Archaeology South-East

ASE

Archaeological Watching Brief Report
At Cissbury Ring Hillfort
Worthing, West Sussex

NGR: TQ 13953 07947

National Monument No: 1015817

ASE Project No: 6721
Site Code: CRI 14

ASE Report No: 2014272
OASIS id: 188676

Worthing Museum Service

By Philippa Stephenson

Archaeological Watching Brief Report
At Cissbury Ring Hillfort
Worthing, West Sussex

NGR: TQ 13953 07947

National Monument No: 1015817

ASE Project No: 6721
Site Code: CRI 14

ASE Report No: 2014272
OASIS id: 188676

Worthing Museum Service

By Philippa Stephenson

September 2014

Archaeology South-East
Units 1 & 2
2 Chapel Place
Portslade
East Sussex
BN41 1DR

Tel: 01273 426830
Fax: 01273 420866
Email: fau@ucl.ac.uk

Abstract

Archaeology South-East was commissioned by The National Trust to undertake an archaeological watching brief during development of land at Cissbury Ring Hillfort, Worthing, West Sussex.

Ground-works undertaken on land to the south of the monument produced evidence for two undated features: a ditch situated at the base of the slope south of the monument, and a large pit or major ditch/trench terminal situated slightly north of the ditch.

CONTENTS

FIGURES

TABLES

1.0 INTRODUCTION

1.1 Site Background

1.1.1 Archaeology South-East (ASE) was commissioned by The National Trust to undertake an archaeological watching brief during development of land at Cissbury Ring Hillfort, Worthing, West Sussex (NGR: TQ 13953 07947; Figure 1).

1.2 Geology and Topography

1.2.1 The site is a Scheduled Monument (National Monument No. 1015817) and comprises a large, oval shaped earthwork of Iron Age date that encloses an area of *c*. 24 ha. It is situated on a chalk eminence (Newhaven Chalk Formation) to the north of Worthing, lying to the immediate east of Findon off the A24.

1.3 Planning Background

1.3.1 An application for Scheduled Monument Consent was prepared by Tom Dommett of the National Trust. It is informed by the Archaeology South-East 2006: *Archaeological and Historic Landscape Assessment, Cissbury Ring* and by the Archaeology South-East 2013: *Walkover, Topographical and Detailed Magnetometer Survey Report*, which was commissioned specifically to ensure that no archaeological features are adversely impacted by development works.

1.3.2 A Written Scheme of Investigation (WSI) for an archaeological watching brief to be maintained during the works was prepared following consultation between ASE and the National Trust in accordance with relevant Standards and Guidance of the Institute for Archaeologists (IfA). All work would be reported upon in line with guidelines set out in Management of Research Projects in the Historic Environment (MoRPHE; English Heritage 2006). It was submitted to all parties for approval prior to the commencement of work at the site.

1.3.3 All work was carried out in accordance with this WSI, which outlined the methodology to be used in the field and in reporting and archiving.

1.4 Aims and Objectives

1.4.1 The general objective of the archaeological watching brief was to record any archaeological deposits exposed during development. Exposed deposits or recovered artefacts should be interpreted within the context of the site as a whole.

1.4.2 To inform the Inspector of Ancient Monuments and the client in the event that significant archaeological remains were encountered.

1.4.3 To make public the results of the archaeological watching brief subject to any confidentiality restrictions.

1.5 Scope of Report

The current report provides results of the archaeological work carried out at the site between 07-05-2014 and 08-05-2014 and on 23-07-2014. The fieldwork was conducted by Philippa Stephenson and Simon Stevens. The project was managed by Paul Mason (Project Manager) and by Jim Stevenson and Dan Swift (Post-Excavation Managers).

2.0 ARCHAEOLOGICAL BACKGROUND

Overview

2.1 Within the monument, evidence of multi-period activity has been identified, including Neolithic flint mines, Romano-British farming and domestic use (including some evidence of refortification), an Anglo-Saxon mint, medieval agriculture, post-medieval beacons and more recent activity relating to the Second World War.

2.2 The general archaeological background of the site has been covered in detail in previous project documentation (e.g. National Trust 2013) and is not repeated here. Copies of these earlier documents will be kept in the site file.

Recent Archaeological Surveys (2006 & 2013)

2.3 A walkover survey in 2006 identified three archaeological features within Cissbury Plantation (James 2006). These features were recorded with gazetteer entries in the resulting report and subsequently on the National Trust Historic Buildings, Sites and Monuments Record (NTHBSMR), although due to the presence of dense woodland cover the locational data was approximate. The three identified features were:

- 130723: Field System, Cissbury Plantation
- 130761: Concrete Base, Cissbury Plantation
- 130762: Bunker, Cissbury Plantation

2.4 A 2013 walkover survey was designed to revisit the results of the 2006 survey, relocating the three previously identified features so that they could be accurately recorded by topographic survey, and also to re-assess the entire woodland area to identify any further archaeological features that may have been missed in 2006.

2.5 In the event, no further archaeological features were identified: the woodland, although dense in many places, was generally sufficiently clear at ground level to identify archaeological features had they been present. In addition, much of the southern and eastern part of the woodland lay on a steep slope where smaller, discrete archaeological features (as opposed to former field boundaries) would be less likely to occur. Much of the interior of the wood was disturbed by extensive areas of tree-throws.

2.6 The geophysical survey identified evidence of possible archaeological activity including a number of discrete moderate positive anomalies, which may represent cut features such as pits and backfilled excavations such as flint mines. A number of these corresponded to features on the base mapping identified as flint mines. In addition, weak positive anomalies were observed which could either be cut features such as pits, or in filled natural features. Also, moderate and weak positive linear anomalies relating to cut features such as ditches were observed, mostly in the north-east of the survey area. However, it was noted that the parallel nature of the anomalies may also indicate former agricultural activity.

2.7 Areas of magnetic debris are also identified in the north-east of the survey area as well as several smaller patches. These are likely to relate to ground disturbance.

2.8 Dipolar anomalies with associated magnetic disturbance were observed mostly along the southern boundary of the survey area. It was noted that those along the southern boundary were probably associated with the footpath.

3.0 ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork Methodology

3.1.1 Prior to the commencement of the works, the geophysical anomalies considered to most likely represent potentially significant archaeological features and earthworks west of the track and the north-south lynchet east of the track were marked to ensure they are not adversely impacted.

3.1.2 Hand excavations associated with fencing work and machine excavations for a water pipe were subject to archaeological watching brief. The contractor allowed sufficient time within their programme so that any archaeological features, artefacts or ecofacts were recorded in line with the requirements of this document.

3.1.3 Where excavation revealed significant archaeological features, machine or hand excavation by contractor's staff ceased. The features were then hand excavated and recorded to archaeological standards by the archaeologist(s) in attendance. Exposures were hand cleaned by archaeologists as necessary to clarify the presence/absence and nature of any features. Adequate time was made available for appropriate archaeological excavation by hand to identify and record the remains as far as possible within the limits of the works.

3.1.4 The spoil from the excavations was inspected by archaeologists to recover any artefacts or ecofacts of archaeological interest.

3.1.5 All archaeological features were recorded according to standard Archaeology South-East practice and in line with Institute for Archaeology (IfA) Standards and Guidance.

3.1.6 Archaeological features and deposits were planned at an appropriate scale (usually 1:20 or 1:50). Sections were drawn by hand at a scale of 1:10 on plastic draughting film. Features and deposits were described on standard pro-forma recording sheets used by Archaeology South-East. A photographic record was made.

3.1.7 The works were associated with the need to instate an effective and sustainable grazing regime on the site – the rationalisation of fence lines and provision of water supplies – which has been identified as essential for the long term management of scrub and control of animal burrowing on Cissbury Ring. New fence lines (Figure 2) would follow the existing landscape features (to be sympathetic to the landscape and the monument setting). Post holes would be reused wherever possible to minimise disturbance to archaeological features and deposits. The same principal was applied to gate construction. In addition, a water pipe would be dug into the ground using an 18 inch bucket to a depth of 24 inches, following the line of the existing chalk track along the west side of Cissbury Plantation (Figure 2).

3.1.9 All intrusive ground-works were observed.

3.2 The Site Archive

3.2.1 Prior to the commencement of fieldwork ASE informed Worthing Museum that a site archive would be generated. This has been offered and provisionally accepted depending on the size of archive. The site archive is currently held at the offices of ASE and will be deposited at Worthing Museum in due course. Worthing Museum does not give out archive accession numbers. The contents of the archive are tabulated below (Table 1).

Number of Contexts	8
No. of files/paper record	1
Plan and sections sheets	2
Photographs	35

Table 1: Quantification of site archive

4.0 RESULTS

Water-pipe Trench (Trenches 1 and 2)

4.1 These two trenches (Figure 2) are continuations of a single trench extending from a point *c*. 1m south of the access track situated to the south of the monument (Trench 1) and running *c*. 140 m north (Trench 2) from the track. The southern 30m of the trench is oriented NW-SE, traversing scrubland. It then turns north to follow the track running to the monument entrance. At its northern extremity it turns eastward over a distance of *c*. 32m. It was a narrow (0.60m), machine-excavated pipeline trench excavated to an average depth of 0.60m. Trench 1 is a short segment *c*. 1m in length connecting with the service pit south of the track. Trench 2 extends up the hill to supply a reservoir tank.

Natural (2/002]

4.2 Natural chalk [2/003] was encountered at a depth of 0.50m below topsoil at the south of the trench and at the surface in the northern part of the trench where it had been exposed along the track.

Ditch [2/006]

4.3 A short segment of ditch [2/006] was identified in the southern part of Trench 2 (Figures 3 and 4) where it traversed the scrubland north of the southern access track. Oriented N-S, it was observed over a distance of 1.60m. Truncating natural, the northern edge of the cut was gently sloping; to the south the slope of the upper edge was barely perceptible. The full width of the upper part of the ditch was *c*. 1.60m. The base of the cut was 0.50m wide and 0.22m deep, with a steep northern edge and a sloping southern edge (Figure 4). The difference between the north and south profile resulted from the rising topography of the natural into which the ditch had been cut. The full observed depth of the feature was 0.60m. It was sealed by a dark brown clay-silt deposit [2/007] accumulated in the shallow upper surface hollow created by the ditch.

4.4 The ditch was oriented towards a rectangular concrete machine base, probably associated with the WWII defences. The single fill [2/006] was a sterile mid greyish-brown clay-silt with frequent chalk nodules. No arte-factual of eco-factual material was retrieved. The feature may have been related to the concrete machine base, or may have predated it.

Buried modern soil [2/004] and made-ground [2/003]

4.5 In the southern part of Trench 2, crossing scrubland situated in the angle between the southern access track and that heading up to the monument, there was evidence of recent ground-works, a modern buried land-surface with traces of turf buried at a depth of 0.40m below current ground level sealed by made ground comprising topsoil and re-deposited natural [2/003].

Pit/ditch terminal [2/008]

4.6 The east side of a large pit, or eastern ditch terminal [2/008] of an east-west ditch truncating natural directly below the topsoil, was situated at the base of the slope where the trench turned northwards on the track alignment (Figures 3 and 4). Measuring 3.0m N-S, and 0.40m E-W, it was observed to a depth of at least 1.10m (Figure 4). Truncated to a depth of 0.60m by the trench, it was investigated to a depth of 1.10m in a central machine-dug sondage. It contained loosely compacted greyish-brown fill with frequent small chalk fragment. No finds were retrieved and no samples taken.

4.7 Anecdotal evidence (National Trust site warden pers comm) points to the presence of a WWII tank trap in this vicinity of which this feature may be the eastern end.

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
1/001	Topsoil	Made ground	Trench	Trench	0.15
1/002	Natural	Natural Chalk	Trench	Trench	-
2/001	Topsoil	Made ground	Trench	Trench	0.15 max
2/002	Natural	Natural Chalk	Trench	Trench	-
2/003	Made ground	Re-deposited topsoil and natural	22.90	0.60	0.30
2/004	Buried soil	Buried modern topsoil	22.90	0.60	0.10
2/005	Cut	Ditch	1.60	1.60/0.50	0.60
2/006	Fill	Fill of ditch 2/006	1.60	1.60/0.50	0.60
2/007	Subsoil	Silting in hollow created by ditch 2/005	1.60	1.50	0.10
2/008	Cut	Pit/Ditch terminal	3.0	0.40	1.10
2/009	Fill	Fill of 2/007	3.0	0.40	1.10

Table 2: List of recorded contexts in trenches

Monitored Post-Holes

4.8 The manual excavation of fence-posts for two new fence alignments was also monitored. Round holes each *c.* 600mm in diameter were excavated, one close to the outer defences of the hillfort (Figure 2; *Fence A*) but the majority within Cissbury Plantation (Figure 2; *Fence B*).

4.9 The single post-hole excavated for *Fence A* revealed a straightforward stratigraphic sequence of a mid-orangey brown silty clay topsoil, context [100], which directly overlay 'natural' chalk, context [101].

4.10 The four post-holes excavated for *Fence B* each revealed a similar stratigraphic sequence of a heavily rooted mid-greyish brown silty clay topsoil, context [102], which overlay an orangey brown silty clay subsoil,

context [103], which directly overlay the 'natural' chalk, context [101].

4.11 Manual excavation of four holes for the gate-post of *Gate 2* was also monitored. Again the holes were a maximum of 600mm in diameter. Much of the area had been disturbed during previous excavations for services. Where there was no discernable truncation, the stratigraphic sequence was identical to that seen in Trench 1.

Context	Type	Description	Deposit Thickness m
100	Layer	Topsoil	0.34
101	Layer	Chalk	-
102	Layer	Topsoil	0.15 - 0.22
103	Layer	Subsoil	0.22 - 0.25

Table 3: List of recorded contexts in post-holes

5.0 DISCUSSION AND CONCLUSIONS

5.1 The ground-works undertaken on land to the south of the monument produced evidence for two features: an undated NNE-SSW ditch situated at the base of the slope to the south of the monument, possibly related to a concrete (WWI?) machine base, or earlier in date; and evidence of either an undated large pit or a major ditch/trench terminal situated *c*. 7m to the north of the ditch. This latter feature may be related to tank trap believed to have been dug in this vicinity.

5.2 Natural chalk was encountered at *c*.120m AOD at the base of the slope and *c*. 150m AOD at the top of the slope.

BIBLIOGRAPHY

ASE 2014, Written Scheme of Investigation for an Archaeological Watching Brief at Cissbury Ring, Worthing, West Sussex

English Heritage 2002. *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation and Geoarchaeology: Using earth sciences to understand the archaeological record*

English Heritage 2008. *Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation*

MoLAS 1994. *Site Manual for Archaeological Fieldwork*

ACKNOWLEDGEMENTS

ASE would like to thank the National Trust for commissioning the work and for their assistance throughout the project, and Tom Dommett National Trust Archaeologist for his guidance and monitoring. The watching brief as directed by Philippa Stephenson with Simon Stevens providing secondary supervisory cover. The author would like to thank all archaeologists who worked on the excavations; Rob Cole who produced the figures for this report; Paul Mason who project managed the excavations and Dan Swift who project managed the post-excavation process.

HER Summary

Site Code	CRI 14					
Identification Name and Address	Cissbury Ring, Worthing, West Sussex					
County, District &/or Borough	Worthing					
OS Grid Refs.	513953 107947					
Geology	Newhaven Chalk formtion					
Arch. South-East Project Number	6721					
Type of Fieldwork			Watching Brief √			
Type of Site	Green Field √					
Sponsor/Client	National Trust					
Project Manager	Paul Mason					
Project Supervisor	Philippa stephenson					
Period Summary						

Summary

Archaeology South-East was commissioned by The National Trust to undertake an archaeological watching brief during development of land at Cissbury Ring Hillfort, Worthing, West Sussex.

Ground-works undertaken on land to the south of the monument produced evidence for two undated features: a ditch situated at the base of the slope south of the monument, and a large pit or major ditch/trench terminal situated slightly north of the ditch.

OASIS Form

OASIS ID: archaeol6-188676

Project name	Cissbury Ring
Short description of the project	Archaeology South-East was commissioned by The National Trust to undertake an archaeological watching brief during development of land at Cissbury Ring Hillfort, Worthing, West Sussex. Ground-works undertaken on land to the south of the monument produced evidence for two undated features: a ditch situated at the base of the slope south of the monument, and a large pit or major ditch/trench terminal situated slightly north of the ditch.
Project dates	Start: 07-05-2014 End: 23-07-2014
Previous/future work	Yes / Not known
Any associated project reference codes	1015817 - NMR No.
Any associated project reference codes	CRI 14 - Sitecode
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Grassland Heathland 1 - Heathland
Monument type	FLINT MINES Neolithic
Monument type	HILL FORT Iron Age
Monument type	FARMING Roman
Monument type	SAXON MINT Early Medieval
Monument type	AGRICULTURE Medieval
Monument type	WWII DEFENCES Modern
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	WEST SUSSEX WORTHING WORTHING Cissbury Hill
Postcode	BN44 3LF

Study area	8000.00 Square metres
Site coordinates	TQ 13953 07947 50.8592265676 -0.380729578433 50 51 33 N 000 22 50 W Point
Height OD / Depth	Min: 120.00m Max: 150.00m

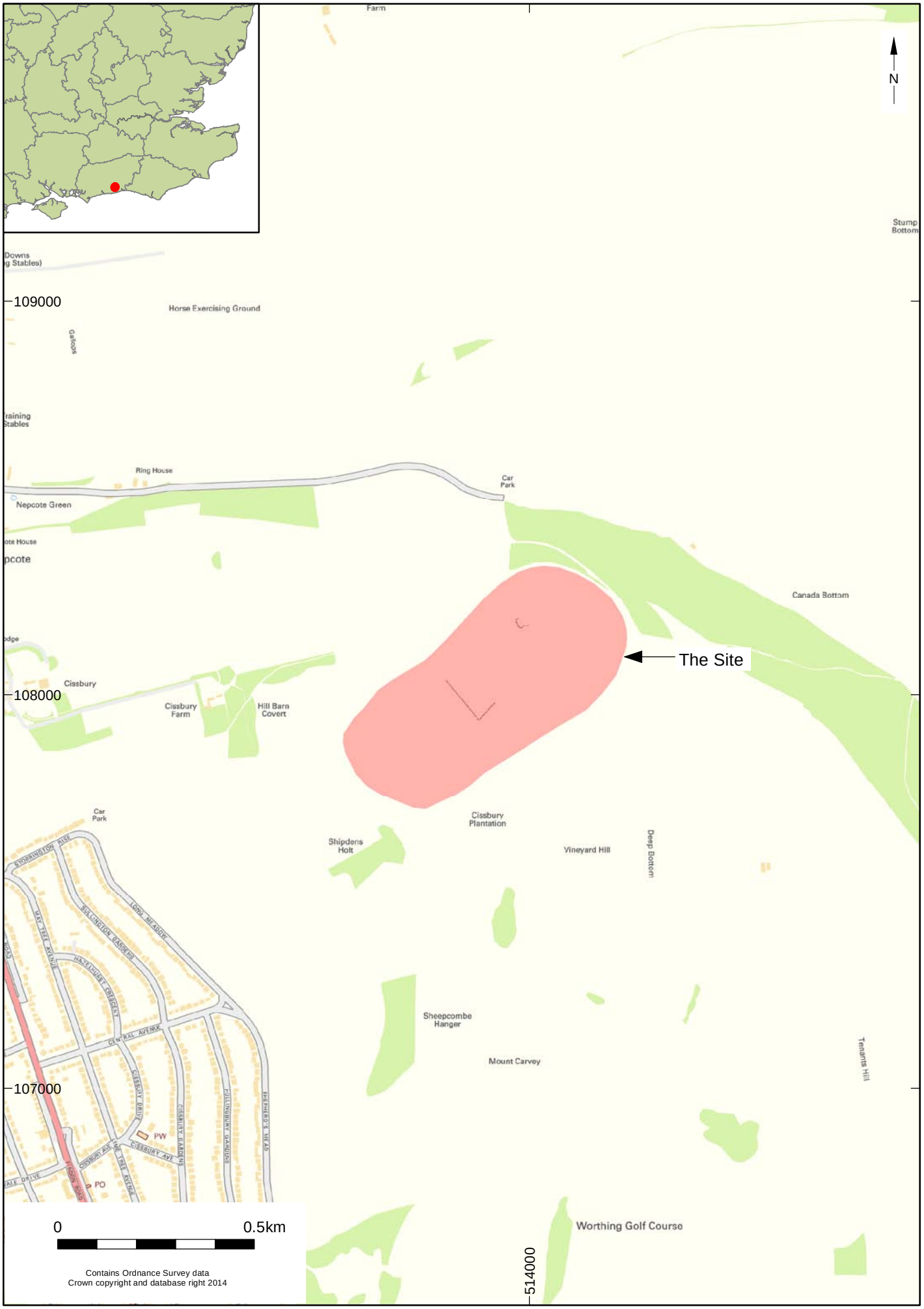
Project creators

Name of Organisation	Archaeology South East
Project brief originator	National Trust
Project design originator	ASE
Project director/manager	Paul Mason
Project supervisor	Philippa Stephenson
Type of sponsor/funding body	National Trust
Name of sponsor/funding body	National Trust

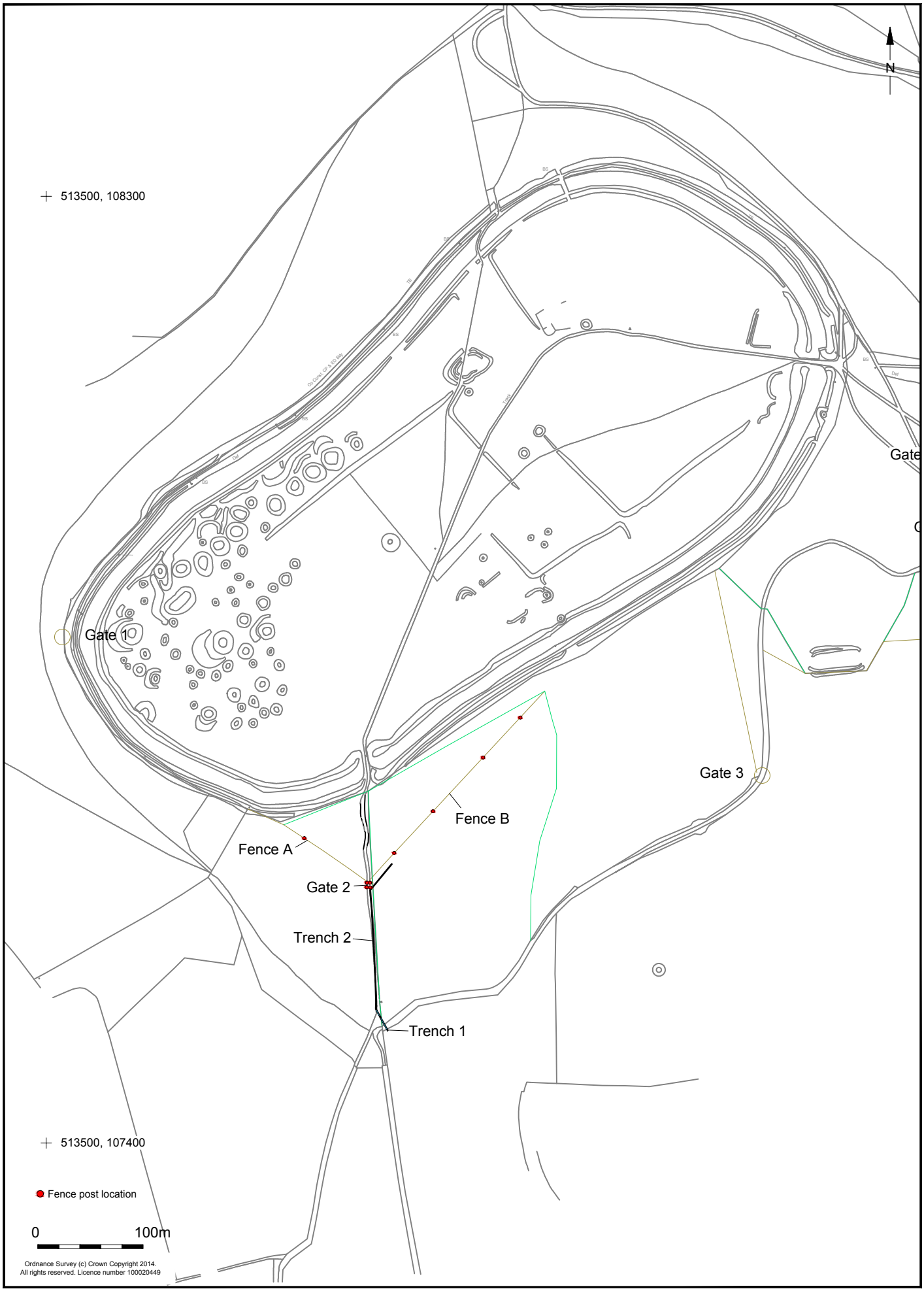
Project archives

Physical Archive Exists?	No
Physical Archive recipient	Worthing Museum
Digital Archive recipient	Worthing Museum
Digital Media available	''Images raster / digital photography'',''Images vector''
Paper Archive recipient	Worthing Museum
Paper Media available	''Context sheet'',''Photograph'',''Section'',''Unpublished Text''

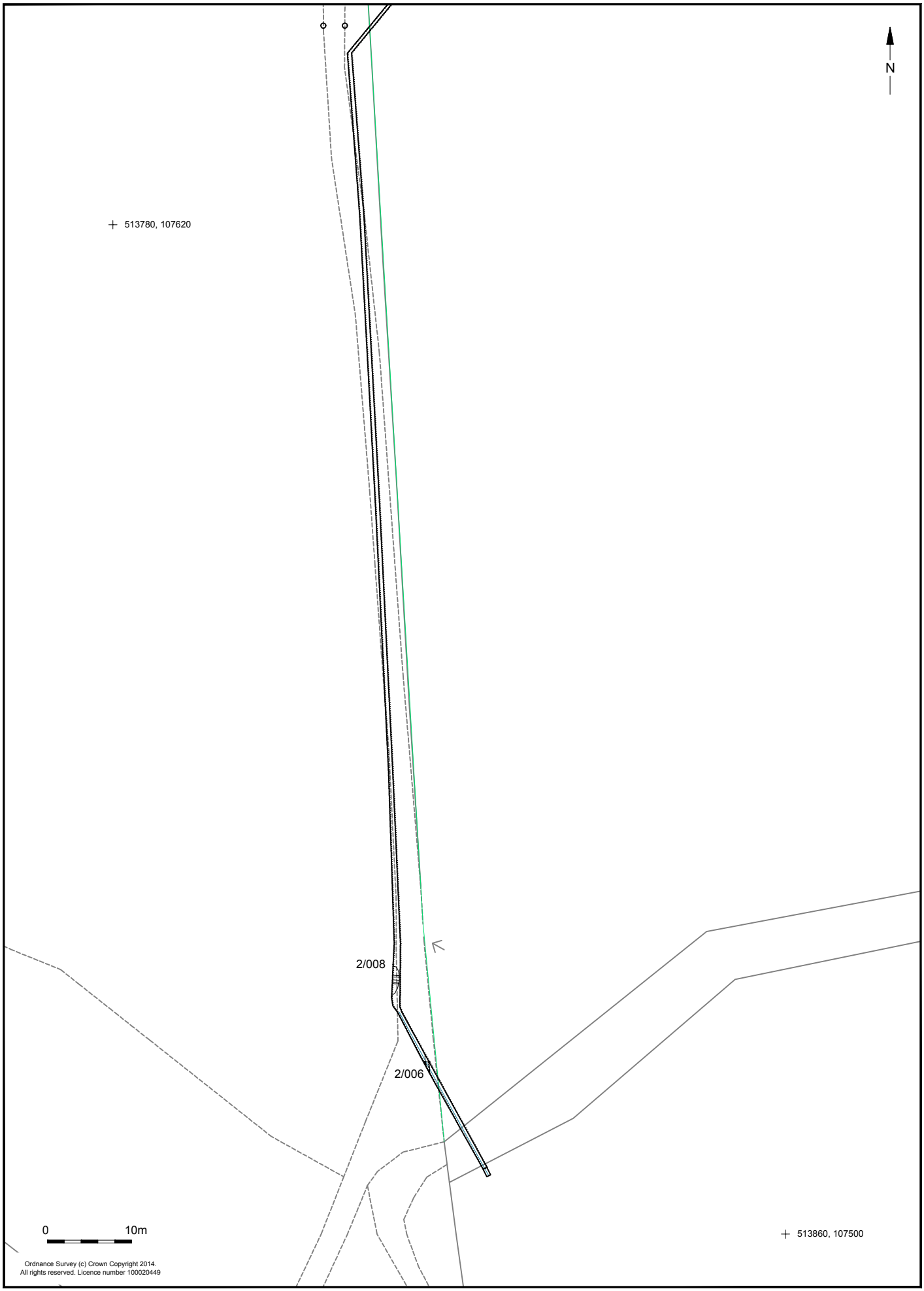
Entered by	Philippa Stephenson (pip.stephenson@ucl.ac.uk)
Entered on	29 August 2014



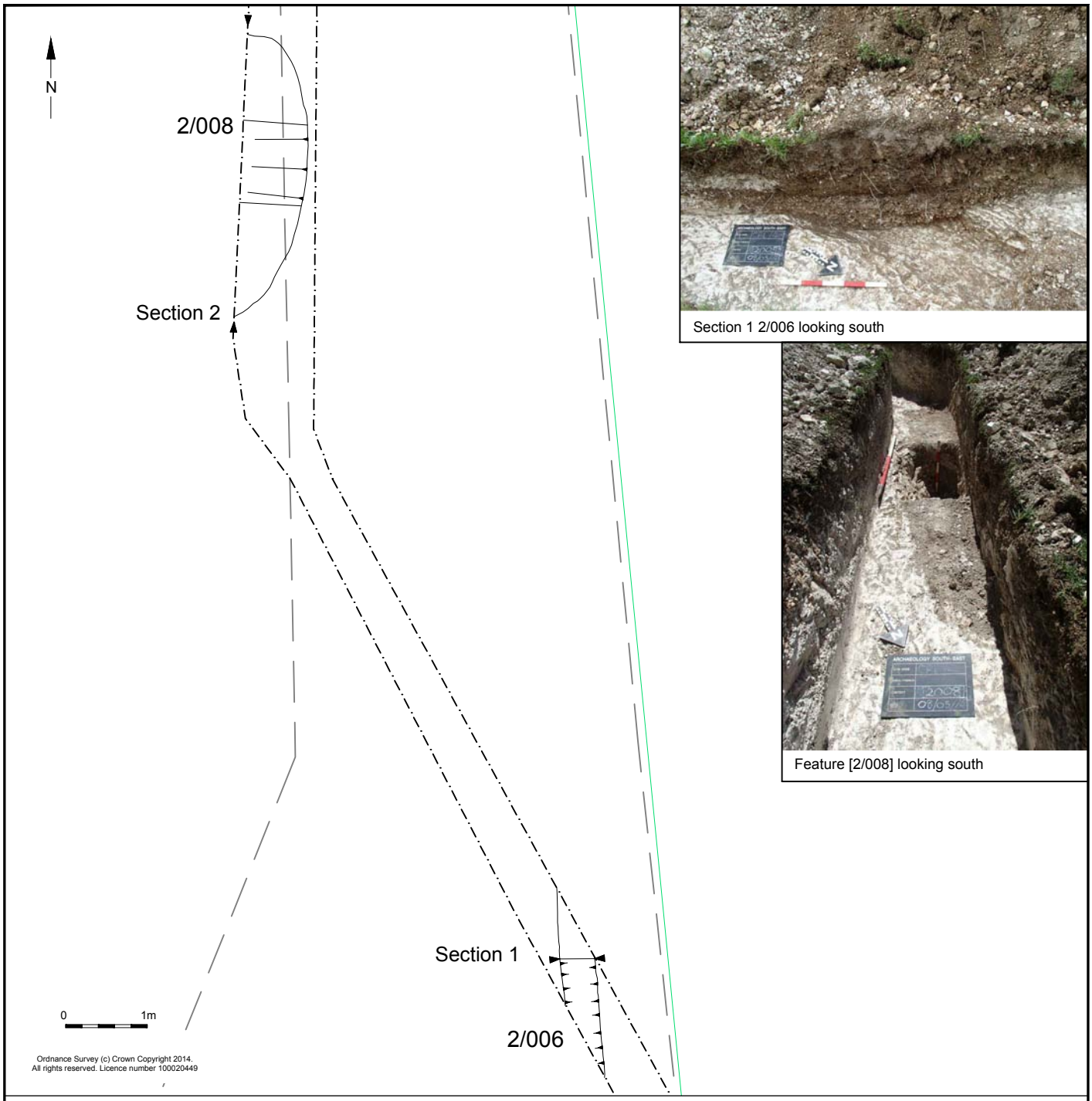
© Archaeology South-East		Cissbury Ring Hillfort, Worthing	Fig. 1
Project Ref: 6721	September 2014	Site location	
Report Ref: 2014272	Drawn by: RHC		



© Archaeology South-East		Cissbury Ring Hillfort, Worthing	Fig. 2
Project Ref: 6721	September 2014	Trench location	
Report Ref: 2014272	Drawn by: RHC		

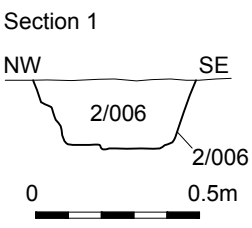


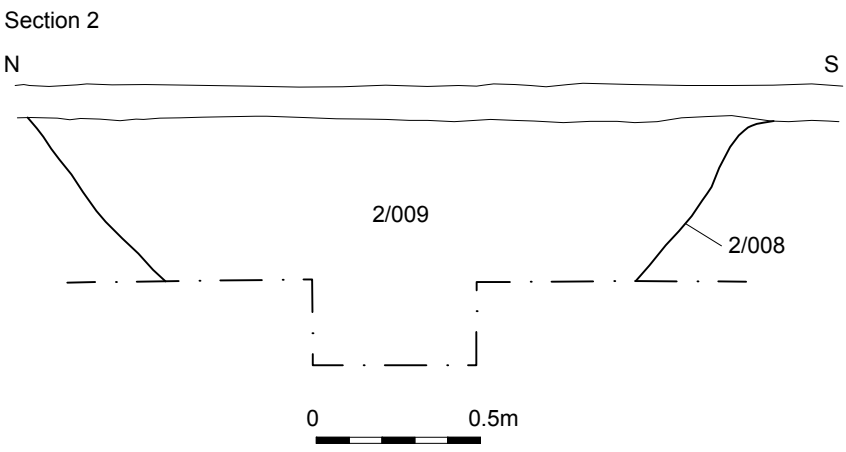
© **Archaeology South-East**		Cissbury Ring Hillfort, Worthing	Fig. 3
Project Ref: 6721	September 2014	Location of archaeological features	
Report Ref: 2014272	Drawn by: RHC		



Section 1 2/006 looking south

Feature [2/008] looking south





© **Archaeology South-East**		Cissbury Ring Hillfort, Worthing	Fig. 4
Project Ref: 6721	September 2014	Trench 2 plan, sections and photographs	
Report Ref: 2014272	Drawn by: RHC		

Head Office
Units 1 & 2
2 Chapel Place
Portslade
East Sussex BN41 1DR
Tel: +44(0)1273 426830 Fax:+44(0)1273 420866
email: fau@ucl.ac.uk
Web: www.archaeologyse.co.uk

London Office
Centre for Applied Archaeology
Institute of Archaeology
University College London
31-34 Gordon Square, London, WC1 0PY
Tel: +44(0)20 7679 4778
Fax:+44(0)20 7383 2572
Web: www.ucl.ac.uk/caa

The contracts division of the Centre for Applied Archaeology, University College London