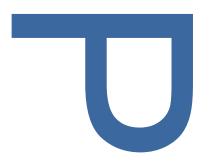
# LAND AT UFFORD STREET SOUTHWARK, SE1 8LE



## AN ARCHAEOLOGICAL EVALUATION



**PCA REPORT NO: R13161** 

**SITE CODE: UFF17** 

**FEBRUARY 2018** 

PRE-CONSTRUCT ARCHAEOLOGY

## DOCUMENT VERIFICATION

## LAND AT UFFORD STREET, SOUTHWARK, SE1 8LE

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# LAND AT UFFORD STREET, SOUTHWARK SE1 8LE

Site Code: UFF17

AN ARCHAEOLOGICAL EVALUATION

Local Planning Authority: London Borough of Southwark

Planning Application Number: 15/AP/3024

Central National Grid Reference: TQ 31543 79907

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#### **CONTENTS**

1	ABSTRACT	3
2	INTRODUCTION	4
3	PLANNING BACKGROUND	5
4	GEOLOGY AND TOPOGRAPHY	7
5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	8
6	ARCHAEOLOGICAL METHODOLOGY	9
7	THE ARCHAEOLOGICAL SEQUENCE	. 10
8	RESEARCH OBJECTIVES AND CONCLUSIONS	20
9	ACKNOWLEDGEMENTS	. 22
10	BIBLIOGRAPHY	23
EIC	URES	
FIG	UKES	
FIG	URE 1: SITE LOCATION	. 24
FIG	URE 2: TRENCH LOCATION	25
FIG	URE 3: TRENCH 1 PLAN AND SECTION	26
FIG	URE 4: TRENCH 2.1 & 2.2 PLAN AND SECTION	27
APF	PENDICES	
APF	PENDIX 1: CONTEXT INDEX	. 28
APF	PENDIX 2: TRENCH 1 MATRIX	. 29
APF	PENDIX 3: TRENCH 2 MATRIX	30
APF	PENDIX 4: POTTERY ASSESSMENT	. 31
APF	PENDIX 5: BUILDING MATERIAL SPOT DATES	35
APF	PENDIX 6: GLASS ASSESSMENT	. 37
APF	PENDIX 7: HUMAN BONE ASSESSMENT	. 38
APF	PENDIX 8: ANIMAL BONE ASSESSMENT	. 39
APF	PENDIX 9: METAL AND SLAG	42
APF	PENDIX 10: CLAY TABACCO PIPE ASSESSMENT	43
APF	PENDIX 11: OASIS DATA ENTRY FORM	50

#### 1 ABSTRACT

- 1.1 This report presents the methods and results of an archaeological investigation conducted by Pre-Construct Archaeology Limited on land at Ufford Street, Southwark SE1 8LE. The site is centred at National Grid Reference TQ 31543 79907 in the London Borough of Southwark.
- 1.2 Following a Written Scheme of Investigation (Bradley 2017) an archaeological evaluation was carried out between 27<sup>th</sup> November 2017 and 12<sup>th</sup> January 2018. The investigation comprised the excavation of two evaluation trenches to establish the presence and character of any archaeological deposits and determine the extent of past post-depositional impacts on the archaeological resource. A watching brief was also maintained during the removal of mass concrete footings from a building previously located in the northwestern area of the site.
- 1.3 The archaeological evaluation revealed limited modern impact on the buried deposits. A series of late post-medieval walls were found across the site relating to the previous workhouse buildings. Two earlier post-medieval linear features were also recorded associated with the land management prior to the construction of the workhouse. These features were cut into alluvial layers that had formed over the natural gravel.
- 1.4 Natural gravel was found within the trench at heights between 0.56m and 0.69m OD.

PCA Report Number: R13161 Page 3 of 51

#### 2 INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited on land at Ufford Street, Southwark, London SE1 8LE between 27th November 2017 and 12th January 2018. The site is centred at National Grid Reference TQ 31543 79907 in the London Borough of Southwark (Figure 1). The archaeological work was commissioned by CgMs Consulting and monitored by Gillian King, Senior Planner Archaeology, on behalf of Southwark Council. The clients' archaeological consultants, CgMs Consulting, had previously prepared a desk-based assessment for the project (CgMs 2017).
- 2.2 A Written Scheme of Investigation (Bradley 2017) was designed by Pre-Construct Archaeology for the evaluation work and was approved in advance by Gillian King of Southwark Council. The archaeological evaluation was conducted by Pre-Construct Archaeology Limited under the supervision of Stacey Amanda Harris and the project manager was Tim Bradley.
- 2.3 The evaluation was proposed to consist of two stepped trenches measuring at the base 20m x 1.8m at base. Trench 1 was excavated as planned (Figure 2 and 3). However, due to on site services Trench 2 had to be split into two parts: Trench 2.1 measured 8.0m x 3.0m, and Trench 2.2 measured 5.8m x 3.0m revealing a concrete surface into which a 1.22m x 0.7m sondage was excavated (Figure 2 and 5). A watching brief was also maintained during the removal of mass concrete footings in the northwestern area of the site. The principal objectives were as follows:
- 2.4 What is the nature and OD height of the natural strata on the site?
- 2.5 What is the natural topography of the area; are there any indications of the potential channel extending through the site?
- 2.6 How does the topography of the site fit with and augment the borehole investigation undertaken by Quest (2018).
- 2.7 Is there any evidence of prehistoric exploitation of the area?
- 2.8 Is there any evidence for Roman activity on the site?
- 2.9 Is there any evidence for medieval activity on the site? Does this suggest principally agricultural activity and/or drainage/reclamation within the area of the site?
- 2.10 Is there any evidence for post-medieval activity on the site? What patterns of more concerted post-medieval development of the site can be seen? Can this be related to the findings made during the 2002 watching brief (MoLAS 2002)?
- 2.11 Is there evidence of the former workhouse buildings known to have occupied the site?
- 2.12 What is the depth of truncation, relative to natural deposits, caused by previous activity on the site?
- 2.13 The site was recorded under the unique site code UFF17, issued by LAARC. The completed archive comprising written, drawn and photographic records will, upon completion of the project, be deposited with the London Archaeological Archive and Research Centre (LAARC) under that code.

#### 3 PLANNING BACKGROUND

#### 3.1 National Guidance: National Planning Policy Framework

- 3.1.1 The National Planning Policy Framework (NPPF) was adopted on March 27<sup>th</sup> 2012, and constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications.
- 3.1.2 In considering any planning application for development, the local planning authority will be guided by the policy framework set by the NPPF, by current local plan policy and by other material considerations.

#### 3.2 Regional Policy: The London Plan

3.2.1 The relevant Strategic Development Plan framework is provided by The London Plan, published July 22<sup>nd</sup> 2011 and amended in 2015. Policy 7.8 headed "Heritage Assets and Archaeology" details guidance relating to strategy and planning decisions that affect the historic environment and outlines the formulation of Local Development Framework for each London Borough:

#### 3.3 London Development Framework: London Borough of Southwark Local Plan

- 3.3.1 The London Borough of Southwark Core Strategy was adopted in April 2011 and contains archaeological policy STRATEGIC POLICY 12 DESIGN AND CONSERVATION.
- 3.3.2 The London Borough of Southwark Unitary Development Plan (UPD) was adopted in July 2007. The Plan contains the following policies which have been saved until the adoption of the Local Development Framework:

#### **POLICY 3.19 – ARCHAEOLOGY**

PLANNING APPLICATIONS AFFECTING SITES WITHIN ARCHAEOLOGICAL PRIORITY ZONES, AS IDENTIFIED IN APPENDIX 7, SHALL BE ACCOMPANIED BY AN ARCHAEOLOGICAL ASSESSMENT AND EVALUATION OF THE SITE, INCLUDING THE IMPACT OF THE PROPOSED DEVELOPMENT. THERE IS A PRESUMPTION IN FAVOUR OF PRESERVATION IN SITU, TO PROTECT AND SAFEGUARD ARCHAEOLOGICAL REMAINS OF NATIONAL IMPORTANCE, INCLUDING SCHEDULED MONUMENTS AND THEIR SETTINGS. THE IN SITU PRESERVATION OF ARCHAEOLOGICAL REMAINS OF LOCAL IMPORTANCE WILL ALSO BE SOUGHT, UNLESS THE IMPORTANCE OF THE DEVELOPMENT OUTWEIGHS THE LOCAL VALUE OF THE REMAINS. IF PLANNING PERMISSION IS GRANTED TO DEVELOP ANY SITE WHERE THERE ARE ARCHAEOLOGICAL REMAINS OR THERE IS GOOD REASON TO BELIEVE THAT SUCH REMAINS EXIST, CONDITIONS WILL BE ATTACHED TO SECURE THE EXCAVATION AND RECORDING OR PRESERVATION IN WHOLE OR IN PART, IF JUSTIFIED, BEFORE DEVELOPMENT BEGINS.

- 3.3.3 Planning permission has been granted (15/AP/3024) for the demolition of the existing college buildings and redevelopment of the site to provide 60 residential units. In accordance with the above policies the following conditions relating to archaeology have been attached to the planning permission:
  - Condition 7 Before any work hereby authorised begins, the applicant shall secure the implementation of a programme of archaeological work in accordance with a written scheme of investigation which shall be submitted to and approved in writing by the Local Planning Authority.

#### Reason

In order that the archaeological operations are undertaken to an acceptable standard and that legitimate archaeological interest in the site is satisfied in accordance with Strategic Policy 12 - Design and Conservation of The Core Strategy 2011, Saved Policy 3.19 Archaeology of the Southwark Plan 2007 and the National Planning Policy Framework 2012.

Condition 34 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.

#### 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, Saved Policy 3.19 Archaeology of the Southwark Plan 2007 and the National Planning Policy Framework 2012.

#### 4 GEOLOGY AND TOPOGRAPHY

- 4.1 The following information regarding the sites geological and topographical make up is summarised from the site's Archaeological Desk Based Assessment (CgMs 2017) and the geoarchaeological deposit model report (Quest 2018).
- 4.2 The solid geology of the study site is shown by the Institute of Geological Sciences as London Clay deposits, overlain by Kempton Park River Terrace Gravels and alluvium deposits.
- 4.3 The natural topography of the Southwark area is one of low level gravel eyots separated by lower-lying areas and braided stream channels. Episodes of Holocene transgression and regression of the Thames have led to the deposition of alluvial silts and clays interspersed with episodes of localised peat formation, especially in channel locations.
- 4.4 The majority of the site, with the exception of a small area to the east, is projected as lying within the area of the Bankside Channel, a large and well documented palaeochannel that is aligned broadly NE to SW from Bankside towards Waterloo.
- 4.5 The River Thames flows from west to east c.500m north of the study site.
- 4.6 The site is generally level at a height between 3.22m and 4.11m OD, and is comprised of the levelled ground surface left by the previous construction work relating to the redevelopment of the college to the northeast of the site.

PCA Report Number: R13161 Page 7 of 51

#### 5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 The archaeological and historical background cited below is summarized from the site-specific desk-based assessment prepared by CgMs Consulting (CgMs 2017).
- 5.2 The MoLA map of Londinium, drawn up in 2011, indicates that the site lay largely within an area of tidal mudflats, tidal creeks and channels, associated with the Bankside Channel, with the southeastern corner encroaching onto the higher, drier terrace gravels beyond the foreshore.
- 5.3 The naturally occurring ground surface within the site was identified during a watching brief undertaken in the northwestern area of the site (MoLAS 2002) to be level at 1.4-1.7m OD. The archaeological monitoring work revealed a Holocene alluvial sequence, deposited by the northward migration of the course of the River Thames.
- While the site was considered to have a potential for palaeoenvironmental information, as demonstrated by the results of the 2002 watching brief, due to its topographical location within the Bankside Channel, the potential for remains of later prehistoric settlement/activity was considered to be generally low.
- 5.5 The potential for land based activity dating to the Roman period was also categorised as low, although there was considered potential for stray finds of Roman material from the former river channel, particularly in the form of water borne discarded artefacts and chance losses. No finds or features of Roman date were identified in the 2002 watching brief.
- The site's archaeological potential for the medieval period was also be identified as generally low. Evidence of land consolidation, agricultural activity and associated land division were considered most likely to be represented within the archaeological sequence.
- During the 2002 watching brief a series of drainage channels, dated to the seventeenth century and later, were identified, revetted with wooden planks. The map regression exercise together with an examination of secondary sources also demonstrates that the site was developed from the seventeenth century onwards, and was formerly occupied by the St Saviour's Union Workhouse, initially established by the early 1820s as Christchurch workhouse, and rebuilt as St Saviour's Union Workhouse in 1834. Contemporary maps do not show a burial ground associated with the workhouse within the site boundary prior to substantial World War Two bomb damage and the subsequent development of Southwark College.
- A geotechnical investigation of the site undertaken in 2017 indicated modern made ground across the area of the site to depths of between 2.4 and 5m bgl. This sealed alluvial deposits, with gravel generally recorded at depths of between 3.4 and 4m bgl. This sequence was further confirmed by the results of the Quest geoarchaeological borehole work.

#### 6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The methodology for the excavation of the two trenches was outlined in the Written Scheme of Investigation for the site (Bradley 2017).
- 6.2 The trenches were excavated by a 13ton tracked excavator under archaeological supervision until either significant archaeological horizons or natural deposits were encountered, at which point deposits were cleaned and excavated by hand.
- 6.3 Trench 1 orientated NW-SE was excavated to a maximum 20.60m x 7.20m to allow for stepped sides. This resulted in an area measuring 18.00m x 2.00m at a depth of approximately 3.00m below ground level (BGL) at heights between 1.13m and 1.27m OD. Three sondages were excavated within the base of Trench 1, to heights between 0.56m and 0.58m OD, in order to adequately evaluate the natural gravel layers.
- During the excavation of Trench 2 a number of services were encountered resulting in the trench being reoriented NW-SE and excavated in two parts, Trench 2.1 and Trench 2.2.
- Trench 2.1 was excavated to a maximum 10.00m by 7.25m to allow for stepped sides. This resulted in an area measuring 7.90m x 4.80m at a depth of approximately 2.00m BGL (between 2.21m and 2.25m OD). A sondage was excavated within the base of Trench 2.1 to a height of 0.68m OD to reveal a layer of natural gravel.
- Due to the presence of services Trench 2.2 was stripped of an area measuring 9.20m x 6.30m to a depth of 1.00m BGL (between 2.98m and 3.08m OD). At this depth several modern concrete surfaces were revealed and found to contain further buried services and asbestos material. A small sondage was excavated through the concrete measuring 1.24m x 0.70m to a height of 2.16m OD.
- Once excavation had been completed all deposits were then recorded on pro forma context sheets.

  Trench plans were drawn at a scale of 1:20 and sections were drawn at a scale of 1:10. A digital photographic record was also made.
- 6.8 Trench 1 was tied in to known points within the study site, whilst Trench 2 was located by PCA's surveyor by GPS.
- During the course of the evaluation the footings for the previous building situated in the northwestern area of the site were also removed by the demolition contractor. A watching brief was maintained during this process. The concrete footings were found to have truncated the entire sequence to the depth of the underlying gravel across the building footprint.
- 6.10 A temporary benchmark at a height of 4.13 m OD was established on site.

#### 7 THE ARCHAEOLOGICAL SEQUENCE

#### 7.1 **TRENCH 1**

#### **Phase 1: Natural Substrate**

- 7.1.1 The earliest deposit found was a gravel layer, seen as a mid orange deposit [55] across the northwest and central part of the trench (Plate 2), and as a mid grey blue deposit [56] to the southeast. This was identified at heights between 0.56m and 0.57m OD in the base of the three sondages.
- 7.1.2 Overlying the gravels to the northwest of the trench, was a mid orange brown slightly organic silt layer, comprising of contexts **[53]** and **[54]**. This layer was seen within the north eastern and central sondage, was 0.12m thick to the north east of the trench, and petered out after 9.13m to the southeast.
- 7.1.3 Sealing and overlying the silt layer was a layer of mottled mid grey blue to mid orange brown alluvium contexts [27[, [28] and [39] (Plate 1) to a height of between 1.16m and 1.64m OD.

#### Phase 3: Post-Medieval

- 7.1.4 Overlying [27] towards the centre of the trench was a layer of mid blue grey clay, [41], which appeared to be an area of weathered or redeposited alluvium.
- 7.1.5 To the northwestern end of the site was a layer of mid brown grey silty clay, contexts [37] and [38], up to 0.43m thick and tapering out 6.2m from the northwestern limit of excavation (LOE). The presence of black and orange red flecking in the form of charcoal and ceramic building material (CBM) suggests this layer to be redeposited alluvial of an early post-medieval date. Sealing the southeastern edge of layer [38] and the northwestern edge of layer [41[ was a deposit of mid grey orange sandy clay [40].
- 7.1.6 A north-south orientated linear feature, [36], was seen to cut layer [37] and [38]. This 0.80m deep cut was most likely for land management at a time after the earlier reclamation and consolidation of the ground commencing during the seventeenth century. This ditch contained a lower fill of mid grey brown silty clay [35] with small fragments of CBM and a piece of clay tobacco pipe stem. Overlying [35] was a pale grey silt sand [34] with frequent mortar throughout and occasional CBM fragments and oyster shell. This fill was located along the western edge of the cut to a height of 1.91m OD.
- 7.1.7 Towards the southeast of Trench 1, a dark blue black deposit, [21], with a north-south orientated edge, was recorded and found to be the fill of a cut within alluvium layer [28]. The upper edge of this cut, [45], was seen at a height of 1.48m OD and descended to a depth of 0.65m OD (Plate 3). The full width of this 'channel' was not recorded due to the presence of concrete and services, but its western side was observed to be edged by a row of stakes [43], [45], [46], [47], [48], [49], [50], [51] and [52], and a plank, [44]. This is most likely relates to the drainage activities that are known to have been necessary during the 17<sup>th</sup> century and later within the vicinity of the study site.

- 7.1.8 The base of **[45]** was filled by 0.19m thick dark blue black sticky silty clay **[21]**. This fill contained occasional CBM, pottery and glass which, when combined, provided a spot date of 1700-1750.
- 7.1.9 This was overlain by an area of mid red orange silt sand [20] which was predominantly seen against the western edge of the 'channel', petering out towards the base. A pottery fragment recovered from within this fill has been dated to between 1680 and 1800.
- 7.1.10 Overlying the eastern edge of ditch [36] and fill [35] at a distance of 2.42m from the northwestern LOE and continuing beyond the southeastern LOE was a layer of humic dark brown black clay silt [30]. This layer contained occasional CBM, clay tobacco pipe, pottery, glass, three pieces of window lead, animal bone, and a small fragment of human bone, which when combined suggest an early 18th century date. This layer exists to a height of between 1.87m and 2.11m OD, and appears to relate to the use of the land as a garden prior to the construction of the workhouse.

#### Phase 4: Later Post-Medieval

- 7.1.11 In the northwestern half of the trench was a layer of mid brown grey clay sand, [33], which overlay the upper fill [34] of ditch [36]. This 0.12m thick layer contained occasional CBM flecking, gravel and occasional animal bone fragments, and appears to be a levelling deposit relating to the earliest phases of workhouse construction.
- 7.1.12 A heavily damaged brick wall [29] was recorded extending 1.15m from the southwestern LOE. The brickwork consisted of mid orange red and pale red brown brick, bonded with a soft pale yellow grey lime mortar and had been reduced to a maximum height of 1.87m OD.
- 7.1.13 A layer of dark grey brown sandy silt [32] was recorded overlying layer [33] and sealing brickwork [29]. This layer contained fragments of CBM, clay tobacco pipe and oyster shell and appeared to be consolidation possibly relating to the workhouse.
- 7.1.14 Several brick walls were seen cut into layer [32]. These walls [24], [26] and [31] were all aligned north-south and constructed from dark orange pink with occasional mid yellow bricks in a hard mid grey cement mortar with white flecking. Walls [24] and [26] were seen to continue beyond the LOE on the northeastern edge of the trench. Between them a 0.40m thick deposit of concreted mid grey yellow mortar [25] was recorded. Deposit [25] and walls [24], [26], and [31] were most likely part of the workhouse complex.
- 7.1.15 A circular pit, **[23]**, was recorded at the northwestern corner of Trench 1 (Plate 4). This pit was cut from a height of 2.05m OD and contained loose dark grey brown sandy silt **[22]** with frequent fragments of pottery and clay tobacco pipe, and occasional fragments of glass, CBM and animal bone. The extent of this pit was not seen as it continued beyond the LOE's of the trench including its depth at a height of 1.31m OD. The artifactual assemblage for this feature including a large amount of pottery and clay tobacco pipe has produced a date range of 1810-1850, consistent with the continued development of the workhouse.

#### 7.2 **TRENCH 2.1**

#### Phase 1: Natural

- 7.2.1 The earliest deposit found was a mid orange gravel layer (Plate 5), which was located in the bottom of the machine dug sondage within Trench 2.1 at a height of 0.69m OD.
- 7.2.2 Overlying the natural gravel was a layer of mottled mid grey yellow and blue clay **(16)**. This 0.65m thick layer was seen to a height of 1.32m OD.

#### Phase 2: Undated

- 7.2.3 Two stakes [11] and [12] were observed within clay layer [16], and were seen from a height of 1.32m OD. Stake [11] was retrieved and found to have been tapered to allow for it to be driven into the ground.
- 7.2.4 Sealing the stakes was a 0.90m thick layer of mid to light grey yellow alluvium **[17]** to a maximum height of 2.20m OD.
- 7.2.5 A 1.88m x 0.55m area of blue brown staining [10] was seen within the upper surface of layer [17], most likely relating to stake [8]. Very little remained of this and only the tapered point of the timber, measuring 70mm across x 80mm in length, was retrieved.
- 7.2.6 Sealing stake [8] was a 0.45m thick layer of mid yellow brown gravel and silt [14], which was in turn overlain by a mid red brown silt sand [15], at a maximum height of 3.40m OD and tapering out to the west to 2.64m OD. These layers most likely relate to ground consolidation activity within the site but are undated.

#### Phase 3: Post-Medieval

7.2.7 To the west, layer [15] was overlain by [18], a deposit interpreted as possible demolition material. This layer comprised CBM and chalk fragments in a pale orange white mortar. No sizeable pieces of brick or tile were retrievable.

#### Phase 4: Later Post-Medieval

7.2.8 Cutting into layer [18], to a depth of 0.63m, was linear [4], which had a flat base and was backfilled with chalk and brick rubble [5] and mid brown grey silt sand [3], to a height of 3.32m OD. This is in turn truncated by linear cut [2], which contained brick rubble with charcoal inclusions [13], and the remnants of brickwork [1]. Brickwork [1] consisted of mid orange red and occasional yellow frogged bricks in a soft light grey sandy mortar. These are most likely the remains of the workhouse's walls which were damaged or destroyed by bombing during World War II.

7.2.9 A further wall, contexts [6] and [7], was seen to the southeast on an approximately east-west alignment. This wall was cut into layer [15], and was constructed from mid orange red frogged bricks with occasional yellow bricks in a hard light grey mortar. This wall appears to be of a different construction to wall [1] and may relate to later alterations to the workhouse buildings.

#### 7.3 TRENCH 2.2

#### Phase 2: Undated

- 7.3.1 Due to the location of services and presence of asbestos within the concrete only a small sondage was excavated within the location of Trench 2.2, but revealed three contexts (Plate 6).
- 7.3.2 A layer of dark grey brown silt clay **[59]** survived to a height of 2.55m OD and extend below the LOE at a height of 2.18m OD. No artifactual remains were recovered from this layer but charcoal flecking and CBM flecking were seen suggesting a post-medieval date.
- 7.3.3 Along the eastern edge of the sondage was cut [58]. This cut had vertical sides with the beginnings of a concave break of slope seen towards the LOE; however, due to restrictions on the size and location of the sondage it was not fully excavated.
- 7.3.4 Cut **[58]** contained a mid grey brown sand silt fill **[57[** with frequent gravels, occasional fragments of CBM and mortar flecking.



Plate 1: Trench 1, with slot excavated through [45], looking northwest (1m scale).



Plate 1: Trench 1, central sondage showing natural gravel (55), looking northeast (1m scale).



Plate 3: Trench 1, Slot excavated through 'channel' [45], looking northeast. Part of the row of stakes [43], and [45] to [52] can be seen on the left (1m scale).



Plate 4: Trench 1, circular pit [23] and finds-rich deposit [22], looking north (1m scale)



Plate 5: Trench 2.1, gravel layer below alluvium [16], looking southwest (1m scale)



Plate 6: Trench 2.2, showing sondage excavated through concrete surface, looking north (1m scale).

#### 8 RESEARCH OBJECTIVES AND CONCLUSIONS

#### 8.1 Research Objectives

The following research objectives were contained within the Written Scheme of Investigation (Bradley 2017) for this evaluation:

#### 8.1.1 What is the nature and OD height of the natural strata on the site?

Natural Kempton Park River Terrace Gravels were uncovered at a height of between 0.56m and 0.58m OD in the western part of site and 0.69m OD in the eastern part of site.

Within Trench 1 a brown humic silt interface layer up to 0.12m thick was seen towards the west and petered out towards the east. This was overlain by alluvium which was seen to extend across the entire site to a height of between 1.64m OD in the west and 1.32m OD in the east.

# 8.1.2 What is the natural topography of the area; are there any indications of the potential channel extending through the site?

The natural topography witnessed during this evaluation was consistent with what had been seen during previous geotechnical and archaeological work within the area.

There was no clear indication of the potential channel extending through the site. Although humic and alluvial deposits suggest the area was at least periodically flooded.

# 8.1.3 How does the topography of the site fit with and augment the borehole investigation undertaken by Quest?

The topography of the site fits well to the borehole investigation report, with Kempton Park Gravels encountered between -0.10m OD (BH1) and 0.60m OD (BH2) which is similar to what was seen within Trench 1 at 0.58m OD and Trench 2 at 0.69.

Within BH3 modern made ground was seen to a height of -1.00m OD, this was confirmed during the excavation of Trench 2.1 where modern material continued below the LOE at a height of 1.26m OD. This material was thought to be backfill, demolition and leveling as a result of World War II bombings and associated clearance.

#### 8.1.4 Is there any evidence of prehistoric exploitation of the area?

There was no evidence of prehistoric exploitation of the area on the site.

#### 8.1.5 Is there any evidence for Roman activity on the site?

There was no in situ evidence of Roman activity on the site.

Two sherds of Roman greyware pottery were found within a post-medieval context, suggesting activity within the vicinity.

# 8.1.6 Is there any evidence for medieval activity on the site? Does this suggest principally agricultural activity and/or drainage/reclamation within the area of the site?

There was no evidence of medieval activity on the site.

# 8.1.7 Is there any evidence for post-medieval activity on the site? What is the pattern of more concerted post-medieval development of the site? Can this be related to the findings made during the 2002 watching brief?

Evidence of post-medieval activity found across the site.

Towards the west of the area a north-south ditch was seen. Also towards the west of the site part of a wider north-south 'channel' was recorded with stakes and possible revetting along its western edge. Both of these features relate closely to the findings of the 2002 watching brief where drainage channels with wooden plank revetting were seen.

#### 8.1.8 Does evidence exist of the former workhouse buildings known to have occupied the site?

Brick walls on both a north-south and east-west alignment were seen within both trenches during this evaluation. These walls appear to be from various phases of workhouse buildings and have been dated between 1805 and 1900.

# 8.1.9 What is the depth of truncation, relative to natural deposits, caused by previous activity on the site?

The depth of truncation by modern activity was between the heights of 2.77m and 3.27m OD. Exception to this were noted in the far east of site where World War II bomb damage had caused a truncation to a height of at least 1.26m OD, and in the footprint of the previous building in the northwest of the site, where the concrete foundations had truncated all deposits into the gravel stratum at approximately 0m OD.

Post-medieval activity had truncated the natural alluvial deposits, with the north-south ditch having been cut to a depth of 1.77m OD, whilst the 'channel' had truncated natural alluvial deposits to a depth of 0.65m OD.

The natural Kempton Park Gravels have not been impacted upon by previous activity except for the previously mentioned bomb damage to the far east of the site and foundations to the northwest.

#### 8.2 **Conclusions**

- 8.2.1 The evaluation has demonstrated that away from the northwest and east of the site, the archaeological sequence comprised of naturally deposited alluvium overlying natural Kempton Park Gravels. This has been impacted upon by the post-medieval land management which included ground consolidation and the excavation and maintenance of drainage ditches. Evidence of the later post-medieval construction and continued development of the workhouse and associated buildings was seen in the upper levels of both Trenches 1 and 2.
- 8.2.2 Once the project is deemed complete, and the report approved by the London Borough of Southwark, the completed archive comprising all site records from the fieldwork will be deposited with LAARC under site code UFF17.

#### 9 ACKNOWLEDGEMENTS

- 9.1 Pre-Construct Archaeology would like to thank Richard von Kalinowski-Meager of CgMs Consulting for commissioning the work.
- 9.2 We also thank Gillian King of Southwark Council for monitoring the fieldwork.
- 9.3 The supervisor would like to thank Tom Brook, Ester Capuz Duran and Neil Hawkins of PCA for their hard work on site.
- 9.4 The author would like to thank Tim Bradley for his help, project management and editing, also Mick Steel for the CAD illustrations, Kevin Rielly for his evaluation of animal bone, Kevin Hayward for analysis of building materials, Chris Jarrett for his assessment of pottery, clay tobacco pipes and glass, James Young Langthorne for his study of the disarticulated human bone, Märit Gaimster for her analysis of the metal and slag and Sevinc Duvarci and her team for processing the finds.

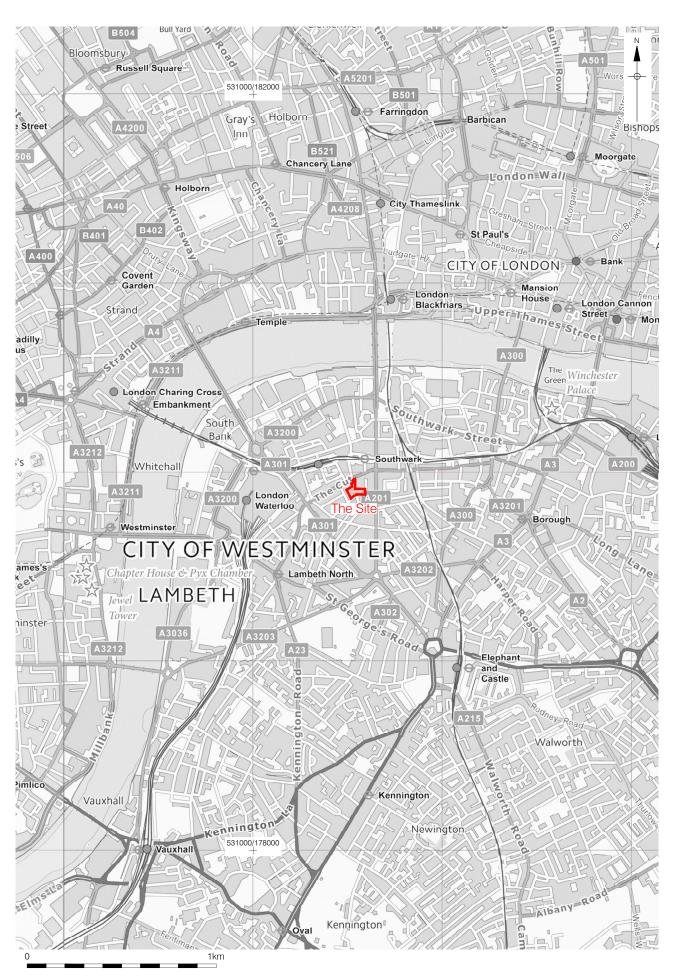
PCA Report Number: R13161 Page 22 of 51

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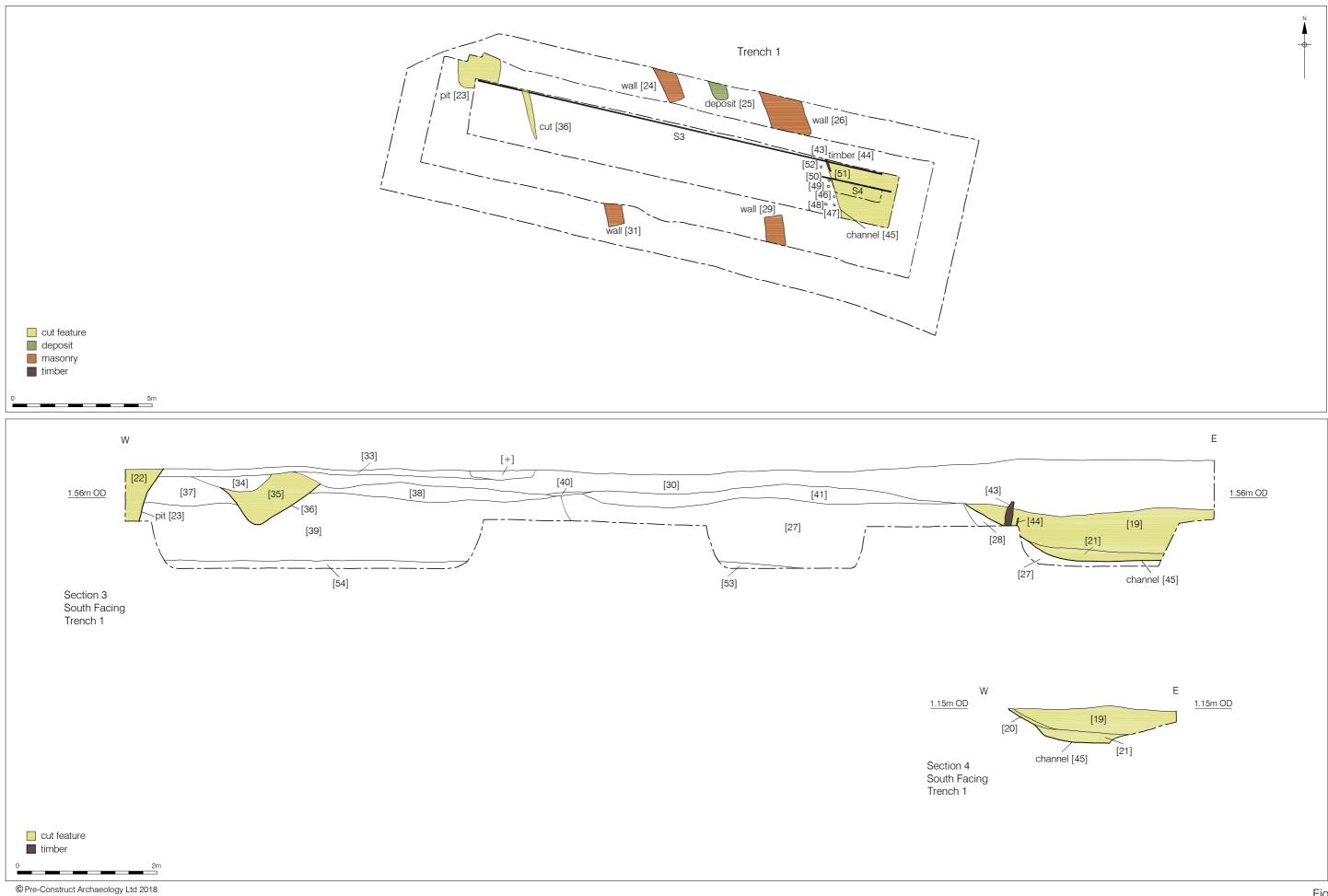
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PCA Report Number: R13161 Page 23 of 51







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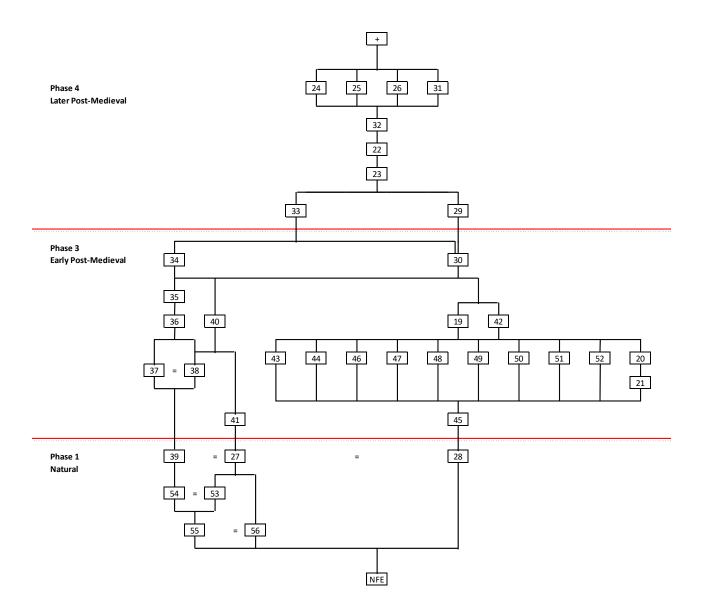


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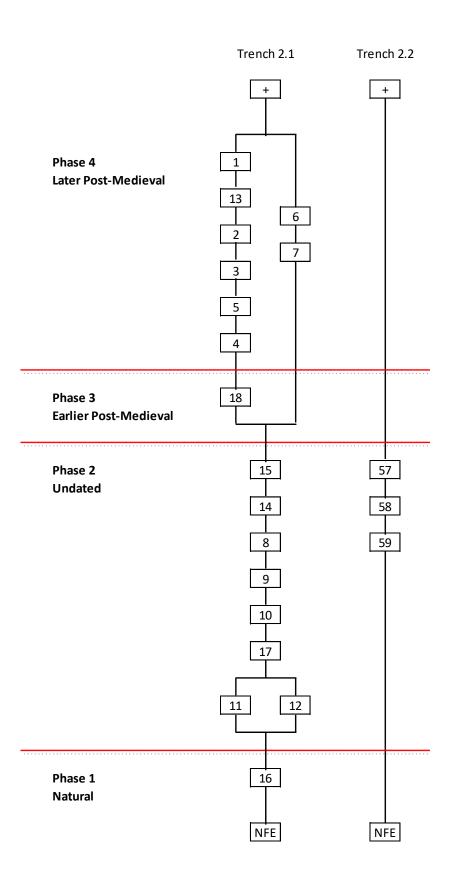
## **APPENDIX 1: CONTEXT INDEX**

1, Geometry         Through Time 1, The Part 2, 11.         1, control of the Control	0 0+60										
Trendy 2	1 Masonry	Trench 2	2.1	Brick wall	Wall		1.42	0.45	0.16	3.36	
Trench 2	2 Cut	Trench 2	2.1	Construction cut of wall	Construction Cut		1.42	0.45	0.48	3.36	2.87
Trench 2   21   Departed to what wailing in Departed to the tree of tree of the tree of tree	3 Fill	4 Trench 2	2.1	Backfill of robbed out wall	Backfill		1.3	0.4	0.35	3.32	3.15
	4 Cut	Trench 2	2.1	Cut of robbed out wall	Robber Cut		1.3	1.4	0.63	3.32	2.95
Financia 2 2   Contractional proteonary (Market) 2   Contractional Con	5 Fill	Trench 2	2.1	Deposit of chalk and brick rubble	Demolition		1.36	1.23	0.63	3.3	
Trimento 2   21   Reconstruction code and section of the control code and section of the control code and section of the control code and section of the code and section of	6 Masonry	Trench 2	2.1	Wall possibly relating to post war	Wall		2.3	0.68		3.4	
9 Timental 2 1.3 Interval 2 Int	7 Cut	Trench 2	2.1	Construction cut of wall	Construction Cut		2.3	0.68	0.42	3.4	
Triment 2   11   Cited State Froble   State Frobl	8 Timber	9 Trench 2	2.1	Remnant of small wooden stake	Post	Stake	0.07		0.08	2.21	
Trence   2   11   Statistical City of the part of the statisting   18   20   25   25   11   Trence   2   11   Trence	9 Cut	Trench 2	2.1	Cut of stake hole	Stake-hole		0.07		0.08	2.21	2.13
Trimeno 2   11   Impliest post within the allunumn   Post	10 Layer	Trench 2	2.1	Staining of clay due to presence of wood	Other	staining	1.88	0.55		2.25	2.21
	11 Timber	Trench 2	2.1	Timber post within the alluvium	Post		0.16	0.12	0.94	1.32	
	12 Timber	Trench 2	2.1	Timber post within the alluvium	Post		0.21		0.35	1.32	
	13 Layer	Irench 2	2.1	Deposit of post-med brick rubble	dwno		1.16	1.14	0.48	3.36	
	14 Layer	Trench 2	2.1	Gravel leveling layer	Levelling		0.8	3.6	0.45	2.67	2.55
Trench   2.1   Layer of natural alluvium	15 Layer	Trench 2	2.1	Layer of made ground	Make-up		2.3	6.3	0.87	3.4	2.64
Trench   2.1   Layer of natural alludum	16 Natural	Trench 2	2.1	Layer of natural alluvium	Natural	Alluvium	2.5	3.06	0.65	1.32	
French   1	17 Natural	Trench 2	2.1	Layer of natural alluvium	Natural	Alluvium	2.5	3.06	6.0	2.2	
45   Trench 1         Fill of Channel         Infilling         3.6         2         1.42         1.48           45   Trench 1         Fill of Channel         Infilling         3.6         2         1.42         1.48           25   Trench 1         Fill of Channel         Infilling         3.6         2         1.2         1.48           27   Trench 1         Top Deposit of Information girge         Bard III         1.6         0.73         0.5         0.5           1 rench 1         Top Deposit of mortar relating to Post-Med         Other         Check 1.1         1.0         0.6         0.73         0.6           1 rench 1         Top Deposit of mortar relating to Post-Med Vali         Wall         Altrovium         8.6         0.6         0.3         1.7           1 rench 1         Top Deposit of mortar relating to Post-Med Vali         Wall         Altrovium         8.6         0.6         0.3         1.7           1 rench 1         Top Deposit of mortar relating to Post-Med Vali         Wall         Altrovium         8.6         0.6         0.3         1.8           1 rench 1         Top Deposit of mortar relating to Post-Med Vali         Med Valid         Altrovium         1.15         0.05         0.04         2.7         1.18      <	18 Layer	Trench 2	2.1	Layer of demolition rubble	Demolition		1.04	2.4	0.46	3.07	2.8
45   French 1         Fill of Channel         Infilling         3.6         2         1.48           45   French 1         Fill of Channel         Infilling         3.5         2         1.42         1.48           12   French 1         Fill of Channel         Infilling         2.5         2.0         0.74         2.05           1   French 1         Fill of Channel         Nat         0.0	19 Fill	45 Trench 1		Fill of 'channel'	Infilling		3.6	2	1.42	1.48	1.3
25 Trench 1         Fill fill of Post-Need found         Infilling         POST         0.04         0.04           23 Trench 1         A Fill of Post-Need wall         PRITI         1.6         0.0         0.74         2.05           Trench 1         A Cruzal Procest-Need pit to Contract value         Volume         deposit         0.6         0.5         0.9         3.27           Trench 1         A Dest-Need wall contract value process. Need         Other         deposit         0.6         0.5         0.9         3.27           Trench 1         A Bost-Need wall         Next and a contract process. Need material         Next and a contract process.	20 Fill	45 Trench 1		Fill of 'channel'	Infilling		3.6	2	1.42	1.48	1.3
Trench 1   1   Fill of Post-Needleval pit containing lage   Backfill   1   Fill of Post-Needleval pit containing lage   Backfill   1   Fill of Post-Needleval pit containing lage   Backfill   1   Finch 1   1   Fill of Post-Needleval pit containing lage   Backfill   1   Finch 1   1   Fill of Post-Need Valid   1   Finch 1   1   Fill of Post-Need Valid   1   Fill of Fill	21 Fill	45 Trench 1	Ţ	Fill of 'channel'	Infilling		2	2	0.19	0.94	0.76
Trench   1   Trench   1   Post-med wall   Wall   Wall   Wall   Make   Manual   Manu	22 Fill	23 Trench 1		Fill of Post-Medieval pit containing large	Backfill		1.6		0.74	2.05	1.98
Trench   1   Post-med formal post-Med   Other   Clepsit   1, 1   0.6   0.54   3.77     Trench   1   Post-Med formal relating to bost-Med   Other   Other   1, 1   0.6   0.56   0.54   3.77     Trench   1   Post-Med relating to bost-Med   Other   Other   1, 1   0.6   0.6   0.55   0.44   3.77     Trench   1   Recover carge alluvium   Natural   Alluvium   2   0.56   0.02   0.25   1.62     Trench   1   Blee depailluvium   Natural   Alluvium   1, 2   0.66   0.25   0.25   1.67     Trench   1   Dask-Med material   Wall   Other   0.0   0.0   0.0   0.0   0.0   0.0     Trench   1   Dask-Med material   Levelling   0.0   0.0   0.0   0.0   0.0   0.0     Trench   1   Layer of Post-Med material   Levelling   0.0   0.0   0.0   0.0   0.0   0.0     Signatura   1   Layer of Post-Med material   Levelling   0.0   0.0   0.0   0.0   0.0   0.0   0.0     Trench   1   Layer of Post-Med material   Levelling   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0     Trench   1   Layer of Post-Med material   Levelling   0.0   0.	23 Cut	Trench 1	,,	Circular Post-Med pit	Pit		1.6		0.74	2.05	1.31
Trench 1   1	24 Masonry	Trench 1	1	Post-med wall	Wall		1.4	9.0	0.94	3.27	2.77
	25 Other	Trench 1	٦,	Deposit of mortar relating to Post-Med	Other	deposit	9.0	0.25	0.4	2.77	
Trench 1   1   Structurum   Natural   Alluvium   8.6   0.65   0.65   1.62     Trench 1   1   Structurum   Natural   Alluvium   1.15   0.66   0.23   1.48     Trench 1   1   Dost-Med valial   Natural   Natural   1.15   0.66   0.24   0.24     Trench 1   1   Dost-Med valial   Natural   Natural   1.15   0.66   0.24   0.25     Trench 1   1   Layer of Post-Med material   Make-up   1.12   0.88   0.65   0.24   0.25     Trench 1   1   Layer of Post-Med material   Make-up   1.17   2   0.25   0.25   1.59     Si Trench 1   1   Layer of Post-Med material   Natural   Natural   1.17   2   0.25   0.25   1.59     Si Trench 1   1   Layer of Post-Med material   Natural   Natural   1.17   2   0.25   0.25   1.59     Trench 1   1   Layer of Post-Med material   Natural   Natural   Natural   1.17   2   0.25   0.25   1.59     Trench 1   1   Layer of Post-Med material   Natural   Natural   Natural   1.17   0.25   0.25   0.25   1.59     Trench 1   1   Layer of Post-Med material   Natural   Natural	26 Masonry	Trench 1	٠,	Post-Med Wall	Wall		1.3	1.2	0.8	3.23	2.73
Trench 1   Tench 1   Stake doing alluvium   Natural   Alluvium   1	27 Layer	Trench 1		Blue clay alluvium	Natural	Alluvium	8.6		0.65	1.62	1.42
Trench   1   Post-Med wall   Wall   Wall   Wall   Trench   1   Dost-Med wall   Wall   Wall   Wall   Trench   1   Dost-Med wall   Wall	28 Layer	Trench 1	٦,	Brown orange alluvium	Natural	Alluvium	2	0.56	0.32	1.48	1.16
Trench   1   Dark humic layer   Horicutural   Male up   146   0.88   0.6   0.4   2.69   1.50   1.5	29 Masonry	Trench 1	Ψ,	Post-Med wall	Wall		1.15	0.66		1.87	
Trench   1   Diayer of Post-Med material   Make-IP   National   172   3   0.35   3.21     Trench   1   Layer of Post-Med material   Make-IP   172   3   0.35   3.21     Si Trench   1   Liayer of Post-Med material   Levelling   1.37   1.37   1.39     Si Trench   1   Liayer of Post-Med material   Levelling   1.37   1.37   1.39     Trench   1   Clut of ditch   Clut of ditch   Ditch   Ditch   2   1.33   0.43   1.38     Trench   1   Clut of ditch   Ditch   Ditch   Ditch   2   1.33   0.43   1.38     Trench   1   Aveathered alluvium layer   Natural   Make-IP   2   1.33   0.43   1.38     Trench   1   Clut of ditch   Ditch   Ditch   Ditch   2   1.33   0.43   1.38     Trench   1   Clut of ditch   Ditch	30 Layer	Trench 1		Dark humic layer	Horticultural		14.6	2	0.82	2.11	1.87
Tremon   1   Layer of Post-Ned material   Nake-up   Rake-up   A17   A1	31 Masonry	Trench 1		Post-Med wall	Wall		0.88	9.0	0.4	2.69	
Trench 1   Appare of Post-Ned material levelling   A	32 Layer	Trench 1	-	Layer of Post-Med material	Make-up		17.2	m i	0.35	3.21	2.66
Se Trench 1         I Upper Intend officin         Backfill         1.17         2         0.25         1.91           Trench 1         I Trench 1         I Till of ditch         Ditch         2         1.5         0.7         1.94           Trench 1         I Land of possiby Post-Med         Make-up         2         1.86         0.8         1.88           Trench 1         I Layer of possiby Post-Med         Matural         Alluvium         6.45         2         0.89         1.79           Trench 1         I Conge alluvium lever         Natural         Alluvium         6.45         2         0.97         1.69           Trench 1         I Leoch 1         I Leoch 1         I Leoch 1         I Leoch 1         1         1.66         1.77           45 Trench 1         Filt Rowest of Opst line in Channel*         Post         Stake         0.61         2         0.32         1.48           45 Trench 1         Stake along west of Channel*         Post         Stake         1         1.51           Trench 1         Stake along west of Channel*         Post         Stake         1         1.13           Trench 1         Stake along west of Channel*         Post         Stake         1         1.13 <t< td=""><td>33 Layer</td><td>Trench 1</td><td>-</td><td>Layer of Post-Med material</td><td>Levelling</td><td></td><td>4.2</td><td>n</td><td>0.12</td><td>1.99</td><td>1.96</td></t<>	33 Layer	Trench 1	-	Layer of Post-Med material	Levelling		4.2	n	0.12	1.99	1.96
Section   1   Fill of ditch   Backrill   B	34 Fill	36 Trench 1	-	Upper fill of ditch	Backfill		1.17	2 -	0.25	1.91	1.88
Trench 1         Lud of diction         Ditch         Luss         0.88         1.88           Trench 1         1         Layer of possibly Post-Med         Make-up         2         1.86         0.08         1.88           Trench 1         1         Weathered alluvium layer         Natural         Alluvium         6.45         2         0.97         1.64           Trench 1         1         Less of sandy material         Dump         2         1.25         0.08         1.64           Trench 1         1         Less of sondy material         Dump         5.34         0.35         0.05         1.65           Trench 1         1         Stake along west of "channel"         Post         Stake         1.48         1.48           Trench 1         1         Stake along west of "channel"         Post         Stake         1.48         1.48           Trench 1         1         Stake along west of "channel"         Post         Stake         1.48         1.13           Trench 1         1         Stake along west of "channel"         Post         Stake         1.13         1.13           Trench 1         1         Stake along west of "channel"         Post         Stake         1.13         1.13	35 Fill	36 Trench 1	,	Fill of ditch	Backfill		2	1.5	0.7	1.94	1.66
Trench 1         Layer of possibily Post-Med         Make-up         As a character of a character of all uvum layer         Make-up         3.2         1.33         0.43         1.88           Trench 1         1         Uweathere ad luvum layer         Natural         Alluvium         6.45         2         0.29         1.79           Trench 1         1         Lens of sandy material         Dump         Alluvium         6.45         2         0.07         1.66           Trench 1         1         Lens of sandy material         Dump         Alluvium         6.45         2         0.07         1.66           4.5 Trench 1         1         Stake along west of post line in 'channel'         Post         Stake         1.23         0.23         1.48           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.6         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13         1.13 <td>36 Cut</td> <td>Trench 1</td> <td>-</td> <td>Cut of ditch</td> <td>Ditch</td> <td></td> <td>2</td> <td>1.86</td> <td>8.0</td> <td>1.88</td> <td>1.77</td>	36 Cut	Trench 1	-	Cut of ditch	Ditch		2	1.86	8.0	1.88	1.77
Trench   1   Weathered alluvium layer   Natural   Alluvium   6.45   2 0.28   1.79     Trench   1   Weathered alluvium   Natural   Dump   Composition   Com	37 Layer	Trench 1	1	Layer of possibly Post-Med	Make-up		- 11	1.33	0.43	1.88	į
Tenchol 1   Orange alluvum   Natural Alluvum   0.45   2 0.05   1.64	38 Layer	Trench 1	η,	Weathered alluvium layer	Natural		3.52	2	0.28	1.79	1.71
Tench 1   Lench 2   Lebo   L	39 Natural	Irench 1	,,	Orange alluvium	Natural	Alluvium	6.45	7	0.97	1.64	1.5
Tench 1   Weatneed allouvun   Natural Allovum   S.45   1.77	40 Layer	Irench 1	٠,	Lens of sandy material	numb .		7	1.25	0.00	1.66	,
45   Tench 1         1         Filt to west of post line in channel         Infilling         Stake         0.01         2         0.32         1.48           Trench 1         1         Stake along west of channel*         Post         Stake         3         2         0.83         1.48           Trench 1         1         Stake along west of channel*         Post         Stake         3         2         0.83         1.48           Trench 1         1         Stake along west of channel*         Post         Stake         1.13           Trench 1         1         Stake along west of channel*         Post         Stake         1.13           Trench 1         1         Stake along west of channel*         Post         Stake         1.13           Trench 1         1         Stake along west of channel*         Post         Stake         1.13           Trench 1         1         Stake along west of channel*         Post         Stake         1.13           Trench 1         1         Stake along west of channel*         Post         Stake         1.15           Trench 1         1         Stake along west of channel*         Post         Stake         0.1         0.66           Trench 1         1	41 Layer	Irench 1	٠,	Weathered alluvium	Natural	Alluvium	5.35	7 (	0.25	1.//	T.5
Trench   1   Stake along west of channel   Post   Stake   Post   Stake   Post   Stake   Post   Pos	42 FIII	45 Irench I	٠, ٠	Fill to west or post line in channel	intilling 2-1-1	0.1-1-1	TG:0	7	0.32	2 1.48	T.43
Trench 1   Stake along west of 'channel'   Post   Stake   Stake   Stake   Stake along west of 'channel'   Post   Post   Stake along west of 'channel'   Post	43 Himber	Tranch 1	-1 -	Stake along west of 'channel'	Post	Stake				1.31	
Trench 1         Stake along west of 'channel'         Post         Stake         1.51           Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         Stake along west of 'channel'         Post         Stake         2.01         0.66           Trench 1         Deaty interface between natural gravel and Natural         Natural         4.43         2.012         0.26           Trench 1         Deaty interface betwe	45 Cut	Trench 1		Cut of 'channel'	Other	channel	٣	2	0.83	1 48	0.65
Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         2         0.1         0.66           Trench 1         1         Post vinterface between natural gravel and Natural         Gravel         4.43         2         0.1         0.56           Trench 1         1         Gravel         Natural         Natural         4.43         2         0.1         0.56	46 Timber	Trench 1		Stake along west of 'channel'	Post	Stake		1		1.51	
Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         2         0.1         0.66           Trench 1         1         Stake along west of 'channel'         Natural         Gravel         4.43         2         0.1         0.66           Trench 1         1         Orange sandy gravel         Natural         Gravel         4.43         2         0.1         0.66           Trench 1         1         Gravel         Anauge sandy gravel         Natural         Natural         0.36         0.3         0.36           SR Trench 2         2         Post-Med fill of cut feature         Badéfill         0.3         0.3         0.39         2.55           Trench 2         2         Cut of Post-Med feature         Other         1.16         0.3 <t< td=""><td>47 Timber</td><td>Trench 1</td><td>1</td><td>Stake along west of 'channel'</td><td>Post</td><td>Stake</td><td></td><td></td><td></td><td>1.13</td><td></td></t<>	47 Timber	Trench 1	1	Stake along west of 'channel'	Post	Stake				1.13	
Trench 1         1         Stake along west of 'channel'         Post         Stake         1.13           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Natural         Natural         0.66           Trench 1         1         Posty interface between natural gravel and Natural         Natural         Gravel         4.43         2         0.1         0.66           Trench 1         1         Orange sandy gravel         Natural         Gravel         4.05         2         0.2         0.56           Trench 2         2.2         Post-Med fill of cut feature         Badfill         3         0.3         0.39         2.55           Trench 2         2.2         Cut of Post-Med feature         Other         1.16         0.3         0.3         0.39         2.55	48 Timber	Trench 1		Stake along west of 'channel'	Post	Stake				1.13	
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Trench 1         1         Stake along west of 'channel'         Post         Stake         1.15           Trench 1         1         Stake along west of 'channel'         Post         Stake         1.12         2         0.1         0.66           Trench 1         1         Peaty interface between natural gravel and Natural         Natural         Gravel         4.43         2         0.12         0.68           Trench 1         1         Orange sandy gravel         Natural         Gravel         4.63         2         0.12         0.56           Trench 1         1         Gravel blue sandy gravel         Natural         Gravel         1.7         2         0.56           Trench 2         2         Post-Med fill of cut feature         Backfill         1.16         0.3         0.39         2.55           Trench 2         2.2         Cut of Post-Med feature         Other         1.16         0.3         0.39         2.55	50 Timber	Trench 1		Stake along west of 'channel'	Post	Stake				1.13	
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Trench 1         1         Peaty interface between natural gravel and Trench 1         Natural Gravel         Additional Gravel	52 Timber	Trench 1	1	Stake along west of 'channel'	Post	Stake				1.15	
Trench 1         1         Peaty interface between natural gravel and Natural         Natural         Gravel         4.43         2         0.12         0.68           Trench 1         1         Orange sandy gravel         Natural         Gravel         4.05         2         0.56           Trench 1         2         Gravel         1.7         2         0.38         0.38           SR Trench 2         2.2         Post-Med feature         Other         Other         0.16         0.3         0.39         2.55	53 Layer	Trench 1	1	Peaty interface between natural gravel and	Natural		1.12	2	0.1	99:0	0.56
Trench 1         1         Orange sandy gravel         Natural         Gravel         4.05         2           Trench 1         1         Grey blue sandy gravel         Natural         Gravel         1.7         2           S8 Trench 2         2.2         Post-Med fill of cut feature         Backfill         1.16         0.3         0.39           Trench 2         2.2         Cut of Post-Med feature         Other         1.16         0.3         0.39	54 Layer	Trench 1	1	Peaty interface between natural gravel and	Natural		4.43	2	0.12	0.68	0.66
Trench 1   Grey blue sandy grave  Natural Grave  1.7 2   Strench 2   2.2   Post-Med fill of cut feature   Backfill   1.16   0.3   0.39     Trench 2   2.2   Cut of Post-Med feature   Other   1.16   0.3   0.39	55 Natural	Trench 1	1	Orange sandy gravel	Natural	Gravel	4.05	2		0.56	
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Cut Trench 2 2.2 Cut of Post-Med feature Other 1.16 0.3 0.39 2	57 Fill	58 Trench 2	2.2	Post-Med fill of cut feature	Backfill		1.16	0.3	0.39	2.55	
	58 Cut	Trench 2	2.2	Cirt of Doct Man to ature	2450						

## **APPENDIX 2: TRENCH 1 MATRIX**



#### **APPENDIX 3: TRENCH 2 MATRIX**



#### **APPENDIX 4: POTTERY ASSESSMENT**

by Chris Jarrett, Pre-Construct Archaeology Limited

#### Introduction

A small sized assemblage of pottery was recovered from the site (four boxes). The pottery dates to the post-medieval period. Very little of the pottery demonstrates evidence for abrasion and only two sherds of residual Roman pottery was observed in the assemblage. Therefore the majority of the ceramics were deposited soon after breakage, although probably from an offsite source. The assemblage comprises sherd material, although vessels with complete profiles were notable amongst the early 19th-20th century dated group. The pottery was quantified by sherd count (SC), estimated number of vessels (ENV) and weight. The sizes of the groups of pottery are all small (fewer than 30 sherds), except for one large group (30–100 sherds). The assemblage was recovered from six contexts.

In total the assemblage consists of 153 sherds, representing 132 ENV and weighing 2.421kg (of which none are unstratified). The assemblage was examined macroscopically and microscopically using a binocular microscope (x20), and entered into a database format. The classification of the pottery types follows the Museum of London Archaeology (2014) typology (form and fabric series). The pottery is discussed by its types and distribution.

#### Pottery types and forms

#### Roman

Two residual Roman greyware sherds of pottery were solely recovered from context (20).

#### Post-medieval

The bulk of the assemblage (153 sherds, 132 ENV, 2.421kg) consists of post-medieval pottery types, dating mainly to the 18th and particularly the early 19th century. The range of the pottery types is shown in Table 1, together with its quantification and the forms that occur in the different types. The main class of pottery represented are industrial finewares (107 sherds, 88 ENV, 1.170kg), such as creamware and pearl ware, decorated in various ways and this occurred in the form of mainly tea and table wares. These wares were solely recovered from context (22).

Red earthenwares accounted for 20 sherds/19 ENV/930g and are comprised of three types. The main type found was London-area post-medieval redware (PMR) and were recorded as 18th-century items in the form of a pipkin, deposit (19), and the complete profile of a flared dish, context (30). The widest range of PMR forms were noted in deposit (22) and included flowerpots, small rounded jars, a pipkin and a flower pot. Of interest is a small cylinder of clay, 12mm in diameter and with a surviving length of 29mm: one end is intact and exists as a straight end. The item is heated on one side and probably had a use in an unknown local industry. A second source of red earthenware was from the Surrey-Hampshire borders (RBOR) and noted only in the form of a medium rounded jar (19) and a chamber

pot (22). The third type of redware noted is Sunderland-type coarseware with mottled glaze (SUND MOT), represented by a bowl sherd (22).

The stonewares are recorded as a total of 10 sherds/1 ENV/124g and occur as four types. More frequent was London stoneware, found as fragments of a tankard (30) and a later bottle with a rounded rim and a sherd of a bottle or jar were recovered from context (22). A fragment of a Staffordshire-type brown salt-glazed stoneware (STBRS) cylindrical mug, decorated with a band of close set combed wavy lines, was noted in deposit (19) and this dated the deposit. Black basalt ware (BBAS) was only noted in deposit (22) and typically for this ware was recorded as tea ware: the rim of a cylindrical teapot and two teapot lids. Residual sherds of white salt-glazed stoneware (SWSG) and a fragment of a Westerwald stoneware (WEST) chamber pot, decorated with an applied lion and probably of an 18th century date, were both found in deposit (22). The Westerwald stoneware and the Chinese porcelain (see below) were the only imported pottery found in the assemblage and these are the main imports recorded in the London area during the 18th and 19th century.

Porcelains are noted as a total of six sherds/6 ENV/52g and are all from a Chinese source and mostly of the blue and white type: CHPO BW. An 18th-century tea bowl, decorated with part of a human figure and a prunus tree was found in context (30) and this item dated the context. The rest of the porcelain was found in context (22) and consisted of a small rounded bowl and a plate base, although additionally of interest is the conical wall sherd of a vase or spill jar decorated with an external landscape scene. A saucer rim decorated with the famille rose palette (CHPO ROSE) has a late 18th-early 19th century geometrical design executed in a grey/black enamel.

Pottery type	Code	Date range	SC	ENV	Wt (g)	Forms
Roman	RPOT	50-400	2	2	4	Unidentified
Post-medieval						
Black basalt ware	BBAS	1770–1900	3	3	59	Teapot, teapot lid
Surrey-Hampshire border whiteware with green glaze	BORDG	1550-1700	1	1	6	Unidentified
Surrey-Hampshire border green-glazed whiteware flat-rimmed chamber pot	BORDG CHP2	1650–1750	2	2	36	
Chinese blue and white porcelain	CHPO BW	1590–1900	5	6	50	Dinner plate, shallow rounded bowl, tea bowl, vase
Chinese porcelain with famille rose decoration	CHPO ROSE	1720–1800	1	1	2	Saucer
Creamware	CREA	1740–1830	46	31	585	Bowl, rectangular dish, rounded bowl, chamber pot, meat dish, dish, squat cylindrical jar, rounded jug, dinner plate, soup plate, saucer, unidentified
Creamware with green glaze	CREA GRN	1760-1830	1	1	8	Teapot
Creamware with polychrome-painted decoration	CREA PNTD	1760-1800	2	2	11	Plate, dinner plate,
Creamware with slip decoration	CREA SLIP	1775–1830	1	1	7	Medium rounded bowl
English yellow-glazed refined earthenware	EYGE	1785–1835	1	1	17	Saucer
London stoneware	LONS	1670–1926	4	4	48	Bottle, bottle or jar, tankard

Pearlware	PEAR	1770–1840	4	3	33	Rounded dish, saucer, tea bowl
Pearlware with under-glaze blue-painted decoration	PEAR BW	1770–1820	10	10	143	Rounded bowl, dinner plate, jug, tea cup, unidentified
Pearlware with under-glaze polychrome-painted decoration in 'earth' colours	PEAR ERTH	1790–1820	8	7	72	Medium rounded bowl, saucer, tea cup,
Pearlware with under-glaze painted decoration	PEAR PNTD	1770–1840	6	6	36	Dinner plate, slop bowl, tea cup,
Pearlware with slip decoration	PEAR SLIP	1775–1840	2	2	26	Rounded jug, unidentified
Pearlware with transfer-printed decoration	PEAR TR	1770–1840	22	20	184	Tea cup, dinner plate, rounded bowl, dessert plate (6-8 inches),saucer, plate, porringer-shaped cup, chamber pot, cylindrical mug
Pearlware with under-glaze brown or black transfer-printed decoration	PEAR TR3	1810–1840	2	2	20	Dessert plate, medium rounded bowl
Pearlware with under-glaze transfer-printed and over-glaze painted decoration	PEAR TR6	1810–1840	1	1	8	Unidentified
London-area post-medieval redware	PMR	1580–1900	17	15	847	Chamber pot, flared dish, flower pot, squat rounded jar, kiln furniture, paint pot, pipkin, unidentified,
Surrey-Hampshire border redware	RBOR	1550-1900	2	2	69	Chamber pot, medium rounded jar
Surrey-Hampshire border redware with slip- trailed decoration	RBOR SLTR	1580-1800	1	1	34	Bowl or dish
Refined white earthenware with slip decoration	REFW SLIP	1805-1900	1	1	20	Medium rounded bowl
Staffordshire-type brown salt-glazed stoneware	STBRS	1690-1730	1	1	7	Cylindrical mug
Sunderland-type coarseware with mottled glaze	SUND MOT	1775–1850	1	1	14	Bowl
White salt-glazed stoneware	SWSG	1720-1780	1	1	4	Unidentified
London tin-glazed ware with plain pale blue glaze	TGW BLUE	1630–1846	1	1	20	Chamber pot
London tin-glazed ware with pale blue glaze and	TGW H	1680-1800	3	3	45	Fluted dish, storage jar,
dark blue decoration (Orton and Pearce style H) Westerwald stoneware	WEST	1590–1900	1	1	6	wall tile, Chamber pot

Table 1. UFF17: pottery types quantified by sherd count (SC), ENV and weight and the forms that occur the wares.

A small quantity (four sherds/4 ENV/65g) of tin-glazed ware is noted and found as the shoulder of a plain blue (TGW BLUE) chamber pot in context (20), while the dark blue designs on a pale blue ground style (TGW H) was noted only in context (22) and were all probably residual. The TGW H forms consist of a fragment of a wall tile, a rounded storage jar with banded decoration and a fluted dish, possibly from a Dutch source, with a Chinese panel design and dated to the 1730's or 1740's.

White earthenwares (3 sherds/3 ENV/42g) consisted of only Surrey-Hampshire border green-glazed whiteware (BORDG) and the sherds all appear to be from flat rimmed chamber pots (BORDG CHP2) and these were only found in contexts (19) and (21). The only sherd classified as a slipware in this assemblage was the base of a bowl or dish made in Surrey-Hampshire border redware with slip-trailed decoration (RBOR SLTR) and this was probably residual in context (22).

#### **Distribution**

Table 2 shows the contexts containing pottery, the size/number of sherds, ENV and weight, the earliest and latest date of the most recent pottery type (Context ED/LD), the pottery types present and a considered (spot) date for the group.

Context	Size	SC	ENV	Wt (g)	Context ED	Context LD	FABRIC	Spot date
1	S	1	1	20	1805	1900	REFW SLIP	1805–1900
19	S	6	6	113	1690	1730	STBRS, BORDG, BORDO, PMR, RBOR	1690–1730
20	S	3	3	24	1630	1846	TGW BLUE, RPOT	1680–1800
21	S	3	3	310	1650	1750	PMR, BORDG CHP2	1650–1750
22	L	137	116	1774	1810	1900	EYGE, PEAR ERTH, PEAR BW, PEAR SLIP, CREA SLIP, PEAR TR, PEAR TR3, PEAR TR6, PEAR PNTD, PEAR, WEST, CREA GRN, SUND MOT, CHPO, CHPO BW, CHPO ROSE, TGW H, BBAS, LONS, PMR, RBOR, RBOR SLTR, CREA PNTD, CREA, SWSG	1810–1830
30	S	3	3	180	1670	1923	CHPO BW, LONS, PMR	18th century

Table 2. UFF17. Pottery spot dating table showing for each context that contained pottery the number of sherds, the pottery types and forms present and a context considered (spot) date for the deposition of the material.

#### Significance, potential of the collection and recommendations for further work

The assemblage of post-Roman pottery recovered from UFF17 is of little significance at a local level and although the pottery types represented are those typically found in the London area, it is more than likely that the bulk of the finds come from an offsite source. The pottery has the potential to date the features in which it was found and to provide a sequence for them. There are no recommendations for further work on the assemblage.

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<a href="http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes">http://www.mola.org.uk/resources/medieval-and-post-medieval-pottery-codes</a>>.

Page 34 of 51

APPENDIX 5: BUILDING MATERIAL SPOT DATES

by Kevin Hayward, Pre-Construct Archaeology Limited

**Introduction and Methods** 

This small building material assemblage (22 examples 11431g) from the evaluation at Former Lesoco Campus, Ufford Street, Southwark was reviewed to determine its overall character, and to provide a list of

spot dates.

The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh

fabric surface was exposed. The fabric was examined at x20 magnification using a long arm

stereomicroscope or hand lens (Gowland x10). Matches then made with the London fabric collection.

**Fabrics and Forms** 

The assemblage consists entirely of later post medieval roofing material, brick, floor tile and Oil Shale.

Late Post Medieval

Brick structures 1 and 6 can be dated to the very late 19th century on the basis form (wide well made

machine frog) fabric (post great fire and Yellow Medway) and mortar type (hard grey clinker mortar).

The rest of the assemblage (13), (21), (22), and (30) is a little earlier probably 18th to early 19th century

due to the prevalence Low Country imported materials curved pan tile, Dutch Paving Brick and an

unglazed Flemish floor. It is possible that one of the peg tiles from (21) with a square nail hole may be

earlier 17<sup>th</sup> or 16<sup>th</sup> century.

**Review** 

The value of this small building material assemblage lies only in its ability to date the post medieval

layers. It very much reflects the later residential, commercial and industrial post medieval expansion of

this part of Southwark. There are no items of intrinsic interest and all of this group should be discarded as

full recording was undertaken.

# Distribution

Context	Fabric	Form	Size		ange of erial	Latest dated material		Spot date	Spot date with mortar
1	3032; 3035; 3101	Machine frogged yellow Medway and Post Great Fire in a hard clinker mortar	2	1664	1940	1780	1940	1875- 1900+	1800-1900
6	3032; 3035; 3101	Machine frogged post great fire bricks in hard clinker mortar	2	1664	1900	1750	1900	1875- 1900	1800-1900
13	2279	Pan Tile	1	1630	1850	1630	1850	1630- 1850	No mortar
21	1977; 2279; 3032R; 2276; 3120	Post medieval unglazed Flemish Floor Tile, early post medieval peg tile, pan No motile and red post great fire brick; Kimmeridge Oil Shale	11	1480	1900	1664	1900	1664- 1800+	No mortar
22	2279	Pan Tile	3	1630	1850	1630	1850	1630- 1850	No mortar
30	2279; 3036	Pan tile and Dutch Paving Brick	2	1600	1850	1630	1850	1630- 1850	No mortar

Page 36 of 51

## **APPENDIX 6: GLASS ASSESSMENT**

By Chris Jarrett, Pre-Construct Archaeology Limited

A total of eight fragments of glass, representing an estimated 5 vessels (ENV) and weighting 339g, were recovered from the archaeological work and was this was found in three contexts. Except for a small rod of burnt or heated glass found in context (22), the rest of the finds consist of free-blown English wine bottles and made in olive green soda glass unless otherwise stated. The earliest wine bottle form was recovered from context (21) and consists of the rounded base of a vessel with a concave kick derived from either a shaft and globe or onion-type wine bottle and dated to the mid 17th-early 18th century. A shoulder from a wine bottle dated to the 18th century was found in context (30). The basal fragments of an early cylindrical wine bottle, dated *c*. 1740–1850 and made in dark green high lime low-alkali glass was noted in deposit (22).

The glass assemblage has little significance at a local level as the identifiable forms are ubiquitous finds recovered from London area archaeological excavations. The only potential of the glass is to broadly date the contexts it was recovered from. There are no recommendations for further work on the material.

PCA Report Number: R13161 Page 37 of 51

## **APPENDIX 7: HUMAN BONE ASSESSMENT**

By James Young Langthorne, Pre-Construct Archaeology Limited

A single piece disarticulated human bone was recovered during an archaeological investigation at the Former Lesoco Campus, Ufford Street, Southwark. It was recovered along with a number of animal bone elements from a humic soil layer and dated to the 18<sup>th</sup> century.

The aim of this report is principally to provide a description of this very small assemblage of human bone.

#### Disarticulated Bone

The disarticulated human bone from layer (30) consisted of a single fragment of human shaft in good condition. No traces of pathology were apparent and it was not possible to ascertain either the sex or age of the individual from which the bone originated.

#### Conclusion

The results of this assessment could be added to any forthcoming publication, but it is not recommended that any further work be performed on the disarticulated human bone from this site.

PCA Report Number: R13161 Page 38 of 51

# **APPENDIX 8: ANIMAL BONE ASSESSMENT**

By Kevin Rielly, Pre-Construct Archaeology Limited

#### Introduction

The site is bordered by The Cut to the north, Ufford Street to the south and Burrows Mews to the east, all located some 400m east of Waterloo Station. Two large trenches were excavated within the study area, adjacent to Ufford Street, this providing evidence for 18<sup>th</sup> and 19<sup>th</sup> century activity. Notably most of the artefacts were found in trench 1, including all of the animal bones. These were all collected by hand.

## Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

#### Description of faunal assemblage by phase

The site provided a total of 66 animal bones, all recovered by hand and all in a good state of preservation with minimal levels of fragmentation. These were taken from three deposits, all in trench 1, as shown in Table 1. The site has been divided into 3 phases of activity, the position and dating of these three deposits placing them within Phase 2 (17/18<sup>th</sup>) and Phase 3 (19<sup>th</sup> century). The channel fill (21) was dated by clay tobacco pipes between 1730 and 1780; the same method dating layer (30) and pitfill (22), between 1700 to 1740 and 1800-1845 respectively and by the associated pottery to the 18<sup>th</sup> century and 1800-1830.

Amongst the earlier levels there were a few cattle, sheep/goat and pig bones, the former mainly represented by foot bones. Most of the cattle bones were taken from the channel fill (21), here including three complete metapodials (one metacarpal and two metatarsals) and a 3<sup>rd</sup> phalange, all clearly from rather large animals. Shoulder heights calculated from the length measurements (using the criteria described in von den Driesch and Boessneck 1974) of these three metapodials ranged from 131 to 142cm. These are within the size range of cattle dating from the late 18<sup>th</sup> century (after Davis 1987, 178), these undoubtedly representing the 'improved' types mentioned in Rixson (2000, 215). There is also at least one large sheep, represented by a femur from the channel fill (21), also perhaps 'improved'.

These metapodials also display a marked degree of abrasion at the distal extremities, suggesting that these bones derived from a dismantled 'knuckle-bone' floor. Such surfaces were created with the distal end uppermost and the observed pattern of abrasion can therefore be interpreted as use wear. It would appear

PCA Report Number: R13161 Page 39 of 51

that such surfaces were more commonly constructed, at least in Southwark, from sheep metapodials, as shown by extant floors found at Tyers Gate and Tabard, as well as a dismantled example at Tower Bridge Road, all dated to the 18<sup>th</sup> century. However a single cattle example, also dismantled, was found at 25-47 Lant Street, this dated to the 17<sup>th</sup> century (all descriptions after Rielly 2011, 165 and 169).

Phase:	2		3	Total
Context:	21	30	22	
Type/Cut:	Chan/45	L	P/23	
Species				
Cattle	5	1	1	7
Cattle-size	1		1	2
Sheep/Goat	3	2	7	12
Pig	1	1	1	3
Sheep-size	1		33	34
Hare			1	1
Chicken			2	2
Mallard			1	1
Goose			4	4
Total	11	4	51	66

Table 1: Counts of hand collected animal bones by occupation phase, context, type and cut, where Chan is channel, L is layer and P is pit.

The latest collection, from pit [23], was rather different, comprising a wealth of sheep/goat and sheep-size (ribs and vertebrae) fragments, amongst a notably larger array of food species including three bird domesticates as well as some game alongside the usual cattle and pig component. While this collection does not include any 'large' individuals, there is evidence for sawing. The use of this instrument for butchery purposes approximately coincides with the introduction of 'improved' domestic stock, by the late 18<sup>th</sup> to early 19<sup>th</sup> centuries (see Albarella 2003, 74).

### Conclusion

This collection would appear to be well dated and in good condition. There is undoubtedly a wealth of potentially interesting aspects, in spite of its small size, including a possible change in eating habits between the 18<sup>th</sup> and 19<sup>th</sup> centuries; a good proportion of age and especially size data; plus the significant recovery, here concerning their rarity, of a knuckle bone floor.

It should also be stated that there are relatively few large post-medieval bone collections from this part of Southwark (to the west of the Blackfriars Road), a notable exception being the bones from 231-241 Blackfriars Road (Rielly 2014).

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PCA Report Number: R13161 Page 41 of 51

# **APPENDIX 9: METAL AND SLAG**

By Märit Gaimster, Pre-Construct Archaeology Limited

Metal and slag were retrieved from two contexts, both in post-medieval Phase 3. Context (22), with a pot date of 1810–1830, produced two small pieces of slag. The slag has characteristic lava-like runs on the upper side and may be tap slag or fuel ash slag. Three pieces of wide, milled lead window came were retrieved from context (30); they were associated with pottery dating from the 18th century.

No further analysis is recommended for these finds. However, extended work on the site may produce additional metal finds or material associated with metalworking; this would occasion more detailed study of the slag. Relevant finds should be included in any further publication of the site.

context	description	pot date	recommendations
22	Two 35 x 40mm pieces of slag with glassy runs on the upper side and	1810-1830	Further identify
	frequent green patches of copper alloy; either tap slag or fuel ash slag		
30	Three pieces of milled lead came for multi-pane windows; W 9mm	18th century	

UFF17: metal and slag

#### APPENDIX 10: CLAY TABACCO PIPE ASSESSMENT

By Chris Jarrett, Pre-Construct Archaeology Limited

#### Introduction

A small sized assemblage of clay tobacco pipes was recovered from the site (one box). The material is generally not abraded, in a good condition and it therefore appears that the clay tobacco pipes were deposited rapidly under both secondary and possibly tertiary conditions. Clay tobacco pipes occur in four contexts as mostly small (under 30 fragments) sized groups, except for one medium sized group (30–100 fragments).

All the clay tobacco pipes (145 fragments, of which one was unstratified) were recorded in a database format and classified by Atkinson and Oswald's (1969) typology (AO) and 18th-century examples are according to Oswald's (1975) typology and prefixed OS. A small number of the bowls have been reclassified according to Higgins (2004). The material was catalogued according to Higgins (2017) and the pipes were coded by decoration and quantified by fragment count. The quality of finish, including the level of burnishing and the degree of milling of the rims (recorded in quarters) has been noted on 17th-century types. The tobacco pipes are discussed by their types and distribution. The assemblage is notable for containing a small quantity of clay tobacco pipe production waste and a fragment of kiln furniture was classified according to Peacey (1996).

#### The Clay Tobacco Pipe Types

The clay tobacco pipe assemblage from the site consists of 109 bowls, 372 stems and thirteen mouth pieces. The clay tobacco pipe bowl types are dated 1680–1880.

1680-1710

AO19: one spurred bowl with a quarter milling of the rim and an average burnish. Context [818]

AO19: one spurred tall, angled bowl with a rounded front and straight back. The rim is damaged and image of milling survives. Context (30)

AO21: one splay heeled angled bowl with a rounded front and a straight back and the rim is missing.

Context (30)

AO20: three tall, angled bowls with a straight back and front. One bowl is a more slender variant and the heel is more pointed than normal and it is square in section. The bowl has three quarters milling of the rim and an average finish (19). The two other bowls have their rims missing although they both appear to be initialled:

A A: one bowl, (22). Probably made by Anthony (Arthur), Andrews, 1694-1716 (Oswald 1975, 130).

?I ?A: illegible initials. Context (30)

1700-1740

OS10: nine examples of these heeled, upright bowls with a rounded front and straight back. A number are maker marked with the letters noted on the sides of the heel:

S ?: one bowl, context (21)

I B: one bowl, context (30). There were numerous possible London clay tobacco pipe makers for this bowl, some of whom were known to have been working in Southwark (see Oswald 1975, 131)

W B: one bowl, context (21), several London pipe makers could have made this bowl (see Oswald 1975, 132)

N G: one bowl, context (21). The pipe maker is unknown, although the distribution of bowls marked with these initials found on other archaeological investigations indicates a Lambeth location for the workshop

W S: one bowl, context (21). A number of pipe makers could have made this bowl and several were located in Southwark (see Oswald 1975, 146; Walker 1981, 179)

T W: one bowl, context (19). A number of London contemporaneous pipe makers share these initials (see Oswald 1975, 149)

Three of the OS10 bowls were not maker marked and singular examples were noted in contexts (21) and (22) and (23).

1730-1780

OS23: one tall, upright spurred bowl, damaged, context (22)

1760-1830

AO27T: ten tall, square heeled bowls with a straight back and rounded front and were all recovered from context (22). All but one of the bowls, which is missing its heel and appears to be a waster, are initialled on the heel and two pipe makers can be identified:

- T B: one bowl. Possibly made by Thomas Bickham, 1781–84, Lambeth (Oswald 1975, 132).
- G S: eight bowls and one example has a muffle/fired pipe clay deposit on the front of the bowl and another bowl has a slag-like deposit covering the left side of the bowl. The pipe maker is currently unknown, although the frequency of the bowls on this site indicates a local pipe maker.

1770-1845

- AO27: 48 square heeled bowls with a straight back and rounded front, all of which were recovered from context (22) and the makers' marks, of which there are at least thirteen definite makers, are recorded as follows:
- \* \*: 1 bowl with stars on the side of the heel and the bowl is decorated with different sized fluting and wheatear borders. A second bowl is missing the heel, although the item appears to have been made in the same mould.
- T?: 1 bowl
- B ?: 1 bowl
- I ?: 1 bowl
- C B: 1 bowl, with a slag-like deposit on the right side of the bowl. The pipe maker is currently not documented.
- T B: 3 bowls; one example is missing the bowl, a second example is decorated with the Prince of Wales's feathers and a third bowl has on the back of the bowl a poorly impressed small, incuse circular stamp with a curving line of leaves above the surname 'BARNES' and evidence for more leaves below the name. The pipe maker is currently not documented in the London area.
- W B: 2 bowls, both with on the back of the bowl a small incuse circular stamp containing branches above and below the name 'BROWN'. Possibly made by William Brown (2), 1805-44 (Oswald 1975, 132)
- W C: 1 bowl. Possibly made by William Clamtree, 1805–07, Piccadilly (Oswald 1975, 134)
- W G: 1 bowl, possibly made by William Greenland, 1795-1817 (Oswald 1975, 137)
- 2 bowls. Possibly made by John Jewster, Borough, 1804–1864, although several London pipe makers shared these initials (see Oswald 1975, 139).

- I L: 5 bowls. There are two possible pipe makers who were working during this period in Southwark: John Leach, 1805-39 and James Lewis, 1823–32, both working in the Horsley Down area (Oswald 1975, 140).
- S L: 2 bowls, probably made by Samuel Lewis, 1774–1805, Oxford Street, Lambeth and Horsley Down (Oswald 1975, 141)
- G R: 6 bowls, five of the bowls are decorated with the Prince of Wales's feathers, while the sixth example survives only as a heel and stem. The pipe maker is unknown, although the frequency of the bowls on the study area indicates a local pipe maker.
- C S: 1 bowl, possibly a G S marked bowl (see below) and the first initial is badly moulded
- G S: 16 bowls, a number of different moulds are represented, including six examples with a more pronounced slanted rim for this type of bowl. One example has a slag-like deposit. (See AO27T for the comment on this pipe maker)
- T?W: 1 bowl. Possibly made by Thomas Wootten, Park Street, Borough, 1820–46 (Oswald 1975, 149).

1840-1880

AO28S: one short spurred bowl with a rounded front and straight back and decorated with wheat ear borders.

The initials on the spur are worn and only the last name I is legible. The bowl was unstratified.

#### Undated bowls

There are seven bowls that are too fragmentary to be classified to type. One example recovered from context (30) is a 17th century example and shows evidence of the rim being milled, while deposit (21) produced the front of a probable 18th-century bowl. Deposit (22) produced five fragments of bowls and are possibly derived from the AO27 type or the tall variant: one of these items has on the back of the bowl a small incuse circular stamp with scrolls above and below the name 'WATTS'. A possible local pipe maker for this bowl was Valentine Watts, 1749 and later, Lambeth (Oswald 1975, 149), or one of his descendents.

#### Stems

The stems were broadly dated according to their thickness and more pertinently the diameter of the bores and indicate that 17th-19th century datable items are present. One late 18th-early 19th century dated thin stem with a fine bore is noticeably curved and may have been derived from a coiled stemmed bowl and this item was found in context (22).

#### Kiln furniture

A single fragment of kiln furniture is recorded that was recovered from context (22). The item can be classed as a roll and falls into the type 2 category (Peacey 1996, 64) and consists of a curving small billet of pipe clay, 7mm in diameter and with a surviving length of 46mm. On the external side of the item are randomly placed, feint impressions of finger tips. The function of kiln furniture rolls is uncertain, although it is believed that these were items used to separate the clay tobacco pipes fired in the muffle chamber of the clay tobacco pipe kiln.

#### Distribution

Table 1 shows the distribution of the clay tobacco pipes, the number of fragments, the date range of the latest bowl type (context ED and LD), the types of bowls present, together with a spot date for each context clay tobacco pipes occur in.

Conte xt	Siz e	No. of fragments	Context ED	Context LD	Bowl types	Spot date
19	S	8	1700	1740	AO22, OS10,	1700–1740
21	S	21	1700	1740	OS10 AO22, OS10, OS22, AO27T, AO27, Kiln	1700–1740
22	M	98	1770	1845	furniture: RL2 AO19, AO21, AO22,	1800–1820
30	S	17	1700	1740	OS10	1700-1740

Table 1. UFF17. Distribution of clay tobacco pipes.

### Significance Of The Collection

The bowl forms present are fairly typical for the London area. The clay tobacco pipes are of some significance at a local level, particularly those recovered from context (22). That deposit contains a largely contemporary group of pipes, perhaps dating to the first two decades of the 19th century and unusually the makers' marks do not allow the bowls to be specifically assigned to local Southwark and Lambeth pipe makers. The range of pipe makers represented in this group of pipes may be complicated by the location of the study area close to that of Blackfriars Bridge Road and the construction of Blackfriars Bridge in 1769 may have allowed for the more easy distribution to this area of Southwark of pipes made north of the Thames and particularly those from the Westminster area. Additionally, of interest is that the range of pipe makers and their products is somewhat different to that of the assemblages of pipes recovered to the east of the site and from archaeological interventions on Borough High Street (e.g. The Thameslink project: Jarrett in prep; The Wolfson Wing: Jarrett 2002) and further south at Tabard Square (Jarrett 2009). The group of pipes from deposit (22) may in part therefore represent a localised snapshot of the industry in this part of Southwark during the period c. 1800–20.

Also of interest is the occurrence in context (22) of the fragment of the roll kiln furniture, indicating that some of the refuse was recovered from a clay tobacco pipe workshop. This was unlikely to have been located

within the study area and represents refuse brought from another source. Clay tobacco pipe wasters or production refuse may also be represented amongst the clay tobacco pipes, particularly in respect to the AO27 and AO27T pipes made by the G S pipe maker, which includes one bowl with the muffle or pipeclay deposit, while two other items have slag-like deposits, often restricted to the underside of the bowl and the stem. This was one of the characteristics noted on the pipe wasters recovered from the pipe kiln operated by James Minto, c. 1809–34 and others at London ridge Station (site code BVM12: Jarrett in prep). Other pipes form context (22), some of them in a fragmentary state also show a similar pattern of slag like deposits.

#### **Potential**

The clay tobacco pipes have some potential. The material is of use for dating the contexts they were found in. However, the group of material recovered from context (22) also demonstrate the distribution of clay tobacco pipes to this area of Southwark and encompasses products probably made by Lambeth and Westminster pipe makers, as well as bowls of a much more localised production. A number of pipes would merit illustration to demonstrate the local manufacture.

#### **Recommendations For Further Work**

It is recommended that a short publication report is written for the Society for Clay Pipe Research Newsletter detailing the clay tobacco pipes recovered from context (22) and the evidence for clay tobacco pipe production and the nature of the local clay tobacco pipe industry. Additionally, the report should indicate what was marketed or distributed from elsewhere to this locality. It is recommended that nine bowls and the fragment of kiln furniture are illustrated to supplement the text.

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PCA Report Number: R13161 Page 49 of 51

## APPENDIX 11: OASIS DATA ENTRY FORM

## OASIS ID: preconst1-307659

#### **Project details**

Ufford Street, Southwark SE1 8LE Project name

Short description of the project

An archaeological evaluation was carried out between 27th November 2017 and 12th January 2018. The investigation comprised the excavation of two evaluation trenches. The archaeological evaluation revealed limited modern impact on the buried deposits. A series of post-medieval walls were found across the site relating to the previous workhouse buildings, there were two earlier post-medieval linear features associated with the land management prior to the construction of the workhouse. These features were cut into alluvial layers that had formed over the natural gravel. When? Natural gravel was found within the trench at heights between 0.56m and 0.69m OD.

Project dates Start: 27-11-2017 End: 12-01-2018

Previous/future

work

No / Not known

Type of project Field evaluation

Site status Area of Archaeological Importance (AAI)

Current Land use Vacant Land 1 - Vacant land previously developed

**BRICKWORK Post Medieval** Monument type

Monument type **DITCH Post Medieval** 

Significant Finds **POTTERY Post Medieval** 

Significant Finds **POTTERY Roman** 

**CLAY PIPE Post Medieval** Significant Finds

Significant Finds **BONE Uncertain** 

## **Project location**

Country England

GREATER LONDON SOUTHWARK SOUTHWARK Land at Ufford Street, Site location

Southwark, SE1 8LE

Postcode SE1 8LE

Study area 2950 Square metres

Site coordinates TQ 31543 79907 51.502271712719 -0.10456076563 51 30 08 N 000 06 16 W

Point

Height OD /

Depth

Min: 0.56m Max: 0.69m

## **Project creators**

Name of Organisation **PCA Warwick** 

Project brief originator

CgMs Consulting

Project design

Pre-Construct Archaeology Limited

originator

Project Tim Bradley

director/manager

Project Stacey Amanda Harris

supervisor

Type of Consultancy

sponsor/funding

body

Name of CgMs ConusIting

sponsor/funding

body

**Project archives** 

Physical Archive LAARC

recipient

Physical "Animal Bones", "Ceramics"

Contents

Digital Archive LAARC

recipient

Digital Contents "Animal Bones", "Ceramics", "Human Bones", "Stratigraphic", "Survey"

Digital Media available

"GIS","Spreadsheets","Text"

Paper Archive LAARC

recipient

Paper Contents "Animal Bones", "Ceramics", "Human Bones", "Stratigraphic", "Survey"

Paper Media available

"Context sheet","Diary","Matrices","Plan","Report","Section","Survey

","Unpublished Text"

Entered by Tim Bradley (tbradley@pre-construct.com)

Entered on 31 January 2018

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