



# **Mounts Bay School, Penzance, Cornwall**

## **Archaeological Watching Brief**





Report No

2011R026

Report Name

Mounts Bay School, Penzance, Cornwall

Report Author

C.M. Thorpe

Event Type

Watching brief

Client Organisation

A P Thompson Sports  
Engineering Limited

Client Contact

Mr Wayne Gilbert

Monuments (MonUID)

52890

Fieldwork dates (From) (To)

03/11/10

15/12/10

(Created By)

CM Thorpe

(Create Date)

10/01/11

Location (postal address; or general location and parish)

Mounts Bay School, Heamoor, Madron Parish

(Town – for urban sites)

Penzance

(Postcode)

TR18 3JT

(Easting) X co-ord

SW 45703

(Northing) Y co-ord

31315



Historic Environment, Cornwall Council is a Registered Organisation with the Institute for Archaeologists

## List of Figures

Cover	Topsoil removal commencing on the site
Fig 1	Site location
Fig 2	2011 OS map
Fig 3	1880 OS map
Fig 4	Site plan showing features encountered and location of recorded sections
Fig 5	Field Boundary crossing site looking NNW
Fig 6	Burnt area (3) looking NE
Fig 7	Phase 1 land drain
Fig 8	Phase 2 land drain
Fig 9	Phase 2 land drain cutting one of Phase 1
Fig 10	Phase 3 land drain
Fig 11	Flints from flint working area (6)
Fig 12	Stonework from flint working area (6)

## Abbreviations

HER	Cornwall and the Isles of Scilly Historic Environment Record
HE	Historic Environment, Cornwall Council
MCO	Monument Cornwall Number
NGR	National Grid Reference
OS	Ordnance Survey
PRN	Primary Record Number in Cornwall HER



## Summary

HE Projects was commissioned by A P Thompson Sports Engineering Limited to undertake archaeological monitoring during groundwork in advance of the construction of new sports pitches at Mounts Bay School, Heamoor, near Penzance (centred at SW 45703 31315).

Prior to the archaeological fieldwork commencing, a geophysical survey of the area had been carried out (GSB 2008; Jones 2008) which showed the line of a linear feature running from north-north-west to south-south-east across the site and several anomalies of potential archaeological significance, and an earlier watching brief that had been carried out during the excavation of geotechnical test pits revealed a few archaeological features (Fleming 2009).

The fieldwork succeeded in locating most of the geophysical features. The linear feature was identified as a couple of parallel ditches the character of which suggests that they were originally associated with field boundaries or hedges, the bank element having been removed. No archaeological dating evidence was obtained from these ditches; however the field boundary they represent appears on both the 1840s tithe map and the 1880 OS map so it is probably of earlier post-medieval origin perhaps associated with the farm at Luthergwearne.

Several of the other geophysical anomalies turned out to be burnt areas of modern origin including possibly the crash site of a Bristol Beaufort aircraft in 1941.

A dense concentration of land drains encountered in the project area attest to this area having once been marshland as suggested by the name of the nearby medieval farm of Luthergwearne, that bears the Cornish language elements meaning the 'steep slope' of the 'alder-swamp'.

Finally, a Neolithic artefact scatter consisting of some 30 flints and 6 other pieces of stonework was located at SW 4571131359.

No other features of archaeological interest were recorded over the area of the site and the development had very little or no impact on any significant buried remains.

## Project background

HE Projects was commissioned by Mr Wayne Gilbert of A P Thompson Sports Engineering Limited to undertake a programme of archaeological recording ahead of the construction of new sports pitches at Mounts Bay School, Penzance (Figs 1 and 2). The development was set within an area of approximately 2 Ha (Fig 4).

The development was the subject of a planning condition, which required that archaeological recording took place ahead of construction.

Previous archaeological work on the site included a geophysical survey (GSB 2008; Jones 2008) the results of which uncovered several anomalies of potential archaeological significance. A watching brief was carried out during the excavation of geotechnical test pits revealed a few archaeological features (Fleming 2009).

Phil Markham (Historic Environment Planning Advice Officer, Cornwall Council) produced a brief (09/12/09) for archaeological recording (Appendix 1) and was consulted over the requirements for the archaeological recording. A written scheme of investigation, outlining the methodology for archaeological recording was produced (09/02/10) by Andy Jones (Senior Archaeologist, HE Projects) in response to the brief (Appendix 2).

## Location and setting

The site is a large field to the west of Mounts Bay School (Fig 2). This is situated on the northern side of the village of Heamoor between Penzance and Madron. The field slopes from 65m OD to 60m OD towards the south. The field was in use as a playing field. The soils are well-drained loams lying over shale. The underlying geology consists of hornfelsed slates of the Mylor Slate Formation belonging to the Devonian Period.

The development area is situated within an area that falls into two historic character zones which have been classified as "Anciently Enclosed Land" and "Urban Land"

(Cornwall County Council 1996). "Anciently Enclosed Land" frequently contains buried archaeological remains dating to medieval and earlier periods. "Urban Land" is land which has been developed since the eighteenth/nineteenth century and which often contains built remains dating to post-medieval and modern times.

A field system consisting of small sub-rectangular and curvilinear fields of possible prehistoric date is located to the immediate south of the development area (PRN 52890) with a possible continuation some 190m further south (PRN 52889). This area also had traces of ridge and furrow indicating use in the medieval period. Luthergwearne is a settlement of medieval origin that is first mentioned in 1560 (Gover 1948) and is located to the southwest of the development area (PRN 30855). The name is Cornish and possibly contains the elements *lether* meaning 'cliff' or 'steep slope', and *guern* meaning 'alders' or 'alder-swamp' (Padel 1985). The medieval settlement lay some 280m south of the present farm at SW4551230842.

## Aims and objectives

The aims of the project were:

- To record archaeological features, layers and finds affected by the works.
- To establish the extent, condition, significance and character of the archaeological resource.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the occupation of the site.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

## Working methods

The archaeological work was undertaken as an 'archaeological watching brief', with the soil strip being carried out under archaeological supervision using a machine fitted with a toothless bucket. The soil was stripped cleanly to a level at which archaeological features or layers were revealed (ie, the top of the first archaeologically significant horizon or the natural, whichever was highest). Machines did not run over the stripped area until the archaeological works were completed.

The area uncovered was then inspected by an archaeologist and any archaeological features or layers exposed were investigated and carefully excavated by hand and recorded by written description, plan and section and photographic record as appropriate.

Features were plotted onto a site plan at a scale of 1:1000 based on an Ordnance Survey map of the same scale, being measured in from fixed locatable points on the ground marked on the map. Sample sections (nature of soil depth, layers present, etc) were also noted across the field (Fig 4).

## Results

### *Ground conditions*

This project was carried out under severe weather conditions resulting in very muddy and wet ground surfaces that may have obscured smaller features. The area stripped for the playing field was approximately 80m wide, and 95m long, and reached a maximum depth of 0.5m.

Several sections (Fig 4) were recorded across the area, full descriptions of which can be found in the site archive. The basic profile observed consisted of 0.05m of grass, roots and topsoil overlying 0.15m of grey-brown clay loam, and 0.05m of light grey-brown clay, this in turn being on top of pale yellow-grey clay at the base.

The thickness of this profile varied from 0.2m to 0.50m the greatest depth being seen down slope at the southern end of the site with the thinnest at the top (north) end of the field. Modern White Glazed stoneware (china) and post-Medieval Glazed Red Earthenware was found in both the plough-soil and lower subsoil dating from the 19<sup>th</sup> or 20<sup>th</sup> centuries (not retained)

#### *Post-medieval field boundaries*

The main feature uncovered on the site was a line of paired ditches, ditches [01] and [02]. These had originally been identified by the geophysical survey (Fig 4) as a single linear feature running from north-north-west to south-south-east, perpendicular to and joining the current field boundary that is alongside the road.

These two ditches set approximately 1.8m apart ran the entire width of the area investigated. The westernmost of this pair of ditches was ditch [01]. This was on average 0.80m wide and reached a maximum depth of 0.17m. It was shallow U shaped in profile, and filled with a dark grey-brown clay loam with a few shillet fragments. The eastern ditch, ditch [02] was on average 1m wide, and a maximum depth of 0.30m was recorded. This ditch had a very shallow U shaped profile and was filled with a dark grey-brown clay loam with a few shillet fragments. No dating evidence for either ditch was obtained.

These ditches marked the line of a removed field boundary hedge that appears on both the 1840's tithe map and the 1880 OS map so it is probably of earlier post-medieval origin perhaps associated with the farm at Luthergwearne (Fig 3).

#### *Modern burnt areas*

Several burnt areas were noted on the southern side of the site, corresponding roughly with the areas tentatively interpreted as potential Middle Bronze Age hollow-set roundhouses or other pit-type anomalies on the geophysical survey (Jones 2008).

The largest (3) was roughly circular in shape with a diameter of about 9m. This area was marked by scorched shillet and fire split rock, charcoal and ash spreads and burnt clay. Throughout the deposit were fragments of burnt animal bone. Dating evidence in the form of burnt Modern White glazed Stoneware (china) from the late 19<sup>th</sup> or 20<sup>th</sup> centuries was observed but not retained. Due to the modern nature of this area it was not investigated further (Figs 4 and 6).

In conversation with a Mr Pollard of Luthergwearne Farm there appears to have been a local tradition that the butchers operating from Penzance in the early 20<sup>th</sup> century used to come out to this field to dispose of any offal and animal remains they could not sell by burning it. This area would seem to be confirmation of this practice.

Two other burnt patches were also noticed (4) and (5). These were similar in nature to area (3) but no burnt bone was found (Fig 4). Some electrical wire was seen in area (5). Though these features probably represent further activity of the Penzance butchers, the presence of electrical wire in one suggests another possibility. Again in conversation with Mr Pollard there is a tradition that a German bomber crashed in this field during the Second World War; these scorch marks may mark the location of this crash.

Further research on this had shown that rather than a German aircraft, a British Bristol Beaufort MkI N1040 MW-K of 217 Squadron based at RAF St Eval crashed in this field on the 23<sup>rd</sup> May 1941 (see Appendix3). However, it is not recorded if this aircraft caught fire (Appendix 3).

#### *Land drains*

A distinctive feature of this site was the large number of land drains encountered. Three separate phases were noted (Figs 4, 5, 7, 8, 9, 10). The earliest (possibly 19<sup>th</sup> century) consisted of trenches up to 0.40m wide infilled with stone rubble to allow water to soak away (Fig 7). The next consisted of trenches (again up to 0.40m wide) infilled with stone rubble and ceramic pipes (Fig 8). These land drains link together in a small square manhole constructed out of bricks and cement which suggests they were put in when the school was first constructed in the 1950s. Finally there is a grid pattern of narrow trenches filled with plastic piping and pea-grit (Fig 10) that was apparently put down

sometime in the 1970s to drain the school playing field (information from the school grounds man).

This density of drainage, plus the gleyed nature of the underlying clay subsoil strongly suggest that this was indeed the marshy or wet ground hinted at by the name Luthergwearne, the 'steep slope' of the 'alder-swamp'.

#### *Neolithic artefact scatter*

Evidence for prehistoric activity was noted at the northern edge of the field (Fig 4). Here in a limited area of some 17m by 7m, context (6), a total of 30 flints and 6 other pieces of stonework were recovered from the base of the subsoil lying immediately on top of (and sometimes pressed into) the gleyed clay (Figs 11 and 12). The presence of cores, primary flakes, waste flakes and tools suggest that this was a flint working site, while the muller and flensing tool hint at other food processing activities (Appendix 4).

The flint is very fresh, and all is of nodular origin. This is significant. Flint does not occur naturally in Cornwall as large nodules but only as rounded beach pebbles mostly derived from raised beach deposits laid down during the various ice ages. In the Neolithic period there was a trade with peoples outside of the county and nodules of good quality flint was brought in from Devon and even further afield. The nodular nature of this flint, plus some of the aspects of the tool shape and methods the flint was worked in strongly suggests that this collection is of Neolithic date *circa* 4000 – 2500 BC. This may be evidence for a hunting camp overlooking the marsh which would have provided a good source of game and also fresh water.

It is recommended that a short note reporting this discovery be made for publication in the Journal 'Cornish Archaeology' and the artefacts then deposited in Truro Museum.

#### *Conclusion*

No other features of archaeological interest were seen over the area of the site and it was observed that the development had very little or no impact on any significant buried remains apart from those noted above.

## References

- Cornwall County Council, 1996. *Cornwall: A Landscape Assessment 1994* report produced by Landscape Design Associates in association with Cornwall Archaeological Unit
- Fleming, F. 2009. *Mounts Bay School, Cornwall, archaeological watching brief during geotechnical test pitting*. HE Report No 2009R080
- Gover, JEB, 1948. *Place-Names of Cornwall* (manuscript at RCM, Truro)
- Jones, A, 2008. *Mounts Bay School Geophysical Survey: Statement of Archaeological Implications* (HES project 20088093). HE Report No 2008R1114
- Padel, OJ, 1985. *Cornish Place-Name Elements*, English Place-name Society, Nottingham

## Project archive

The HE project number is **2010111**

The project's documentary, photographic and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project and information file containing site records and notes, project correspondence and administration (file no 20100111).
2. Field plans and annotated notes stored in an A2-size plastic envelope (GRE737/1-2).
3. Digital photographs stored in the directory R:\Historic Environment (Images)\SITES.M-P\Mounts Bay School, Penzance WB 2010111
4. This report text is held in digital form as: G:\Historic Environment (Documents)\HE Projects\Sites\Sites P\PENZANCE\Penzance Mounts bay School Playing field WB 2010111\report.doc
5. English Heritage/ADS OASIS online reference: cornwall2-95050

Artefacts and environmental material retrieved during the project should be stored in sturdy boxes and be kept under stable conditions. The artefacts are to be deposited within the Royal Cornwall Museum, River Street, Truro (Museum accession code Truri 2011.22). The site code is MBS10. The artefacts are currently stored at the HE Office. Copies of all archive material and drawing will be kept at the HE premises.

# Appendix 1: Brief for Archaeological Recording

**Date:** 5<sup>th</sup> October 2009

**Address:** Mounts Bay School, Boscathnoe Way, Heamoor, Penzance

**Site:** Playing Fields at the Above Address

**Applicant:** Cornwall Council, Executive (Children, Young People and Families Portfolio), New County Hall, Truro TR1 3AY

**Agent:** Cedric Wynter, Poynton Bradbury Wynter Cole, Bethesda Hill, St Ives TR26 1PB email. architects@pbwc.co.uk

**Historic Environment Planning Advice Officer:** Phil Markham, Cornwall Council, Historic Environment Service, Kennall Building, Old County Hall, Truro TR1 3AY. tel. 01872 322546 email. pmarkham@cornwall.gov.uk

**Local Planning Authority Officer:** Not recorded, Cornwall Council, Natural Resources, New County Hall, Truro TR1 3AY

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 trial trenches at the above site to inform the developer and the HEPAO of the archaeological potential and requirement, or otherwise for further stages of mitigation.

### **2 Site Location and Description**

The site is located on the north-western edge of Penzance at OS grid reference SW 45672 31297. The site is currently playing fields at a height of approximately 60m OD on a south-east facing slope. The Historic Environment Record records the site has soils of Denbigh 2 (Loam over shale) overlying a geology of Mylor Slate Formation.

### **3 Planning Background**

Cornwall Council granted permission for the creation of a synthetic turf floodlit pitch, improved access arrangements, new storage shed; re-level the existing rugby pitch and ancillary development at Mounts Bay School Penzance. This permission is subject to 9 conditions; Condition 6 States:

*No development shall take place within the site until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted and approved in writing by the CPA in consultation with the county archaeologist. Developments shall be carried out in strict accordance with the approved details.*

*Reason: In order to protect potential archaeological remains at the site in accordance with CSP Policy 2.*

#### **4 Archaeological Background**

Part of the proposed development is on land recorded by the Cornwall and Scilly Historic Environment Record (HER) as being 'Anciently Enclosed Land' (AEL). The Cornwall Landscape Assessment 1994 describes AEL as:

*Typical Historical/Archaeological Components*

*Bronze Age, Iron Age and Romano-British settlements and fields of the farmers who originally cleared this zone. (Page 142)*

*Potential for historical and archaeological research*

*Considerable. Each farming settlement will contain a wealth of historical, architectural and archaeological information. Surveys of field systems yield considerable agricultural, social, and tenurial information. Buried archaeological features can be expected virtually anywhere in this zone. (Page 143)*

The HER also records the presence of a prehistoric field system adjacent to the proposed development. The development may therefore disturb buried archaeological remains.

A geophysical survey (Historic Environment Report 2008R114)) was undertaken which lead to the discovery of a scatter of anomalies which have the potential to be significant archaeological features. Linear anomalies, probably caused by ditches were found and may be associated with removed field boundaries. A number of other potential archaeological anomalies were scattered across the survey area. These include a number of sub-circular pit type anomalies. The nature of these features is uncertain and it is possible that many of them will prove to be of geological or modern origin. However, two or three of these anomalies appear to be up to 10m in diameter and are therefore of similar dimensions to Middle Bronze Age hollow set roundhouses, which have found elsewhere in Cornwall (Jones 1998-9). The smaller pit-type anomalies could be similar to those which have been found at prehistoric occupation sites across the county (e.g. Gossip and Jones 2007). In the event that any of the pits should prove to be associated with prehistoric activity they would be regarded as being of regional importance.

#### **5 Requirement for Work**

Ground works associated with the development may disturb buried archaeological remains. Whilst the site has been assessed to be of archaeological potential there is currently insufficient evidence on the nature of this potential. The principal objective of this programme shall be to evaluate the survival of below-ground archaeological deposits across the proposed development site. The results will inform as to the nature, extent, condition, date and significance of any surviving archaeological deposits within the application area. This information will inform as to the requirement for any further investigations to be undertaken as mitigation for the impact of the proposed development upon the archaeological resource and, as such, represents the second stage of a programme of archaeological mitigation.

The site specific aims are to:

- Establish the presence/absence of archaeological remains
- Evaluate 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 the site from any archaeological remains encountered
- To inform the HEPAO and the LPA whether further archaeological mitigation would be required

## **6 General Methodology**

- 6.1 A series of trenches will be excavated across the proposed development area. The location of these excavations will be to target the potential archaeological sites recorded in the geophysical survey report.
- 6.2 All stages of the investigation shall be supported by a written scheme of investigation (WSI).
- 6.3 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA) as set out in the *'IfA Standards and Guidance for an Archaeological Field Evaluations (1994 - revised 2008)*.
- 6.4 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.
- 6.5 All of the latest Health and Safety guidelines shall be followed on site.
- 6.6 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.
- 6.7 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 Where appropriate, trenches should be excavated by a 360 degree tracked or JCB-type machine (fitted with a toothless ditching bucket) or by hand, to the surface of archaeological deposits or in situ natural ground - whichever is highest in the stratigraphic sequence. Exposed archaeological features and deposits will be cleaned and excavated by hand and fully recorded by context as per the Institute of Field Archaeologists 'Standards and Guidance for an Archaeological Watching Brief (1994 - revised 2001).
- 7.3 Where appropriate all archaeological features should be investigated and as a minimum:
  - i) small discrete features will be fully excavated;
  - ii) larger discrete features will be half-sectioned (50% excavated); and
  - 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) 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.



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 will be undertaken in agreement with Historic Environment (Advice)

- 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 Should deposits be exposed that contain palaeoenvironmental or datable elements appropriate sampling and post-excavation analysis strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on finds or advise or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits - if required.
- 7.6 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.
- 7.7 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.

## **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 HEAA.
- 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 as a minimum:

- 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 2: Mounts Bay School: written scheme of investigation for archaeological recording

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### 1. Project Background

HE Projects have been requested by Mr Andrew Sandow of WR Sandow Ltd to provide a project design and an estimate for archaeological recording in advance of the construction of new sports pitches at Mounts Bay School, Penzance. The proposed scheme, which covers an area of approximately 2 HA, is located to the north of a prehistoric field system, which is visible from the air as a crop-mark site. A recent geophysical survey of the development area (GSB Ltd 2008) identified a number of anomalies within the area, which may prove to be of an archaeological nature. These included circular anomalies, linear features and pit-type anomalies (Jones 2008). Most of these sites will fall outside the area where deeper excavations are taking place. However, there is potential for buried archaeology to be encountered within the development area.

These investigations are required as part of planning condition. This states that: *"No development shall take place within the site until the applicant has secured and implemented a programme of archaeological work in accordance with a written scheme of investigation to be submitted and approved in writing by the CPA in consultation with the county archaeologist. Developments shall be carried out in strict accordance with the approved details."*

*Reason: In order to protect potential archaeological remains at the site in accordance with CSP Policy 2".*

Phil Markham (Historic Environment Planning Advice Officer, Cornwall County Council) has produced a brief (9/12/09) and has been consulted in the preparation of this project design and will monitor the project.

This project design and estimate is for initial soil stripping of the entire area, as well as for monitoring of deeper excavations, where 'cut and fill' takes place. A contingency has also been allowed for five days of archaeological recording. However, this may need to be reviewed in light of the results of the stripping. Depending upon the results from the monitoring, further stages of archaeological recording may be needed to mitigate the impact of development. This might include one or more of the following elements:

- **Excavation of significant features**
- **Collation of archive and production of archive report**
- **Assessment, analysis (and archive deposition)**
- **Final publication (in an academic journal)**

#### 1.1 Historical Background

The area of the proposed development falls into two historic character zones which have been classified as "Anciently" and "Urban land" (Cornwall County Council 1996). 'Anciently Enclosed Land' is land which has been settled since at least the medieval period and which often contains archaeological remains dating to prehistoric and medieval times. "Urban Land" is land which has been developed since the eighteenth/nineteenth century and which often contains built remains dating to post-medieval and modern times. The development is situated within an area which has the potential to contain buried archaeological remains. The potential for buried remains was highlighted by the results from the geophysical survey.

##### *Identified archaeological sites*

A number of sites have been identified from the HER. They include:

- A prehistoric field system is located to the immediate south of the development area (PRN 52890).
- Luthergearne, a settlement of medieval origin is located to the southwest of the development area (PRN 30855).

#### *Potential sites*

There is potential for buried prehistoric and medieval sites to survive within the project area and there is the scope for the survival of previously unrecorded archaeological remains and artefacts of all periods.

## **2. Aims and objectives**

The purpose of the archaeological recording will be:

- To record archaeological features, layers and finds affected by the development.
- To establish the extent, condition, significance and character of the archaeological resource.
- To establish the presence/absence of archaeological remains.
- To identify any artefacts relating to the occupation of the site.
- The dissemination and publication of the results.
- The long-term conservation of the project archive in appropriate conditions.

In particular the key objective will be:

- To investigate and recover evidence in the form of artefacts, structures and deposits associated with the medieval and earlier settlement activity in order to enhance our knowledge of the extent, form and potential of the site.

## **3. Methods**

The archaeological programme will follow five stages: fieldwork; archiving; assessment; analysis and report.

### **3.1 Preparation**

Prior to undertaking the fieldwork the project officer will familiarise themselves with the archaeological potential of the area. This will involve the reading of pertinent data held at HE offices.

In advance of site works a meeting will be held between HE Projects and the client to discuss and agree:

- Working methods and programme.
- Health and Safety arrangements.

### **3.2 Fieldwork**

#### **3.2.1 Archaeological Recording**

The archaeological fieldwork will be undertaken with members of HE Projects present during the soil stripping/cut and fill to identify and record any archaeological features, layers and finds exposed during the site works.

- The soil stripping will be carried out under archaeological supervision using a machine fitted with a toothless bucket. The site stripping is expected to take 15 days. The topsoil will be taken down to the level required for the development, or in areas where deeper excavation is required, stripped cleanly to a level at which archaeological features or layers can be expected to be revealed. The contractor will not run over the stripped areas until recorded by the archaeologist. All exposed significant archaeological features will be totally (e.g. postholes and pits) or partially (for example, field ditches) excavated by hand and where appropriate sampled. All

features will be planned using an EDM and tied into the national grid. A further 5 days has been allocated for the recording of significant archaeological features.

On completion of the site stripping there will be a rapid review of the requirements for further archaeological recording. This will assess the range and complexity of the remains to be recorded and agree on the remaining programme of fieldwork. It is important therefore that the programme is staged, as follows:

- Controlled soil stripping under archaeological supervision.
- Rapid review of the archaeological features exposed by the soil stripping and the requirements for archaeological recording. An onsite meeting with the client, the Historic Environment Planning Advice Officer and HE Projects will be held at this stage.
- Excavation of areas with archaeological remains.

During the archaeological recording the archaeologist will:

- Identify and record any archaeological features that are revealed in the stripped area; the level of recording will be appropriate to the character/importance of the archaeological remains. If archaeological deposits of a regional or national importance are uncovered, then a further stage of archaeological recording will be necessary. **In the event that remains cannot be preserved *in situ* then full-scale excavation may be required.** A contingency should be allowed to record any significant archaeological remains which are uncovered during the stripping. The significance of the remains should be agreed between the client, the Historic Environment Planning Advice Officer and HE Projects.

Where necessary the detailed archaeological recording may include:

- Excavation of archaeological features exposed in the stripped area and plotting them onto a base map.
- Production of plans and section drawings of the excavated features and recording of features using a continuous numbering system.
- Retrieval of artefacts and environmental samples (if appropriate).

#### *Recording - general*

- Site drawings (plans, sections, locations of finds) will be made by pencil (4H) on drafting film; all plans will be linked to the Ordnance Survey Landline (electronic) map; all drawings will include standard information: site details, personnel, date, scale, north-point.
- All features and finds will be accurately located at an appropriate scale. Sections will normally be drawn at 1:10 and plans at 1:20.
- All archaeological contexts will be described to a standard format linked to a continuous numbering sequence.
- Photography: scaled monochrome photography will be used as the main record medium, with colour slides/digital images used more selectively and for illustrative purposes. This will include both general and site specific photographs. Photographs should have a scale and detailed ones should include and north arrow.
- Drawings and photographs will be recorded in a register giving details of feature number and location.
- Sealed/undisturbed archaeological contexts in the form of buried soils, layers or deposits within cut features (ditches and pits, etc) will be sampled for environmental evidence and dating material. Advice may be needed from Vanessa Straker (Regional Advisor for Archaeological Science).
- If human remains are discovered on the site they will be treated with respect and the Historic Environment Planning Advice Officer and the Ministry of Justice will be informed. All recording will conform to best practice and legal requirements.

### **3.3 Treatment of finds**

The archaeological fieldwork may produce artefactual material.

- All finds in significant stratified contexts predating 1800 AD (eg, settlement features) should be collected by context and described. Post medieval or modern finds may be disposed of at the cataloguing stage. This process will be reviewed ahead of its implementation.
- All finds will be collected in sealable plastic bags which will be labelled immediately with the context number or other identifier.

## **POST FIELDWORK STAGES**

**(To be reviewed in light of results from the fieldwork)**

### **3.4 Archiving**

Following review with the HES Project Manager, the results from the fieldwork will be collated as an archive. This will involve washing and cataloguing of finds, the indexing and cross-referencing of photographs, drawings and context records. Initial processing of palaeoenvironmental samples will be undertaken. This will involve flotation of bulk samples to recover plant macrofossils and other remains.

- All finds and samples, etc will be stored in a proper manner (being clearly labelled and marked and stored according to HES guidelines).
- All records (context sheets, photographs, etc) will be ordered, catalogued and stored in an appropriate manner (according to HE guidelines).
- The site archive and finds will initially be stored at HE premises and transferred to the Royal Cornwall Museum and the RCM conditions for archives will be followed. The RCM will be notified of the commencement of the project and included in discussions for sampling and disposal as appropriate.
- In the event that there are no finds or they are retained by the owner documentary archive in due course shall be deposited with the Cornwall Record Office, but in the medium term will be stored at Pound and Co. All digital records will be filed on the Cornwall Council network.

### **3.5 Archive report**

The results from the fieldwork will be presented in a concise report. Copies of the report will be distributed to the Client, the County Archaeologist and the local and main archaeological record libraries. A PDF copy of the report will be produced.

This will involve:

- producing a descriptive text;
- producing maps and line drawings;
- selecting photographs;
- report design;
- report editing;
- dissemination of the finished report
- Deposition of archive and finds in the Royal Cornwall Museum, Truro.

The report will have the following contents:

- Summary - Concise non-technical summary.
- Introduction - Background, objectives, aims and methods.
- Results - Factual description of the results of the various aspects of the project, with separate sections as necessary for discussion/interpretation and potential for further analysis.
- Discussion - Discussion of the interpretation of the results, highlighting information gained on a chronological or thematic basis

Recommendations for further analysis and publication.

Recommendations for further mitigation.

- Archive
  - A brief summary and index to the project archive.
- Appendix
  - A copy of the project brief.
  - A copy of the WSI
- Illustrations
  - General location plan.
  - Detailed location plans to link fieldwork results to OS map.
  - Selected plans and section drawings (as appropriate).
  - Finds drawings (if appropriate).
  - Photographs (if appropriate).

An English Heritage/ADS online access to the index of archaeological investigations (OASIS) record will be made.

### **3.6 Assessment/analysis**

The structural and stratigraphic data and artefactual material will be assessed to establish whether further analyses and reporting is appropriate. The outline of final report, and the work required to produce it will be determined.

In the event of significant remains being recovered (eg, prehistoric artefacts) it may be appropriate to:

- Liaise with specialists (eg, artefacts) to arrange for assessment of the potential for further analysis and reporting.
- Consult with the Historic Environment Planning Advice Officer over the requirements for assessment, analysis and reporting.

### **3.7 Updated project design and final publication**

In the event of significant remains being recorded the scope and final form of the report will be reviewed; for example in addition to an archive report the results should be published in an academic journal (eg, *Cornish Archaeology*).

## **4. Monitoring**

- This written scheme of investigation will need to be approved by the planning authority.
- The recording exercise will be monitored. The Historic Environment Planning Advice Officer should be informed 1 week in advance of the intention to start the recording.
- HE Projects will liaise with the Historic Environment Planning Advice Officer to advise on the programme and progress of work, and agree site meetings as required.
- A summary of the results will be presented to the Historic Environment Planning Advice Officer within 1 month of the completion of the fieldwork.
- In the event that significant remains are encountered an updated project design will be agreed with the Historic Environment Planning Advice Officer.

## **5. Project Staff**

An experienced archaeologist employed by HE will carry out the archaeological fieldwork. The report will be compiled by experienced archaeologist(s) employed by HE.

Relevant experienced and qualified specialists will be employed to undertake appropriate tasks during the assessment and analysis stages of the project.

The project will be managed by a manager who is a Member of the Institute For Archaeologists, who will:



- Take responsibility for the overall direction of the project.
- Discuss and agree the objectives and programme of each stage of the project with project staff, including arrangements for Health and Safety.
- Monitor progress and results for each stage.
- Edit the project report.

## **6. Timetable**

The archiving and archive report will be completed within 12 months of the ending of the excavations. The timetable for further stages of assessment, analyses and publication will be agreed with Historic Environment Planning Advice Officer in the light of the results of the excavations.

## **7. Health and safety during the fieldwork**

### **7.1 Health and safety statement**

Historic Environment is within the Environment, Planning and Economy Directorate of Cornwall Council. The HE projects team follows Cornwall Council's *Statement of Safety Policy*. For more specific policy and guidelines the Unit uses the manual *Health and Safety in Field Archaeology* (2002) endorsed by the Standing Conference of Archaeological Unit Managers.

Prior to carrying out any excavations HE will carry out a risk assessment

## **8. Insurance**

As part of Cornwall Council, HE is covered by Public Liability and Employers Liability Insurance.

## **9. Standards**

HE follows the Institute For Archaeologists' Standards and Code of Conduct and is a Registered Archaeological Organization.

As part of Environment, Planning and Economy Directorate of Cornwall Council, the HE projects team has certification in BS9001 (Quality Management), BS14001 (Environmental Management), OHSAS18001 (Health, Safety and Welfare), Investors in People and Charter Mark.

## **10. Copyright**

Copyright of all material gathered as a result of the project will be reserved to the Environment, Planning and Economy Directorate of Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

This project design and estimate is the copyright of Historic Environment, Cornwall Council.

Use of the material will be granted to the client.

## **11. Freedom of Information**

All information gathered during the implementation of the project will be subject to the rules and regulations of the Freedom of Information Act 2000.

## **Notes**

- It is assumed that the client will supply the mechanical excavator. The cost is not included in the attached estimate.

- The client will be responsible for the Health and Safety arrangements onsite (including fencing, etc), and it is assumed that welfare facilities will be made available.
- The post excavation programme (assessment, analysis and reporting) will need to be reviewed in the light of the fieldwork.

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## **Appendix 3. Aircraft Crash at Heamoor during WWII.**

23-05-1941

Bristol Beaufort I N1040 MW-K of 217 Squadron based at RAF St Eval took off on an Anti-Submarine search for a U-boat. The crew spotted the U-boat on the surface near the Ile d'Oleron and dropped a stick of four bombs. A second attack against the vessel was made with the two remaining bombs but return fire ripped open both wing leading edges. Sgt Harper made a further run in using machine-guns but a cannon shell tore into the starboard main fuel tank and another exploded behind the observer's panel. The pilot set course for home and the crew assessed the damage, the flaps and undercarriage were visibly damaged. On reaching the Bishop's Light the starboard engine started to misfire through lack of fuel and the Beaufort lost height and crash landed in a field at Boscathnoe Lane, Heamoor 2 miles North of Penzance. The crew Sgts Harper, Scollin, Seth and Wendle were all injured.

[http://www.rafdavidstowmoor.org/pages/crash\\_log/crashlog41.html](http://www.rafdavidstowmoor.org/pages/crash_log/crashlog41.html)

## **Appendix 4. Finds catalogue.**

- 1 large flint core of nodular flint.
- 5 medium flint cores of nodular flint.
- 5 flint primary flakes. Nodular.
- 2 core rejuvenation flakes.
- 5 flint blades.
- 2 flint flake 'fabricators'.
- 2 utilised flint flakes.
- 8 flint waste flakes.
  
- 1 fragment of a granite muller.
- 1 vein quartz cobble hammerstone (broken).
- 1 broken, elongated slate bevelled pebble or flensing tool.
- 3 water rounded pebbles suitable for use as sling stones.





Figure 1. Site location.



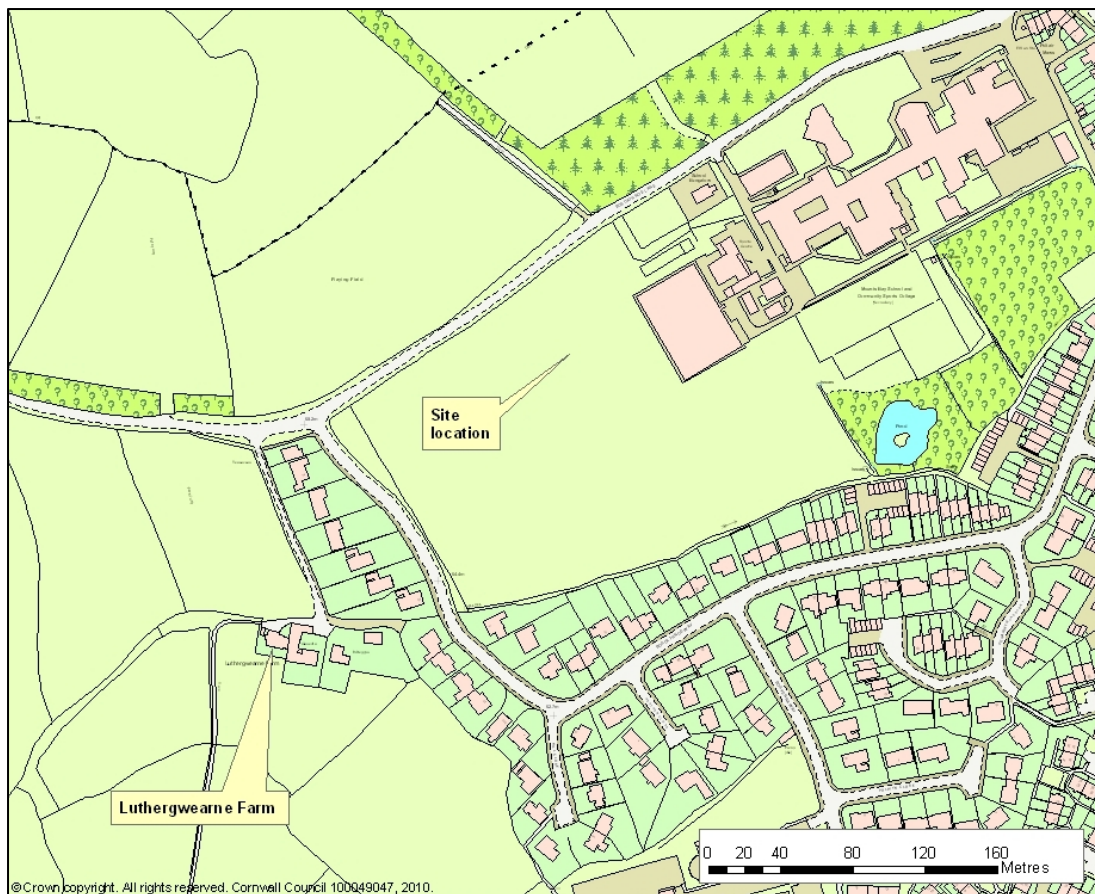


Figure 2. Site location. 2011 OS map.

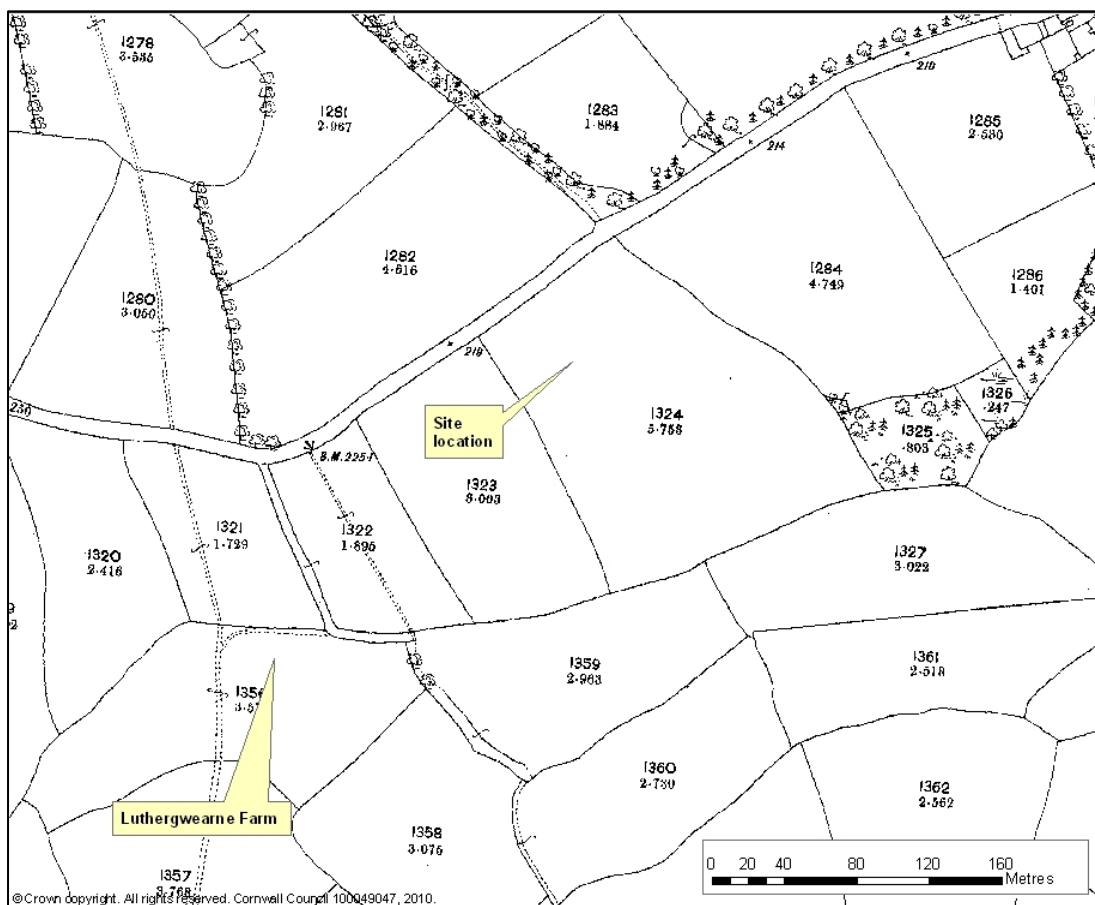


Figure 3. Site location. 1880 OS map.

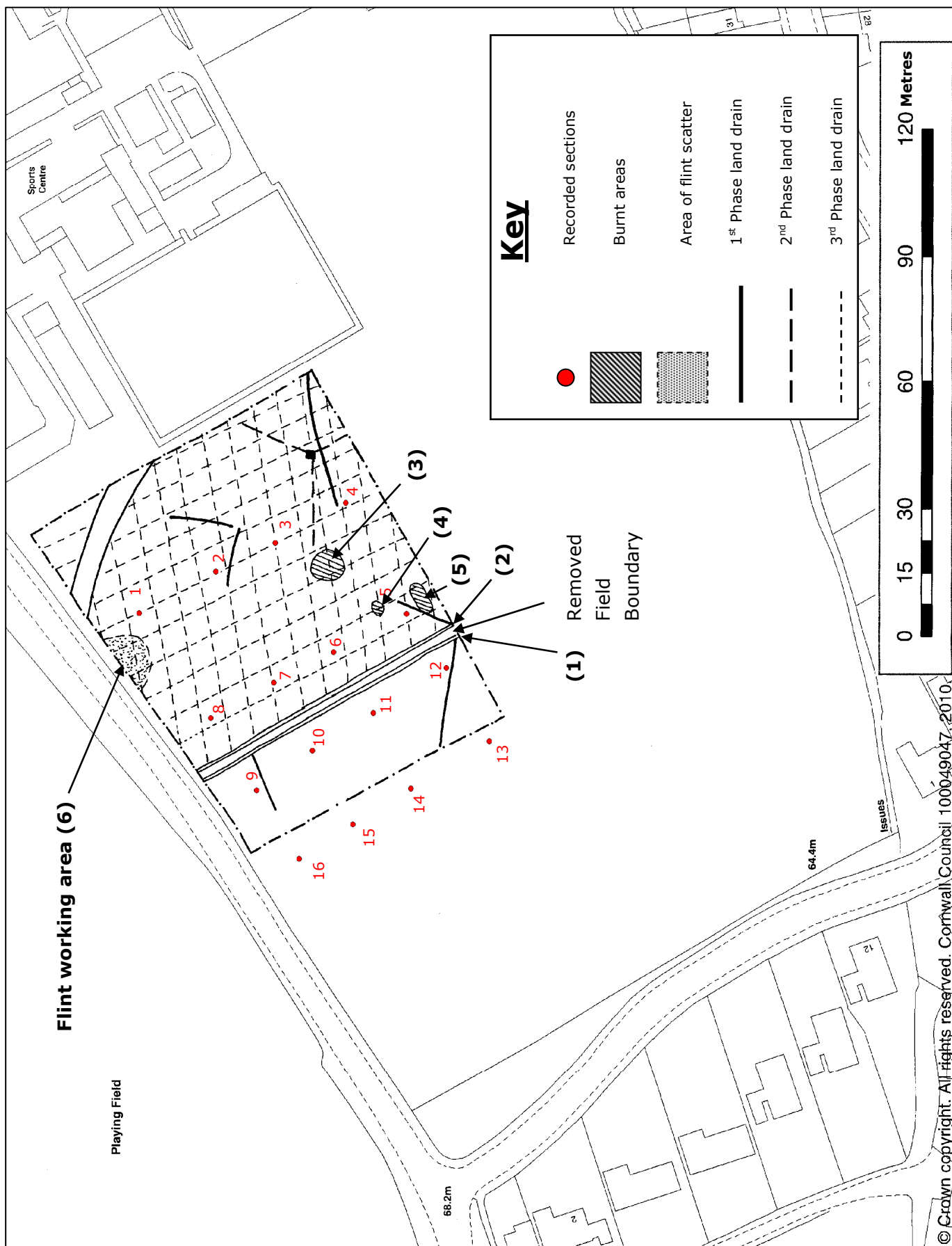


Figure 4. Site plan showing features encountered and location of recorded sections.





*Figure 5. Field Boundary crossing site looking NNW showing ditches (1) and (2)*



*Figure 6. Burnt area (3) looking NE.*





Figure 7. Phase 1 land drain.



Figure 8. Phase 2 land drain





*Figure 9. Phase 2 land drain cutting a phase 1 land drain.*



Figure 10.  
Phase 3 land drain





Figure 11. Flint from flint working area (6)



Figure 12. Stonework from flint working area (6)

