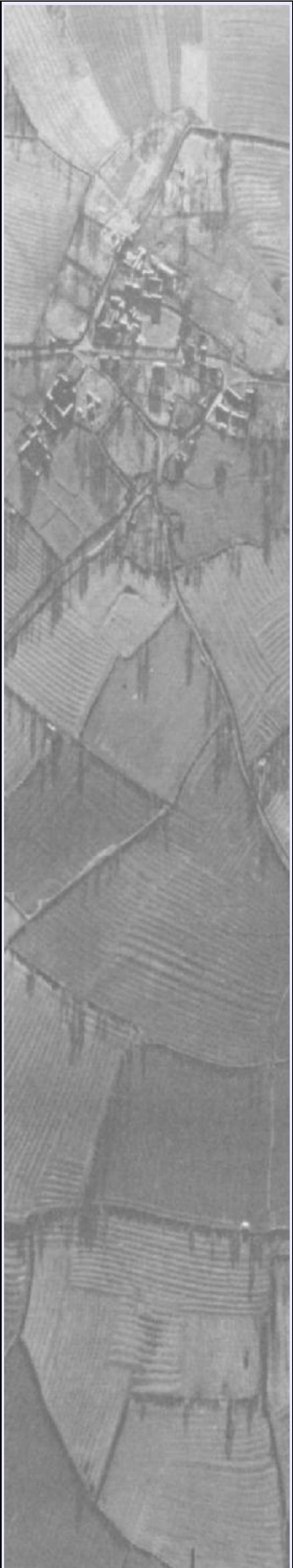


# Appendix 14A

## Geophysical Survey Report



**Bristol Airport  
Area HH  
North Somerset**

**MAGNETOMETER SURVEY REPORT**

for

**Cotswold Archaeology**

Kerry Donaldson & David Sabin

May 2018

Ref. no. J751

ARCHAEOLOGICAL SURVEYS LTD

**Bristol Airport  
Area HH  
North Somerset**

Magnetometer Survey Report

for

**Cotswold Archaeology**

Fieldwork by David Sabin BSc (Hons) MCIfA

Report by Kerry Donaldson BSc (Hons)

Report checked by David Sabin

Primary archive location - Archaeological Surveys Ltd, Yatesbury, Wiltshire

Survey date – 9<sup>th</sup> May 2018

Ordnance Survey Grid Reference – **ST 50025 64600**



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## CONTENTS

SUMMARY.....	1
1 INTRODUCTION.....	1
1.1 Survey background.....	1
1.2 Survey objectives and techniques.....	1
1.3 Standards, guidance and recommendations for the use of this report.....	1
1.4 Site location, description and survey conditions.....	2
1.5 Site history and archaeological potential.....	3
1.6 Geology and soils.....	3
2 METHODOLOGY.....	4
2.1 Technical synopsis.....	4
2.2 Equipment configuration, data collection and survey detail.....	5
2.3 Data processing and presentation.....	5
3 RESULTS.....	7
3.1 General assessment of survey results.....	7
3.2 Statement of data quality and factors influencing the interpretation of anomalies....	7
3.3 Data interpretation.....	8
3.4 List of anomalies .....	9
4 CONCLUSION.....	10
5 REFERENCES.....	11
Appendix A – basic principles of magnetic survey.....	12
Appendix B – data processing notes.....	12
Appendix C – survey and data information.....	13
Appendix D – digital archive.....	13



Appendix E – CAD layers for abstraction and interpretation plots.....	13
Appendix F – copyright and intellectual property.....	14

## LIST OF FIGURES

Fig 01	Map of survey area (1:25 000)
Fig 02	Referencing information (1:1500)
Fig 03	Greyscale plot of minimally processed magnetometer data (1:2000)
Fig 04	Abstraction and interpretation of magnetic anomalies (1:2000)
Fig 05	Greyscale plot of minimally processed magnetometer data (1:1000)
Fig 06	Abstraction and interpretation of magnetic anomalies (1:1000)

## LIST OF PLATES

Plate 1: Survey area looking south west.....	3
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## LIST OF TABLES

Table 1: List and description of interpretation categories.....	8
Table 2: Archive metadata.....	13
Table 3: CAD layering.....	14

## SUMMARY

A geophysical survey, comprising detailed magnetometry, was undertaken by Archaeological Surveys Ltd at the request of Cotswold Archaeology on land to the south of Bristol Airport ahead of a car park development. The data have revealed a number of widespread natural features within the underlying limestone geology and anomalies that may be related to soil reinstatement after quarrying. There are a number of positive linear, possible rectilinear and discrete anomalies that have a high potential to relate to further similar features; however, they do appear ditch-like and pit-like and an anthropogenic origin is possible.

## 1 INTRODUCTION

### 1.1 *Survey background*

- 1.1.1 Archaeological Surveys Ltd was commissioned by Cotswold Archaeology to undertake a magnetometer survey of an area of land to the south of Bristol Airport in North Somerset. The site has been outlined for a proposed development of a car park for the airport and the survey forms part of an archaeological assessment.
- 1.1.2 The geophysical survey was carried out in accordance with a Written Scheme of Investigation (WSI) produced by Archaeological Surveys (2018). The land immediately to the north (Site C) has been previously subject to geophysical survey for an earlier car park scheme (Archaeological Surveys, 2016).

### 1.2 *Survey objectives and techniques*

- 1.2.1 The objective of the survey was to use magnetometry to locate geophysical anomalies that may be archaeological in origin so that they may be assessed prior to development of the site.
- 1.2.2 The methodology is considered an efficient and effective approach to archaeological prospection.
- 1.2.3 Geophysical survey can provide useful information on the archaeological potential of a site; however, the outcome of any survey relies on a number of factors and as a consequence results can vary. The success in meeting the aims and objectives of a survey is, therefore, often impossible to predetermine.

### 1.3 *Standards, guidance and recommendations for the use of this report*

- 1.3.1 The survey and report generally follow the recommendations set out by: English Heritage (2008) *Geophysical survey in archaeological field evaluation*; European Archaeological Council (2015) *Guidelines for the Use of*

*Geophysics in Archaeology*; Institute for Archaeologists (2002) *The use of Geophysical Techniques in Archaeological Evaluations*. The work has been carried out to the Chartered Institute for Archaeologists (2014) *Standard and Guidance for Archaeological Geophysical Survey*.

- 1.3.2 Archaeological Surveys Ltd provide a detailed geophysical survey report and it is recommended that where possible the contents should be considered in full. The Summary provides a brief overview of the results with more detail available in the Discussion and/or Conclusion. The *List of anomalies* within the Results provides a detailed assessment of the anomalies within separate categories which can be useful in inferring a level of confidence to the interpretation. Quality and factors influencing the interpretation of anomalies is also set out within the results.
- 1.3.3 It is recommended that the full report should always be considered when using data and interpretation plots; where this is not possible, in the field for example, the abstraction and interpretation plots should retain their colour coding and be used with a corresponding legend.
- 1.3.4 Where targeting of anomalies by excavation is to be carried out, care should be taken to place trenches over solid lines or features visible on the abstraction and interpretation plots. Archaeological Surveys abstraction and interpretation avoids the use of dashed or dotted lines; broken or fragmented anomalies may well correspond closely with subsurface truncation.

#### 1.4 Site location, description and survey conditions

- 1.4.1 The site is located to the south of Bristol Airport on pasture land at Goblin Combe Farm within the parish of Wrington, North Somerset. It is centred on Ordnance Survey National Grid Reference (OS NGR) ST 50025 64600, see Figs 01 and 02.
- 1.4.2 The geophysical survey covers approximately 4ha of pasture mainly within a single field but also including a very small paddock at the south western corner. Several areas of rocks and scrub are situated within the site and these were unsurveyable. The land is known to have been subject to quarrying in the past, with topsoil reinstated.
- 1.4.3 The survey area generally slopes down gently towards the south although the eastern edge of the site drops more steeply due to a small combe further to the east beyond the boundary. Within the small paddock, forming the south western part of the site, the land is generally flat but was heavily poached and partly waterlogged at the time of survey. At the eastern end of the paddock is a pond surrounded by a stone wall.



*Plate 1: Survey area looking south west*

- 1.4.4 The ground conditions across the site were variable with scrubby vegetation and rocks preventing survey in some areas. Poor conditions due to poaching and waterlogging also prevented survey within the western part of the small paddock. Survey was also avoided in the vicinity of steel cattle feeders near the north western corner of the area. Weather conditions during the survey were fine.

## **1.5 Site history and archaeological potential**

- 1.5.1 The site does not contain any designated or undesignated heritage assets. A previous geophysical survey on land immediately to the north located a number of positive linear and rectilinear anomalies (Archaeological Surveys, 2016). Subsequent evaluation revealed a ditch containing quantities of Roman pottery in this area (Cotswold Archaeology, 2016). The other geophysical anomalies proved to relate to natural joints and cracks within the underlying shallow geology. Approximately 125m south of the survey area is a Neolithic chambered long barrow (long barrow 350m south-west of Cornerpool Farm, scheduled monument no. 11008291/22819).

## **1.6 Geology and soils**

- 1.6.1 The underlying geology is from the Black Rock Limestone Subgroup (Carboniferous limestone) with a small zone of Triassic mudstone and limestone from the Westbury Formation and Cotham Member across the south western corner of the main survey area (BGS, 2017).
- 1.6.2 During the course of the survey numerous large rocks were visible on and

within the ground surface. Personal communication with the farmer indicated that much of the site had been subject to quarrying associated with previous development of the airfield, although the precise area was uncertain. After the quarrying topsoil was replaced but this had become heavily contaminated with rock which in the following years had slowly been removed to improve the quality of the pasture.

- 1.6.3 The overlying soil across the site is from the Nordrach association and is a typical paleo-argillic brown earth. It consists of a well drained, fine, silty over clayey soil (Soil Survey of England and Wales, 1983).
- 1.6.4 Magnetometry carried out over similar geology and soil has produced good results; however, it can be difficult to distinguish the fill of anthropogenically cut features to those relating to the underlying geology. The properties and structure of the soil is likely have been altered by the previous quarrying and reinstatement operations and, as a consequence, anomalies of recent origin may be present.

## 2 METHODOLOGY

### 2.1 *Technical synopsis*

- 2.1.1 Magnetometry survey records localised magnetic fields that can be associated with features formed by human activity. Magnetic susceptibility and magnetic thermoremnance are factors associated with the formation of localised fields. Additional details are set out below and within Appendix A.
- 2.1.2 Iron minerals within the soil may become altered by burning and the break down of biological material; effectively the magnetic susceptibility of the soil is increased, and the iron minerals become magnetic in the presence of the Earth's magnetic field. Accumulations of magnetically enhanced soils within features, such as pits and ditches, may produce magnetic anomalies that can be mapped by magnetic prospection.
- 2.1.3 Magnetic thermoremnance can occur when ferrous minerals have been heated to high temperatures such as in a kiln, hearth, oven etc. On cooling, a permanent magnetisation may be acquired due to the presence of the Earth's magnetic field. Certain natural processes associated with the formation of some igneous and metamorphic rock may also result in magnetic thermoremnance.
- 2.1.4 The localised variations in magnetism are measured as sub-units of the Tesla, which is a SI unit of magnetic flux density. These sub-units are nano Teslas (nT), which are equivalent to  $10^{-9}$  Tesla (T).

## 2.2 *Equipment configuration, data collection and survey detail*

- 2.2.1 The detailed magnetic survey was carried out using a SENSYS MAGNETO®MXPDA 5 channel cart-based system. The instrument has 5 fluxgate gradiometers (FGM650) spaced 0.5m apart with readings recorded at 20 Hz. The cart is pushed at walking speed and not towed. Each sensor is not zeroed in the field as the vertical axis alignment is precisely fixed leaving sensor offsets that are removed during data processing. The fixing of the vertical alignment ensures the sensors are not unduly influenced by localised magnetic fields and that the vertical component of a magnetic anomaly is measured. The gradiometers have a range of recording data between  $\pm 0.1\text{nT}$  and  $\pm 10,000\text{nT}$ . They are linked to a Leica GS10 RTK GPS with data recorded by SENSYS MAGNETO®MXPDA software on a rugged PDA computer system.
- 2.2.2 Due to the fixed offsets within the fluxgate sensors, as a result of the manufacturing and tensioning process, the survey data do not provide a visually useful dataset until a zero median traverse algorithm is applied. It is recognised that this has the potential to affect some anomalies detrimentally by removing linear features orientated parallel to survey transects. However, this has not been noted as a particular problem with the system due to the high resolution data collection, generally long length of traverses and variability within the magnetic characteristics of a linear anomaly.
- 2.2.3 Data are collected along a series of parallel survey transects to achieve 100% coverage of the surveyable land. The length of each transect is variable and relates to the size of the survey area and other factors including ground conditions. A visual display allows accurate placing of transects and helps maintain the correct separation between adjacent traverses. Data are not collected within fixed grids and data points are considered to be random even though the data are collected in a systematic manner covering all accessible areas (Aspinall, Gaffney and Schmidt, 2009).
- 2.2.4 Fluxgate sensors are highly sensitive to temperature change and this is manifest as drift during the course of a survey. This can be particularly noticeable during the morning as temperatures rise and the equipment warms or cools. Sensor drift within the course of a traverse will appear as a line trending from negative to positive after processing with a zero median traverse algorithm. To remove the potential for temperature drift data were collected after a 20 minute stabilisation period and traverses were limited to a time of generally <100s.

## 2.3 *Data processing and presentation*

- 2.3.1 Magnetic data collected by the MAGNETO®MXPDA cart-based system are initially prepared using SENSYS MAGNETO®DLMGPS software. The software effectively allocates a geographic position for each data point and can compensate for fixed offsets present within the FGM650 sensors. The offsets are positive or negative values present on all fluxgate gradiometer sensors. Some systems use manual or electronic balancing to effectively zero the sensors; however, this is a short term measure that is prone to drift

through temperature changes and vibration and can easily be incorrectly set due to localised magnetic fields. The FGM650 sensors are very accurately aligned to the vertical magnetic gradient and are highly stable showing negligible drift on long traverses. The offset values are removed using TerraSurveyor software.

- 2.3.2 Survey tracks are analysed and georeferenced raw data (UTM Z30N) are then exported in ASCII format for further analysis and display within TerraSurveyor. The removal of offset values (compensation) of the sensors is also carried out in TerraSurveyor using a zero median traverse function. Data are then considered to be minimally processed. Note: without the zero median traverse function it is not possible to create a meaningful data plot as all sensors have a different offset value. Although a zero median traverse algorithm can remove anomalies aligned with the survey tracks, in practice this rarely occurs due to the use of long traverses, high resolution measurement and variability within the magnetic susceptibility of long linear features.
- 2.3.3 The minimally processed data are collected between limits of  $\pm 10000\text{nT}$  and clipped for display at  $\pm 5\text{nT}$  and at  $\pm 3\text{nT}$ . Data are interpolated to a resolution of effectively 0.5m between tracks and 0.15m along each survey track.
- 2.3.4 Appendix C contains metadata concerning the survey and data attributes and is derived directly from TerraSurveyor. Reference should be made to Appendix B for further information on processing.
- 2.3.5 A TIF file is produced by TerraSurveyor software along with an associated world file (.TFW) that allows automatic georeferencing (OSGB36 datum) when using GIS or CAD software. The main form of data display used in the report is the minimally processed greyscale plot. With regard to the Sensys MXPDA, minimally processed data are considered by the manufacturer to be data that are compensated by SENSYS MAGNETO DLMGPS software, see 2.3.1 and 2.3.2. Note: traceplots are not considered to be appropriate as they do not provide an accurate or useful assessment of the magnetic anomalies due to the very high density of data collection.
- 2.3.6 The raster images are combined with base mapping using ProgeCAD Professional 2016, creating DWG (2010) file formats. All images are externally referenced to the CAD drawing in order to maintain good graphical quality. The CAD plots are effectively georeferenced facilitating relocation of features using GPS, resection method, etc.
- 2.3.7 An abstraction and interpretation is drawn and plotted for all geophysical anomalies located by the survey. Anomalies are abstracted using colour coded points, lines and polygons. All plots are scaled to landscape A3 for paper printing. Appendix E sets out CAD layer names with colour and graphic content for each interpretation category, see 3.3.
- 2.3.8 A brief summary of each anomaly, with an appropriate reference number, is set out in list form within the results (Section 3) to allow a rapid and objective



assessment of features within the survey area.

- 2.3.9 The abstraction and interpretation procedure has been supported by analysis of a digital terrain model and/or contour plot derived from GNSS height data automatically logged during the survey. The GNSS heights are converted from the ETRS89 ellipsoid using the National Geoid Model OSGM02 to obtain ODN (Ordnance Datum Newlyn) + the GNSS antenna height (approximately 1.5M).
- 2.3.10 A digital archive is produced with this report, see Appendix D below. The main archive is held at the offices of Archaeological Surveys Ltd.

## 3 RESULTS

### 3.1 *General assessment of survey results*

- 3.1.1 The detailed magnetic survey was carried out over a total of approximately 4ha.
- 3.1.2 Magnetic anomalies located can be generally classified as positive anomalies of an uncertain origin, anomalies associated with ground disturbance, areas of magnetic debris and disturbance and strong discrete dipolar anomalies relating to ferrous objects. Anomalies have been numbered and are described in 3.4 below.

### 3.2 *Statement of data quality and factors influencing the interpretation of anomalies*

- 3.2.1 Data are considered representative of the magnetic anomalies present within the site. There are no significant defects within the dataset.
- 3.2.2 Useful contrast between the magnetic susceptibility of the soil and underlying geology appears to exist across the site. However, due to the nature and extent of previous quarrying and reinstatement, abstraction and interpretation is problematic. Anomalies may relate to naturally formed features within the shallow solid geology or anthropogenically formed features associated with differences in the make-up of the reinstated soil. The precise extent and depth of previous quarrying is unclear and has implications for the the potential survival of archaeological features, should they exist within the site.
- 3.2.3 Data are positioned using RTK GNSS giving a high degree of precision to the location of anomalies. At least one linear anomaly crosses from the previously surveyed area to the north, where data were also collected with RTK GNSS, demonstrating continuity within the ground conditions and confidence in the accuracy of positioning.



### 3.3 Data interpretation

3.3.1 The list of sub-headings below attempts to define a number of separate categories that reflect the range and type of features located during the survey. A basic explanation of the characteristics of the magnetic anomalies is set out for each category in order to justify interpretation, see Table 1.

Interpretation category	Description and origin of anomalies
<b><i>Anomalies with an uncertain origin</i></b>	The category applies to a range of anomalies where <u>there is not enough evidence to confidently suggest an origin</u> . Anomalies in this category <u>may well be related to archaeologically significant features, but equally relatively modern features, geological/pedological features and agricultural features should be considered</u> . Morphology may be unclear or uncharacteristic and there may be a lack of additional supporting information. Positive anomalies are indicative of magnetically enhanced soils that may form the fill of 'cut' features or may be produced by accumulation within layers or 'earthwork' features; soils subject to burning may also produce positive anomalies. Negative anomalies are produced by material of comparatively low magnetic susceptibility such as stone and subsoil.
<b><i>Anomalies associated with magnetic debris</i></b>	Magnetic debris often appears as areas containing many small dipolar anomalies that may range from weak to very strong in magnitude. They often occur where there has been dumping or ground make-up and are related to magnetically thermoremanent materials such as brick or tile or other small fragments of ferrous material. This type of response is occasionally associated with kilns, furnace structures, hearths and nail spreads from former wooden structures or rooves and <u>may, therefore, be archaeologically significant</u> . It is also possible that the response may be caused by natural material such as certain gravels and fragments of igneous or metamorphic rock. Strong discrete dipolar anomalies are responses to ferrous objects within the topsoil.
<b><i>Anomalies with a modern origin</i></b>	The magnetic response is often strong and dipolar indicative of ferrous material and may be associated with extant above surface features such as wire fencing, cables, pylons etc.. Often a significant area around these features has a strong magnetic flux which may create magnetic disturbance; such disturbance can effectively obscure low magnitude anomalies if they are present. Fluxgate sensors may respond erratically adjacent to strong magnetic sources. Buried services may produce characteristic multiple dipolar anomalies dependant upon their construction.
<b><i>Anomalies with a natural origin</i></b>	Naturally formed magnetic anomalies are caused by localised variability in the magnetic susceptibility of soils, subsoils and other drift or solid geologies. Anomalies may be amorphous, linear or curvilinear and may appear 'fluvial' or discrete; and at times can be <u>almost impossible to distinguished from pit-like anomalies with an anthropogenic origin</u> . Fluvial, glacial and periglacial processes may be responsible for their formation within drift material and subsoil, with soil filled joint and cracks within limestone formations often appearing ditch-like and pit-like in form.
<b><i>Anomalies associated with ground disturbance</i></b>	Magnetically variable anomalies which may be negative indicating a response to geology/drift deposits and/or positive indicating an increased depth of topsoil. Very strongly magnetic anomalies are a response to highly magnetic material of modern origin which can be used to infill a quarry depression.

Table 1: List and description of interpretation categories

### 3.4 List of anomalies

Area centred on OS NGR 350025 164600, see Figs 03 – 06.

#### *Anomalies with an uncertain origin*

(1 & 2) - Two positive linear anomalies may relate to natural features within the underlying limestone geology; however, they could form a rectilinear feature. Rectilinear anomalies were located 240m to the north west during the previous survey with some evidence for them relating to Roman ditches and so an archaeological origin should be considered.

(3) – A positive linear anomaly extends southwards from an area of scrub and rocks towards the southern edge of the survey area. Again, this could be a natural feature, although it appears ditch-like.

(4) - Positive discrete and linear anomalies could relate to soil filled natural features.

(5) - The survey area contains a number of isolated discrete positive responses. Although they appear pit-like, they may well relate to natural features.

#### *Anomalies associated with ground disturbance*

(6) - A zone of magnetically variable response relates to a patch that contain widespread rocks on the surface. The field has been subject to quarrying and this may relate to redeposited material.

#### *Anomalies with a natural origin*

(7) – A positive linear anomaly extends south eastwards from the previous survey area and relates to a natural feature. At the time of the previous survey it was not clear if the long, parallel linear anomalies related to natural cracks within the underlying geology, or if they had an association with agricultural activity or land drainage. The previous evaluation to the north revealed that they related to natural joints and cracks within the limestone.

(8) - In the eastern part of the survey area are a number of positive discrete and linear anomalies. Again, previously it was not clear if similar responses to the north related to cut features or an increased depth of topsoil within natural features. The evaluation revealed that they were natural features.

(9) - Positive responses with no coherent morphology can be seen in the western part of the survey area. They are likely to relate to further natural features.

*Anomalies associated with magnetic debris*

(10) - Patches of magnetic debris relate to ferrous and other magnetically thermoremanent material and are likely to be of modern origin.

(11) - The entire survey area contains evidence for ferrous objects within the topsoil.

## 4 CONCLUSION

- 4.1.1 The detailed magnetometer survey located a number of positive linear and discrete anomalies that were similar to, and with one a direct continuation of, the natural features previously located within the survey area to the north. The majority of the anomalies probably relate to naturally formed, soil filled, joints, cracks and pits within the underlying limestone geology and to differences in the reinstated topsoil overlying quarried areas. However, there are a small number of positive linear anomalies and a possible rectilinear anomaly that appear ditch-like in form and several discrete positive responses that may indicate pit-like features. The likelihood of these also relating to natural features is high; however, fragmented rectilinear anomalies and a ditch containing Romano-British material were previously located approximately 200m to the north west and so further archaeological features are possible.

## 5 REFERENCES

Archaeological Surveys, 2016. *Bristol Airport, Site C, North Somerset, Magnetometer Survey Report*. Ref. J655. Unpublished typescript document.

Archaeological Surveys, 2018. *Bristol Airport, Area HH, North Somerset, Geophysical Survey Written Scheme of Investigation*. Unpublished typescript document.

Aspinall, A., Gaffney, C. and Schmidt, A. 2009. *Magnetometry for Archaeologists*. Lanham (US), AltaMira Press.

British Geological Survey, 2017. *Geology of Britain viewer, 1:50 000 scale [online]* available from <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [accessed 14/5/2018].

Chartered Institute for Archaeologists, 2014. *Standard and Guidance for archaeological geophysical survey*. IfA, University of Reading.

Cotswold Archaeology, 2016. *Bristol Airport, Site C, Broadfield Down, North Somerset, Archaeological Evaluation*. Report no. 16456. Unpublished typescript document.

English Heritage, 2008. *Geophysical survey in archaeological field evaluation. Research and Professional Service Guideline No. 1*. 2<sup>nd</sup> ed. Swindon: English Heritage.

European Archaeological Council, 2015. *EAC Guidelines for the Use of Geophysics in Archaeology: Questions to Ask and Points to Consider*. Europae Archaeologia Consilium and Association Internationale sans But Lucratif, Belgium.

Institute for Archaeologists, 2002. *The use of Geophysical Techniques in Archaeological Evaluations*. IfA Paper No. 6. IfA, University of Reading.

Soil Survey of England and Wales, 1983. *Soils of England and Wales, Sheet 5 South West England*.

## Appendix A – basic principles of magnetic survey

Iron minerals are always present to some degree within the topsoil and enhancement associated with human activity is related to increases in the level of magnetic susceptibility and thermoremanent material. Magnetic susceptibility is an induced magnetism within a material when it is in the presence of a magnetic field. This can be thought of as effectively permanent due to the presence of the Earth's magnetic field. Thermoremanent magnetism occurs when ferrous material is heated beyond a specific temperature known as the Curie Point. Demagnetisation occurs at this temperature with re-magnetisation by the Earth's magnetic field upon cooling.

Enhancement of magnetic susceptibility can occur in areas subject to burning and complex fermentation processes on biological material; these are frequently associated with human settlement. Thermoremanent features include ovens, hearths, and kilns. In addition thermoremanent material such as tile and brick may also be associated with human activity and settlement.

Silting and deliberate infilling of ditches and pits with magnetically enhanced soil can create an area of enhancement compared with surrounding soils and subsoils into which the feature is cut. Mapping enhanced areas will produce linear and discrete anomalies allowing an assessment and characterisation of hidden subsurface features.

It should be noted that areas of negative enhancement can be produced from material having lower magnetic properties compared to the topsoil. This is common for many sedimentary bedrocks and subsoils which were often used in the construction of banks and walls etc. Mapping these 'negative' anomalies may also reveal archaeological features.

Magnetic survey or magnetometry can be carried out using a fluxgate gradiometer and may be referred to as gradiometry. The SENSYS gradiometer is a passive instrument consisting of two fluxgate sensors mounted vertically 65cm apart. The instrument is carried about 10-20cm above the ground surface and the upper sensor measures the Earth's magnetic field as does the lower sensor but this is influenced to a greater degree by any localised buried magnetic field. The difference between the two sensors will relate to the strength of the magnetic field created by the buried feature.

There are a number of factors that may affect the magnetic survey and these include soil type, local geology and previous human activity. Situations arise where magnetic disturbance associated with modern services, metal fencing, dumped waste material etc., obscures low magnitude fields associated with archaeological features.

## Appendix B – data processing notes

### *Clipping*

Minimum and maximum values are set and replace data outside of the range with those values. Extreme values are removed improving colour or greyscale contrast associated with data values that may be archaeologically significant. It has been found that clipping data to ranges between  $\pm 5\text{nT}$  and  $\pm 3\text{nT}$  often improves the appearance of features associated with archaeology. Different ranges are applied to data in order to determine the most suitable for anomaly abstraction and display.

### *Zero (destripe) Median/Mean Traverse*

The median (or mean) of each traverse is calculated ignoring data outside a threshold value, the median (or mean) is then subtracted from the traverse. The process is used to equalise differences between the baseline value of gradiometer sensors.

### *High Pass Filtering*

A mathematical process used to remove low frequency anomalies relating to survey tracks, modern agricultural features and other large magnetic bodies within or adjacent to survey areas.

### *Low Pass Filtering*

A mathematical process used to remove high frequency anomalies relating to uneven ground, vibration, etc.

## Appendix C – survey and data information

Filename:	J751-mag.-proc-3nT.xcp	Median:	0.01
Description:	Imported as Composite from: J751-mag.asc	Composite Area:	6.6581 ha
Instrument Type:	Sensys DLMGPS	Surveyed Area:	3.9702 ha
Units:	nT	PROGRAM	
UTM Zone:	30U	Name:	TerraSurveyor
Survey corner coordinates (X/Y):	OSGB36	Version:	3.0.23.0
Northwest corner:	349859.3111, 164713.686 m	GPS based Process	
Southeast corner:	350163.961, 164495.136 m	1 Base Layer.	
Collection Method:	Randomised	2 Unit Conversion Layer (Lat/Long to OSGB36).	
Sensors:	5	3 DeStripe Median Traverse:	
Dummy Value:	32702	4 Clip from -5.00 to 5.00 nT	
Source GPS Points:	1280900	5 Clip from -3.00 to 3.00 nT	
Dimensions			
Composite Size (readings):	2031 x 1457	Filename:	J751-mag-proc.xcp
Survey Size (meters):	305 m x 219 m	Stats	
Grid Size:	305 m x 219 m	Max:	5.53
X Interval:	0.15 m	Min:	-5.50
Y Interval:	0.15 m	Std Dev:	1.44
Stats		Mean:	0.01
Max:	3.32	Median:	0.01
Min:	-3.30	GPS based Process	
Std Dev:	1.14	1 Base Layer.	
Mean:	0.01	2 Unit Conversion Layer (Lat/Long to OSGB36).	
4 Clip from -5.00 to 5.00 nT		3 DeStripe Median Traverse:	

## Appendix D – digital archive

Archaeological Surveys Ltd hold the primary digital archive at their offices in Wiltshire. Data are backed-up onto an on-site data storage drive and at the earliest opportunity data are copied to CD ROM for storage on-site and off-site.

A PDF copy will be supplied to the North Somerset Historic Environment Record with printed copies on request. The report will also be uploaded to the Online Access to the Index of archaeological investigations (OASIS). A summary will be placed in the Somerset Archaeology section of the *Proceedings of the Somerset Archaeological and Natural History Society*.

Archive contents:

File type	Naming scheme	Description
Data	J751-mag-[area number/name].asc J751-mag-[area number/name].xcp J751-mag-[area number/name]-proc.xcp	Raw data as ASCII CSV TerraSurveyor raw data TerraSurveyor minimally processed data
Graphics	J751-mag-[area number/name]-proc.tif	Image in TIF format
Drawing	J751-[version number].dwg	CAD file in 2010 dwg format
Report	J751 report.odt	Report text in Open Office odt format

Table 2: Archive metadata

## Appendix E – CAD layers for abstraction and interpretation plots

The table below sets out Archaeological Surveys Ltd CAD layer names with associated colours and graphical content. Where CAD files are available layers may be extracted for further CAD/GIS use. Note: hatched polygon boundaries are contained within layers with the RGB colour code 254, 255, 255 (near white) in order to prevent their visibility.

Report sub-heading and associated CAD layer names	Colour with RGB index	Layer content
<b>Anomalies with an uncertain origin</b>		
AS-ABST MAG POS LINEAR UNCERTAIN	Orange 255,127,0	Line, polyline or polygon (solid)
AS-ABST MAG POS DISCRETE UNCERTAIN	Orange 255,127,0	Solid donut, point or polygon (solid)
<b>Anomalies associated with magnetic debris</b>		
AS-ABST MAG DEBRIS	Grey 132, 132, 132	Polygon (cross hatched ANSI37)
AS-ABST MAG STRONG DIPOLAR	Grey 132, 132, 132	Solid donut, point or polygon (solid)
<b>Anomalies with a modern origin</b>		
AS-ABST MAG DISTURBANCE	Grey 132, 132, 132	Polygon (hatched ANSI31)
<b>Anomalies with a natural origin</b>		
AS-ABST MAG NATURAL FEATURES	Yellow 255,255,0	Polygon (cross hatched ANSI37)
<b>Anomalies associated with ground disturbance/quarrying</b>		
AS-ABST MAG QUARRYING/ GROUND DISTURBANCE	Yellow 255,255,127 or 255,223,127	Polygon (net)

Table 3: CAD layering

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Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

Map of survey area

Reproduced from OS Explorer map no.154 1:25 000  
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● Survey location

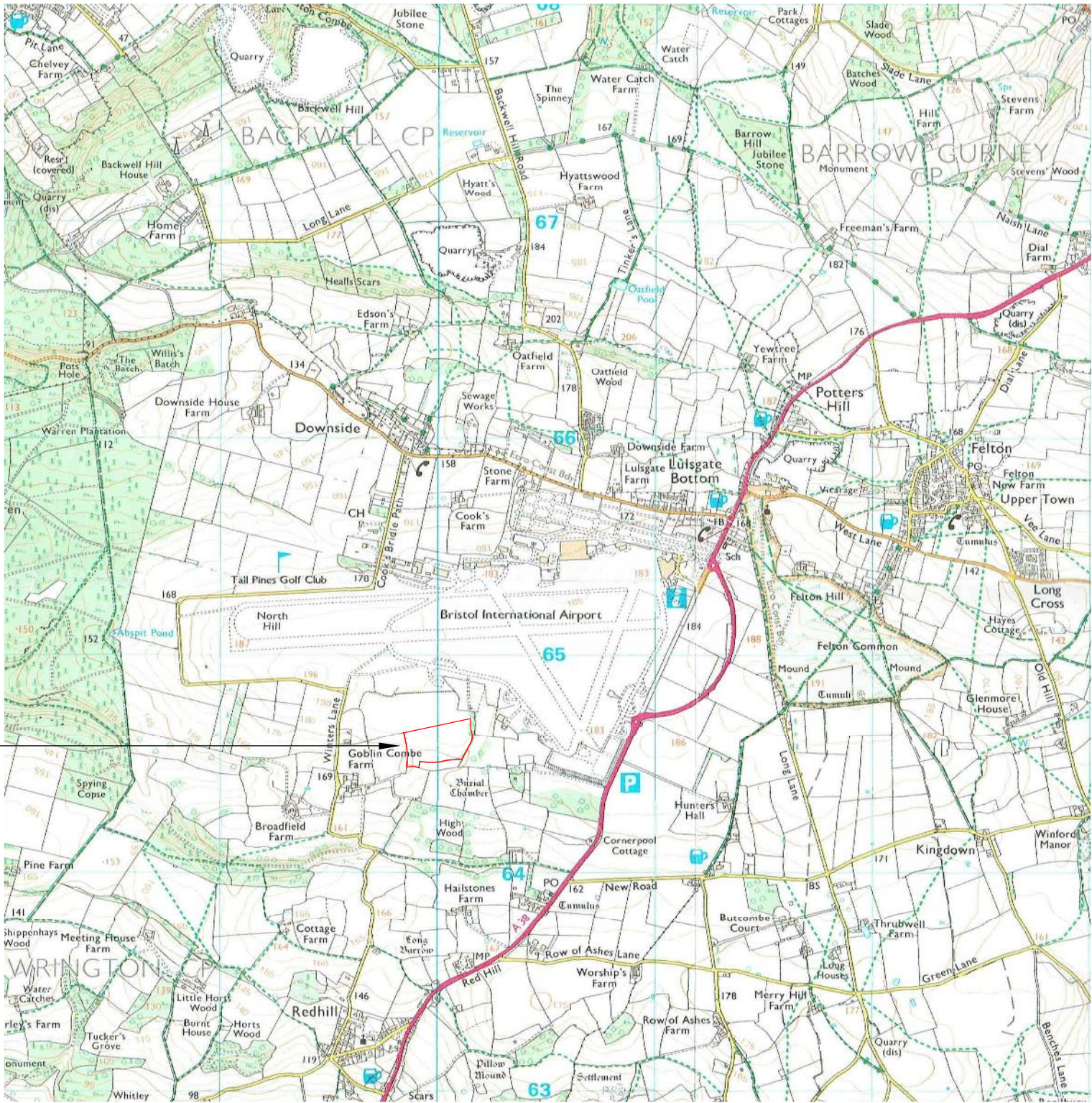
Site centred on OS NGR  
ST 50025 64600

SCALE 1:25 000



SCALE TRUE AT A3

Survey location





Site C previously surveyed 2016

Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

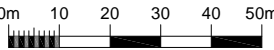
Referencing information

Referencing grid to OSGB36 datum at 50m intervals

Data collected at 20Hz and georeferenced to ETRS89 zone 30 with conversion to OSGB36 using OSTN02

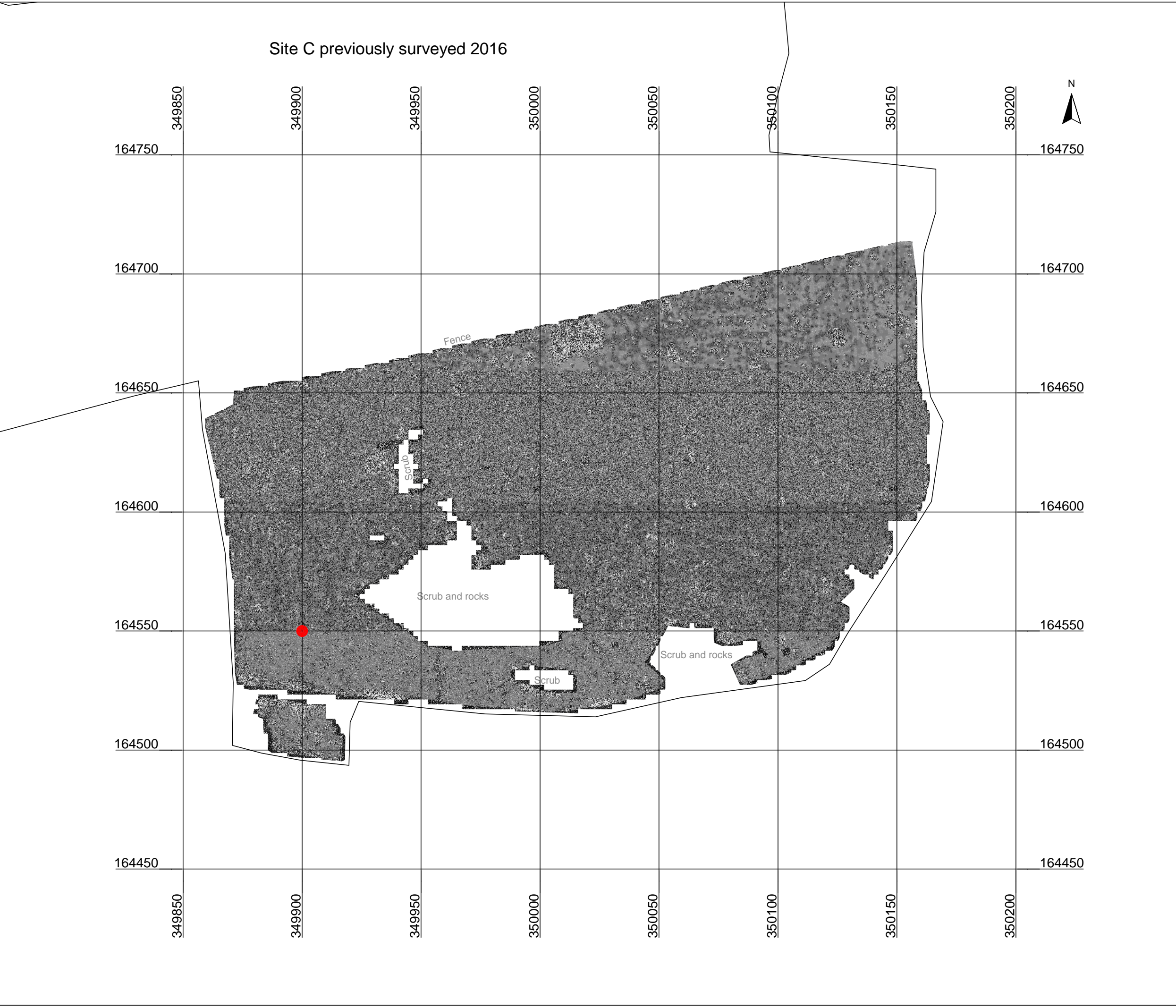
● 349900 164550

SCALE 1:1500



SCALE TRUE AT A3

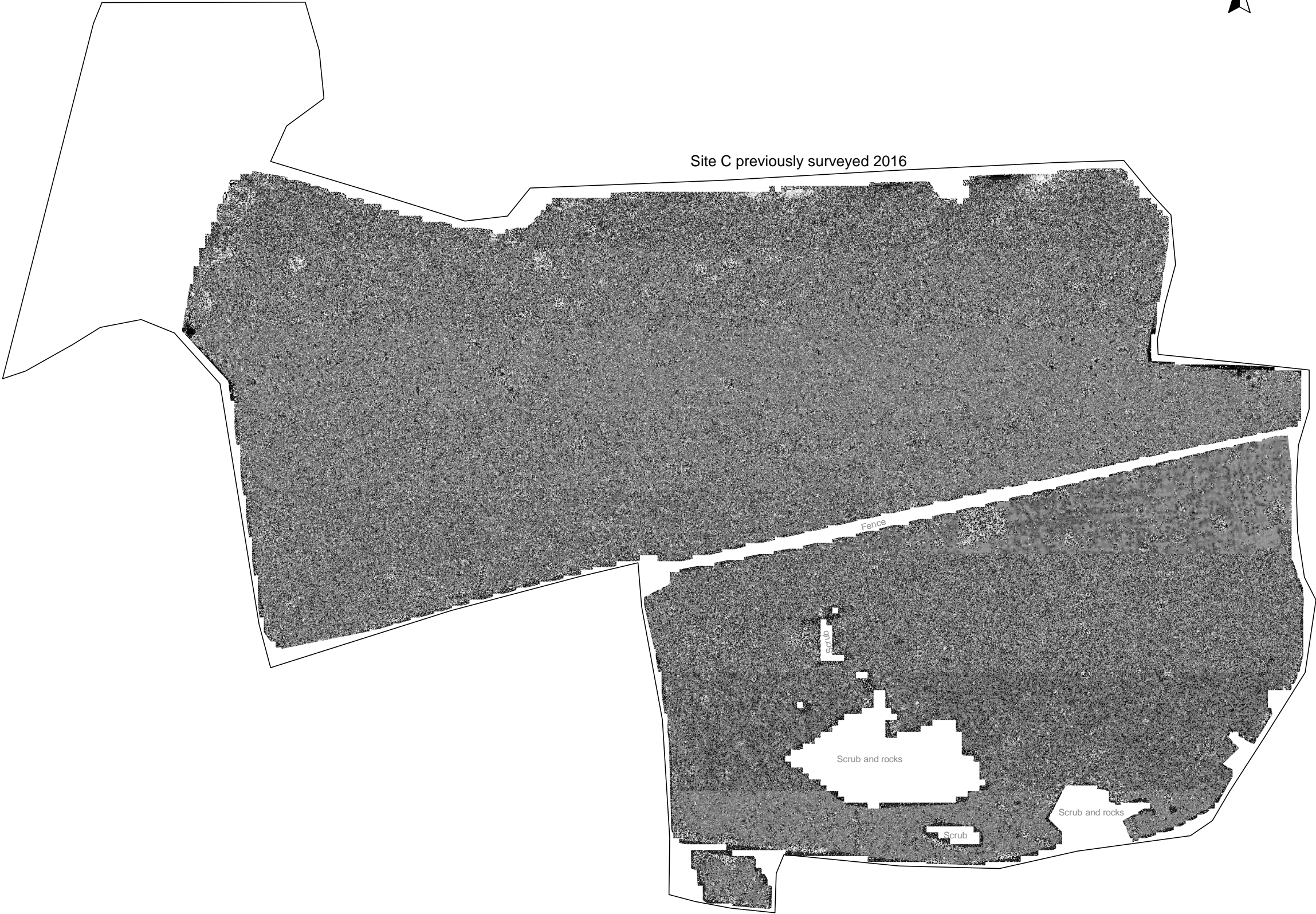
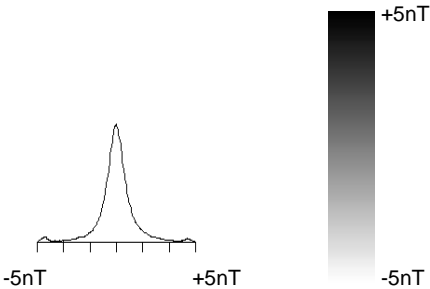
FIG 02



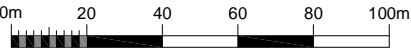


Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

Greyscale plot of minimally  
processed magnetometer data



SCALE 1:2000



SCALE TRUE AT A3

FIG 03



Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

Abstraction and interpretation of  
magnetic anomalies

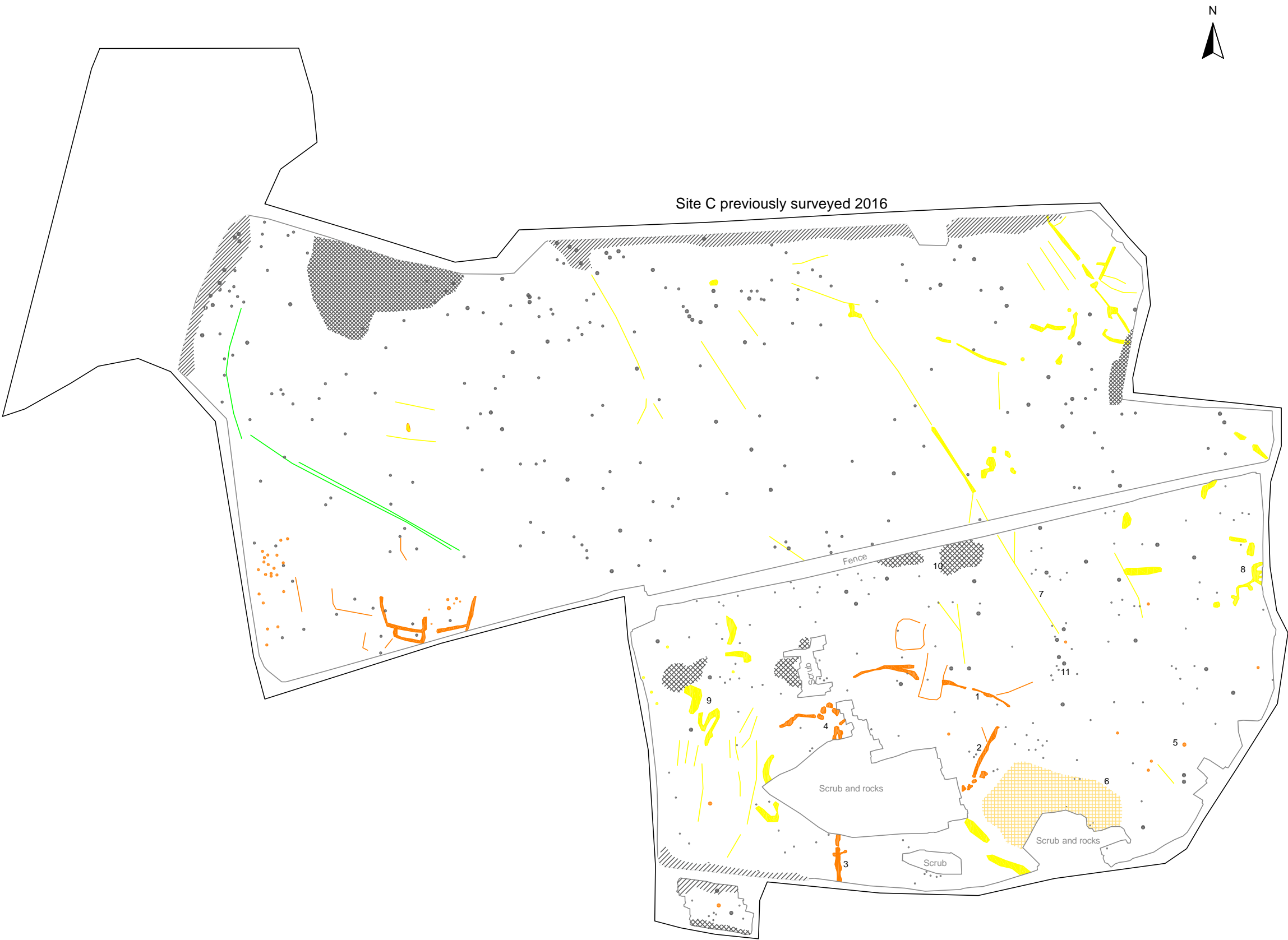
- Positive linear anomaly - possible ditch-like feature
- Negative linear anomaly - vehicle rut
- Discrete positive response - possible pit-like feature
- Positive linear anomaly - of natural origin
- Discrete positive response - of natural origin
- Variable magnetic response - ground disturbance
- Magnetic debris - spread of magnetically thermoremnant/ferrous material
- Magnetic disturbance from ferrous material
- Strong dipolar anomaly - ferrous object

SCALE 1:2000



SCALE TRUE AT A3

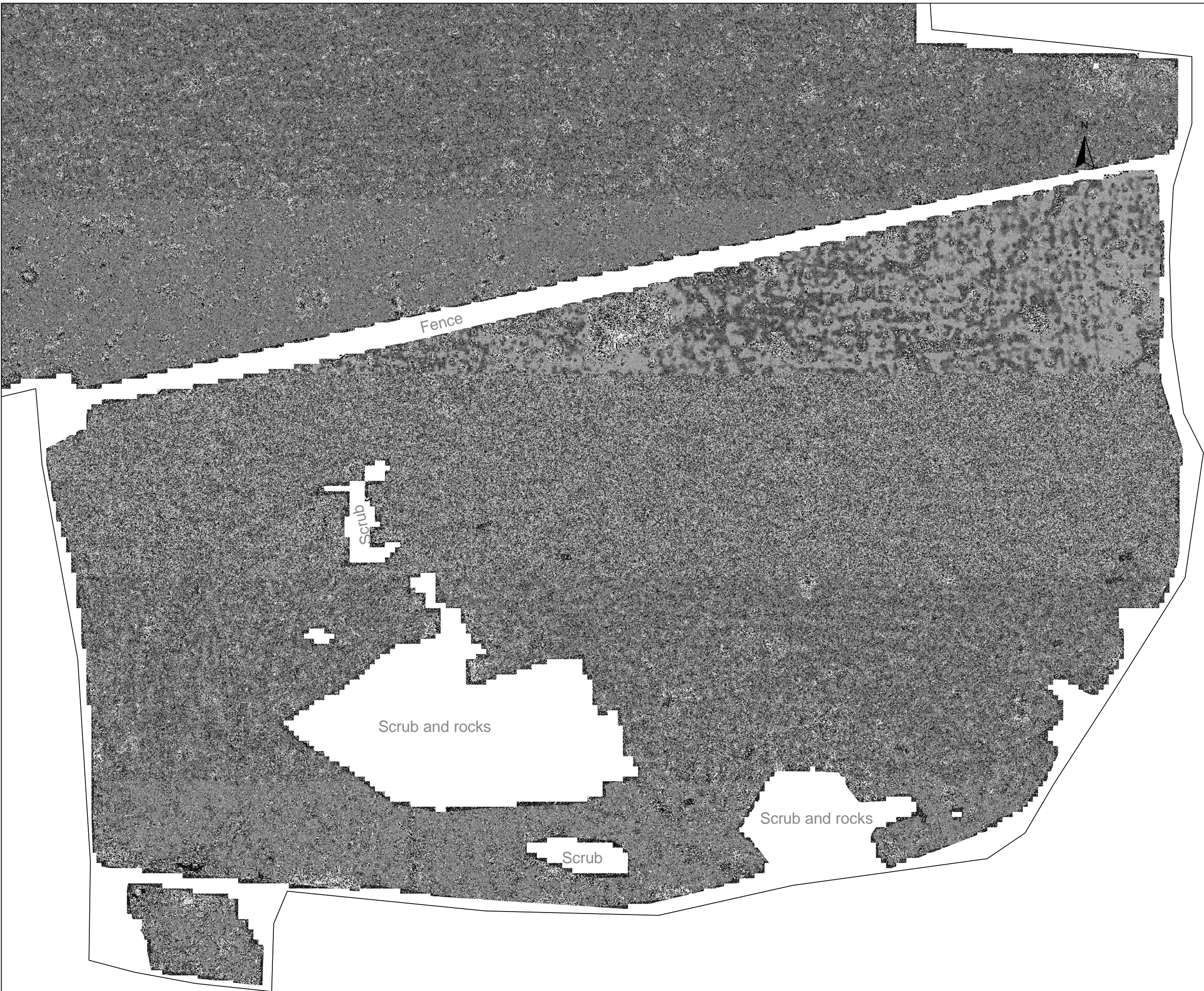
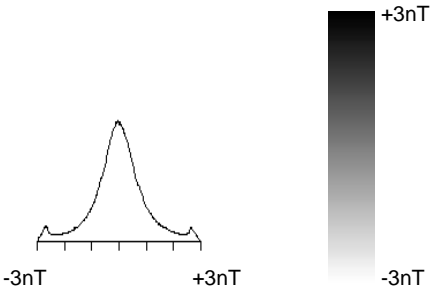
FIG 04





Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

Greyscale plot of minimally  
processed magnetometer data



SCALE 1:1000



SCALE TRUE AT A3

FIG 05



Geophysical Survey  
Bristol Airport  
Area HH  
North Somerset

Abstraction and interpretation of  
magnetic anomalies

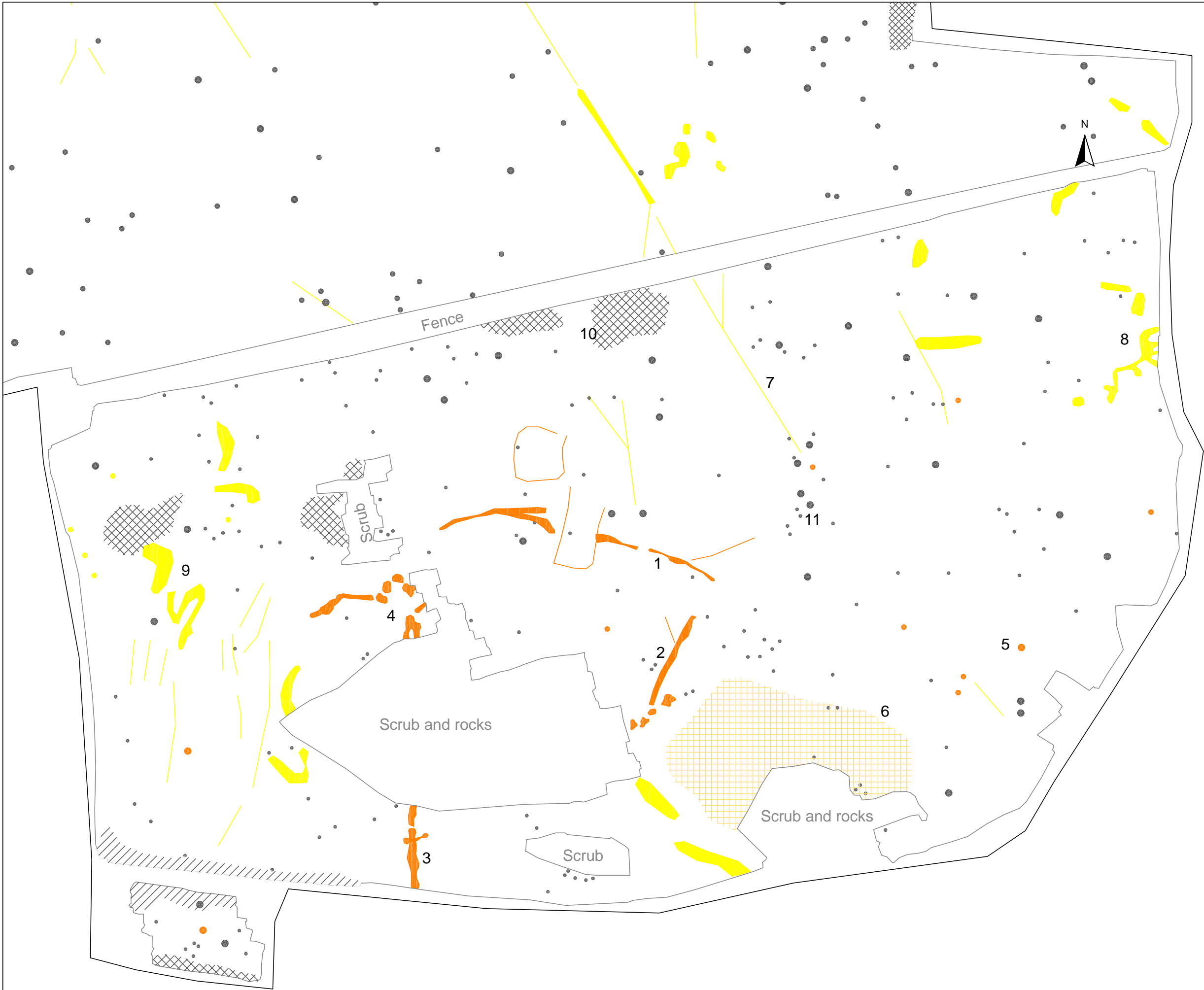
- Positive linear anomaly - possible ditch-like feature
- Discrete positive response - possible pit-like feature
- Variable magnetic response - ground disturbance
- Positive linear anomaly - of natural origin
- Discrete positive response - of natural origin
- Magnetic debris - spread of magnetically thermoremnant/ferrous material
- Magnetic disturbance from ferrous material
- Strong dipolar anomaly - ferrous object

SCALE 1:1000



SCALE TRUE AT A3

FIG 06



# Appendix 14B

## Archaeological Evaluation

# Bristol Airport Silver Zone Extension (Phase 2) Broadfield Down North Somerset

*Archaeological Evaluation*



for  
Bristol Airport Ltd

CA Project: 6619  
CA Report: 18513

November 2018



# Bristol Airport Silver Zone Extension (Phase 2) Broadfield Down North Somerset

## Archaeological Evaluation

CA Project: 6619  
CA Report: 18513



Document Control Grid						
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by
A	1 November 2018	Jonathan Orellana & Derek Evans	Derek Evans	Internal review	–	Duncan Coe
B	12 November 2018	Jonathan Orellana & Derek Evans	Derek Evans	Client review	Changed site name throughout report	Duncan Coe

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## CONTENTS

SUMMARY .....	2
1. INTRODUCTION.....	3
2. ARCHAEOLOGICAL BACKGROUND.....	3
3. AIMS AND OBJECTIVES.....	4
4. METHODOLOGY .....	5
5. RESULTS .....	6
6. DISCUSSION.....	6
7. CA PROJECT TEAM.....	6
8. REFERENCES.....	7
APPENDIX A: CONTEXT DESCRIPTIONS .....	8
APPENDIX B: OASIS REPORT FORM.....	9

## LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan (1:25,000)  
Fig. 2 Trench location plan, showing geophysical survey results (1:1000)  
Fig. 3 Photographs

## SUMMARY

**Project Name:** Bristol Airport, Silver Zone Extension (Phase 2)  
**Location:** Broadfield Down, North Somerset  
**NGR:** 350002 164575  
**Type:** Evaluation  
**Date:** 26–28 September 2018  
**Location of Archive:** To be deposited with the Somerset Museums Service  
**Site Code:** CPEX 18

In September 2018, Cotswold Archaeology (CA) carried out an archaeological evaluation of land adjacent to Bristol Airport, Broadfield Down, North Somerset. A total of 11 trenches were excavated.

The evaluation recorded no archaeological features at the site.

DRAFT



## 1. INTRODUCTION

- 1.1 In September 2018, Cotswold Archaeology (CA) carried out an archaeological evaluation of the proposed Silver Zone Extension (Phase 2) site on land adjacent to Bristol Airport, Broadfield Down, North Somerset (centred at NGR: 350002 164575; Fig. 1). The evaluation was undertaken for Bristol Airport Ltd.
- 1.2 The evaluation results will inform a planning application that is being made to North Somerset Council for the development of a carpark at the site. The scope of the evaluation was defined in consultation with Cat Lodge (North Somerset Council Archaeologist).
- 1.3 The evaluation was carried out in accordance with a detailed Written Scheme of Investigation (WSI) produced by CA (2018) and approved by Cat Lodge. The evaluation was also in line with *Standard and guidance for archaeological field evaluation* (ClfA 2014), *Management of Research Projects in the Historic Environment (MoRPHE) PPN 3: Archaeological Excavation* (Historic England 2015) and *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (Historic England 2016).

### **The site**

- 1.4 The evaluation site is approximately 4.5ha in extent, and currently comprises a large pasture field. It is bounded to the north by a carpark associated with Bristol International Airport and to the east, south and west by agricultural fields. The site lies at approximately 182m AOD and is broadly flat, although the western part of the field slopes gently up to a height of approximately 191m AOD.
- 1.5 The bedrock geology in the main body of the site is mapped as Black Rock Limestone Subgroup of the Carboniferous Period. This borders Westbury Formation and Coatham Member mudstone and limestone (of the Jurassic Period) in the site's south-western corner. No superficial deposits are recorded (BGS 2018).

## 2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The evaluation site has been the subject of a summary desk-based heritage assessment included in a previous written scheme of archaeological investigation

(Entec UK 2011) and a geophysical survey (Archaeological Surveys 2018). The following text is summarised from these documents and from the reports on other previous archaeological works in the vicinity of the site.

- 2.2 A Neolithic chambered long barrow is known approximately 1km south-west of the evaluation site. Two further groups of barrows are recorded: on Felton Hill (to the east) and at Redhill (to the south) (Entec UK 2011).
- 2.3 Site C, which lies directly north of the evaluation site (Fig. 1), has been subject to a geophysical survey (Archaeological Surveys 2016) and trial trench evaluation (CA 2016). The evaluation identified a single ditch of possible prehistoric or Roman date.
- 2.4 A geophysical survey (Archaeological Surveys 2011), trial trench evaluation (CA 2011) and archaeological watching brief (CA 2015) have been undertaken at Bristol Airport Site U, which lies to the immediate east of the present evaluation site (Fig. 1). Although the geophysical survey identified several anomalies indicative of infilled ditches and pits, the evaluation and watching brief demonstrated that most of the geophysical anomalies represented modern disturbance, agricultural furrows or geological formations, although a small number of undated ditches were recorded.
- 2.5 The evaluation site was apparently used to source material for the western extension of the airport runway in 1969 (Entec UK 2011).

### ***Geophysical survey***

- 2.6 The geophysical survey of the evaluation site (Archaeological Surveys 2018) identified a number of anomalies indicative of natural features within the underlying limestone geology, as well as anomalies interpreted as potentially related to soil reinstatement after quarrying. There were also a number of linear and discrete anomalies which had some potential to be archaeological in origin, although it was considered highly likely that they were natural in origin.

## **3. AIMS AND OBJECTIVES**

- 3.1 The objective of the evaluation was to provide further information on the likely archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality. This information will enable

North Somerset Council to identify and assess the particular significance of any archaeological heritage assets within the site, consider the impact of the proposed development upon that significance and, if appropriate, develop strategies to avoid or minimise conflict between heritage asset conservation and the development proposal, in line with the *National Planning Policy Framework* (Ministry of Housing, Communities and Local Government 2018).

#### 4. METHODOLOGY

- 4.1 The evaluation fieldwork comprised the excavation of 11 trenches (Fig. 2), each measuring 50m in length and 1.8m in width. The trenches were located to test geophysical anomalies, as well as to give a representative sample of the remainder of the site.
- 4.2 Trenches were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with *CA Technical Manual 4: Survey Manual*. All trenches were excavated by a mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the natural substrate. Records were maintained in accordance with *CA Technical Manual 1: Fieldwork Recording Manual*.
- 4.3 Deposits were assessed for palaeoenvironmental potential in accordance with *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites*. No deposits that required sampling were identified.
- 4.4 CA will make arrangements with Somerset Museums Service for the deposition of the project archive.
- 4.5 A summary of information from this project, as set out in Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

## **5. RESULTS**

- 5.1 This section provides an overview of the evaluation results. Detailed summaries of the recorded contexts can be found in Appendix A.
- 5.2 The natural geological substrate comprised brown-orange clay with frequent limestone outcrops. It was exposed in all trenches at a depth of 0.25m–0.55m below the present ground level. The natural substrate was sealed in T1, T4, T6 and T11 by 0.1m–0.3m of silty clay subsoil, which was sealed in turn by the modern topsoil. The natural substrate was sealed directly by the modern topsoil in all other trenches.
- 5.3 No archaeological features were present in any of the trenches, and no artefactual material pre-dating the modern period was observed.

## **6. DISCUSSION**

- 6.1 The evaluation recorded no archaeological features at the site. The anomalies recorded by the previous geophysical survey (Archaeological Surveys 2018) were apparently caused by variations in the underlying natural substrate, which comprised brown-orange clay with frequent limestone outcrops. This is in line with the interpretation of the anomalies given in the survey report. It is also consistent with the results of trial trenching at Site C (which lies directly north of the present evaluation site) and Site U (which lies directly east of the present evaluation site), where it was demonstrated that most of the geophysical anomalies in these areas represented modern disturbance, agricultural furrows or geological formations (Archaeological Surveys 2011, 2016; CA 2011, 2015, 2016).

## **7. CA PROJECT TEAM**

- 7.1 The evaluation fieldwork was undertaken by Jonathan Orellana, assisted by Parris Stubbings and Jake Godfrey. This report was written by Jonathan Orellana and Derek Evans. The report illustrations were prepared by CA Tom Brown. The project archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Derek Evans.

## 8. REFERENCES

Archaeological Surveys 2011 *Bristol Airport Site U, North Somerset: Magnetometer Survey Report*

Archaeological Surveys 2016 *Bristol Airport Site C, North Somerset: Magnetometer Survey Report*

Archaeological Surveys 2018 *Bristol Airport Area HH, North Somerset: Magnetometer Survey Report*

British Geological Survey 2018 *Geology of Britain Viewer* <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> Accessed 25 October 2018

Cotswold Archaeology 2011 *Site U, Bristol Airport Development, Broadfield Down, North Somerset: Archaeological Evaluation* CA Report No. **11118**

Cotswold Archaeology 2015 *Bristol Airport Development, Broadfield Down, North Somerset: Archaeological Watching Brief* CA Report No. **15213**

Cotswold Archaeology 2016 *Site C, Bristol Airport, Broadfield Down, North Somerset: Archaeological Evaluation* CA Report No. **16456**

Cotswold Archaeology 2018 *Bristol Airport Site HH, Broadfield Down, North Somerset: Written Scheme of Investigation for an Archaeological Evaluation*

Entec UK 2011 *Bristol Airport Development: Written Scheme of for Archaeological Investigation*

Ministry of Housing, Communities and Local Government 2018 *2018 National Planning Policy Framework*

## APPENDIX A: CONTEXT DESCRIPTIONS

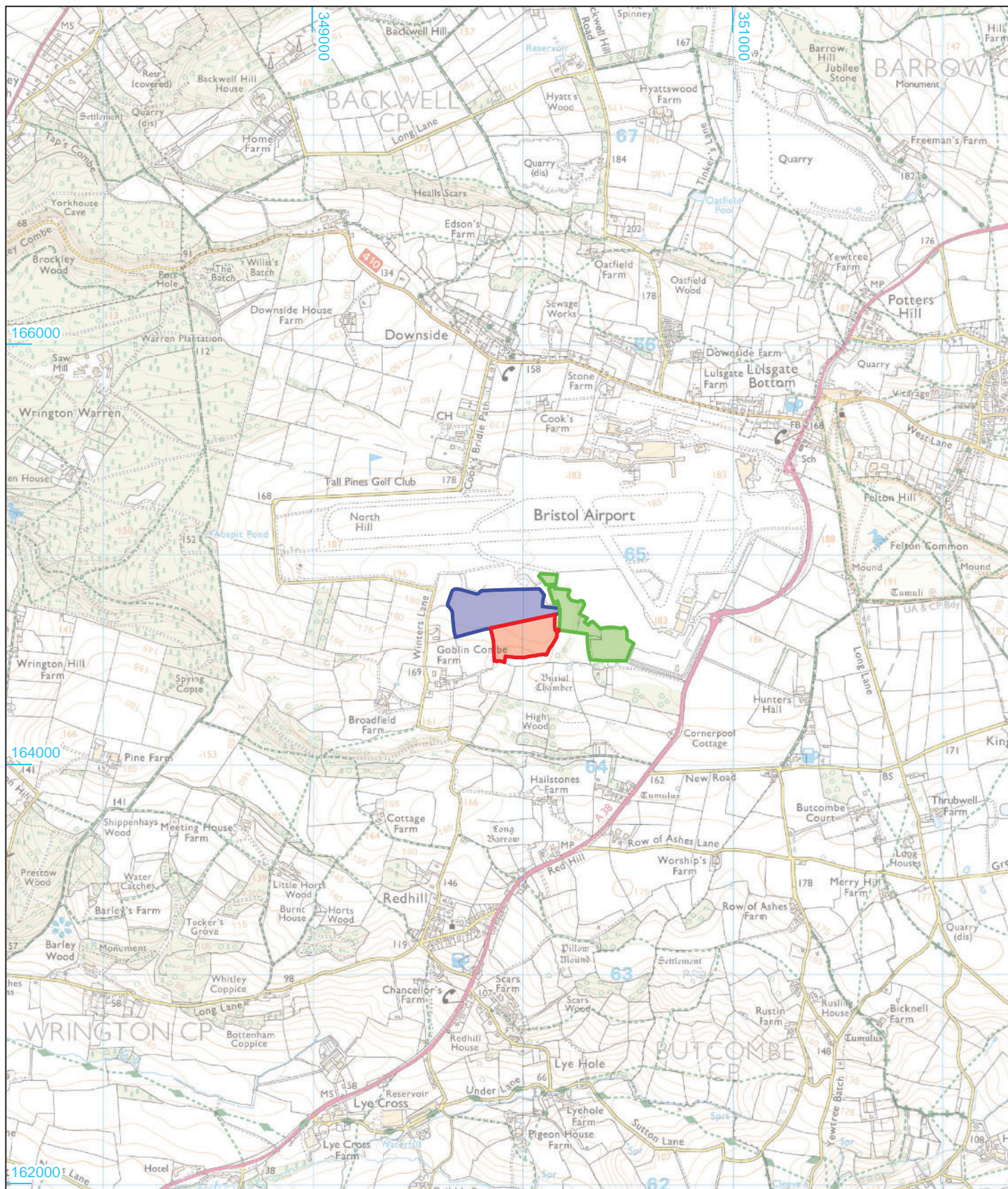
Trench	Context	Type	Context interpretation	Description	Depth/thickness (m)
1	100	layer	topsoil	mid brownish grey clayey silt	0.25
1	101	layer	subsoil	mid brownish orange silty clay	0.25
1	102	layer	natural	firm reddish orange clay with frequent limestone outcrops	
2	200	layer	topsoil	mid brownish grey clayey silt	0.3
2	201	layer	natural	firm mid brownish orange clay with frequent limestone outcrops	
3	300	layer	topsoil	mid greyish brown clayey silt	0.3
3	301	layer	natural	firm brownish orange clay with frequent limestone outcrops	
4	400	layer	topsoil	mid brownish grey silty clay	0.25
4	401	layer	subsoil	mid orangey brown silty clay	0.3
4	402	layer	natural	firm mid brownish orange clay with frequent limestone outcrops	
5	500	layer	topsoil	mid brownish grey silty clay	0.34
5	501	layer	natural	firm mid reddish brown clay with frequent limestone outcrops	
6	600	layer	topsoil	mid greyish brown clayey silt	0.22
6	601	layer	subsoil	mid brownish orange clay	0.1
6	602	layer	natural	firm brownish orange clay with frequent limestone outcrops	
7	700	layer	topsoil	mid greyish brown clayey silt	0.3
7	701	layer	natural	firm limestone brash with patches of grey clay	
8	800	layer	topsoil	mid greyish brown clayey silt	0.35
8	801	layer	natural	firm limestone brash with patches of orangey clay	
9	900	layer	topsoil	mid greyish brown clayey silt	0.25
9	901	layer	natural	firm limestone brash with patches of orangey clay	
10	1000	layer	topsoil	mid brownish grey clayey silt	0.25
10	1001	layer	natural	firm mid brownish orange clay with frequent limestone outcrops	
11	1100	layer	topsoil	mid brownish grey silty clay	0.25
11	1101	layer	subsoil	mid brownish orange clay	0.1
11	1102	layer	natural	firm mid brownish orange clay with frequent limestone outcrops	



**APPENDIX B: OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		
Project name	Bristol Airport, Silver Zone Extension (Phase 2), Broadfield Down, North Somerset	
Short description	In September 2018, Cotswold Archaeology (CA) carried out an archaeological evaluation of land adjacent to Bristol Airport, Broadfield Down, North Somerset. A total of 11 trenches were excavated.  The evaluation recorded no archaeological features at the site.	
Project dates	26–28 September 2018	
Project type	Evaluation	
Previous work	Geophysical survey (Archaeological Surveys 2018)	
Future work	Unknown	
<b>PROJECT LOCATION</b>		
Site location	Bristol Airport, Silver Zone Extension (Phase 2), Broadfield Down, North Somerset	
Study area (m <sup>2</sup> /ha)	c. 4.5ha	
Site co-ordinates	350002 164575	
<b>PROJECT CREATORS</b>		
Name of organisation	Cotswold Archaeology	
Project brief originator	N/A	
Project design (WSI) originator	Cotswold Archaeology	
Project Manager	Derek Evans	
Project Supervisor	Jonathan Orellana	
<b>MONUMENT TYPE</b>	None	
<b>SIGNIFICANT FINDS</b>	None	
<b>PROJECT ARCHIVES</b>	<b>Intended final location of archive</b>	<b>Content</b>
Physical	N/A	N/A
Paper	Somerset Museums Service	Trench forms
Digital	Somerset Museums Service	Digital survey, digital photos
<b>BIBLIOGRAPHY</b>		
Cotswold Archaeology <i>Bristol Airport, Silver Zone Extension (Phase 2), Broadfield Down, North Somerset: Archaeological Evaluation</i> CA typescript report <b>18513</b>		





- Silver Zone Extension (Phase 2) (current site boundary)
- Site C (CA, 2016)
- Site U (CA, 2011)

0 1km

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Ordnance Survey 0100031673



**Cotswold Archaeology**  
 Andover 01264 347630  
 Cirencester 01285 771022  
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**PROJECT TITLE**  
 Bristol Airport, Silver Zone Extension (Phase 2), Broadfield Down, North Somerset

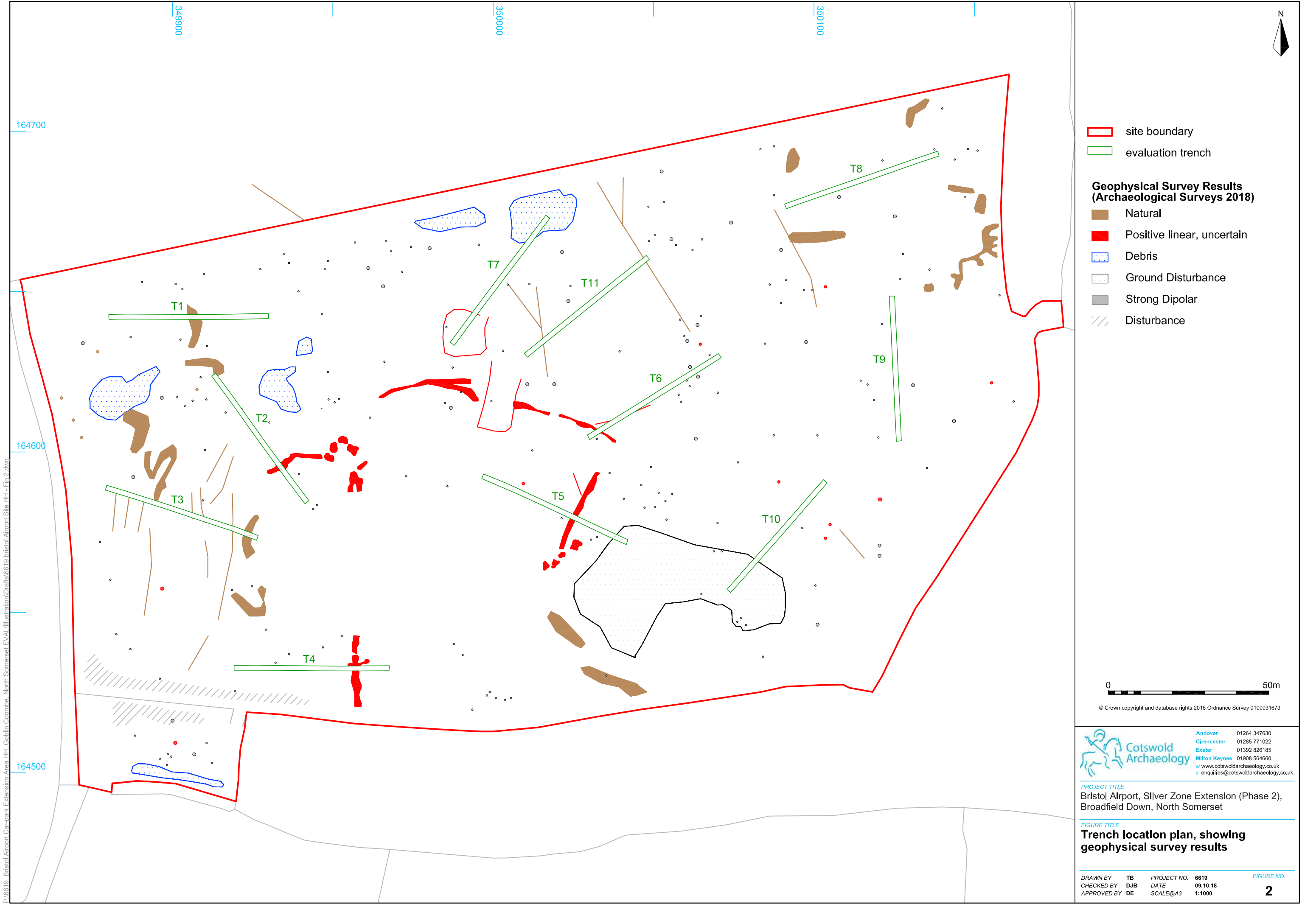
**FIGURE TITLE**  
 Site location plan, showing previous archaeological investigations

**DRAWN BY** TB **PROJECT NO.** 6619  
**CHECKED BY** DJB **DATE** 09.10.18  
**APPROVED BY** DE **SCALE** @A4 1:25,000

**FIGURE NO.**

**1**





P:\6619 - Bristol Airport Car-park Extension Area HH - Goblins Coombe, North Somerset EVAL Illustration\Drafts\6619 Bristol Airport Site HH - Fig 2.dwg



General view of the site, looking south-east



Trench 1, looking east (1m scales)



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 Exeter 01392 826185  
 Milton Keynes 01908 564660  
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**PROJECT TITLE**

Bristol Airport, Silver Zone Extension (Phase 2), Broadfield Down, North Somerset

**FIGURE TITLE**

**Photographs**

DRAWN BY TB PROJECT NO. 6619  
 CHECKED BY DJB DATE 09.10.18  
 APPROVED BY DE SCALE @A4 NA

**FIGURE NO.**

**3**



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## Appendix 14C

### Historic England List Entry Information



# Bowl barrow 420m ENE of Quarry Farm: part of the Redhill round barrow cemetery

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Bowl barrow 420m ENE of Quarry Farm: part of the Redhill round barrow cemetery

List entry Number: 1011126

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 16-Mar-1994

Date of most recent amendment: Not applicable to this List entry.

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22831

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Round barrow cemeteries date to the Bronze Age (c.2000-700 BC). They comprise closely-spaced groups of up to 30 round barrows - rubble or earthen mounds covering single or multiple burials. Most cemeteries developed over a considerable period of time, often many centuries, and in some cases acted as a focus for burials as late as the early medieval period. They exhibit considerable diversity of burial rite, plan and form, frequently including several different types of round barrow, occasionally associated with earlier long barrows. Where large scale investigation has been undertaken around them, contemporary or later "flat" burials between the barrow mounds have often been revealed. Round barrow cemeteries occur across most of lowland Britain, with a marked concentration in Wessex. In some cases, they are clustered around other important contemporary monuments such as henges. Often occupying prominent locations, they are a



major historic element in the modern landscape, whilst their diversity and their longevity as a monument type provide important information on the variety of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving or partly-surviving examples are considered worthy of protection.

The bowl barrow 420m ENE of Quarry Farm survives comparatively well and will contain archaeological and environmental evidence relating to the monument and the landscape in which it was constructed. This barrow forms an integral part of one of only three round barrow cemeteries known in the county of Avon.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes a bowl barrow forming part of a wider round barrow cemetery, situated on the north-facing slope of Redhill, 420m ENE of Quarry Farm. The barrow has a mound 24m wide and c.0.5m high surrounded by a ditch from which material was quarried during its construction. This has become infilled over the years but survives as a buried feature c.2m wide. Part of a sarsen stone c.0.5m by 0.3m has been exposed in the western area of the mound: this may form part of a cist covering the burial. The barrow is one of at least six bowl barrows which originally formed the round barrow cemetery at Redhill.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

## Selected Sources

### Other

Description of the barrow cemetery,

National Grid Reference: ST 50831 63833

## Map





Historic England

# WINDMILL HOUSE

## List Entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: WINDMILL HOUSE

List entry Number: 1158202

## Location

WINDMILL HOUSE, FELTHAM COMMON

The building may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: II

Date first listed: 19-Jan-1987

Date of most recent amendment: Not applicable to this List entry.

# Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: LBS

UID: 34011

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Building

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Legacy Record - This information may be included in the List Entry Details.

### History

Legacy Record - This information may be included in the List Entry Details.

### Details

ST 56 SW WRINGTON C.P. FELTON COMMON (west side)

6/145 Windmill House

II Shown indicated on the map as The Round House. Former windmill, now cottage. Late C18. Random rubble with some render and pyramidal plain tile roof. Circular on plan of 3 storeys. One C19 sash window with marginal glazing to ground floor on north facing section, 2-pane fixed lights to upper floors. Lean-to porch at rear (south facing) with plank door. Interior. Circular



staircase.

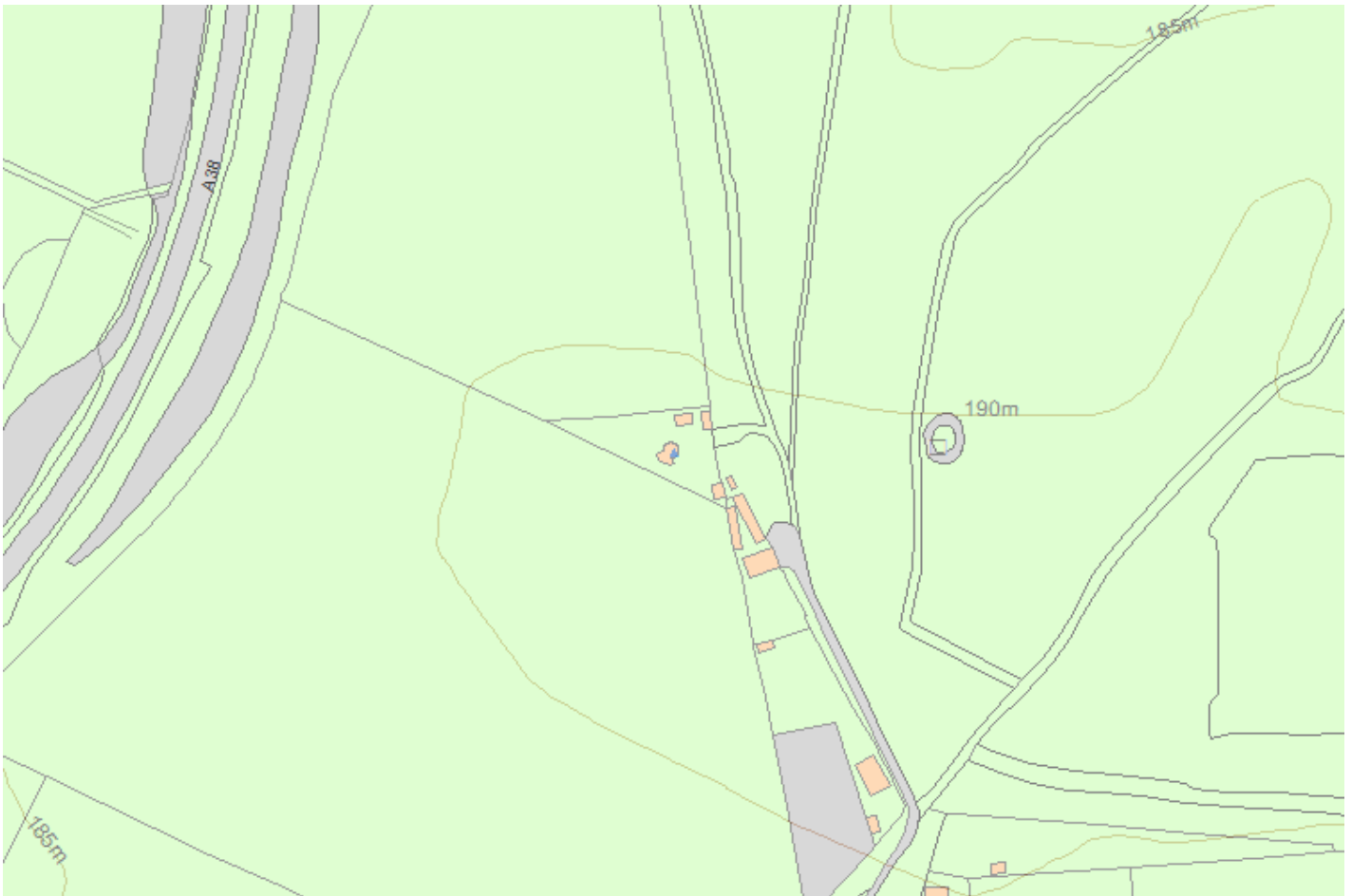
Listing NGR: ST5152364906

## Selected Sources

Legacy Record - This information may be included in the List Entry Details

National Grid Reference: ST 51523 64906

## Map



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([http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/148884/HLE\\_A4L\\_Grade|HLE\\_A3L\\_Grade.pdf](http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/148884/HLE_A4L_Grade|HLE_A3L_Grade.pdf)).

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End of official listing



# Two confluent bowl barrows on Felton Hill

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Two confluent bowl barrows on Felton Hill

List entry Number: 1008361

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Winford

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 17-Feb-1927

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22813

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Bowl barrows, the most numerous form of round barrow, are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC. They were constructed as earthen or rubble mounds, sometimes ditched, which covered single or multiple burials. They occur either in isolation or grouped as cemeteries and often acted as a focus for burials in later periods. Often superficially similar, although differing widely in size, they exhibit regional variations in form and a diversity of burial practices. There are over 10,000 surviving bowl barrows recorded nationally (many more have already been destroyed), occurring across most of lowland Britain. Often occupying prominent locations, they are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.



The bowl barrows on Felton Hill survive well and contain archaeological and environmental information relating to the monument and the landscape in which it was constructed. Confluent bowl barrows are an unusual occurrence in this area of the country.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes two confluent bowl barrows aligned north-west to south-east and situated on the crest of Felton Hill. The two mounds lie within c.10m of one another and share the same quarry ditch. The northern barrow mound survives to a height of c.1.2m and has a diameter of 22m; the southern example is c.1m in height and c.21m in diameter. An outer ditch c.3m wide and c.0.7m deep represents the quarry from which material was derived during the construction of the monument. This would originally have been deeper, but has become infilled over the years.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

## Selected Sources

### **Books and journals**

Bowen, H C, Eagles, B N (ed), The archaeology of Bokerley Dyke, (1990), 80-83

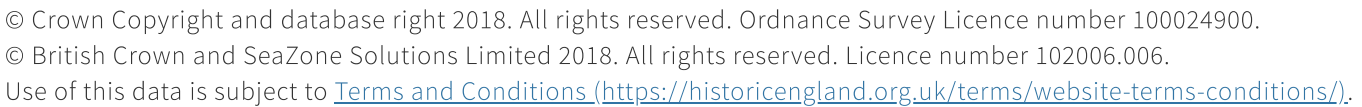
Bowen, H C, Eagles, B N (ed), The archaeology of Bokerley Dyke, (1990), 80-83

Tratman, E, 'Proc UBSS' in Somerset Barrows, (1925), 279

Tratman, E, 'Proc UBSS' in Somerset Barrows, (1925), 279

National Grid Reference: ST 51958 64820

## Map



For a copy of the full scale map, please see the attached PDF - [1008361.pdf](http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/25443/HLE_A4L_NoGrade|HLE_A3L_NoGrade.pdf)  
([http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/25443/HLE\\_A4L\\_NoGrade|HLE\\_A3L\\_NoGrade.pdf](http://mapservices.HistoricEngland.org.uk/printwebservicehle/StatutoryPrint.svc/25443/HLE_A4L_NoGrade|HLE_A3L_NoGrade.pdf)).

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End of official listing



# Two bowl barrows 400m north-east of Quarry Farm: part of the Redhill round barrow cemetery

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Two bowl barrows 400m north-east of Quarry Farm: part of the Redhill round barrow cemetery

List entry Number: 1011127

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 16-Mar-1994

Date of most recent amendment: Not applicable to this List entry.

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22832

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Round barrow cemeteries date to the Bronze Age (c.2000-700 BC). They comprise closely-spaced groups of up to 30 round barrows - rubble or earthen mounds covering single or multiple burials. Most cemeteries developed over a considerable period of time, often many centuries, and in some cases acted as a focus for burials as late as the early medieval period. They exhibit considerable diversity of burial rite, plan and form, frequently including several different types of round barrow, occasionally associated with earlier long barrows. Where large scale investigation has been undertaken around them, contemporary or later "flat" burials between the barrow mounds have often been revealed. Round barrow cemeteries occur across most of lowland Britain, with a marked concentration in Wessex. In some cases, they are clustered around other important contemporary monuments such as henges. Often occupying prominent locations, they are a



major historic element in the modern landscape, whilst their diversity and their longevity as a monument type provide important information on the variety of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving or partly-surviving examples are considered worthy of protection.

The two bowl barrows 400m north-east of Quarry Farm survive comparatively well and will contain archaeological and environmental information relating to the monument and the landscape in which it was constructed. These barrows form an integral part of one of only three round barrow cemeteries known in the county of Avon.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes two bowl barrows forming part of a wider round barrow cemetery. The barrows are aligned broadly north-east to south-west and are situated on the north-facing slope of Redhill, 400m north-east of Quarry Farm. The northern barrow has a mound 15m wide and c.0.75m high; the southern barrow has a mound 25m wide and c.0.8m high. Each mound is surrounded by a ditch from which material was quarried during their construction. These ditches have become infilled over the years but survive as buried features c.2m wide. The two bowl barrows belong to a group of at least six barrows which originally formed the Redhill round barrow cemetery. Excluded from the scheduling are all fence posts which lie within its boundary although the ground beneath them is included.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

## Selected Sources

### Other

Description of barrow cemetery,  
Description of the barrow cemetery,

## Map



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End of official listing





# Oval barrow on Felton Hill 100m east of The Round House

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Oval barrow on Felton Hill 100m east of The Round House

List entry Number: 1008300

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Winford

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 17-Feb-1927



## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22812

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Oval barrows are funerary and ceremonial monuments of the Early to Middle Neolithic periods, with the majority of dated monuments belonging to the later part of the range. They were constructed as earthen or rubble mounds of roughly elliptical plan, usually delimited by quarry ditches. These ditches can vary from paired "banana-shaped" ditches flanking the mound to "U-shaped" or unbroken oval ditches nearly or wholly encircling it. Along with the long barrows, oval barrows represent the burial places of Britain's early farming communities and, as such, are amongst the oldest field monuments surviving visibly in the present landscape. Where investigated, oval barrows have produced two distinct types of burial rite: communal burials of groups of individuals, including adults and children, laid directly on the ground surface before the barrow was built; and burials of one or two adults interred in a grave pit centrally placed beneath the barrow mound. Certain sites provide evidence for several phases of funerary monument preceding the barrow and, consequently, it is probable that they may have acted as important ritual sites for local communities over a considerable period of time. Similarly, as the filling of the ditches around oval barrows often contains deliberately placed

deposits of pottery, flintwork and bone, periodic ceremonial activity may have taken place at the barrow subsequent to its construction. Oval barrows are very rare nationally, with less than 50 recorded examples in England. As one of the few types of Neolithic structure to survive as earthworks, and due to their rarity, their considerable age and their longevity as a monument type, all oval barrows are considered to be nationally important.

The oval barrow 100m east of The Round House survives well and will contain information relating to the monument and the landscape in which it was constructed. This is one of only very few examples of an oval barrow occurring in the south-west of England and one of only two known examples within Avon.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes an oval barrow orientated north-south and situated 100m east of The Round House on Felton Hill. The oval barrow has a mound c.1m high and c.16m by 20m across. Several large stones which protrude from the northern area of the mound may represent a collapsed burial chamber. The smaller stones lying on the mound are likely to have been deposited during the clearance of the common during the Second World War. The barrow mound is surrounded by a ditch from which material was quarried during the construction of the monument. This is no longer visible at ground level, having become infilled over the years, but survives as a buried feature c.3m wide.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

## Selected Sources

### **Books and journals**

Grinsell, L V, 'Proceedings of the Somerset Archaeology and Natural Hist Soc' in Somerset Barrows (Volume 115) (1970), , Vol. 115, (1970), 87

### **Other**

Iles' suggestion of Post Mill use, Iles' suggestion of Post Mill use,  
Mention of 1946 deposition of stones, Mention of 1946 deposition of stones,  
Tratman's identification of barrow, Tratman's identification of barrow,

National Grid Reference: ST 51624 64906

## Map



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End of official listing





Historic England

# Long barrow 350m south-west of Cornerpool Farm

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Long barrow 350m south-west of Cornerpool Farm

List entry Number: 1008291

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 29-Apr-1955

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22819

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Long barrows were constructed as earthen or drystone mounds with flanking ditches and acted as funerary monuments during the Early and Middle Neolithic periods (3400-2400 BC). They represent the burial places of Britain's early farming communities and, as such, are amongst the oldest field monuments surviving visibly in the present landscape. Where investigated, long barrows appear to have been used for communal burial, often with only parts of the human remains having been selected for interment. Certain sites provide evidence for several phases of funerary monument preceding the barrow and, consequently, it is probable that long barrows acted as important ritual sites for local communities over a considerable period of time. Some 500 long barrows are recorded in England. As one of the few types of Neolithic structure to survive as earthworks, and due to their comparative rarity, their considerable age and their longevity as a monument type, all long barrows are considered to be nationally important.

The long barrow 350m south-west of Cornerpool Farm survives comparatively well and contains archaeological and environmental information relating to the monument and the landscape in which it was constructed.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes a chambered long barrow situated on level ground 350m south-west of Cornerpool Farm. The monument has a long mound which is orientated NNE-SSW and is c.37m long, c.15m wide and c.0.5m high. The mound is composed of small stones, and a burial chamber is situated at the northern end. The chamber, which is now collapsed, includes a fallen portal stone and three supporting stones which have slumped. This would have provided the main depository for the burials and will have been a prominent visual feature of the monument since its construction. Running parallel with the long axis of the mound are two side ditches from which material was quarried during the construction of the monument. The ditches are no longer visible at ground level as they have become infilled over the years, but they survive as buried features c.3m wide. Prehistoric artefacts, including a chert axe and bronze palstave, have been discovered in the proximity of the monument.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

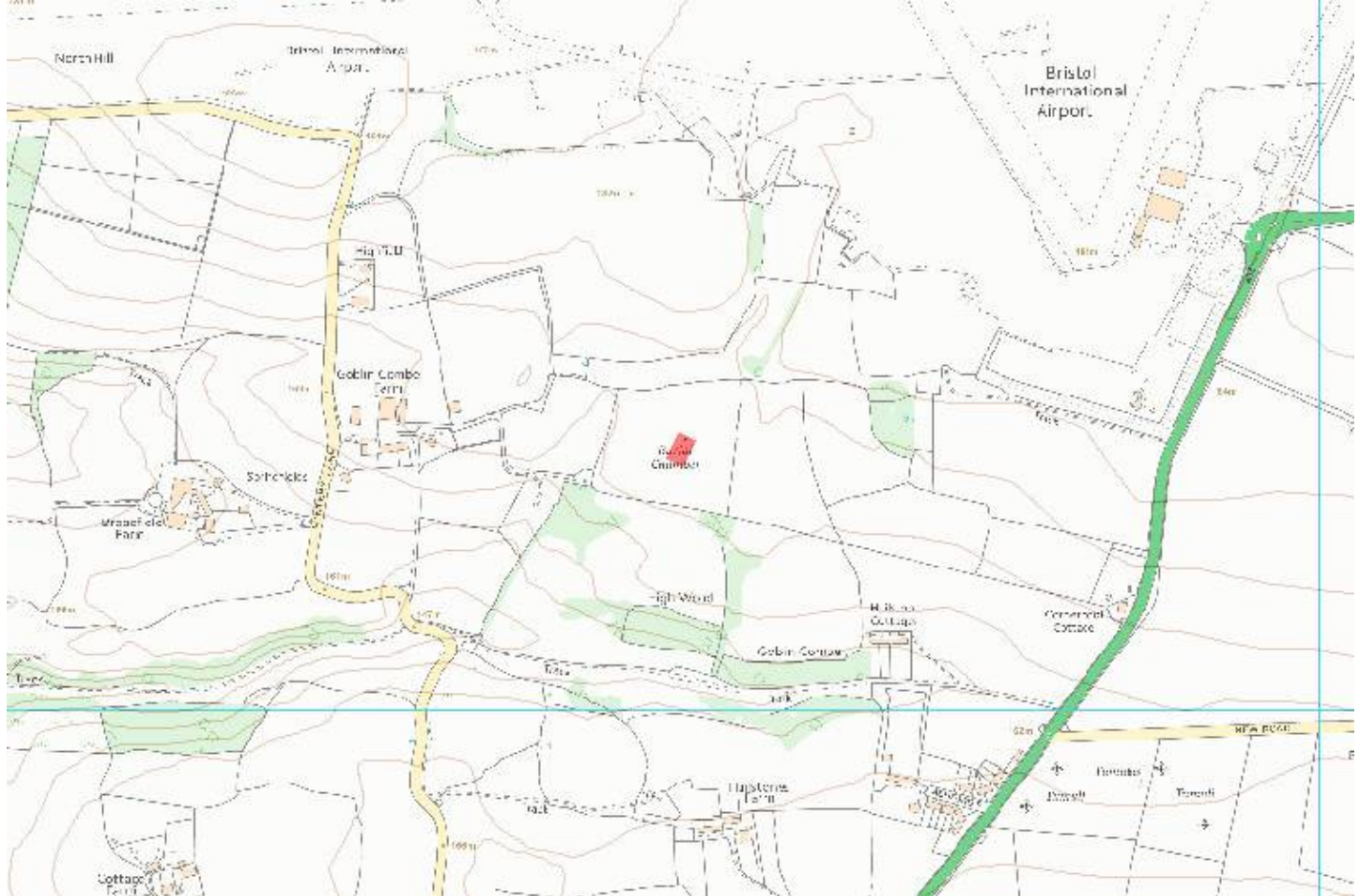
## Selected Sources

### Other

Mention of Crawford's description, Mention of Crawford's description, Suggestion that mound was levelled, Suggestion that mound was levelled,

National Grid Reference: ST 50057 64386

## Map



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End of official listing





# Bowl barrow 230m NNE of Quarry Farm: part of the Redhill round barrow cemetery

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Bowl barrow 230m NNE of Quarry Farm: part of the Redhill round barrow cemetery

List entry Number: 1011129

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 16-Mar-1994

Date of most recent amendment: Not applicable to this List entry.

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22834

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Round barrow cemeteries date to the Bronze Age (c.2000-700 BC). They comprise closely-spaced groups of up to 30 round barrows - rubble or earthen mounds covering single or multiple burials. Most cemeteries developed over a considerable period of time, often many centuries, and in some cases acted as a focus for burials as late as the early medieval period. They exhibit considerable diversity of burial rite, plan and form, frequently including several different types of round barrow, occasionally associated with earlier long barrows. Where large scale investigation has been undertaken around them, contemporary or later "flat" burials between the barrow mounds have often been revealed. Round barrow cemeteries occur across most of lowland Britain, with a marked concentration in Wessex. In some cases, they are clustered around other important contemporary monuments such as henges. Often occupying prominent locations, they are a

major historic element in the modern landscape, whilst their diversity and their longevity as a monument type provide important information on the variety of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving or partly-surviving examples are considered worthy of protection.

Despite having been levelled by ploughing during the Second World War, the bowl barrow 230m NNE of Quarry Farm will contain archaeological and environmental evidence relating to the monument and the landscape in which it was constructed. Such evidence will survive both in buried features, such as the ditch and buried pit, and on the old ground surface which lies below the depth of the disturbed topsoil. The barrow forms an integral part of one of only three round barrow cemeteries known in the county of Avon.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes a levelled bowl barrow forming part of a wider round barrow cemetery and situated on a terrace on the north-facing slope of Redhill, 230m NNE of Quarry Farm. Although the barrow mound was levelled by ploughing during the Second World War, the encircling ditch or `ring ditch` can still be identified on aerial photographs defining an area c.15m across. It was from the ditch that material was quarried during the construction of the monument. This has subsequently become infilled but survives as a buried feature c.2m wide. The monument is one of at least six bowl barrows which originally formed the round barrow cemetery at Redhill.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

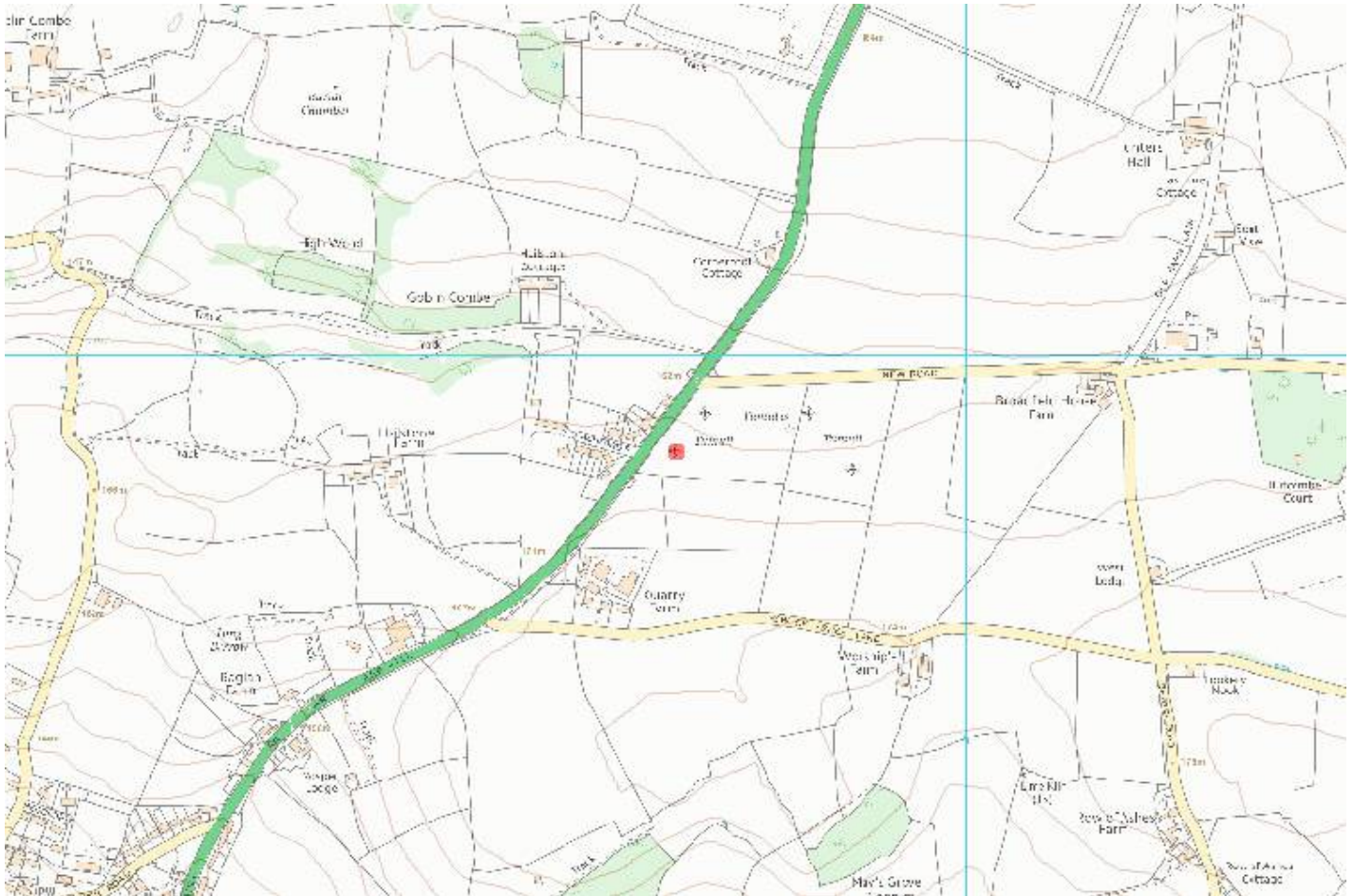
## Selected Sources

### Other

Description of the barrow cemetery,

National Grid Reference: ST 50568 63860

## Map



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Historic England

# Bowl barrow 300m NNE of Quarry Farm: part of the Redhill round barrow cemetery

## List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Bowl barrow 300m NNE of Quarry Farm: part of the Redhill round barrow cemetery

List entry Number: 1011128

## Location

The monument may lie within the boundary of more than one authority.

County:

District: North Somerset

District Type: Unitary Authority

Parish: Wrington

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

Date first scheduled: 16-Mar-1994

Date of most recent amendment: Not applicable to this List entry.

## Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM

UID: 22833

## Asset Groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

## List entry Description

### Summary of Monument

Legacy Record - This information may be included in the List Entry Details.

### Reasons for Designation

Round barrow cemeteries date to the Bronze Age (c.2000-700 BC). They comprise closely-spaced groups of up to 30 round barrows - rubble or earthen mounds covering single or multiple burials. Most cemeteries developed over a considerable period of time, often many centuries, and in some cases acted as a focus for burials as late as the early medieval period. They exhibit considerable diversity of burial rite, plan and form, frequently including several different types of round barrow, occasionally associated with earlier long barrows. Where large scale investigation has been undertaken around them, contemporary or later "flat" burials between the barrow mounds have often been revealed. Round barrow cemeteries occur across most of lowland Britain, with a marked concentration in Wessex. In some cases, they are clustered around other important contemporary monuments such as henges. Often occupying prominent locations, they are a

major historic element in the modern landscape, whilst their diversity and their longevity as a monument type provide important information on the variety of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving or partly-surviving examples are considered worthy of protection.

The bowl barrow survives comparatively well and will contain archaeological and environmental evidence relating to the monument and the landscape in which it was constructed. The barrow forms an integral part of one of only three round barrow cemeteries known in the county of Avon.

## History

Legacy Record - This information may be included in the List Entry Details.

## Details

The monument includes a bowl barrow forming part of a wider round barrow cemetery and situated on the north-facing slope of Redhill, 300m NNE of Quarry Farm. The barrow has a mound 12m wide and c.0.5m high surrounded by a ditch from which material was quarried during its construction. This has become infilled over the years but survives as a buried feature c.2m wide. The monument is one of at least six barrows which originally formed the round barrow cemetery at Redhill.

MAP EXTRACT The site of the monument is shown on the attached map extract. It includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.

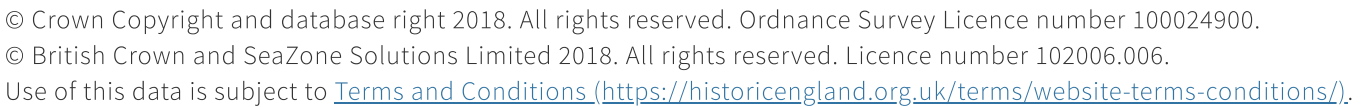
## Selected Sources

### Other

Description of the barrow cemetery,

National Grid Reference: ST 50613 63916

## Map



The PDF will be generated from our live systems and may take a few minutes to download depending on how busy our servers are. We apologise for this delay.

End of official listing



## Appendix 14D

### North Somerset HER records

HER Ref	Name	Location
Monument Records Within Bristol Airport site boundary		
295	Bronze age barrow North Hill	ST 4920 6507
297	Barrow North Hill	ST 4940 6501
358	Barrow? North Hill	ST 4943 6500
625	Flint scatter south of Down House	ST 5131 6529
664	Mound (site of) south side of Bristol Aerodrome	ST 5019 6485
665	Flint working site east of Cornerpool Farm	ST 5069 6446
2186	Mound ('Gruffy Ground')	ST 5052 6444
4014	Limekiln, S Backwel	ST 4973 6503
4030	Limekiln, N of Goblin Combe Far	ST 4971 6497
4083	Limekiln	ST 5079 6551
4084	Limekiln, Felton Hill	ST 5144 6516
4096	Site of limekiln NE of Cornerpool Farm	ST 5065 6470
4687	Bronze age axe	ST 5100 6500
8892	Lulsgate Airfield	ST 5034 6525
41525	WW2 HQ RAF Lulsgate, Stone Farm,	ST 5044 6578
41526	WW2 Bellman hanger, RAF Lulsgate	ST 5001 6538
41527	WW2 blister hanger (double E-0), RAF Lulsgate Bottom	ST 5030 6472
41528	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5034 6481
41529	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5042 6469
41530	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5048 6461
41531	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5085 6464
41532	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5090 6474
41533	WW2 double fighter pen, RAF Lulsgate Bottom	ST 5094 6483
41540	site of WW2 RAF Lulsgate Inner Marker Beacon	ST 5119 6514
41541	site of WW2 main beacon (BA System), RAF Lulsgate	ST 4951 6505

HER Ref	Name	Location
41552	site of WW2 RAF Lulsgate HQ post office and guard hut	ST 5036 6582
41553	site of WW2 Bowser maintenance depot, RAF Lulsgate	ST 5039 6576
41554	site of WW2 guard house, RAF Lulsgate	ST 5032 6553
41555	site of AMWD WW2 stores, offices & latrines, RAF Lulsgate	ST 5030 6551
41556	site of WW2 transformer plinth & blast wall, RAF Lulsgate	ST 5025 6546
41557	site of WW2 agricultural implements shed, RAF Lulsgate	ST 5031 6548
41558	site of WW2 sub-station kiosk, RAF Lulsgate	ST 5031 6547
41559	site of WW2 link trainer, RAF Lulsgate	ST 5034 6547
41560	site of WW2 armoury, RAF Lulsgate	ST 5035 6544
41561	site of WW2 link trainer and offices, RAF Lulsgate	ST 5033 6542
41562	site of WW2 static 7000 gallon water tank, RAF Lulsgate	ST 5034 6541
41563	site of WW2 bicycle shelter, RAF Lulsgate	ST 5034 6538
41564	site of WW2 offices and lecture room, RAF Lulsgate	ST 5034 6537
41565	site of WW2 link trainer office and workshop, RAF Lulsgate	ST 5035 6539
41566	site of WW2 gas defence centre, RAF Lulsgate	ST 5037 6541
41567	site of WW2 lecture rooms, RAF Lulsgate	ST 5039 6538
41568	site of WW2 cycle shelter, RAF Lulsgate	ST 5040 6537
41569	site of WW2 squadron office(as Flying Wing) RAF Lulsgate	ST 5042 6537
41570	site of WW2 technical latrine (WAAF) RAF Lulsgate	ST 5042 6540
41571	site of WW2 M.T.1000 gallon petrol tank, RAF Lulsgate	ST 5040 6542
41572	site of WW2 technical latrine (RAF), RAF Lulsgate	ST 5040 6544
41573	site of WW2 bulk oil compound, RAF Lulsgate	ST 5043 6544
41574	site of WW2 bicycle shelter, RAF Lulsgate	ST 5037 6544
41575	site of WW2 maintenance & squadron office, RAF Lulsgate	ST 5040 6545
41576	site of WW2 Motor Transport Garage, RAF Lulsgate	ST 5039 6546
41577	site of WW2 Motor Transport Office, RAF Lulsgate	ST 5037 6545
41578	site of WW2 Navigation lecture rooms. RAF Lulsgate	ST 5036 6550
41579	site of WW2 Nav & Signal Instructors common room, RAF Lulsgate	ST 5038 6550
41580	site of WW2 Navigation lecture rooms, RAF Lulsgate	ST 5038 6552
41581	site of WW2 Aircraft Recognition & Cine gun rm, RAF Lulsgate	ST 5040 6549

HER Ref	Name	Location
41582	site of WW2 Intelligence Library & quiet room, RAF Lulsgate	ST 5042 6549
41583	site of WW2 technical latrine (RAF), RAF Lulsgate	ST 5046 6548
41584	site of WW2 Gas Clothing & Respirator store, RAF Lulsgate	ST 5052 6548
41585	site of WW2 battery charging room, RAF Lulsgate	ST 5056 6544
41586	site of WW2 main store buildings (2) , RAF Lulsgate	ST 5050 6546
41587	site of WW2 bicycle shelter, RAF Lulsgate	ST 5047 6544
41588	site of WW2 Lubricant & Inflammables store, RAF Lulsgate	ST 5047 6542
41589	site of WW2 Parachute store, RAF Lulsgate	ST 5048 6540
41590	site of WW2 salt store, RAF Lulsgate	ST 5046 6540
41591	site of WW2 static 7000 gallon water tank, RAF Lulsgate	ST 5046 6539
41592	site of WW2 Fire party & workshop, RAF Lulsgate	ST 5046 6538
41593	site of WW2 Floodlight trailer & tractor shed, RAF Lulsgate	ST 5046 6536
41594	site of WW2 Fire tender shelter, RAF Lulsgate	ST 5049 6537
41595	site of WW2 speech broadcast building, RAF Lulsgate	ST 5050 6537
41596	site of WW2 Fire Section(orig. Watch office), RAF Lulsgate	ST 5050 6535
41597	site of WW2 Sleeve Streamer Mast, RAF Lulsgate	ST 5051 6535
41598	site of WW2 Instructional Operations Room, RAF Lulsgate	ST 5051 6536
41599	site of WW2 Pyrotechnic store, RAF Lulsgate	ST 5053 6535
41600	site of WW2 transformer plinth; main site, RAF Lulsgate	ST 5051 6542
41601	site of WW2 Fuel compound, RAF Lulsgate	ST 5055 6540
41602	site of WW2 Control tower (watch office), RAF Lulsgate	ST 5040 6524
41603	site of WW2 signal square, RAF Lulsgate	ST 5042 6521
41604	site of WW2 battle headquarters, RAF Lulsgate	ST 5055 6524
41605	site of WW2 meteorological instruments, RAF Lulsgate	ST 5049 6522
41606	site of WW2 tool house, RAF Lulsgate	ST 5114 6521
41607	site of WW2 fuel compound, RAF Lulsgate	ST 5115 6524
41608	site of WW2 blister hanger(double E- O), RAF Lulsgate	ST 5120 6533
41609	site of WW2 store hut, RAF Lulsgate	ST 5120 6535
41610	site of WW2 link trainer I- compt., RAF Lulsgate	ST 5121 6536
41611	site of WW2 defence unit, kitchen etc., RAF Lulsgate	ST 5121 6535

HER Ref	Name	Location
41612	site of WW2 blister hanger (standard), RAF Lulsgate	ST 5122 6537
41613	WW2 transformer plinth & blast wall, RAF Lulsgate	ST 5123 6540
41615	site of WW2 store & airmens latrine, RAF Lulsgate	ST 5122 6541
41616	site of WW2 Electric instrument/wireless rm, RAF Lulsgate	ST 5122 6540
41617	site of WW2 Flight office & orderly room, RAF Lulsgate	ST 5120 6541
41618	site of WW2 Flight store hut & WAAF latrine, RAF Lulsgate	ST 5120 6542
41619	site of WW2 latrines, RAF Lulsgate	ST 5120 6543
41620	site of WW2 blister hanger (double E- 0), RAF Lulsgate	ST 5117 6543
41621	site of WW2 S.S.A. Store, RAF Lulsgate	ST 5099 6490
41622	site of WW2 dispersal flight offices(4 huts), RAF Lulsgate	ST 5093 6480
41623	WW2 transformer plinth & blast wall, RAF Lulsgate	ST 5094 6477
41626	site of WW2 dispersal drying room, RAF Lulsgate	ST 5088 6466
41627	site of WW2 S.A.A. Type B store, RAF Lulsgate	ST 5047 6458
41628	WW2 transformer plinth, RAF Lulsgate	ST 5044 6465
41629	site of WW2 dispersal latrine, RAF Lulsgate	ST 5043 6465
41630	site of WW2 sleeping shelter (for 33), RAF Lulsgate	ST 5040 6465
41631	site of WW2 drying room, RAF Lulsgate	ST 5039 6465
41632	site of WW2 Flight office (4 huts), RAF Lulsgate	ST 5038 6470
41633	WW2 cannon test butts, RAF Lulsgate	ST 5029 6465
41634	remains WW2 machine gun & cannon range, RAF Lulsgate	ST 5025 6477
41635	site of WW2 Stanton air raid shelter, d/s 5, RAF Lulsgate	ST 5036 6446
41636	site of WW2 drying room/latrine, disp site 5 , RAF Lulsgate	ST 5037 6444
41637	site of WW2 airmen's barrack hut, d/s 5, RAF Lulsgate	ST 5038 6444
41638	WW2 static water tank, dispersal site 5, RAF Lulsgate	ST 5039 6442
41639	site of WW2 airmen's barrack huts(2), d/s 5, RAF Lulsgate	ST 5036 6442
41640	site of WW2 recreation hut, dispersal site 5, RAF Lulsgate	ST 5037 6441
41641	site of WW2 blister hanger (dbl E-0) d/site 4, RAF Lulsgate	ST 5001 6487
41642	site of WW2 air raid shelter (for 50),d/s 4, RAF Lulsgate	ST 4995 6491
41643	site of WW2 latrine/drying rm, dispersal site 4, RAF Lulsgate	ST 4992 6490
41644	site of WW2 crew & locker room, disp/site 4, RAF Lulsgate	ST 4988 6489

HER Ref	Name	Location
41645	site of WW2 static water tank, disp/site 4, RAF Lulsgate	ST 4987 6491
41646	site of WW2 cycle shelter, dispersal site 4, RAF Lulsgate	ST 4987 6493
41647	site of WW2 dispersal offices, site 4, RAF Lulsgate	ST 4985 6490
41648	site of WW2 recreation hut, dispersal site 4, RAF Lulsgate	ST 4983 6487
41649	site of WW2 maintenance rm & store, d/s 4, RAF Lulsgate	ST 4982 6490
41650	site of WW2 transformer plinth, dispersal site 4, RAF Lulsgate	ST 4979 6492
41651	site of WW2 transformer plinth, dispersal site 2, RAF Lulsgate	ST 4988 6537
41652	site of WW2 transformer plinth, south of d/s 2, RAF Lulsgate	ST 4977 6517
41653	site of WW2 bulk oil storage tank, d/s 2, RAF Lulsgate	ST 4982 6533
41654	site of WW2 waste oil storage , d/s 2, RAF Lulsgate	ST 4984 6533
41655	site of WW2 aviation fuel 24000gall tank, d/s2, RAF Lulsgate	ST 4988 6533
41656	site of WW2 recreation hut, dispersal site 2, RAF Lulsgate	ST 4991 6535
41657	site of WW2 Airmen's barrack huts (2), d/s 2, RAF Lulsgate	ST 4994 6534
41658	site of WW2 airmen's latrines/drying rm, d/s 2, RAF Lulsgate	ST 4994 6533
41659	site of WW2 servicing squadron office, d/s 2, RAF Lulsgate	ST 4996 6534
41660	site of WW2 cycle shelter. dispersal site 2, RAF Lulsgate	ST 4996 6532
41661	site of WW2 squadron ground crew room, d/s 2, RAF Lulsgate	ST 4998 6534
41662	WW2 static water tank, dispersal site 2, RAF Lulsgate	ST 4997 6532
41663	site of WW2 servicing squadron store, d/s 2, RAF Lulsgate	ST 4999 6533
41664	site of WW2 Stanton air raid shelter, d/s 2, RAF Lulsgate	ST 5000 6532
41665	site of WW2 crew and locker room, d/s 2, RAF Lulsgate	ST 5002 6532
41666	site of WW2 officers latrines, dispersal site 2, RAF Lulsgate	ST 5000 6533
41667	site of WW2 flight offices, dispersal site 2, RAF Lulsgate	ST 5004 6532
41668	site of WW2 cycle shelter, dispersal site 2, RAF Lulsgate	ST 5003 6530
41669	site of WW2 maintenance crew & store, d/s 2, RAF Lulsgate	ST 5006 6531
41670	site of WW2 WAAF technical latrine, d/s 2, RAF Lulsgate	ST 4993 6535
41671	WW2 main workshops, dispersal site 2, RAF Lulsgate	ST 4995 6537
41672	site of WW2 inflammables store, d/s2, RAF Lulsgate	ST 4992 6538
41673	site of WW2 S.A.A. store, dispersal site 1, RAF Lulsgate	ST 5059 6558
41674	site of WW2 gas chamber, dispersal site 1, RAF Lulsgate	ST 5068 6557



HER Ref	Name	Location
41675	site of WW2 P.B.X. building, dispersal site 1, RAF Lulsgate	ST 5060 6544
41676	site of WW2 blister hanger (E-0), d/s 1, RAF Lulsgate	ST 5062 6541
41677	site of WW2 blister hanger (E-0), d/s 1, RAF Lulsgate	ST 5069 6545
41678	WW2 transformer plinth & blast wall, d/s 1, RAF Lulsgate	ST 5081 6554
41679	site of WW2 airmen's barrack hut, d/s 1,RAF Lulsgate	ST 5078 6554
41680	site of WW2 airmen's barrack hut, d/s 1, RAF Lulsgate	ST 5077 6552
41681	site of WW2 maintenance room & store d/s 1, RAF Lulsgate	ST 5077 6550
41682	site of WW2 crew & locker rm, dispersal site 1, RAF Lulsgate	ST 5076 6548
41683	site of WW2 dispersal offices, d/s 1, RAF Lulsgate	ST 5074 6546
41684	site of WW2 airmen's latrines/drying rms, d/s 1,RAF Lulsgate	ST 5078 6550
41685	site of WW2 static water tank, dispersal site 1, RAF Lulsgate	ST 5079 6549
41686	site of WW2 cycle shelter, dispersal site 2, RAF Lulsgate	ST 5077 6548
41687	site of WW2 stanton air raid shelter, d/s 2, RAF Lulsgate	ST 5078 6547
41688	site of WW2 sergeants latrines/drying rm, d/s 2, RAF Lulsgate	ST 5077 6546
41735	WW2 sports store, S of Downside Rd (SDR), RAF Lulsgate	ST 5061 6574
41736	remains of WW2 WAAF technical latrine (SDR), RAF Lulsgate	ST 5062 6573
41737	site of WW2 RTtrainer/morse lecture rm (SDR), RAF Lulsgate	ST 5062 6572
41738	WW2 gym and cinema /church (SDR), RAF Lulsgate	ST 5068 6573
41739	site of WW2 education block, S Downside Rd, RAF Lulsgate	ST 5069 6571
41740	site of WW2 Anti-Aircraft Dome trainer (SDR), RAF Lulsgate	ST 5069 6566
41741	site of WW2 contractors hut bases (x3) (SDR), RAF Lulsgate	ST 5085 6568
41742	site of WW2 airmen's technical latrine (SDR), RAF Lulsgate	ST 5086 6565
41743	site of WW2 Bombing teacher, S Downside Rd, RAF Lulsgate	ST 5088 6567
41744	site of WW2 airmen's barrack hut for 100 (SDR), RAF Lulsgate	ST 5091 6565
41745	site of WW2 airmen's barrack hut for 56 (SDR), RAF Lulsgate	ST 5095 6566
41746	site of WW2 airmen's barrack hut for 56 (SDR), RAF Lulsgate	ST 5094 6563
41747	site of WW2 ablutions, S of Downside Road, RAF Lulsgate	ST 5096 6560
41824	WW2 static water tank, Main site (by A38), RAF Lulsgate	ST 5124 6543
41825	site of WW2 tented site for early 1941, RAF Lulsgate	ST 5122 6543
42254	Junkers Ju 88-A4 landed in error RAF Lulsgate 24.7.1941	ST 5044 6528

HER Ref	Name	Location
42279	Spitfire P8071 crash-landed at RAF Lulsgate, 2.1.1942	ST 5054 6529
42280	Spitfire IIA damaged wing landing RAF Lulsgate, 6.12.1941	ST 5037 6528
42286	Oxford W6610 dived into ground, RAF Lulsgate 22.9.1942	ST 5062 6529
42288	Fulmars N4079, N4008 collided over RAF Lulsgate, 15.10.1942	ST 5056 6508
42291	B17F. Fortress PU-F crash-landed RAF Lulsgate, 23.1.1943	ST 4970 6492
42299	Oxford AB771 crashed on take-off, RAF Lulsgate, 23.8.1943	ST 5079 6529
42773	Oxford V3511 crash-landed RAF Lulsgate, 4.4.1944	ST 5063 6526
42781	Westland Welkin DX308 force-landed RAF Lulsgate, 18.9.1944	ST 5070 6530
42782	Oxford P8899 crashed on landing, RAF Lulsgate, 14.11.1944	ST 5075 6526
44418	Site of Stone Farm, Lulsgate Airport	ST 5042 6578
44426	Milestone at Lulsgate airfield	ST 5100 6487
44429	Site of 'stone', Lulsgate airfield	ST 5113 6509
44432	Site of Cornerpool Farm, Lulsgate	ST 5042 6450
44580	Site of old quarry, Bristol airport	ST 4892 6508
Within 500m study area		
356	Pre-medieval field system south of Harvey's Farm	ST 5127 6412
357	Bronze socketed axe west of the Nursery	ST 5060 6390
416	Mound north west of Bradfield Farm	ST 5100 6600
418	Enclosure Goblincombe Farm	ST 5010 6430
624	Doubtful site of a barrow	ST 5000 6600
626	Socket stone of cross St.Katherine's Churchyard	ST 4928 6641
660	The Waterstone 'Dolmen' remains of chambered long barrow	ST 4974 6569
661	Possible deserted settlement north of High Wood	ST 4891 6470
662	Neolithic axe near The Water Stone Dolmen	ST 4973 6439
663	Bronze age palstave near The Water Stone Dolmen	ST 5179 6592
666	Barrow cemetery west of Butcombe Court	ST 5151 6564
674	Bowl barrow east of Carlisle House	ST 5006 6439
678	Long Barrow on Felton Hill Winford	ST 5002 6423
679	Possible Mesolithic occupation west of Carlisle House	ST 5007 6440
680	Round Barrow on Felton Hill Winford	ST 5064 6393

HER Ref	Name	Location
2182	Broadfield Down Windmill	ST 5196 6481
2184	Mound Felton Hill	ST 5162 6491
3008	Lead mining Bourton Woods	ST 5121 6492
3102	Old Lime Kiln south of Home Farm	ST 5195 6482
3178	Site of a barrow in a cemetery west of Butcombe Court	ST 5152 6490
3179	Barrow in a cemetery west of Butcombe Court	ST 5178 6469
3181	Barrow in a cemetery west of Butcombe Court	ST 4879 6601
3182	Barrow in a cemetery west of Butcombe Court	ST 5061 6389
3183	Barrow in a cemetery west of Butcombe Court	ST 5073 6389
4072	Limekiln West of Lulsgate Bottom	ST 5076 6391
4073	Limekiln, nr New In	ST 5083 6383
4080	Limekiln, Potters Hil	ST 5062 6391
4095	Limekiln, N of Butcombe Cour	ST 5012 6593
4662	Cave E of Downside House	ST 5129 6578
4928	Chapel Edsons Farm	ST 5165 6602
5684	'Warren' field name	ST 4952 6620
5854	Limekiln NW of Butcombe Court	ST 4988 6646
5855	Leadmine & Works	ST 4855 6453
7459	Parish Boundary between	ST 5126 6412
8211	World War II structures at	ST 5168 6444
40556	Undated linear earthworks, north-west Felton Common	ST 5154 6532
40557	Felton Common, Winford	ST 5177 6505
40590	The Suck Stone, Felton Common	ST 5182 6494
41443	WW2 Ablutions block for airmen & WAAF,C/s, RAF Lulsgate	ST 5074 6607
41444	access roads for Communal site, RAF Lulsgate	ST 5070 6603
41534	site of WW2 QL site, E of Goblin Coombe Fm, Cleeve	ST 4989 6437
41535	HQ for Starfish RAF lighters at Goblin Coombe Farm, Cleeve	ST 4964 6439
41536	Winstones:WW2 RAF Lulsgate Station Sick Quarters	ST 4943 6631
41537	Downside "air raid shelter"(WW2), the caves, Downside	ST 4969 6611
41538	site of Rest Hut for DF/DF R/T station (SMR 8211), RAF Lulsgate	ST 5168 6445

HER Ref	Name	Location
41542	site of WW2 air raid shelter, dispersal site 3, RAF Lulsgate	ST 4955 6544
41543	WW2 recreation hut, dispersal site 3, RAF Lulsgate	ST 4955 6545
41544	WW2 Airman's Barrack hut ,Dispersal site 3, RAF Lulsgate	ST 4956 6544
41545	WW2 Airman's barrack hut. dispersal site 3, RAF Lulsgate	ST 4958 6544
41546	WW2 Airman's barrack hut, dispersal site 3, RAF Lulsgate	ST 4959 6543
41547	WW2 Sergeant's Quarters, dispersal site 3, RAF Lulsgate	ST 4960 6543
41548	WW2 Sergeant's latrine & drying hut, DS 3, RAF Lulsgate	ST 4962 6543
41549	site of WW2 cycle shelter. dispersal site 3, RAF Lulsgate	ST 4960 6543
41550	WW2 Airman's latrines etc, dispersal site 3, RAF Lulsgate	ST 4957 6543
41551	WW2 static water tank ,dispersal site 3, RAF Lulsgate	ST 4957 6542
41614	site of WW2 store, RAF Lulsgate	ST 5124 6542
41624	site of WW2 dispersal latrines, RAF Lulsgate	ST 5091 6472
41625	site of WW2 sleeping shelter (for 33), RAF Lulsgate	ST 5090 6470
41689	site of WW2 officer's quarters, WAAF living site, RAF Lulsgate	ST 5057 6626
41690	site of WW2 officer's quarters, WAAF living site, RAF Lulsgate	ST 5057 6628
41691	site of WW2 Lat., laundry, & hairdressers, WAAF, RAF Lulsgate	ST 5056 6631
41692	site of WW2 Decontam., & Bath hse, WAAF site, RAFLulsgate	ST 5058 6631
41698	site of WW2 suction tank, WAAF living site, RAF Lulsgate	ST 5062 6629
41701	WW2 sergeants shower & latrines, comm/site, RAF Lulsgate	ST 5075 6603
41702	WW2 M.I. hut & dental surgery, communal site, RAF Lulsgate	ST 5072 6601
41703	site of WW2 suction tank base, communal site, RAF Lulsgate	ST 5069 6592
41704	site of WW2 pump house, later store, com/site, RAF Lulsgate	ST 5069 6595
41705	site of WW2 commanding officer quarters, c/s, RAF Lulsgate	ST 5069 6596
41706	site of WW2 air raid blast shelter(for 50), c/site, RAF Lulsga	ST 5068 6601
41707	site of WW2 grocery & local produce store, c/s, RAF Lulsgate	ST 5069 6602
41708	site of WW2 RAF & WAAF officers mess, c/s, RAF Lulsgate	ST 5069 6598
41709	site of WW2 cycle shelter, communal site, RAF Lulsgate	ST 5071 6600
41710	site of WW2 cycle shelter, communal site, RAF Lulsgate	ST 5071 6609
41711	site of WW2 barbers, tailors & shoe shop, c/s, RAF Lulsgate	ST 5074 6601
41712	site of WW2 RAF&WAAF sergeants mess, c/s, RAF Lulsgate	ST 5073 6605

HER Ref	Name	Location
41713	site of WW2 boiler house to sgt's mess, c/s, RAF Lulsgate	ST 5074 6604
41714	site of WW2 blast air raid shelter (for 50), c/site, RAF Lulsgate	ST 5072 6604
41715	site of WW2 blast air raid shelter (for 50), c/site, RAF Lulsgate	ST 5072 6606
41716	site of WW2 blast air raid shelter (for 50), c/site, RAF Lulsgate	ST 5074 6606
41717	site of WW2 high water tank 30K gallons, c/s, RAF Lulsgate	ST 5073 6607
41718	site of WW2 blast air raid shelter (for 50), c/site, RAF Lulsgate	ST 5074 6609
41719	site of WW2 decontam. & officers showers, c/s, RAF Lulsgate	ST 5072 6609
41720	site of WW2 NAAFI staff quarters, comm./site, RAF Lulsgate	ST 5066 6612
41721	site of WW2 Institute (for 709 Airmen/women), RAF Lulsgate	ST 5067 6610
41722	site of WW2 rms for games, reading, writing, c/s, RAF Lulsgate	ST 5069 6610
41723	site of WW2 airmen's latrine block, comm./site, RAF Lulsgate	ST 5070 6609
41724	site of WW2 Stanton air raid shelter (for 50) c/s, RAF Lulsgate	ST 5066 6608
41725	site of WW2 fat rendering plant hse, c/site, RAF Lulsgate	ST 5067 6607
41726	site of WW2 blast air raid shelter(for 50), c/site, RAF Lulsgate	ST 5066 6606
41727	site of WW2 ration store/butchers prep rm, c/s, RAF Lulsgate	ST 5069 6607
41728	site of WW2 static water tank (20K galls), c/s, RAF Lulsgate	ST 5070 6606
41729	site of WW2 airwomen/men dining room, c/s, RAF Lulsgate	ST 5068 6605
41730	site of WW2 picket post/medical rm, c/site, RAF Lulsgate	ST 5067 6602
41732	site of WW2 bucket cleansing house, c/site, RAF Lulsgate	ST 5064 6598
41733	site of WW2 stand-by set house (250KW) c/s, RAF Lulsgate	ST 5066 6594
41734	site of WW2 fire trailer pump shed, comm./site, RAF Lulsgate	ST 5067 6604
41752	site of WW2 fuel compound, communal site, RAF Lulsgate	ST 5066 6598
41827	WW2 access road to RAF Lulsgate sewage works	ST 5021 6594
41828	remains of WW2 humus tank, RAF Lulsgate sewage works	ST 5014 6606
41829	remains of WW2 sedimentation tank, RAF Lulsgate s/works	ST 5014 6609
41830	WW2 percolating tank, RAF Lulsgate sewage works	ST 5013 6607
41831	WW2 sludge drying beds, RAF Lulsgate sewage works	ST 5017 6605
41832	WW2 tool house, RAF Lulsgate sewage works	ST 5013 6606
41833	rem. of WW2 destructor house, RAF Lulsgate sewage works	ST 5022 6602
41834	remains of WW2 irrigation trenches, RAF Lulsgate s/works	ST 5015 6602



HER Ref	Name	Location
41836	WW2 telephone HQ, Wrigton Home Guard, Downside platn.	ST 4959 6464
41838	WW2 concrete static water tank, adjacent RAF Lulsgate	ST 4979 6574
41881	site of WW2 ARP/Home Guard hut near watertower, Felton com	ST 5176 6518
42776	Oxford L4616 crashed at Waggon & Horses Inn, 6.6.1944	ST 5152 6611
42907	St Katherines church, Felton Common	ST 5151 6565
43000	site of WW2 officers bath house, comm./site, RAF Lulsgate	ST 5070 6600
44244	Small quarry 70m W of Big Bullock Farm	ST 5156 6536
44258	Site of old quarry, West Lane	ST 5166 6579
44259	C20 quarry (disused) at Lulsgate	ST 5166 6589
44261	Wagon and Horses, Potters Hill	ST 5156 6608
44270	Boundary stone behind Wagon and Horses	ST 5156 6610
44413	Airport Tavern (form. New Inn), Lulsgate Bottom	ST 5134 6567
44414	Old quarry on corner of Downside Road	ST 5128 6562
44415	St Katherines Farm, Downside Road	ST 5116 6568
44416	Lulsgate Farm, Downside Road	ST 5081 6577
44417	Downside Farm, Downside Road	ST 5083 6594
44419	Cooks Farm, Downside	ST 5011 6572
44420	Downside Farm (form. House), Brockley Combe	ST 4915 6611
44421	Site of quarry 200m NE of Downside Farm	ST 4937 6620
44423	Postmedieval buildings at Old Farm	ST 5049 6598
44425	?Former Methodist chapel, Downside Road	ST 4993 6593
44427	Site of Lulsgate school	ST 5133 6553
44428	'The Forge', site of smithy at Lulsgate	ST 5134 6557
44430	Site of 'old gravel pit' Lulsgate	ST 5128 6497
44431	Hunters Hall (form. Cornwell farm), Lulsgate	ST 5133 6432
44433	Goblincombe Farm, Redhill	ST 4961 6440
44434	Broadfield farm, Redhill	ST 4933 6430
44435	Site of quarry at the Lodge, Winters Lane	ST 4967 6540
44436	Site of 'stone', Winters Lane	ST 4973 6541
44437	Old quarry 285m E of Goblincombe Farm	ST 4991 6434

HER Ref	Name	Location
44439	Old quarry 160m SW of Hailstone Cottages	ST 5022 6399
44440	Site of barn and enclosure, Lulsgate	ST 5095 6433
44445	Site of quarry at Broadfield House Farm	ST 5115 6395
44589	Abspit Pond, Broadfield Down	ST 4850 6509
44965	Deserted farmstead at Goblin Combe	ST 5015 6423
44966	Deserted farmstead at Goblin Combe	ST 4996 6596
46218	Corner Cottage, Downside	ST 4989 6651
46223	Edson's Farm, Oatfield Batch	ST 4935 6647
46231	Site of farmstead, Brockley Combe	ST 4960 6640
46242	'Stanwell' field name, SW of Edson's Farm	ST 5041 6602
46244	Lead mines at Old Farm	ST 4989 6430

## Appendix 14E

### Designated Assets Setting photographs



Photo 1) View across Oval barrow on Felton Hill 100m east of The Round House (SM1008300) towards Bristol Airport site (existing control tower highlighted). Photo taken July 3<sup>rd</sup>, 2018.



Photo 2) View across Two confluent bowl barrows on Felton Hill (SM1008361), towards Bristol Airport site (existing control tower highlighted). Photo taken July 3<sup>rd</sup>, 2018.