

**Archaeological Watching Brief Report  
New Cross Substation, Ormside Street  
London Borough of Southwark**

**NGR: TQ 3506 7795**

**Planning Consent Ref. 12/AP/1784**

**ASE Project No: 6711  
Site Code: ORM 14**

**ASE Report No: 2014149  
OASIS ID: archaeol6-178085**



**By Ian Hogg**

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**By Ian Hogg**

**May 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](mailto:fau@ucl.ac.uk)**

**Abstract**

*Archaeology South-East was commissioned by SEESA on behalf of their client to undertake an archaeological watching brief at New Cross Substation, Ormside Street, London Borough of Southwark.*

*The work comprised the monitoring of geotechnical test pits and boreholes. Natural Kempton Park Gravels were recorded across the site overlain by between 0.6m and 3.1m of modern made ground associated with the contamination remediation which had taken place on the site. Severe truncation was recorded across the site with alluvial and peat deposits associated with Bermondsey Lake entirely absent.*

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## **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) was commissioned by The South East Electricity Substation Alliance (SEESA) on behalf of their client to undertake an archaeological watching brief during site investigation works at New Cross Substation, Ormside Street, London Borough of Southwark (NGR TQ 3506 7795; Figures 1 and 2).

### **1.2 Geology and Topography**

1.2.1 The site is located to the south of the River Thames floodplain approximately on the boundary between River Terrace Gravels and an area overlain by clays, silts and peat. In the area to the north alluvial organic rich clays and silts have been recorded which are associated with a freshwater lake, formed after the last Ice Age (c 10,000 BC) and known as Bermondsey Lake. There is the possibility of alluvial deposits and peats associated with Bermondsey Lake extending as far south as the site. The sequence of palaeoenvironmental deposition at Bermondsey Lake is described further in section 2 of this report.

### **1.3 Planning Background**

1.3.1 Planning permission has been granted by the Southwark Council (Ref. 12/AP/1784) for the construction of a new 33kV AIS substation subject to conditions.

1.3.2 The archaeological conditions attached to the planning consent stated:

*Condition 2*

*Archaeological mitigation*

*Before any work hereby authorised begins, the applicant shall submit a written scheme of investigation for a programme of archaeological recording which shall be submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with any such approval given.*

*Reason*

*In order that the details of the programme of archaeological recording works are suitable with regard to the impacts of the proposed development and the nature and extent of archaeological remains on site in accordance with Strategic Policy 12 'Design and conservation' of the Core Strategy 2011 and Saved Policy 3.19 'Archaeology' of the Southwark Plan 2007*

*Condition 6*

*Archaeological reporting*

*Within six months of the completion of archaeological site works, an assessment report detailing the proposals for post-excavation works, publication of the site and preparation of the archive shall be submitted to*

*and approved in writing by the Local Planning Authority. The works detailed in the assessment report shall not be carried out other than in accordance with any such approval given.*

**Reason**

*In order that the archaeological interests of the site are secured with regard to the details of the post excavation works, publication and archiving to ensure the preservation of archaeological remains by record in accordance with Strategic Policy 12 'Design and conservation' of the Core Strategy 2011 and Saved Policy 19 'Archaeology' of The Southwark Plan 2007."*

- 1.3.3 Accordingly, a Written Scheme of Investigation was prepared (Mott MacDonald 2014) and approved by the Greater London Archaeological Advisory Service (GLAAS) in its capacity as advisor to the local council on archaeological matters. All work was undertaken in accordance with this document and with the relevant standard and guidance documents of the Institute for Archaeologists (IFA 1999 and 2008) GLAAS Archaeological Guidance Papers No's 3 – 5 (GLAAS 1998a, 1998b and 1998c).

## **1.4 Aims and Objectives**

1.4.1 The general aim of the archaeological work was to determine the presence of absence of archaeological deposits and characterise any deposits which were located within the New Cross development site.

1.4.2 The specific objectives of the fieldwork were to;

- Add a greater degree of understanding of the Bermondsey Lake Archaeological priority area by recording, where impacted, the palaeo-topography and geological deposits on the site;
- Record any palaeoenvironmental remains;
- Identify any remains that may survive associated with the prehistoric occupation of the area; and
- Identify the nature and extent of any unknown archaeological deposits within the development area

## **1.5 Scope of Report**

1.5.1 This report details the results of the archaeological watching brief carried out on the site between the 22nd and 24th April 2014 and has been prepared in accordance with the Written Scheme of Investigation (Mott MacDonald 2014). The work was carried out by Ian Hogg (Archaeologist).

## **2.0 ARCHAEOLOGICAL BACKGROUND**

2.1.1 The following information is taken from the WSI for the site (Mott MacDonald 2014). For a more comprehensive background please refer to that document.

Prehistoric

2.1.2 The site is located within the Bermondsey Archaeological Priority Area. This area is locally designated in relation to the sequence of alluvial and peat deposits which date from approximately 10,000 BC to 1,000BC and the associated archaeological deposits which have been found during excavations in the area.

2.1.3 Archaeological excavations at Bramcote Grove, approximately 120m north of the site, recovered evidence of organic rich alluvial clays and silts which relate to fluctuating water levels developing shallow standing water in the basin of Bermondsey Lake between 10,000 BC and 7,000 BC. Archaeological evidence dating to the Mesolithic Period (around 10,000-4000 BC) has been identified on 700m west of the site on the edge of Bermondsey Lake and 450m south of the site during archaeological investigation on the Old Kent Road.

2.1.4 The evidence from the Bramcote Grove site and other surrounding sites suggests that the floodwater level in this area may have slightly exceeded AOD at its highest point before sea level regression at the end of the second millennium BC. After this the environment developed into marshy, standing and possibly slow moving water which resulted in the deposition of peat. The highest point on the peat across the Bramcote Grove archaeological excavation was -0.07 m OD. At other sites elsewhere in Southwark peat levels have been found as high as +0.34 m OD at the Bricklayers Arms site and +0.65m OD at Hibernia Wharf. This peat layer dates to the late Bronze Age (around 1200 BC to 700 BC).

2.1.5 Approximately 90m north of the site at Varcoe Road peat and sedge fen deposits were recorded, which indicated that the development of a fen environment from c 1500 years BC. This in turn was sealed by alluvial clay, deposited during seasonal flooding by the rising Thames, c 600 BC.

2.1.6 During the fen environment phase, a wooden trackway was laid from the southern high ground, approximately in the site location, and Bermondsey Island to the north. The remains of two phases of wooden trackway were revealed in archaeological excavation at Bramcote Grove 120m north of the site. The tracks were substantial in size, which suggests that there may have been settlements at either end of the trackway. The tool marks recorded on the wood indicated that they had been worked with bronze axes. The associated organic material provided palaeo-environmental as well as archaeological evidence and was well preserved by the deposition of peat which continued into the late Bronze Age.

2.1.7 An archaeological watching brief was undertaken in the area approximately 150m to the west of the site during ground remediation of a former gasworks.



There were natural gravels overlain in places by organic water lain silts observed at an excavation depth of 2m. This was interpreted as being associated with Bermondsey Lake and although the site was heavily truncated by the development of the gas works, the slope of the gravel terrace could be defined.

#### Roman

- 2.1.8 Old Kent Road is approximately 450 m south of the site and is suggested to have been aligned to the route of Watling Street from Londinium to Canterbury.
- 2.1.9 In the area of Old Kent Road there have been archaeological finds dating to the Roman period. This includes the possible foundations of a Roman building, drainage ditches and pottery approximately 450m to 500m south of the site.

#### Medieval

- 2.1.10 The location of a manor house known as Cold Harbour or Cold Abbey Manor is recorded approximately 350 m south-west of the site. Historical records date the manor to the 14th and 15th century AD. There is no physical evidence recorded for a manor house but the location of a manor is likely to indicate that the surrounding landscape was managed and is likely to have been agrarian in character.

#### Post-medieval

- 2.1.11 The site appears to have remained agricultural until the 19<sup>th</sup> century. The construction of the Grand Surrey Canal began in 1801 and is marked on Cary's 1825 Map. The route of the canal passed 50m north of the site and stayed active until the 1970s when it was filled in.
- 2.1.12 The 1894 to 1896 second edition Ordnance Survey map shows the development of the gas works to the west of the site. There is evidence for limited damage caused to the gas works during the Second World War. By 1972 the gas holders and larger buildings remain in situ but the building in the north-east and north-west of the site have been cleared.
- 2.1.13 The site was occupied by light industrial buildings until their demolition in 2012. As part of this work much of the site was reduced for contamination remediation, in some areas excavation went to 4m below ground level.

### **3.0 ARCHAEOLOGICAL METHODOLOGY**

- 3.1 The work comprised mechanical and hand excavation of four geotechnical test pits and four boreholes across the site. Once the degree of truncation had been established across the site, the remaining two boreholes (1 and 4) were not monitored. The geotechnical borehole logs are included at the rear of this report as Appendix 1. The boreholes were excavated using a dynamic boring rig.
- 3.2 Spoil from the test pits was visually scanned for finds.
- 3.3 All deposits were recorded using standard ASE recording sheets, with colours recorded by visual inspection only.
- 3.4 A digital photographic record was taken of the work.
- 3.5 ASE informed the London Archaeological Archive and Research Centre (LAARC) before the commencement of fieldwork that a site archive would be generated. The site archive is currently held at the offices of ASE and will be deposited at the LAARC in due course. The contents of the archive are tabulated below (Table 1).

Number of Contexts	12
No. of files/paper record	1
Photographs	10 Digital

Table 1: Quantification of site archive

## 4.0 RESULTS

4.1 Four geotechnical test pits (TP's 1-4) were monitored; the locations of TP's 2 and 3 were slightly moved to avoid services (Figure 2). Two of the four boreholes (BH's 2 and 3) were monitored.

### 4.2 Test Pit 1 (Monitored on 24-04-2014)

4.2.1 Test Pit 1 was located in the north-west of the site, it measured 4.00m x 0.80m in plan and was excavated to a depth of 3.90m.

4.2.2 Natural orange Kempton Park Terrace Gravels [1/002] were directly overlain by dark grey rubbly silt made ground [1/001] 1.80m thick. This deposit was associated with the remediation works which had taken place on site. No archaeology was recorded in this pit.

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
2/001	Layer	Modern made ground	4.00	0.80	1.80
2/002	Layer	Natural gravels	4.00	0.80	-

Table 2: Test Pit 1. List of recorded contexts

### 4.3 Test Pit 2 (Monitored on 23-4-2014)

4.3.1 Test Pit 2 was located in the south-west of the site. It measured 4.00m x 0.90m in plan and was excavated to a depth of 4.00m.

4.3.2 Natural orange Kempton Park Terrace Gravels [2/004] were directly overlain by dark grey rubbly silt made ground [1/003] 0.60m thick. This deposit contained hydrocarbons and was associated with the demolition of the previous building. The contaminated deposit was overlain by mid grey rubbly silt made ground [2/002] associated with the remedial works, this deposit was 2.15m thick. The made ground was overlain by 0.35m of crushed concrete [2/001]. No archaeology was recorded in this pit.

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
2/001	Layer	Crushed concrete	4.00	0.90	0.35
2/002	Layer	Made ground	4.00	0.90	2.15
2/003	Layer	Contaminated made ground	4.00	0.90	0.60
2/004	Layer	Natural gravels	4.00	0.90	-

Table 3: Test Pit 2. List of recorded contexts

#### 4.4 Test Pits 3 and 4 (Observed on 24-4-2014)

4.4.1 Test Pits 3 and 4 was located close to the eastern boundary of site. They each measured 4.00m x 0.90m in size and were 4.00m deep. Both pits displayed the same stratigraphic sequence.

4.4.2 Gravels [003] were overlain by natural mid orangey brown sandy clay [002] between 0.30m and 1.45m thick. These deposits are considered to both be elements of Natural Kempton Park Gravel formation, not alluvial deposits associated with Bermondsey Lake. The natural deposits were overlain by mid grey rubbly silt made ground [001] from the remediation work which took place on site, the made ground was between 0.75m and 2.00m thick. No archaeology was recorded in these pits.

Test Pit	Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
3	001	Layer	Made ground	4.00	0.90	2.00
3	002	Layer	Natural sandy clay	4.00	0.90	0.30
3	003	Layer	Natural gravel	4.00	0.90	-
4	001	Layer	Made ground	4.00	0.90	0.75
4	002	Layer	Natural sandy clay	4.00	0.90	1.45
4	003	Layer	Natural gravel	4.00	0.90	-

Table 4: Test Pits 3 and 4. List of recorded contexts

#### 4.5 Boreholes 2 and 3 (Monitored between 22-4-2014 and 24-4-2014)

4.5.1 Boreholes 2 and 3 were located in the west and east of the site respectively. Both boreholes displayed the same stratigraphic sequence.

4.5.2 Natural Kempton Park [002] gravels were overlain by between 1.50m and 3.10m of mid grey rubbly silt made ground [001]. No archaeology was recorded in the boreholes.

Boreholes	Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
2	001	Layer	Made ground	0.25	0.25	3.10
2	002	Layer	Natural gravel	0.25	0.25	-
3	001	Layer	Made ground	0.25	0.25	1.50
3	002	Layer	Natural gravel	0.25	0.25	-

Table 5: Boreholes 2 and 3. List of recorded contexts

## **5.0 DISCUSSION AND CONCLUSIONS**

- 5.1 No archaeological features or deposits were recorded, no finds were retrieved from the site and no environmental samples were taken.
- 5.2 Natural Kempton Park Gravels were recorded across the site. Along the eastern edge of the site, in test-pits 3 and 4, the gravels were overlain by a degraded sandy clay natural deposit. These deposits are considered to both be elements of Natural Kempton Park Gravel formation, not alluvial deposits associated with Bermondsey Lake. No evidence of the Bermondsey lake alluvial deposits or peats was recorded.
- 5.3 The entire site had undergone substantial horizontal truncation most notably during the demolition and remedial works which took place in the last few years. There appears additionally to have been substantial truncation prior to this with an absence of overburden even in areas only lightly affected by the recent works. A thick deposit of made ground was recorded in all test pits and boreholes across the site. This ranged between 0.75m and 3.1m in thickness.
- 5.4 Given the lack of archaeological remains and the degree of truncation of the monitored areas of the site, no further work is recommended as these areas are considered to have no archaeological potential.

## **BIBLIOGRAPHY**

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## **ACKNOWLEDGEMENTS**

ASE would like to thank SEESA for commissioning the work and for their assistance throughout and GLAAS for their guidance and monitoring. The author would like to thank all archaeologists who worked on the excavations; Justin Russell who produced the figures for this report; Andy Leonard who managed the excavations and Jim Stevenson who managed the post-excavation process.

**HER Summary**

Site Code	ORM 14					
Identification Name and Address	New cross Substation, Ormside Street					
County, District &/or Borough	Southwark					
OS Grid Refs.	TQ 3506 7795					
Geology	Kempton Park Gravels					
Arch. South-East Project Number	6711					
Type of Fieldwork			Watching Brief✓			
Type of Site			Deep Urban✓			
Dates of Fieldwork			WB. 22-04-14 to 24-04-14			
Sponsor/Client	SEESA					
Project Manager	Andy Leonard					
Project Supervisor	Ian Hogg					
Period Summary						
<p><i>Summary</i></p> <p><i>Archaeology South-East was commissioned by SEESA on behalf of their client to undertake an archaeological watching brief at New Cross Substation, Ormside Street, London Borough of Southwark.</i></p> <p><i>The work comprised the monitoring of geotechnical test pits and boreholes. Natural Kempton Park Gravels were recorded across the site overlain by between 0.6m and 3.1m of modern made ground associated with the contamination remediation which had taken place on the site. Severe truncation was recorded across the site with alluvial and peat deposits associated with Bermondsey Lake entirely absent.</i></p>						

## OASIS Form

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**OASIS ID: archaeol6-178085**

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### Project details

Project name	New Cross Substation, Ormside Street
Short description of the project	The work comprised the monitoring of geotechnical test pits and boreholes. Natural Kempton Park Gravels were recorded across the site overlain by between 0.6m and 3.1m of modern made ground associated with the contamination remediation which had taken place on the site. Severe truncation was recorded across the site with alluvial and peat deposits associated with Bermondsey Lake entirely absent.
Project dates	Start: 22-04-2014 End: 24-04-2014
Previous/future work	No / Not known
Any associated project reference codes	6711 - Contracting Unit No.
Any associated project reference codes	ORM 14 - Sitecode
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Current Land use	Transport and Utilities 3 - Utilities
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	National Planning Policy Framework - NPPF

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### Project location

Country	England
Site location	GREATER LONDON SOUTHWARK BERMONDSEY ROTHERHITHE AND SOUTHWARK New cross Substation, Ormside Street
Postcode	SE15 1JZ
Study area	270.00 Square metres
Site coordinates	TQ 3506 7795 51.4838522113 -0.0546633739361 51 29 01 N 000 03 16 W Point



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**Project creators**

Name of Organisation	Archaeology South-East
Project brief originator	GLAAS
Project design originator	Mott MacDonald
Project director/manager	Andy Leonard/Jim Stevenson
Project supervisor	Ian Hogg
Type of sponsor/funding body	Developer
Name of sponsor/funding body	SEESA

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**Project archives**

Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	LAARC
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet", "Plan", "Report", "Unpublished Text"

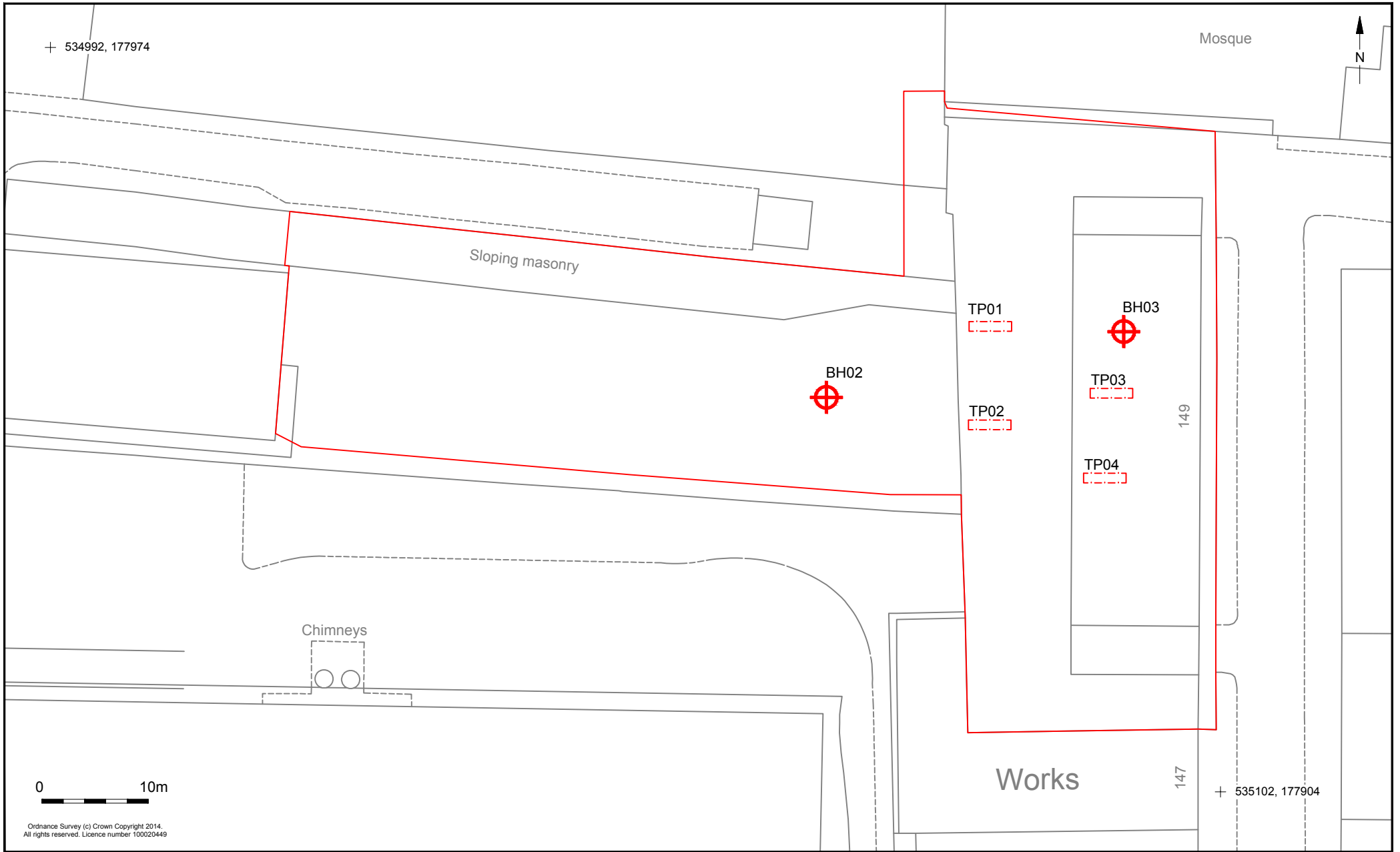
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Entered on	1 May 2014



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© Archaeology South-East		New Cross Substation, Peckham		Fig. 1
Project Ref: 6711	May 2014	Site location		
Report Ref:	Drawn by: RHC			



© Archaeology South-East		New Cross Substation, Peckham		Fig. 2
Project Ref: 6711	May 2014	Site plan		
Report Ref:	Drawn by: RHC			

**Sussex Office**

Units 1 & 2  
2 Chapel Place  
Portslade  
East Sussex BN41 1DR  
tel: +44(0)1273 426830  
email: [fau@ucl.ac.uk](mailto:fau@ucl.ac.uk)  
web: [www.archaeologyse.co.uk](http://www.archaeologyse.co.uk)

**Essex Office**

The Old Magistrates Court  
79 South Street  
Braintree  
Essex CM7 3QD  
tel: +44(0)1376 331470  
email: [fau@ucl.ac.uk](mailto:fau@ucl.ac.uk)  
web: [www.archaeologyse.co.uk](http://www.archaeologyse.co.uk)

**London Office**

Centre for Applied Archaeology  
UCL Institute of Archaeology  
31-34 Gordon Square  
London WC1H 0PY  
tel: +44(0)20 7679 4778  
email: [fau@ucl.ac.uk](mailto:fau@ucl.ac.uk)  
web: [www.ucl.ac.uk/caa](http://www.ucl.ac.uk/caa)

