

FALMOUTH GOLF COURSE FALMOUTH CORNWALL

Results of a Geophysical Survey and
Archaeological Monitoring & Recording



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Falmouth Golf Course, Falmouth, Cornwall

Results of a Geophysical Survey and Archaeological Monitoring & Recording

For

Russell Dodge, Business Location Services Ltd.

(The Agent)

D C Hughes (Falmouth) Ltd.

(The Client)

By



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Summary

South West Archaeology Ltd. undertook a programme of archaeological monitoring and recording between November 2012 and August 2013 on land at Falmouth Golf Course, Falmouth, Cornwall. A geophysical survey was also conducted on a further area of proposed development.

No significant archaeological remains or features were identified during the geophysical survey of the monitoring and recording. The only archaeological features, aside from sections cut through the upstanding historic hedgebanks, were those associated with a known barrage balloon in Field F. A small assemblage of Bronze Age pottery was recovered from a buried soil horizon (102) in Field B and in general a medium sized assemblage of mostly post-medieval finds were recovered from the topsoil and subsoil from across the entire site.

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1.0 Introduction

Location: Falmouth Golf Course

Parish: Falmouth

County: Cornwall

NGR: SW 7959 3055

1.1 Project Background

This report presents the results of an archaeological monitoring and recording carried out by South West Archaeology Ltd. (SWARCH) on land at Falmouth Golf Course, Falmouth, Cornwall (Figures 1). The work was commissioned by Mr Russell Dodge of Business Location Services Ltd. (The Agent) on behalf of D C Hughes (Falmouth) Ltd. (The Client) in order to identify any archaeological features that might be revealed and affected by any groundworks relating to the development of two new holes on the site. This expansion of the course requires the landscaping of two tees, two greens and the removal of three sections from two earthen hedge banks.

1.2 Topographical and Geological Background

The location of the development covers five fields immediately south and west of the existing golf course; 590m west of the coast, 1.95km north from the centre of Falmouth and 2.5km north-east of Mawnan Smith. The planned holes and tees occupy the north facing slope on the hill at the south end of the site, immediately west of existing fairways; and the undulating valley to its north, immediately south-west of Pennance Farm. The south end of the site sits at a height of 60m AOD while the north aspects of the development sit between 35m and 43m AOD.

The underlying bedrock is Portscatho Formation, made up of interbedded sandstone and subequal/subordinate argillaceous rocks, formed in the Devonian Period (BGS Viewer 2013). The soils of this area are typically the shallow fine loamy soils over slate and slate rubble rock of the Denbigh 2 Association (Soil Survey of England and Wales 1983).

1.3 Historical Background

An archaeological assessment of the site was written in 2008 by Cornwall County Councils Historic Environment Service (Projects) (HEP2008:R123). From which a brief historical statement about the site has been summarised below.

Pennance was first recorded in 1208. Its name is derived from the Cornish place-name elements *pen* 'head' and *nans* 'valley'. The landscape around Pennance was made up of a number of Medieval farms including a number with the *tre* 'farmstead place-name element that was well established before AD 1000. Although an established Manor, for which a detailed estate map from 1769 exists and documentary evidence of ownership in the early 17th century, Pennance was not recorded as a specific settlement on Gascoyne's map of 1699. The 1880 and 1907 OS maps show continuity with the 1840 Tithe map.



Figure 1: Site location. The fields impacted by the new golf holes are shaded in red.

1.4 Archaeological Background

An archaeological assessment of the site was written in 2008 by Cornwall County Councils Historic Environment Service (Projects) (HEP2008:R123). This document identified the site as a surviving medieval field system (Site 18) associated with the Pennance holding, much of which has been lost by the construction of the golf course in the 20th century. The surviving part of the field system includes a number of stone-faced earthen banks, three of which will have sections removed by the development. All three of these are evident on an estate map dating to 1769. This field system, although Medieval in date, constitutes an example of '*Anciently Enclosed Land*' and therefore has a raised potential for the presence of buried archaeological remains, particularly of the prehistoric period.

Other than the historic field systems that survive on the development site, the golf course also contains sites relating to the Second World War defences of the port of Falmouth; such as an anti-aircraft battery, tank trap and associated building battery that are visible on the ground and numerous features evident in aerial photography of the site. A Roman coin hoard (HER No.18670) was discovered in the 19th century in the field immediately east of the site on Pennance Point. Finally, a group of three crop marks which may represent Bronze Age barrows (HER No.18547.01) have been identified to the west and south-west of the site.

1.5 Methodology

The schedule of work regarding the archaeological monitoring and recording was conducted in accordance with two Written Schemes of Investigation (WSI's) devised in consultation with and in accordance to a Brief supplied by Historic Environment Planning Advice Officer Dan Ratcliffe (HEPAO) of the Cornwall County Council (see Appendices 1-3).

The archaeological monitoring and recording took place over several visits between November 2012 and August 2013. All groundwork's were carried out with a 360° machine fitted with a toothless grading bucket under archaeological supervision. Topsoil was removed from all areas subject to landscaping groundwork's relating to the golf course pavilion and; tees and greens. Where necessary, such as in the locations of bunkers, and areas needing levelling, such as around holes and tees, subsoil and natural was also removed and in each case newly exposed deposits observed and investigated. Three sections of hedge bank were also removed by machine under archaeological supervision and a drawn record made of their sections. Another area in the process of pre-planning was subject to a geophysical survey. All potential archaeological deposits that were exposed were excavated by hand and recorded in accordance with the WSI and IFA guidelines.

2.0 Archaeological Monitoring and Recording

Three of the five agricultural enclosures to the south west of Pennance Farm were subject to intrusive groundworks; these fields were labelled as A, B and C (see Figure 2) and were all archaeologically monitored. Three sections of earthen hedgebank were also subject to removal during these works (numbered 1-3 in Figure 2). The field labelled D was subject to a geophysical survey, and Area E would have been, but was not suitable due to the landscaping and ferrous objects associated with the golf course. An area of the existing driving range, Area F, was subject to groundworks relating to the construction of a new pavilion and this area was stripped to the natural subsoil under supervision of the site archaeologist. The works were all carried out in accordance with the WSI's (see Appendices 1 and 2) and the methodology described above.

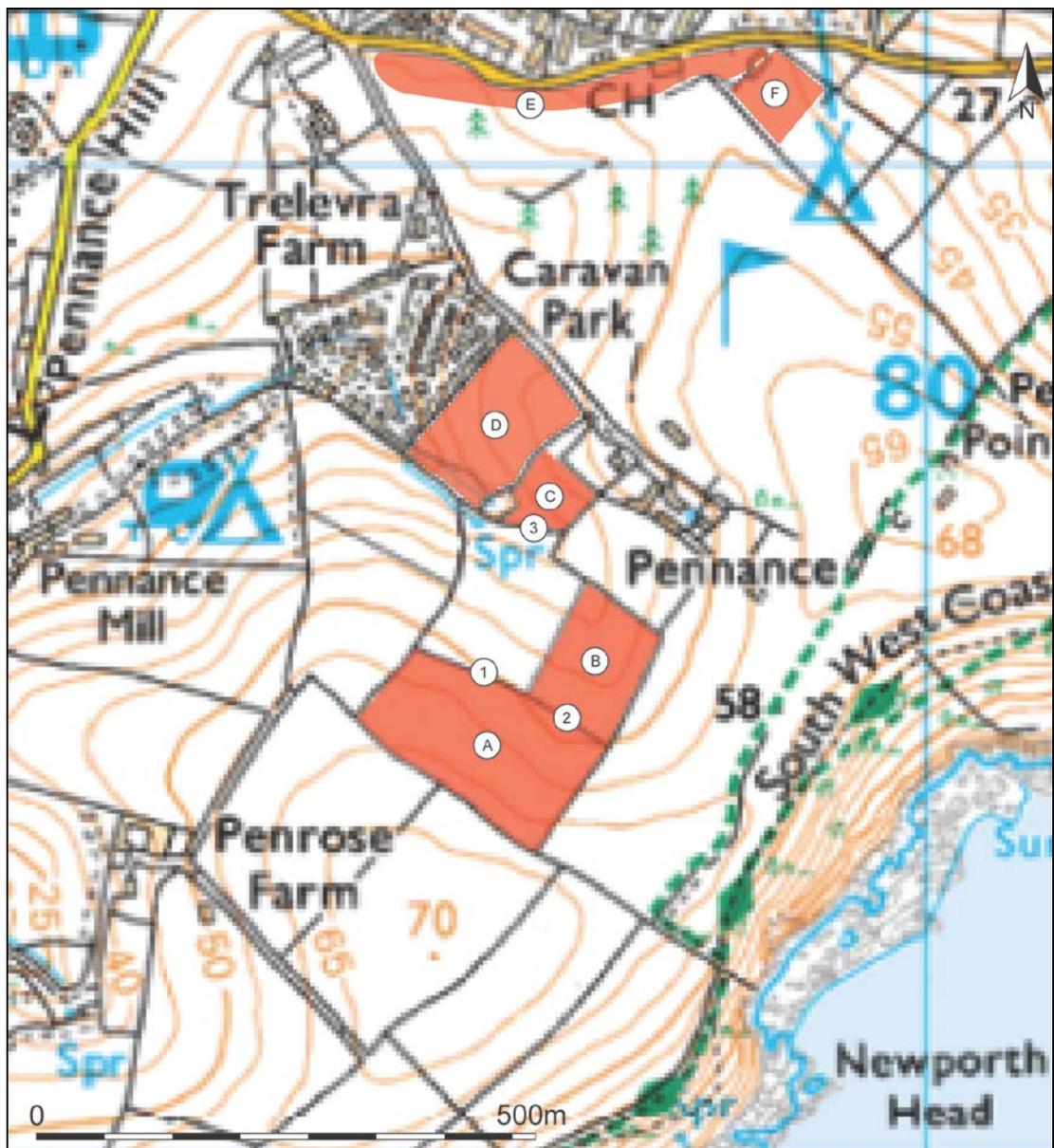


Figure 2: Fields and boundaries subject to intrusive developments shaded in red and labelled accordingly; A, B, C, F for the fields and 1, 2, 3 for the boundaries.



Figure 3: Location of areas excavated. Areas excavated to depth of natural are shaded in red.

2.1 Field A

Field A (Figures 4, 5, 6) revealed no archaeological remains or features cut into the natural. It had six areas (made up of four bunkers and two parts of a new tee) that were excavated to the depth of the natural (103). The Topsoil (100) was a slightly yellow mid-brown, soft clay-silt loam with occasional small sub-rounded stones. It was 0.15-0.21m in depth. It produced an assemblage of mostly post-medieval CBM, pottery, glass, and numerous modern golf balls (see Appendix 3). The subsoil (101) was a yellowy-orange light brown, friable-soft clay-silt with moderate-frequent small rounded and sub-rounded stones and occasional coal and charcoal inclusions. It was 0.45m thick. This subsoil deposit also produced a similar assemblage of CBM, pottery, glass, etc (see Appendix 3). The natural was a compact light pink-grey with orange banding clay with common shillet fragments.



Figure 4: Area in Field A after the initial topsoil strip, viewed from the north-west (no scale).



Figure 5: Field A post excavation of bunkers; viewed from the west (2m scale).



Figure 6: Field A post excavation of bunkers; viewed from the south-east (2m scale).

2.2 Field B

Field B (Figures 7, 8, 9) revealed no archaeological remains or features cut into the natural. It had three areas (made up of two bunkers and an area of landscaping) that were excavated to the depth of the natural (103). The Topsoil (100) was as in Field A. It produced a similarly constituted although smaller assemblage of finds (see Appendix 3). The subsoil (101) was also as in Field A. Below this subsoil in one area of excavation there appeared to be an horizon of a buried soil, this only seemed to cover a small area (c.2m x 6m) and constituted a very thin (0.04m thick) spread. However this soil horizon produced a small assemblage of Bronze Age pottery (see Appendix 3). In part of the southernmost bunker was revealed a lower subsoil deposit (102), a mid reddish orange-brown, soft silt-clay with frequent small shillet fragments and stones that produced no finds. It was either a weathered natural or relict colluvium between 0.03 and 0.08m thick, and this may have been part of the same deposit. The natural was as in Field A.



Figure 7: Area in Field B post excavation of bunkers, viewed from west (no scale).



Figure 8: Area in Field B post topsoil strip, viewed from the south-west (no scale).



Figure 9: Sample section from eastern bunker in Field B, viewed from the north-west (1m scale).

2.3 Field C

Field C (Figure 10) revealed no archaeological remains or features cut into the subsoil (101). A series of terraces were used to level the area and resulted in the northern half of the area being excavated to the depth of the natural (103) (see Figure 3), which also revealed no archaeological remains or features. The Topsoil (100) was as in Field A; although it produced notably fewer finds than the other two fields (see Appendix 3). The subsoil (101) was as in Field A and produced no finds. The natural was also as noted in Field A.



Figure 10: Working shot during topsoil strip in Field C, viewed from north (no scale).

2.4 Hedgebanks

Three sections of hedgebank (Figure 11) were also removed between the Areas A, B and C (see Figure 2 for locations of the sections).

2.4.1 Section 1

A 28m wide section of hedge was removed from the north-east hedgebank of Field A. This revealed that the hedge, which stood up to 1m high, was comprised of a c.0.4m high core of mixed yellowish-brown silt and shillet (104) overlain by a much thicker deposit (c.0.65m) of similar material (105). Deposit (105) appears likely to represent a rebuilding of the boundary most likely in the 19th century. Deposit (105) was abutted by stone facing on both its north-east {108} and south-west {109} sides. The stone facing ({108} & {109}) was comprised of roughly lain and coursed blocky slate and granite rubble, with that to the northeast generally in better condition and containing slightly more common granite stones. The stone facing and (105) were overlain by active topsoil layers (106) and (107).

2.4.2 Section 2

A further 25m wide section of hedge was removed from this same north-east hedgebank of Field A, to provide a wide gap through to Field B. The hedgebank along this portion was of the same construction as seen in Section 1, with the exception of that in places the north-east stone facing of the bank {110} had clearly been rebuilt, as it was of a different build style with herringbone style upper portion. Stone facing {110} was also seen to abut topsoil deposit (106).

2.4.3 Section 3

A 20m wide section of hedge was removed from the south-west boundary of Field C. This was the only boundary to provide extant evidence of a ditch [114] along its northeast face, perhaps not surprising given that it is located in the base of a coombe. This boundary survived to a height of c.0.7m, but only seemingly had evidence of stone facing {113} along its north-east face, although this had largely collapsed/eroded into the ditch [114]. It is also of note that there did not appear to be an earlier phase (represented by (104)) to this boundary.

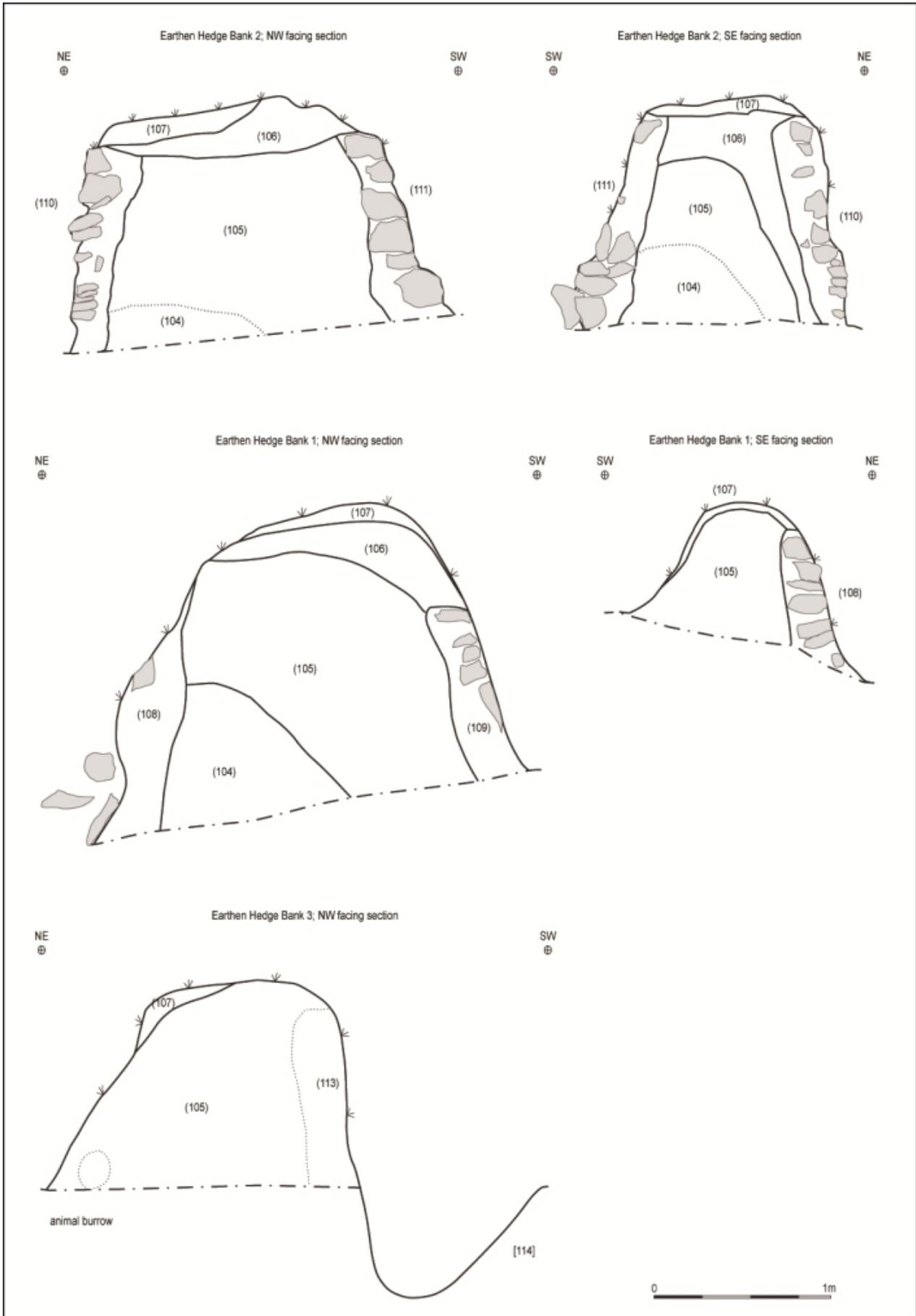


Figure 11: Sections through the hedgebanks of Fields A, B and C.

2.5 Field D

Field D (see Figure 2) was subject to a geophysical survey prior to a residential development.

This survey was designed to record any magnetic anomalies occurring within the proposed development area. The anomalies themselves cannot be regarded as actual archaeological features and the dimensions of the anomalies shown do not represent the dimensions of any associated archaeological features. The analysis presented below attempts to identify and characterise anomalies and anomaly groups that may pertain to archaeological deposits and structures.

The magnetic contrast across the survey areas was sufficient to be able to differentiate between anomalies representing possible archaeological features and background magnetic and geological responses (see Figure 12). A total of six magnetic anomaly groups were identified as pertaining to potential archaeology.

The groups of anomalies identified in the survey are numbered on the illustration below (Figure 13). Groups 1 to 4 and 6 are positive linear anomalies and are most likely field drains running into the bottom of the coombe. Group 5 is a positive irregular anomaly, which may represent a removed field boundary as it closely follows the alignment of the south-east boundary to the field. It would appear that linear 4 cuts this removed field boundary supporting a post-medieval date for this feature.

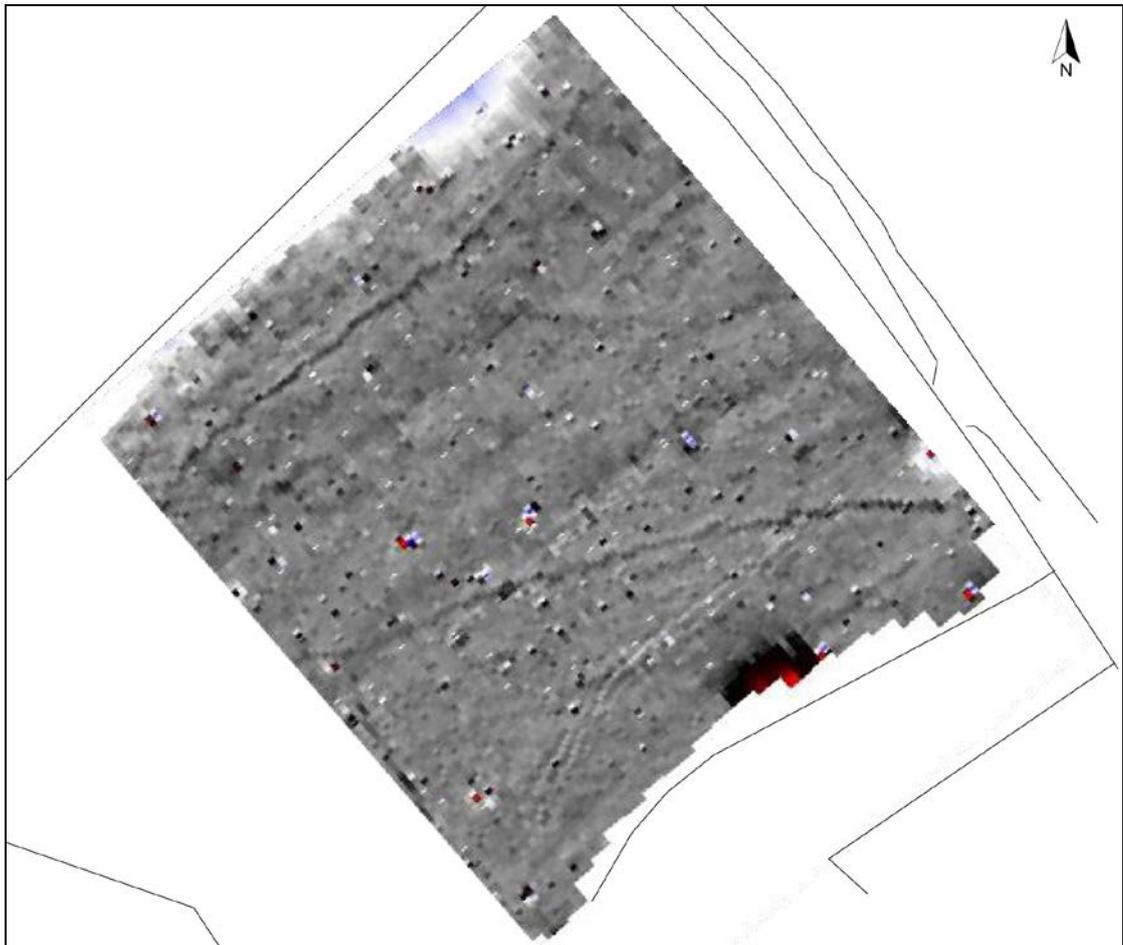


Figure 12: Colour plot of the raw data.

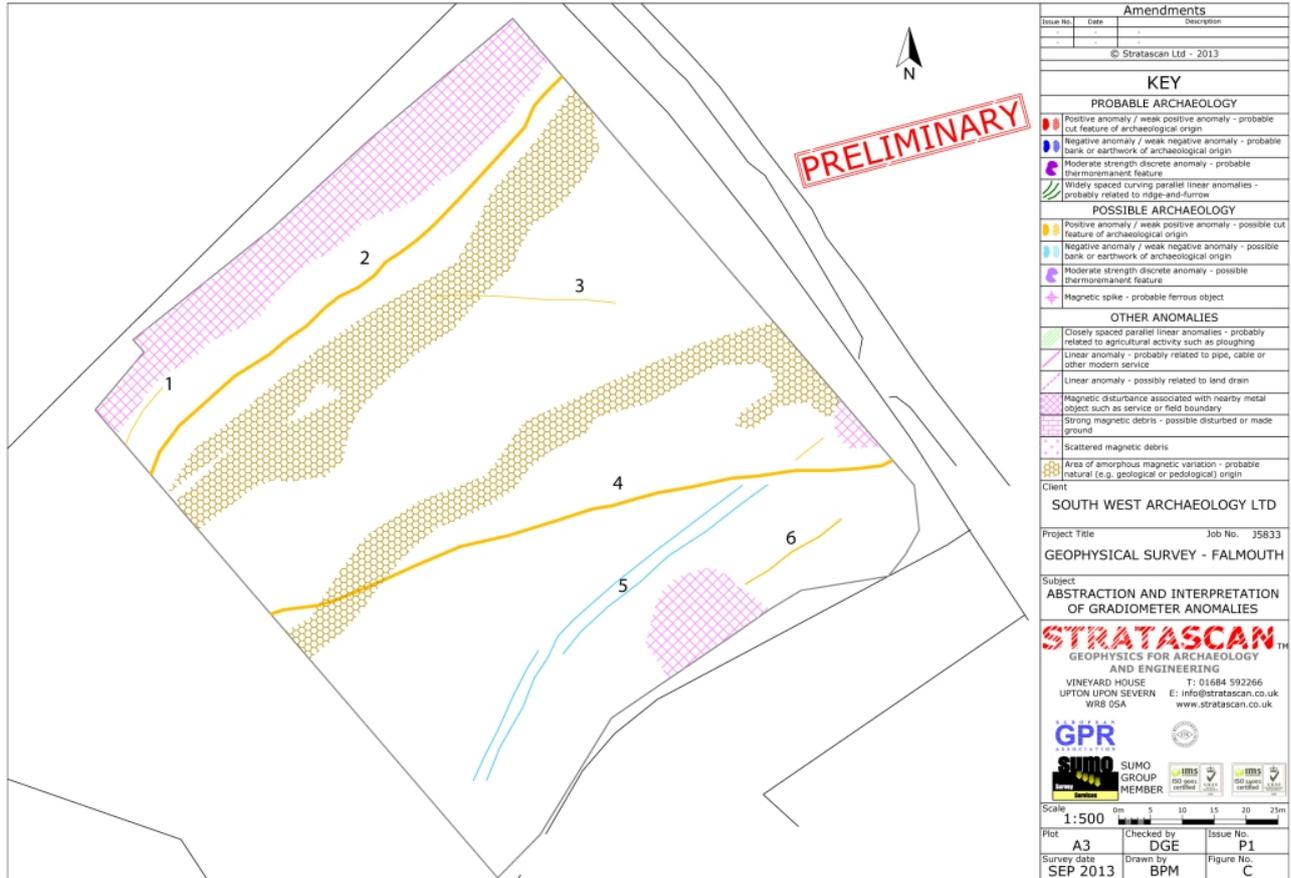


Figure 13: Abstraction and interpretation of the geophysical anomalies.

2.6 Field E

The potential for conducting a geophysical survey within Field E was assessed, and it was deemed that the modern disturbance and high amount of ferrous material would disguise any potential archaeologically related anomalies from being identified. Therefore no survey was carried out in this area.

2.7 Field F

Field F (Figure 14-16) revealed the remains of a Second World War barrage balloon anchor point cutting the subsoil (101). An area about 12 by 18m across, including the eight central pads/piles and five smaller anchor points from the east by north-east quadrant of an outer ring were exposed (Figure 14). This feature is recorded on the Cornwall County HER and identifiable on aerial photography (see Figure 15). A shallow depth of topsoil was excavated from the area of the proposed footprint for the new site pavillion to the depth of the natural (103). The topsoil produced a small amount of primarily post-medieval finds and golfing related debris (see Appendix 3). No other significant archaeological features or finds were revealed.

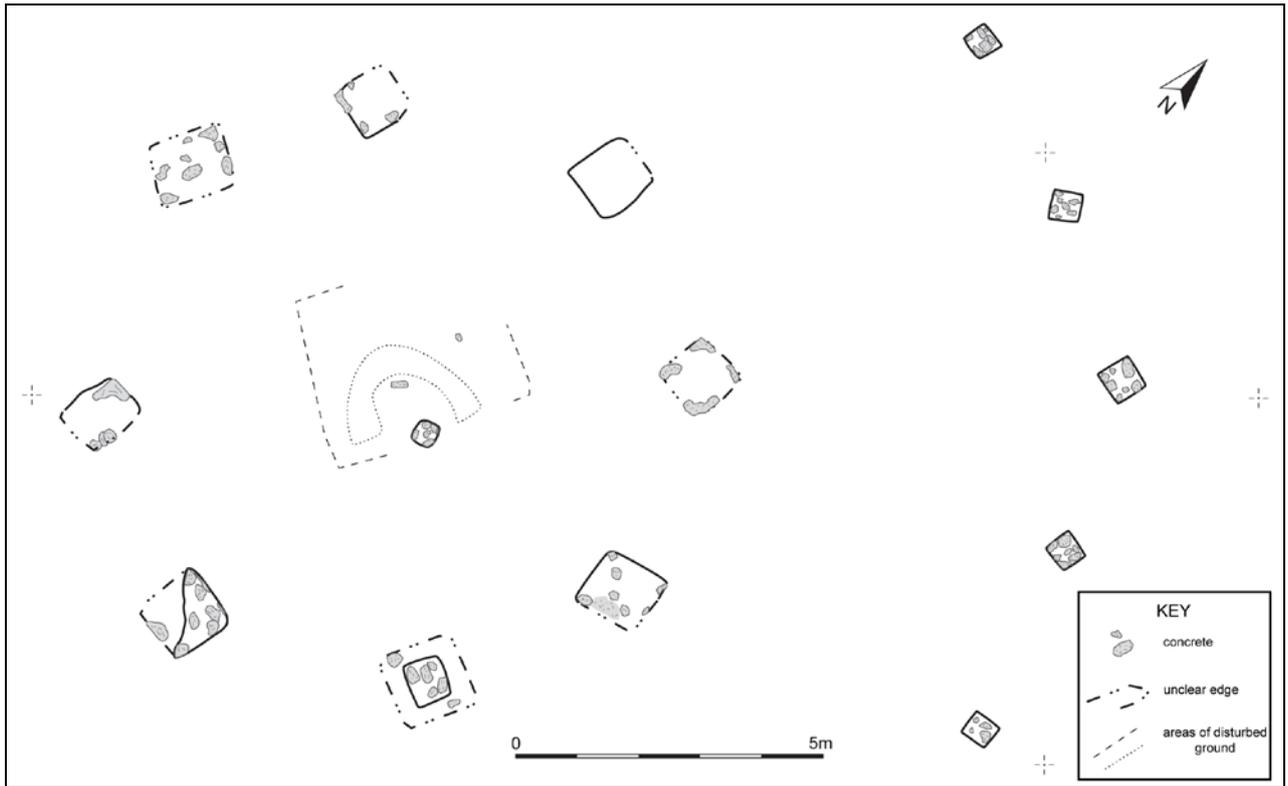


Figure 14: Detailed plan of the exposed remnants of the barrage balloon footings.



Figure 15: Copy of the 1946 aerial photograph of the area (Courtesy: HER). The barrage balloon site is marked.

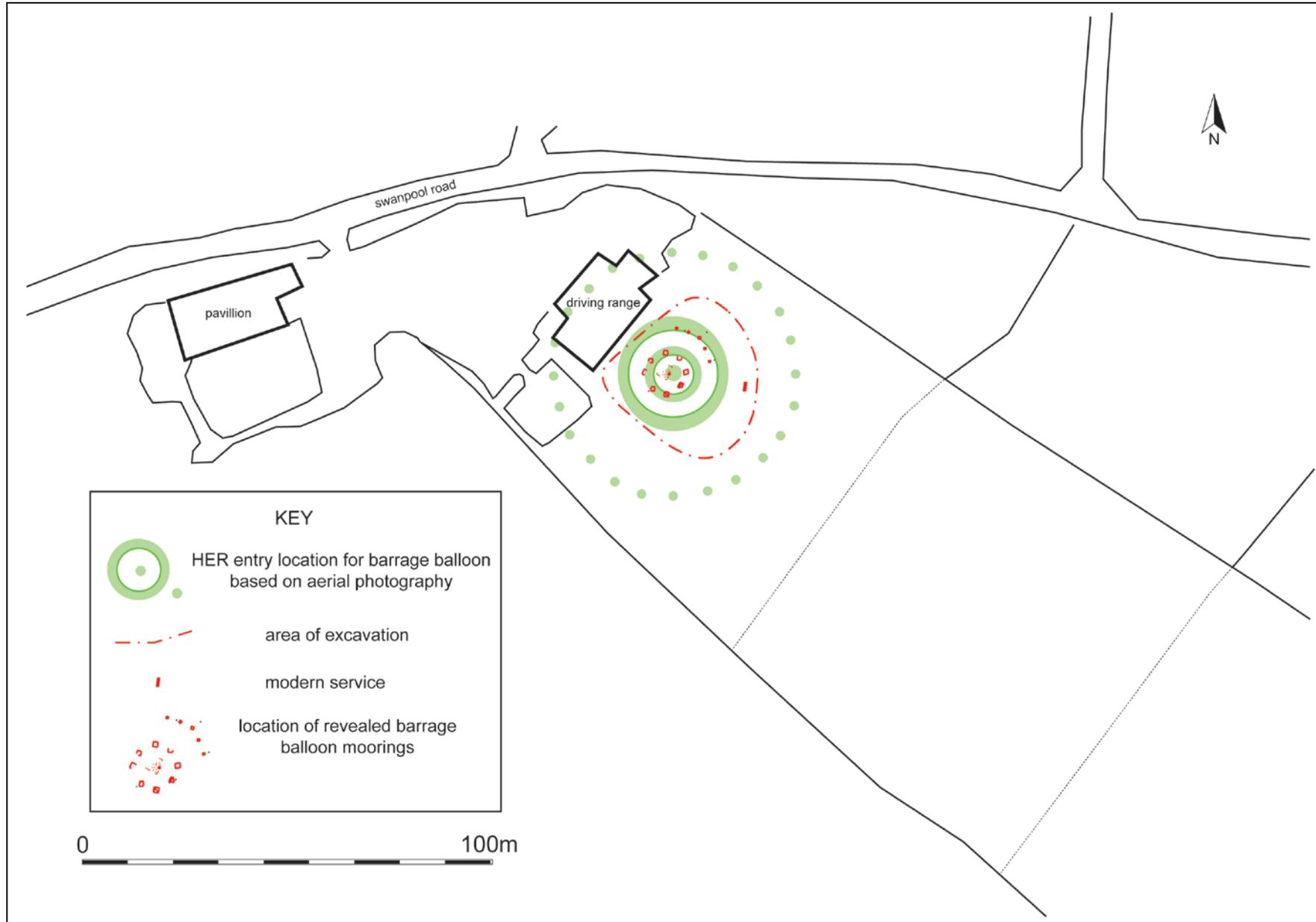


Figure 16: Location plan of the Excavated area of Area F, showing the HER located barrage balloon and the location of the identified footings.

Despite the relatively high potential for intact sub-surface remains on the site, given its designation as *Anciently Enclosed Land*, no significant archaeological evidence was encountered during the monitoring and recording. The only find of interest were the moorings of a World War II barrage balloon located in Area F. A small assemblage of Bronze Age pottery from Field B do however suggest that there is a background of prehistoric activity nearby, probably most likely within the area now occupied by the golf course.

The record of the earthen and stone hedge banks further contribute to the understanding and database of these features in the region, which are of interest at a local level. Most notably it appears that the boundary between Areas A and B has an earlier phase of build, not evident in the removed boundary of Area C.

It would be prudent to suggest that any further works within Areas A and B be carried out under archaeological monitoring and recording due to the nature of the development in this part of the site not excavating deep enough across most of the site to absolutely discount the existence of archaeological remains. The more extensive stripping within Area C and the adjacent geophysical results for Area D suggests that further archaeological works in these two areas are unlikely to yield much reward. Future development works near to Area F, although producing limited results should also be monitored given the potential highlighted in the desk-based study (Cole 2008). It is clear that although Area E has seen some degree of landscaping that there is potential to expose further Second World War archaeology (Zig-Zag trenches and tank trap) and possibly Prehistoric or Romano-British deposits or features.

4.0 Bibliography & References

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- 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)*

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<http://mapping.cornwall.gov.uk/website/A2M/viewer.asp>

Appendix 1

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MONITORING AND RECORDING AT FALMOUTH GOLF COURSE

Location: Falmouth Golf Course
Parish: Falmouth
County: Cornwall
NGR: SW 7959 3055
Planning Application no: PA02/1508/09/M
Proposal: Creation of two new holes

1.0 INTRODUCTION

1.1 This document forms a Written Scheme of Investigation (WSI) which has been produced by South West Archaeology (SWARCH) at the request of Mr Russel Dodge of Business Location Services Ltd (the Client). It sets out the methodology for archaeological monitoring and recording to be undertaken during the above development and for related off site analysis and reporting. The WSI and the schedule of work it proposes were drawn up in accordance to a brief issued by the Historic Environment Planning Advice Officer (HEPAO) Dan Ratcliffe (20/05/2011).

1.2 The planning application for the development has been approved subject to a number of conditions. Condition 6 states:

No development shall take place within the application site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation and timetabling that has been first been submitted to and approved in writing by the local planning authority.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 This site consists of 5 agricultural enclosures to the south west of Pennance Farm. The application relates to the creation of two new holes for the course and will result in a fundamental change to the historic character of 5 fields, the creation of new openings in two historic boundaries and some small areas of excavation in order to create landscaping features such as tees and bunkers. An archaeological assessment of the site was written in 2008 (HEP2008:R123). This document identified the area of interest as a surviving medieval field system (Site 18) made up of traditional hedge boundaries most of which are shown on an estate map dating to the 1760s. This field system, which constitutes an example of 'Anciently Enclosed Land', is likely to indicate a raised potential for the presence of buried archaeological remains, particularly of the prehistoric period.

3.0 AIMS

3.1 To observe, investigate, excavate and record any surviving below-ground archaeological artefacts and deposits across the area affected by the proposed development;

3.2 Analyse and report on the results of the project as appropriate.

4.0 METHOD

4.1 Archaeological monitoring and recording:

Topsoil and any groundworks associated with the development will be stripped under archaeological supervision. All groundworks including service trenching and topsoil stripping will be carried out by machine, fitted with a toothless grading bucket, under the supervision and control of the site archaeologist, to the depth of formation, the surface of *in situ* subsoil/weathered natural or archaeological deposits whichever is highest in the stratigraphic sequence. Should archaeological deposits be exposed machining will cease in that area to allow the site archaeologist to investigate the exposed deposits. If significant or complex archaeological remains are uncovered, SWARCH will liaise with the client and the HEPAO to determine the most satisfactory way to proceed. Archaeological features and deposits will be excavated by the site archaeologist by hand:

4.1.1 The archaeological work will be carried out in accordance with the *Institute for Archaeologists Standard and Guidance for Archaeological Field Evaluation 1994 (revised 2001 & 2008)* and *Standard and Guidance for an Archaeological Watching Brief 1994 (revised 2001 & 2008)*.

4.1.2 Spoil will be examined for the recovery of artefacts.

4.1.3 All excavation of exposed archaeological features shall be carried out by hand, stratigraphically, and fully recorded by context to IfA guidelines.

4.1.4 If archaeological features are exposed, then as a *minimum*:

i) small discrete features will be fully excavated;

ii) larger discrete features will be half-sectioned (50% excavated);

iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features;

iv) a minimum of one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

4.1.5 Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined, full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.

- Any variation of the above or decisions regarding expansion will be considered in consultation with the Client and the HEPAO.
- 4.1.6 In exceptional circumstances where materials of a particularly compact nature are encountered, these may be removed with a toothed bucket, subject to agreement with archaeological staff on site.
- 4.1.7 Should archaeological or palaeoenvironmental remains be exposed, the site archaeologist will investigate, record and sample such deposits.
- 4.1.8 Human remains will be left *in-situ*, covered and protected. Removal will only take place under appropriate Ministry of Justice and environmental health regulations. Such removal will be in compliance with the relevant primary legislation.
- 4.1.9 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, will be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- 4.2 In the event of particularly significant discoveries, the HES will be informed and a site meeting convened between the consultant, the HES and the client/applicant to determine the appropriate mitigation.
- 4.3 The Client will provide SWARCH with details of the location of existing services and of proposed groundworks within the site area, and of the proposed construction programme.
- 4.4 Health and Safety requirements will be observed at all times by any archaeological staff working on site, particularly when working with machinery. As a minimum: high-visibility jackets, safety helmets and protective footwear will be worn.
- 4.4.1 Appropriate PPE will be employed at all times.
- 4.4.2 The site archaeologist will undertake any site safety induction course provided by the Client.
- 4.4.3 If the depth of trenching exceeds 1.2 metres the trench sides will need to be shored or stepped to enable the archaeologist to examine and if appropriate record the section of the trench. The provision of such measures will be the responsibility of the client.
- 4.5 Monitoring
- 4.5.1 The HEPAO will monitor the work and will be kept regularly informed of progress.
- 4.5.2 Notification of the start of work shall be given to the HEPAO at least one week in advance of its commencement.
- 4.5.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.
- 5.0 ARCHAEOLOGICAL RECORDING**
- 5.1 This will be based on IfA guidelines and those advised by the HEPAO and will consist of:
- 5.1.1 Standardised single context recording sheets, survey drawings in plan, section and profile at 1:10, 1:20, 1: 50 and 1:100 as appropriate and digital photography.
- 5.1.2 Survey and location of features.
- 5.1.3 Labelling and bagging of finds on site, post-1800 unstratified pottery may be discarded on site after a representative sample has been retained.
- Any variation of the above shall be agreed in consultation with the HEPAO.
- 5.2 A photographic record of the excavation will be prepared. This will include photographs illustrating the principal features and finds discovered, in detail and in context. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. All photographs of archaeological detail will feature an appropriately-sized scale. The photographic record for the excavations will be made in B/W print supplemented by digital or colour transparency. However, if digital imagery is to be the sole photographic record then suitably archivable prints will be made of the digital images by a photographic laboratory. The drawn and written record will be on an appropriately archivable medium in accordance with the current conditions of deposit of the Museum.
- 5.3 Should suitable deposits be exposed (e.g. palaeoenvironmental) then scientific assessment/ analysis/dating techniques will be applied to further understand their nature/date and to establish appropriate sampling procedures. The project will be organised so that specialist consultants who might be required to conserve or report on other aspects of the investigations can be called upon. Should deposits be exposed that contain palaeoenvironmental or datable elements appropriate sampling and post-excavation analysis strategies will be initiated. On-site sampling and post-excavation assessment and analysis will be undertaken in accordance with English Heritage's guidance in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation 2002* and if necessary with reference to and with advice from the English Heritage Regional Science Advisor.
- 6.0 ARCHIVE AND REPORT**
- 6.1 An ordered and integrated site archive will be prepared in accordance with *The Management of Archaeological Projects* (English Heritage, 1991 2nd edition) upon completion of the project. This will include relevant correspondence together with field notes and drawings, and environmental, artefactual and photographic records. The archive and finds will be deposited with the Royal Cornwall Museum. The museum's current guidelines for the deposition of archives for long-term storage will be adhered to. If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office and with the Courtney Library of the Royal Institution of Cornwall.
- 6.2 The reporting requirements will be confirmed with the HES on completion of the site work. In the event that few or no archaeological remains are exposed, only minimal reporting would be required. The results may be

- presented in the form of a short entry to the Historic Environment Record (HER), sent to the HES either digitally or as a hard-copy. If archaeological deposits or remains are exposed during the course of the works, then more detailed reporting would be required, in the form of an illustrated summary report submitted both in hard-copy and digitally and, if merited, wider publication.
- A report will include the following elements:
- 6.2.1 A concise non-technical summary of the project results.
 - 6.2.2 The aims and methods adopted in the course of the investigation.
 - 6.2.3 A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
 - 6.2.4 A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
 - 6.2.5 All specialist reports and assessments.
 - 6.2.6 A summary of the archive contents and date of deposition.
 - 6.2.7 A context register with brief descriptions shall be included as an appendix.
 - 6.2.8 A copy of the brief and the approved WSI will be included as an appendix.
- 6.3 The HEPAO will receive the report within six months of completion of fieldwork, dependant on the provision of specialist reports, radiocarbon dating results etc. If a substantial delay is anticipated then an interim report will be produced and a revised submission date for the final report agreed with the HEPAO.
- 6.4 Should the development proceed in a staged manner, with each stage requiring archaeological fieldwork, and where a period of more than three months between each stage is anticipated or occurs, then SWARCH shall prepare an interim illustrated summary report at the end of each stage. The report will set out the results of that phase of archaeological works, including the results of any specialist assessment or analysis undertaken. The report will be produced within three months of completion of each phase of fieldwork. At the completion of the final stage of the fieldwork an overarching report setting out the results of all stages of work will be prepared. HES would normally expect to receive the report within six months of completion of fieldwork - dependent upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then the HES will be informed of this, an interim report will be produced within three months of the completion of the final stage of fieldwork, and a revised date for the production of the full report agreed between the HEPAO and the archaeological contractor.
- 6.5 A copy of the report detailing the results of these investigations will be submitted to the OASIS (*Online Access to the Index of archaeological investigations*) database under record number southwes1-128227.
- 7.0 CONFLICT WITH OTHER CONDITIONS AND STATUTORILY PROTECTED SPECIES**
If topsoil stripping or groundworks are being undertaken under the direct control and supervision of the archaeological contractor then it is SWARCH's responsibility - in consultation with the applicant or agent - to ensure that the required archaeological works do not conflict with any other conditions that have been imposed upon the consent granted and should also consider any biodiversity issues as covered by the NERC Act 2006. In particular, such conflicts may arise where archaeological investigations/excavations have the potential to have an impact upon protected species and/or natural habitats e.g. SSSIs, National Nature Reserves, Special Protection Areas, Special Areas of Conservation, Ramsar sites, County Wildlife Sites etc.
- 8.0 PERSONNEL & MONITORING**
8.1 The project will be managed by Colin Humphreys; the archaeological monitoring will be undertaken by SWARCH personnel with appropriate expertise and experience. Where necessary, appropriate specialist advice will be sought (see list of consultant specialists in Appendix 1 below).

Deb Laing-Trengove

South West Archaeology

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Appendix 1 – List of specialists

Building recording

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Conservation

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Richard and Helena Jaeschke, 2 Bydown Cottages, Swimbridge, Barnstaple EX32 0QD
mrshjaeschke@email.msn.com Tel: 01271 830891

Curatorial

Thomas Cadbury

Curator of Antiquities Royal Albert Memorial Museum, Bradninch Offices, Bradninch Place, Gandy Street, Exeter EX4 3LS Tel: 01392 665356

Alison Mills, The Museum of Barnstaple and North Devon, The Square, Barnstaple, North Devon. EX32 8LN Tel: 01271 346747

Bone

Human Professor Chris Knusel, University of Exeter Tel: 01392 722491 c.j.knusel@ex.ac.uk
Animal Wendy Howard, University of Exeter, w.j.howard@exeter.ac.uk Tel: 01392 269330

Lithics

Martin Tingle, Higher Brownston, Brownston, Modbury, Devon, PL21 OSQ, martin@mtingle.freereserve.co.uk

Metallurgy

Lee Bray, Exmoor National Park Authority, Exmoor House, Dulverton TA22 9HL Tel: 01398 324491

Palaeoenvironmental/Organic

Wood identification Dana Challinor Tel: 01869 810150 dana.challinor@tiscali.co.uk

Plant macro-fossils Julie Jones juliedjones@blueyonder.co.uk

Pollen analysis Ralph Fyfe Room 211, 8 Kirkby Place, Drake Circus, Plymouth, Devon, PL4 8AA

Pottery

Prehistoric Henrietta Quinnell, 39D Polsloe Road, Exeter EX1 2DN Tel: 01392 433214

Roman Alex Croom, Keeper of Archaeology. Tyne & Wear Archives & Museums, Arbeia Roman Fort and Museum, Baring Street, South Shields, Tyne and Wear NE332BB Tel: (0191) 454 4093
alex.croom@twmuseums.org.uk

Medieval John Allen, 22 Rivermead Road, Exeter, EX2 4RL, Tel: 01392 256154

Post Medieval Graham Langman, Exeter, EX1 2UF, Tel: 01392 215900 email: su1429@eclipse.co.uk

Appendix 2

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL MONITORING AND RECORDING AT FALMOUTH GOLF COURSE

Location: Falmouth Golf Course
Parish: Falmouth
County: Cornwall
NGR: SW 7959 3055
Planning Application no: C1/EA02/0075/09/M
Proposal: Construction of a new clubhouse and car park

1.0 INTRODUCTION

1.1 This document forms a Written Scheme of Investigation (WSI) which has been produced by South West Archaeology (SWARCH) at the request of David Hughes of Falmouth Golf Course (the Client). It sets out the methodology for archaeological monitoring and recording to be undertaken during the above development and for related off site analysis and reporting. The WSI and the schedule of work it proposes were drawn up in accordance with advice issued by the Historic Environment Planning Advice Officer (HEPAO) Dan Ratcliffe.

1.2 The planning application for the development has been approved subject to a number of conditions. Condition 6 states:

No development shall take place within the application site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation and timetabling that has been first been submitted to and approved in writing by the local planning authority.

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 This site consists of 5 agricultural enclosures to the south west of Pennance Farm. The application relates to the creation of a new clubhouse and car park. An archaeological assessment of the site was written in 2008 (HEP2008:R123). This document identified the area of interest as part of a surviving medieval field system made up of traditional hedge boundaries most of which are shown on an estate map dating to the 1760s. This field system, which constitutes an example of '*Anciently Enclosed Land*', is likely to indicate a raised potential for the presence of buried archaeological remains, particularly of the prehistoric period.

3.0 AIMS

3.1 To observe, investigate, excavate and record any surviving below-ground archaeological artefacts and deposits across the area affected by the proposed development;

3.2 Analyse and report on the results of the project as appropriate.

4.0 METHOD

4.1 Archaeological monitoring and recording:

Topsoil and any groundworks associated with the development will be stripped under archaeological supervision. All groundworks including service trenching and topsoil stripping will be carried out by machine, fitted with a toothless grading bucket, under the supervision and control of the site archaeologist, to the depth of formation, the surface of *in situ* subsoil/weathered natural or archaeological deposits whichever is highest in the stratigraphic sequence. Should archaeological deposits be exposed machining will cease in that area to allow the site archaeologist to investigate the exposed deposits. If significant or complex archaeological remains are uncovered, SWARCH will liaise with the client and the HEPAO to determine the most satisfactory way to proceed. Archaeological features and deposits will be excavated by the site archaeologist by hand:

4.1.1 The archaeological work will be carried out in accordance with the *Institute for Archaeologists Standard and Guidance for Archaeological Field Evaluation 1994 (revised 2001 & 2008)* and *Standard and Guidance for an Archaeological Watching Brief 1994 (revised 2001 & 2008)*.

4.1.2 Spoil will be examined for the recovery of artefacts.

4.1.3 All excavation of exposed archaeological features shall be carried out by hand, stratigraphically, and fully recorded by context to IfA guidelines.

4.1.4 If archaeological features are exposed, then as a *minimum*:

i) small discrete features will be fully excavated;

ii) larger discrete features will be half-sectioned (50% excavated);

iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features;

iv) a minimum of one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

4.1.5 Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined, full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.

Any variation of the above or decisions regarding expansion will be considered in consultation with the Client and the HEPAO.

- 4.1.6 In exceptional circumstances where materials of a particularly compact nature are encountered, these may be removed with a toothed bucket, subject to agreement with archaeological staff on site.
- 4.1.7 Should archaeological or palaeoenvironmental remains be exposed, the site archaeologist will investigate, record and sample such deposits.
- 4.1.8 Human remains will be left *in-situ*, covered and protected. Removal will only take place under appropriate Ministry of Justice and environmental health regulations. Such removal will be in compliance with the relevant primary legislation.
- 4.1.9 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, will be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- 4.2 In the event of particularly significant discoveries, the HES will be informed and a site meeting convened between the consultant, the HES and the client/applicant to determine the appropriate mitigation.
- 4.3 The Client will provide SWARCH with details of the location of existing services and of proposed groundworks within the site area, and of the proposed construction programme.
- 4.4 Health and Safety requirements will be observed at all times by any archaeological staff working on site, particularly when working with machinery. As a minimum: high-visibility jackets, safety helmets and protective footwear will be worn.
- 4.4.1 Appropriate PPE will be employed at all times.
- 4.4.2 The site archaeologist will undertake any site safety induction course provided by the Client.
- 4.4.3 If the depth of trenching exceeds 1.2 metres the trench sides will need to be shored or stepped to enable the archaeologist to examine and if appropriate record the section of the trench. The provision of such measures will be the responsibility of the client.
- 4.5 Monitoring
- 4.5.1 The HEPAO will monitor the work and will be kept regularly informed of progress.
- 4.5.2 Notification of the start of work shall be given to the HEPAO at least one week in advance of its commencement.
- 4.5.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.
- 5.0 ARCHAEOLOGICAL RECORDING**
- 5.1 This will be based on IfA guidelines and those advised by the HEPAO and will consist of:
- 5.1.1 Standardised single context recording sheets, survey drawings in plan, section and profile at 1:10, 1:20, 1: 50 and 1:100 as appropriate and digital photography.
- 5.1.2 Survey and location of features.
- 5.1.3 Labelling and bagging of finds on site, post-1800 unstratified pottery may be discarded on site after a representative sample has been retained.
- Any variation of the above shall be agreed in consultation with the HEPAO.
- 5.2 A photographic record of the excavation will be prepared. This will include photographs illustrating the principal features and finds discovered, in detail and in context. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. All photographs of archaeological detail will feature an appropriately-sized scale. The photographic record for the excavations will be made in B/W print supplemented by digital or colour transparency. However, if digital imagery is to be the sole photographic record then suitably archivable prints will be made of the digital images by a photographic laboratory. The drawn and written record will be on an appropriately archivable medium in accordance with the current conditions of deposit of the Museum.
- 5.3 Should suitable deposits be exposed (e.g. palaeoenvironmental) then scientific assessment/ analysis/dating techniques will be applied to further understand their nature/date and to establish appropriate sampling procedures. The project will be organised so that specialist consultants who might be required to conserve or report on other aspects of the investigations can be called upon. Should deposits be exposed that contain palaeoenvironmental or datable elements appropriate sampling and post-excavation analysis strategies will be initiated. On-site sampling and post-excavation assessment and analysis will be undertaken in accordance with English Heritage's guidance in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation 2002* and if necessary with reference to and with advice from the English Heritage Regional Science Advisor.
- 6.0 ARCHIVE AND REPORT**
- 6.1 An ordered and integrated site archive will be prepared in accordance with *The Management of Archaeological Projects* (English Heritage, 1991 2nd edition) upon completion of the project. This will include relevant correspondence together with field notes and drawings, and environmental, artefactual and photographic records. The archive and finds will be deposited with the Royal Cornwall Museum. The museum's current guidelines for the deposition of archives for long-term storage will be adhered to. If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office and with the Courtney Library of the Royal Institution of Cornwall.
- 6.2 The reporting requirements will be confirmed with the HES on completion of the site work. In the event that few or no archaeological remains are exposed, only minimal reporting would be required. The results may be presented in the form of a short entry to the Historic Environment Record (HER), sent to the HES either digitally or as a hard-copy. If archaeological deposits or remains are exposed during the course of the

- works, then more detailed reporting would be required, in the form of an illustrated summary report submitted both in hard-copy and digitally and, if merited, wider publication.
 A report will include the following elements:
- 6.2.1 A concise non-technical summary of the project results.
 - 6.2.2 The aims and methods adopted in the course of the investigation.
 - 6.2.3 A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
 - 6.2.4 A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
 - 6.2.5 All specialist reports and assessments.
 - 6.2.6 A summary of the archive contents and date of deposition.
 - 6.2.7 A context register with brief descriptions shall be included as an appendix.
 - 6.2.8 A copy of the brief and the approved WSI will be included as an appendix.
- 6.3 The HEPAO will receive the report within six months of completion of fieldwork, dependant on the provision of specialist reports, radiocarbon dating results etc. If a substantial delay is anticipated then an interim report will be produced and a revised submission date for the final report agreed with the HEPAO.
- 6.4 Should the development proceed in a staged manner, with each stage requiring archaeological fieldwork, and where a period of more than three months between each stage is anticipated or occurs, then SWARCH shall prepare an interim illustrated summary report at the end of each stage. The report will set out the results of that phase of archaeological works, including the results of any specialist assessment or analysis undertaken. The report will be produced within three months of completion of each phase of fieldwork. At the completion of the final stage of the fieldwork an overarching report setting out the results of all stages of work will be prepared. HES would normally expect to receive the report within six months of completion of fieldwork - dependent upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then the HES will be informed of this, an interim report will be produced within three months of the completion of the final stage of fieldwork, and a revised date for the production of the full report agreed between the HEPAO and the archaeological contractor.
- 6.5 A copy of the report detailing the results of these investigations will be submitted to the OASIS (*Online Access to the Index of archaeological investigations*) database under record number southwes1-128227.
- 7.0 CONFLICT WITH OTHER CONDITIONS AND STATUTORILY PROTECTED SPECIES**
 If topsoil stripping or groundworks are being undertaken under the direct control and supervision of the archaeological contractor then it is SWARCH's responsibility - in consultation with the applicant or agent - to ensure that the required archaeological works do not conflict with any other conditions that have been imposed upon the consent granted and should also consider any biodiversity issues as covered by the NERC Act 2006. In particular, such conflicts may arise where archaeological investigations/excavations have the potential to have an impact upon protected species and/or natural habitats e.g. SSSIs, National Nature Reserves, Special Protection Areas, Special Areas of Conservation, Ramsar sites, County Wildlife Sites etc.
- 8.0 PERSONNEL & MONITORING**
 8.1 The project will be managed by Colin Humphreys; the archaeological monitoring will be undertaken by SWARCH personnel with appropriate expertise and experience. Where necessary, appropriate specialist advice will be sought (see list of consultant specialists in Appendix 1 below).

Colin Humphreys
 South West Archaeology
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Appendix 1 – List of specialists

Building recording

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Conservation

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 Richard and Helena Jaeschke
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Curatorial

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Alison Mills

The Museum of Barnstaple and North Devon
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Bone

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	University of Exeter	Tel: 01392 722491 c.j.knusel@ex.ac.uk
Animal	Wendy Howard	

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Lithics

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Metallurgy

Lee Bray

Exmoor National Park Authority, Exmoor House, Dulverton TA22 9HL Tel: 01398 324491

Palaeoenvironmental/Organic

Wood identification Dana Challinor Tel: 01869 810150 dana.challinor@tiscali.co.uk

Plant macro-fossils Julie Jones juliedjones@blueyonder.co.uk

Pollen analysis Ralph Fyfe Room 211, 8 Kirkby Place, Drake Circus, Plymouth, Devon, PL4 8AA

Pottery

Prehistoric

Henrietta Quinnell

39D Polsloe Road, Exeter EX1 2DN Tel: 01392 433214

Roman

Alex Croom, Keeper of Archaeology

Tyne & Wear Archives & Museums, Arbeia Roman Fort and Museum, Baring Street, South Shields,

Tyne and Wear NE332BB

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Medieval

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Post Medieval

Graham Langman

Exeter, EX1 2UF Tel: 01392 215900 email: su1429@eclipse.co.uk

Appendix 3

BRIEF FOR ARCHAEOLOGICAL RECORDING

Date: 20/05/2011
Address: Falmouth Golf Course
Applicant:
Agent:

Historic Environment Planning Advice Officer: Dan Ratcliffe, Cornwall Council, Historic Environment Service, Kennall Building, Old County Hall, Truro TR1 3AY. Tel. 01726 223463 E-mail. dratcliffe@cornwall.gov.uk

Local Planning Authority Officer:

This brief is only valid for six months. After this period the Historic Environment Planning Advice Officer (HEPAO) should be contacted. Any written scheme of investigation (WSI) resulting from this brief shall only be considered for the same period. The contractor is strongly advised to visit the site before completing their WSI as there may be implications for accurately costing the project.

Contractors Written Scheme of Investigation (WSI)

No ground works are to be undertaken until the HEPAO and the Local Planning Authority (LPA) have approved the archaeological contractor's WSI.

1 Introduction

This brief has been written by the HEPAO and sets out the minimum requirements for archaeological recording at the above site. This work is required to discharge an archaeological condition placed on **PA02/1508/09/M**. This application concerned the creation of two new holes for the course and will result in a fundamental change to the historic character of 5 fields, the creation of new openings in two historic boundaries and some small areas of excavation in order to create landscaping features such as tees and bunkers. An archaeological condition is in place to seek mitigation of losses of significance to the historic environment. This condition requires a programme of archaeological work to be commissioned by the applicant to follow a 'written scheme of investigation' (WSI) for which this document forms a brief.

2 Site Location and Description

This site is located at SW 7959 3055 and consists of 5 agricultural enclosures to the south west of Pennance Farm.

3 Planning Background

Planning application PA02/1508/09/M was submitted on the 20th May 2011 for the "change of use of agricultural land to enable extension to existing 18 hole golf course and associated engineering operations." This application has been approved subject to a number of conditions. Condition 6 states:
No development shall take place within the application site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation and timetabling that has been first been submitted to and approved in writing by the local planning authority.

The applicant, their agents and any subcontractors should note that where there are other conditions requiring satisfaction in advance of the commencement of works on site; it is the responsibility of the applicant to liaise with the planning officer concerned to ensure that the timetabling of these works is managed accordingly.

4 Archaeological Background

An archaeological assessment of the site was written in 2008 (HEP2008:R123). This document identified the area of interest as a surviving medieval field system (Site 18) made up of traditional hedge boundaries most of which are shown on an estate map dating to the 1760s. This field system, which constitutes an example of 'Anciently Enclosed Land', is likely to indicate a raised potential for the presence of buried archaeological remains, particularly of the prehistoric period.

5 Requirement for Work

Ground works associated with the development may disturb buried archaeological remains. It is therefore important that a suitably qualified archaeologist(s) is/are present during these works in order to identify and record any features of interest.

The site specific aims are to:

- Establish the presence/absence of archaeological remains
- Determine the extent, condition, nature, character, date and significance of any archaeological remains encountered
- To establish the nature of the activity on the site
- To identify any artefacts relating to the occupation or use of the site
- To provide further information on the archaeology of Falmouth from any archaeological remains encountered

6 General Methodology

6.1 All stages of the investigation shall be supported by a written scheme of investigation (WSI).

6.2 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).

6.3 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.

- 6.4 All of the latest Health and Safety guidelines shall be followed on site.
- 6.5 The IfA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.
- 6.6 Terminology will be consistent with the English Heritage Thesaurus.
- 7 Archaeological Recording Methodology**
- 7.1 Prior to the commencement of on site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER), the Cornwall Records Office at Truro and the Cornwall Centre at Redruth, where appropriate.
- 7.2 An archaeologist shall be present during all ground works associated with the development, unless circumstances dictate a different approach. A toothless ditching bucket can be used for the removal of any overburden until the first archaeological horizon is exposed. This will then be hand cleaned as appropriate.
- 7.3 Any surviving remains which will be disturbed or destroyed by the development shall be archaeologically excavated and recorded.
- 7.4 Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site will be tied into the national grid.
- 7.5 Details of the site planning policy shall be given in the WSI. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections 1:10, unless circumstances indicate that other scales would be more appropriate.
- 7.6 The photographic record shall consist of prints in both black and white and colour together with the negatives. Digital photography may be used for report illustration. For both general and specific photographs, a photographic scale shall be included. In the case of detailed photographs it may be appropriate to include a north arrow. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.
- 7.7 If significant archaeological deposits are exposed, all works must cease and a meeting convened with the client and the HEPAO to discuss the most appropriate way forwards.
- 8 Finds**
- 8.1 All finds, where appropriate, will be retained from each archaeological context excavated.
- 8.2 All finds, where appropriate, shall be washed.
- 8.3 All pottery, and other finds, where appropriate, shall be marked with the site code and context number.
- 8.4 The WSI shall include an agreed list of specialist consultants, who may be required to conserve and/or report on finds, and advise or report on other aspects of the work including environmental sampling.
- 8.5 The requirements for conservation and storage shall be agreed with the Royal Cornwall Museum prior to the start of work, and confirmed in writing to the HEPAO.
- 8.6 Finds work should be to accepted professional standards and adhere to the Institute for Archaeologists *Guidelines for Finds Work*.
- 8.7 Environmental sampling should be guided by *Environmental Archaeology* (English Heritage Centre for Archaeological Guidelines. 2001/02).
- 8.8 Further English Heritage guidance that may be helpful includes *Geoarchaeology* (2004) and *Archaeometallurgy* (2001).
- 8.9 The English Heritage Advisor for Archaeological Science will be able to provide archaeological science advice if required (Vanessa Straker 0117 975 0689).
- 9 Human Remains**
- 9.1 Any human remains which are encountered must initially be left in situ and reported to the HEPAO and the appropriate authorities (the Coroner), where appropriate. If removal is necessary this must comply with the relevant Government regulations. If burials are encountered their legal status must be ascertained and recording and/or removal must comply with the legal guidelines.
- 9.2 If human remains are not to be removed their physical security must be ensured, preferably by back filling as soon as possible after recording.
- 9.3 If human remains are to be removed this must be done with due reverence and in accordance to current best practice and legal requirements. The site must be adequately screened from public view. Once excavated, human remains must not be exposed to public view.
- 10 Results**
- 10.1 The full report including all specialist assessments of artefact assemblages shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall County Council Historic Environment Service and the Royal Cornwall Museum. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 10.2 The archaeological contractor will undertake the English Heritage/ADS online access to the index of archaeological investigations (OASIS).
- 10.3 This report will be held by the Cornwall and Scilly Historic Environment Record (HER) and made available for public consultation.
- 10.4 The report must contain:
- A concise non-technical summary of the project results.
 - The aims and methods adopted in the course of the investigation.
 - A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
 - A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.

- All specialist reports and assessments.
 - A summary of the archive contents and date of deposition.
 - A context register with brief descriptions shall be included as an appendix.
 - A copy of the brief and the approved WSI will be included as an appendix.
- 10.5 A contingency shall be made within the costs for full publication in an appropriate journal. The HEPAO will notify the contractor of such a need within four weeks of receipt of the report.
- 11 Archive Deposition**
- 11.1 An ordered and integrated site archive will be prepared in accordance with: *Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006* upon completion of the project. The requirements for archive storage shall be agreed with the Royal Cornwall Museum.
- 11.2 If the finds are to remain with the landowner a full copy of the documentary archive shall be housed with the Cornwall County Record Office and with the Courtney Library of the Royal Institution of Cornwall.
- 11.3 The archive including a copy of the written report shall be deposited with the Royal Cornwall Museum within two months of the completion of the full report and confirmed in writing with the HEPAO.
- 11.4 Where there is only a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtney Library of the Royal Institution of Cornwall.
- 11.5 A copy of the report will be supplied to the National Monuments Record (NMR) in Swindon.
- 11.6 A summary of the contents of the archive shall be supplied to the HEPAO.
- 11.7 Only on completion of 11.1 to 11.5 (inclusive) will there be a recommendation for the discharge of any archaeological recording condition.
- 12 Monitoring**
- 12.1 The HEPAO will monitor the work and should be kept regularly informed of progress.
- 12.2 Notification of the start of work shall be given preferably in writing to the HEPAO at least one week in advance of its commencement.
- 12.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.

Appendix 4

Context List

Context	Description	Relationships	Depth/Thickness	Spot Date	
(100)	Turf/Topsoil	Slightly yellow mid-brown, soft clay-silt loam with occasional small sub-rounded stones. Finds = CBM, pottery, glass, golf balls.	Overlies (101)	0.15-0.21m	C20
(101)	Subsoil	Yellowy-orange light brown, friable-soft clay-silt with moderate-frequent small rounded and sub-rounded stones and occasional coal and charcoal fleck inclusions. Finds = CBM, pottery, glass.	Overlain by (100), Overlies (102)	0.45m	C19- C20
(102)	2 nd Subsoil	Mid reddish orange-brown, soft silt-clay with frequent small shillet fragments and stones that produced no finds. It was either a weathered natural or relict colluviums. No finds.	Overlain by (101), Overlies (103)	0.03-0.08m	-
(103)	Natural	Light pink-grey with orange, compact clayey-shillet	Overlain by (102)	-	-
(104)	Hedgebank deposit	A light yellow-brown friable sandy-silt with frequent small sub-angular stones. A deposit of mixed natural and topsoil.	Overlain by (105)	0.6m	
(105)	Hedgebank deposit	A light yellow-brown compact silty-shillet forming core of the hedgebank. Common roots and animal burrows.	Overlies (105), overlain by (106)	Up to 0.8m	
(106)	Hedgebank deposit	A dark greyish-brown slightly clayey silt topsoil layer formed on top of hedgebanks	Overlies (106), overlain by (107)	0.2m	
(107)	Hedgebank deposit	Dark Grey-brown friable sandy-silt on top of hedgebanks	Overlies (106)	0.05m	C20
{108}	Stone facing to Hedgebank	A roughly lain slatey and granite stone rubble facing to NE side of Hedgebank 1. Partially collapsed in places, bonded with grey-brown sandy-silt.	Abutts (105)	Up to 0.55m high	C19
(109)	Hedgebank deposit	A roughly lain slatey and granite stone rubble facing to SW side of Hedgebank 1. Bonded with grey-brown sandy-silt. In better condition than NE face and contains slightly more blocky stone	Abutts (105)	Up to 0.55m high	C19
(110)	Hedgebank deposit	A roughly lain slatey and granite stone rubble facing to NE side of Hedgebank 2. Bonded with grey-brown sandy-silt. Stones lain horizontally at base and herring bone for upper portion	Abutts (105)	Up to 0.65m high	C19
(111)	Hedgebank deposit	A roughly lain slatey and granite stone rubble facing to SW side of Hedgebank 2. Bonded with grey-brown sandy-silt. Contains slightly more of the blocky granite than NE face.	Abutts (105)	Up to 0.65m high	C19
(112)	VOID	VOID	VOID	VOID	VOID
(113)	Hedgebank deposit	Remnant of collapsed wall on SW side of Hedgebank 3, heavily disturbed by roots and animals.	Abutts (105)	Up to 0.55m high	C19
(114)	Cut of ditch	Ditch running along the SW side of Hedge 3, it becomes a pond to NW	-	Up to 0.55m deep and 1m wide	C19

Appendix 5

Concordance of Non-ceramic Finds

Area	Golf Balls			Clay Pipe				Glass			CBM			Frag of metal & nails		
	No.	wgt. (kg)	No. Discarded	No. of stems	No. of bowls	wgt. (kg)	No. Discarded	No.	wgt. (kg)	No. Discarded	No.	wgt. (kg)	No. Discarded	No.	wgt. (kg)	No. Discarded
Area A	107	5.021	107	57	2	0.138	57	64	0.778	64	11	0.268	11	26	0.376	26
Area B	217	9.521	217	16	1	0.028	17	66	0.547	66	16	0.475	16	24	0.719	24
Area C	0	0	0	2	0	0.003	2	1	0.006	1	0	0	0	1	0.012	1
Area F	458	21.16	458	0	0	0	0	4	0.015	4	0	0	0	0	0	0
Totals	782	35.702	782	75	3	0.169	76	135	1.346	135	27	0.743	27	51	1.107	51

Area	Other Finds			
	No.	wgt. (kg)	No. Discarded	
Area A	32	1.57	23	DISCARDED: 2x Plastic, 1x stone, 11x Clinker, 2x slag, 2x asbestos, 1x flint, 1x 2p piece, 1x brushing hook, 1x pantile, 2x bone. RETAINED: 1x Metal token, 1 x Floor tile, 1 x flint pebble, 2 x coal, 1 x vitreous slag, 1 x sawn bone
Area B	13	0.184	8	DISCARDED: 2x plastic, 1x pebble, 1x pantile, 4x coal/clinker. RETAINED: 1x Cu alloy washer?, 1x roof tile frag, 2x flint, 1x floor tile frag
Area C	0	0	0	
Area F	18	4.526	17	DISCARDED: 16x Tee fragments, 1x plastic golf club frag, RETAINED: 1x FE Coiled cable
Total	63	6.28	48	

Appendix 6

Concordance of Ceramic Finds

Area	No.	Wgt. (kg)	No. Discarded	Discarded	No. Retained	Retained
Area A	1114	5.549	808	764x White Wares (WRE), 22x C19th Red refined earthenwares (RRE), 7x C19th N.Devon wares, 4x C9th Stoneware, 4x Jackfield type Teapot, 3x bone china, 3x C19th English Stoneware, 1x C17th N.Devon Yellow Slipware	306	4x C19th English Stoneware, 4x Polychromatic Tin glaze, 2x C18th Mottled Ware, 2x Delft type tin glaze, 1x Delft type ware polychromatic Dish, 1x Westewald Ware, 17x Chinese Porcelain, 17x WRE, 1x Burnt WRE, 1x C19th Scratch blue 12x Post-Med N.Devon Gravel Tempered, 1x C17th N.Devon Yellow slipware, 11x Cornish Medieval Micaeous Coarse ware, 71x Post-Med Cornish Coarse Ware, 2x Cornish redware, 15x Post-med N.Devon Coarseware, 4x White Stoneware, 3x C18th White Notts Stoneware, 5x C19th RRE, 1x Post-Med N.Devon Gravel Free, 1x S.Somerset, 1x Tin glaze, 6x N.Devon Medieval Coarsewares, 8x Post-Med S.Somerset Ware, 3x Post-med Cornish Red bodied Black glazed Coarseware, 2x Flowerpot, 1x Yellow Bristol Stafford Slipware Cup Base, 4x C18th Yellow Bristol Staffordshire Slipware with Brown Marvelled Trails, 1x Yellow Bristol Staffordshire Slipware cup, 1x C19th Basset Stone Ware, 2x C18th Jackfield Ware, 1x Black Basalt Ware,
Area B	621	3.269	453	421x WRE, 2x RRE, 4x C19th English Stoneware, 2x Bone china, 15x Post-med N.Devon Coarsewares, 7x C18th S.Somerset, 2x Flowerpot	168	12x Bristol Staffordshire Yellow Slipware; cup, plate, posit pot, 1x Polychromatic tin glaze, 2x Post-med. N.Devon Sandy Ware, 4x C18th S.Somerset, 3x C18th Bridgewater Ware 7x post-med N.Devon Coarsewares, 13x Chinese Porcelain, 6x WRE, 73x late Med to Post-Med. Cornish Coarse Wares, 1x Post-Med. N.Devon Gravel Tempered, 1x Cornish Post-Med. Red Bodied; Black glazed Coarse Ware, 2x Cornish Micaeous Coarse Ware, 9x Post-Med. N.Devon Gravel Free, 3x Medieval N.Devon Wares, 3x Jackfield type ware, 1x C18th White Notts Stoneware, 1x Scratch Blue Stoneware, 1x Raeren Stoneware, 1x Unknown Stoneware, 3x C17th N.Devon Yellow slipware, 7 x Medieval Lostwithiel type coarsewares, 10x Bronze Age Trevisker style pottery
Area C	23	0.103	23	21xWRE, 2x Post-med N.Devon Coarsewares	0	
Area F	43	0.316	36	29 x WRE, 1 X Bone china, 1 x 19th Cent English Stoneware, 1x Jackfield type teapot, 2 x Post-Med. North Devon Gravel Tempered, 2x 18th Cent. S. Somerset	7	1x C18th White Notts Stoneware, 1 x C18th Mottled Ware, 3 x C17th Tin Glaze, 1 x Chinese Porcelain, 1 x Medieval Lostwithiel type ware
Total	1801	9.237	1320		481	

Appendix 7

List of Jpegs on CD to the rear of the report

<i>Photo</i>	<i>Description</i>	<i>From</i>	<i>Scale</i>
FGC12 (1)	Site shot from beyond barn conversions to SW. 6-13/11/12	NE	-
FGC12 (2)	Site shot of birdy	NE	-
FGC12 (3)	Depth of topsoil removed (minus turf)	-	2m
FGC12 (4)	Site/working shots Area A (top of hill)	E	-
FGC12 (5)	As above	E	-
FGC12 (6)	As Above	W	-
FGC12 (7)	As above	E	-
FGC12 (8)	As above	NW	-
FGC12 (9)	As above	NW	2m
FGC12 (10)	Site/working shot Area B (bottom of hill)	SW	-
FGC12 (11)	Sample section showing depth of topsoil to colluviums subsoil, Area B (not natural). 15-16/11/12	NW	1m
FGC12 (12)	As above + working shot	NW	1m
FGC12 (13)	SHEEP! In Area A	SW	-
FGC12 (14)	SHEEP! through fence	SW	-
FGC12 (15)	Area B mid excavation	NE	-
FGC12 (16)	As above	W	-
FGC12 (17)	Barn conversions and spoil from field of Area B	SW	-
FGC12 (18)	Area A post-excavation (topsoil strip)	E	-
FGC12 (19)	Site shot	SW	-
FGC12 (20)	Area B post-excavation (topsoil strip)	SW	-
FGC12 (21)	As above	SW	-
FGC12 (22)	Area B post ex, including bunkers to depth of natural 20-23/5/13	SW	-
FGC12 (23)	As above	SW	-
FGC12 (24)	Site shot of Areas A and B through hedges	NE	-
FGC12 (25)	Area B post ex, including bunkers to depth of natural 20-23/5/13	W	-
FGC12 (26)	Area A, hole post-ex, including bunkers to natural	W	2m
FGC12 (27)	As above	SE	2m
FGC12 (28)	Area A eastern bunker post-excavation	NE	2m
FGC12 (29)	Sample section in bunker in Area B	NW	1m
FGC12 (30)	Area B post ex, including bunkers to depth of natural	SW	2m
FGC12 (31)	As above	NW	2m
FGC12 (32)	As above	NE	2m
FGC12 (33)	Area A, "Tee" under excavation. 27/5/13	NW	-
FGC12 (34)	Area C, "Tee" topsoil strip	NE	-
FGC12 (35)	As above	E	
FGC12 (36)	Area F, during strip	NE	-
FGC12 (37)	Area F, partially stripped	W	-
FGC12 (38)	Bucket of balls recovered from Area F	-	-
FGC12 (39)	Barrage balloon footings (marked by pegs)	SW	1m
FGC12 (40)	Central footing of Balloon	SE	1m
FGC12 (41)	Outer ring of footings	SE	1m
FGC12 (42)	Seagulls on spoil from Area F	SW	-
FGC12 (43)	West Facing Section Hedgebank 1	W	2m
FGC12 (44)	West Facing Section Hedgebank 2	W	2m
FGC12 (45)	East Facing Section Hedgebank 2	E	2m
FGC12 (46)	West Facing Section Hedgebank 3	W	2m



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