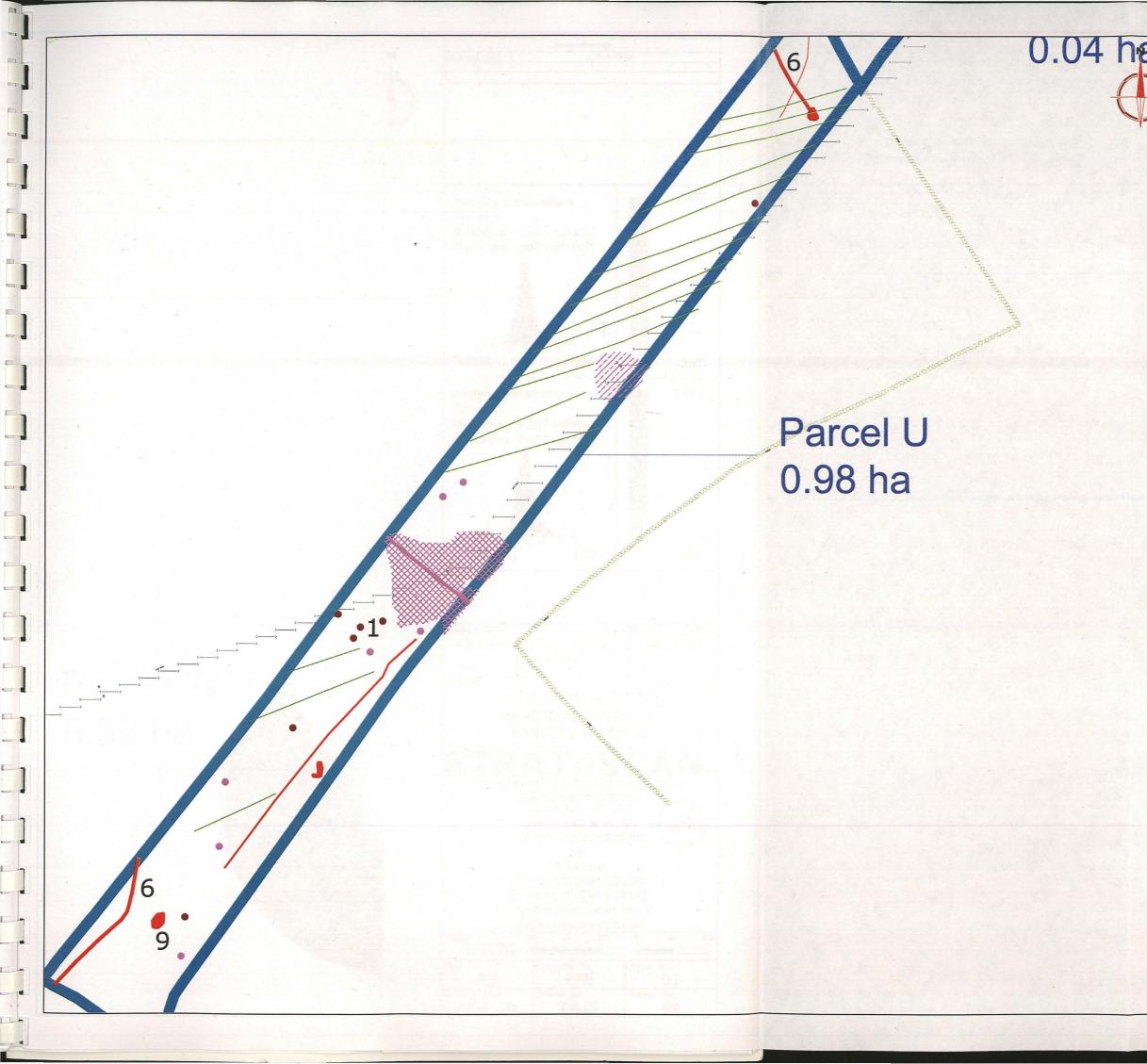
			Amendments						
	Issue N	lo. Date	Descript	ion					
1	-								
				and the second					
				Alter Barrier					
•									
	20 1.00								
	1								
		Section Streets	KEY						
	•	Discrete positive anomaly - possible pit							
	•		maly with associated errous object	i negative					
	1	Positive linear anomaly - agricultural mark							
	1	Positive line archaeologic	ar anomaly - cut fea	ture of possible					
	-		a anomaly - cut feat	ure of possible					
		archaeologic	cal origin						
	1								
	Client	Client							
		APS							
		Project Title Job No. 2538							
	G	GEOPHYSICAL SURVEY -LINCOLN							
	EASTERN BYPASS								
	Subje		STRACTION						
	INT	ABSTRACTION AND INTERPRETATION OF GRADIOMETER							
		ANOMALIES- PARCEL S (SOUTH)							
	114	Careford the rate to Co. C. A. To.							
		1. 1.4.1	4. 1. 1. 4. 3	ТА ТМ					
		GEOPHYS	SICS FOR ARCH	AEOLOGY					
		Ĭ	<b>VINEYARD HOUS</b>	E 44 AR					
			PPER HOOK ROA TON UPON SEVE						
- ,		UP	UK	KIN YASINA					
			WR8 0SA	200					
		T: +44 (0)1684 592266 F: +44 (0)1684 594142							
		E: info@stratascan.co.uk							
	Caste	www.stratascan.co.uk							
	Scale 1	:1000	m 10 20	30 40 50					
	Plot	A3	Checked by PPB	Issue No. 01					
		y date	Drawn by	Figure No.					
	IN	OV 08	RAJS	39					





<b>N</b>	Issue N	o. Date	Amendments	intion					
	ISSUE N	o. Date	- Descr	ption					
		-	- 1.276 ± 1						
	1277								
	in the second			a letter a sector					
· · · · · ·									
	1.5			Here and the					
	1.50								
	-			the second second					
	KEY								
		Discrete p	ositive anomaly - no	ssible nit					
	Discrete positive anomaly - possible pit								
		and the second second second	nomaly with associat	ed negative					
		response -	ferrous object						
	Positive linear anomaly - agricultural mark								
	Positive linear anomaly - cut feature of possible								
	/	archaeolog	gical origin						
منتسب معصور	Negative linear anomaly - bank or earthwork of								
المستعملين فسيتم	possible archaeological origin								
S.	Positive area anomaly - cut feature of possible archaeological origin								
	Magnetic disturbance associated with nearby								
	service or field boundary								
	1 Anomaly type identification number								
	Client								
	APS								
	-	t Title		Job No. 2538					
	G		SICAL SURVE						
		Έ	ASTERN BYP	ASS					
	Subje								
	ABSTRACTION AND								
	INT	ERPRET	ATION OF G	RADIOMETER					
	ANOMALIES- PARCEL T								
	PATHA TA TA TA AND TA								
	GEOPHYSICS FOR ARCHAEOLOGY								
	AND ENGINEERING								
	UPTON UPON SEVERN								
	WR8 0SA								
	T: +44 (0)1684 592266								
	F: +44 (0)1684 594142								
Net all and	E: info@stratascan.co.uk								
	www.stratascan.co.uk								
in the second	Scale 0m 10 20 30 40 50 1:1000								
	Plot	.1000	Checked by	Issue No.					
	. 101	A3	PPB	01					
		y date	Drawn by	Figure No.					
		80 VC	RAJS	41					





		ALC: N	Amen	dments		1 2 St.	
ssue No	o. Date	-	11	Descrip	tion		
1.5.1	-	-			5. P.F.		
				4			
KEY							
Discrete positive anomaly - possible pit							
Positive anomaly with associated negative response - ferrous object							
1	/ Magnetic disturbance - associated with						
1	pipe/cable Positive linear anomaly - agricultural mark						
/	Positive linear anomaly - agricultural mark						
/	Positive linear anomaly - cut feature of possible archaeological origin						
	Positive area anomaly - cut feature of possible						
	archaeological origin						
	Magnetic disturbance associated with nearby service or field boundary						
1/1	Magneti metallic		turbance a	ssociated	d with	nearby	
11/1		-	A STATE				
1	Anomaly type identification number						
Client							
	APS						
1.50		2.10				Sec.	
Project Title Job No. 2538							
GEOPHYSICAL SURVEY -LINCOLN EASTERN BYPASS							
0.1.1	-	EA	STERN	DIPA	133	Ne. Cho	
Subje		AD	STRAC	TION	AND	1	
TAIT							
INTERPRETATION OF GRADIOMETER ANOMALIES- PARCEL U							
	AN	101	ALIES	- PAR	CEL	U	
Chin'	1.4	1/	1 The	1, 6	1	1 24	
GEOPHYSICS FOR ARCHAEOLOGY							
		V	INEYAR	D HOUS	SE	#GISTERE	
			PPER HC			Zo IFA	
		UP			EKN	AA2INAS	
UK WR8 0SA							
	T: +44 (0)1684 592266						
			44 (0)1				
E: info@stratascan.co.uk							
		_	w.strata			40	
Carli	Scale 0m 10 20 30 40 50						
Scale	:1000						
	1. A. J. A.		Checked		Issue	e No.	
1 Plot	A3	,	PF	PB	1	01	
1 Plot Surve	1. A. J. A.			PB	1		

