

BUDE CAMPING AND CARAVANNING CLUB

ST GENNY'S

BUDE

CORNWALL

Results of a Geophysical Survey



South West Archaeology Ltd. report no. 180130



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Bude Camping and Caravanning Club, St Genny's, Bude, Cornwall

Results of a Desk-Based Assessment, Walkover Survey & Geophysical Survey

By J. Bampton
Report Version: Final
30th January 2018

Work undertaken by SWARCH for
Charlotte Bellamy of the Environmental Dimension Partnership (The Agent)
on behalf of the Camping & Caravanning Club (The Client)

SUMMARY

South West Archaeology Ltd. was commissioned to undertake a geophysical survey at the Bude Camping and Caravanning Club, St Genny's, Bude, Cornwall. The site is an existing caravan/camp site that had been two fields that were ostensibly open ground enclosed in the post-medieval and modern periods, although the southern part of the site may have been farmed through the medieval period. Near to the site are multiple prehistoric assets including enclosures and predominantly barrows, which survive or have been truncated/destroyed to varying degrees.

The geophysical survey indicates that a significant amount of landscaping has taken place across the site, including the stripping of topsoil, levelling the ground, and the laying of new surfaces/track-ways. The geophysical survey also identified services across the site. A single anomaly, most likely a further modern service, has been flagged up as a precautionary measure, due to the level of magnetic disturbance across parts of the site.

Despite the known archaeology in the wider area, the geophysical survey does not indicate the survival/presence of significant archaeological features or deposits on the site.



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ACKNOWLEDGEMENTS

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1.0 INTRODUCTION

LOCATION:	BUDE CAMPING AND CARAVANNING CLUB, OFF THE A39
PARISH:	ST GENNY'S
COUNTY:	CORNWALL
NGR:	CENTRED ON SX 17568 94233
SWARCH REF:	GBC18

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by Charlotte Bellamy of Environmental Dimension Partnership (the Agent) on behalf of the Camping and Caravanning Club to undertake a geophysical (gradiometer) survey on a site at the Bude Camping and Caravanning Club, off the A39, St Genny's, Cornwall. This work was carried out in accordance with a Project Design (Walls 2018).

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is located on a ridge of land between the River Ottery and streams that lead to the bay of Crackington Haven, at a height of c.60m AOD. It is located across two fields; one rectangular and one triangular, directly off of the A39, c.12km south of Bude and c.12km north of Camelford (Figure 1).

The soils in this area are the slowly permeable seasonally waterlogged clayey soils of the Hallsworth 1 Association (SSEW 1983), which overlie the mudstone and siltstone of the Crackington Formation (BGS 2017).

1.3 HISTORICAL BACKGROUND

St. Genny's is located within the hundred of Lesnewth and deanery of Trigg-Major. The manor of St Genny's belonged anciently to the Treise family and in c.1800 belonged to a Sir John Morshead, who had married an heiress of that family (Lysons 1814). Historically, the larger rectangular field of the site was located in the parish of Otterham, which was in the same deanery and hundred as St Genny's. In the 14th century the manor of Otterham belonged to the Champernownes and in the 15th century passed to the Bonville family with parcels then passing to a Philip Copelstone and his wife Anne and her heirs. Parcels of the manor then went to a John Wybbery and in the 17th century a the Saltern held the manor and rectory. In 1814 the manor was held by a George Welch Owen (Lysons 1814). The site is located near to Small Hill Barton, which in 1814 was held by a Charles Chichester, having previously belonged to the French family (Lysons 1814).

The 1839 St Genny's tithe map and apportionment show the triangular field of the site as (part of Plot 132) as being part of *Trevreak*, which was owned by a Robert Chichester and occupied/farmed by a Henry Moise (or Moyse). It was called Outward Moor and under pasture. Trefreak/Trefreock (*Trevreak*) probably equates to the Domesday manor of *Trerihoc*, which was held by Waso before the conquest and was worth 5 Shillings and was held by Brenner from the Earl of Cornwall in 1086 and was worth 3 Shillings and had 3 occupying families (Williams and Martin 2002). The 1841 Otterham tithe map and apportionment show the larger rectangular field (Plot 632) as part of *Small Hill*, which was owned and occupied by Robert Chichester and Henry Moise (or Moise). It was named Skinnish Park and under arable cultivation. The large number of *tumuli* depicted on later Ordnance Survey (OS) mapping in the local landscape are alluded to in many of the field names listed on the tithe apportionments, e.g. Plot 627 on the Otterham tithe records, immediately east of the site; named

Borough Moor. The majority of other field names are prosaic; indicative of the relatively late enclosure of much of the landscape. The site has been in use as a campsite for a number of years, and there is likely to have been some disturbance as a result, particularly with the installation of services. Supporting cartographic sources can be seen in Appendix 2.

The place-name of St Genny's is derived from the dedication of the church to St Genesis (*Sanguinas/Sanwinas* in AD 1086) (Watts 2004). Otterham (*Otrham* 1086) is derived from the Old English (OE) *oter* and *hamm* meaning 'enclosed land on the river Otter' or 'river meadow' or 'river meadow where otters are' (Watts 2004). The parish is probably named for the land about the River Otter. *Small Hill* is a prosaic literal/descriptive name from the OE and Modern English (ModE) words *smæl/small* and *hyll/hill*, describing a small or narrow hill, which perfectly describes the spur of land on which the Barton sits. Trefreak is derived from the Cornish *tre* meaning 'farmstead' and a probable personal name, although the OE *hocer* meaning 'hill' or *hock* meaning hock/mallow' (a herbaceous plant), particularly the 'hill' element may apply.

1.4 ARCHAEOLOGICAL BACKGROUND

The Cornwall Council Historic Landscape Characterisation (HLC) characterises the south part of the site (the rectangular field) as within post-medieval enclosed land - '*Land enclosed in the 17th, 18th and 19th centuries, usually from land that was previously Upland Rough Ground and often medieval commons. Generally in relatively high, exposed or poorly-drained parts of the county*'; and the north part of the site (the triangular field) as within modern enclosed land - '*Mainly Anciently Enclosed Land or Post-Medieval Enclosed Land whose field systems have been substantially altered by large-scale hedge removal in the 20th century. It also includes, however, 20th century intakes from rough ground, woodland and marsh*'. In this instance the cartographic sources would imply the enclosure of rough ground, although some possible medieval field systems have been identified in the area (MCO36709 and MCO36709, to the south). Immediately west of the site the farmland is described by the HC as medieval - '*The agricultural heartland, with farming settlements documented before the 17th century AD and whose field patterns are morphologically distinct from the generally straight-sided fields of later enclosure. Either medieval or prehistoric origins*'.

The Cornwall Historic Environment Record records several heritage assets, particularly prehistoric, in close proximity to the proposed development site. Small Hill Barton itself is a Grade II Listed (1222722; MCO48324) 16th century property and Small Hill was first recorded as a settlement in AD 1180 (MCO16787). Early 18th and 19th century Grade II Listed properties are also listed to the north and south of; Rosecare Villa Farmhouse (1312340; MCO48328) and Collamoor Head/Newman Farm (1222615; MCO14059), respectively. Prehistoric assets and Scheduled Ancient Monuments near to the site include: a group of three bowl barrows (2400-1500BC) within c.120m east and south of the site (1004623; MCO3476; MCO3477; MCO3478) with additional features including a damaged barrow (MCO3480), a cropmark of an enclosure (MCO36720) and 'Headon' barrow further east (1005434); a flint scrapper find spot to the north-west of the site, just north of Small Hill Barton (MCO1350); barrows to the west and south-west of the site, both near and within the wider landscape at Cansford, three barrows (1005463) and near Tresparrett Posts, which includes two barrows a possible 'round' and earthworks (1005439, 1005460, 1005461, 1005462; MCO3772, MCO8074, MCO48329); to the north of the site barrow cemeteries including at Bickbeans (1004385) and the Beacon barrows (1004371) both near to Wainhouse Corner (e.g. MCO3411 and MCO3948); also north of the site a probable prehistoric rectangular enclosure, c.350 from the site, west of Rosecare Villa Farm (1007281; MCO22009). Geophysical surveys and excavations in the immediate area have confirmed the presence of further prehistoric features in the wider landscape beyond the protected monuments, e.g. at Collamoor Farm to the south (ECO4075) and the excavation of a demolished barrow at Small Hill Barton in 1960/61 (ECO1315; MCO3475). Illustrative cartographic sources and LiDAR imagery can be seen in Appendix 2.

1.5 METHODOLOGY

This document follows the methodology outlined in the Project Design (Walls 2018), which was drawn up in accordance with advice from Phil Copleston, Senior Development Officer, Historic Environment at Cornwall Council (SDOHE).

Any desk-based assessment aspect follows the guidance as outlined in: *Standard and Guidance for Archaeological Desk-Based Assessment* (CIfA 2014a) and *Understanding Place: historic area assessments in a planning and development context* (English Heritage 2012).

The gradiometer survey follows the guidance outlined in *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014b).

'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 leading to the formulation of a strategy to mitigate a threat to the archaeological resource.

BUDE CAMPING AND CARAVANNING CLUB, ST GENNY'S, BUDE, CORNWALL



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

2.0 GRADIOMETER SURVEY

2.1 INTRODUCTION

The purpose of this survey was to identify and record magnetic anomalies within the proposed site. While the anomalies may relate to archaeological deposits and structures, the dimensions of recorded anomalies may not directly correspond with any associated archaeological features. The following discussion attempts to clarify and characterise identified anomalies. The survey was undertaken on 25th January 2018 by Mark Edwards (Substrata) in showery conditions. The survey data was processed by Ross Dean (Substrata). An area of approximately 1.32ha was surveyed.

The survey identified a single anomaly group. This was a linear anomaly that probably equates to a modern service, although that is obscured by magnetic debris and may follow an alternative linear feature, such as a boundary or drain. Otherwise the survey indicates a significant level of shallow ground disturbance and magnetic debris associated with landscaping and possibly modern services associated with the caravan park.

2.2 SITE INSPECTION

The site was a relatively level area across two fields with a hedge bank between them lined with a farm track. The site had a circular track-way in the south field and earth banks/bunds sub-dividing the field. Modern structures with electric and water amenities were also located on the site. The site was surrounded by low Cornish hedge banks with well kept hedges.

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* (ClfA 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; DeStagger, offset in- and outbound by 25.00cm (all grids), interpolate: match X and Y doubled.

Details: 1.32ha surveyed; Max. 320.38nT, Min. -261.47nT; Standard Deviation 15.67nT, mean 0.95nT, median 0.11nT.

2.4 RESULTS

Figures 2 and 3 with the accompanying Table 1 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.

Anomaly group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Strong negative with associated positive, possible	Linear	Service or boundary	Not present on historic mapping. Responses vary up to c.-40nT and typically c.+8nT. Although most likely part of a modern service, it is obfuscated by the general magnetic debris across the site, some of which relate to modern track-ways and services associated with the camp/caravan site.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

2.5 DISCUSSION

The survey identified a single anomaly and indicated that the site was subject to at least shallow ground disturbance associated with the landscaping of the site.

Group 1 was comprised of a single linear negative with associated positive anomaly (c.-40nT and c.+8nT) aligned north-east by south-west, indicative of a modern service or drain. There is no evidence of a boundary across the site on accessed cartographic sources (see Appendix 2) and the strength of the response is indicative of a modern feature or thermoremnant debris. However, it is obscured by a frequent amount of magnetic debris from ground disturbance and more obvious modern track-ways and services and it is possible that a modern service followed an existing topographical feature, such as a bank or ditch, which in this case would have run parallel to the north-west boundary of the site and divided the field in two.

Many of the areas denoted by magnetic disturbance in Figure 3 equate to track-ways and electric cables, with possible water pipe trenches following similar lines. The majority of these areas, which form and include definable linear routes, have responses of between -50nT to -150nT and up to +200nT.

Striations aligned parallel to the south-west boundary of the site may be geological or agricultural; the southern, rectangular part of the site having been under arable cultivation and presumably ploughed in the past. However, they are most likely associated with the landscaping of the site as a caravan park and camp site, in which the ground was levelled and various bunds built up across the site. LiDAR imagery (see Appendix 2) of the site also indicates the level of topographic disturbance/landscaping having taken place across the site relative to the surrounding fields.

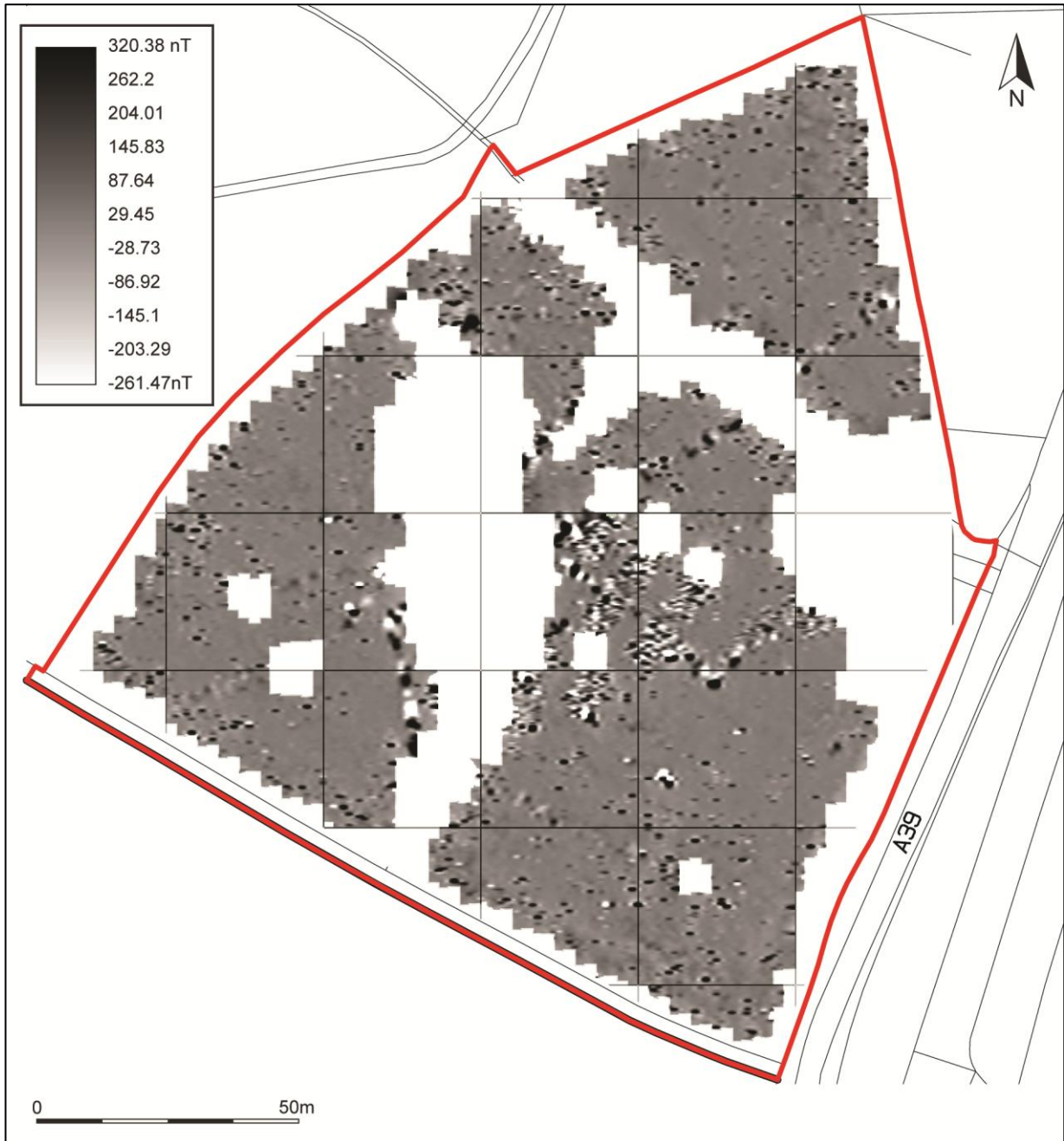


FIGURE 2: SHADE PLOT OF GRADIOMETER SURVEY DATA (MINIMAL PROCESSING).

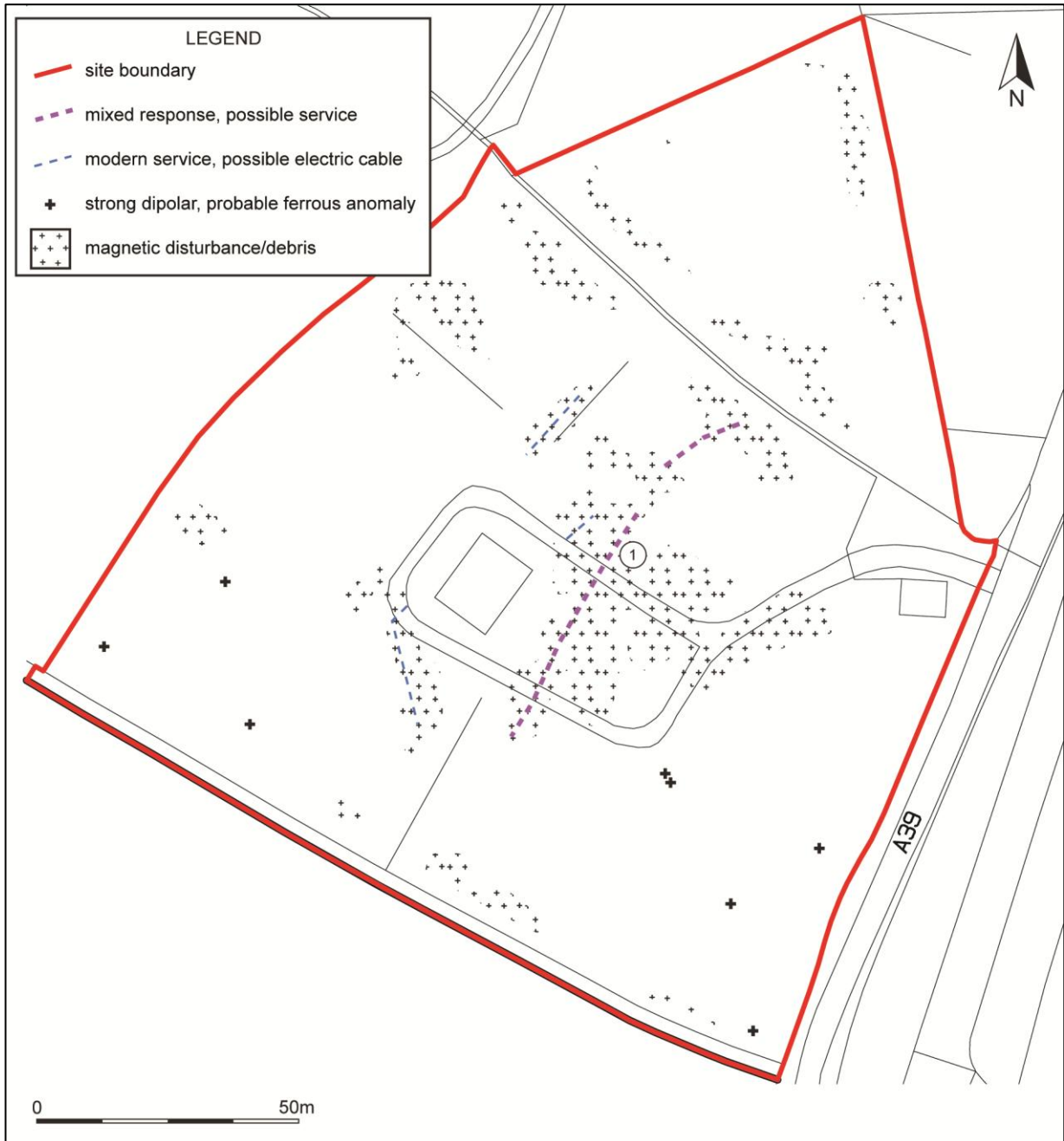


FIGURE 3: INTERPRETATION OF GRADIOMETER SURVEY DATA.

3.0 CONCLUSION

The site was across an existing caravan/camp site that had been two fields, now divided by a hedge bank and a track. The fields, particularly the northern section of the site, were ostensibly open ground that was enclosed in the post-medieval and modern periods, although the southern part of the site may have been farmed through the medieval period. Near to the site are multiple prehistoric assets including enclosures and predominantly barrows, which survive or have been truncated/destroyed to varying degrees.

The geophysical survey indicates that a significant amount of landscaping has taken place across the site, including the stripping of topsoil, levelling the ground, and laying of new surfaces/track-ways. The geophysical survey also identified services across the site. A single anomaly, most likely a further modern service, has been flagged up as a precautionary measure, due to the level of magnetic disturbance across parts of the site.

Despite the known archaeology in the wider area, the geophysical survey does not indicate the survival/presence of significant archaeological features or deposits on the site.

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Unpublished Sources:

Walls, S. 2018: *The Camping and Cravanning Club, St Genny's, Bude, Cornwall: Project Design for Geophysical Survey*. SWARCH report: GBC18PD

British Library:

Surveyor's Draft Map for the Camelford area, 1805

Cornwall Record Office:

St Genny's Tithe Map and Apportionment, 1839

Otterham Tithe Map and Apportionment 1841

Ordnance Survey 1st edition map, surveyed 1883, published 1884

Ordnance Survey 2nd edition map, surveyed 11905, published 1906

APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY

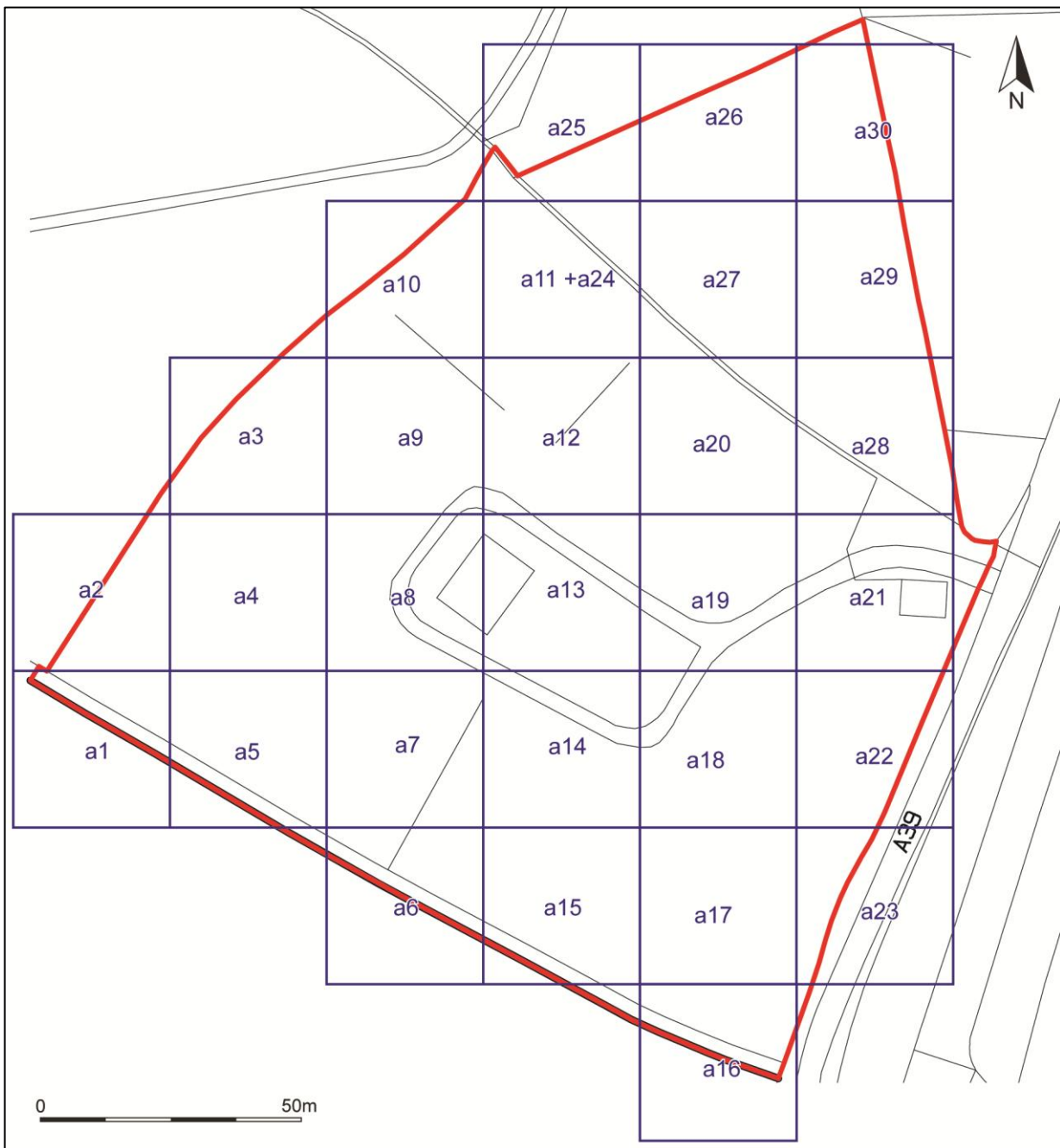


FIGURE 4: GEOPHYSICAL SURVEY GRID LOCATION, LAYOUT AND NUMBERING.

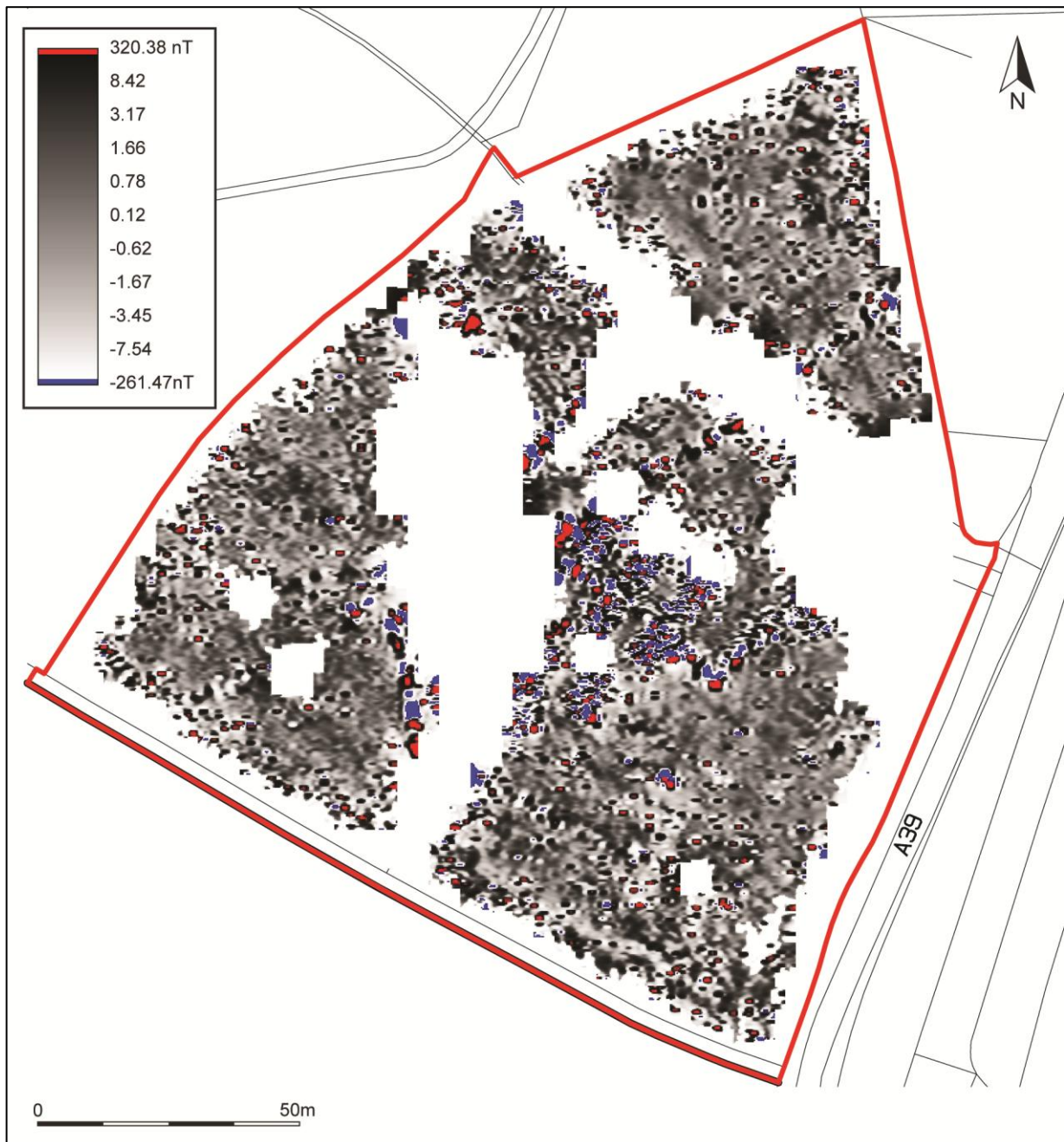


FIGURE 5: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.

APPENDIX 2: SUPPORTING CARTOGRAPHIC SOURCES AND LIDAR IMAGERY



FIGURE 6: EXTRACT FROM THE SURVEYOR'S DRAFT MAP FOR THE CAMELFORD AREA, 1805 (BL); THE SITE IS INDICATED.

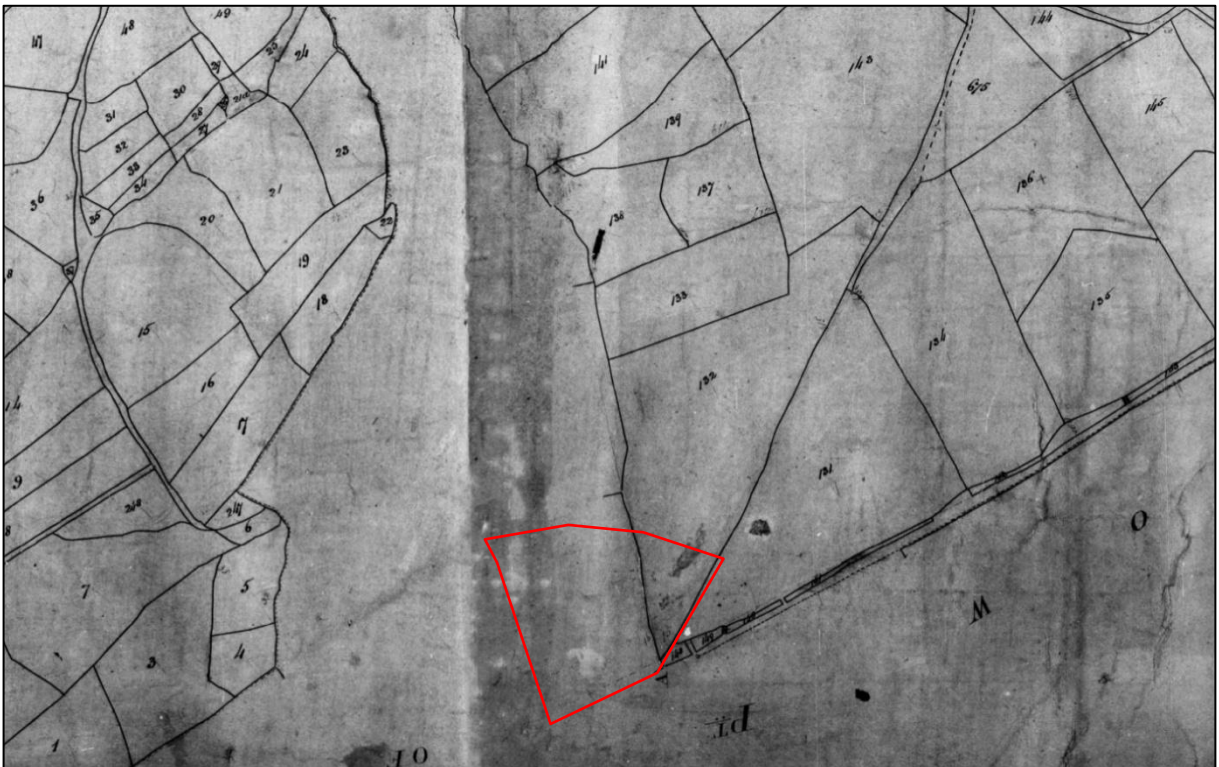


FIGURE 7: EXTRACT FROM THE ST GENNY'S TITHING MAP, 1839 (CRO); THE APPROXIMATE LOCATION OF THE SITE IS OUTLINED IN RED.

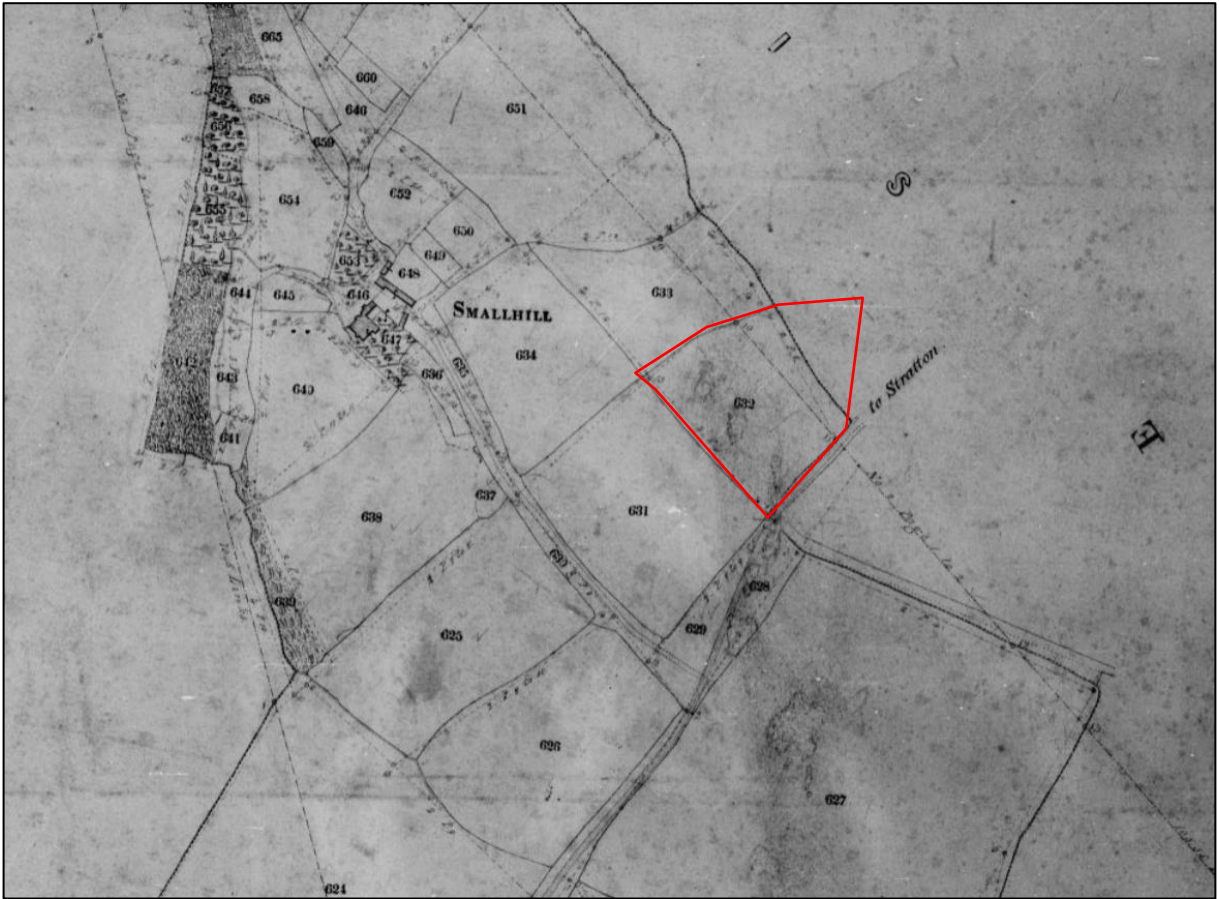


FIGURE 8: EXTRACT FROM THE OTTERHAM TITHE MAP, 1841 (CRO); THE SITE IS OUTLINED IN RED.

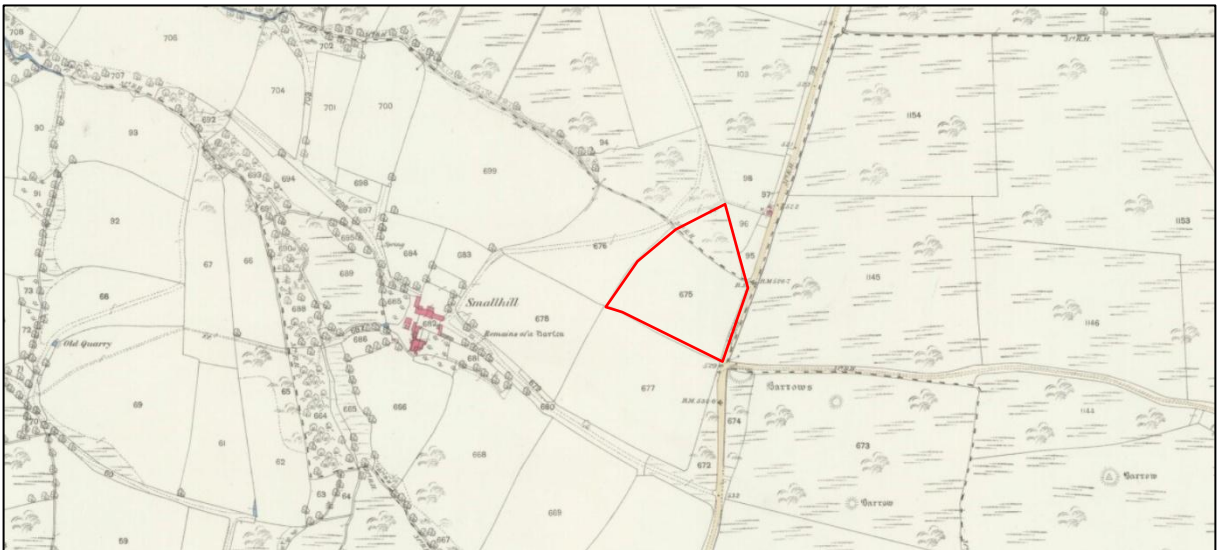


FIGURE 9: EXTRACT FROM THE ORDNANCE SURVEY 1ST EDITION MAP, SURVEYED 1883, PUBLISHED 1884 (CRO); THE SITE IS OUTLINED IN RED.



FIGURE 10: EXTRACT FROM THE ORDNANCE SURVEY 2ND EDITION MAP, SURVEYED 1905, PUBLISHED 1906 (CRO); THE SITE IS OUTLINED IN RED.

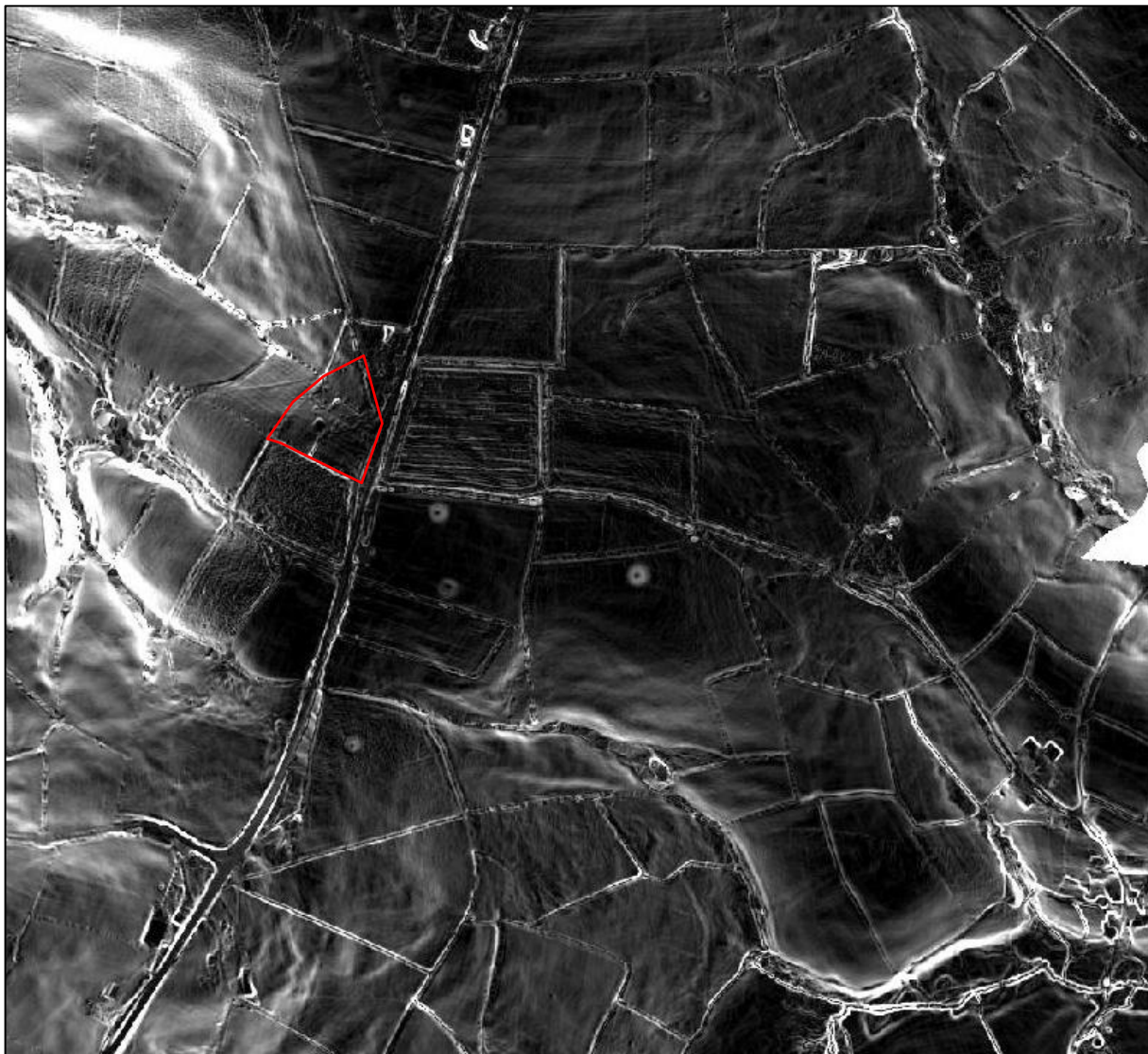


FIGURE 11: TOPOGRAPHICAL IMAGE BASED ON LIDAR DATA. THIS IS A QGIS-GENERATED IMAGE (TERRAIN ANALYSIS>SLOPE) OF TELLUS LIDAR SURVEY DATA [CONTAINS FREELY AVAILABLE LIDAR DATA SUPPLIED BY NATURAL ENVIRONMENT RESEARCH COUNCIL (CENTRE FOR ECOLOGY & HYDROLOGY; BRITISH ANTARCTIC SURVEY; BRITISH GEOLOGICAL SURVEY), ©NERC.



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