



Restormel Castle Lightning Conductor, Cornwall.
December 2016. Archaeological Watching Brief

Report No

2016R081

Report Name

Restormel Castle Lightning Conductor,
Cornwall. December 2016. Archaeological
Watching Brief

Report Author

C. M. Thorpe

Event Type

Watching Brief

Client Organisation

English Heritage

Client Contact

Stuart Kenhard

Monuments (MonUID)

Medieval castle MCO135	12 th Century Castle MOC136	Late century castle MCO137	13 th Medieval chapel MCO146	Scheduled Monument 15004	NHLE 1017574
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Fieldwork dates (From)

13/12/16

(To)

14/12/16

(Created By)

CMT

(Create Date)

Dec 2016

Location (postal address; or general location and parish)

Restormel Castle, Lanlivery

(Town - for urban sites)

Lostwithiel

(Postcode)

PL22 0HN

(Easting) X co-ord

SX10422

(Northing) Y co-ord

61410



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List of Figures

- Cover. *Photograph showing location of conductor tape trench and pit for the earthing plate.*
- Figure 1. *General site location map.*
- Figure 2. *Site location showing its position in relation to rest of the castle.*
- Figure 3. *Site plan showing location of areas examined archaeologically (in red).*
- Figure 4. *Earthing pit. Sections A-B-C showing possible edge of motte.*
- Figure 5. *View of site looking north-west showing location of conductor tape trench and pit for the earthing plate.*
- Figure 6. *Detail of conductor tape trench looking south west.*
- Figure 7. *Detail of Earthing pit, looking north east showing Section A-B-C.*
- Figure 8. *Site overview looking south west showing conductor tape trench and earthing plate pit.*
- Figure 9. *Site overview looking south west after back filling.*
- Figure 10. *Slot 1. Location adjacent to lightning conductor.*
- Figure 11. *Slot 1. Detail of wall walk surface.*
- Figure 12. *Slot 1 after excavation showing concrete bedding for the stone surface of wall walk.*
- Figure 13. *Slot 1 after re-instatement of wall walk surface, the stones bedded within a lime mortar.*
- Figure 14. *Fragment of roof ridge tile from earthing pit, context (5). Mid to late thirteenth century in date.*

Abbreviations

CAU	Cornwall Archaeological Unit
HER	Historic Environment Record
MCO	Monument number in the Cornwall and Scilly HER
NHLE	National Heritage List Entry

1 Project background

Cornwall Archaeological Unit (CAU) was commissioned by Stuart Kenhard, English Heritage Facilities Manager M & E, South West Region, to undertake archaeological recording as Restormel Castle is a Scheduled Monument (NHLE No 1017574) during groundworks required for the installation of a lightning conductor system at Restormel Castle, Cornwall (SX 10422 51410). In addition four narrow slots that were cut across the castle curtain wall walk to accept copper conductor tape as part of the conductor system were also monitored.

A method statement (Appendix 1), was produced (01/12/2016) by Charles Johns (Archaeology Projects Officer, CAU).

This short report covers the results of an archaeological watching brief carried out on the 13th and 14th December 2016.

2 Location and background

Restormel Castle is located about one mile (1.6 Km) to the north (SX 10402 61398) of the town of Lostwithiel on a spur of ground overlooking the western bank, and first fording point of the River Fowey (Figs 1 and 2). The underlying geology is calcareous slate, grit and thin limestones of the Devonian Meadfoot Beds (BGS sheet 347 Bodmin 1981).

Restormel Castle originated late in the eleventh or early in the twelfth century as a ringwork and bailey. The keep was renewed in stone in the later thirteenth century, probably associated with the transfer of the castle to the Earls of Cornwall and appears to have never been designed to be a stronghold but instead was intended to reflect the status of its owners especially as they encouraged the growth of the town of Lostwithiel as an administrative centre for the Duchy. Attached to the castle was an extensive deer park (Thomas and Buck 1993; Taylor and Johns forthcoming).

There is no evidence that the bailey defences were ever modified but remained an earth bank, ditch, and probable palisade. After the Black Death (1348-9) and with the progressive silting of the River Fowey, Lostwithiel declined as a port and with it the fortunes of the castle. It was still maintained in the fifteenth century but was abandoned by 1540 and the deer park disparked (Thomas and Buck 1993; Taylor and Johns forthcoming).

The ruinous castle was briefly re-occupied during the Civil War when it was re-fortified by Parliamentary forces; however, it fell to the Royalists in 1643 with barely a fight, and was not reoccupied. During the eighteenth and nineteenth centuries the ruin was incorporated as a garden feature with landscaping forming part of a scenic walk from Restormel Manor (Thomas and Buck 1993; Taylor and Johns forthcoming).

Owned by the Duchy of Cornwall, Restormel Castle has been in Guardianship care since the 1920s when some consolidation of walling, and clearance of rubble from the interior was undertaken to allow public access. It is a Scheduled Monument (SM 15004; NHLE No 1017574).

The conductor tape exited from a garderobe chute within the curtain wall roughly 5m south-east of the southern wall of the chapel, and then ran down the steep side of the 'motte' within a narrow trench before connecting to a copper earthing plate set in a pit within the ditch surrounding the castle (Figs 3, 5 and 8). It was the excavation of the trench and pit for the plate that was monitored during this project.

3 Aims and objectives

The site specific aims and objectives were:

- To identify and record the presence/absence of archaeological remains.
- To determine the extent, condition, nature, character, date and significance of any archaeological remains encountered.
- To establish the nature of activity on the site.
- To identify any artefacts relating to the occupation of the castle.
- To provide further information on the archaeological history of the castle.

4 Working methods

The conductor tape exited from a garderobe chute within the curtain wall roughly 5m south-east of the southern wall of the chapel, and then ran down the steep side of the 'motte' within a narrow trench before connecting to a copper earthing plate set in a pit within the ditch surrounding the castle (Figs 3, 5 and 8). It was the excavation of the trench and pit for the plate that was monitored during this project.

An archaeologist was present during the excavation of the conductor tape trench and pit for the earthing plate. These were both spade-dug by hand. The trench and pit were inspected for any archaeological features or artefacts and a photographic record was made. Notes were made of the soil profile encountered. The spoil was also examined for any artefacts.

A plan showing the location of the conductor tape trench and pit for the earthing plate posthole was made at a scale of 1:100 (Fig 3). Sketch sections of two sides of the pit were made at a scale of 1:20 (Fig 4).

Four narrow slots were also cut across the top surface of the curtain wall, wall walk in order allow conductor tape to be laid so that it would not form a trip hazard (Fig 3). This tape was to connect the lightning conductor to tape leading down the garderobe chute and thus to the grounding plate, and also to the metal handrails around the interior circumference of wall walk. These were also recorded. The location of each was marked on a plan at a scale of 1:500, then for each slot, photographs were taken before commencement, during and at the conclusion of the work (Figs 10, 11, 12 and 13). Brief notes were also made recording the nature of the material encountered.

5 Results

5.1 Stratigraphy

The trench down the side of the 'motte' was roughly 9m long, 0.25m wide, and reached a maximum depth of 0.3m (Figs 3, 6 and 8).

The profile recorded consisted of 0.05m of grass roots and topsoil overlying 0.1m of grey-brown clay loam, and 0.1m of red, grey-brown clay. This in turn overlay 0.05m of grey-brown clay with numerous shillet fragments. This latter deposit was not bottomed. No archaeological features were recorded along the length of the trench, and no artefacts were recovered (Fig 6).

The pit excavated for the earthing plate located immediately within the flat ditch area at the base of the slope of the 'motte' measured 1.2m x 1.2m, and reached a depth of 1m. It was orientated parallel with the edge of the slope so was roughly north west to south east (Figs 3, 4, 7 and 8).

The profile recorded within the pit consisted of 0.05m of grass roots and topsoil (1), overlying 0.1m of grey brown clay loam (2), 0.2m of grey-brown clay with stone fragments including roofing slate fragments (3), 0.4m of red-brown clay containing

large blocks of stone (4), and 0.25m of grey-brown clay with large stone blocks (5). This latter deposit was not bottomed (Fig 4).

Rotten shillet bedrock (6) was encountered on the western side of the pit, dipping steeply to the east the before it disappeared halfway across the width of the pit (Fig 4). It was overlain by grey-brown clay (5).

5.2 Finds

A small fragment of heavily abraded glazed roof ridge tile was recovered from the top of context (4). The fabric is highly micaceous and resembles that found in Cornish medieval coarseware: Lostwithiel-type ware pottery. Unfortunately there were no diagnostic features, but it probably dated from the thirteenth to fourteenth centuries AD.

A second larger ridge tile fragment was recovered from context (5). This was in a highly micaceous fabric resembling Cornish medieval coarseware: Lostwithiel-type ware pottery. The outer surface has incised line decoration in the form of a 'Christmas tree' pattern that is often found running up decorative crests often found on ridge tiles. It is probable that this tiles dates from the mid to late thirteenth century (Fig 14).

6 Discussion

The sloping bedrock (6) encountered within the western half of the earthing plate pit is probably part of the hillside scarped to form the 'motte', which also forms the edge of the castle ditch.

The location of the earthing plate pit is immediately below the window and southern wall of the chapel (Cover, Figs 5 and 8). This area was heavily modified in the seventeenth century when the chapel was converted into a gun battery during the Civil War. It is possible that some of the large blocks of stone encountered within contexts (4) and (5) may be derived from stone thrown down from the walls above during the conversion work, or in a possible slighting of the gun position after the fall of the castle.

The four slots cut across the curtain wall, wall walk averaged a width of 0.1m and reached a maximum depth of 0.08m. It was found that they were cut only through the top layer of material forming the surface of the wall walk which had been bedded in concrete during the consolidation works carried out in the 1920s. The slots thus had no impact on the structure of the building. The slots were reinstated using a lime mortar (Figs 10, 11, 12 and 13).

Apart from the possible edge of the 'motte' no archaeological features were identified, it is thus evident that this work had no discernible impact on any buried archaeological remains. The cutting of the slots across the curtain wall walk also had little impact either physically or visually on the structure of the castle.

7 References

British Geological Survey, 1881. Map sheet 347 Bodmin.

Taylor, SR, and Johns, C, forthcoming. Restormel Castle, Cornwall; archaeological recording 2006–2008, *Cornish Archaeol*

Thomas, N, and Buck, C, 1993. A historical and archaeological investigation of Restormel Castle, Cornwall: an interim study, Truro (Cornwall Archaeological Unit).

8 Project archive

The CAU project number is **146631**

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew Road, Truro, TR1 3AY. The contents of this archive are listed below:

1. Projects file containing site records and notes, project correspondence and administration (146631).
2. Field plans stored in an A2-size plastic envelope (GRE 868/1-3).
3. Digital photographs stored in the directory: R:\Historic Environment (Images)\SITES.Q-T\Restormel Castle Lightning conductor WB December 2016 HEXQPR146631
4. English Heritage/ADS OASIS online reference: cornwall2-271714
5. This report text is held in digital form as: G:\TWE\Waste & Env\Strat Waste & Land\Historic Environment\Projects\Sites\Sites R\Restormel Castle Lightning Conductor WB 146631\Report
6. Artefacts recovered in the course of the project are temporarily stored at the CAU finds archive store with the site code RCLC16.

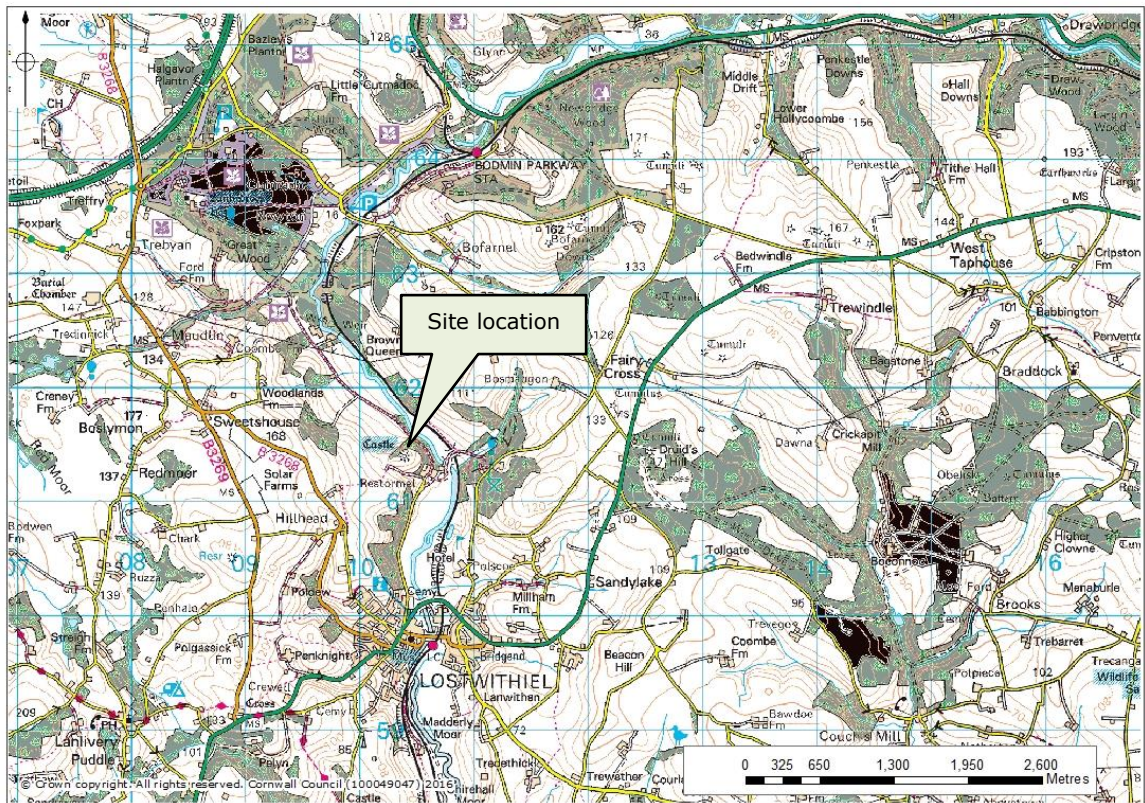


Figure 1. General site location map.

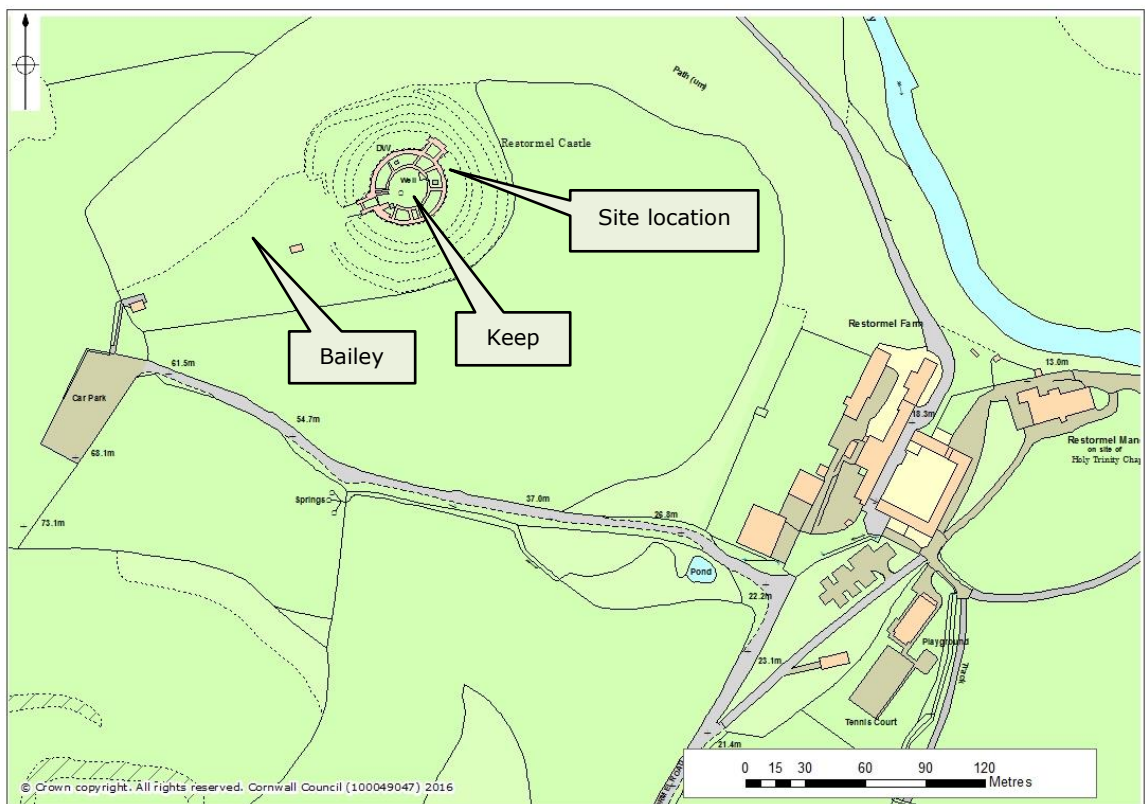


Figure 2. Site location showing its position in relation to rest of the castle.

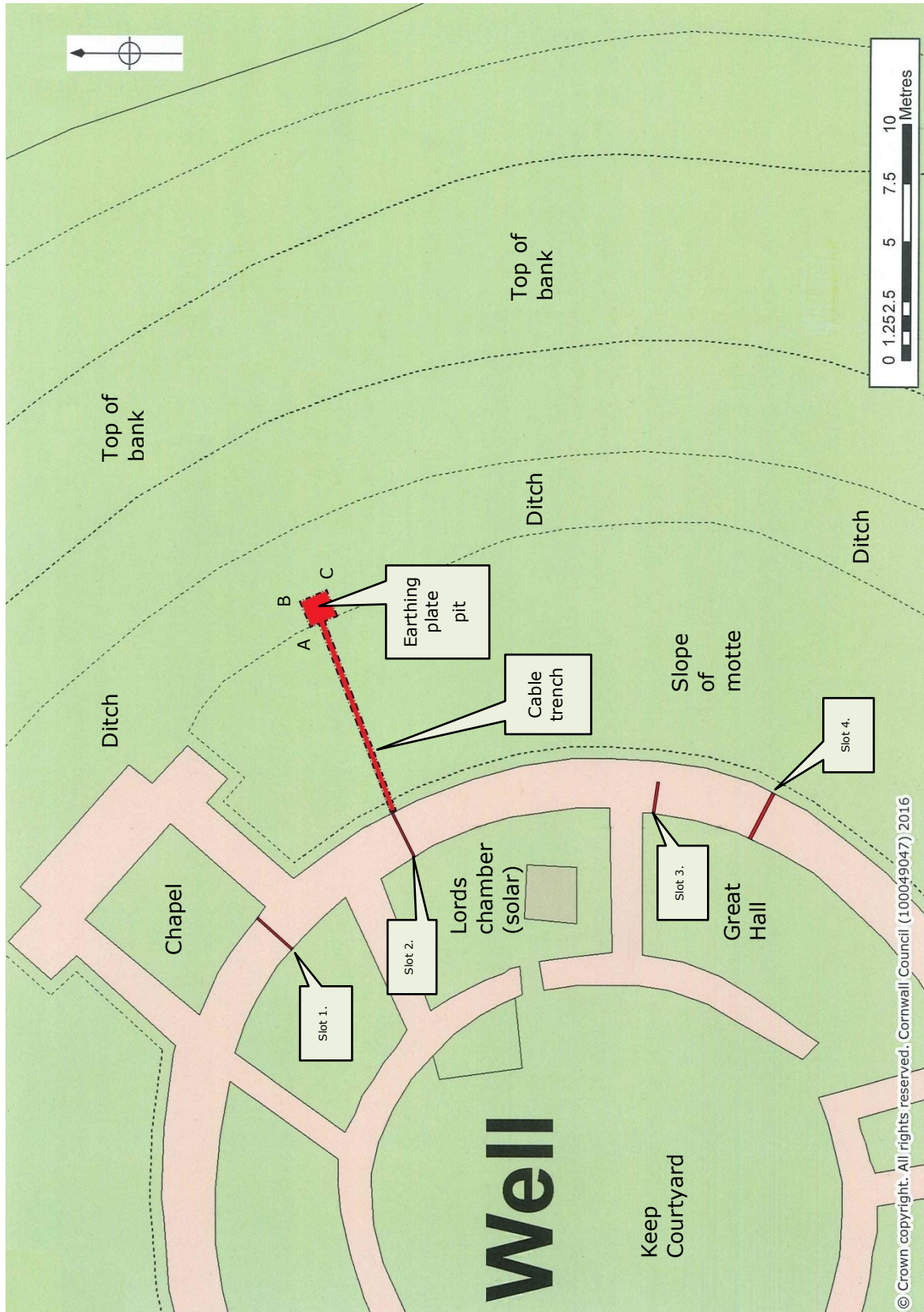


Figure 3. Site plan showing location of areas examined archaeologically (in red).

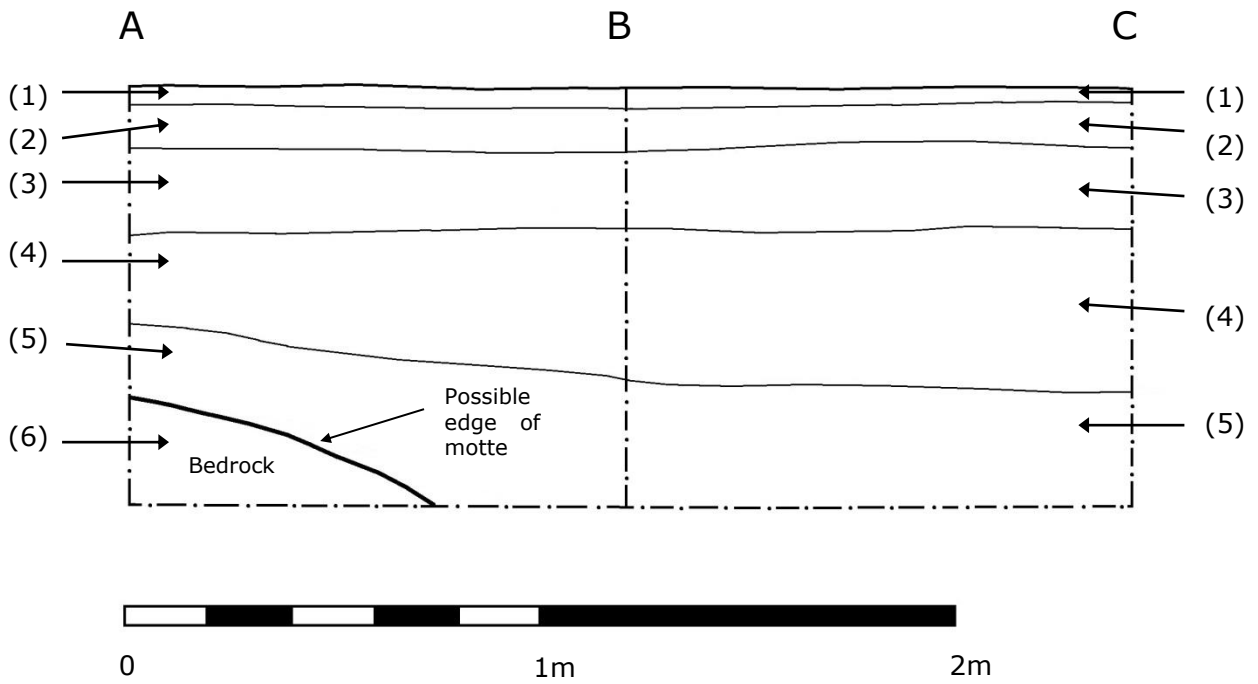


Figure 4. Earthing pit. Sections A-B-C showing possible edge of motte.



Figure 5. View of site looking north-west showing location of conductor tape trench and pit for the earthing plate.



Figure 6. Detail of conductor tape trench looking south west.

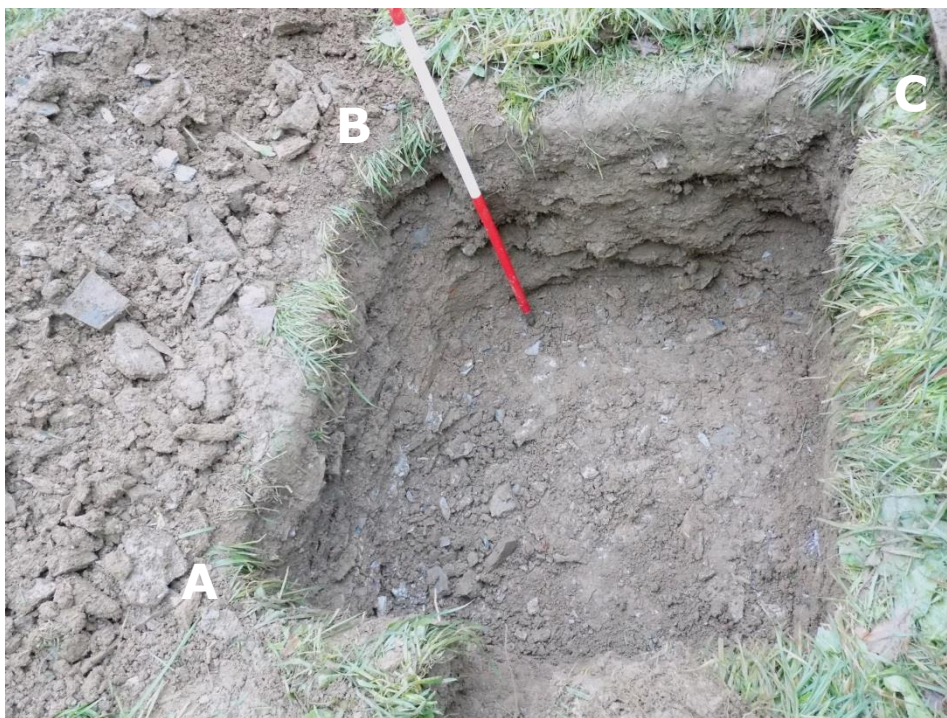


Figure 7. Detail of Earthing pit, looking north east showing Section A-B-C.



Figure 9. Site overview looking south west after back filling.

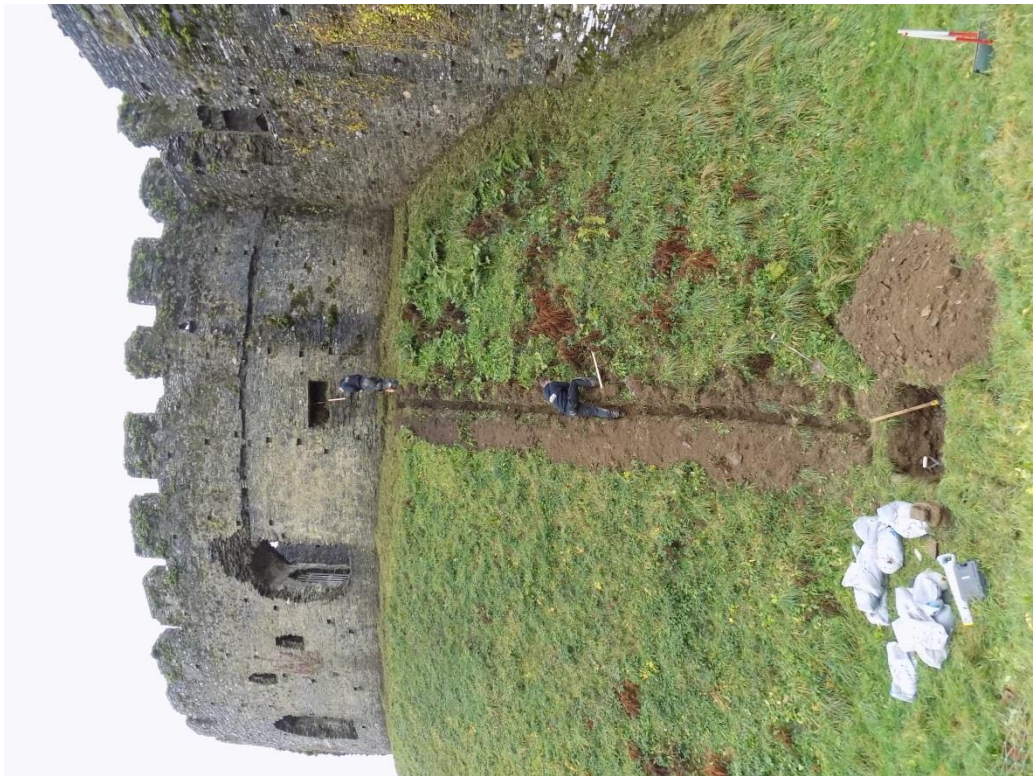


Figure 8. Site overview looking south west showing conductor tape trench and earthing plate pit.



Figure 10. Slot 1. Location adjacent to lightning conductor.



Figure 11. Slot 1. Detail of wall walk surface.



Figure 12. Slot 1 after excavation showing concrete bedding for the stone surface of wall walk.



Figure 13. Slot 1 after re-instatement of wall walk surface, the stones bedded within a lime mortar.



Figure 14. Fragment of roof ridge tile from earthing pit, context (5). Mid to late thirteenth century in date.

9 Appendix 1. Restormel Castle, Cornwall (NHLE no. 1017574): Method Statement for an Archaeological Watching Brief during lightning conductor installation, December 2016

Client: English Heritage
Client contact: Stuart Kenhard
Client tel: 07917 214676
Client e-mail: Stuart.Kenhard@english-heritage.org.uk

• Project Background

Restormel Castle is a Scheduled Monument (National Heritage List Entry no. 1017574). Stuart Kenhard, Facilities Manager M&E, English Heritage, has commissioned Cornwall Archaeological Unit (CAU) to carry out an archaeological watching brief during groundworks at the castle associated with the installation of a lightning protection system. The tape/conductor for the system will be buried, approximately 300mm deep, following a route down the inner sloping ground of the moat to the flat area of the bottom of the moat. There the tape/conductor will be connected to a 900mm x 900mm x 3mm copper lattice earth plate. This copper conductor plate will be buried at a depth of 1m.

• Methodology

An archaeologist will be present during the excavations in the castle moat. Any archaeological features and deposits that may be revealed will be recorded. Excavated spoil will be carefully inspected for artefacts. A written/scaled drawing/photographic record will be made as appropriate. The methodology for recording, archiving and reporting will be similar to that described in full in the Written Scheme of Investigation for an archaeological watching brief during drainage works at St Mawes Castle submitted by CAU (then Historic Environment Projects) to EH in August 2005 (Johns 2005).

The results will be presented as a watching brief report and will be submitted within six months of the completion of the fieldwork, with copies supplied to English Heritage (two), Cornwall Council Historic Environment Record and the Royal Cornwall Museum. A draft will initially be submitted to the Facilities Manager M&E for comment.

The project will be managed by Charlie Johns (BA, MCIfA) and the fieldwork will be carried out by Carl Thorpe (BSc) who has extensive experience of carrying out archaeological watching briefs at castles in Cornwall.

Standards



CAU is a Registered Organisation with the Chartered Institute for Archaeologists and follows their Standards and Code of Conduct. <http://www.archaeologists.net/codes/ifa>

• Health and safety statement

CAU follows Cornwall Council's *Statement of Safety Policy*.

Prior to carrying out on-site work CAU will carry out a Risk Assessment.

• Copyright

Copyright of all material gathered as a result of the project will be reserved to Cornwall Archaeological Unit, Cornwall Council. Existing copyrights of external sources will be acknowledged where required.

Use of the material will be granted to the client.

- **Freedom of Information Act**

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

CAU will ensure that all information arising from the project shall be held in strict confidence to the extent permitted under the Act. However, the Act permits information to be released under a public right of access (a "Request"). If such a Request is received CAU may need to disclose any information it holds, unless it is excluded from disclosure under the Act.

- **Insurance**

CAU is covered by Cornwall Council's Public and Employers Liability Insurance, with a policy value of £50m. The Council also has Professional Negligence insurance with a policy value of £10m.

- **References**

Johns, C, 2005. *St Mawes Castle, Cornwall: Written Scheme of Investigation for an archaeological watching brief during proposed drainage works*, Truro, HES Projects

Charles Johns

Archaeology Projects Officer

01/12/2016

Cornwall Archaeological Unit

Cornwall Council

Fal Building, County Hall,

Treyew Road,

Truro, Cornwall. TR1 3AY

Tel: 01872 322056

Email: chjohns@cornwall.gov.uk

Cornwall Archaeological Unit

Fal Building, County Hall, Treyew Road, Truro, Cornwall,
TR1 3AY

(01872) 323603
enquiries@cau.org.uk
www.cau.org.uk

