Land at 24-28 Warner Street, London Borough of Camden: An Archaeological Evaluation and Geoarchaeological Report

Planning Application Number: 2011/5129/P National Grid Reference Number: TQ 3115 8217 Site Code: WAR12 AOC Project No: 32177 Date: June 2012



ARCHAEOLOGY

HERITAGE

CONSERVATION

Land at 24-28 Warner Street, London Borough of Camden

An Archaeological Evaluation and Geoarchaeological Report

On Behalf of:	Ward Williams Associates 91-93 Baker Street London W1U 6QQ
National Grid Reference (NGR):	TQ 3115 8217
AOC Project No:	32177
Prepared by:	Catherine Edwards
Illustration by:	Jonathan Moller
Date of Report:	May 2012

This document has been prepared in accordance with AOC standard operating procedures.				
Author: Catherine Edwards Date: June 2012				
Approved by: Melissa Melikian	Date: June 2012			
Draft/Final Report Stage: Draft	Date: June 2012			

Enquiries to:	AOC Archaeology Group Unit 7 St Margarets Business Centre Moor Mead Road Twickenham TW1 1JS			
	Tel. Fax. e-mail.	020 8843 7380 020 8892 0549 london@aocarchaeology.com		



Contents

		J -
1	Introduction	1
2	Introduction Planning Background	1
	Geology and Topography	
4.	Archaeological and Historical Background	2
5.	Aims of the Investigation	4
6.	Methodology	5
7.	Methodology Evaluation Results	6
	Geoarchaeological Results	
	Finds	
	Discussion	
	Recommendations	
	Publication	
13	Archive deposition	8
	Bibliography	
	pendix A – Context Register	
Ap	pendix B – Geoarchaeological Borehole Report	12
	pendix C – Oasis Form	

List of illustrations

Figure 1 – Site Location Figure 2 – Detailed Site Location Plan Figure 3 – Sample Section

Page

Non-Technical Summary

An archaeological and geoarchaeological evaluation was undertaken by AOC Archaeology Group between the 15th and 16th May 2012 at 24-28 Warner Street, London Borough of Camden. The work was undertaken on behalf of Ward Williams Associates. The aim of the evaluation was to assess the impact of development on any surviving archaeological remains.

The evaluation comprised of a single trench and a single borehole. The trench measured 5.00m x 1.80m and was located within the western extent of the site (No 24). The single borehole was excavated within the excavated trench. No significant archaeological remains were encountered on site; the archaeological evaluation revealed two layers of possible demolition deposits truncated by a modern concrete footing. The only remains relating to the Red Lion Public House, which had previously occupied the site, was a large limestone and brick work block which may have been part of the building. The geoarchaeological investigation revealed very thick made ground overlying a sequence of silty sandy clays and gravels. The results indicate that no fluvial sediments that might represent a significant period of Holocene deposition on the floodplain of the Fleet River were present on site.

Due to the lack of archaeological remains and the probable truncation of deposits on site, no further archaeological work is recommended. No further work is required on the samples obtained from the geoarchaeological borehole.

Publication of the evaluation results will be carried out through a short summary of the fieldwork submitted to the local fieldwork roundup. An OASIS form has also been completed and an electronic copy of the evaluation report will be deposited with the Archaeological Data Service (ADS). The site archive will be prepared in accordance with local and national guidance and will be deposited with the London Archaeological Archive and Research Centre.

1 Introduction

- 1.1 This document details the findings of an archaeological and geotechnical evaluation undertaken at the proposed development at 24-28 Warner Street, London Borough of Camden (Figure 1). The investigation took place between 15th and 16th May 2012 and comprised of the excavation of a single trench and borehole.
- 1.2 The development site is located to the south of Warner Street in Clerkenwell. The site is located at National Grid Reference of TQ 312 821 (centre) and is roughly rectangular in shape measuring 336 sq meters.
- 1.3 The site is vacant and until recently contained late 19th century two-storey warehouse buildings.
- 1.4 The development consists of the demolition of the existing two storey warehouse building and the erection of a basement and part three, four and five storey building to create 12 self-contained residential units.

2 Planning Background

- 2.1 The local planning authority is the London Borough of Camden. Archaeological advice to the borough is provided by Kim Stabler of the Greater London Archaeological Advisory Service (GLAAS), part of English Heritage.
- 2.2 The demolition of the existing warehouses and redevelopment of the site was granted full Planning Permission Granted Subject to a Section 106 Legal Agreement (23rd in December 2011). Planning consent included Planning Condition 10 that states:

No development shall take place until the applicant has implemented a programme of archaeological work, in accordance with the written scheme of investigation which has been submitted by the applicant and approved by the Council. The development shall only take place in accordance with the detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Council.

Reason: The development of this site is likely to damage heritage assets of archaeological interest. Accordingly the Council wishes to secure the provision of archaeological investigation in the form of an archaeological project design prior to development in accordance with the requirements of policy CS14 (Promoting high quality places and conserving our heritage) of the London Borough of Camden Local Development Framework Core Strategy and policy DP25 (Conserving Camden's heritage) of the London Borough of Camden Local Development Policies.

- 2.3 The first stage of works involved the production of a desk based assessment by CgMs (CgMs 2011). The evaluation works were then carried out in accordance with a written scheme of investigation (WSI) (AOC 2012). The WSI was approved by the Kim Stabler of the Greater London Archaeological Advisory Service (GLAAS) prior to the commencement of works.
- 2.4 This report details the results of the archaeological and geoarchaeological evaluation.

3. Geology and Topography

- 3.1 The solid geology of the study site is shown by the Institute of Geological Sciences (IGS 1979) as London Clay deposits forming the London Basin (CgMs 2011). According to the British Geological Survey (BGS 1994) the underlying geology of the site is Alluvial Deposits formed from the valley of the River Fleet.
- 3.2 Much of the natural topography of London has been lost or masked by generations of development. The site itself sits on a gradual east facing slope, at approximately 15m AOD (CgMs 2011).

4. Archaeological and Historical Background

The information below has been extracted and summarised from the Desk Based Assessment produced by CgMs Consulting (CgMs 2011).

4.1 The Prehistoric Periods

(Palaeolithic *c*. 500,000 – 10000 BC; Mesolithic *c*. 10000 to 4000 BC; Neolithic *c*. 4000-2200 BC; Bronze Age *c*. 2200-700 BC and Iron Age *c*. 700 BC - AD 43)

- 4.1.1 The Hackney Gravels, which surround but do not underlie the study site, are part of the Lynch Hill Gravels sequence, traditionally a major source of Lower Palaeolithic material in London (MoLAS/English Heritage 2000: 31, 34-6). The presence of Hackney Gravels in the surrounding area may explain the presence of a small number of Palaeolithic artefacts recorded on the GLHER. These finds comprise three hand axes found in Clerkenwell and a stag horn hoe or antler pick found near St John's Square.
- 4.1.2 Similarly little Mesolithic material has been found within the wider study area of the site. The only find held for the study area on the GLHER comprises a Mesolithic hand axe found near Grays Inn Road.
- 4.1.3 From around 4000 BC the mobile hunter-gathering economy of the Mesolithic gradually gave way to a more settled agriculture-based subsistence. The pace of woodland clearance to create arable and pasture-based agricultural land varied regionally and locally, depending on a wide variety of climatic, topographic, social and other factors. The trend was one of a slow, but gradually increasing pace of forest clearance. A single hand axe found in the area of Grays Inn Road is the only Neolithic artefact recorded on the HER for the study area.
- 4.1.4 By the 1st millennium, i.e. 1000 BC, the landscape was probably a mix of extensive tracts of open farmland, punctuated by earthwork burial and ceremonial monuments from distant generations, with settlements, ritual areas and defended locations reflecting an increasingly hierarchical society. No finds or features of Bronze Age date have been identified within the study area.
- 4.1.5 It is thought that during these periods the study site lay within unsettled woodland or wetland on the flood plain of the River Fleet. Consequently a low potential has been identified for the Neolithic and Bronze Age within the study site itself.
- 4.1.6 A heavily truncated ditch with finds of Iron Age pottery was found during excavation work at Clerkenwell Close to the east of study site. The GLHER records Clerkenwell Road as possibly being an Iron Age trackway before becoming a Roman road. The route is thought to link what is now Oxford Street to the routes north and east at Old Ford and Kingsland Road (Margary 1955).

4.2 The Roman Period (AD 43 – AD 410)

4.2.1 The GLHER records Theobald's Road (which leads eastward on to Clerkenwell Road) as a Roman road. This is recorded also as forming part of the Silchester/Colchester route. Roman findspots from

the study area include two Roman urned cremations, known from Greys Inn Road, two coins found to the northeast of the study site on Farringdon Road and a coin from Gough Road to the northwest.

4.2.2 The Roman road to the south of the site is essentially the northern Roman bypass for *Londinium*. Based on the current evidence it is likely that the area in which the site is located was at this time farm land. The sites location in the floodplain of the River Fleet is less likely to make it a preferred location of Roman settlement.

4.3 The Early Medieval (AD 410 – AD 1066) and Medieval Periods (AD 1066 – AD 1538)

- 4.3.1 The sole find of Saxon date identified within a 500m radius of the study site comprises a chevron cane bead identified at Clerkenwell to the southwest of the study site. In view of the paucity of material, a low potential can be identified for the Anglo-Saxon period at the study site itself.
- 4.3.2 In the medieval period Clerkenwell grew up as a hamlet serving the 12th century monastic foundations of St Mary's Nunnery and the Priory of St John of Jerusalem (Weinreb, Hibbert & Keay 2008). The area was described as fertile meadowland watered by abundant springs and the Fleet River.
- 4.3.3 The former location of the St Mary's Nunnery is now a Scheduled Ancient Monument, located c. 300m to the east of the study site. The nunnery was established in 1145 and continued through to the dissolution in 1539 (MLO17296). The site of the Grand Priory of the Order of St. John of Jerusalem was located to the southwest of the nunnery approximately 500m from the site. Both monastic houses have undergone many archaeological investigations culminating in a wealth of knowledge regarding the Orders.
- 4.3.4 Findspots for the surrounding area comprise re-used medieval stonework, domestic implements found in the River Fleet, ceramic jugs found in Hatton Garden and an iron crossbow bolthead.
- 4.3.5 The distribution of known archaeological evidence for the medieval period places the location of the site to the west of the main areas of activity for the period. Although the site is not within the immediate boundaries of the monastic houses it is located within their sphere of influence and based on additional information it was most likely used for peripheral activity such as farming.

4.4 The Post-Medieval (AD 1538 – AD 1900) and Modern Period (AD 1900 to present)

- 4.4.1 The rural nature of the area at the beginning of this period is illustrated on Agas' map of 1560 which shows the area of the site to the north of Hockley in the Hole and to the west of Farringdon Road as part of wider open fields. The area of the site is still shown within open land on mapping from 1682 where the site was situated on the cusp of development to the north of the Fleet River.
- 4.4.2 Great Warner Street is present on mapping from 1762. By 1799 residential properties are shown lining the southern side of the street. Each of the properties within the site is shown to have a small yard area/garden at the rear backing on to Red Lion Yard.
- 4.4.3 Ordnance Survey mapping of 1871 shows the site as comprising three separate properties. No 24, at the west of the site, is shown as a Public House (The Red Lion) comprising a main building at the street frontage with two outbuildings extending back to the Red Lion Yard. 26 and 28 Warner Street are thought to be residential properties again with the main structures located on the street frontage and outhouse, likely toilets, in the backyards.
- 4.4.4 The overpass (Rosebery Avenue) which crosses Warner Street to the west of the site is shown on mapping from 1897. The construction of the route saw the demolition of part of Warner Street including the Red Lion Yard, formerly to the back and west of the site. The western property of the

site (26 Warner Street) appears to have been on the edge of the demolition work as an alleyway is now present to west of the site leading to a smaller yard, where housing had previously stood. No obvious change is visible at the site from mapping dated between 1916 and 1938.

- 4.4.5 The LCC Bomb Damage Maps of 1939-45 show the site as having undergone extensive bomb damage during WWII and possibly a direct hit. The central building of the site (26 Warner Street) is shown as coloured black (Total Destruction) and the adjacent areas of the site (24 and 28 Warner Street) are shown as purple (Damaged Beyond Repair).
- 4.4.6 The post-war site shown in 1953 has a very different layout to the pre-war site as clearance and reconstruction have taken place. The Red Lion Pub is no longer shown present and the area is shown as an open plot adjacent to Warner Yard. Numbers 26 and 28 Warner Street are depicted as long thin buildings extending to the back of the site and separated by an open area. Two small buildings are shown at either end of the open area, the one at the rear of which is a bathroom.
- 4.4.7 No change is shown to the study site by 1962. Mapping from 1992 shows a warehouse incorporating the majority of the area of the former Red Lion Pub. No change is shown on the site from mapping of 1994.
- 4.4.8 The other GLHER listings mainly record houses, drains, kilns and other features associated with the surrounding area, which is to be expected in an area which was largely built up by the 17th and 18th century.

5. Aims of the Investigation

- 5.1 The aims of the evaluation and geoarchaeological works 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 and geoarchaeological deposits 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 Camden, 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.
- 5.2 The specific aims of the investigation were:
 - Determine the presence of any features which may relate to the post-medieval development of the area prehistoric evidence on site, particularly the Red Lion Public House which was located in the western part of the site.
 - Determine the presence of pre post-medieval activity on site.
- 5.3 The specific aims of the archaeological geoarchaeological borehole survey were defined as being:
 - To provide a detailed record of the sedimentary sequence of the Fleet Channel.
 - To obtain a chronological framework for the deposit sequence through carbon dating.
 - To produce a geoarchaeological assessment report which includes an evaluation of the significance of the findings.

- Can the survey link landscapes and chronologies to determine influences of the Fleet Channel on settlement?
- 5.4 The final aim was to make public the results of the investigation, subject to any confidentiality restrictions, through ADS OASIS website.

6. Methodology

- 6.1 The evaluation consisted of archaeological trial trenching (archaeological evaluation). The evaluation involved the machine excavation of a single trench excavated under archaeological supervision (Figure 2). A single borehole was excavated on site, located within the excavated trench. The borehole excavation was carried out by QUEST, University of Reading. The borehole was excavated to a depth of 6.80mOD which equates to 6.40m below ground surface (Figure 2).
- 6.2 Due to the presence of upstanding structures on site and internal metal framework, the trench was shortened to 5.0m in length. Also, due to width restrictions on site, there was no scope to widen the trench in order to excavate to a greater depth. The archaeological advisor was notified of the site constraints during the fieldwork.
- 6.3 All machining was carried out using a JCB 3CX type excavator with a smooth bladed ditching bucket and under the constant supervision of the archaeological Project Officer.
- 6.4 The accession code WAR 12 was obtained from the London Archaeological Archive Resource Centre (LAARC) for the project, and was used for all fieldwork.
- 6.5 The evaluation trench and borehole were accurately located to the National Grid. A differential GPS unit was used to establish a temporary bench mark located at the corner of Eyre Street Hill measuring 12.93mOD. This temporary bench mark was used to level the site.
- 6.6 All recording was in accordance with the standards and requirements of the Museum of London's *Archaeological Field Manual* (MoL 3rd edition 1994).
- 6.7 All of the work was carried out in line with:
 - English Heritage, 1991, Management of Archaeological Projects (MAP2)
 - Archaeological Guidance Papers (AGP): 2-4, *Standards and Practices in Archaeological Fieldwork* (English Heritage 2009)
 - If A Standard and Guidance for Archaeological Field Evaluation (If A 2008).
- 6.8 A continuous unique numbering system was employed. For each trench, a block of numbers in a continuous sequence was allocated. In this report the archaeological fills and layers are represented in curved brackets i.e. (), whilst the cut numbers are represented in square brackets i.e. [].
- 6.9 Written descriptions, comprising both factual data and interpretative elements, were recorded on standardised sheets.

7. Evaluation Results

7.1 Trench 1 (Figure 2 & 3)

Table of the stratigraphic sequence

Context No	Depth	Height of Deposit (mOD)	Description/Interpretation
1	0.20m	13.20m – 13.00m	Modern concrete floor.
2	0.60m	13 00m – 12 40m	Loose brick rubble in silt and sand. Demolition layer and made ground.
3	0.60m	12.40m - 11.90m - 1	Mixed brick rubble with brown silt and sand. Demolition layer and made ground.

- 7.1.1 Trench 1 measured 5.00m x 1.80m and was located within the central area of the site (Figure 2).
- 7.1.2 The lowest deposit in Trench 1 was (3), a mixed layer of red and yellow brick rubble within a brown silty sand, with inclusions of wood, metal springs, stone and glass. Within the deposit was a large fragment of building rubble composed of a limestone slab measuring 0.58m x 0.58m x 0.16m. Attached to the slab on two sides, were three courses of brown glazed bricks, each measuring 110mm x 70mm. The remains are likely to relate to the demolition of the Red Lion Public House that had previously occupied the site.



Plate 1 – Possible rubble remains of Red Lion Public House

- 7.1.3 Overlying (3), was (2), a dense layer of loose red and yellow brick rubble in grey brown silt. This deposit has been interpreted as a layer of demolition material, possible *in situ* or imported as made ground.
- 7.1.4 Cutting into (2) was a large modern concrete footing. The footing measured 1.80m x 0.55m x 0.90m thick and appeared to be part of the current building on site.



Plate 2 – Modern Concrete Footing

- 7.1.5 Overlying the trench was a 0.20m thick layer of reinforced concrete.
- 7.1.6 No archaeological remains were recorded in Trench 1.

8 Geoarchaeological Results

- 8.1 A single borehole was excavated, within the evaluation trench, in order to ascertain whether there were any deposits associated with the Fleet River floodplain. The borehole was excavated using Eijkelkamp windowless sampler and gouge set using an Atlas Copco TT 2-stroke percussion engine. The borehole was sampled until the terrace gravels were reached.
- 8.2 The results from the single borehole are considered in depth as Appendix B, and are summarised below. The stratigraphy indicated from the borehole showed 4.77m thick made ground overlying olive grey silty clay, slightly organic in its upper part with a base at 7.34m OD. Below this deposit was a silty sandy gravel which was present to the level at which the borehole terminated, recorded as 6.80m OD. A thin (0.16m) bed of silty sandy clay was recorded between 7.07m and 6.91m OD.
- 8.3 The results, in conjunction with previous boreholes data from the site and the local area, indicate no presence of fluvial sediments that might represent a significant period of Holocene deposition on the floodplain of the Fleet River. In particular, there is no evidence of fine-grained organic alluvium. This may be a consequence of borehole placement, determined by commercial requirements and therefore effectively random, or it may indicate that the floodplain sediments of the Fleet River in this part of its valley in the prehistoric and historic period were always thin and therefore subject to frequent reworking.
- 8.4 No further work has been recommended.

9 Finds

9.1 No finds were recovered during the site works on site. The results of the geoarchaeological borehole excavation are included as Appendix B.

10 Discussion

- 10.1 The archaeological evaluation accomplished its aim of establishing the presence/absence of archaeological remains. No significant archaeological remains were recorded on site.
- 10.2 The natural horizon (Terrace Gravel) was only identified within the single geoarchaeological borehole on site at a height 6.29mOD. The gravel was overlain by a sequence of silty sands and gravels before being overlaid by a 4.77m thick deposit of made ground. Within the made ground were identifiable deposits of demolition horizons which are likely to have been deposited during the demolition of the Red Lion Public House which had previously occupied the site. Within one deposit of made ground was a block fragment of limestone and brick work which may have been part of the previous structure.
- 10.3 A modern concrete footing was recorded within the trench which is likely to relate to the current occupying structure.

11 **Recommendations**

11.1 Due to the lack of archaeological remains no further work is recommended.

12 Publication

12.1 Due to the nature of the project, initial publication is expected to be limited to a summary in the London Archaeologist Round-up and publication via the Archaeological Data Service (ADS) (Appendix C).

13 Archive deposition

13.1 On completion of the project, the archive, consisting of paper records, drawings, and digital photographs, will be deposited with the London Archaeological Archive and Resource Centre.

14 Bibliography

- AOC (2012), Land At 24-28 Warner Street, London Borough Of Camden: A Written Scheme Of Investigation For An Archaeological Evaluation And Geoarchaeological Works
- BGS (1996) British Geological Survey London and the Thames Valley 4th Edition 1994
- CgMs Consulting (2011) Archaeological Desk Based Assessment: Land at 24-28 Warner Street EC1
- CLG (2010a), PPS 5, Planning for the Historic Environment: Historic Environment Planning Practice Guide
- CLG (2010b), Planning Policy Statement 5: Planning for the Historic Environment
- Department Communities and Local Government, Department of Culture Media and Sport & English Heritage (2010), PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide
- DCMS (2010), Scheduled Monuments: Identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979
- Department Communities and Local Government, Department of Culture Media and Sport & English Heritage (2012), *National Planning Policy Framework*

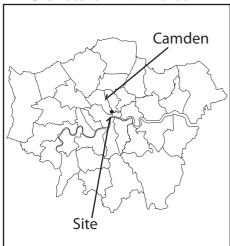
English Heritage, (2011), The Setting of Heritage Assets

English Heritage (1991). Management of Archaeological Projects.

- English Heritage (1998a) Archaeological Guidance Paper 2: Standards and Practices for Written Schemes of Investigation. English Heritage London Region.
- English Heritage (1998b). Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork. (English Heritage London Region).
- English Heritage (1998c). Archaeological Guidance Paper 4: Standards and Practices in Archaeological Reports. (English Heritage London Region).
- English Heritage (2001). Archaeometallurgy. Centre for Archaeology Guidelines 2001/01.
- English Heritage (2002). Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation
- English Heritage Greater London Archaeology Advisory Service, 2009, Standards for Archaeological Work
- English Heritage, (2008), Conservation Principles. Policies and Guidance for the Sustainable Management of the Historic Environment
- Institute for Archaeologists (2008a). Standards and Guidance and Guidelines for Finds Work.
- Institute for Archaeologists (2008b). Standard and Guidance for an Archaeological Watching Brief.
- Institute for Archaeologists (2008c). Code of Conduct.
- Institute for Archaeologists (2008d). Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.
- Institute for Archaeologists (2008e). Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
- Margary I D,(1955) Roman Roads in Britain
- Murphy, P L and Wiltshire, P E J (1994). A guide to sampling archaeological deposits for environmental analysis. English Heritage. London
- Museum of London (1994). Archaeological Site Manual (3rd ed).
- Museum of London (2002). A Research Framework for London Archaeology.
- Planning Policy Statement 5 Planning for the Historic Environment
- RESCUE & ICON (2001). First Aid For Finds. (3rd ed).
- Rowsome, P, B, D & Stephenson, R, (2011), A Strategy for Researching the Historic Environment of Greater London, v.11.2 (draft)
- Society of Museum Archaeologists (1993). Selection, Retention and Dispersal of Archaeological Collections.
- Starley, D. (1995) Hammerscale, Historical Metallurgy Society Datasheet 10.
- United Kingdom Institute for Conservation (1983). Conservation Guidelines No 2.
- United Kingdom Institute for Conservation (1990). Guidance for Archaeological Conservation Practice.
- WHK (2008) Weinreb, Hibbert & Keay (eds.) The London Encyclopaedia

LAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN: AN ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT

Site Location Within London



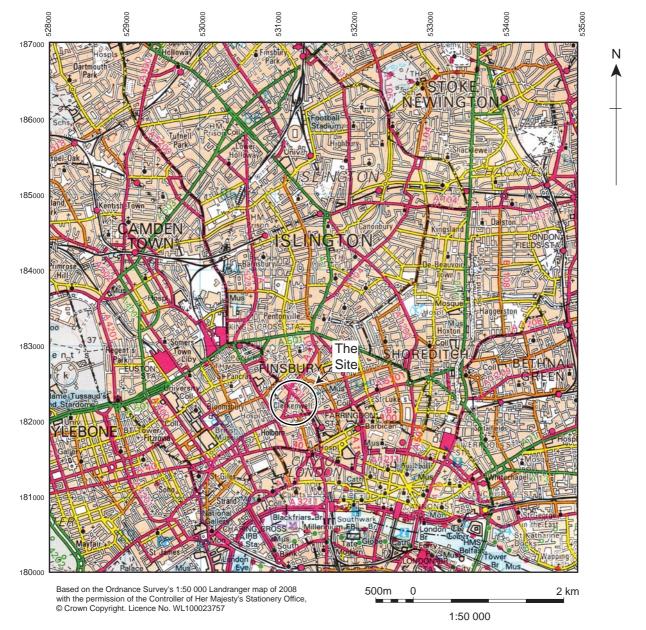
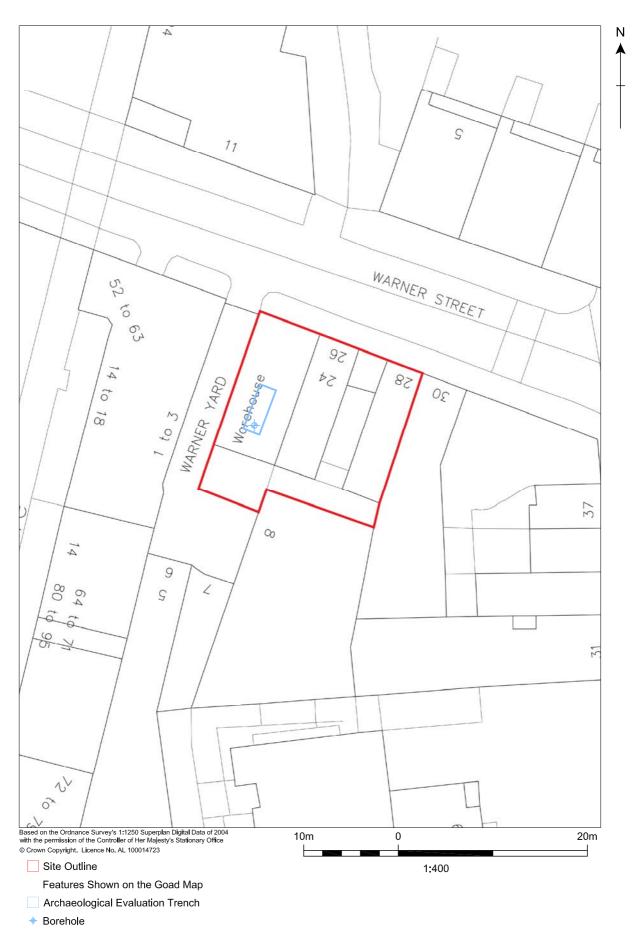


Figure 1: Site Location



LAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN: AN ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT







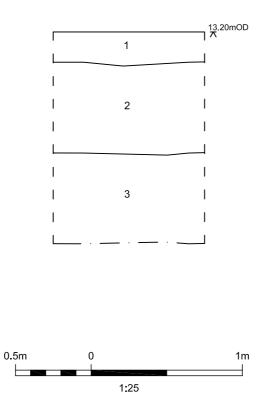


Figure 3: Sample Section







Context No.	Context Description/Index code	Length	Width	Depth	
01	Reinforced Concrete	5.00m	1.80m	0.20m	
02	Demolition Layer/ Made Ground	5.00m	1.80m	0.60m	
03	Demolition Layer/ Made Ground	5.00m	1.80m	0.60m	
04	Concrete Footing	1.80m	0.55m	0.90m	

Appendix A – Context Register

Appendix B – Geoarchaeological Borehole Report

LAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN (SITE CODE: STO12): GEOARCHAEOLOGICAL ASSESSMENT REPORT

By C.P. Green and D.S. Young

INTRODUCTION

This report summarises the findings arising out of the geoarchaeological assessment undertaken by Quaternary Scientific (University of Reading) in connection with the proposed development of land at 24-28 Warner Street, London Borough of Camden (National Grid Reference: TQ 31150 82170; Site Code: STO12). The site is in east London to the north of the River Thames about 1.4km from the modern waterfront. The site is in the valley of the Fleet River at a point where this valley is aligned broadly WNW to ESE. The valley is cut down through terrace gravel of the River Thames (Middle Pleistocene Hackney Gravel) into the underlying bedrock London Clay. The British Geological Survey (1:50,000 Sheet 256 North London 1994) shows the site underlain by Alluvium (of the Fleet River) with London Clay exposed in the lower valley side to the north and Hackney Gravel to the south. The river itself has long been culverted and the natural floodplain at the site and across the surrounding area is buried beneath several metres of Made Ground. The present ground level at the site is *c*.13.20m OD. The level of the natural ground surface (base of the Made Ground) in Borehole BH1 at the site is 9.19m OD. This is reasonably consistent with a mean value of 8.57m OD (range: 8.07m-9.12m OD) for the base of the Made Ground in four nearby borehole records (BGS TQ38SW 338, 3525, 2033/F, 2033).

LAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN: AN ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT

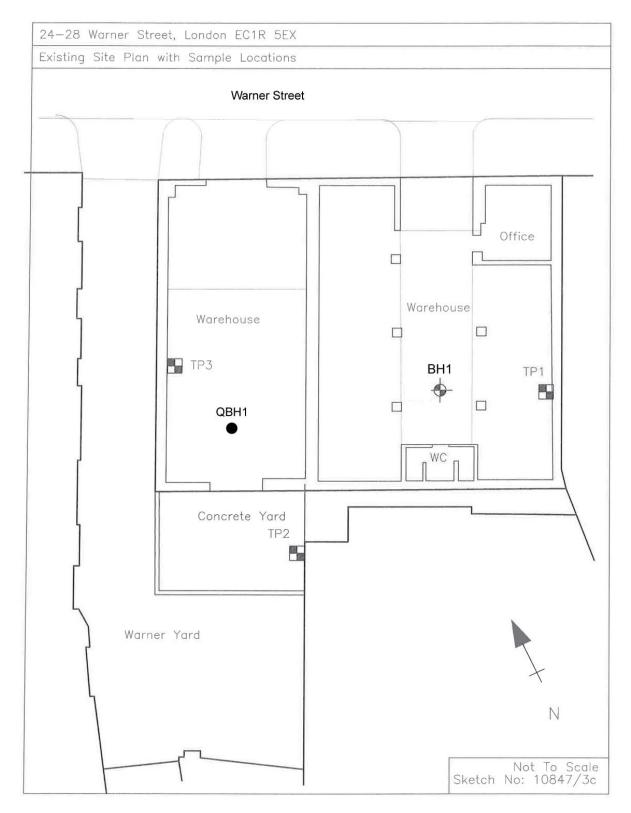


Figure 1: Approximate location of borehole QBH1, borehole BH1 and Test Pits 1-3, 24-28 Warner Street, London Borough of Camden (adapted from Herts & Essex Site Investigations (2012).

METHODS

Field investigations

One geoarchaeological borehole (QBH1) was recovered at the site by Quaternary Scientific using an Eijkelkamp windowless sampler and gouge set using an Atlas Copco TT 2-stroke percussion engine. The borehole was sampled until the terrace gravels were reached. All samples were wrapped and labelled with the depth and orientation, and returned to the University of Reading for cold storage. The spatial attributes of the borehole were recorded by AOC Archaeology.

Lithostratigraphic descriptions

The lithostratigraphy of borehole QBH1 was described in the laboratory using standard procedures for recording unconsolidated sediment and organic sediments, noting the physical properties (colour), composition (gravel, sand, clay, silt and organic matter) and inclusions (e.g. artefacts) (Tröels-Smith, 1955). The procedure involved: (1) cleaning the samples with a spatula or scalpel blade and distilled water to remove surface contaminants; (2) recording the physical properties, most notably colour using a Munsell Soil Colour Chart; (3) recording the composition; gravel (Grana glareosa; Gg), fine sand (Grana arenosa; Ga), silt (Argilla granosa; Ag) and clay (Argilla steatoides); (4) recording the degree of peat humification and (5) recording the unit boundaries e.g. sharp or diffuse. The results are displayed in Table 1 and Figure 2.

RESULTS, INTERPRETATION AND DISCUSSION OF THE LITHOSTRATIGRAPHIC DESCRIPTIONS

Three Trial Pits at the site (depth: 1.0m, 2.3m, 2.6m) all terminated in Made Ground. A single geotechnical borehole (BH1) passed through 4.0m of Made Ground into 'soft brown slightly organic peaty clay'. This organic sediment, 0.50m thick, rested on 'soft grey slightly silty clay with occasional to much flint gravel'. This gravelly unit, 1.0m thick, rested at 7.70m OD on sediments that seem likely to have been the London Clay, weathered brown in the upper 1.5m but generally grey below. A borehole (QBH1) (Table 1) put down to support palaeoenvironmental investigation of the site was located a short distance to the west of geotechnical borehole BH1. It passed through 4.77m of Made Ground into olive grey silty clay, slightly organic in its upper part with a base at 7.34m OD. Below this level silty sandy gravel was present to the level at which the borehole terminated, +6.80m OD. A thin (0.16m) bed of silty sandy clay was recorded between 7.07m and 6.91m OD.

The surface of the London Clay has been recorded at levels between 5.03m and 9.37m OD in nearby boreholes (mean of six records: 7.70m OD). The four deeper records, including the present site (7.70m OD in geotechnical Borehole BH1; 7.01m OD; below 6.40m OD in QBH1; 5.03m OD) lie along a WNW-ESE alignment, probably related to the course of the Fleet River in this part of Clerkenwell. Geotechnical borehole BH1 passed through 15.5m of London Clay into gravel at -7.73m OD. This gravel probably represents part of the Lambeth Group (Woolwich & Reading Beds).

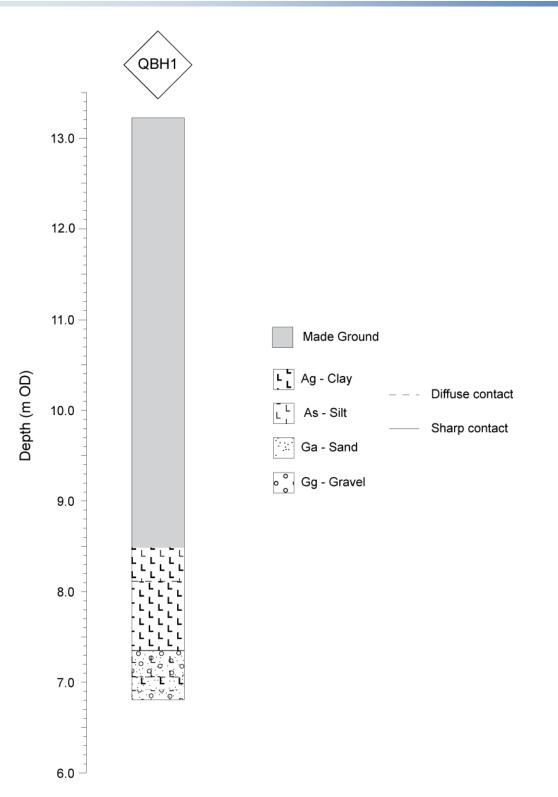
Deposits overlying the London Clay in this part of Clerkenwell are variable but generally thin and with little indication of significant organic horizons. Gravel or 'clay with stones' form the lower part of most

sequences and may well be pre-Holocene in age. A thickness of only 1.5m of sediment was recorded in BH1 resting on the London Clay, including 1.0m of gravelly clay. At least 1.63m of sediment was recorded in Borehole QBH1 without reaching the London Clay, including 0.94 m of sand and gravel. The average thickness of the sediment sequence overlying the London Clay in five nearby boreholes is 1.57m (Range 0.44-3.04m). The thickest sediments (BGS TQ38SW2033/F) come from a position that is likely to be close to the axis of the Fleet River valley. In the boreholes being considered here, organic material was recorded only in boreholes BH1 and QBH1 from the present site (sparse in both boreholes), although 'river mud' and 'black mud with stones' were recorded in other boreholes.

Table 1: Lithostratigraphic description of Borehole <QBH1>, 24-28 Warner Street, London Borough of Camden

Depth	Depth	Description
(m OD)	(m bgs)	
13.20 to 8.43	0.00 to 4.77	Made ground.
8.43 to 8.11	4.77 to 5.09	5Y 4/2; As3 Ag1 Sh+; olive grey silty clay with occasional
		flecks of organic matter. Diffuse contact in to:
8.11 to 7.34	5.09 to 5.86	5Y 4/2; As4 Ag+; olive grey clay with a trace of silt. Sharp
		contact in to:
7.34 to 7.05	5.86 to 6.15	5Y 4/2; Gg2 Ag1 Ga1; olive grey silty sandy gravel. Diffuse
		contact in to:
7.05 to 6.91	6.15 to 6.29	5Y 4/2; As2 Ag1 Ga1; olive grey silty sandy clay. Diffuse
		contact in to:
6.91 to 6.80	6.29 to 6.40	5Y 4/2; Gg2 Ga1 Ag1; olive grey silty sandy gravel.

LAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN: AN ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT





CONCLUSION AND RECOMMENDATIONS

Neither the boreholes put down in the present site, nor any of the other boreholes nearby record a sequence of fluvial sediments that might represent a significant period of Holocene deposition on the floodplain of the Fleet River. In particular, there is no evidence of fine-grained organic alluvium. This may be a consequence of borehole placement, determined by commercial requirements and therefore effectively random, or it may indicate that the floodplain sediments of the Fleet River in this part of its valley in the prehistoric and historic period were always thin and therefore subject to frequent reworking. No further work is recommended on the borehole collected from 24-28 Warner Street.

REFERENCES

Essex Site Investigations (2012) Site at 24-28 Warner Street, London EC1R 5EX: Geotechnical Report. Unpublished Report June 2012.

Tröels-Smith, J. (1955) Karakterisering af løse jordater (Characterisation of unconsolidated sediments), *Danm. Geol. Unders.*, Ser IV 3, 73.

Appendix C – Oasis Form

OASIS ID: aocarcha1-125357

Project details Project name 24-28 Warner Street, London Borough of Camden

An archaeological and geoarchaeological evaluation was undertaken by AOC Archaeology Group between the 15th and 16th May 2012 at 24-28 Warner Street, London Borough of Camden. The work was undertaken on behalf of Ward Williams Associates. The aim of the evaluation was to assess the impact of development on any surviving archaeological remains. The evaluation comprised of a single trench and a single borehole. The trench measured 5.00m x 1.80m and was located within the western extent of the site (No 24). The single borehole was excavated within the excavated trench. Short description No significant archaeological remains were encountered on site. The of the project archaeological evaluation revealed two layers of possible demolition deposits truncated by a modern concrete footing. The only remains relating to the Red Lion Public House, which had previously occupied the site, was a large limestone and brick work block which may have been part of the building. The geoarchaeological investigation revealed very thick made ground overlying a sequence of silty sandy clays and gravels. The results indicate that no fluvial sediments that might represent a significant period of Holocene deposition on the floodplain of the Fleet River were present on site. No further work is required on the samples obtained from the goearchaeological borehole.

Project dates Start: 14-05-2012 End: 15-06-2012

Previous/future work No / Not known

Any associated project reference 32177 - Contracting Unit No. codes

Any associated project reference WAR12 - Sitecode codes

Type of project Field evaluation

Site status None

Current Land use Industry and Commerce 4 - Storage and warehousing

Methods	& "Environmental Sampling","Geophysical Survey","Targeted Trenches"
techniques	Environmental Sampling, Geophysical Survey, Targeted Trenches

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

Prompt Planning condition

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

Project location							
Country	England						
Site location	GREATER LONDON Borough of Camden	CAMDEN	CAMDEN	24-28	Warner	Street,	London

- Postcode EC1
- Study area 336.00 Square metres

Site coordinates TQ 3115 8217 51 0 51 31 21 N 000 06 33 W Point

Height OD / Depth Min: 7.00m Max: 7.00m

Project creators

Name of AOC Archaeology Group

Project brief originator AOC Archaeology Group

Project design originator AOC Archaeology Group

Project director/manager Melissa Melikian

Project supervisor Catherine Edwards

Type of sponsor/funding developer body

Name of sponsor/funding Ward Williams Associates body

Project archives Physical Archive Exists?

Digital Archive LAARC

Digital Archive ID WAR12

Digital Contents "Stratigraphic"

Digital Media "Images raster / digital photography", "Spreadsheets", "Text"

Digital Archive LAARC archive registers ,images and report.

Paper Archive recipient LAARC

Paper Archive ID WAR12

Paper Contents "Stratigraphic"

Paper Media available "Context sheet", "Matrices", "Microfilm", "Photograph", "Plan", "Report", "Unpublished Text"

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

TitleLAND AT 24-28 WARNER STREET, LONDON BOROUGH OF CAMDEN: AN
ARCHAEOLOGICAL EVALUATION AND GEOARCHAEOLOGICAL REPORT

Author(s)/Editor(s) Edwards, C

Date 2012

Issuer or publisher AOC Archaeology

Place of issue or London

Description A4 bound report with illustrations, plates and a geoarchaeological bore hole report

Entered bycatherine edwards (catherine.edwards@aocarchaeology.com)Entered on29 June 2012

