PERRAN ROUND

Rose

PERRANZABULOE

CORNWALL

Results of a Geophysical Survey



South West Archaeology Ltd. report no. 220717



Perran Round, Rose, Perranzabuloe, Cornwall Results of a Geophysical Survey

By J. Bampton, MCIfA and N. Boyd Report Version: FINAL

Draft Issued: 17th July 2022 Report Finalised: 27th July 2022

Work undertaken by SWARCH for Golden Tree Productions (The Client)

SUMMARY

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) at Perran Round, Rose, Perranzabuloe, Cornwall. The site is located across the internal area of the Scheduled Perran Round (1016168).

Assessments of the round in 1997 and 2005 suggest that although it is noted in the scheduling and HER record that St. Perran Round had an Iron Age or Romano British origin, later adapted to form a medieval playing place, it is more probable that it was constructed in the medieval period. Its use in this period and more recently would have been for the performance of Cornish language miracle plays and other local events. An 18th century plan of the 'round' shows a seating area and internal ditch and pit, the 'Devil's Spoon', used for putting on plays. 19th century mapping shows a track bisecting the site. At the time of this survey the track and 'Devil's Spoon' are still visible/present as topographic features.

The geophysical survey identified eight groups of anomalies mostly associated with extant and historical features on the site. These include a probable ditch and material within a pit composing the 'Devil's Spoon'; a former routeway through the round that may simply be represented in the ground by a slight worn track or hollow-way with potential for some compacted material but probably not any substantial construction; material from the extant bank of the round; possible deposits or features associated with the bank and access through it such as erosion, remodelling or repair; and an unaccounted for metallic object or deposit near the middle of the round that could have uses associated with the 'Devil's Spoon', such as a fire pit to light any activities or shows. Some probable natural or geological anomalies on the site could be indicative of shallow ground disturbance associated with temporary structures and use of the site for public events; however, these are not included within the identified Groups due to the extremely low probability of them being archaeological in nature.

There are no apparent features or anomalies that one could associate with potential Iron Age or prehistoric activity or occupation on the site. This could support the theory that Perran Round is a purpose built plain an gwarry/playing place for theatrical purposes of medieval or later origins; rather than an earlier Iron Age settlement feature/'round'.

Further archaeological works, such as evaluation trenching or test pitting would test the efficacy and validity of the results of the geophysical survey and aid to confirm the presence or absence of any archaeology resource on the site.



July 2022

South West Archaeology Ltd. shall retain the copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved, excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project. The views and recommendations expressed in this report are those of South West Archaeology Ltd. and are presented in good faith on the basis of professional judgement and on information available at the time of production.

CONTENTS

SUMMA	IRY	2			
CONTEN	ITS	3			
LIST OF	FIGURES	3			
LIST OF	TABLES	3			
LIST OF	APPENDICES	3			
ACKNO	NLEDGEMENTS	4			
PROJEC	T CREDITS	4			
1.0	INTRODUCTION	5			
1.1	Project Background	5			
1.2	TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND	5			
1.3	HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	5			
1.4	METHODOLOGY	8			
2.0	GEOPHYSICAL SURVEY	9			
2.1	Introduction	9			
2.2	SITE INSPECTION	9			
2.3	METHODOLOGY	9			
2.4	RESULTS	10			
2.5	DISCUSSION	11			
3.0 CONCLUSION		16			
4.0	BIBLIOGRAPHY & REFERENCES	17			
COVER PLATE:	UKES Aerial photo Perran Round; viewed from above, orientated NNW to the top of the image (source: KK – C	 16			
DJI_0031).	TEMPLE THE TOTAL THE WINDOWS OF THE				
FIGURE 1: SITE	LOCATION (THE SITE IS INDICATED).	8			
FIGURE 2: GRE	YSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.	13			
FIGURE 3: INTE	ERPRETATION OF GRADIOMETER SURVEY DATA.	14			
FIGURE 4: RES	ULTS OF THE GEOPHYSICAL SURVEY OVERLAID ON APRIL 2021 AERIAL PHOTO.	15			
FIGURE 5: GEO	PHYSICAL SURVEY GRID LOCATION AND NUMBERING.	18			
	-GREY-BLUE SCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.	19			
	-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIPPED TO 1SD, GRADIATED SHADING.	20			
	Y OF WILLIAM BORLASE'S PLAN OF THE ROUND FROM THE 18 TH CENTURY (SOURCE: KK EN/2021 & PRESTON-JONES	21			
	RACT OF THE C.1810 SURVEYOR'S DRAFT MAP, SHOWING PERRAN ROUND BISECTED BY A ROAD/TRACK.	22			
	TRACT FROM THE C.1841 TITHE MAP SHOWING PERRAN ROUND (KK).	22			
	TRACT FROM THE 1880 ORDNANCE SURVEY (OS) 1 ST EDITION, 25 INCH MAP SERIES (KK).	23			
	TRACT FROM THE $1907 \text{ OS } 2^{\text{ND}}$ Edition, 25 inch map series; showing little change from the 1^{ST} Edition. IE LiDAR for the site (source: lidarfinder.com).	23 24			
FIGURE 13. In	E LIDAN FOR THE SITE (SOURCE: LIDARFINDER.COM).	24			
LIST OF TAE	BLES				
TABLE 1: INTER	RPRETATION OF GRADIOMETER SURVEY DATA.	11			
LIST OF APE	PENDICES				
APPENDIX 1: A	DDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY	18			
APPENDIX 2: SUPPORTING HISTORICAL SOURCES					
APPENDIX 3: S	Appendix 2: Supporting Historical Sources Appendix 3: Supporting Photographs				

ACKNOWLEDGEMENTS

GOLDEN TREE PRODUCTIONS (THE CLIENT)
CORNWALL COUNCIL
KRESEN KERNOW

PROJECT CREDITS

PROJECT DIRECTOR: DR. SAMUEL WALLS, MCIFA PROJECT MANAGER: JOE BAMPTON, MCIFA FIELDWORK: JOE BAMPTON, MCIFA

REPORT: JOE BAMPTON, MCIFA; NATALIE BOYD

GRAPHICS: JOE BAMPTON, MCIFA EDITING: DR. SAMUEL WALLS, MCIFA

1.0 Introduction

LOCATION: PERRAN ROUND, ROSE
PARISH: PERRANZABULOE
COUNTY: CORNWALL

CENTROID NGR: SW 77891 54476

SAM REF: 1016168 SWARCH REF: PPRG22

OASIS REF: SOUTHWES1-507017

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by Golden Tree Productions (The Client) to undertake a geophysical survey at Perran Round, Rose, Perranzabuloe, Cornwall. This work was undertaken in accordance with best practice and ClfA guidance and in line with a WSI (Boyd 2022) and Section 42 Licence granted by Historic England on 30th May 2022 (Case no. SL00234314).

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is a 'round', on the south-eastern edge of the village of Rose, just north of the B3285 and c.2.3km east of the coast at Perranporth and Perran Sands Beach (see Figure 1). The 'round' is on a relatively level plateaux/ridge between Goonhavern and the coast with some steeper valleys at a distance towards the north-east and south-west. A small road/track runs along the south-west edge of the 'round' with properties to the south-west of the site and extending north-west towards the bulk of the village. The general surrounding landscape is agricultural with fields immediately north and east of the site. The 'round' that defines the site includes a large circular outer ditch and an internal bank with a relatively flat central area under short grass with internal features.

The soils of the site are the well-drained fine loamy over slate or slatestone rubble of the Denbigh 2 Association (SSEW 1983), which overlie the sedimentary mudstone and siltstone of the Trendrean Mudstone Formation (BGS 2022).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Perran Round, or St. Piran's Round, is a Scheduled Monument; the Listing text reading as follows:

Reasons for Designation

Rounds are small embanked enclosures, one of a range of settlement types dating to between the later Iron Age and the early post-Roman period. Usually circular or oval, they have a single earth and rubble bank and an outer ditch, with one entrance breaking the circuit. Excavations have produced drystone supporting walls within the bank, paved or cobbled entrance ways, post built gate structures, and remains of timber, turf or stone built houses of oval or rectangular plan, often set around the inner edge of the enclosing bank. Other evidence includes hearths, drains, gullies, pits and rubbish middens. Evidence for industrial activities has been recovered from some sites, including small scale metal working and, among the domestic debris, items traded from distant sources. Some rounds are associated with secondary enclosures, either abutting the round as an annexe or forming an additional enclosure. Rounds are viewed primarily as agricultural settlements, the equivalents of farming hamlets. They were replaced by unenclosed settlement types by the 7th century AD. Over 750 rounds are recorded in the British Isles, occurring in areas bordering the Irish Seas, but confined in England to south west Devon and especially Cornwall, where many more examples may await discovery. Most recorded examples are sited on hillslopes and spurs. Rounds are important as one of the major sources of information on settlement and social organisation of

the Iron Age and Roman periods in south west England. Consequently, sites with significant surviving remains will normally be considered to be of national importance.

St Piran's Round is a well preserved example of its class and will retain archaeological evidence for the monument's construction, the lives of its inhabitants, and the landscape in which they lived. The monument also exhibits features of medieval date resulting from its use as a Plain an Gwarry. Although many parishes in medieval Cornwall are believed to have had Plain and Gwarry, few survive. The example of St Piran's Round is especially unusual in that many of its original features remain visible and correspond to those shown on an 18th century plan.

Details

The monument, known as St Piran's Round, includes a circular defended late prehistoric enclosure, or round, with a surviving bank and wide outer ditch located about 1.5km behind the coastal sand dunes east of Perranzabuloe; it was later adapted for use as a Plain an Gwarry, a `playing place' or amphitheatre for the performance of medieval mystery or miracle plays. The interior of the enclosure is about 45m in diameter and it is defended by a single earthen rampart surviving 3m high around the entire circuit, except where entranceways occur, and a ditch 2.5m deep and 3m wide. The outer near vertical scarp of the rampart forms the inner face of the ditch which is continuous around the rampart except for the causewayed southern entrance where the ditch terminates either side of a 4.5m wide entrance gap. The earthworks comprising the monument appear to have been modified, probably in medieval times, for the use of the site as a Plain an Gwarry. Consequently, the rampart is flat topped with a walkway 2.5m wide, probably to allow access to the seating which would once have been supported on the bank. Other interior features comprise a trench and connecting hollow pit on the north east side of the arena known as the `devil's spoon'. This was designed to help with dramatic effects during the play, for example representing hell, form which the devil could appear at appropriate moments. A secondary entranceway, opposite to the original causewayed south entrance, was cut at some time in antiquity, possibly for the cart track which ran through the site after it ceased to function as a Plain an Gwarry. Excluded from the scheduling are all fencing, iron posts, and stanchions, signposts, paving stones and the mock wooden gateway facade at the southern entrance; the ground beneath all these features is however included.

The round was subject to assessment by Cornwall Council in 1997 (Preston-Jones 1997) and a damage assessment by Cornwall Council's Historic Environment Service in 2005 (Cole 2005). Both reports note that although it is noted in the scheduling and HER record for Perran Round that it had an Iron Age or Romano British origin, later adapted to form a medieval playing place, or *plain an gwary*, it is more probable that it was constructed in the medieval period. Its use in this period would have been for the performance of Cornish language miracle plays, although it has had several uses in the post-medieval and modern periods, including use for political rallies. The monument has gone through periods of neglect, periods of conservation and has seen several phases of restoration. The 2005 report notes the varying condition of the monument in recent years:

Finding the work too expensive and onerous, Rose Men's Institute gave up the management of the Round in 1995. In 1996, the Cornwall Wildlife Trust undertook an ecological assessment in advance of the monument being handed onto the Cornwall Heritage Trust.

At this time, gorse and scrub were cleared from three areas: the bottom of the ditch, the outer face of bank and ditch to either side of the entrance and the top of the bank on the west. The work was carried out by the British Trust for Conservation Volunteers.

The Cornwall Heritage Trust did not maintain the site as well as had been anticipated, with the result that gorse on the banks grew back and flourished. In 2002, the lease was taken over by the St Piran Trust who, with the help of an English Heritage Management Agreement, have started to tackle the Round's management needs energetically and have carried out further scrub clearance and other works.

At the present time, the top of the bank and its inner slope are clear of large scrubby vegetation, although the outer slope of the bank is still masked by a very heavy coverage of vegetation. This includes gorse, thorn and some elder. Where the gorse has been cleared from the inner slopes of the monument, the roots remain in place and a large amount of the gorse has started to regrow.

Neither of the previous reports included provision for determining the origin of the monument or the preservation of any archaeological features or deposits.

Historical plans and maps of the site include a 1758 plan and profile by William Borlase (Kresen Kernow (KK): EN/2021). This plan shows the 'Devil's Spoon' and wooden seating constructed on the banks of the round. The c.1810 Surveyor's draft map for the area shows a road/track running through the round. By the time of the c.1841 tithe map a road/track is ostensibly developing beside the south-west side of the round along with probable recent small enclosures, and the track shown bisecting the road in c.1810 is no longer depicted. The tithe map shows that the round was contiguous with plot 3110, a large open area on the west of the round. Plot 3110 was part of the parish's commons, roads and waste - exempt from tithes and was called Tywarnhayle Common, which was owned by William Vice and occupied by John Jenkin. Plots adjacent to the site were; 214 and 395, which were part of *Tywarnhayle* and both under arable cultivation; and plot 1137, which was part of Ponslego and was under pasture. Plot 214 was called Plot by Perran Round, was owned by Stephen and Richard Davey and occupied by David Jacka. Plot 395 was called Perran Pound Field, was owned by Elizabeth Demble and occupied by Richard Kitto. Plot 1137 was called Great Croft, was owned by Nancy Opie and was occupied by Edward Penna. By the time of the late 19th and early 20th century Ordnance Survey (OS) mapping the round and its immediate fieldscape and road systems have been established, with later developments mainly consisting of agricultural and building developments on the south side of the round and modern improvements and maintenance of the round. LiDAR imagery of the site shows the banks and ditches of the round and the 'Devil's Spoon' very clearly, with features in the land surrounding the round likely related to the modern development and agricultural use of the area. No other significant features are discernable in the round on the available LiDAR imagery. Supporting cartographic and visual sources for the archaeological and historical background of the site can be seen in Appendix 2.

Cornwall's Historic Landscape Characterisation (HLC) describes the site as within an area of post-medieval enclosed land (HCO13): '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.'

Cornwall's Historic Environment Record (HER) does not include many particularly significant assets near to the site: although, medieval settlements nearby in the landscape include Hendravossan (MCO14855) and Reen (MCO16543), both recorded first in the 14th century; possible medieval ridge and furrow has been recorded from cropmarks near Budnick (MCO32869); and there is the post-medieval West Wheal Hope mine east of the site. Scheduled Ancient Monuments (SAMs) within 1km of the site (which is scheduled itself) include Bronze Age barrows to the south and west (e.g. MCO2641, MCO2642, MCO2643, MCO2863).

Modern use of the site for meetings and plays has included the installation of temporary structures on the site including seating and props. Examples of these can be seen in photographs and videos from the 1940's to 1990's (KK: corn05364, corn 03331, 792.160228042378). A local interest website for Goonhavern (Goonhavern.com) includes a large number of photos of the round including from various events and sketches of the site including one depicting the site in *c*.1862 with a horse and cart crossing the track that bisects the round.

1.4 METHODOLOGY

This work was undertaken in accordance with current best practice and CIfA guidance. Any desk-based assessment aspect of this report 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 geophysical (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).

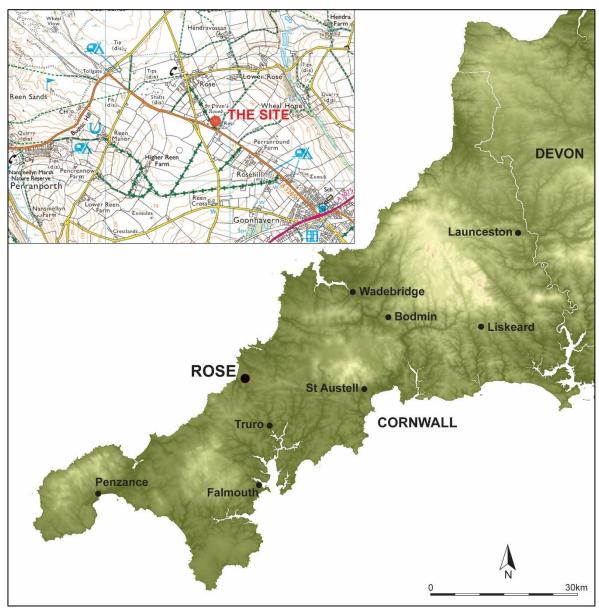


FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 GEOPHYSICAL SURVEY

2.1 Introduction

An area of c.0.13ha 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 10th of June 2022 by J. Bampton; the survey data was processed by J. Bampton.

2.2 SITE INSPECTION

The site was located across the circular level interior of Perran Round. This interior area was *c.*40m in diameter and defined by a high steep bank with access points through the bank on opposing north-west and south-east segments of the round. The south-east access had paving slabs and led from a fenced-off gravelled car park area. The site was under short, recently cut, grass. Presumable mole-hills were occasional visible on the site, particularly in the south and west of the site, and had been mown flat. Occasional rabbit burrows and surface erosion/soil-creep was also noted on/in the bank. Topographic features in the survey area included: a slight hollow way along a presumed path between the two access points to the round; a hole a couple of meters across and at least 0.5m deep was located just east of centre; and a trench/channel ran from the hole roughly east to the bank, which had ostensibly suffered some erosion adjacent to the trench/channel. 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: *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 0.125m, 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:

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 traverses b1, b2, b4, b5 out- and inbound by 0.5m, traverse b3 out- and inbound by 0.75m; reduces staggering effects within data derived from zig-zag collection method. Clip at +/-1nT; removes extreme data point values.

Details:

0.1342ha surveyed

Stats unadjusted/raw composite; Max. 98.51nT, Min. -100.00nT; Standard Deviation 10.61nT, mean -2.66nT, median -0.93nT.

Stats threshold adjusted/post processing; Max. 98.91nT, Min. -100.19nT; Standard Deviation 9.34nT, mean -0.62nT, median 0.02nT.

Stats threshold adjusted/post processing (clipped at +/-1nT); Max. 8.72nT, Min. -9.95nT; Standard Deviation 4.27nT, mean -0.33nT, median 0.02nT.

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.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Strong Positive, probable	Linear	Ditch, channel	Indicative of a cut and in-filled feature such as a ditch. Equates to an extant topographic feature on the site; the trench or 'handle' of the 'Devil's Spoon'. On the east side of the survey area, aligned approximately east-north-east by west-south-west. Ostensibly contiguous with Group 2. Response strength of <+48nT.
2	Strong Positive, probable	Linear	Ditch/channel within pit	Ostensibly contiguous with Group 1, but within the limits of a topographic feature on the site; a hole forming the 'pan' of the 'Devil's Spoon'. Response strength of <+46nT.
α	Strong positive, probable	Oval	Pit, ditch or bank material	Indicative of 2 cut and in-filled features such as pits or tree-throws, but possibly associated with a relatively moist or soily made-ground or bank material. Located at/in the north-west access to the round. Response strength of c.+37nT to +43nT.
4	Weak-moderate positive, possible	oval	Pit, ditch or bank material	Indicative of 2 cut and in-filled features such as pits or tree-throws, but possibly associated with a relatively moist or soily made-ground or bank material, or shallow ground disturbance. 1 located in the north-west access to the round; 1 located within an area of eroded bank at the east end of the Group 1 trench/'Devil's Spoon'. Response strength of between +8nT and +28nT.
5	Moderate-strong negative, probable	amorphous	Made-ground, bank material	Indicative of compact and/or stony material associated with bank construction. Six examples at the edge of the survey area and at the foot of the surrounding bank to the survey area. Response strengths of c30nT to c52nT.
6	Very weak negative, probable	Linear spread	Pathway, shallow soil over compacted material or stony/metalled surface	Possibly indicative of compacted or stony material on the route of a path, track/road across the site and corresponding to an extant topographic feature of a slight hollow-way/worn down track. Its weak response could be associated with a shallow topsoil allowing for readings within typical ranges for the underlying geology. Response strength of <c2.5nt< td=""></c2.5nt<>
7	Very strong mixed/bipolar, probable	Oval/sub- rectangular	Fe object or debris	Indicative of a buried Fe object. Comparable response to an iron man-hole cover. This may represent a capped or buried feature associated with historical uses of the site, such as theatre. Located near the middle of the site and in the line of an historical track/road this could allude to reuse or design or the presence of a temporary/semi-permanent feature such as a post-socket for a beacon, or fire pit for lighting. Possibly an earlier 'Devil's Spoon'-type feature or associated use. Response strength of <c.+ -100nt.<="" td=""></c.+>
8	Very strong mixed/bipolar, probable	Oval/sub- rectangular	Fe object or debris within a pit	Indicative of a Fe Object or debris within the limits of an extant hole on the site (part of the 'Devil's Spoon'). Response strength of between -100nT and +53nT.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

2.5 DISCUSSION

The geophysical survey identified 8 groups comprising c.15 anomalies mostly associated with extant and historical features on the site, including: the 'Devil's Spoon' (Groups 1, 2 and 8); a former routeway through the round (Group 6); the extant bank of the round (Group 5); possible deposits or features associated with the bank and access through it such as erosion, remodelling or repair (Groups 3 and 4); and an unaccounted for metallic object or deposit near the middle of the round that could have uses associated with the 'Devil's Spoon', such as a fire pit to light any activities or shows (Group 7).

The general 'noise' (inherent geological variation) of the site varied from quiet to moderately loud, between -3nT and +8nT with higher spikes of < c.+/-10nT.

Of some interest are patterns of probable geological variation on the site that could allude to shallow ground disturbance or natural features/variation on the site. These probable geological variations are shaded in light orange in Figure 3 and in the north part of the site appear to form

linear striations and in the south and east parts of the site include a curvi-linear series of discrete oval anomalies. Although probably natural, with response strengths typically from +4nT to +7nT and within the limits of probable natural variation, these anomalies could allude to natural or manmade shallow ground disturbance associated with structures or posts. These probable natural/geological anomalies have been represented to provide potential targets of future archaeological works other than those associated with historical- and extant topographic features such as the historical routeway and 'Devil's Spoon'. A relatively positive response along the edges of the Group 6 routeway anomaly is also evident, but this is likely to be a relative response within the natural geology as opposed to any genuine ditch-like feature. The strength of the Group 6 routeway is indicative of a probable worn natural hollow-way type track. It probably does not have a substantial construction/build, although may have some slight natural stone mettling or compacted material, or simply a relatively shallow overlying topsoil over natural geology.

There are no apparent features or anomalies that one could associate with potential Iron Age or prehistoric activity or occupation on the site. This could support the theory that Perran Round is a purpose built *plain an gwarry*/playing place for theatrical purposes of medieval or later origins; rather than an earlier Iron Age settlement feature/'round'.

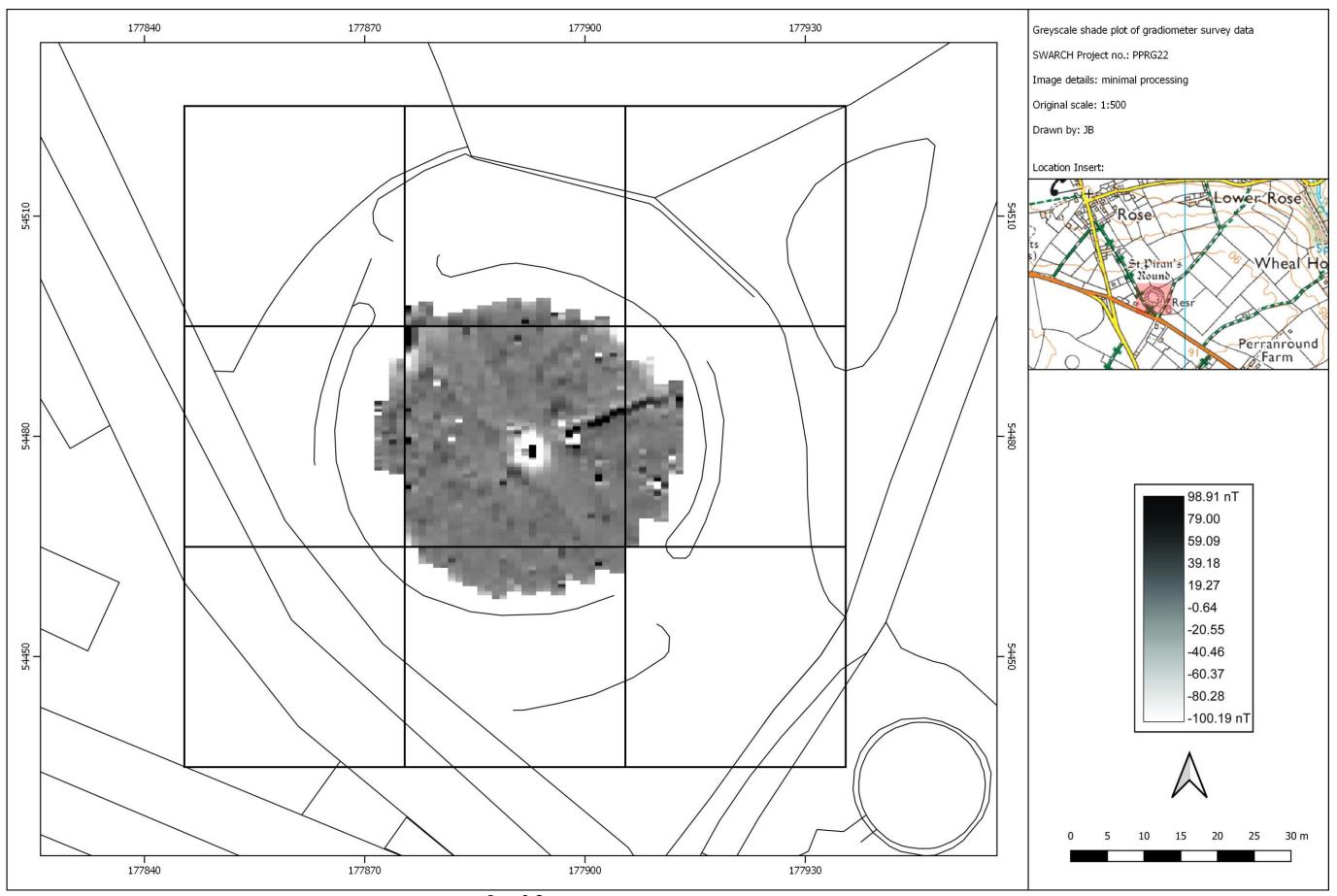


FIGURE 2: GREYSCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.

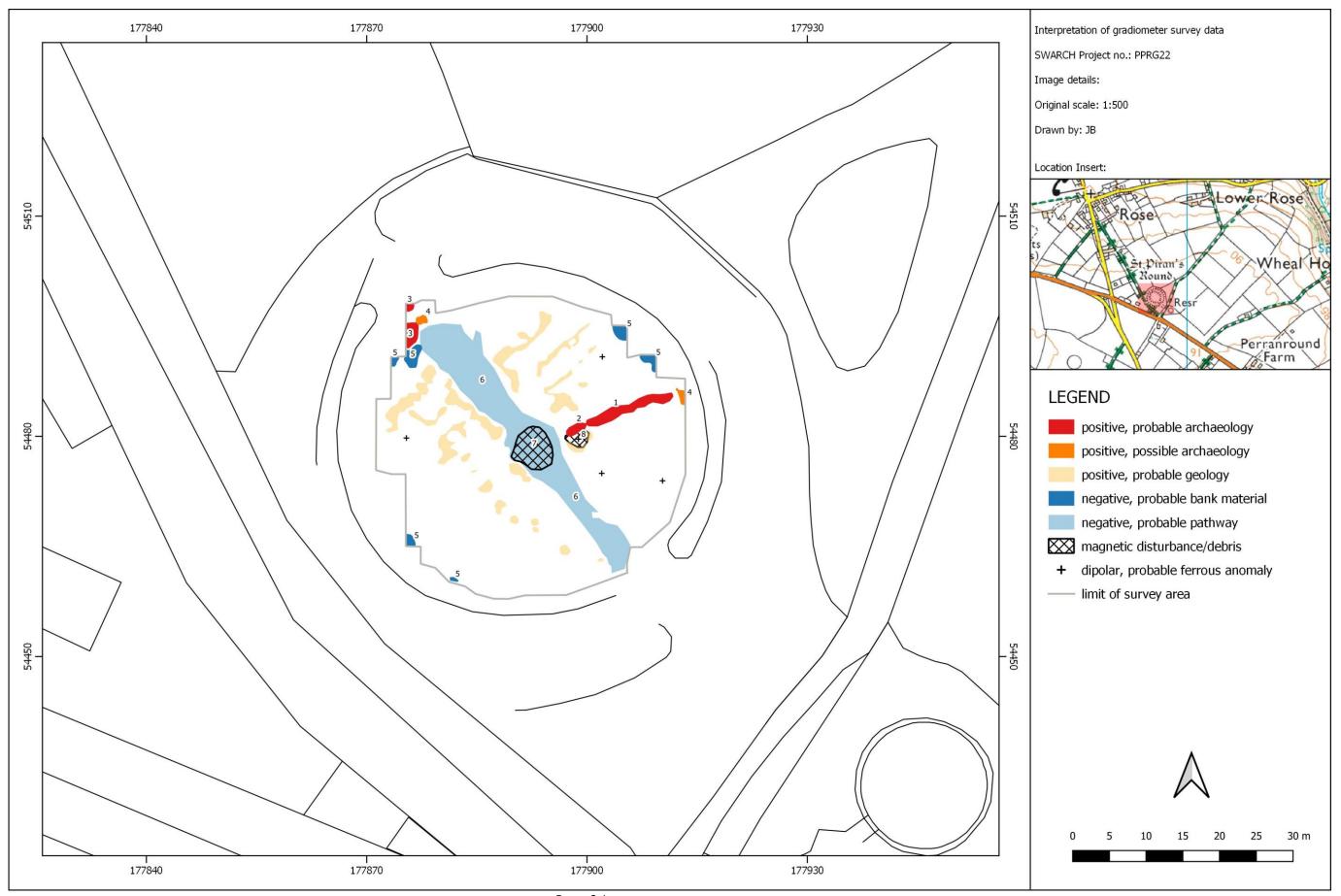


FIGURE 3: INTERPRETATION OF GRADIOMETER SURVEY DATA.

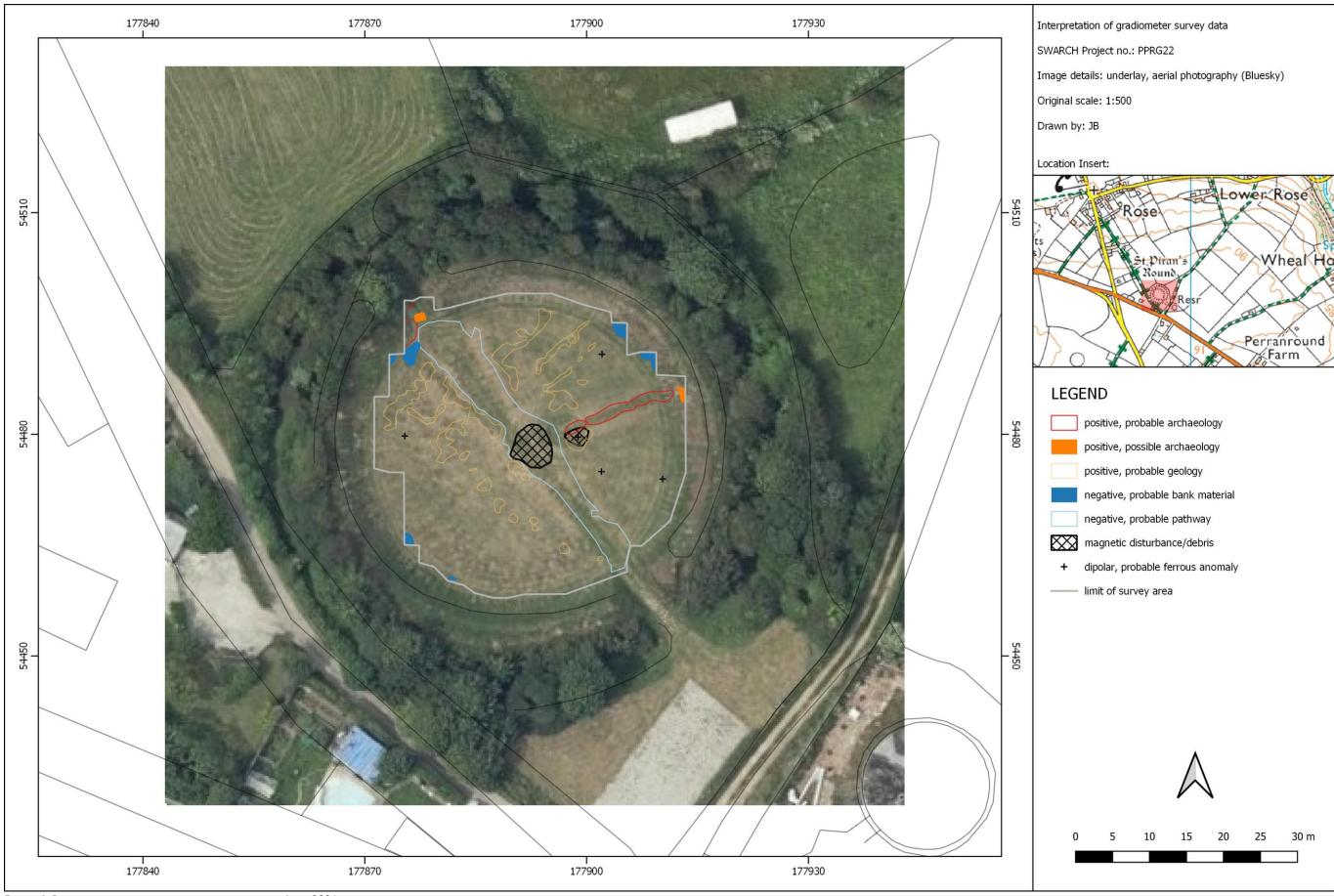


FIGURE 4: RESULTS OF THE GEOPHYSICAL SURVEY OVERLAID ON APRIL 2021 AERIAL PHOTO.

3.0 CONCLUSION

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) at Perran Round, Rose, Perranzabuloe, Cornwall. The site is located across the internal area of the Scheduled Perran Round (1016168). Perran Round was subject to assessment by Cornwall Council in 1997 and a damage assessment by Cornwall Council's Historic Environment Service in 2005. Both reports note that although it is included in the scheduling and HER record for Perran Round that it had an Iron Age or Romano British origin, later adapted to form a medieval playing place (plain an gwarry), it is more probable that it was constructed in the medieval period. Its use in this period and more recently would have been for the performance of Cornish language miracle plays, although it has had several uses in the post-medieval and modern periods, including use for political rallies. The monument has gone through periods of neglect, periods of conservation and has seen several phases of restoration. Historical plans and cartographic sources depict temporary structures having existed on the site associated with its use as an amphitheatre/playing place and a track/road bisecting the site in the early 19th century.

The geophysical survey identified eight groups of anomalies mostly associated with extant and historical features on the site. These include a probable ditch and material within a pit composing the 'Devil's Spoon' (Groups 1, 2 and 8); a former routeway through the round that may simply be represented in the ground by a slight worn track or hollow-way with potential for some compacted material but probably not any substantial construction (Group 6); material from the extant bank of the round (Group 5); possible deposits or features associated with the bank and access through it such as erosion, remodelling or repair (Groups 3 and 4); and an unaccounted for metallic object or deposit near the middle of the round that could have uses associated with the 'Devil's Spoon', such as a fire pit to light any activities or shows (Group 7). Some probable natural or geological anomalies on the site could be indicative of shallow ground disturbance associated with temporary structures and use of the site for public events; however, these are not included within the identified Groups due to the extremely low probability of them being archaeological in nature.

There are no apparent features or anomalies that one could associate with potential Iron Age or prehistoric activity or occupation on the site. This could support the theory that Perran Round is a purpose built *plain an gwarry*/playing place for theatrical purposes of medieval or later origins; rather than an earlier Iron Age settlement feature/'round'.

3.1 POTENTIAL FOR FURTHER RESEARCH/WORKS

Further archaeological works, such as evaluation trenching or test pitting would test the efficacy and validity of the results of the geophysical survey and aid to confirm the presence or absence of any archaeology resource on the site. The most pertinent two targets would be the north-eastern entrance, to determine the presence/nature of any gateway/entrance and possible structures and the relationship between the track and earthworks. The other target, would most sensibly be the Devil's Spoon, again at the point it meets the earthwork bank, to determine if it acted as a tunnel leading from the outside onto the 'stage'.

There is also potential for undertaking further geophysical surveys around the site, with the small triangular shaped field to the east and the rectangular field to the north-west, considered to be the two areas which would most likely identify any features/depoisits associated with Perran Round and its use and origins.

4.0 BIBLIOGRAPHY & REFERENCES

Published Sources:

Chartered Institute of Field Archaeologists 2014a (*revised* 2017): *Standard and Guidance for Historic Environment Desk-based Assessment*.

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

DW Consulting 2016: TerraSurveyor User Manual.

Europae Archaeologiae Consilium 2016: *EAC Guidelines for the use of geophysics in Archaeology: Questions to Ask and Points to Consider, EAC guidelines* 2.

English Heritage 2008: *Geophysical Survey in Archaeological Field Evaluation.*

Schmidt, A. 2002: *Geophysical Data in Archaeology: A Guide to Good Practice.* ADS series of Guides to Good Practice. Oxbow Books, Oxford.

Soil Survey of England and Wales 1983: Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations).

Unpublished Sources:

Preston-Jones, A. 1997: Management Work at St. Piran's Round, Perranzabuloe: Scheduled Monument No. 259. CAU Report No: 1997R061.

Cole, D. 2005: Perran Round, Perranzabuloe, Cornwall: Excavation to investigate root damage from gorse; CAU Report No. 2005R020

Boyd, N. 2022: Perran Round, Perranzabuloe, Cornwall: Written Scheme of Investigation for Geophysical Survey.

Websites:

British Geological Survey 2022: Geology of Britain Viewer.

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

Cornwall Council Historic Environment Record (HER) and HLC 2022: *Cornwall Council Interactive Map.*

https://map.cornwall.gov.uk/website/ccmap/ and http://www.heritagegateway.org.uk

Kresen Kernow (Cornwall Centre) 2022: Catalogue.

https://kresenkernow.org

LiDAR Finder 2022: LiDAR, Digital Surface Model data

https://lidarfinder.com

Local interest website 2022: various photos and images of Perran Round

http://goonhavern.com

Kresen Kernow (KK):

Surveyors draft map for the St Columb Major area, c.1810

Perranzabuloe Tithe Apportionment, c.1841

Perranzabuloe Tithe Map, c.1841

Ordnance Survey 1st edition, 25 inch map, Sheet: Cornwall XLVIII.6, surveyed 1878, published 1880

Ordnance Survey 2nd edition, 25 inch map, Sheet: Cornwall XLVIII, surveyed 1906, published 1907

Reference numbers and shelf numbers for example 20th century photo and video sources of Perran Round:

EN/2021, corn05364, corn 03331, 792.160228042378 (video of 1996 production also available on YouTube)

APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY

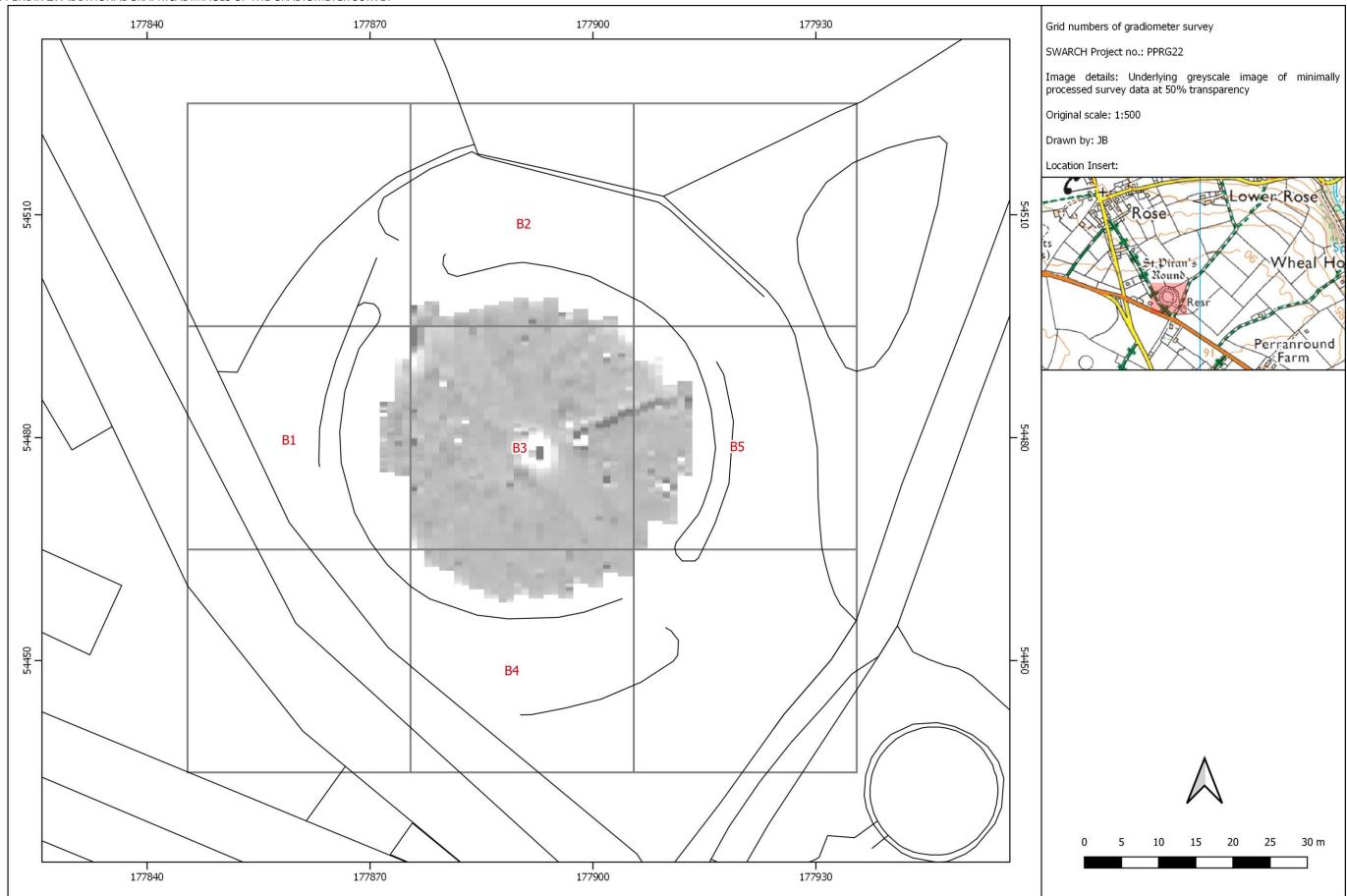


FIGURE 5: GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.

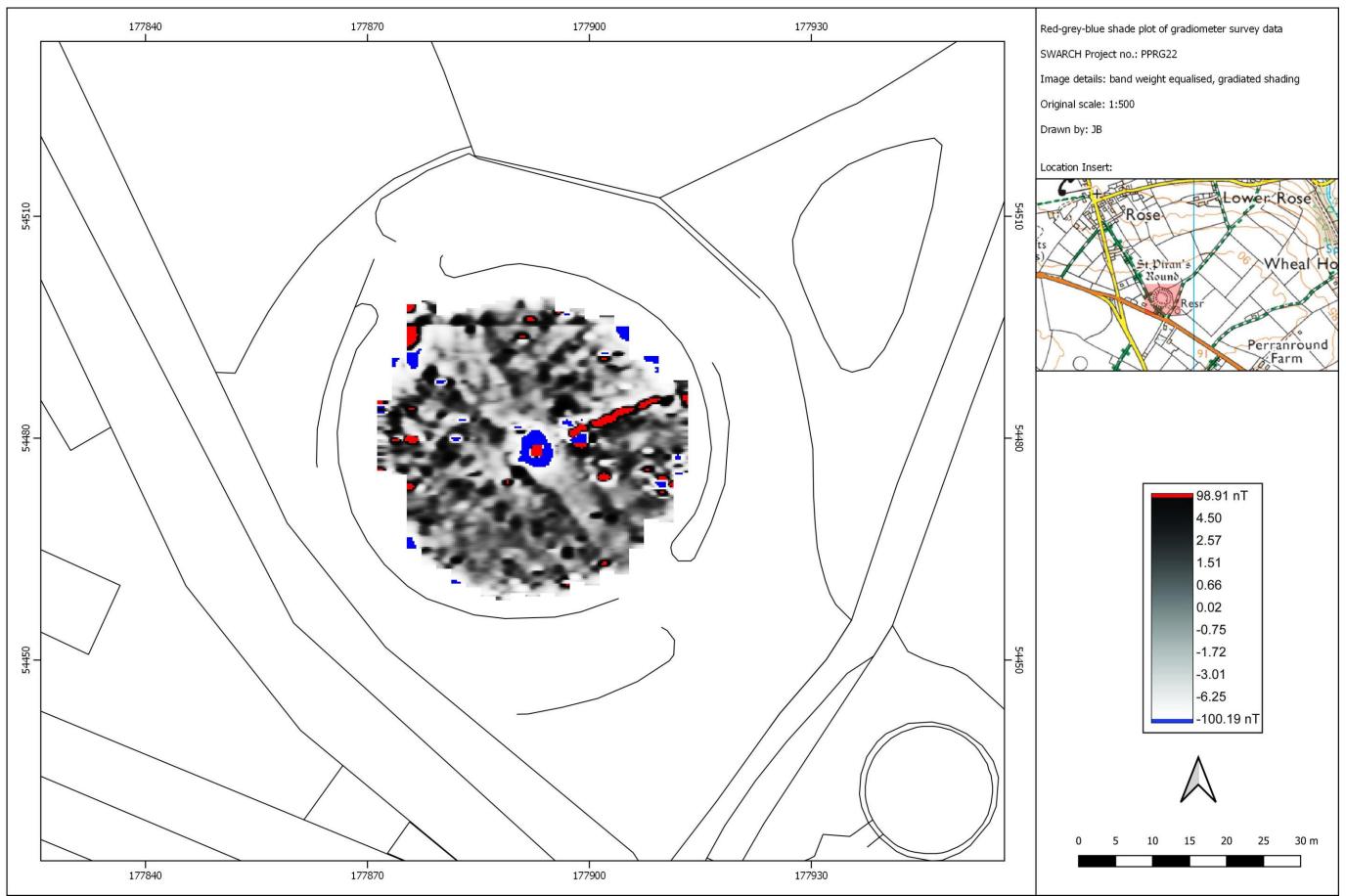


FIGURE 6: RED-GREY-BLUE SCALE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.

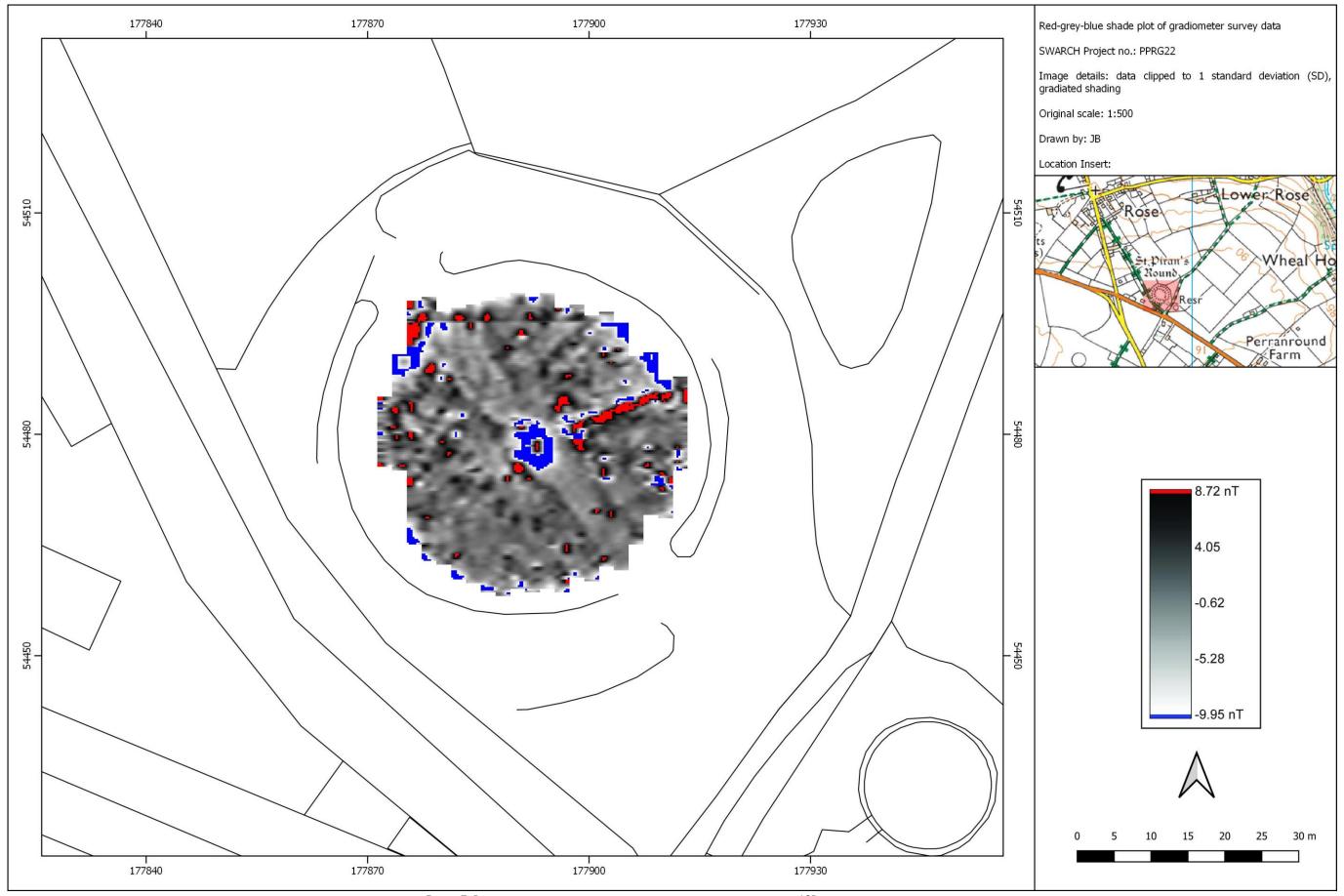


FIGURE 7: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; CLIPPED TO 1SD, GRADIATED SHADING.

APPENDIX 2: SUPPORTING HISTORICAL SOURCES

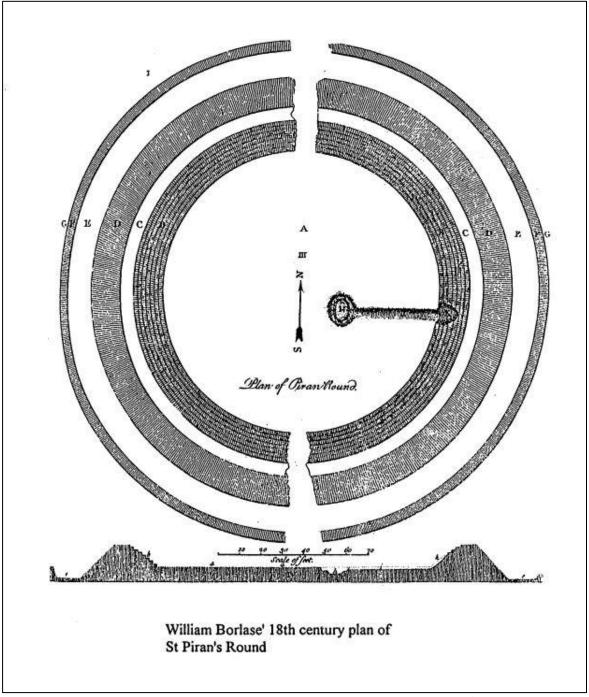


FIGURE 8: COPY OF WILLIAM BORLASE'S PLAN OF THE ROUND FROM THE 18TH CENTURY (SOURCE: KK EN/2021 & PRESTON-JONES 1997).

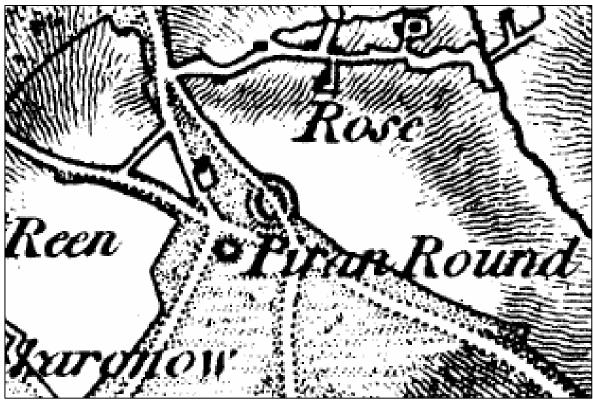


FIGURE 9: EXTRACT OF THE C.1810 SURVEYOR'S DRAFT MAP, SHOWING PERRAN ROUND BISECTED BY A ROAD/TRACK.

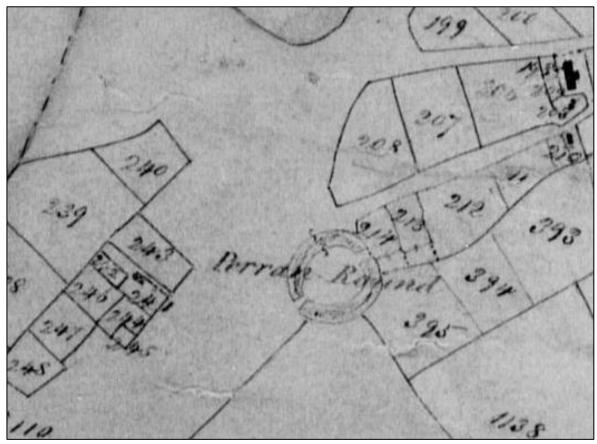


Figure 10: Extract from the c.1841 Tithe Map showing Perran Round (KK).

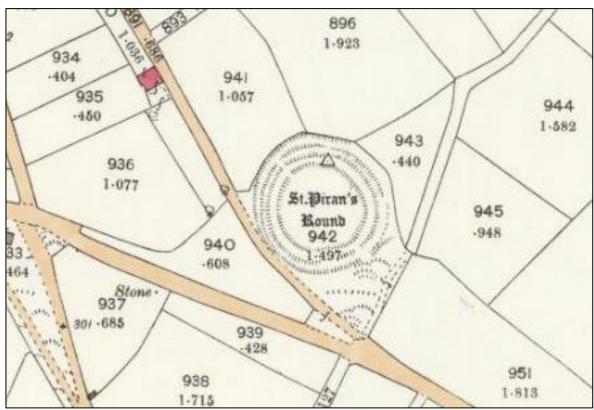


FIGURE 11: EXTRACT FROM THE 1880 ORDNANCE SURVEY (OS) 1^{ST} EDITION, 25 INCH MAP SERIES; SHOWING THE INCREASED NUMBER OF ENCLOSURES AND THE ADDITION OF ROADS/TRACKS OUTSIDE THE ROUND (KK).

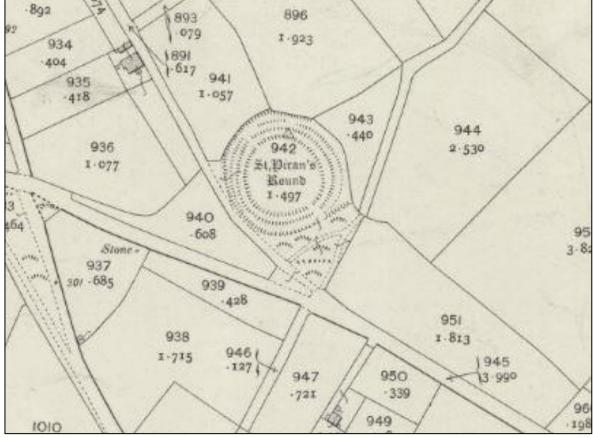


Figure 12: Extract from the 1907 OS 2^{ND} Edition, 25 inch map series; showing little change from the 1^{ST} Edition.



FIGURE 13: THE LIDAR FOR THE SITE (SOURCE: LIDARFINDER.COM).

APPENDIX 3: SUPPORTING PHOTOGRAPHS



1. CARPARK AND ACCESS TO PERRAN ROUND, SOUTH SIDE OF THE ROUND; VIEWED FROM THE SOUTH-WEST (NO SCALE).



2. SOUTH-EAST ACCESS THROUGH THE BANK TO ST PIRRAN'S ROUND; VIEWED FROM THE SOUTH-EAST (NO SCALE).



3. BANK AND DITCH BESIDE SOUTH-EAST ENTRANCE TO ROUND; VIEWED FROM THE SOUTH-WEST (NO SCALE).



4. BANK AND DITCH BESIDE SOUTH-EAST ENTRANCE TO ROUND; VIEWED FROM THE EAST (NO SCALE).



5. VIEW ALONG ROUTEWAY ACROSS THE MIDDLE OF THE ROUND; VIEWED FROM THE SOUTH-EAST (NO SCALE).



6. Interior of round; viewed from the south (no scale).



7. BANK BESIDE SOUTH-EAST ENTRANCE TO ROUND; VIEWED FROM THE SOUTH-WEST (NO SCALE).



8. VIEW BEYOND THE SOUTH-EAST ENTRANCE TO ROUND; VIEWED FROM THE NORTH-WEST (NO SCALE).



9. SOUTH-WEST HALF OF THE ROUND; VIEWED FROM THE EAST-SOUTH-EAST (NO SCALE).



10. The 'Devil's Frying Pan'; viewed from the west-south-west (no scale).



11. EAST END OF THE 'DEVIL'S FRYING PAN'; VIEWED FROM THE WEST (NO SCALE).



12. RABBIT BURROWS IN THE NORTH SECTION OF THE BANK; VIEWED FROM THE SOUTH-SOUTH-EAST (NO SCALE).



13. OVERGROWN AND BLOCKED AREA BEYOND THE NORTH-WEST ENTRANCE TO THE ROUND; VIEWED FROM THE SOUTH-EAST (NO SCALE).



14. VIEW THROUGH THE NORTH-WEST ENTRANCE TO THE ROUND; VIEWED FROM THE NORTH-WEST (NO SCALE).



15. VIEW ALONG THE ROUTEWAY ACROSS THE MIDDLE OF THE ROUND; VIEWED FROM THE NORTH-WEST (NO SCALE).



16. BANK EROSION IN THE SOUTH-WEST SEGMENT OF THE ROUND; VIEWED FROM THE NORTH-EAST (NO SCALE).



17. BANK EROSION IN THE SOUTH SEGMENT OF THE ROUND; VIEWED FROM THE EAST (NO SCALE).



THE OLD DAIRY
HACCHE LANE BUSINESS PARK
PATHFIELDS BUSINESS PARK
SOUTH MOLTON
DEVON
EX36 3LH

01769 573555 01872 223164 MAIL@SWARCH.NET