

**LAND AT CHURCHTOWN FARM**

**PENDOWER ROAD**

**VERYAN**

**CORNWALL**

Results of a Geophysical Survey



South West Archaeology Ltd. report no. 190203



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## LAND AT CHURCHTOWN FARM, VERYAN, CORNWALL RESULTS OF A GEOPHYSICAL SURVEY

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By J. Bampton  
Report Version: FINAL  
Draft issued: 1<sup>st</sup> February 2019

Work undertaken by SWARCH for Cornwall Council (The Client)

### SUMMARY

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*This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) on land at Churchtown Farm, Veryan, Cornwall. This work was conducted on behalf of Cornwall Council. The site is located on the south-west edge of the medieval settlement of Veryan, immediately off of Pendower Road, north-east of Churchtown Farm and in a landscape of possible prehistoric feature cropmarks.*

*The geophysical survey identified a linear anomaly and three discrete ovoid anomalies. The linear anomaly is probably a ditch associated with a strip field element or trackway. The discrete ovoid anomalies were indicative of undated cut features such as pits, treethrows or some other geological feature. Ploughing had also evidently occurred on the site, although the site was under pasture at the time of the survey.*

*The geophysical survey returned limited results of ostensibly non-significant potential.*

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February 2019

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## ACKNOWLEDGEMENTS

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THE CLIENT  
CORNWALL COUNCIL  
THE STAFF OF THE CORNWALL RECORD OFFICE (CRO)

## PROJECT CREDITS

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## 1.0 INTRODUCTION

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<b>LOCATION:</b>	LAND AT CHURCHTOWN FARM, PENDOWER ROAD
<b>PARISH:</b>	VERYAN
<b>COUNTY:</b>	CORNWALL
<b>NGR:</b>	SW 91410 39201
<b>PLANNING NO.</b>	PRE-PLANNING
<b>SWARCH REF.</b>	VCF19

### 1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by Cornwall Council (The Client) to undertake a geophysical survey on land at Churchtown Farm, Pendower Road, Veryan, Cornwall, as part of the pre-application requirements for a proposed housing development. This work was undertaken in accordance with best practice and in consultation with Cornwall Councils Senior Development Officer Historic Environment.

### 1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is located on the southern edge of the village of Veryan, immediately north-east of Churchtown Farm, off of Pendower Road. The site is located in the north corner of a large field with modern fenced subdivisions on a very gentle north facing slope. The site is at a height of c.70m AOD (Figure 1).

The soils on the site are the well-drained fine loamy soils over slate or slate rubble of the Denbigh 2 Association (SSEW 1983), which overlie the sandstone of the Carne Formation; although the site is near to the border of the mudstone of the Pendower Formation (BGS 2018).

### 1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Veryan is a village and parish in the deanery- and west division of the hundred of Powder, c.10km south-east of Truro (Lysons 1814). In 1086 the principle manor of the churchtown was Elerkey (*Elerchi*), which prior to the conquest had been held by Mærle-Sveinn and was subsequently part of the lands of the Count of Mortain and held by a Leofnoth (Lysons 1814; Morris 1992). The manor had 45 households and was worth 100 Shillings prior to the conquest and 50 Shillings in 1086 (Morris 1992). The manor passed through the Archdeknes and Vaux families and later moieties of it passed through the Tregian, Wallop, Maynard, Hobart, Morice and Molesworthy families; and in the 1790's was purchased by a Francis Gregor Esq. who sold the estate in several lots along with its manorial rights (Lysons 1814). Veryan takes its name from the dedication of the Church of St Symphorian (HER no.22846), which was dedicated in the 13<sup>th</sup> century and later the name was bastardised and misinterpreted as first *Severian* then *Saint-Virian*. The Domesday manor name of *Elerchi* is derived from the Cornish *elerhc* meaning 'swans' and means 'swan-stream/place' (Watts 2004).

The 1811 Surveyor's draft map for the Grampound area depicts the site as in relatively unenclosed land (see Appendix 2 for supporting sources). The 1840 Veryan tithe map depicts the site and field-scape much as it is today; the field containing the site having been established. The tithe apportionment shows the site as plot 1332, which was part of *Churchtown*; although the farm as it is today is not present on the mapping; and it was owned by the Rev. John Kempe, occupied by a Thomas Blamey and called *Nine Acres* and was under arable cultivation. The majority of the field names on the tithe apportionment were prosaic and probably indicative of the relatively late enclosure of the landscape. Any significant changes to the site are not depicted

in the cartographic record until the 20<sup>th</sup> century. On the Ordnance Survey (OS) 2<sup>nd</sup> edition map, published 1907, a small field/annex with a boundary is shown in the corner of this field, where the site will be. The development of Churchtown Farm in its current location occurs in the 20<sup>th</sup> century.

The site lies outside the historic core of the settlement which has a Conservation Area comprised of three Grade II\* Listed properties, 13 Grade II Listed structures, and the c.1300 Grade I Listed Church of St Symphorian. In addition to these Listed assets the Cornwall Historic Environment Record (HER) lists the 11<sup>th</sup> century settlement of Elerkey (22816) at Veryan; the 13<sup>th</sup> century settlement at Tregamenna to the south-east (22821); and the churches possible existence as an Early Medieval lann site (22846.10) within 1km of the site. Prehistoric assets listed on the HER within 1km of the site include the Scheduled Ancient Monument (SAM) of the Iron Age hillfort at Veryan Castle c.650m to the south-west (22826) and the SAM of Carne Beacon Barrow (22827); its associated barrow cemetery c.600m to the south; and various possible prehistoric enclosures, barrows, tracks and field-systems identified through cropmarks in the wider landscape (e.g. 50737, 50738, 50739 and 50746). Geophysical surveys have been conducted at both Veryan Castle and Carne Beacon (ECO4067; ECO4080). The Cornwall Historic Landscape Characterisation (HLC) labels the sites field-scape as 'medieval', established before the 17<sup>th</sup> century; although, it lies in a wider landscape of post-medieval and modern enclosures, adapting either formerly open ground or Anciently Enclosed Land.

No previous archaeological works have taken place on the site.

#### 1.4 METHODOLOGY

This work was undertaken in accordance with, best practice and ClfA guidance. Any desk-based assessment aspect of this report follows the guidance as outlined in: *Standard and Guidance for Archaeological Desk-Based Assessment* (ClfA 2014a) and *Understanding Place: historic area assessments in a planning and development context* (English Heritage 2012). The geophysical (gradiometer) survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (ClfA 2014b).



FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

## 2.0 GEOPHYSICAL SURVEY

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### 2.1 INTRODUCTION

An area of c.0.309ha was the subject of a magnetometry (gradiometer) survey. The purpose of this survey was to identify and record magnetic anomalies within the proposed site. 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 the 29<sup>th</sup> of January 2019 by P. Bonvoisin; the survey data was processed by P. Bonvoisin.

### 2.2 SITE INSPECTION

The site was in the north corner of a field that sloped down gently to the north. It was in a state of pasture, with relatively rough ground having been churned by grazing animals and some vehicles. The site was under short grass and the topsoil appeared water-logged and boggy. The sites hedges were broad and overgrown with brambles, with relatively few trees. Post and wire fencing and electric fencing bounded and crossed the site. There was a large amount of modern debris towards the edges and corners of the site including caravans, poly-tunnels and general farm refuse and machinery. Supporting photographs for the site inspection can be seen in Appendix 3.

### 2.3 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) 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. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor Version 3.0.25.0*. 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 +/- 3SD; DeStripe all traverses, median

Details: 0.309ha surveyed; Max. 103.82nT, Min. -103.21nT; Standard Deviation 11.50nT, mean -0.35nT, median 0.00nT.



## 2.4 RESULTS

Table 1 with the accompanying Figures 2 and 3 show the analyses and interpretation of the geophysical survey data. Additional graphic images of the survey data and numbered grid locations can be found in Appendix 1.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Moderate-strong, probable	Linear	Ditch/Field Boundary	Indicative of a cut and filled feature such as a ditch. Possibly associated with a boundary depicted on 1907 OS mapping but not 1880 OS mapping or earlier. Responses of c.+31nT.
2	Moderate-strong positive, possible	Ovoid	Pit or Treethrow	Indicative of discrete cut features such as pits or treethrows. Responses of between c.+27nT and +33nT.

## 2.5 DISCUSSION

The survey identified two groups of anomalies and responses indicative of ploughing. The anomaly groups included: a probable ditch and three possible pits or treethrows. The general variation of responses associated with the underlying geology was relatively strong (between -4nT and +10nT; although predominantly between -/+3nT). This may be associated with the water-logged ground conditions during the survey and also may have helped define responses indicative of ploughing. Strong responses associated with magnetic debris, disturbance and/or objects were also identified in the survey data. Cartographic and additional sources that support the following discussion and interpretation can be seen in Appendix 2.

Anomaly Group 1 consists of a single moderate-strong (+31nT) positive response indicative of a ditch. The interference of magnetic debris/disturbance in the north corner of the site may obfuscate this anomaly; however, it may continue to the north-east and align with an adjacent property boundary north-east of the site. It does not appear to continue to the south-west, but lack of a wider picture means its continuation cannot be ruled out. Its south-west end may be a terminus that affords an access with a slight positive response in the west corner of the survey area accounting for the other side of an access way/gate. This linear is on the same alignment as the extant boundary to the north, potentially indicating a strip field element or possibly a track or routeway across the field.

Anomaly Group 2 consists of three moderate-strong (+27nT to +33nT) ovoid responses indicative of discrete cut features such as pits or natural features such as treethrows. These anomalies are undatable and if they are more than geological they may be natural or man-made. Modern disturbance that is evident on the site and possible tree clearance associated with the possible late enclosure of the site may account for these anomalies. The relatively strong nature of background geophysical responses on the site, possibly due to ground conditions and geology, may indicate that these are uncommonly strong responses of natural features.

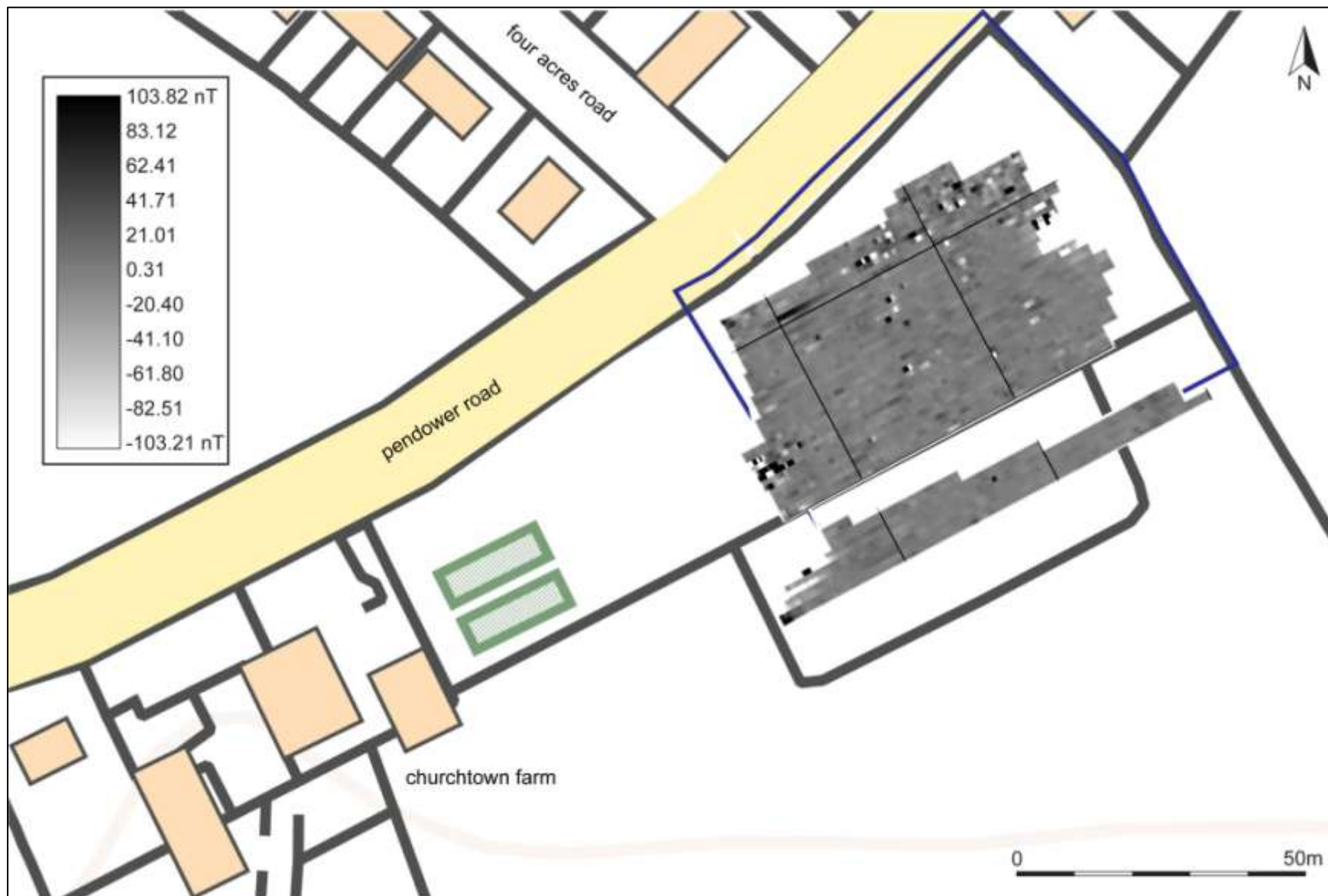


FIGURE 2: SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.

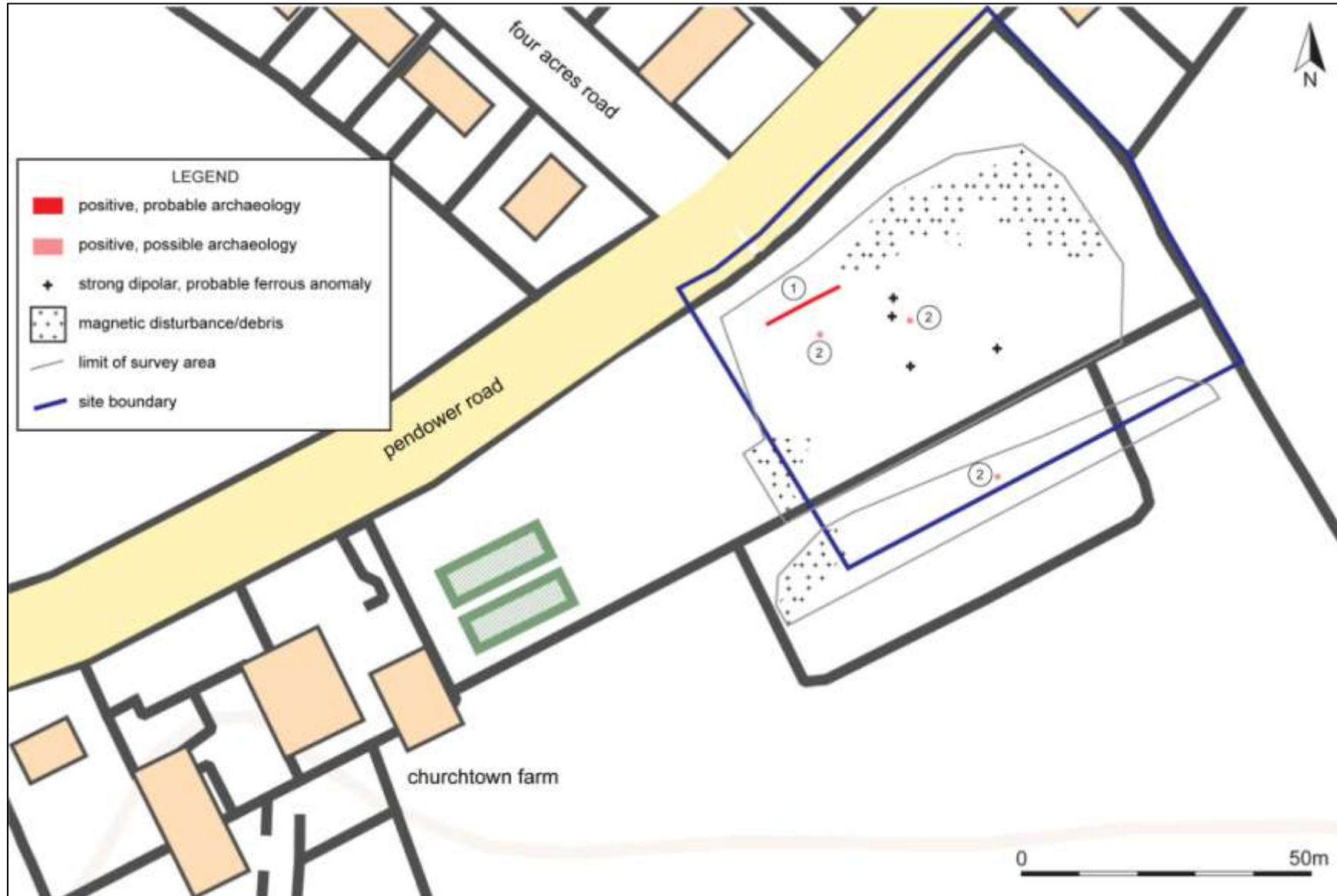


FIGURE 3: INTERPRETATION OF GRADIOMETER SURVEY DATA.

### 3.0 CONCLUSION

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The site is located on the south-west edge of the medieval settlement of Veryan, immediately off of Pendower Road, north-east of Churchtown Farm and in a landscape of possible prehistoric feature cropmarks.

The geophysical survey identified a linear anomaly and three discrete ovoid anomalies. The linear anomaly is probably a ditch associated with a strip field element or trackway. The discrete ovoid anomalies were indicative of undated cut features such as pits, treethrows or some other geological feature. Ploughing had also evidently occurred on the site, although the site was under pasture at the time of the survey.

The geophysical survey returned limited results of ostensibly non-significant potential..

## 4.0 BIBLIOGRAPHY & REFERENCES

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### *Published Sources:*

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[http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html)

**Historic Environment Record (HER) and HLC** 2019: *Cornwall Council Interactive Map*

<https://map.cornwall.gov.uk/>

### *Cornwall Record Office (CRO)*

Veryan Tithe Apportionment, 1840

Veryan Tithe Map, 1840

Ordnance Survey 2<sup>nd</sup> edition, 25 inch map, Sheet: Cornwall LXV.12, surveyed 1906, published 1907

### *British Library (BL)*

Surveyor's Draft Map of the Grampound area, 1811

APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY

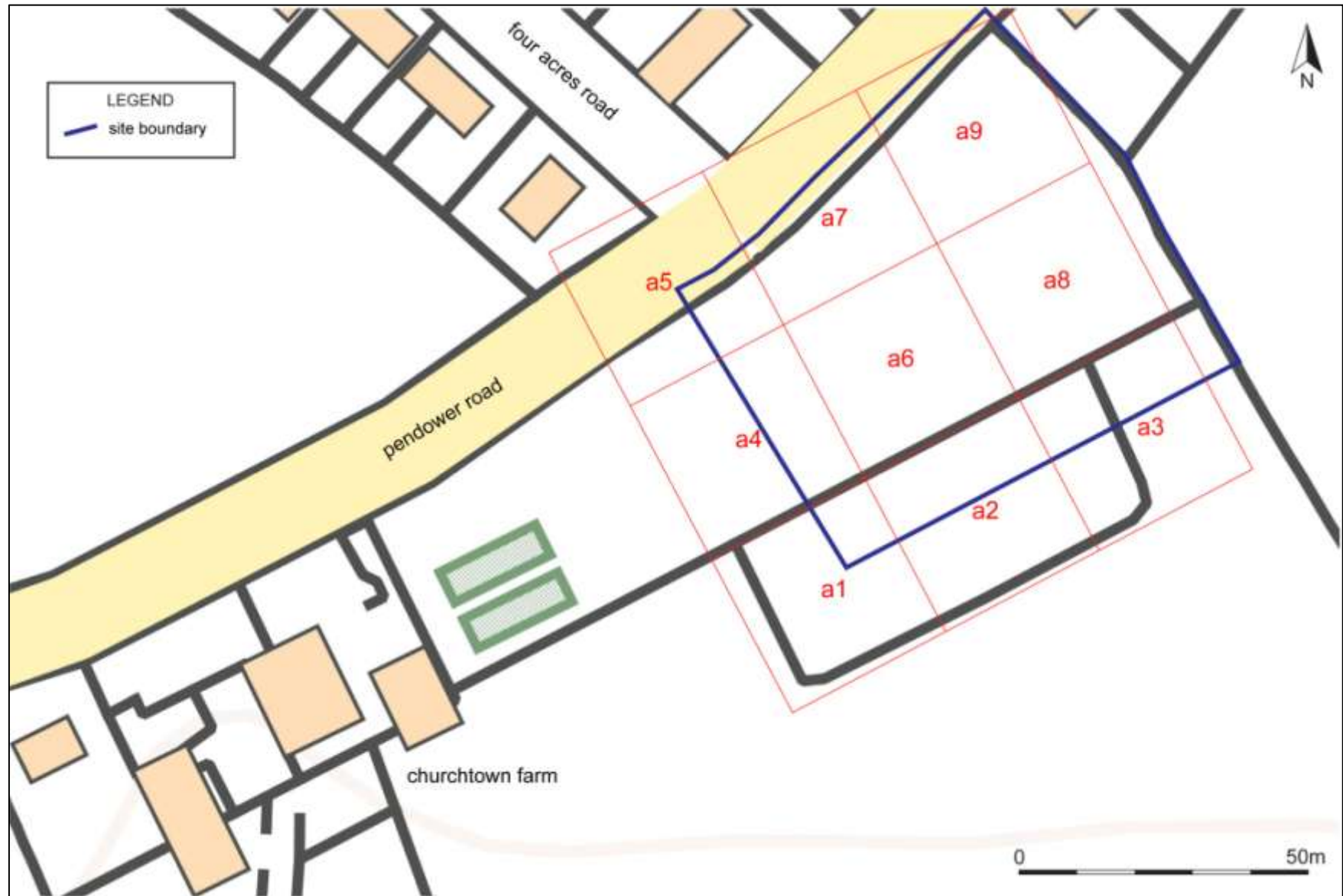


FIGURE 4: GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.



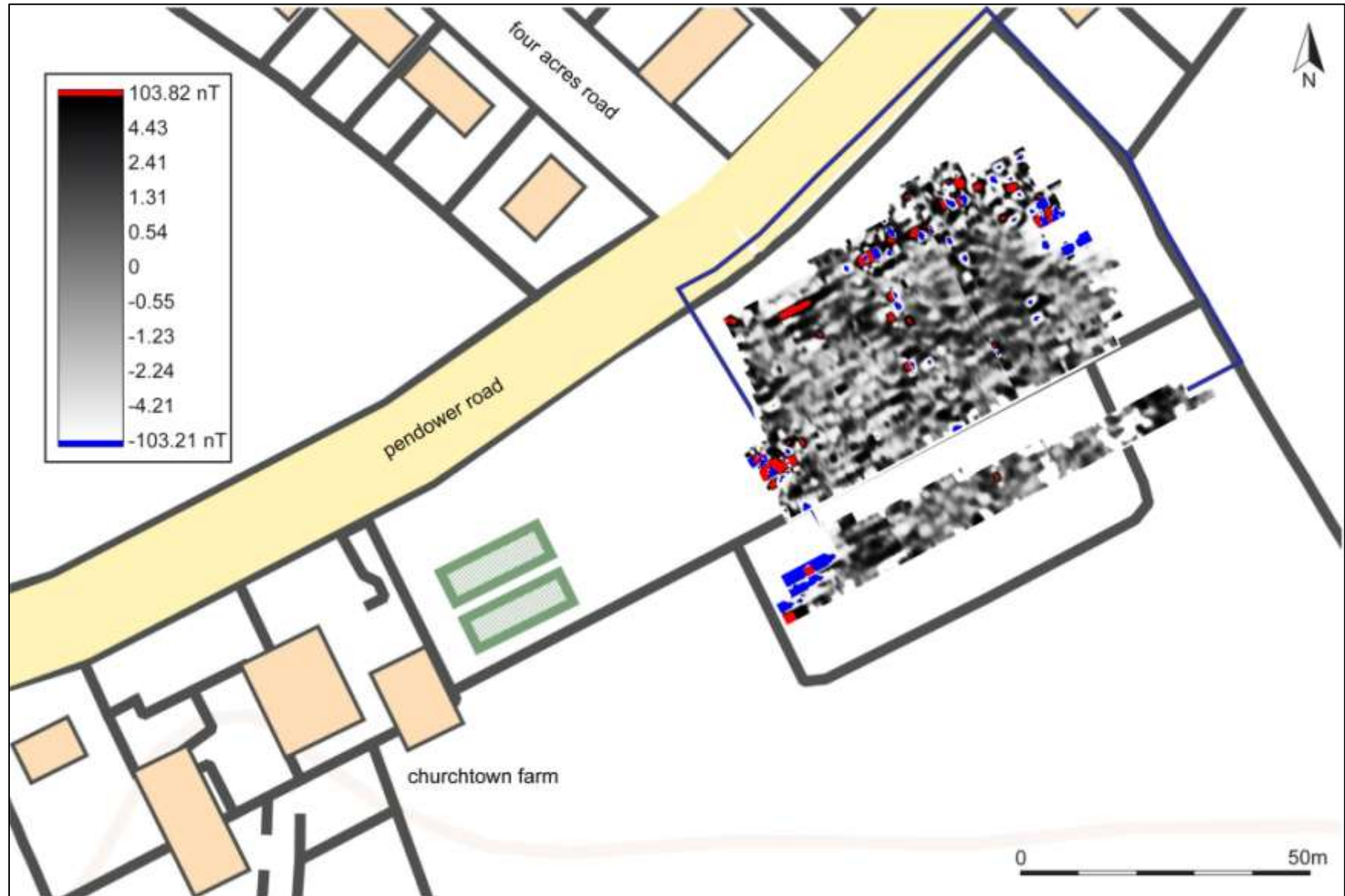


FIGURE 5: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED; GRADIATED SHADING.



FIGURE 6: RED-BLUE-GREEN2 SHADE PLOT OF GRADIOMETER SURVEY DATA; GRADIATED SHADING.



APPENDIX 2: SUPPORTING SOURCES



FIGURE 7: EXTRACT FROM THE 1811 SURVEYOR'S DRAFT MAP OF THE GRAMPOND AREA, C.1804; THE APPROXIMATE LOCATION OF THE SITE IS INDICATED (BL).



FIGURE 8: EXTRACT FROM THE VERYAN TITHE MAP, 1840; THE APPROXIMATE LOCATION OF THE SITE IS INDICATED (CRO).

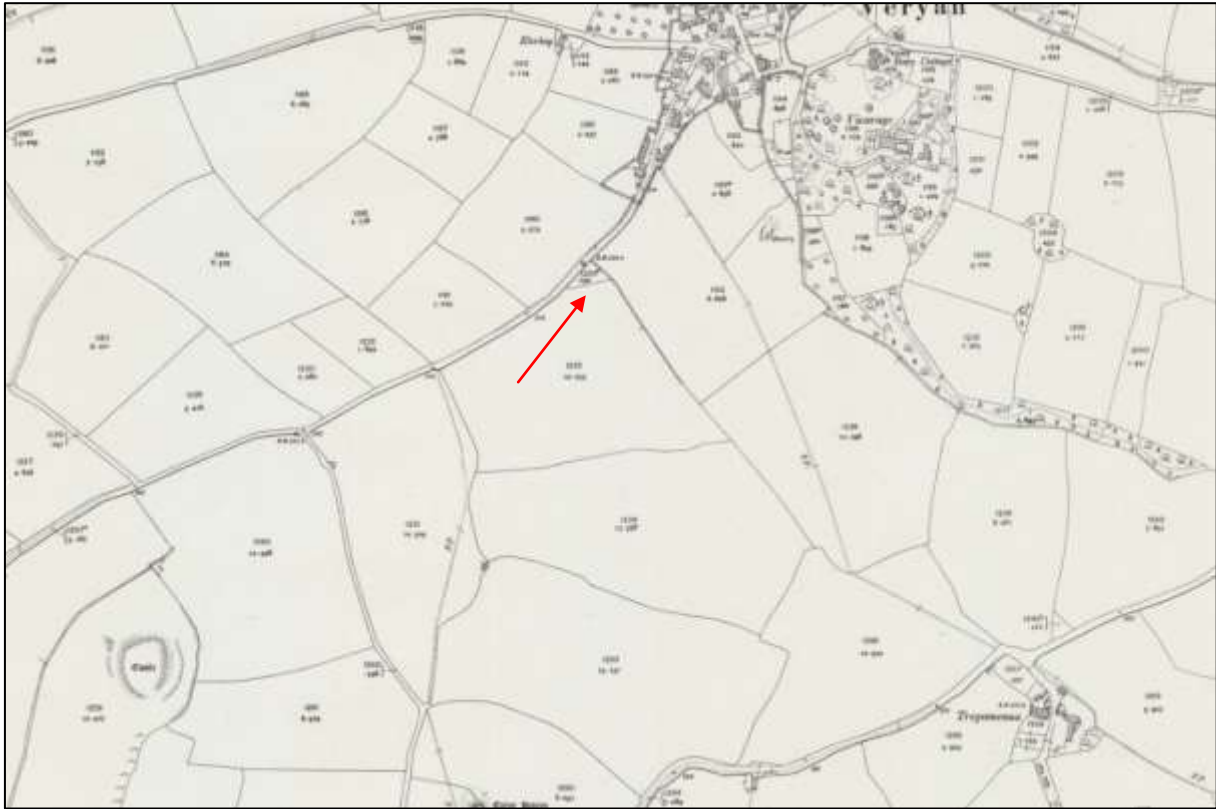


FIGURE 9: EXTRACT FROM THE ORDNANCE SURVEY 2<sup>ND</sup> EDITION, 25 INCH SERIES, PUBLISHED 1907; THE SITE IS INDICATED (CRO).



APPENDIX 3: SUPPORTING PHOTOGRAPHS



1. Site shot from south-west of the west corner of the site; viewed from the south-west (no scale).



2. Site shot from near the south corner of the site, north of the boundary between surveyed parts of the site; viewed from the south-west (no scale)



3. Site shot from near the south corner of the site, over the boundary between surveyed parts of the site, showing electric and wire fence; viewed from the west-south-west (no scale)



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