## **LAND AT RONCOMBE GATE**

**FARWAY** 

**EAST DEVON** 

**DEVON** 

Results of a Geophysical Survey



South West Archaeology Ltd. report no. 230519



www.swarch.net

# LAND AT RONCOMBE GATE, FARWAY, DEVON RESULTS OF A GEOPHYSICAL SURVEY

By P. Webb

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Finalised: 7<sup>th</sup> September 2023

Work undertaken by SWARCH for a Private Client (the Client).

### **SUMMARY**

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) on land at Roncombe Gate, Farway, Devon, as part of a planning application for the creation of an access track. The site sits on the boundary between the parishes of Farway and Sidmouth, in the historic hundred of Colyton and deanery of Honiton. Farway was an Anglo-Saxon manor owned by Æthelmær and Chenias in 1066 and by Drogo from the Bishop of Countances and Ludo from Goscelm in 1086. The manor subsequently passed through the Earls of Devonshire and John Frye to the Willoughby family prior to the 17<sup>th</sup> century; after which it was owned by the Trevelyans and Thomas Putt in the 19<sup>th</sup> century.

The proposal site lies within an area recorded on the Historic Landscape Characterisation (HLC) as rough ground: rough grazing ground, heathland or moorland; and is surrounded by areas of conifer plantation; medieval enclosures; post-medieval enclosures; and modern enclosures. The features identified on the Devon Historic Environment Record (HER) largely reflect prehistoric use of the landscape, the site falling within the extensive Broad Down/Farway Barrow Cemeteries which follow the prominent valley tops; and to the south-east of the Iron Age farmstead of Farway Castle. This is contrasted to the extensive evidence of 19<sup>th</sup> century use of the area for extractive purposes to both the northeast and south-west.

The survey identified two groups of anomalies across the field: possible pits (Group 1) and possible pits /or tree-throws (Group 2), alongside anomalies associated with metallic debris and ground disturbance.

The degree of preservation of the identified features appears to be poor, all of the anomaly responses being weak, with some barely discernible from the background geology./ This suggests that many of the identified features only survive to a shallow depth, their intermittent nature suggesting only partial survival. However, it is possible that additional, even more ephemeral features, are masked by the background geology and modern disturbances.

The results of the geophysical survey would suggest that the archaeological potential for the site is low, though it sits within a landscape of high potential. It is thought that the identified features relate to post-medieval extractive processes, though the presence of prehistoric activity in the immediate vicinity and surrounding landscape means that a prehistoric or Romano-British date cannot be ruled out.



May 2023

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## LAND AT RONCOMBE GATE, FARWAY, DEVON

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## **ACKNOWLEDGEMENTS**

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#### 1.0 Introduction

**LOCATION:** RONCOMBE FARM, FARWAY **PARISH:** FARWAY; SIDMOUTH

**DISTRICT:** EAST DEVON **COUNTY:** DEVON

**NGR:** CENTRED ON SY 316520 94870

PLANNING NO.: N/A SWARCH REF. FRT23

OASIS REF: SOUTHWES1-516635

#### 1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by a Private Client (the Client) to undertake a geophysical survey on land at Roncombe Gate, Farway, Devon as part of a planning application for the creation of an access track. This work was undertaken in accordance with best practice and ClfA guidance.

## 1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The survey area is located to the west of Roncombe Gate, c.1.6km south-west of Farway and c.5km south of Honiton. The site sits at the head of a river valley of a tributary of the River Sid with steep sloping valley sides. The soils of the area are the slowly permeable seasonally wet acid loamy and clayey soils of Soilscape 17 (CSAI 2023), overlying superficial deposits of clay, silt, sand and gravel of the Clay with Flints Formation, and sandstone of the Upper Greensand Formation (BGS 2023) at a height of between c.230m and c.235m AOD.

#### 1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The site lies predominantly within the parish of Farway, in the historic hundred of Colyton and deanery of Honiton. Farway was an Anglo-Saxon manor split into two, owned by Æthelmær and Chenias in 1066 and by Drogo from the Bishop of Countances and Ludo from Goscelm when the Domesday book assessed the manor with 20 households and land for eight ploughs (Williams & Martin 2002). The manor was subsequently owned by the families of Fleming, Mohun, Osborne and Devenish; passing through the Earls of Devonshire and John Frye to be purchased by the Willoughby family prior to the 17<sup>th</sup> century; after which it passed to the Trevelyans and was purchased by Thomas Putt in the 19<sup>th</sup> century (Lysons 1822).

The proposal site lies within an area recorded on the Historic Landscape Characterisation (HLC) as rough ground: rough grazing ground, heathland or moorland; and is surrounded by areas of conifer plantation; medieval enclosures; post-medieval enclosures; and modern enclosures.

At the time of the tithe survey (c.1838-1840), the land occupied by the proposal site remained under two ownerships: that to the north-east within the parish of Farway (plot no. 253) forming part of the lands owned and occupied by the Reverend Thomas Putt and recorded as Farway Hill, under conifer plantation; that to the south-west within the parish of Sidmouth (plot no. 2141) forming part of the lands associated with Rumckhum, owned and occupied by John Guppy esq., and recorded as heathland and furze as part of common lands.

The features identified on the Devon Historic Environment Record (HER) largely reflect prehistoric use of the landscape, the site falling within the extensive Broad Down/Farway Barrow Cemeteries (SAM1017642) with numerous Scheduled Bronze Age barrows (SAM1010271-9) which follow the

prominent valley tops; and to the south-east of the Scheduled Iron Age farmstead of Farway Castle (SAM1014243). This is contrasted to the extensive evidence of 19<sup>th</sup> century use of the area for extractive purposes to both the north-east (MDV66557, MDV131618, MDV131713) and south-west (MDV39003, MDV39024), and the turnpike route along the parish boundary evidenced by a former hollow way (MDV20186) and toll house (MDV10846).

#### 1.4 METHODOLOGY

The geophysical (gradiometer) survey was undertaken in accordance with current best practice and CIfA guidance; and follows the guidance outlined in *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008b); *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014b); *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider* (Europae Archaeologiae Consilium/European Archaeological Council 2016).

'Archaeological geophysical survey uses non-intrusive and non-destructive techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as reasonably possible, within a specified area or site on land, in the inter-tidal zone or underwater. Geophysical survey determines the presence of anomalies of archaeological potential through measurement of one or more physical properties of the subsurface.' (Standard and Guidance for Archaeological Geophysical Survey 2014).

The results of the survey will as far as possible inform on the presence or absence, character, extent and in some cases, apparent relative phasing of buried archaeology to inform a strategy to mitigate any threat to the archaeological resource.

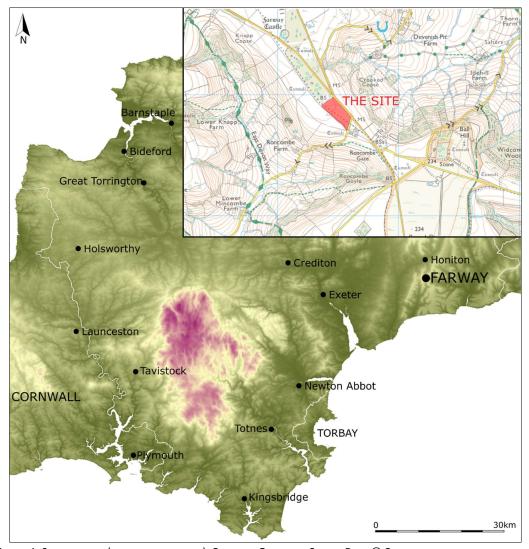


FIGURE 1: SITE LOCATION (THE SITE IS INDICATED). CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT AND DATABASE RIGHT 2023. LICENCE NUMBER 100022432.

#### 2.0 GEOPHYSICAL SURVEY

#### 2.1 Introduction

An area of c.2.7ha was the subject of a magnetometry (gradiometer) survey (c.0.8ha surveyed). The purpose of this survey was to identify and record magnetic anomalies within the wider site so that any proposed trackway could be positioned to avoid any identified significant archaeology.

While identified anomalies may relate to archaeological deposits and structures the dimensions of recorded anomalies may not correspond directly with any associated features. The following discussion attempts to clarify and characterise the identified anomalies. The survey was undertaken on 20<sup>th</sup> April 2023 by P. Bonvoisin; the survey data was processed by P. Bonvoisin. Supporting photographic evidence from the site inspection can be seen in Appendix 1; detailed survey data in Appendix 2; and additional graphic images of the survey data and numbered grid locations can be found in Appendix 3.

#### 2.2 SITE INSPECTION

The site comprises a single north-west to south-east orientated sub-rectangular field (F1; c.2.7ha) along the south-western edge of Seaton Road to the north-west of Roncombe Gate. At the time of survey the field was under pasture, with areas of gorse and clusters of trees. The largely flat field is bordered to the north-east by Seaton Road; to the south-east by Roncombe Hill; to the south-west by agricultural land; and to the north-west by woodland. The field is bounded by tree-lined post and wire fences.

The ground is generally uneven, though a number of earthworks could be identified across the site, including: a linear hollow running along the south-western boundary and a series of large sub-oval to irregular hollows suggestive of extractive pits.

#### 2.3 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider* (Europae Archaeologiae Consilium/European Archaeological Council 2016) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014b).

The survey was carried out using a twin-sensor fluxgate gradiometer (Bartington Grad601). These machines are sensitive to depths of up to 1.50m. The survey parameters were: sample intervals of 0.25m, traverse intervals of 1m, a zigzag traverse pattern, traverse orientation was circumstantial, grid squares of 30×30m. The gradiometer was adjusted ('zeroed') every 0.5-1ha. The survey grid was tied into the Ordnance Survey National Grid- and set out using a Leica CS15 GNSS Rover GPS. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor Version 3.0.36.0*. The primary data plots and analytical tools used in this analysis were *Shade* and *Metadata*. The details of the data processing are as follows:

#### Processes:

Clip +/- 1SD; removes extreme data point values.

*DeStripe* all traverses, median; used to equalise underlying differences between grids (potentially caused by instrument drift or orientation, directional effects inherent in magnetic instrument, or differences in instrument set up during survey e.g. using two gradiometers).

DeStagger selected grids, all traverses out- and inbound by 0.25m to 0.50m reduces staggering effects within data derived from zig-zag collection method.



FIGURE 2: GREYSCALE SHADE PLOT OF THE GRADIOMETER SURVEY DATA; MINIMAL PROCESSING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).

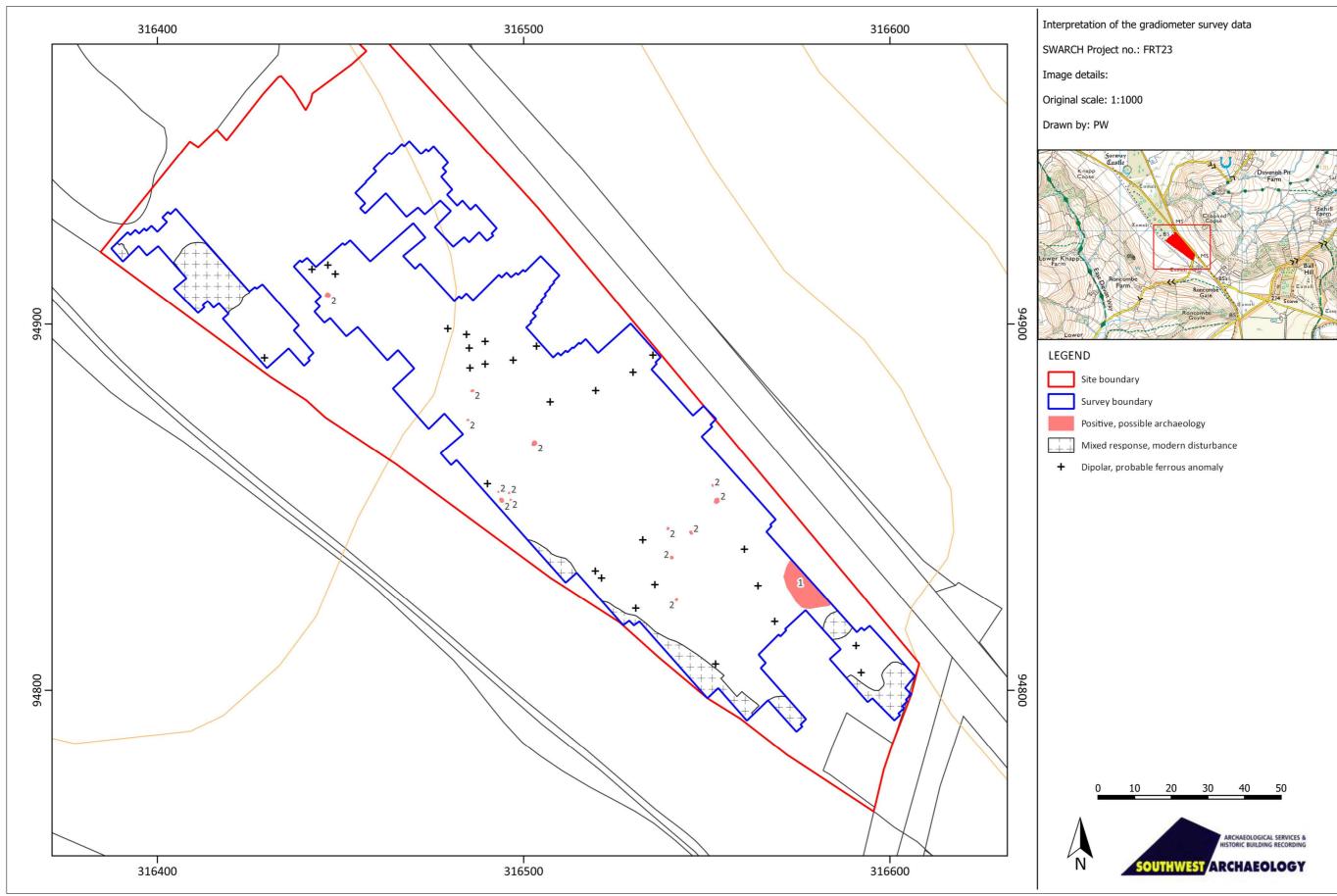


FIGURE 3: INTERPRETATION OF THE GRADIOMETER SURVEY DATA (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).

TABLE 1: SURVEY DETAILS (UN-ADJUSTED)

Field	Area Surveyed (ha)	Max (nT)	Min (nT)	Standard Deviation (nT)	Mean (nT)	Median (nT)
F1	0.7951	101.56	-101.52	12.25	-0.70	0.00

#### 2.4 RESULTS

Table 2 with the accompanying Figures 2-3 show the analyses and interpretation of the geophysical survey data.

TABLE 2: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly	Class and Certainty	Form	Archaeological	Comments				
Group			Characterisation					
Field F1								
1	Strong positive,	Discrete	Pit	Indicative of a cut and infilled feature such as a pit. Responses of				
	probable			between +0.04nT and +59.32nT.				
	Weak positive,	Discrete	Pit or tree-throw	Indicative of discrete cut and infilled features such as pits.				
2	possible			Weaker responses may indicate natural features such as tree-				
				throws. Responses of between +0.01nT and +10.14nT				
	Strong dipolar	Discrete	Ferrous anomaly	Indicative of metallic objects. Responses of between -101.38nT				
	(mixed response)			to +96.45nT.				
	Strong bipolar	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by				
	(mixed response)			proximity to metallic fences and debris. Responses of between				
				-99.91nT and +98.50nT.				

#### 2.5 DISCUSSION

The survey identified two groups of anomalies across the field: possible pits (Group 1) and possible pits /or tree-throws (Group 2), alongside anomalies associated with metallic debris and ground disturbance.

The general response variation across the site was between +/-2nT with occasional clear background geological variation up to +/-5nT. The response strength of probable archaeological activity was low to moderate (typically between +/-10nT). The weaker responses of some of the anomalies may indicate that these are only likely to survive to a shallow depth; the stronger responses perhaps indicating the presence of more recent disturbance.

## 2.6 ARCHAEOLOGICAL POTENTIAL

The geophysical survey identified only a small number of features, all possible pits (Group 1) and/or tree-throws (Groups 2), across the site. The size of the Group 1 anomaly, along with its location within an area of post-medieval marl pits suggests that this may be an associated extractive pit; the weak nature of many of the Group 2 responses suggesting that they may be natural in origin, the anomalies reflecting tree-throws or even geological variations.

None of the identified features can at this stage be dated, though the surrounding landscape contains evidence of both prehistoric settlement and funerary activity and post-medieval marl extraction, and it is likely the one/both of these could have extended into the survey area.

The degree of preservation of the identified features appears to be poor, all of the anomaly responses being weak, with some barely discernible from the background geology. This suggests that many of the identified features only survive to a shallow depth, their intermittent nature suggesting only partial survival. However, it is possible that additional, even more ephemeral features, are masked by the background geology and modern disturbances.

The results of the geophysical survey would suggest that the archaeological potential for the site is *low*, though it sits within a landscape of *high* potential. It is thought that the identified features relate

## LAND AT RONCOMBE GATE, FARWAY, DEVON

to post-medieval extractive processes, though the presence of prehistoric activity in the immediate vicinity and surrounding landscape means that a prehistoric or Romano-British date cannot be ruled out.

#### 3.0 CONCLUSION

The site comprises a single sub-rectangular field located to the west of Roncombe Gate, c.1.6km south-west of Farway and c.5km south of Honiton. The site sits at the head of a river valley of a tributary of the River Sid with steep sloping valley sides.

The site sits on the boundary between the parishes of Farway and Sidmouth, in the historic hundred of Colyton and deanery of Honiton. Farway was an Anglo-Saxon manor split into two, owned by Æthelmær and Chenias in 1066 and by Drogo from the Bishop of Countances and Ludo from Goscelm. The manor was subsequently owned by the families of Fleming, Mohun, Osborne and Devenish; passing through the Earls of Devonshire and John Frye to be purchased by the Willoughby family prior to the 17<sup>th</sup> century; after which it passed to the Trevelyans and was purchased by Thomas Putt in the 19<sup>th</sup> century.

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#### 4.0 BIBLIOGRAPHY & REFERENCES

#### **Published Sources:**

**Chartered Institute for Archaeologists** 2014b (revised 2017): Standard and Guidance for Archaeological Geophysical Survey.

**DW Consulting** 2016: *TerraSurveyor User Manual.* 

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http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Cranfield Soil and Agrifield Institute 2023: Soilscape Viewer.

http://www.landis.org.uk/soilscapes/index.cfm

APPENDIX 1: SUPPORTING PHOTOGRAPHS — SITE INSPECTION



1. F1, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE WEST (NO SCALE).



2. F1, VIEW ACROSS THE SURVEY AREA; VIEWED FROM THE EAST-NORTH-EAST (NO SCALE).



3. F1, VIEW ACROSS THE PROPOSAL AREA; VIEWED FROM THE SOUTH (NO SCALE).



4. F1, VIEW ACROSS THE PROPOSAL AREA; VIEWED FROM THE SOUTH-EAST (NO SCALE).



5. F1, VIEW ACROSS THE PROPOSAL AREA; VIEWED FROM THE NORTH-WEST (NO SCALE).



6. F1, VIEW ACROSS THE PROPOSAL AREA; VIEWED FROM THE NORTH-WEST (NO SCALE).



7. F1, VIEW ALONG THE LINEAR EARTHWORK FEATURE RUNNING ALONG THE SOUTH-WESTERN BOUNDARY OF THE FIELD; VIEWED FROM THE NORTH-WEST (NO SCALE).



8. F1, DETAIL OF ONE OF THE POSSIBLE EXTRACTIVE PITS IDENTIFIED ACROSS THE SITE; VIEWED FROM THE NORTH-WEST (NO SCALE).



9. F1, DETAIL OF GORSE COVERING THE NORTH-WESTERN END OF THE SITE; VIEWED FROM THE SOUTH-EAST (NO SCALE).

#### APPENDIX 2: METADATA FOR GEOPHYSICAL SURVEY PROCESSING

#### **GRADIOMETRY**

#### GENERAL DATA FOR ALL FIELDS/SITE:

SITE

*NAME:* FRT23

LOCATION: Roncombe Farm, Farway

COLLECTION METHOD: ZigZag

SENSORS: 2 @1m spacing

DUMMY VALUE: 32702 X&Y INTERVAL: 0.25m

INSTRUMENT TYPE: Bartington Grad 601

UNITS: nT

SURVEYED AREA: 0.7951ha

**PROGRAM** 

NAME: TerraSurveyor VERSION: 3.0.37.30

#### STATISTICS ADJUSTED AFTER PROCESSING

#### **PROCESSES USED:**

*DeStripe*: used to equalise underlying differences between grids (potentially caused by instrument drift or orientation, directional effects inherent in magnetic instrument, or differences in instrument set up during survey e.g. using two gradiometers).

DeStagger: reduces staggering effects within data derived from zig-zag collection method.

## FIELD F1

 STATS

 MAX:
 101.56

 MIN:
 -101.52

 STD. DEV.:
 12.25

 MEAN:
 -0.70

 MEDIAN:
 0.00

 COMPOSITE AREA:
 3.24ha

PROCESSES

SURVEYED AREA:

PROCESSES: 9

1 Base Layer

2 DeStripe Median Traverse: Grids: All

DeStagger: Grids: All By: 0 intervals, 25.00cm
 DeStagger: Grids: All By: 0 intervals, -50.00cm
 DeStagger: Grids: All By: 0 intervals, -50.00cm

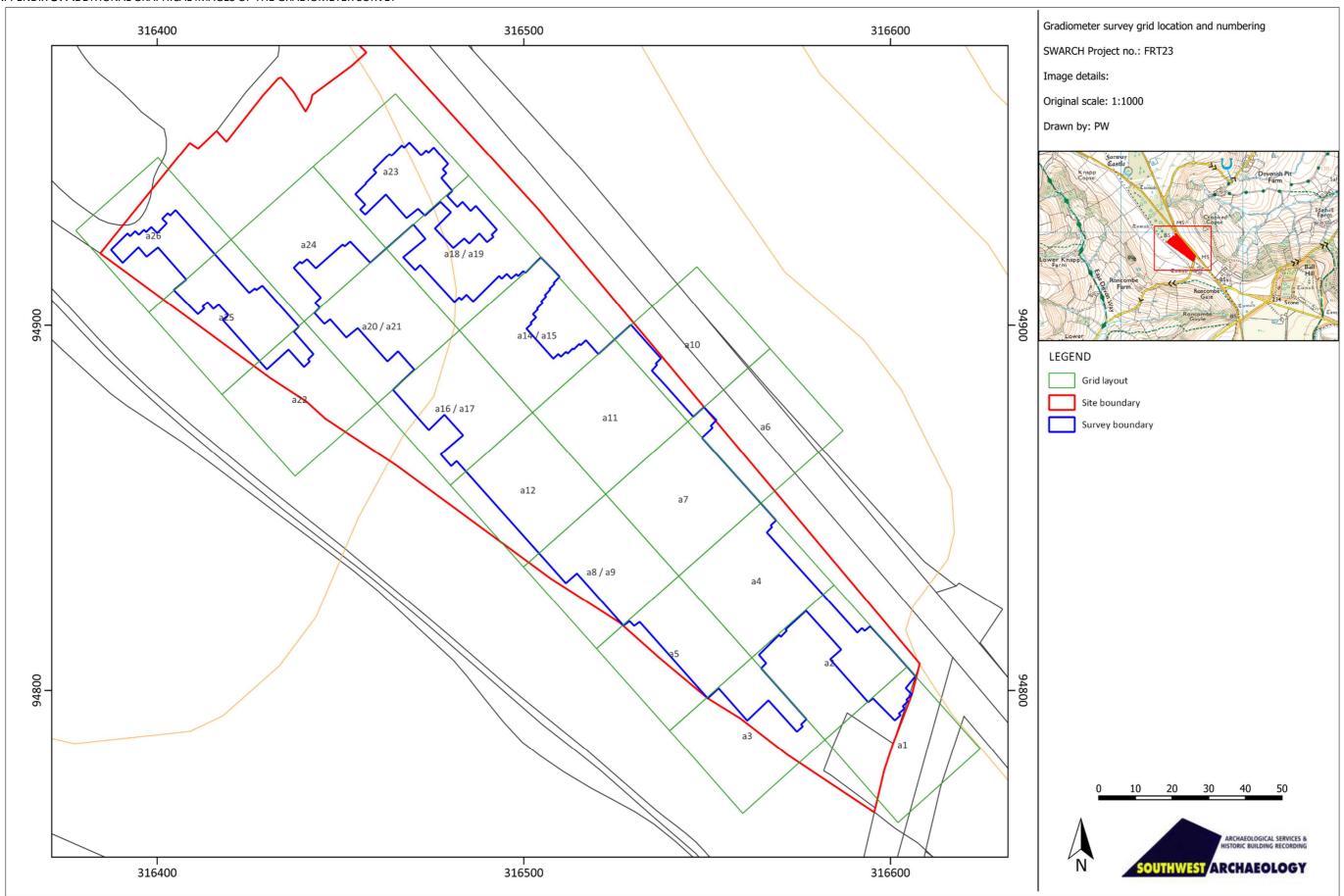
0.7951ha

DeStagger: Grids: a7.xgd By: 0 intervals, 25.00cm
 DeStagger: Grids: a12 By: 0 intervals, 25.00cm

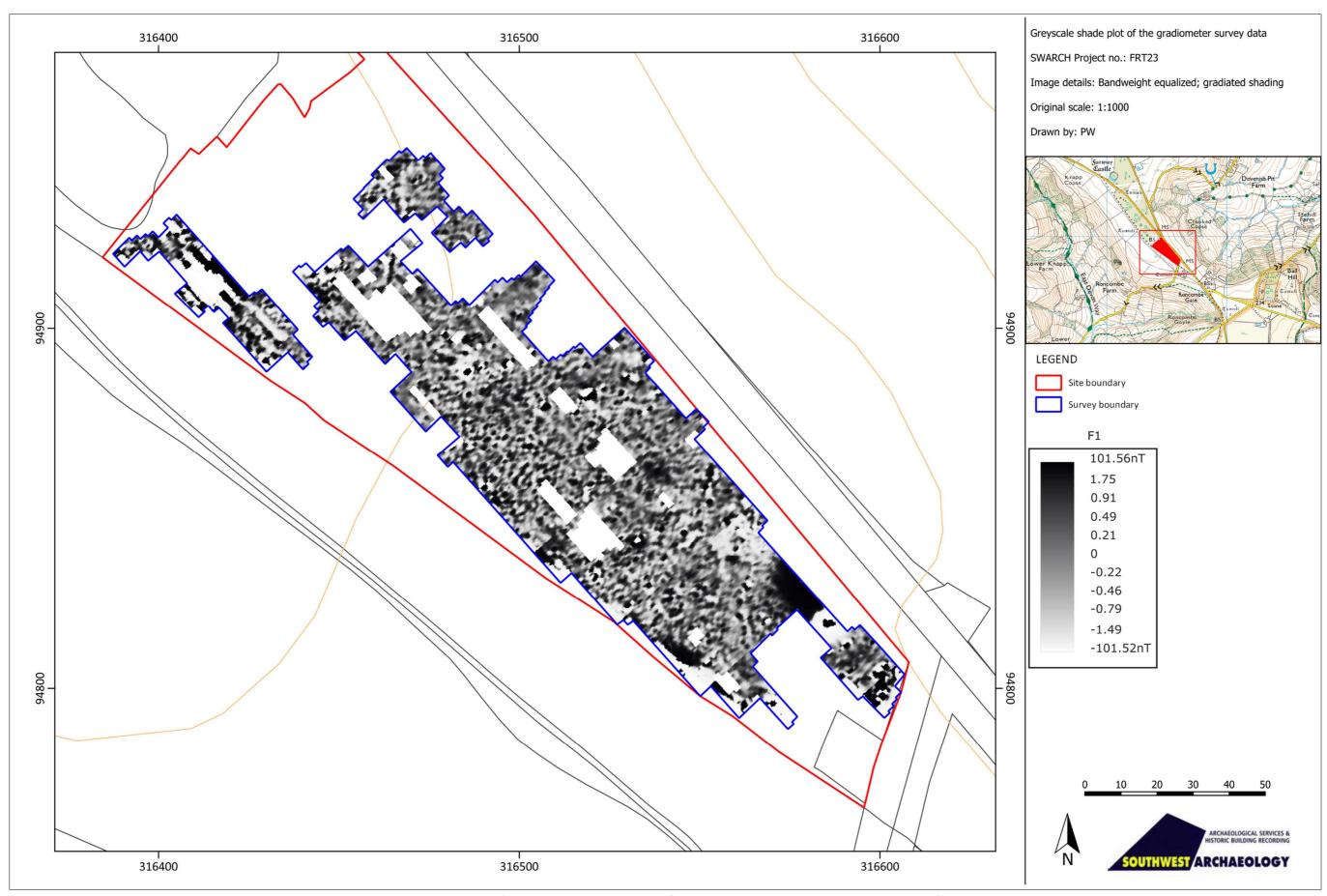
8 DeStagger: Grids: a14+a15 By: 0 intervals, 25.00cm

9 DeStagger: Grids: a8+a9 By: 0 intervals, -50.00cm

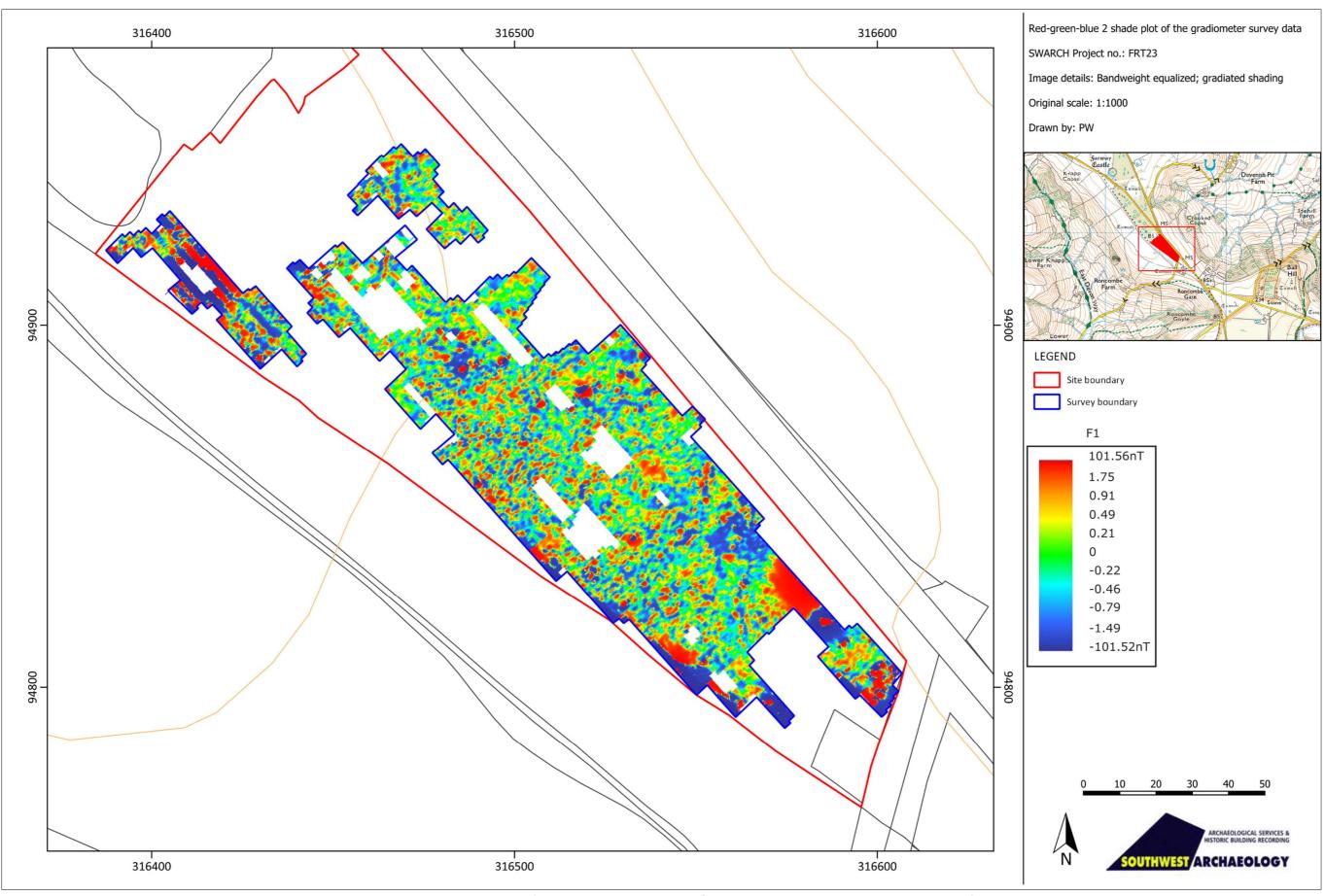
APPENDIX 3: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY



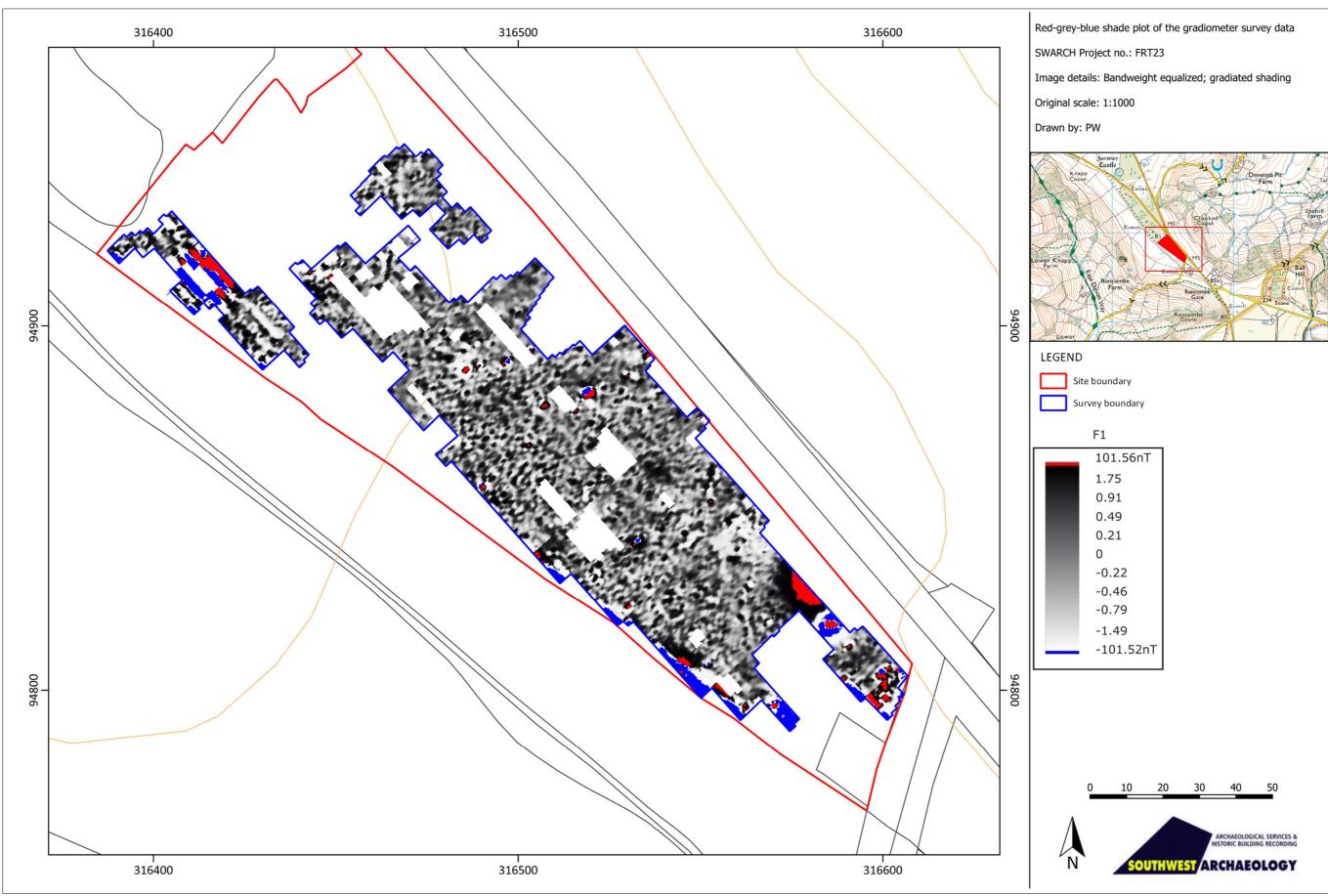
<sup>1.</sup> GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING. (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).



<sup>2.</sup> GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; BANDWEIGHT EQUALIZED, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).



<sup>3.</sup> RED-GREEN-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BANDWEIGHT EQUALIZED, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).



<sup>4.</sup> RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BANDWEIGHT EQUALIZED, GRADIATED SHADING (CONTAINS ORDNANCE SURVEY DATA © CROWN COPYRIGHT 2023. LICENCE NUMBER 100022432).



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