Archaeology South-East

ASE

A DETAILED STAGE 1 MAGNETOMETER SURVEY AND STAGE 1 GEO-ARCHAEOLOGICAL BOREHOLE SURVEY ON LAND OFF HAMPDEN PARK DRIVE,EASTBOURNE, EAST SUSSEX, BN22 9QR

NGR 560272, 101759

ASE Project No: 6494

ASE Report No. 2013343
OASIS ID: archaeol6-167293

By Chris Russel and Kristina Krawiec
Illustrations by Rob Cole

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Abstract

Archaeology South-East were commissioned by Eastbourne District Council to carry out a detailed fluxgate gradiometer survey and hand auger survey on land off Hampden Park Drive, Eastbourne, East Sussex. The survey took place on the 17th and 18th of December 2013. The area investigated was a former firing range which is now short grass pasture bounded by hedges and the back wall of the firing range.

The geophysical survey revealed several anomalies, although these related to either buried services or to activity linked to the site's use as a firing range. The auger survey demonstrated a thin layer of alluvial clay overlying an oxidised orange clay which in turn sealed the underlying geology (Gault formation). The alluvium was confined to the south-eastern half of the site thinning out to the west. No organic deposits were recorded which may have the potential to preserve wooden archaeological remains.

CONTENTS

1.0 INTRODUCTION

1.1 Site Background

1.1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) were commissioned by Eastbourne District Council to conduct a Stage 1 magnetometer survey and hand auger survey at the site of a former firing range in Hampden Park, Eastbourne (Figure 1; centred on NGR 560272 101759) hereafter referred to as 'the site'.

1.2 Geology and Topography

1.2.1 The British Geological survey records the site geology as superficial Head Deposits of Silt, sand and Clay overlying Gault Mudstone. (BGS2013). The site consisted of a relatively flat low-lying area of short grassland bounded by sports pitches to the south and west, a bowls club and tennis courts to the north and woodland to the east.

1.3 Planning Background

1.3.1 A planning application for a new sunken skate park is due to be submitted by Eastbourne District Council. The Local Planning Officer, in consultation with the East Sussex County Council Archaeologist, Greg Chuter (hereafter the ESCC Archaeologist) recommended that an initial programme of archaeological fieldwork should be undertaken to help inform the planning application decision.

1.4 Aims of Investigation

1.4.1 The aim of the geophysical survey was to detect any buried archaeological anomalies that might provide a measurable magnetic response to enable the site's archaeological potential to be better understood. The aim of the auger survey was to characterise the lithology of the deposits at the site which lie at the edge of the Eastbourne Levels.

1.5 Scope of Report

1.5.1 This report details the results of the survey. The project was conducted by Chris Russel and Kristina Krawiec, assisted by Liz Chambers, and the fieldwork took place on the 17th and 18th of December 2013. The project was managed by Jon Sygrave (fieldwork) and by Jim Stevenson (post-fieldwork).

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Prehistoric

2.1.1 The greatest archaeological potential at the site is likely to be of a Bronze Age date. The site is located on the edge of the former Willingdon or Eastbourne lagoon, an area of salt marsh and peat deposits during the Bronze Age and actively used as an important resource. This is clearly demonstrated by the discoveries made at Shinewater where a Bronze Age trackway and platform site comparable to the archaeology at Flag Fen, Peterborough were uncovered (Greatorex 2003). Probable votive objects, also paralleled at Flag Fen, were found thrown into a former lake, linked to the platform by a long causeway. Waterlogged deposits of Late Bronze Age date discovered at Shinewater Marsh, on the Willingdon Levels near Eastbourne during landscaping work in 1995. A timber platform covering at least 2000 square metres comprising large oak posts driven vertically into the peat and underlying clay, while horizontal timbers were placed on the peat, these in turn supporting wooden rods and intermittent layers of sandy gravel and reed or rush matting. A substantial accumulation of cultural debris lies directly on the platform surface. Pottery and other artefacts suggest a date early in the 1st millennium BC. Finds include metalwork (axes, a chisel and a bracelet), pottery, an antler bridle piece, four amber beads and items of lead. A bronze sickle or reaping hook, complete with its field maple handle, has been radiocarbon dated to 2655+/-50 BP (uncalibrated). The platform appears to have been constructed in an open brackish to freshwater environment, immediately north of saltmarsh and mudflats. It was connected to higher dry land (circa 250 metres to the west) by a substantial timber trackway which comprised a series of horizontal timbers and rods located in the top of the peat and secured by three parallel rows of vertical posts. Finds from this area included part of a shale bracelet, plus items of metal, pottery, flint and animal remains. The site is currently protected from drying out via plastic sheeting and other protective coverings whilst decisions are awaited concerning its future.

2.1.2 Additionally, there is local Mesolithic potential. Bullock Down behind Beachy Head yielded 45 tranchet axes and twenty other axes together with picks, transverse arrowheads and waste material.

2.1.3 Neolithic sites are abundant in the Downs in the area west of the site, although very rare on lower land.

2.2 Roman

2.2.1 Roman archaeology is quite common in the area with a nearby villa site (NMR1083609), field systems and numerous coin hoards.

2.2.2 At least five Early Saxon cemeteries are known in the area, but during the Late Saxon period activity seems mostly focused around Pevensey.

2.2.3 More recently the site has been used as a miniature rifle range and is now part of an area of parkland and recreational spaces.

3.0 SURVEY METHODOLOGY

3.1 Summary of Methodology

3.1.1 A Bartington Grad 601-2 fluxgate gradiometer was used to survey an area of 0.6 hectares. The survey grid was set out using a differential GPS (Global Positioning System). A 30 metre grid was set out across the survey area and transects were walked every metre across these grids. Samples for the magnetometry survey were taken at 0.125m intervals along each transect.

3.2 Geophysical Survey

3.2.1 The magnetometry survey was undertaken in the areas depicted in Figures 1 and 2.

3.3 Applied geophysical instrumentation

3.3.1 The Fluxgate Gradiometer employed was the Bartington Instrumentation Grad 601-2. The Grad 601-2 has an internal memory and a data logger that store the survey data. This data is downloaded into a PC and is then processed in a suitable software package.

3.3.2 30m x 30m grids were set out using a GPS (see below). Each grid was surveyed with 1m traverses; samples were taken every 0.125m.

3.3.3 Data was collected along north-south traverses in a zigzag pattern beginning in the south-west corner of each grid.

3.4 Instrumentation used for setting out the survey grid

3.4.1 The survey grid for the site was geo-referenced using a Leica Viva Smartrover. The GPS receiver collects satellite data to determine its position and uses the mobile phone networks to receive corrections, transmitting them to the RTK Rover via Bluetooth to provide a sub centimetre Ordnance Survey position and height. Each surveyed grid point has an Ordnance Survey position; therefore the geophysical survey can be directly referenced to the Ordnance Survey National Grid.

3.5 Data Processing

3.5.1 All of the geophysical data processing was carried out using Geoplot V3 published by Geoscan Research. Minimally processed data was produced using the following schedule of processing. Due to the very high positive readings of some of the magnetic disturbance the values were replaced with a dummy value so as to avoid detrimentally affecting the dataset when further processed. The first process carried out upon the data was to CLIP it. CLIP can be used to limit data to specified maximum and minimum values for improving graphical presentation. It also has the effect of removing some of the 'iron spikes' that occur with fluxgate gradiometer survey data. ZERO MEAN TRAVERSE was then applied to survey data. This removes stripe effects within grids and

ensures that the survey grid edges match. Next DESPIKE was applied to the data set which removes the remaining random 'iron spikes' that occur within fluxgate gradiometer survey data. LOW PASS FILTER was then applied to the data. LOW PASS FILTER removes high frequency minor scale spatial detail. This is particularly useful for smoothing data or for enhancing larger weak features. INTERPOLATE smoothes the data by creating extra data points based upon collected values. INTERPOLATE was carried out upon the survey data in the Y axis. INTERPOLATE improves the data presentation. Figures 3-5 display the processed survey data.

3.6 Hand Auger Survey

3.6.1 The hand auger survey was carried out using an Eijkelkamp gouge auger using both an open chamber and Edelman head. The upper coarse material was removed using the Edelman head (corkscrew) and the lower less coarse sediments were recovered using an open chamber. Core locations were surveyed using a Leica DGPS. The lithology of the cores was recorded using the Troels-Smith (1955) system of sediment classification. The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are also identified according to darkness (Da), stratification (St), elasticity (El), dryness of the sediment (Dr) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) and a stratigraphic breakdown of the cores are provided in the Appendices.

3.6.2 The auger survey was carried out in transects approximately 12m apart with cores placed at 6m intervals where possible. Where obstructions such as services and earthworks were encountered the cores and transects were moved to avoid them. The results of the auger survey were then placed into ArcGis 10.1 in order to create an interpolated surface using a tension spline. The result is a colour coded raster which uses a mathematical interpolation based on the input points, in this case the depth of alluvium. The tension algorithm results in a smooth surface that passes through all the points (core locations).

3.7 The site archive

3.7.1 The site archive is currently held at ASE offices in Portslade but will be offered to Eastbourne Museum in due course.

Paper record	1 file
Digital record	1 cd of survey data

Table 1: Site Archive Quantification

4.0 GEOPHYSICAL SURVEY RESULTS (Figures 3-5)

4.1 Description of Site

4.1.1 The survey area consisted of approximately 0.6 hectares of short grass pasture bounded by woodland, sports pitches and tennis courts. Standing water was present in several locations across the site.

4.2 Survey Limitations

4.2.1 There were few barriers to the geophysical survey but those that existed are listed below and were omitted from the survey.

4.2.2 The south-western portion of the survey area contained two benches and which proved a barrier to survey and there was a metal roller at the centre of the survey area which was avoided.

4.3 Results Terminology

4.3.1 The results should be read in conjunction with the figures at the end of this report. The types of features likely to be identified are discussed below.

4.3.2 Positive Magnetic Anomalies

Positive anomalies generally represent cut features that have been in-filled with magnetically enhanced material.

4.3.3 Negative Magnetic anomalies

Negative anomalies generally represent buried features such as banks that have a lower magnetic signature in comparison to the background geology

4.3.4 Magnetic Disturbance

Magnetic disturbance is generally associated with interference caused by modern ferrous features such as fences and service pipes or cables.

4.3.5 Dipolar Anomalies

Dipolar anomalies are positive anomalies with an associated negative response. These anomalies are usually associated with discreet ferrous objects or may represent buried kilns or ovens.

4.3.6 Bipolar Anomalies

Bipolar anomalies consist of alternating responses of positive and negative magnetic signatures. Interpretation will depend on the strength of these responses; modern pipelines and cables typically produce strong bipolar responses.

4.3.7 Thermoremanence

Thermoremanence is most commonly encountered through the magnetizing of clay through the firing process although stones and soils can also acquire thermoremnance.

4.4 Interpretation of Fluxgate Gradiometer Results (Figures 6 and 7)

4.4.1 The results from the magnetometer survey show a large amount of modern disturbance at the site. Figure 6 is an interpretive plan of these results with anomalies annotated A-K. Figure 7 shows these anomalies overlain by a plan of the former rifle range layout so that correspondences between the two can be clearly seen.

4.4.2 Bipolar anomalies are visible at B, D and F. Anomalies D and F are caused by modern services whilst anomaly B is probably a concrete or tarmac base for the firing positions of the former rifle range. The scatter of magnetic debris at C is possibly also related to the firing range. A further spread of magnetic debris is visible at J to the east of the site where the targets for the range were located.

4.4.3 Dipolar anomalies may be seen at G and I. These exhibit a response consistent with near surface metallic objects.

4.4.4 Areas of magnetic disturbance can be seen at E, H and K. these are caused by metallic objects at or near the ground surface.

4.4.5 A linear positive anomaly can be seen running south-east to north-west at A. This is in close physical proximity to modern disturbance and may also relate to activity of a relatively recent date.

4.5 Auger survey results (Figure 8)

4.5.1 The auger survey consisted of 5 transects distributed across the site with cores taken at 6m intervals, or more where potential obstructions were noted. These obstructions consisted of small dumps of material which appear as low earthworks that may be features of the former rifle range.

4.5.2 The full core logs can be found in Appendix II. The underlying bedrock (Gault- a blue grey hard clay/mudstone) was encountered in several cores although in most locations the interface between this and the upper unit was unable to be breached due to large flint fragments. The Gault was encountered between 0.95m-1.70m below ground level across the site. This was overlain by a thin layer of orange manganese-rich clay which was flinty at the base.

4.5.3 The orange clay was trended into light grey orange mottled alluvial clay which contained occasional mollusc fragments and rounded chalk. This alluvium was confined to the south-eastern part of the site. This was then overlain by 0.10-0.15m of topsoil which sometimes contained crushed brick and chalk fragments suggesting dumping of material at the site.

4.5.4 The auger survey did not encounter any organic deposits or deposits with palaeoenvironmental potential. Despite standing water across the area the underling sediment was dry and compact suggesting the water table is perched due to the impermeability of the underlying clay.

5.0 DISCUSSION

5.1 Magnetometer survey

5.1.1 The majority of the anomalies noted in the results of the magnetometer survey at Hampden Park are almost certainly the result of modern activity at the site (Figure 7). Features consistent with the use of the site as a firing range are visible along with modern services and responses consistent with metallic objects high in the soil column.

5.2 The auger survey

5.2.1 The auger survey has demonstrated that the majority of the area is devoid of alluvial deposits. The alluvium in the south-eastern half of the site lies directly over the basal geology of the Gault formation. The OD heights of this alluvium are shown on Figure 8. This indicates that the site lies to the very edge of the Levels at the limits of alluviation. The potential for waterlogged archaeological remains is low and although features associated with the dryland-wetland interface are still a possibility this cannot be detected through the auger survey. The potential for the survival of palaeoenvironmental remains is low as no organic deposits, such as those recorded at Shinewater, were encountered

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Acknowledgements

Archaeology South-East would like to thank Eastbourne District Council for commissioning the survey.

HER Summary Form

Site Code						
Identification Name and Address	Hampden Park Hampden Park Dive Eastbourne					
County, District &/or Borough	Eastbourne					
OS Grid Refs.						
Geology	Alluvium, Gault formation					
Arch. South-East Project Number	6494					
Type of Fieldwork					Geophysics	Auger survey
Type of Site		Greenfield				
Dates of Fieldwork	Eval.	Excav.	WB.	Other		
Sponsor/Client	Eastbourne District Council					
Project Manager	J.Sygrave					
Project Supervisor	K.Krawiec/C.Russel					
Period Summary						
		modern				

100 Word Summary

Archaeology South-East were commissioned by Eastbourne District Council to carry out a detailed fluxgate gradiometer survey and hand auger survey on land off Hampden Park Drive, Eastbourne, East Sussex. The survey took place on the 17th and 18th of December 2013. The area investigated was a former firing range which is now short grass pasture bounded by hedges and the back wall of the firing range.

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Appendix

Included on C.D

1. Raw Magnetometry Data

Appendix II

Transect 1
Core 1
0-0.15m Topsoil

1.15-1.20m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag1 As3 Gaj+
Grey orange mottled stiff clay, coarse material at base unable to core

Core 2
0-0.10m Topsoil

0.10-1.00m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, coarse at base, occasional chalk and mollusc fragments

Core 3
0-0.15m Topsoil, dump of material containing brick fragments

0.15-1.20m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, coarse at base, molluscs fragments and coarse particles throughout

Core 4
0-0.15m Topsoil

0.15-0.90m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.90-1.20m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 5
Too hard to core, 4 attempts then abandoned, possible dumped material

Transect 2
Core 6
0-0.10m Topsoil

0.10-0.80m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.80-0.90m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 7
0-0.10m Topsoil

0.10-0.80m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.80-1.05m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 8
0-0.10m Topsoil

0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay rounded chalk fragments, trends into

0.50-0.85m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 9
0-0.10m Topsoil, coarse chalk fragments

0.10-0.30m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.30-0.75m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Transect 3
Core 10
0-0.10m Topsoil

0.10-0.80m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.80-1.00m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments
1.00-1.70m Gault, very hard

Core 11
0-0.10m Topsoil

0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	4

Ag3 As1 ptm Gmaj
Grey orange mottled stiff clay, trends into

0.50-0.90m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 12
0-0.10m Topsoil

0.10-0.95m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Core 13
0-0.10m Topsoil

0.10-1.00m	Da	St	El	Sicc	UB
	2	0	0	4	2

Ag3 Gmaj1
Orange manganese rich clay, flint fragments

Transect 4
Core 14

0-0.10m	Topsoil				
0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				

Core 15

0-0.10m	Topsoil				
0.10-0.95m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				

Core16

0-0.10m	Topsoil				
0.10-0.95m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				

Core17

0-0.10m	Topsoil				
0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				

Transect 5
Core18

0-0.10m	Topsoil				
0.10-0.40m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				
0.40-0.80m	Gault, very hard				

Core19

0-0.10m	Topsoil				
0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				
0.50-1.50m	Gault, very hard				

Core20

0-0.10m	Topsoil				
0.10-0.50m	Da	St	El	Sicc	UB
	2	0	0	4	2
	Ag3 Gmaj1				
	Orange manganese rich clay, flint fragments at base				
0.50-1.00m	Gault				

Appendix III

Troels-Smith (1955) classification scheme

Degree of Darkness	
nig.4	black
nig.3	
nig.2	
nig.1	
nig.0	white

Degree of Stratification	
strf.4	well stratified
strf.3	
strf.2	
strf.1	
strf.0	no stratification

Degree of Elasticity	
elas.4	very elastic
elas.3	
elas.2	
elas.1	
elas.0	no elasticity

Degree of Dryness	
sicc.4	very dry
sicc.3	
sicc.2	
sicc.1	
sicc.0	water

	Sharpness of Upper Boundary
lim.4	< 0.5mm
lim.3	< 1.0 & > 0.5mm
lim.2	< 2.0 & > 1.0mm
lim.1	< 10.0 & > 2.0mm
lim.0	> 10.0mm

	Sh	*Substantia humosa*	Humous substance, homogeneous microscopic structure
I Turfa	*Tb*	*T. bryophytica*	Mosses +/- humous substance
	Tl	*T. lignosa*	Stumps, roots, intertwined rootlets, of ligneous plants
	Th	*T. herbacea*	Roots, intertwined rootlets, rhizomes of herbaceous plants
II Detritus	*Dl*	*D. lignosus*	Fragments of ligneous plants >2mm
	Dh	*D. herbosus*	Fragments of herbaceous plants >2mm
	Dg	*D. granosus*	Fragments of ligneous and herbaceous plants <2mm >0.1mm
III Limus	*Lf*	*L. ferrugineus*	Rust, non-hardened. Particles <0.1mm
IV Argilla	*As*	*A.steatodes*	Particles of clay
	Ag	*A. granosa*	Particles of silt
V Grana	*Ga*	*G. arenosa*	Mineral particles 0.6 to 0.2mm
	Gs	*G. saburralia*	Mineral particles 2.0 to 0.6mm
	Gg(min)	*G. glareosa minora*	Mineral particles 6.0 to 2.0mm
	Gg(maj)	*G. glareosa majora*	Mineral particles 20.0 to 6.0mm
	Ptm	*Particulae testae molloscorum*	Fragments of calcareous shells

OASIS FORM

OASIS ID: archaeol6-167293

Project details

Project name	MAGNETOMETER SURVEY AND STAGE 1 GEO-ARCHAEOLOGICAL BOREHOLE SURVEY ON LAND OFF HAMPDEN PARK DRIVE,EASTBOURNE
Short description of the project	Archaeology South-East were commissioned by Eastbourne District Council to carry out a detailed fluxgate gradiometer survey and hand auger survey on land off Hampden Park Drive, Eastbourne, East Sussex. The survey took place on the 17th and 18th of December 2013. The area investigated was a former firing range which is now short grass pasture bounded by hedges and the back wall of the firing range. The geophysical survey revealed several anomalies, although these related to either buried services or to activity linked to the site's use as a firing range. The auger survey demonstrated a thin layer of alluvial clay overlying an oxidised orange clay which in turn sealed the underlying geology (Gault formation). The alluvium was confined to the south-eastern half of the site thinning out to the west. No organic deposits were recorded which may have the potential to preserve wooden archaeological remains.
Project dates	Start: 17-12-2013 End: 18-12-2013
Type of project	Field evaluation

Project location

Country	England
Site location	EAST SUSSEX EASTBOURNE EASTBOURNE Hampden Park
Site coordinates	TV 560272 101759 49 0 49 58 14 N 000 10 33 E Point

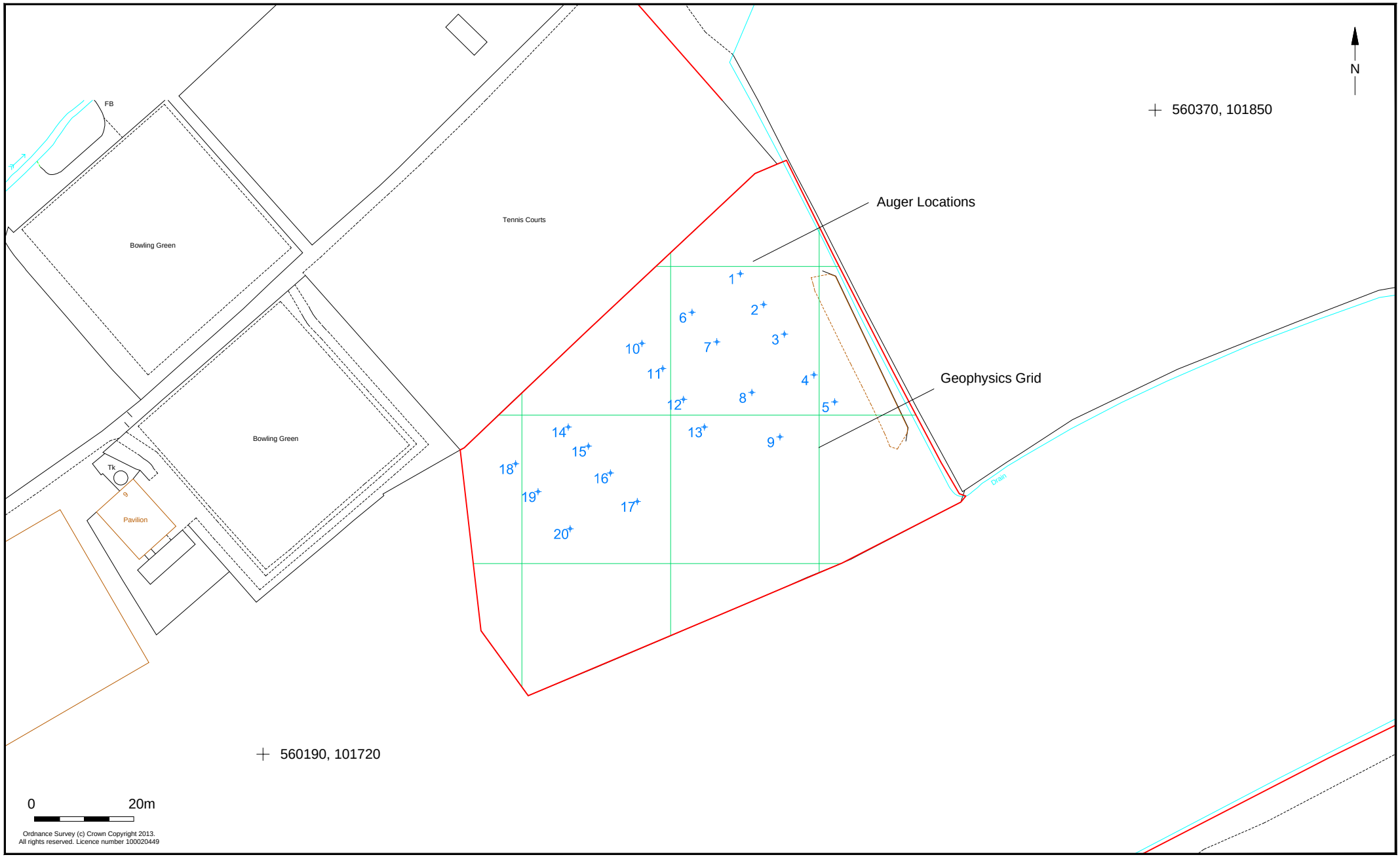
Project creators

Name of Organisation	Archaeology South-East
Project brief originator	Eastbourne District Council
Project design originator	East Sussex County Council
Project director/manager	Jon Sygrave
Project supervisor	Chris Russel
Type of sponsor/funding body	District Council

Entered by	Jim Stevenson (jim.stevenson@ucl.ac.uk)

Entered on 20 December 2013

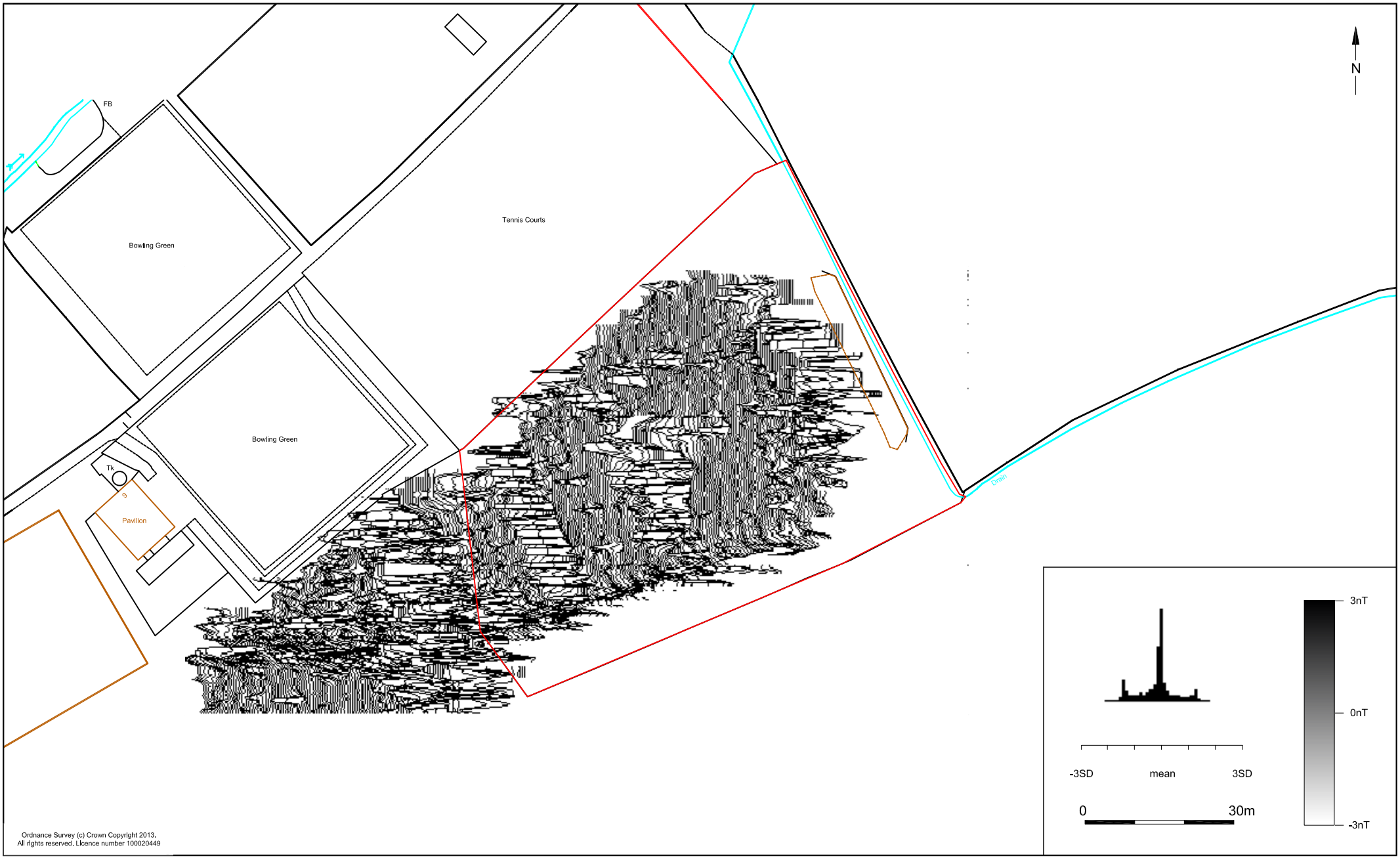
© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 1
Project Ref: 6494	December 2013	Site location	
Report Ref: 2013343	Drawn by: RHC		



© **Archaeology South-East**		Hampden Park Skate Park, Eastbourne	Fig. 2
Project Ref: 6494	December 2013	Auger and geophysics grid locations	
Report Ref: 2013343	Drawn by: RHC		

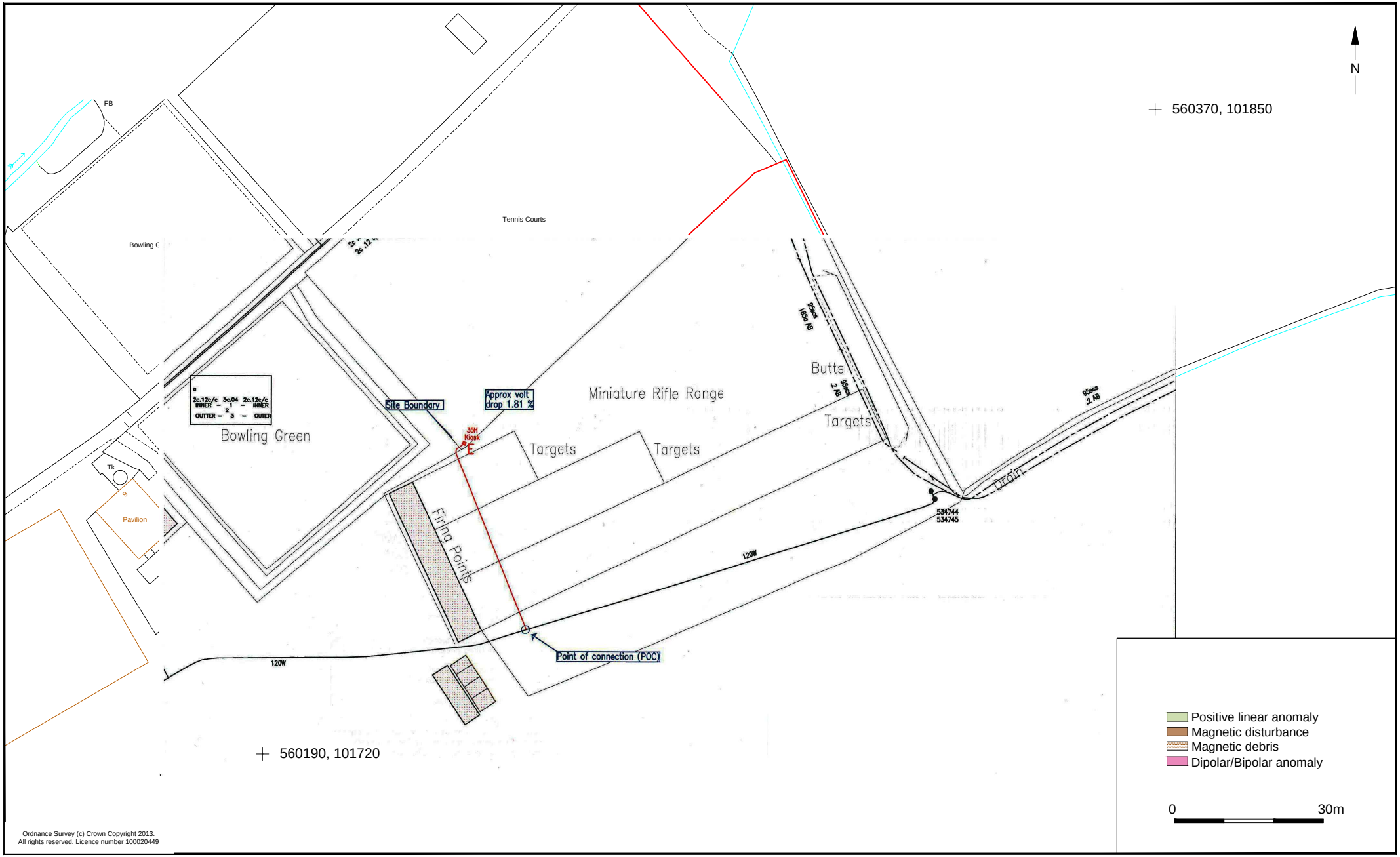
© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 3
Project Ref: 6494	December 2013	Raw data	
Report Ref: 2013343	Drawn by: RHC		

© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 4
Project Ref: 6494	December 2013	Processed data	
Report Ref: 2013343	Drawn by: RHC		

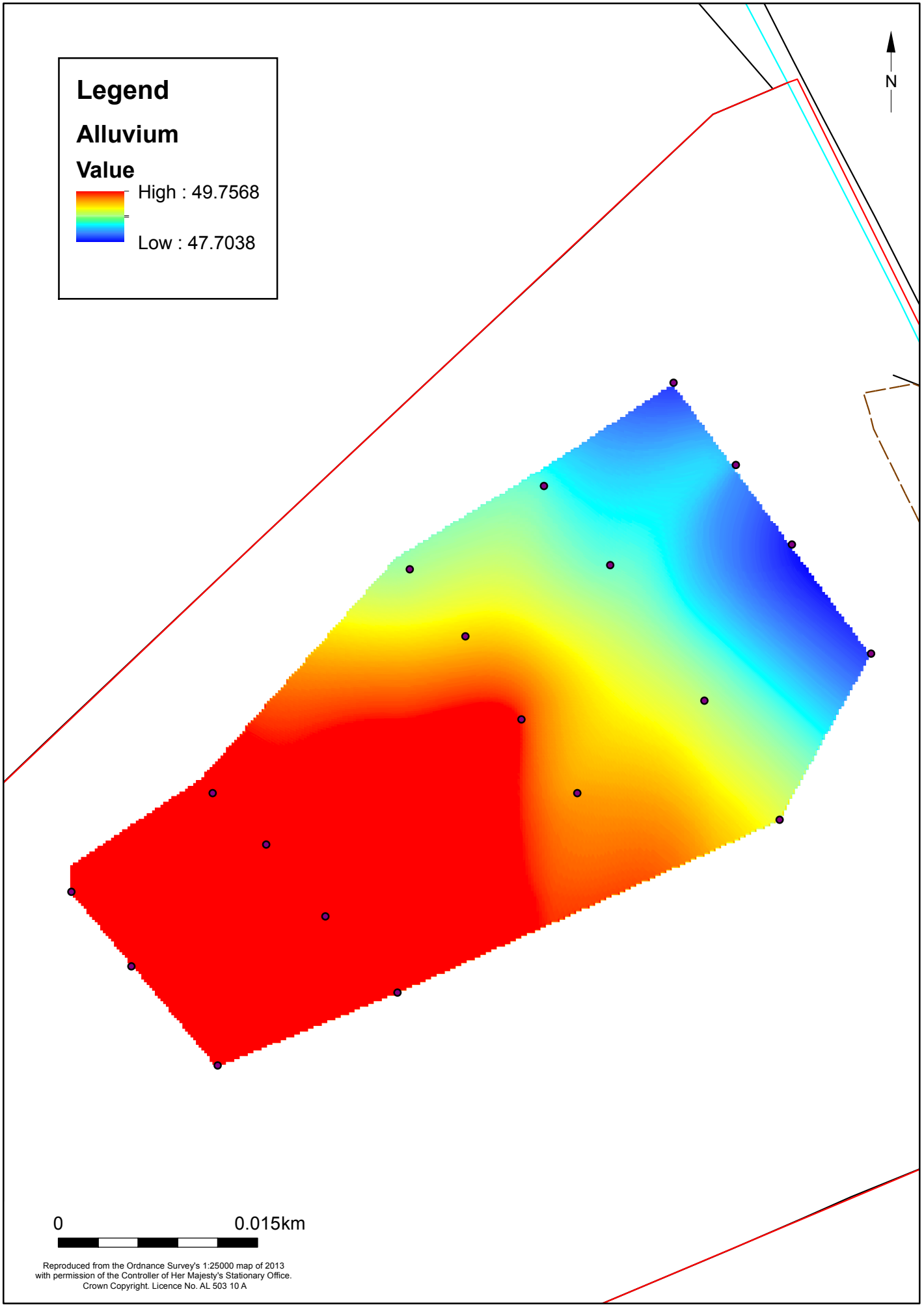


© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 5
Project Ref: 6494	December 2013	Processed trace	
Report Ref: 2013343	Drawn by: RHC		

© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 6
Project Ref: 6494	December 2013	Interpretation	
Report Ref: 2013343	Drawn by: RHC		



© Archaeology South-East		Hampden Park Skate Park, Eastbourne	Fig. 7
Project Ref: 6494	December 2013	Interpretation showing Rifle Range Layout	
Report Ref: 2013343	Drawn by: RHC		



© Archaeology South-East		Hampden Park skate park, Eastbourne	Fig. 8
Project Ref: 6494	2013	Alluvium surface	
Report Ref: 2013341	Drawn by:		

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