# Land on the East Side of Crosby Row and the South Side of Porlock Street, London Borough of Southwark:

# Results of an Archaeological Evaluation

## and Watching Brief

Planning Application: 11AP0140 National Grid Reference Number: TQ 32740,79767 AOC Project No: 30999 Site Code: SHC 11 Date: June 2012



ARCHAEOLOGY

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## Land on the East Side of Crosby Row and the South Side of Porlock Street, London Borough of Southwark: Results of an Archaeological Evaluation and Watching Brief

On Behalf of:	<b>Rydon Construction</b> Rydon House Forest Row East Sussex RH18 5DW
National Grid Reference (NGR):	TQ 32740 79767
AOC Project No:	30999
Prepared by:	Helen MacQuarrie and Tara Fidler
Illustration by:	Jonathan Moller
Date:	June 2012

This document has been prepared in accordance	e with AOC standard operating procedures.
Author: Helen MacQuarrie and Tara Fidler	Date: June 2012
Approved by: Melissa Melikian	Date: June 2012
Draft/Final Report Stage: Draft	Date: June 2012

Enquiries to:	AOC Ar Unit 7 St Marg Moor M Twicker TW1 1J	rchaeology Group larets Business Centre ead Road nham S
	Tel. Fax. e-mail.	020 8843 7380 020 8892 0549 Iondon@aocarchaeology.com

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## **Summary**

This document presents the results of an archaeological evaluation and watching brief at land on the east side of Crosby Row and the south side of Porlock Street, London Borough of Southwark. The archaeological works comprised of the excavation of a single trench measuring 10m length x 3m width at base.

The archaeological investigation revealed a sequence of deposits commencing with naturally lain sands at -0.85m OD. This was overlain by alluvium and peat which slopes slightly towards the southwest of the site. During the Roman period this slope, which may represent a palaeochannel, was deliberately infilled with a ceramic and domestic waste deposit (116). This was overlain by a sequence of water lain deposits, which continue to slope towards the south-west. A possible Late Roman (ceramics assessment to be completed), south-west to north-east aligned ditch was recorded through the centre of the trench. The fills of this ditch are organic rich and possibly represent attempts to drain and manage the landscape in the Late Roman period. The Roman horizons were overlain directly by post-medieval deposits which indicate truncation of post-Roman deposits, presumably during construction of the previously extant church structure.

A programme of environmental assessment and analysis is planned.

## 1. Introduction

- 1.1 This document presents the results of an archaeological evaluation and watching brief at land on the east side of Crosby Row and the south side of Porlock Street, London Borough of Southwark (Figure 1). The archaeological works comprised of the excavation of a single trench measuring 10m length x 3m width at base and the monitoring of excavations for new foundations.
- 1.2 The application site is located on the junction of Crosby Row and Porlock Street (Figure 2). The site is bounded by Crosby Row to the west, Porlock to the north and houses, a school and a hostel to the east and south. The site was previously occupied by St Hugh's Church, which has recently been demolished. The site covers an area of c. 572m<sup>2</sup>.

### 2. Development Proposal and Planning Background

- 2.1 The local planning authority is the London Borough of Southwark. Archaeological advice to the borough is provided by Dr Chris Constable of Southwark Council.
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- 2.3 The site is located within an Archaeological Priority Zone as designated by the London Borough of Southwark's Unitary Development Plan (2004). There are no Listed Buildings within the site boundary and the site neither contains nor lies within the area of any defined World Heritage Sites, Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields or Areas of Historic Woodland.
- 2.4 The proposed development (Planning Application Ref No: 11AP0140) comprises the demolition of the existing building currently occupying the site and the construction of a new residential development.
- 2.5 The conditions placed upon the planning consent were as follows:

#### **Condition 11**

Archaeological Foundation Design – Prior to the commencement of the development, a detailed scheme showing the complete scope, arrangement levels and methods of construction of the foundation design and all ground works shall be submitted to and approved in writing by the Local Planning Authority and the development shall not be carried out otherwise than in accordance with any such approval given.

#### **Condition 12**

Archaeological Foundation Design – Prior to the commencement of the development, the applicant shall secure the implementation of a programme of archaeological mitigation works in accordance with a written scheme of investigation, which shall be submitted to and approved in writing by the Local Planning Authority.

#### **Condition 13**

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 and that the works detailed in this assessment report shall not be carried out otherwise than in accordance with any such approval given.

#### Condition 14

Archaeological Building Recording – Prior to the commencement of the development, the applicant or successors in title shall have secured the implementation of a programme of archaeological building recording in accordance with a written scheme of investigation, which shall be submitted to and approved in writing by the Local planning Authority.

- 2.6 Conditions 11 and 12 are pre-commencement conditions which will be fulfilled following the submission of this document. Condition 13 will be fulfilled once the fieldwork and reporting is complete. Condition 14 is also pre-commencement and will be dealt with by Sutton Archaeological Services.
- 2.7 Previous archaeological works include a pre-determination geoarchaeological evaluation which involved the drilling of three boreholes and two window samples (MoLA 2010). The results indicated that the site was located within a channel area. This lead to a geoarchaeological survey (AOC 2011a) and historic building recording (HBR). The HBR was carried out by Sutton Archaeological Services (SAS 2011).
- 2.8 The approved foundation design required amending due to engineering issues. The proposed foundation scheme now comprises a series of 54 piles measuring 450mm in diameter and pile caps typically 750mm wide by 1000mm deep (Figure 3). This new plan resulted in the archaeological officer for Southwark Council requesting further investigation works in the form of an archaeological evaluation and watching brief. Thus, evaluation trenching was required as a condition on the granting of the Planning Application for the site. A WSI for the evaluation (AOC 2012a) and watching brief (AOC 2012b) was prepared in accordance with current best archaeological practice and local and national standards and guidelines:
  - English Heritage Management of Archaeological Projects (EH 1991).
  - Institute for Archaeologists Code of Conduct (IfA 2010).
  - Institute of Archaeologists Standards and Guidance for Archaeological Field Evaluations (IfA 2008a).
  - Institute of Archaeologists Standards and Guidance for Archaeological Watching Briefs (IfA 2008b).
  - English Heritage Archaeological Guidance Papers 2-4 London Region (EH 1998a-c).
  - Department for Communities and Local Government National Planning Policy Framework (NPPF 2012).
  - Museum of London A Research Framework for London Archaeology (MoL 2002).

## 3. Geology and Topography

- 3.1 The British Geological Survey mapping (BGS Sheet 270) of this area indicates that the solid geology underlying the site and surrounding area is the London Clay formation. This is an Eocene marine deposit, laid down c. 55 million years ago. This is overlain by a superficial geology of Kempton Park Gravel comprising sand and gravels formed in the Devensian period (c.110,000 25,000 years Before Present (BP). The geological mapping furthermore indicates that the site lies near the boundary where alluvium associated with the River Thames overlies the gravels.
- 3.2 The site is located approximately 700m from the current southern bank of the River Thames, a focus of human activity from prehistory onwards, attested by numerous artefacts discovered from the River and its flood plains (e.g. MoLAS 2000).

- 3.3 Southwark has been identified as lying within a low lying area within the floodplain of the River Thames and has in the past been an area of braided river channels threading between gravel islands and eyots. Since the retreat of the last ice sheet c. 10,000 years ago, the area has been affected by fluctuating sea levels with periods of high sea level (transgression) resulting in flood plain deposition of alluvium over the natural gravels. Conversely, during periods of falling sea level (regression) the area will have seen the development of reed, saltmarsh and woodfen peats within former braided channels. The area that the site lies in has been identified as being poorly drained and marshy during the historical period.
- 3.4 A geotechnical survey was conducted on the site in 2011 as part of the Site Investigation Report (Ground Engineering, 2011). The boreholes and window samples recorded Natural Shepperton Gravels between -1.40mOD and -1.50mOD across the site; these were overlain by a sequence of peat and alluvial clays between 4.6m and 4.8m thick.
- 3.5 Two geoarchaeological investigations have also taken place on site; MOLA recorded a sequence Shepperton Gravels overlain by a sequence of peat, alluvium and made ground between 4.75m and 6.5m thick (MOLA 2010). The investigation by AOC Archaeology (AOC 2011) recorded natural gravels at a height of -1.49mOD, overlain by peat and alluvium 4.40m thick.

## 4. Archaeological And Historical Background

4.1 The following historical background is taken from the Geoarchaeological Evaluation report completed for the site by Museum of London Archaeology (MoLA 2010).

#### 4.1 Prehistoric

- 4.1.1 Evidence for prehistoric activity was found at Hunts House, Guys Hospital (HHO97) some 65m north of the present site. Here flint tools, prehistoric pottery and ard marks, scoured by primitive ploughs into the underlying sand were recorded at around 0.25 - 0.55m OD. Neolithic flints were also found at the Marshalsea Prison site, on the southern edge of the Borough High Street eyot, several hundred metres south west of the present site. Prehistoric peat deposits were recorded at Mermaid Court, while at Bowling Green Place evidence was found to indicate that main flow of water appears to have migrated away from the site, perhaps as water levels fell sometime in the prehistoric period but no dating evidence for these events have been obtained. At this time the former sand and silty clay river sediments previously deposited across the site probably became vegetated over and a dryland surface may have existed (as was previously observed at a slightly higher elevation at Hunts House just north of Bowling Green Place). Unfortunately no pollen was preserved in these sediments to enable the environment of the site at this time to be reconstructed. However, peat had began to form by the Iron Age, perhaps as river levels began to rise once more and the site remained as marshy land until at least the early Roman period. Pollen evidence has shown that, at this time, plants like burreed and sedges, growing in very shallow water would have existed across most of the site. However the western part of the site (the part that is closer to the road today) may have been drier and transitional to grassy meadowland, where dandelions and a diverse range of other herb plants were growing. Occasional clumps of ash and alder trees would also have grown nearby and intermittent flood events probably carried pollen from the cultivation that was taking place on the mainland to the south and the eyots that rose either side of the channel, depositing it across the site, (MoLA 2010).
- 4.1.2 Geotechnical logs show the upper surface of the sand at Bowling Green Place, 100m north east is lower than at Hunts House and lies at around -1.0 or -2.0m OD.

#### 4.2 Roman Period

- 4.2.1 There is extensive evidence for Roman occupation in Southwark. The Romans exploited the Thames gravel islands at Southwark and construct their first bridge across the river, close to the existing London Bridge, c 280m north-west of the site, around AD 50-52 (Drummond-Murray et al 2002, 14). Borough High Street follows the line of the main road leading to the bridge. The road ran in a north-south direction and linked the new capital, Londinium, to Dover. The main focus of the Roman settlement was on the gravel island to the west of the Guy's Channel. During the Roman period the various creeks and channels in Southwark were used to provide sheltered moorings, where vessels could be loaded and unloaded hence the construction of jetties and other structures along these creeks. For instance, nearby along the western side of the Guy's Channel at Hunt's House during c AD 90-110 a wooden jetty was constructed (Taylor-Wilson 2002, 5). While further south of the site at 171-191 Borough High Street, the shallow western extension of this channel was being actively reclaimed from the mid 1st century onward and by AD 100-120 much of the reclaimed area had been built over (Cowan et al 2009, 69-73). Further north along the western side of the channel in c AD 161 an imposing waterfront was constructed (Cowan et al 2009, 73-75). Examination of the deposits within the centre of the channel during the watching brief carried out by Peter Marsden in 1958 during the construction of New Guy's House revealed a sequence of fluvial silts and peats, the lower portion of these deposits containing pottery dated to c AD 100 and the upper to c AD 200, plus and a slightly worn coin of Marcus Aurelius, dated to AD 180 (Marsden 1965, 126). Finds from the upper deposits included an exceptionally fine Samian ware globular bowl (Déch 72) decorated with barbotine and appliqué relief designs, dated to c AD 200 (Detsicas 1960). In Marsden's second Guys trench, sterile sands were found at 4.3m below ground level (-0.25m OD). During c AD 190-225 a boat (aligned north-south) was abandoned in this stretch of the channel. Part of the eastern side of the hull of this vessel and five parallel ribs or frames were found in March 1958, by workmen during the construction of the lightwell for the basement of the southwest portion of New Guy's House. The boat timbers were recorded on site and later after they were sawn out and taken to the Cuming Museum. A second shaft trench was opened up a nearby in 1960, which located a section either the prow or the stern of the same vessel (it is impossible to tell which). This discovery enabled the centre line of the keel of this vessel to be established, which in turn allowed its dimensions to be tentatively reconstructed (Marsden 1965).
- 4.2.2 The vessel was apparently in use for some time as there was evidence of repairs and wear. It was abandoned in the channel and drift wood and other debris accumulated inside and around the wreck. Pottery dating to c AD 190-225 was recovered from sediments sealing the wreck (Marsden 1965, 126), but the date of the construction of the vessel remains unknown. From these discoveries it was established that the Guy's boat was carvel built (edge to edge hull planking) following the Romano-Celtic tradition of northern Europe. It is estimated that it was at least 16m long and about 4.25m wide and is interpreted as a shallow draught, beamy, flat bottomed river barge or lighter (Marsden 1994, 97-104).
- 4.2.3 In 1965 less than 10m south of the previous shaft trench a Southwark Archaeological Excavation Training dig organised by the Cuming Museum attempted to locate more of the boat by digging a 5m deep shaft trench. This trench was located about 3m south-west of the 2010 evaluation trench and its results can now be reinterpreted and correlated with the present fieldwork, the available spatial data indicates that this trench was located about 1.0m west of the conjectured extent of the boat, (MoLA 2010).
- 4.2.4 It is difficult to interpret the surviving records of this 1965 investigation but it appears that at -0.3m OD, one timber containing two long hooked iron nails (identical to these found on the boat frames in

1958 and 1960) and 'some other fragments of timbers' were discovered. It is not certain if the other timbers were simply driftwood, which had accumulated around the wreck as it fell apart or were more ex-situ boat timbers, which could imply that this trench was situated to the west of the in-situ portion of the vessel, hence it only located scattered ex-situ material. Certainly there is no evidence that these timbers represented any in-situ portion of the boat (which are very distinctive). Possibly this portion of the wreck had been partly dismantled in antiquity or had been disturbed by the construction of the adjoining warehouse stanchion base, from available records it is not possible to tell.

- 4.2.5 It is stated in a short report in Guy's Hospital Gazette (1889, 11) in an article about the new college building that: 'that the river undoubtedly reached as far as the site of the new college in the past, and in digging down they came upon what were evidently old breakwaters' probably Roman waterfront revetments along the western margin of the Guy's Channel. The former Guy's Hospital College was situated on the east side of Great Maze Pond (TQ 3283/8001). This short article also mentions the discovery of an 'old barge' 'embedded in the mud'. This vessel was found some years earlier during the construction of an adjacent warehouse. This implies the existence another Roman boat buried within the channel sediments, which means that there may be more undiscovered vessels buried in the channel (MoLA, 2010).
- 4.2.6 To date only three Roman boats (Blackfriars I, the County Hall and the example from Guy's Hospital) are known from Greater London. These vessels are rare discoveries of national and international importance because of their parallels and importance for the comparative study of other wrecks. As more of the Guy's boat remained in-situ its remains have been made a Scheduled Monument (SM No: L0157) in recognition of its importance. Scheduled monument consent was obtained in January 2010 to evaluate the boat when the Guy's and St Thomas' NHS Foundation Trust decided to replace the Newcomen and Bloomfield medical centres which currently occur the site. Due to the number of live services within the roadway it was only deemed practical to dig one three metre square trench within the projected footprint of the boat during February and March 2010. As the evaluation trench was somewhat deeper than anticipated because of the discrepancy between the expected and actual depth of the boat only a one metre square area of the vessel was uncovered. The wooden remains of boat seen during the evaluation were found between -0.8 --0.7m OD. They were well preserved and appeared from visual inspection to be oak (Quercus sp). The remains of the boat consisted of four parallel sets of rectangular frames and their attached hull planking. These frames noticeably sloped from west to east, probably due to their being moulded over time by the pressure of the overlying deposits to follow the profile of the underlying deposits. It appears that part of the midships section along the centre line of the vessel was exposed (there is no evidence that the vessel possessed a keel).
- 4.2.7 During the late Roman period, the build-up of sediments within the Guy's Channel continued and the some peats and dumps of rubbish have been dated to the early 3<sup>rd</sup> century (Marsden 1965, 126). The northernmost of the 1965 trenches within the channel (Trench 1) revealed organic deposits containing 3<sup>rd</sup> and 4<sup>th</sup> century pottery overlying a 1m thick undated build-up of silt. While at Hunt's House on the western edge of channel external surfaces were constructed during the late 4<sup>th</sup> and early 5<sup>th</sup> centuries (Taylor-Wilson 2002, 31-34). Evidence from Bowling Green Court suggests that by the later Roman period rising water levels had caused the peat and sedge fen to become inundated with tidal water, as the former channel and subsequent low lying marshy area became a tidal creek. At this time deep water probably existed across the entire site at high tide, with mud possibly exposed in the west of the site at low tide, where occasional lumps of Roman tile and pot were discarded on the muddy foreshore. This environment may have persisted throughout the

Roman and medieval period and, as no medieval finds were obtained from these river muds it is possible that water levels rose still higher at this time, or that the area was not inhabited. Pollen was not well preserved in the tidal mud, probably because the samples were taken from the western part of the site where the muds were weathered and regularly exposed. Nevertheless examination of pollen samples were able to show that although meadowland probably continued to exist during the later Roman and medieval periods, it consisted of a more restricted range of herb plants and few, if any, trees and shrubs. This is likely to indicate that clearance and management of the surrounding land was taking place, especially as the herb pollen was dominated by weeds of arable field, waysides and disturbed ground (MoLA 2010).

#### 4.3 Medieval and Post-Medieval Period

- 4.3.1 In the medieval period the area was largely marshland, although attempts were made to drain the area, as drainage ditches were found at Hunts House, dating to the 14<sup>th</sup> century. However episodic flooding events appear to be a characteristic of the medieval and post-medieval period, emphasising the fragile or marginal nature of habitation in this low-lying floodplain area at this time. The drainage ditches at Hunts House were infilled with alluvial clay during the medieval period and almost half a metre of clay was deposited across the southern part of the Hunts House site (up to about 1.2m OD) at some time during the 17th century. The ditches were probably remnants of the earlier medieval ditches. These watercourses and the many pools or ponds in the fields, particularly the Maze Pond north of the site are likely to be relicts of the former Guys Channel. Long Lane and several other roads were bounded by drainage ditches where they crossed the low-lying Snows Fields area, (MoLA 2010).
- 4.3.2 The site remained undeveloped and still lay within gardens at the time of Rocque's map of 1746 and the surrounding area appears to have become drier. More buildings had been erected in the area and orchards were growing. By the time of Horwood's map of 1799 the study site was still open space. The current building on the site, St. Hugh's Church (Charterhouse Mission), was built between 1892–8 by the architects Carpenter and Ingelow. It is a substantial building of 3 storeys in height and has a building frontage of 24 metres. St Hugh's was originally part of Charterhouse-in-Southwark, a mission established in 1885 by old boys of the Surrey-based public school, to provide food, clothes and spiritual support to the slum dwellers of Bermondsey. The interior of the church was re-ordered in the early 1994 with money from the Church Urban Fund.

#### 4.4 Previous Investigations

- 4.4.1 An archaeological environmental evaluation was carried out on site by MoLA in 2010 (MOLA 2010). The evaluation consisted of three boreholes and two window samples located around the exterior of the site. The results indicated that the site lies within a channel area, and preserves a deep sequence of alluvial, fluvial and organic deposits related to the evolution of the floodplain and changes in channel morphology.
- 4.4.2 A subsequent geoarchaeological investigation was undertaken by AOC Archaeology in December 2011 (AOC 2011); the investigation comprised the excavation and assessment of a single borehole. A sequence of Shepperton Gravels, overlain by alluvial sands and Bronze Age peat was observed.

## 5. Strategy

#### 5.1 Aims of the Investigation

- 5.1.1 The aims of the archaeological evaluation and watching brief were defined as being:
  - To establish the presence/absence of archaeological remains within the site.

- To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and sample excavate any archaeological remains encountered.
- To assess the ecofactual and environmental potential of any archaeological features and deposits.
- To determine the extent of previous truncations of the archaeological deposits.
- To enable the archaeology advisor to the London Borough of Southwark to make an informed decision on the status of the condition, and any possible requirement for further work in order to satisfy that condition.
- To make available to interested parties the results of the investigation.
- 5.1.2 The specific aims of the archaeological evaluation were defined as being:
  - Determine the presence of any Romano-British activity on site?
  - Determine the presence of any medieval archaeology on site?
  - Assess the degree and extent of truncation of earlier deposits by late post-medieval buildings on the site.
- 5.1.3 The specific aims of the archaeological watching brief were defined as being:
  - Record the extent of the Roman archaeological deposits?
  - Monitor the groundworks in the event of significant remains within the channel.
  - Determine the presence of any medieval archaeology on site?
- 5.1.4 The final aim is to make public the results of the investigation, subject to any confidentiality restrictions. If the nature of any findings warrant, this will include discussion as to the development of an appropriate outreach strategy.

#### 5.2 Methodology

- 5.2.1 Site procedures were defined in the Written Schemes of Investigation (AOC 2012a&b). All work was carried out in accordance with local and national guidelines (see Section 2.7).
- 5.2.2 A single evaluation trench was excavated (Figure 2) in the south-central part of the site. Due to the depth of the archaeological horizon the trench was stepped, in accordance with the Written Scheme of Investigation (AOC 2012a) to achieve safe access. The watching brief was conducted during the piling and pile probing work as specified in the Written Scheme of Investigation (AOC 2012b).
- 5.2.3 Prior to commencing work a unique site code (**SHC 11**) for the project was agreed with consultation with LAARC, Museum of London as the site identifier.
- 5.2.4 The evaluation trench was excavated between 21<sup>st</sup> and 23<sup>rd</sup> March 2012. The watching brief was undertaken between 31<sup>st</sup> May and 12<sup>th</sup> June 2012.
- 5.2.5 Levels for each context were established; the temporary bench mark transferred from a bench mark on the east face of Kipling Street, north of Porlock Street. The evaluation trench was located to the Nation Grid using an EDM.
- 5.2.6 The site work was supervised by Helen MacQuarrie, for the evaluation, and Paul Fitz, for the watching brief, under the overall management of Melissa Melikian. The site was monitored by Dr Chris Constable of Southwark Council with a monitoring meeting conducted on Thursday 22<sup>nd</sup> March 2012.

## 6. Results

## **Archaeological Evaluation**

#### 6.1 Trench 1

Contoxt	Description	Thicknoss	OD Height of	
COMEX	Description	THICKIESS	deposit	
100	Made Ground: crush	1.00 - 1.50	2.22	
101	Made Ground	0.60	1.22	
109	Cut of linear ditch (Late Roman?)	1.70	0.69	
102	Alluvium	0.64	0.69	
115	Cut of Roman possible channel	0.40	-0.01	
103	Peat (Middle Bronze Age)	0.58	0.13 to -0.11	
104	Alluvium	0.40	-0.45 to -0.59	
105	Geology: fine sands	N.F.E	-0.85	

#### Table of the stratigraphic sequence

- 6.1.1 Trench 1 was located in the south-centre of the development site, oriented north-east to south-west. The trench measured 10m by 3m at base.
- 6.1.2 Naturally-lain sand (105) was the lowest deposit revealed within sondages at both ends of the trench. The sands were lying virtually level, recorded at -0.83m OD at the south-western end of the trench and -0.85m OD at the north-eastern end. This was sealed by a 0.40m thick deposit of light blue silty clay alluvium (104). This deposit was recorded at a height of -0.45m in the sondage in the north-eastern part of the site, but sloped gently towards the south-west of the site where it was recorded at a height of -0.59 within the sondage. The alluvial deposit was overlain by a 0.58m thick peat deposit (103). This deposit was exposed across the surface of the trench, and within the sondages at each end. At the north-eastern end of the trench the peat was recorded at a height of -0.11m OD. In the north-west end of the trench a linear cut [124] was noted through the peat deposit. This truncation is 0.15m in thickness and is filled with naturally lain alluvium (102). This may represent early peat extraction.
- 6.1.3 In the south-west of the trench, along a similar trajectory of the natural slope of the early alluvium (104) and peat (103), a 0.40m deep truncation was noted [115] from the top of the peat horizon. This was filled with a ceramic and organic rich, light grey, slightly sand-gravel deposit (116). Primary inspection of the ceramics from this deposit (assessment to be completed) suggests that these are exclusively Roman in date. A 40 litre environmental sample of this deposit was taken and processed by flotation at AOC Archaeology (Sample <09>, Appendix C). Moderate organic/twig inclusions and very frequent small molluscs (land snails) were recovered from the residue, in addition to moderate concentration of Roman ceramics and CBM (ceramic building material), animal bone and oyster shell and two very small fragments of glass. The wealth of un-abraded ceramics from this deposit waste.



Plate 1: Trench 1 – Section 3, Roman infill deposit (116) in situ, direction north-west

- 6.1.4 The infill deposit (116) was overlain by a dark grey silty deposit (117). This represents a sequence of silts, sands and peaty-clays (118, 119, 120, 121, 122) which shelf off towards along the south-western axis. It is suggested, at this stage that these represent a sequence of naturally lain flood and possible drought periods in the late Roman period. A 40 litre environmental sample was taken of deposit (121) which was processed by flotation at AOC Archaeology (Sample <08>, Appendix C). The residue revealed frequent twig / wood and tiny mollusc inclusions. Only a few small fragments of CBM were recovered from the deposit. A single piece of burnt charcoal was recovered which may be suitable for radiocarbon dating. This sequence of deposits was sampled by monolith and further assessment by QUEST will aim to illuminate the Late Post-Roman environmental implications of these deposits.
- 6.1.5 These deposits were overlain by a 0.64m thick light grey-brown silty clay (102), which was recorded across the full extent of the trench (Section 1 and 3, Figure 4). No dating evidence was recovered from this dating evidence, however it post-dates the previously discussed Roman infill deposit (116) and it is also truncated by a roughly south-west to north-east aligned ditch [109]. This ditch measured 1.70m in depth and approximately 2.0m in width (full profile of the feature was obscured by modern truncation [113]). The ditch was filled by a sequence of friable, dark grey silty-clay, organic rich deposits (106, 107, 108). A monolith sample of the primary fill of the ditch (106) was taken in addition to a 40 litre bulk sample for environmental processing (Sample <05>, Appendix C). The deposit was rich in organic and molluscs and included a couple of fragments of (possibly intrusive) orange coloured CBM and occasional fruit stones. Initial, inspection of the ceramics from (106) suggests that the deposit is Roman in date (ceramic assessment to be completed), which accumulated while the ditch was open and functioning, possibly as a drainage ditch. The secondary fill comprised a firm grey-brown silty-clay (107) which was also sampled (Sample <04>, Appendix C). The residue of the fill was very cess and twig rich with a notable absence of snail shell. Fruit stones and a single small mammal bone fragment was also recovered. This deposit represents the gradual silting up of the ditch under waterlogged conditions. The tertiary fill of the ditch was a friable mid-grey silty-sandy-clay (108), less organic in character than the earlier fills of the ditch. As previously noted the northern edge of this deposit was truncated by post-medieval activity [113].



Plate 2: Trench 1 – Ditch [109] direction north

6.1.6 These deposits were overlain by a post-medieval made ground deposit, 0.60m in thickness (101) and a 1m–1.50m thick deposit of demolition crush (100) associated with the previously demolished structure. The interface between the Roman and post-medieval horizons suggest that the construction of the structure which previously occupied the site, in particular the basements of the structure, truncated post-Roman deposits.



Plate 3: Trench 1 – Section 1 full sequence from natural sands (105) to modern Made Ground (100), direction south-east

## Watching Brief

- 6.1.7 The pile probing works carried out across the site were monitored and the stratigraphic sequence remained generally consistent with the evaluation trench (Figure 6).
- 6.1.8 The earliest recorded deposit was the natural horizon comprising of yellow gravelly sand, overlain by an alluvial deposit and the organic blackish brown peat deposit. This remained consistent across the site. However, pile number 26, situated on the eastern side of the site, comprised a rich medium brown humic deposit, rather than the much darker blackish brown peat. This deposit contained 18<sup>th</sup>-19<sup>th</sup> century ceramics.
- 6.1.9 The organic deposits were then overlain by made ground, consisting of 19<sup>th</sup>-20<sup>th</sup> century ceramic rubble, and finally a demolition rubble layer.

## 7 Finds

- 7.1 Ceramic building material and animal bone was recovered form the archaeological evaluation which has not been fully assessed to date.
- 7.2 A total of nine environmental samples were taken during the archaeological evaluation. Four of these were processed by flotation at AOC Archaeology (Appendix C).
- 7.3 Two monolith samples (with supporting 0.05m spit samples through peat horizons) were taken through the archaeological sequence at the north-west end of the site (Figure 4, Section 1) and the south-east of the site (Figure 4, Section 2). These are to be assessed by QUEST at the University of Reading. The strategy to date includes:
  - Geoarchaeological assessment of the new column sample sequences (lithostratigraphic descriptions and organic matter content analysis.
  - Deposit modelling of the site with previous boreholes (MoLAS 2010, AOC 2011) and the two new sequences.
  - Assessment of the sequences, depending on the results of stage 1- this will include radiocarbon dating and assessment as with the previous borehole (pollen, diatoms, waterlogged macrofossils (seeds and wood), insects).
  - Analysis as recommended at the assessment stage.
- 7.4 No finds were retained during the watching brief. 18<sup>th</sup>-19<sup>th</sup> century ceramics, including pottery, brick and tile were observed in pile number 26, but were not retained.

## 8 Conclusions and Interpretation

- 8.1 During the course of the archaeological evaluation and watching brief, a full sequence of deposits from natural geology through to the modern ground surface was recorded.
- 8.2 The archaeological investigation revealed a sequence of deposits commencing with naturally lain sands at -0.85m OD. This was overlain by alluvium and peat which slopes slightly towards the south-west of the site. During the Roman period this slope, which may represent Guy's Channel, was deliberately infilled with a ceramic and domestic waste deposit (116). This was overlain by a sequence of water lain deposits, which continue to slope towards the south-west. A possible Late Roman (ceramics assessment to be completed), south-west to north-east aligned ditch was recorded through the centre of the trench. The fills of this ditch are organic rich and possibly represent attempts to drain, manage the landscape in the Late Roman period. The Roman horizons

were overlain directly by post medieval deposits which indicate truncation of post-Roman deposits, presumably during construction of the previously extant Church structure.

## 9 Further Work and Publication

- 9.1 A programme of environmental assessment and analysis is planned.
- 9.2 A final report will be produced which will include all investigation works completed by AOC Archaeology: the geotechnical assessment work (AOC 2011), archaeological evaluation, watching brief, forthcoming geoarchaeological assessment and analysis work.
- 9.3 Due to the nature of the project, publication will be restricted to a summary of results in the London Archaeological Round Up, and via the Archaeological Data Service (ADS) (Appendix B). This is dependent on the results of the assessment and analysis phase.
- 9.4 The archive, consisting of paper records, drawings, and digital photographs will be deposited with the London Archaeological Archive and Research Centre.

### **10** Archive Deposition

10.2 The archive, consisting of paper records, drawings, and digital photographs will be deposited with the London Archaeological Archive and Research Centre.

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LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET, LONDON BOROUGH OF SOUTHWARK: RESULTS OF AN ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF







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Bottom of Trench

Top of Trench with Three Steps



Figure 3: Plan of Proposed Piles and Foundations



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LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET,

LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET, LONDON BOROUGH OF SOUTHWARK: RESULTS OF AN ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF





















Context	Description	Length (m)	Width (m)	Thickness (m)
100	Made Ground: crush	<10.00	<3.00	1 – 1.50
101	Made Ground	<10.00	<3.00	0.60
102	Alluvium	<10.00	<3.00	0.64
103	Peat	<2.60	<1.60	0.58
104	Alluvium	<2.60	<1.60	0.40
105	Geology: fine sands	<2.60	<1.60	N.F.E
106	Primary fill of Ditch [109]	<5.00	<2.00	>0.12
107	Secondary fill of Ditch [109]	<5.00	<2.00	>0.30
108	Tertiary fill of Ditch [109]	<5.00	<2.00	>0.50
109	Cut of linear ditch (Late Roman?)	<5.00	<2.00	1.70
110	Orange peat / clay	<1.50	<1.50	0.05
111	Mixed fill of ditch [109]	N.F.E	N.F.E	0.05
112	Post Medieval fill of Ditch [109]	<5.00	<2.00	>0.40
113	Cut of modern foundation	3.00	1.00	1.00
114	Peat / alluvial variant	N.F.E	N.F.E	<0.05
115	Cut of Roman possible channel	<1.50	<2.60	0.40
116	Roman infill of [115]	<1.50	<2.60	0.40
117	Roman / Post Roman clay	<2.00	<3.00	0.25
118	Roman / Post Roman mixed sandy / clay layer	<2.00	<1.00	0.18
119	Roman / Post Roman peat / clay layer	<2.00	<1.00	0.08
120	Roman / Post Roman peat / clay layer	<2.00	<1.00	0.10
121	Roman / Post Roman peat / clay layer	<2.00	<1.00	0.10
122	Roman / Post Roman mixed sandy clay	<2.00	<1.00	0.20
	/ layer			
123	Roman / Post Roman orange peat / clay	<1.50	<1.50	N.F.E
	layer			
124	Linear cut through peat [103]	<3.00	<2.00	0.15

## Appendix A - Context Register

## **Appendix B - Finds**

## Appendix C – Environmental

Processing of four environmental samples from St Hugh's church, Southwark Site Identifier: **SHC11** Paul Fitz AOC Archaeology

#### SUMMARY

Bulk Samples were taken from four separate context fills.

Samples <4> (context 107) and <5> context (106) are from the same feature, believed to be a Roman ditch. Sample <9> (context 116) is also from a possible ditch/channel of the Roman period. Whilst sample <8> (Context 121) is from an undated deposit.

Flot was collected within a 300 micron and 1mm sieves. The 300 micron flots all consist of very fine silting and organic fibers. They may only be useful for possible pollens analysis.

#### RESULTS

Sample <4> (107). A 30I sample broke down to 2.5I of residue. The flot and residue are both similar in being a very cess-rich twig organic mix dark grey in colour. Of the four samples this is the only one where snails are absent. Fruit stones, a single small mammal bone and various wood types were retrieved from this residue. The collected flot when dried weighed 93 grams(1mm) and 2 grams (300 micron). It is mostly the same as the residue, though occasional peach/prune? stones are visible.

Sample <5> (106). A 10I sample broke down to 0.50I of residue. The deposit is rich in organics,( a lot of which has been collected as flot) with about 2% small molluscs. There are very small fragment of what appears to be orange coloured tile or brick fragments. They may well be intrusive contamination. The collected flot when dried weighed 52g (1mm) and 5g (300 micron). It contains the occasional fruit stone.

Sample  $\langle 8 \rangle$  (121). 30I were processed which broke down to broke down to 4.5I of residue. This was a rich brown coloured residue with frequent twig/wood and thousands of tiny molluscs. The artefactual evidence in this deposit appears to be a few small fragments of what look to be quite fresh brick or tile. It is unclear as to the likelihood of these being intrusive contamination. A single piece of burnt charcoal 30 x 25mm may be suitable for carbon dating. The collected flots (snail rich) when dried weighed 68g grams (1mm sieve) and 12 grams (300 micron).

Sample <**9**> (116). 30I were processed which broke down to broke down to 5I of residue. This was a dark grey gravel/stone mix with moderate organic/twig inclusion and very frequent small molluscs (land snails). Artefacts retrieved included moderate Roman pottery and CBM, animal bone and oyster shell. A struck flint flake was noticeable within the residue. Though it may not be man-made it is conspicuous within the residue matrix. Two small pieces of glass were also retrieved. The collected flot when dried weighed 49g (1mm) and 9g (300 micron).

#### CONCLUSIONS/RECOMENDATIONS

All the samples provide good environmental evidence for vegetation and climate patterns. As controlled monolith samples have been taken for laboratory analysis the flots may be used for standard environmental assessment. The fruit stones/nuts should be identified. Sample 4 (context 107) appears to be an organic /cess deposit with the partial appearance of horse manure. If it was human waste then smaller animal bone would be expected along with fruit stones etc.

The fragments of CBM within deposit 121 (Sample 8) will need to be studied by a fabric specialist. It is my view that the freshness of these pieces may be due to the fact that they are contamination.

## Appendix C - OASIS Form

#### OASIS ID: aocarcha1-108996

Project details	
Project name	Land by St Hugh's Church
Short description of the project	The excavation of a geoarchaeological borehole was completed on the 18th November. Archaeological evaluation of a single trench which revealed a Roman ditch and channel. Geoarchaeological assessment and a Watching Brief on foundation pile placements to follow.
Project dates	Start: 18-11-2011 End: 30-05-2012
Previous/future work	Yes / Yes
Any associated project reference codes	30999 - Contracting Unit No.
Any associated project reference codes	SHC11 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Significant Finds	CERAMICS Roman
Methods & & techniques	'Sample Trenches'

## LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET, LONDON BOROUGH OF SOUTHWARK: RESULTS OF AN ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF

Development	Urban	residential	(e.g.	flats,	houses,	etc.)
type						

Prompt Direction from Local Planning Authority - PPS

Position in the After full determination (eg. As a condition) planning process

#### **Project location**

Country	England
Site location	GREATER LONDON SOUTHWARK SOUTHWARK LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET
Postcode	SE1
Study area	572.00 Square metres
Site coordinates	TQ 32755 79750 51.5005766761 -0.08716623010410 51 30 02 N 000 05 13 W Point
Lat/Long Datum (other)	2.642
Height OD / Depth	Min: -0.85m Max: -0.83m

#### **Project creators**

Name of AOC Archaeology Organisation

Project brief Southwark Council originator

Project design AOC Archaeology originator

Project Melissa Melikian director/manager

#### LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET, LONDON BOROUGH OF SOUTHWARK: RESULTS OF AN ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF

Project Helen MacQuarrie supervisor

Type of developer sponsor/funding body

Name of Rydon Construction sponsor/funding body

#### **Project archives**

Physical Archive Museum of London-LAARC recipient

Physical Archive SHC11 ID

Physical 'Animal Bones', 'Ceramics', 'Environmental' Contents

Physical Archive small assemblage of Roman finds notes

Digital Archive Museum of London-LAARC recipient

Digital Archive ID SHC11

Digital Contents 'Environmental', 'Stratigraphic'

Digital Media 'Images raster / digital photography','Images vector','Spreadsheets','Text' available

Paper Archive Museum of London-LAARC recipient

Paper Archive ID SHC11

#### LAND ON THE EAST SIDE OF CROSBY ROW AND THE SOUTH SIDE OF PORLOCK STREET, LONDON BOROUGH OF SOUTHWARK: RESULTS OF AN ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF

Paper Contents 'Environmental', 'Stratigraphic'

Paper Media 'Correspondence', 'Microfilm', 'Photograph', 'Plan', 'Report', 'Section', 'Unpublished Text' available

Entered by fitz (paul.fitz@aocarchaeology.com)

Entered on 29 May 2012

## OASIS:

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