LONDON'S TRANSPORT MUSEUM
COVENT GARDEN, CITY OF WESTMINSTER
LONDON

POST-EXCAVATION ASSESSMENT

Site Code: LTM 03

National Grid Reference (NGR):- TQ 3042 8085

on behalf of

Wates Group Ltd

JUNE 2006

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Site Code: LTM 03

On behalf of: Wates Group Ltd

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1 SUMMARY

1.1 *Between June and October 2005 a programme of archaeological work was undertaken by AOC Archaeology Group at London's Transport Museum, Covent Garden, London (NGR: TQ 3042 8085) (Figure 1) on behalf of Wates Group. The work was carried out ahead of the scheme to extend the museum basement and comprised an initial watching brief on seven pile holes, followed by a full excavation of the area affected by the development.*

1.2 The earliest archaeological features were dated to the Early Saxon period (mid-6th to early-7th centuries) and consisted of two inhumation and nine cremation burials cut into the natural deposits, concentrated in the southwest part of the site. Several grave goods were retrieved from one inhumation burial including approximately 19 amber beads from a necklace and an oval loop and cello-shaped shield buckle. A silver disc brooch was retrieved from a well truncating this grave which is likely to have originally been part of the grave good assemblage. By the early to mid 7th century the area of the site was abandoned as a burial ground, probably as a result of the settlement of Lundenwic expanding in a northerly direction. A number of pits and stakeholes dating to this time suggests that although human habitation of the site had yet to occur, it was being utilised for waste disposal and possibly animal pens or some other activity requiring fencing. Sealing these features and deposits was a thick layer that covered most of the site. It contained very large quantities of animal bone and was probably a spread-out midden deposit. The deposit was probably spread out as a result of levelling. Between the early – mid 8th century occupation of the site occurred and was represented by a series of large waste pits, wells and stake and postholes. Dumped deposits of burnt debris were also prevalent towards the mid 8th century. A series of gravel layers dating to the mid-late 8th centuries probably represented yard or alley surfaces. These were only found in the north half of the site where later truncation was less intrusive. From the late 8th to the mid 9th century a series of dumped deposits and waste pits were the latest evidence for Saxon activity on the site.

1.3 Truncating the Saxon deposits were substantial post-medieval drains, pits and walls. These were the remnants of the late 17th and 18th century basements and their associated features. The southern half of the site had evidently undergone more extensive truncation in the period of demolition in the 19th century than the north, the only upstanding structures surviving in the northern and southeastern part of the site. Those remaining structures in the southern half of the site correspond with the layout of the site detailed in a lease plan of 1795, denoting the area as being occupied by 32-34 Tavistock Street.

1.4 The 18th century basements were sealed by a substantial deposit of 19th century demolition material associated with the demolition of the ground level structures by the Duke of Bedford in 1856-61. This was immediately overlain by a bedding layer of compacted modern crush material for the modern concrete ground slab.

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1.5 The initial results of these works are included in this document. The research aims outlined prior to excavation are discussed with reference to the results and the further work to enable full interpretation and publication. Quantification of the resources needed to fulfil this work has been undertaken in the light of the revised research objectives.

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2 INTRODUCTION

2.1 The site of London's Transport Museum, Covent Garden is in the City of Westminster and is centred on NGR TQ 3042 8085 (Figure 1). The site is rectangular in shape and comprises the western gallery of the museum between Covent Garden and Tavistock Street, known as the 'Covered Way'. It is bounded by the main building of London's Transport Museum to the east, by Tavistock Street to the south and Covent Garden to the west and north. The site covers an area of approximately 430m².

2.2 The 1994 BGS map (Sheet 256) reveals that the site lies in an area of geological transition and is partially located on Hackney Terraced Gravels and on, or adjacent to, an outcrop of Langley Silt. During the excavation the natural geology observed was predominantly light brown/orange clayey silt overlying light brown sandy gravels. The geology was encountered at an average level of 16.90mOD at the north end, sloping down to an average 16.55mOD at the southern end.

3 PLANNING BACKGROUND

3.1 The proposed scheme of development at London's Transport Museum is for the addition of a basement within London's Transport Museum western gallery. The depth of the basement will reach a finished floor level of 15.25mOD. The base slab of the basement will be 300mm thick.

3.2 As a condition of the planning permission (Planning Application No: TP/4144; RN: 03/08388/FULL), under the guidelines of PPG 16 (DoE 1990), a Project Design (AOC 2005) outlining the strategy for dealing with the archaeological remains was commissioned by Wates Group.

3.3 English Heritage (GLAAS) were notified prior to the commencement of the archaeological field work. A site code had already been instigated for the previous archaeological work on site. This was maintained for this phase of works.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The archaeological and historical background has been covered in detail within the impact assessment (AOC 2003), a summary of which is incorporated below.

4.2 Archaeological investigations took place on the site in the form of an archaeological evaluation and a watching brief on geotechnical investigations (AOC Archaeology October 2001, 2003). A number of archaeological investigations have been conducted in the immediate vicinity of the site and there are numerous entries in the Greater London Sites and Monuments Record (SMR) for archaeological features or chance finds within 100m of the site. The site

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contains a Grade II listed building, but does not contain any scheduled ancient monuments.

4.3 The evaluation consisted of two test pits (Figure 2) referred to as evaluation pits: EP) and was undertaken in 2001 by AOC Archaeology Group as part of a pre-determination exercise by London's Transport Museum in advance of potential redevelopment (AOC 2001).

4.4 The evaluation showed that a backfilled basement existed within this area, which truncated any earlier archaeological deposits to a depth of c.2.85m. The nature of the basement bricks and the backfill sediments suggested that the basements were part of the buildings erected at the time of the creation of Tavistock Court in 1706-7. The location of these buildings is shown on Rocque's map of 1746 and in more detail on Horwood's map of 1819. The evaluation pits can be quite accurately located with reference to the latter, EP2 being within the basement of No.33 Tavistock Street. EP1 appears to be on the northeastern corner of the back wall of the basement under No.4 Tavistock Court.

4.5 It was anticipated that the scale of truncation of archaeology would be up to c. 3m given that the depth from the top of the existing slab to the top of the 18th century basement floor was 2.85m. Although health and safety considerations prevented excavation through the basement floor it was considered possible that Saxon deposits survived below this level. Saxon archaeology remains were discovered at 20 Tavistock Street, approximately 20m to the south of the site where they survived from a surface height of 16.21mOD for 500mm. The top of the basement floor at London's Transport Museum was 17.27mOD. 20 Tavistock Street is slightly downslope from London's Transport Museum leading to the consideration that up to 800mm of Saxon stratigraphy may have survived below the 18th century basements.

4.6 It was further anticipated that the central and northern areas of London's Transport Museum would be truncated to various degrees by post-medieval and modern development and construction but the discovery of Saxon archaeological deposits in the geotechnical test pit at 17.88mOD suggested that 'islands' of Saxon archaeological deposits survived, possibly to a depth of c. 1.5m in this area.

Prehistoric (before c. AD 43)

4.7 The underlying geology of the site and its location near the River Thames and the river Crane, are conditions that are often associated with prehistoric settlements: i.e. being situated close to reliable sources of water and demonstrating good drainage.

4.8 Generally, the evidence for prehistoric activity in the vicinity has been sparse, although in prehistory the rivers and river banks were the main arteries of

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transport and trade and it is likely that trackways existed along the banks of the River Thames, particularly after c. 1500 BC when the London region gradually became an important centre for both the production of metal objects and the controlling of their trade (Merriman, 1990). Prehistoric occupation is likely to have occurred along the ridge of land surmounted today by Long Acre which would have overlooked the Thames to the south.

4.9 A number of entries are noted in the SMR for prehistoric discoveries within the vicinity of the site. An excavation conducted at 28-29 Southampton Street by MoLAS in 1992 found several possible prehistoric features. A further excavation in the same year at 42 Maiden Lane uncovered a group of cut features consisting of slots and post holes containing a number of flint flakes, thought to be of prehistoric date. It is thought that together they may have formed a structure of prehistoric date. A more recent excavation in 2000 at 20 Tavistock Street found a sherd of Iron Age pottery in a layer of colluvial sand along with prehistoric struck flint. The sand sealed a cut feature which contained a few pieces of decayed animal bone and overlay natural brickearth. AOC excavations at 45-47 Floral Street recovered four sherds of Neolithic Peterborough ware pottery and two worked flints from redeposited brickearth layers (AOC September 2001).

Roman (c. AD 43 - 450)

4.10 The site is located some 1.5 km to the west of Roman *Londinium,* away from the main areas of settlement and in an area of little known Roman activity. It lies between two major roads: approximately 600m to the north is the line of the road west from the City out of Newgate to Silchester and Bath (High Holborn/Oxford Street over or near its route); and approximately 150m to the south is the presumed line of the road from Ludgate, going west along the line of Fleet Street and the Strand until joining the main Silchester road where Chiswick High Road lies over its route. The lands beyond the boundaries/c.3rd century walls and cemeteries of Roman London are likely to have been cultivated, probably as market gardens. Very little in the way of Roman archaeology has been found in the area and there are no entries within the 100m radius of the site relating to Roman remains.

Saxon (c. 451-1065)

4.11 When the Roman Empire began to collapse in the later 4th century AD, the walled city of *Londinium* declined and was eventually abandoned. Sometime during the next 200 years, Saxons from across the North Sea established a trading settlement in the area. In documents of the 7th to 9th centuries the settlement was referred to as *Lundenwic* and was assumed to have been on the former site of *Londinium*. The identification of the location of *Lundenwic* as actually having been in the Strand/Covent Garden area is one of the most important archaeological discoveries ever made in London (Vince, 1990). Unfortunately, the discovery was not made until 1985 by which time many potentially

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significant sites had been redeveloped with mostly limited or no archaeological investigations.

4.12 *Lundenwic* was an important North European trading port described in the 730s by the Venerable Bede (a celebrated monk who recorded events of the time) as an *emporium*, a market for many peoples coming by land and sea. It was principally a centre for manufacture and commerce, trading with similar *emporia* in England and on the continent via the River Thames. The name *Lundenwic* has continued to be linked to the area in the form of Aldwych, e*ald wic,* meaning old port or trading settlement.

4.13 It was along the shoreline where wharves and storehouses for trading would have been erected and, therefore, presumably, the original settlement would have been located. Archaeological investigations on the higher ground to the north, in the Covent Garden area, have revealed extensive evidence of the Middle Saxon settlement in the form of buildings and alleyways, rubbish pits and human burials (Cowie, 1988). In particular a large quantity of Saxon remains including human burials were discovered at Floral Street (AOC September 2001). Attacks on *Lundenwic* by Vikings during the 9th century (in AD 842, 851 and 871-2 when they wintered in London), may have been the reason King Alfred ordered the occupation and strengthening of the old walled city of *Londinium* in AD 886, which became known as *Lundenburg,* and the abandonment, at least for the most part, of the *Lundenwic* settlement. By AD 959, in a Charter of King Edgar, the Strand area was described as a wasteland and in AD 1040 Earl Godwin camped with his forces on what presumably was largely barren ground (Maplestone, unpublished).

4.14 The original focus of *Lundenwic* is considered to have centred on the Strand and excavations have revealed a contemporary embankment which indicated that the foreshore was 160m north of the present shoreline (Cowie, 1989a). The majority of the excavated Middle Saxon sites lie to the north of the Strand (Cowie, 1988) and there may have been an east-west street at this period on the line of the Roman road from Ludgate which in the Medieval period became known as the Strand. A forerunner of the Strand may have been one of the settlement's principal streets, but the earliest documentary evidence is a charter of AD 1002, where it is referred to as *Akemannestraete* (Gelling, 1953, 102; Sawyer, 1968, 275, no. 903). The boundaries of the settlement are uncertain (except to the south, along the river) although the distribution of the known sites covers an area of some 60 hectares. Its limit to the west may be marked by the area of gravel quarries excavated at the National Gallery site (Cowie, 1988). Occupation sites are known as far north as Shorts Gardens, (approximately 450m north of the site), although excavations at the Royal Opera House (200m to the north of the site), have revealed a large V-shaped ditch which may have been a boundary and/or defensive at some stage, as well as the impressive remains of some 30 buildings and a major N-S street (Maloney, 1996).

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4.15 A number of excavations within 100m of the site have provided evidence for the Saxon settlement of *Lundenwic*. An excavation carried out in 1985 revealed an adult male inhumation, traces of four buildings, including timber framed structures and a possible sunken building along with pits, wells and metalled surfaces. The pottery assemblage mainly comprised chaff tempered and Ipswich wares, although 12% were continental imports. Other finds include loomweights a spindle whorl, lava quern stone fragments and bronze and iron objects and a series of 'V' sceatta dating to 720-725AD.

4.16 An excavation carried out at 20 Tavistock Street in 2000 found a total of 26 stakeholes of Middle Saxon date. A large shallow pit of middle Saxon date was also uncovered and a Saxon occupation layer, which sealed a hearth, was cut into the occupation layer. Finds from the deposit included pottery, daub, iron objects, a piece of slag and a loomweight fragment. Environmental evidence included animal bones, fish bones and a few seeds and grains representing weeds and cultivated cereals. The area of excavation covered an area of 2.4m by 2.2m.

4.17 An excavation at 42 Maiden Lane in 1992 found two middle Saxon rubbish pits containing large numbers of antler cut offs and two similar pits were found at 28-29 Southampton Street. Close by at 26-27 Southampton Street an excavation and watching brief by DGLA revealed evidence of 7-9th century occupation including rubbish pits, dump layers and traces of a post-built structure aligned east to west. Finds included decorated glass vessels, quern stone fragments, bone spindle whorl, loom weight fragments and copralites (SMR 082169)

Medieval (c.1066 - 1485)

4.18 By the end of the Saxon period Westminster had begun to develop with the building of the palace and Minster by Edward the Confessor. The Strand must have again quickly become an important and busy thoroughfare; however, to the north of the Strand the land appears to have remained open and undeveloped well into the 17th century. The archaeological finds from the vicinity of the site reflect this, as only one SMR entry exists for medieval finds within 100m of the site and this relates to a house opened by Mendicant friars on the Strand on land owned by Westminster Abbey (the last friar died in 1316 and the land was returned to the Abbey).

Post-medieval (c.1485 - modern)

4.19 Detailed evidence in the form of contemporary maps and drawings exist of the Covent Garden area, providing much information of the previous land development in the post-medieval period, particularly for the 18th century on wards.

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4.20 Cartographic evidence provides a useful insight into previous land useage upon the proposed development site and the surrounding area. Braun and Hogenberg's map dated to 1572 reveals that much of the Covent Garden including the area of the site consisted for the most part of fields. However not far to the south, buildings are visible running ribbon like along what is now the Strand, with associated gardens to the rear.

4.21 The surrounding area developed rapidly during the 17th century as is depicted on contemporary maps such as the Map of the Parish of St Paul dated to 1686 showing the Piazza of Covent Garden. The site at this date appears to have been occupied by part of a building which extends to the east, with the remaining area consisting of yards. The area immediately to the west is undeveloped.

4.22 The layout of the piazza was established in 1631, to the north of the grounds of the Bedford House, originally granted to John Russell, the 1st Earl of Bedford after the Dissolution of the Monasteries in 1539. The piazza was surrounded by arcaded buildings, dominated by St Paul's Church situated to the west, becoming a popular place to live for the rich. The market itself was started at some stage in the mid 17th century, and in 1670, the 5th Earl of Bedford was granted a royal charter for the right to hold a market for flowers, fruit, roots and herbs. The market gradually expanded, and 22 shops with cellars were constructed between 1677-8 against the garden wall of the Bedford House (Weinreb & Hibbert 1983), located immediately west and south of the proposed development site. It was at this date that Tavistock Court was first laid out.

4.23 Rocque's map of 1746 reveals that the site was occupied, but is not clear in detail what the occupation was. The size and nature of the buildings on the site are depicted in a view of the piazza of 1735 showing the site and Tavistock Court in the background. A more detailed map than Rocque's, although only partially covering the site is the Lease Plan of Bedford Ground dating to 1795, which shows the site is occupied by 32-34 Tavistock Street towards the southern end of the site.

4.24 Horwood's map of 1819 demonstrates that similar buildings exist to the north of the site also, with a small area of court yard to the east. Covent Garden Market consists of a number of small rectangular buildings. The properties on the site were demolished between 1856-61 by the Duke of Bedford, as the south-eastern part of the Piazza was renovated to ease congestion and for the western extension of the Flower Market which was located upon the site as seen on the Ordnance Survey map of 1862. This demolition is represented on the site in the backfill in both the evaluation pits conducted in 2001 (see above). The temporary extension housing the flower dealers was later made permanent when the 'Covered Way', over an area formerly known as Tavistock Court, between Tavistock Street and the Piazza, was completed in 1887. This is depicted on the Ordnance Survey maps of 1894 and 1916.

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4.25 The 'Covered Way' was originally open on both sides and ends and took the form of an iron framed multi-pitched roof with glazed sky lights (Figure 13). In 1975, work began on the conversion of the 'Covered Way' area into the museum. The 'Covered Way' was eventually enclosed as part of the restoration of the Museum by London Transport in 1979 and incorporated into the Museum. The whole internal area of the 'Covered Way' was levelled and a new slab laid in 1993.

5 ORIGINAL RESEARCH AIMS

5.1 Listed below are the original research aims as laid out in project design (AOC 2005):

5.2 The investigation will make a record of all archaeological remains that will be disturbed or destroyed during the course of the proposed development works and to make public the results of the archaeological work.

5.3 Are any features, deposits or finds pre-dating the Middle Saxon period present? What is their date and nature and what information does this give regarding the character of any earlier activity on the site?

5.4 The excavation will seek to clarify the nature and extent of the Middle Saxon archaeological deposits identified during the watching brief and assess the potential for extracting important interpretative data for the social and economic function of *Lundenwic*.

5.5 The site would appear to be located within the main area of Saxon occupation, 65m to the southeast of the Royal Opera House site (Malcolm et al 2003) and 20m to the north of 20 Tavistock Street. Is it possible to determine the nature of activity in this part of *Lundenwic* through the surviving features or contents of features?

5.6 Does any evidence for Middle Saxon burials exist in this area of *Lundenwic*? A dispersed cemetery of 7th century date appears to have been located within the northern part of *Lundenwic* on the higher ground but so far no evidence for burials has been recorded this far to the south.

5.7 Are buildings of Saxon date present on the site? If so what is their nature and date of construction, duration of occupation and date of abandonment? What degree of spatial organisation is present and are there associated streets/alleys or open spaces?

5.8 Are activities taking place within the buildings to enable interpretation of their functions?

5.9 As with many *Lundenwic* sites, are cut features such as Middle Saxon pits present on the site? What is the nature, date and function of any pit digging activity?

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5.10 Do the Middle Saxon archaeological features and deposits contain domestic, craft or industrial refuse? Can these materials be linked to specific processes taking place upon the site and can they be linked to building functions?

5.11 What ecofactual material is present to assess the nature of provisioning of food and other raw materials to the settlement?

5.12 What is the relationship of the post-medieval remains and structures on the site with the early development of the surrounding area? Can post-medieval remains be linked to historically or cartographically known developments?

5.13 Do the brick flue and floor surfaces found within the geotechnical pit relate to an underfloor heating system? What other elements of this building survive on site and what can these tell us about the nature of the building.

5.14 The aims of this investigation may be modified in the light of the on-going results of the excavations.

6 METHODOLOGY

6.1 During the archaeological works the existing structure of the 'Covered Way' remained in place.

6.2 The 'Covered Way' contained various structures relating to a ground floor café. These were removed prior to any archaeological activity taking place in order to enable the entire area to be excavated in a single action. The eastern side of the excavation was formed by the wall of the Theatre Museum basement and the western side was formed by the basement wall of Jubilee Market. Both these walls were stabilized as load-bearing fill was removed from them during the excavation process.

6.3 The excavation was made safe by the installation of an in situ skin wall and perimeter piling. The piling was carried out by the client's contractor and was monitored by the on-site archaeologist. The archaeologist examined the arisings from the pile coring and, as far as was reasonably practicable, recorded the depths and nature of the deposits revealed. Finds that came out in the arisings were retained.

6.4 The previous work carried out on the site by AOC Archaeology was allocated two different site codes by the Museum of London. The evaluation work was CVG 01 and the watching brief was LTM 03. The excavation continued to use the site code LTM 03. All of the phases of work will be archived together under this code.

6.6 Once the piling was in place. The concrete ground slab and modern make-up material was removed from the site by the client's contractor using a small

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mechanical excavator under archaeological supervision in order to prevent damage to any underlying archaeological features. The spoil was removed from the site to the south of the 'Covered Way'. All spoil removal was carried out by the client's contractor. The concrete slab was retained in the area above the Theatre Museum basement in order to provide a working area for the client's contractor and the archaeology team.

6.7 In accordance with the client's Health and Safety regulations (Wates 2004), all machine excavation was carried out within the specifications of the 'permit to dig' system, issued by Wates' site representative. Excavation work was supervised and inspected by a competent person (the Project Supervisor) every day. Records of these inspections were maintained and made available for inspection by the client's on-site management on a weekly basis.

6.8 The resulting surface was hand cleaned by the archaeology team and planned at a 1:20 scale.

6.10 Areas of undifferentiated post-medieval or modern fill such as 19th century demolition backfill of 18th century basements were carefully machine excavated. The construction of the end skin walls took place as the level of the fill was gradually reduced.

6.11 All non-modern features and deposits were then fully excavated, stratigraphically, starting with the latest, until clean natural deposits were encountered. 'Harris' style stratigraphic matrices were compiled during the excavation, cross-referenced against plan matrices and checked on-site. During this period provision was to be made for the contractor to complete sections of the skin wall. The depth of the skin wall was determined on site by the rate of excavation and nature of any features found within the excavation.

6.12 The project structural engineers regularly attended the site and were available for consultation as necessary. Allowance was made for underpinning work were it required. In the event this was not necessary although over-head temporary structures were installed to secure the walls and roof of the 'Covered Way' during the archaeological works.

6.13 Due to difficulties inherent in removal of spoil from the site the area excavation was undertaken in three stages. Initially the northern half (Area 1) of the site was excavated. Once this was completed the southeast quarter (Area 2) was excavated followed finally by the southwest quarter (Area 3). The total duration of the archaeological works from the start of the watching brief to the end of the area excavation was 15 weeks.

6.14 All artefacts were collected and retained, with the exception of large quantities of post-medieval building materials which were sampled.

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6.15 For environmental evidence, sampling was only taken from sealed features which demonstrated no, or very low percentage of, residual material. Samples of 20 - 40 litres were taken from pit/quarry fills, combined with the hand-collection of animal bone.

6.16 The supervision of the slab and make-up removal was undertaken by a single archaeologist. The team for the area excavation comprised an Archaeological Project Supervisor and six experienced assistants. All work was undertaken under the overall direction of Mark Beasley and Ron Humphrey, Project Managers.

6.17 Allowance was made in the event that groundwater was encountered. However, this did not prove to be a problem.

6.18 All work was undertaken according to the Health and Safety requirements of the main contractor and CDM regulations. There was one trained first aider among the AOC Archaeology staff to complement the arrangements already set in place by the site management. For a staff not exceeding six people at any one time this was considered sufficient.

6.19 A risk assessment was submitted with the Project Design.

6.20 Weekly reports detailing work completed and work scheduled for completion in the following week were maintained.

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7 SUMMARY OF RESULTS

Period 1: natural deposits and pre-Saxon residual material

OPEN AREA 1

7.1 The natural geology was observed at an average level of 16.90mOD at the northern end of the site, sloping towards the south to an average level of 16.55mOD. This represents the first phase of deposition recorded on site. The nature of these deposits was fairly consistent across the site, comprising a light brown clayey silt or 'brickearth', which was recorded as (8401), (8709) and (8862) due to division of the site into three 'Areas' (as discussed in the section 6 above).

7.2 Overlying these deposits was a thin deposit of the same consistency but dirtier and with a green tinge. Despite containing charcoal flecks, this deposit appeared to be naturally deposited and almost certainly represents the upper part of the natural brickearth that had been affected by bioturbation and leaching. Due to later truncation this deposit was given several context numbers, recorded as (8707), (8860), (8861), (8831), (8852) and (8400). Between (8707) and (8709) a small, thin spread of dark organic material was recorded as (8708). This was interpreted as being the remains of decayed roots.

7.3 The earliest material recovered from the site were four pieces of struck or worked flint. One of these came from the fill of cremation vessel <39>, (8868), while a second was retrieved from the fill (8858) of cut [8859] which contained cremation vessel <47> (see below). Two further pieces were recovered from Saxon deposits (8655) and (8505). Twenty-three pieces of burnt flint were also recovered from six contexts across the site. This assemblage is of probable Bronze Age date (Appendix N) and is residual.

7.4 Two sherds of residual flint-tempered pottery were recovered from pits [8836] and [8837]. One further sherd was retrieved from a naturally accumulated deposit (8834). These are of probable Bronze or Iron Age date (Appendix C).

7.5 A considerable amount of residual Roman material was retrieved from the site, mostly in the form of ceramic building material, of which 110 pieces were retrieved, although six sherds of Roman pottery were also retrieved from Saxon contexts (Appendix C). As there was no evidence for Roman occupation on the site it is likely this material was brought onto the site during the Saxon period. The large quantity of material would suggest, however, that there may have been Roman occupation near the site (Appendix L).

Period II: mid 6th – mid 7th century

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7.6 Precise dating of the Saxon deposits is problematic due to the broad dating of the pottery retrieved. Five main ware-types were identified, of which Ipswich ware and Chaff-tempered ware were the most abundant (Pottery Assessment - Appendix C). Period II is exclusively represented by the burials. Several features attributed to Period III could quite possibly have come from this period, containing Chaff-tempered pottery dating from AD550-750. However, it is likely that the area was abandoned as a burial ground prior to it being given over to more domestic activities (see below).

OPEN AREA 2 (Figure 3)

7.7 Cut into the natural brickearth were a total of nine cremation burials and two inhumation burials. All the cremation burials were interred in urns although all but two of these (<38> and <47>) were disturbed by later activity. The cremation vessels were nearly all interred in almost indiscernable cuts [8569, 8841, 8854, 8856, 8859] as a result of these being filled with the originally excavated material, (8570, 8840, 8853, 8866, 8858). The cuts were all sub-circular and approximately 0.30m in diameter with a depth of 0.25m. A larger, sub-circular cut [8828] contained two vessels <38> and <39>. The fill (8829) was sampled for any scattered material and yielded a further, disturbed cremation which was recorded by its sample number 114. The charcoal deposits from this contained possible twig and brach wood from *Quercus* (Oak). Thermal degredation was acute, suggesting exposure to extreme temperatures as would be expected (Appendix S). Samples taken from the fills of vessels 46, 39 and 47 (8855, 8868 and 8858) all contained fragments of *Quercus* (Oak). The remaining cremation was very badly damaged and spread out, suggesting that it had been accidently dug up and dumped within layer (8543). This was also recorded by its sample number (39). Of the more complete cremation pots <47> is biconical in shape with a height of 193–205mm and a diameter of 132-135mm while jar <39> is more rounded in shape. All the vessels contained the remains of adults except <47> which contained a juvenile and it was not possible to identify the age of the individual within cut [8854] (Human Bone - Appendix K).

7.8 The cremation vessels were predominantly of Chaff-tempered wares with sand tempering, suggesting an earlier date within the prescribed AD450-750 range. The remains of the vessel within Sample 39 had an organic Chaff-temper, suggesting a slightly later date. Vessels <46> and <45> were both slightly later, <46> being of Sandy-ware (type B) and <45> being of mixed-gritted ware (type C), dating both vessels to the mid-7th century at the earliest. From their location within the stratigraphy they are likely to be within the earlier date range provided (AD650-850). However, it is noted in the assessment that dating of these fabrics is problematic and it is probable that the actual date for all these vessels is closer to AD575-600 given the relative scarcity of sandstone-tempered wares.

7.9 An ornate metal object <43> was recovered from the sample taken of (8829). The identification of this object is not certain but it seems likely to be either a pair of

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tweezers or a small girdle holder with intricate decoration (Appendix H). This sample (114) also contained possible tubers from false oat grass – an attribute more commonly associated with Bronze Age cremations and interpreted as a fuel. Two deposits (8829) and (8867) contained molten glass beads <146>, <147> and <148>, the former two being yellow, the latter <148> being blue. None of these beads contained the high level of soda that might be expected for beads of this date, possibly due to the high level of heat and weathering exposure. Copper alloy fragments <113> were identified adhering to the bone within (8570). As with the residual flint found in vessel fill (8868) these two latter objects are likely to be from the funeral pyre.

7.10 Two inhumation burials were identified. Skeleton (8700) was buried within grave cut [8699], which was aligned east-west in the central, southern part of the site. The grave was 1.50m by 0.90m and was 0.46m deep. It was truncated at both ends by later activity, resulting in the loss of the feet, head and shoulders although enough remained of the skeleton to establish that the head would have been at the west end. Generally the bones were in poor condition, being soft and in many places completely decayed. It became apparent on lifting that many of the bones had adhered to the underlying gravels, probably the result of the more acidic natural gravels. Those bones that did survive demonstrated that the individual was buried supine with the legs straight out and hands over the pelvis. Several finds of interest were recovered from this grave. The remains of a necklace consisting of approximately 19 amber beads <16> and one glass bead, typical of the mid to late 6th century (Appendix D) was found in the chest area. A complete shield-on-tongue buckle <19> was retrieved by the hands. This had an oval loop and cello-shaped shield and was common in Kent. This form originated on the continent and was being produced in Kent by the early 7th century (Appendix H). Various other small metal objects were recovered from the primary grave fill (8701), an orange/grey sandy silt. Some of these are probably associated with a possible buckle <17> found between the knees of the skeleton (Appendix H). Although not found within the grave it is worth noting that a silver disc brooch <14> set with four cut garnets was recovered from the well that truncated the grave at the west end. It seems likely that this brooch, the most impressive find retrieved from the site, was originally buried with skeleton (8700). The brooch is dated to AD525 – AD 625. The rim of a bowl in a pale green glass <144> dating to 1st-3rd centuries AD was also located within fill (8701). A secondary fill (8702) of slumped natural clayey silt overlay (8701). Grave [8552] contained skeleton (8558) and was located within in the central, northern part of the site. It partially truncated cremation burial [8569]. The grave measured 1.50m by 0.50m and 0.20m deep and was aligned north-south with the head at the north end. It had vertical, slightly undercutting sides and a flat base. The skeleton was 85% complete and was lying on the left side with the legs bent and arms drawn up to the chest. It was identified as a female of 'middle' adult age (Appendix K). Chaff-tempered pottery from the fill (8553) dated the inhumation to AD550-AD700. Other than fragments of a folded or crumpled sheet of metal <9> no obvious grave goods were recovered. However, a sample assemblage taken from gravefill (8553) was entirely

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composed of calcined cattle and sheep-sized fragments, possibly representing a burnt offering (Appendix O). These bones were consistently burnt white indicating they were all subjected to very high temperatures. It can be supposed that these bones represent either redeposited or *in situ* animal offerings. It is not clear what this derives from or what they may represent. The quality of the bone preservation was considerably better than that of skeleton (8700). The most likely explanation for this is that grave [8552] was only a shallow cut and did not completely truncate the natural clayey silt brickearth whereas grave [8699] did, resulting in skeleton (8700) lying directly on the underlying sandy gravels.

7.11 All of the cremation and inhumation burials were filled with the natural deposit upcast that resulted from the original excavation of the grave. This is probably a reflection of the lack of any other activity in the area during this earliest period of land use. It may also explain why such little regard was observed for the burials during later periods –the burials were likely not known about and not observed until the vessel or skeleton was damaged.

Period III: mid 7th – early 8th century

7.12 The next period of activity was located predominantly in the southern half of the site and marks the abandonment of the site as a burial ground some time around the mid 7th century or possibly slightly later. This probably reflects the gradual expansion of the *Lundenwic* settlement in a northerly direction. The majority of the features attributed to Period III were pits although there were a few stakeholes. It seems likely that although the site was outside the main area of human occupation during this period, it was nevertheless being used by the settlement. It was probably an area used for waste pits away from the main area of human occupation, while the stakeholes may represent the remnants of animal pens or perhaps screens or markers associated with the pits.

OPEN AREA 3 (Figure 4)

7.13 Open Area 3 comprised 15 pits [8684, 8681, 8675, 8694, 8732, 8671, 8843, 8837, 8848, 8839, 8833, 8850, 8534, 8540 and 8814] and 10 spreads or layers (8673, 8719, 8728, 8733, 8734, 8830, 8834, 8810, 8857 and 8532). These all directly cut or overlay the natural brickearth deposit except pit [8814] which cut cremation [8828] <38>, pit [8540] which cut cremation deposit (8543), Sample 39, and layer (8857) which overlay cremation cut [8856] <46>. Six of the layers were either naturally accumulated spreads of clayey silts (8830) and (8834), or redeposited brickearth (8810, 8719, 8728 and 8673), probably the result of dumping of the excavated material from the pits. A single cat bone was retrieved from layer (8834). Three small spreads (8857, 8733 and 8734) contained moderate amounts of charcoal within an ashy matrix, all located within the southern half of the site. Only one of these layers (8532) was recorded in the northern half of the site. It appeared to be another layer of redeposited brickearth measuring 2.86m by 2.20m with a depth of 0.05m, although pottery retrieved from it proved to be chaff-

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tempered and dated to AD550 – AD650. The nature and random deposition of these layers would suggest that they are dumped material from the excavation of surrounding pits.

7.14 Three undated pits [8681] and [8675] and [8850] were located in the southeast corner of the site. The shape of pits [8675] and [8850] was obscured by heavy truncation. The fills of these pits (8680), (8674) and (8851) respectively were all naturally slumped material containing no datable evidence, suggesting these pits were abandoned once they were no longer required and allowed to silt up over some time.

7.15 The remaining ten pits comprising Open Area 3 [8684, 8694, 8671, 8732, 8843, 8837, 8848, 8839, 8833 and 8814] all appeared to be deliberately in-filled with grey/brown clayey silts (8683, 8693, 8670, 8731, 8842, 8836, 8849, 8832 and 8847 and 8815), the latter two being the two fills within pit [8814]. All the fills contained varying quantities of animal bone (cattle/sheep) except (8838) which was devoid of finds. Fill (8836) also contained a single chicken bone. Fill (8693) contained small amounts of charred material, including the more rare rye and oats (Sample 71). The fact that these pits contained such waste fills rather than natural slumped or silted material would suggest they were either not filled until the next phase of activity or were purposely filled fairly contemporary to the time at which they were dug, as one would expect of waste pits. Three of the pit fills (8670, 8836 and 8851) contained sherds of Chaff-tempered pottery. Fill (8836) also contained a sherd of a Surrey-type (Lower Greensand, type A) jar. The presence of a Shell-tempered pottery sherd within (8670) is likely to be the result of later intrusive pitting.

STRUCTURE 1 (Figure 4)

7.16 Nine stakeholes [8714, 8712, 8706, 8704, 8723, 8718, 8716, 8698, 8690] and seven postholes [8845, 8696, 8727, 8688, 8686, 8679, 8725] were all located in the southern half of the site within a 10m x 10m area. The majority of these features were cut into natural brickearth. However, stakehole [8690] was cut through the base of pit [8684], OA3, (although this may well have been driven through the fill of it but not observed), placing Structure 1 stratigraphically later in the sequence of events. Only one of the postholes [8688] contained any datable evidence within its fill (8687), two sherds of chaff-tempered pottery dating to between AD550 to AD750. However, the stratigraphy places the remaining features comprising Structure 1 in the same period. In general the stakeholes had a diameter of 80mm and were no more than 90mm deep. The postholes were not much greater in size having a maximum 0.14m diameter and being 0.30m deep. The fills of these features (8713, 8711, 8705, 8703, 8722, 8717, 8715, 8697, 8689, 8844, 8695, 8726, 8687, 8685, 8680 and 8724) respectively, comprised orange/brown or grey sandy silts, probably the result of the posts or stakes having decayed *in situ* and natural silt slumping in. This would also explain the general dearth of datable evidence from these features. The elements of Structure 1 did

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not appear to have a discernible arrangement. As this structure marks one of the first uses of the site following the abandonment of it as a burial ground, it may well be that Structure 1 represents the remains of fencing or animal pens that are essentially still outside of the focus of human occupation.

OPEN AREA 4 (Figure 4)

7.17 Four pits [8669, 8730, 8721 and 8677] were recorded in the southeastern quarter of the site. These were stratigraphically later than Structure 1 with pit [8721] cutting stakehole [8723] (S1). These were all roughly sub-circular and measured no more than 1.34m by 0.82m with a depth of 0.30m. They were filled with dark grey/brown clayey silts (8668, 8729, 8720, 8676) respectively, all of which were devoid of finds. The dearth of finds evidence makes the function of these pits uncertain.

7.18 Three layers of redeposited brickearth or gravelly silts (8692, 8691 and 8710) also comprise Open Area 4. Although none of these deposits contained any datable evidence, layer (8710) partially overlay layer (8719) (OA3). Layer (8692), although directly overlying natural brickearth, was equivelant to layer (8691) which overlay posthole [8727] (S1). These deposits were of widely varying compaction and constitution. Again these did not contain any datable evidence. Possibly these represent similar activities to those layers identified in Open Area 3. A fourth layer (8531), overlying layer (8532) (OA3) of moderately compacted light brown sandy clay, measuring 2.54m by 2.10m with a depth of 0.05m, was identified in the northwest quarter of the site. This had an irregular shape but appeared to have been worn away to the north and east. It appeared to be cut by two postholes [8530] and [8528]. However, the fill of posthole [8530] contained pottery sherds of a later date. Combined with the similarity in constitution between the posthole fills and layer (8505), it seems likely that the postholes were in fact cut through layer (8505) and therefore belong to a later period (see below).

OPEN AREA 5 (Figure 5)

7.19 An extensive layer (8505, 8399, 8655, 8657, 8656, 8804, 8799, 8789, 8800, 8846) covered the majority of the site area and was allocated several numbers due to later truncation and the phased excavation strategy. It was stratigraphically later than Open Area 4. It had varying depth (from 0.10m up to 0.30m thick) and make-up, but was mainly a moderately compacted grey clayey silt with frequent inclusions, most notably a large quantity of animal bone amounting to 1,990 pieces (through hand collection and samples) weighing 66.18kg. The animal bone primarily comprised of cattle, sheep/goat and pig reflecting the rest of the bone assemblage both on the site and the general area (Appendix O). One goose bone from (8800), a human bone (presumably from the truncated skeleton [8699]) and an antler crown from a large red deer (probably in its eighth year) from (8657), probably from working rather than food waste, proved to be exceptions to the assemblage. A bone spindle whorl <15> was also retrieved from this deposit. The

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majority of the pottery retrieved from this horizon was Chaff-tempered pottery. One sherd of Early Saxon coarse sandstone tempered pottery from (8657) was residual given the upper date range of AD600 and the dating of the stratigraphy below this layer. Nevertheless the date for this deposit is probably early-mid 8th century at the latest given the continuing presence of Chaff-tempered wares in the later periods. Two sherds of pottery from layer (8804) comprised similar inclusions and firing to Beauvais ware although the quartz grains were coarser than the type sherd. A single fragment of residual thick blue-green glass from layer (8656) <143> was from a square sectioned prismatic bottle dating to between the late 1st and early 2nd centuries. Two further fragments were from a vessel <142> of dark green-brown glass with *reticella* decoration in yellow. Two loomweights, <99> and <51>, were retrieved from (8656). <99> was smaller than most retrieved from the site, measuring *c*. 100mm. <51> appears to have a flat base and central hole that is either very flaring or extremely skewed. Given the quantity of animal bone in this substantial layer it is probable that it was derived from a midden deposit that accumulated in this area. The deposit was probably spread out when the site was levelled prior to the re-use of the site in Period IV. The layer was thicker at the south end of the site where the natural ground surface sloped away.

Period IV: early - mid 8th century

7.20 Period IV introduces a new phase of activity on the site; cutting the grey layer (OA5) were a large number of small postholes and stakeholes, pits and wells. Again the structural elements, while numerous, were not suggestive of buildings due to the sporadic and variant layouts and sizes of the features. It seems most likely that these also represent fencing or more ephemeral structures. However, the presence of wells indicates that in Period IV human occupation of the site has occurred and the levelling of the probable midden deposit that previously occupied the area (OA5) was probably preparatory work carried out for this event. The increased number and size of the pits, along with a general increase in animal bone assemblages within them confirms human presence on site. Dating for the period is tenuous but most likely to be between the early and mid 8th century. Chaff-tempered wares are still predominant in Period IV but there was a scattering of Ipswich and North French wares, pushing the date to the latter range of the AD 550 – 750 scope provided by the former. Towards the end of Period IV an increasing number of dumped deposits began to appear on the site, many comprising burnt debris. Although these did not appear to be *in situ* the number of them would suggest that they were at least dumped from the local vicinity.

STRUCTURE 2 (Figure 6)

7.21 In the southwest quarter of the site a layer (8835) of firmly compacted redeposited brickearth was recorded measuring 2.22m by 1.64m. This was cut by six stakeholes [8821, 8823, 8825, 8827, 8819 and 8817], all measuring approximately 0.10m in diameter with an average depth of 0.15m. The fills (8820, 8822, 8824,

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8826, 8818 and 8816) were all dark brown/grey sandy silts. The compacted nature of the brickearth layer (8835) potentially provides a floor surface for a building supported by the stakeholes. However, given the small size of the stakeholes, the close proximity (approximately 0.25m apart) and loose north-south alignment, this is unlikely to have been a significant structure and its function is unknown. The lack of finds within these deposits suggests that the stakes were left to decay *in situ*.

STRUCTURE 3 (Figure 6)

7.22 Four postholes [8651, 8653, 8665 and 8667] cut grey layer (8655), (OA5) in the southeast quarter of the site. These were all roughly sub-circular and measured approximately 0.36m in diameter with a depth of 0.14m. The fills (8650, 8652, 8664 and 8666) were all loose, dark yellow slightly silty sands, evidently deliberately infilled once the posts were removed. As a group they formed a roughly square shape with the posts approximately 1.20m apart. The fairly substantial nature of these features is surprising given their proximity, suggesting that their girth may be the result of efforts to remove the posts once they were defunct. The function of this structure is not known.

OPEN AREA 6 (Figure 6)

7.23 Two layers (8787) and (8791) overlay grey layer (8800), (OA5) at the southern end of the site. Both covered areas of approximately 2.00m by 2.00m although later truncation had destroyed layer (8787) to the west. These layers comprised moderately compacted dark yellow clayey silts with chaff-tempered ware pottery retrieved from (8791). This deposit also contained three sherds from a North French grey ware jar, narrowing the potential date to AD600-AD750. A sample (101) taken from layer (8791) also contained charred cereal grain, predominantly of barley but also containing smaller amounts of free-threshing wheat. Eleven charcoal fragments were recovered from this sample, three of which were identified as Corylus (Hazel), the remainder as Quercus (Oak). These are likely to represent redeposited fire debris.

7.24 Two further layers of compact light brown gravelly clay (8628) and (8796) overlay OA5 grey layer (8656) and (8804) respectively in the southeast corner of the site. Both deposits were truncated by later activity leaving deposits of a similar size to (8787) and (8791).

7.25 No features were identified as being directly related to these deposits. It is possible that they are the remains of a floor or yard surface such as the gravel layers found in the north part of the site (discussed below). However, the constitution of these deposits would seem to be too varied for such a conclusion. Perhaps more likely is that these deposits represent dumps of excavated material from the deeper features within this period of activity (such as the wells which cut into the natural underlying gravels, discussed below).

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7.26 Three wells [8620, 8604 and 8658] cut the grey layer (OA5), the former into (8655), the latter two into (8657), in the southern half of the site. Well [8604] was circular and measured 1.15m in diameter with a depth of nearly 2.00m, the base being at 14.68mOD. It contained five fills of varying composition. The well cut [8604] had a patchy lining of yellow sandy clayey silt (8612), similar to the natural slumped brickearth, which was probably brickearth from the top of the cut. The secondary fill (8614) was a yellow silty gravel 0.85m thick, similar to the underlying natural gravels but with lenses of grey sand and charcoal flecks. Given this similarity to the natural deposit and a general lack of finds it is probable that this fill represents slumping of the well's sides. Overlying this deposit was a dark grey/brown sandy silt (8613), 0.55m thick, containing charcoal comprising *Quercus* (Oak) heartwood, *Fraxinus* (Ash), *Acer* (Maple), *Corylus/Alnus* (Hazel/Alder) and *Fagus* (Beech), and large quantities of animal bone. This deposit is the result of general rubbish dumping once the well had ceased to be of use and also contained two pieces of loomweight <88> and <53> (Appendix G). This was sealed with a thin band of yellow sand (8611), 0.10m thick. No finds were recovered from this fill and as it was also very clean it seems likely that it was deliberately deposited, possibly to seal off the lower deposit (8613) which probably smelled quite strongly. The final phase of deposition was another brown silt deposit (8605) with animal bone, daub and charcoal flecks, resulting in the conclusion that this was a second phase of rubbish dumping. Chaff-tempered pottery sherds (AD550 – 750) were retrieved from both (8613) and fill (8605).

7.27 Well [8620] was sub-circular measuring 1.15m in diameter and was 1.85m deep, the base being at 14.93mOD. The primary fill (8619) was a moderately compact brown sandy gravel which, other than occasional lenses of grey silty sand, was clean and devoid of finds. It is probably the result of the natural gravels slumping from the sides. This was sealed with secondary fill (8618), a damp, heavy, dark grey silty clay containing large quantities of animal bone. It is probable that once the well sides had slumped in, it was used as a general waste pit.

7.28 Well [8658] was circular, measuring 1.30m in diameter and with a depth of 2.55m, the base being at 14.26mOD. The primary fill (8654) was a brown sandy gravel with occasional charcoal flecks, oyster shell and daub flecks. Although it initially appeared to be slump material, the substantial quantity of animal bone within the fill suggested that this was actually the result of infilling. A sample, <62>, of the charcoal deposits was dominated by *Quercus* (Oak), including both heartwood and fast-grown immature wood. Bones from very young cattle and sheep were also retrieved from this deposit. These fragments are clear indicators of the presence of infant mortalities which therefore suggests the presence of some breeding/keeping of livestock in the locality. A silver disc brooch <14> set with four cut garnets (Appendix H) was also retrieved from this fill. This was previously mentioned in discussing grave [8699]. The likelihood is that the brooch was originally buried within the grave and ended up in the well as the well truncated the west end of the grave, removing the head and upper torso of the

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skeleton. A sample from this deposit (62) contained free-threshing wheat, barley and also small quantities of rye and oats. A secondary fill (8639) was a green/brown silty gravel containing animal bone and Chaff-tempered pottery sherds dating to AD550-AD750.

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7.29 Nine pits [8793, 8790, 8663, 8617, 8521, 8545, 8557, 8397and 8555] were fairly evenly distributed across the site and all cut the grey layer (OA5) except [8557], [8521] and [8555]. These three pits were recorded in an area of intense pitting acitivity making their relationships difficult to ascertain. It is quite likely that these pits did truncate the grey layer (OA5) but this relationship has been subsequently lost due to later pitting activity. Pits [8557] and [8521] were located at the west side of the site. They were sub-circular, measuring approximately 1.86m in diameter, [8521] with a depth of 1.60m, [8557] with a depth of 0.20m. Both fills (8520) and (8556) were loose dark brown clayey sands with occasional animal bone inclusions. These were the earliest in a series of pits in the immediate vicinity, although they differed in that the fills were not as obviously the result of general refuse dumping. Nevertheless, this does appear to be the function of these pits which are discussed in greater detail immediately below.

7.30 Pit [8545] was located in the northwest quarter of the site and was sub-circular in shape, measuring 0.44m by 0.50m with a depth of 0.13m. The fill (8544) was dark grey silty clay with frequent animal bone inclusions.

7.31 Pit [8555] was located approximately 1.20m to the southeast of pit [8521]. It was sub-circular, measuring 1.46m by 1.36m and had a depth of 0.96m. Its fill (8554) was a grey silty sand with occasional charcoal flecks and lenses of gravel but was otherwise barren of finds.

7.32 Three substantial pits [8617], [8663] and [8790] were located in the southern half of the site, all containing similar fills of grey sandy or clayey silts with large quantities of bone. A large circular pit [8617] measuring 2.18m in diameter, with a depth of 1.35m, was recorded to the immediate south of well [8604]. This had steep sides and a flat, slightly curved base. Primary fill (8616) was a grey/brown sandy silt with animal bone and daub inclusions, evidently the result of refuse dumping. Chaff-tempered pottery sherds dated this period of infilling to AD600-AD750. The base of a Surrey-type (lower Greensand, type A) small pot was also retrieved from this fill. A secondary fill (8615) was a grey silty sand containing fragments of post-medieval building material, pottery dating from 1745 to 1880 and a clay tobacco pipe mouthpiece with a nipple-shaped tip that dates to after *c*. 1800. It seems most probable that the primary fill took a long time to subside, making space for this post-medieval deposit. Three quernstone fragments <12>, <218> and <219> were also retrieved from this deposit. A relatively large quantity of charcoal (approximately 150 fragments) was recovered from this deposit, including *Corylus* (Hazel), *Faxinus* (Ash) and *Quercus* (Oak). These fragments were from both mature and immature wood and given the presence of 18th and 19th century material, are not reliable.

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7.33 A second large pit [8663] was recorded 2.00m to the south of pit [8617]. The dimensions of this pit (2.20m in diameter by 1.20m deep) were similar to those of pit [8617] and may well have served the same function. In shape it was similar too although the sides were steeper and in places undercutting. Above a primary fill (8672) of slumped natural gravels were two dumped deposits. Fills (8662) and (8660) were both dark grey clayey silts with large quantities of animal bone. Chaff-tempered pottery was recovered from the secondary fill (8662). Following a further episode of slumping (8661) a final dump of dark grey clayey silt (8659) with Chaff-tempered ware pottery, animal bone and charcoal fleck inclusions was deposited. The dumps in this pit and pit [8617] were very similar and although it would appear that this pit was open for a longer period of time given the amount of slump, it is likely that .they served the same function.

7.34 A large circular pit [8790] was recorded in the west, central part of the site. The dimensions of this pit (2.30m by 2.37m) were similar to the above pits but it was much shallower (0.81m) and the sides were undercut in the south and west, although this may be the result of slumping. The primary fill (8747) was a greyish yellow clayey sand containing large quantities of animal bone, and occasional charcoal and daub flecks. This deposit also contained 16 fragments of loomweights from parts of 13 weights (Appendix G). The latest fills (8738) and (8737) were both dark grey in colour with large quantities of animal bone, oyster shell and charcoal flecks. These deposits varied from other pit fills mainly in that the composition was very sandy. Possibly this was to cover the smell of the remaining rotting meat. Fills (8747) and (8737) both contained chaff-tempered pottery sherds dating from AD550 – 750 although its location, stratigraphically later than OA5, places it in the latter end of this timeframe.

7.35 Pit [8397] was located in the central, northern part of the site and was sub-circular, measuring 1.20m by 1.06m with a depth of 0.40m. Its fill (8396) was a loosely compacted dark grey silty clay with frequent animal bone and charcoal inclusions. Surrey-type (Lower Greensand, type D) pottery was retrieved from it dating to AD600-750. One further, small circular pit [8793] was located to the east side of the site. This measured 0.32m by 0.26m with a depth of 0.07m. It was filled with a dark grey sandy silt (8792). Such a small pit has no obvious function and it is possible that this may only be the remains of a larger pit that was subsequently horizontally truncated by post-medieval activity.

7.36 Two shallow linear features [8813] and [8808] were roughly at right-angles to each other. Feature [8813] cut OA5 grey layer (8789). Linear [8808] cut stakeholes [8817] and [8819] from Structure 2. Both were heavily truncated at each end destroying any physical relationship that might have existed. Linear cut [8808] measured 3.00m by 0.60m on a northeast-southwest alignment and was 0.14m deep. Three fills were recorded (8807), (8806) and (8805), all silty clays of slightly differing colours from dark grey to mid brown. No datable evidence was retrieved from any of these fills. Linear cut [8813] was 0.47m by 0.70m on a

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northwest-southeast alignment. It had a depth of 0.07m and was filled with a yellow silty clay (8812), again barren of finds. It is possible that these two features represent beam slots. However, the broad profiles of these features would suggest otherwise, the sides gently sloping to a concave base. Immediately adjacent to linear cut [8813] was a small spread of yellow/brown silty sand (8811) with frequent charcoal fleck inclusions and Chaff-tempered pottery measuring 0.32m by 0.36m. It is possible that this deposit was in some way related to the linear cuts, perhaps as a bedding layer for a floor surface but the frequent charcoal inclusions indicate that this is more likely to represent a dumped demolition layer.

STRUCTURE 4 (Figure 6)

7.37 Clustered around the central part of the site were forty-three stakeholes and small postholes: [8502, 8500, 8498, 8496, 8494, 8492, 8490, 8488, 8486, 8484, 8482, 8480, 8478, 8469, 8467, 8465, 8463, 8461, 8459, 8457, 8455, 8453, 8449, 8446, 8444, 8423, 8421, 8419, 8417, 8440, 8442, 8476, 8474, 8438, 8434, 8408, 8436, 8547, 8549, 8550, 8542, 8471, 8515]; and seven large postholes: [8451, 8467, 8469, 8465, 8480, 8413 and 8415] cutting the grey layer (OA5), (8399) and (8505). The stakeholes ranged in size from 60mm in diameter with a depth of 140mm to 0.20m in diameter with a depth of 0.16m. The seven postholes were of a more uniform size, being approximately 0.34m in diameter with a depth of 0.15m. The fills of these features (8501, 8449, 8497, 8495, 8493, 8491, 8489, 8487, 8485, 8483, 8481, 8479, 8477, 8468, 8466, 8464, 8462, 8460, 8458, 8456, 8454, 8452, 8448, 8447, 8445, 8424, 8422, 8420, 8418, 8441, 8443, 8435, 8475, 8439, 8433, 8407, 8437, 8546, 8548, 8551, 8541, 8470, 8514, 8450, 8466, 8468, 8464, 8479, 8414, 8416) respectively, were varied and probably resulted from being filled at different times with deposits from stratigraphically later features as the posts or stakes decayed. That the posts decayed *in situ* is supported by the presence of *Corylus* (Hazel) in posthole [8547], which has been widely used for structural purposes from prehistory onwards. Charcoal retrieved from posthole [8408], however, contained *Prunus* twig-wood and may be the result of later filling as the post remains subsided. *Quercus* (Oak) heartwood was also present in this posthole, suggesting the presence of mature timber also. The elements of this structure or structures did not appear to have any pattern to them. Two large, later pits were dug straight through the nucleus of them, possibly removing features that would answer this question. Only one posthole contained any datable evidence; chaff-tempered pottery was retrieved from posthole [8550] dating it to AD550-AD750.

OPEN AREA 7 (Figure 7)

7.38 Two dumped layers of grey/brown burnt silty clay (8473) and (8432) overlay grey layer (8505), OA5, in the northwest part of the site. These were quite extensive, measuring 3.54m by 0.40m and 5.00m by 2.80m respectively. The former was overlain by a further deposit of ash (8472). No datable evidence was retrieved from these deposits.

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7.39 Two deposits of grey brown silty clay with frequent gravel inclusions (8431) and (8404) partially overlay burning deposit (8432). These were both thin and patchy (no thicker than 0.06m) and apart from some occasional animal bone inclusions, contained no finds. Two small layers of naturally silted green grey sandy clay (8405) and (8406) and a substantial (8.20m by 3.42m) layer of dark green grey silty clay (8367) were all located in the north end of the site. Layer (8406) overlay layer (8405) which in turn directly overlay grey layer (8505), OA5. Layer (8367) sealed most of the stakeholes forming Structure 4. It contained occasional flecks of shell and daub with frequent lenses of charcoal. A sherd of imported fine oxidised redware and Chaff-tempered pottery dated it to AD600-AD750. Events leading to the deposition of this layer are not apparent although the amount of charcoal does suggest some form of clearance material from a fire or burnt building.

7.40 A dark grey silty clay (8765) covered an area of 1.70m by 3.60m and overlay layer (8811), OA6. It contained frequent shell and bone and appeared to be a dumped deposit. Two layers of redeposited natural clays and gravels (8647) and (8627) measured 4.32m by 2.40m and 2.28m by 2.16m respectively. Layer (8647) sealed the features forming Structure 3, layer (8627) sealed well [8658], OA6. The former deposit contained Chaff-tempered and North French grey wares, the latter probably from a biconical vessel (Appendix C), dating it to AD600-AD750. Layer (8627) contained small quantities of charred cereal grain including occasional grains of rye and oats as well as free-threshing wheat and barley. Chaff-tempered ware pottery dated to AD550-AD750 and probably results from material excavated from surrounding pits and wells.

7.41 A large sub-circular pit [8526] measuring 1.86m by 1.94m with a depth of 1.54m contained fill (8525) comprising a grey/brown silty clay with charcoal and shell flecks, moderate charred remains (Sample 34) and nearly 10kg of animal bone. This was stratigraphically later than pit [8521], OA6 but also cut pit [8540], OA3. The large quantity of bone would suggest that some kind of meat processing was being undertaken in the area. Pottery sherds varied from Chaff-tempered wares to Ipswich and North French grey wares, suggesting a fairly tight date range of AD730-750.

7.42 Two pits in the southeast corner of the site, [8572] and [8645], were both sub-circular. Pit [8645] truncated pit [8663], OA6 and pit [8572] was cut straight into grey layer (8656), OA5. Pit [8572] measured 1.22m by 0.94m and had a depth of 0.28m. The fill (8571) was a dark grey brown silty clay containing 5.5kg of animal bone. The small size of this pit in comparison with others containing large quantities of bone would suggest that this fill was the result of general waste dumping rather than its specific function. Pit [8645] measured 2.26m by 0.80m and had a depth of 0.60m. Four fills were identified (8649, 8648, 8644 and 8643) all of which were barren of datable evidence and with only occasional pieces of animal bone in (8649) and (8643).

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7.43 A sub-circular pit [8803] cut layer (8796), OA6 and measured 1.12m by 2.00m and had a depth of 0.98m. Two fills (8802) and (8801) were grey/brown clayey silts. Chaff-tempered pottery retrieved from the secondary fill (8801) was dated to AD550-AD750. One further pit [8798] cut linear feature [8808], OA6 and was sub-circular measuring 1.90m by 1.40m with a depth of 0.33m. This was filled with a brown/grey sandy silt with frequent lenses of gravel, animal bone, shell and charcoal inclusions.

STRUCTURE 5 (Figure 7)

7.44 Two stakeholes [8430] and [8403] and a small posthole [8410] were located in the east-west extent of the north end of the site. The two stakeholes both cut layer (8432), OA7 and posthole [8410] cut layer (8406), OA7. Stakeholes [8430] and [8403] were both 0.07m in diameter with depths of approximately 0.10m. Both cuts were filled with grey sandy silts (8429) and (8402), suggesting that the posts had decayed *in situ*. Posthole [8410] was sub-circular, measuring 0.22m by 0.18m with a depth of 0.10m. Although no obvious pattern or function could be gleaned from these features fill (8409) was similar to that of the two stakeholes, being light grey sandy silt and given their proximity it is possible that these features were related.

STRUCTURE 6 (Figure 7)

7.45 A layer of firmly compacted brown silty clay (8398) measuring 2.54m by 3.88m with a depth of 0.07m contained occasional charcoal flecks. It was located in the northwest corner of the site and overlay burnt deposits (8472) and (8432), OA7 and stakehole [8515], Structure 4. It was cut by eight features, seven of which were stakeholes roughly placed towards the edges of the layer. These stakeholes [8390, 8379, 8377, 8369, 8371, 8373 and 8387] had a slight variation in size but were all roughly 0.10m in diameter with a depth of 0.10m. The fills (8389, 8378, 8376, 8368, 8370, 8372 and 8386) were all grey sandy silts with little in the way of inclusions. The other cut [8375] was irregular in shape and may have been two intercutting postholes. It measured 0.66m by 0.21m with a depth of 0.14m. The fill of this (8374) was also a grey sandy silt and it was probably associated with the above stakeholes given its alignment (east-west). It seems quite likely that these features represent the remains of a structure. Layer (8398) may have been the remains of a floor surface with structural stakeholes cut into it to support a superstructure. This idea is undermined somewhat by the uneven layout of the stakeholes and it is possible that layer (8398) was not associated with the stakeholes at all other than physically.

OPEN AREA 8 (Figure 7)

7.46 A sub-square pit [8524] truncated pits [8526], OA7 and [8555], OA6. It was 1.00m by 1.00m and had a depth of 0.58m. The fill (8523) was a dark grey sandy

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silt with frequent charcoal flecks, daub and moderate quantities of animal bone. Chaff-tempered pottery and badorf-type ware (H) were recovered from the fill, dating the feature to AD675-AD750.

7.47 A sub-circular well [8785] cut pit [8798], OA7 and measured 1.64m by 1.68m with a depth of 1.77m (the base being at 15.00mOD). This feature contained 13 fills (8784-8772) of which only the secondary fill (8783) contained any datable evidence; chaff-tempered ware dating to AD550-AD750. The fills generally comprised dumped deposits of apparently domestic waste and slumped natural deposits of gravels and clayey silts, similar to deposits found in other wells already discussed (Open Area 7).

7.48 Three dump layers (8391, 8363 and 8364) overlay layer (8398) and underneath layer (8362) which sealed the stakeholes associated with layer (8398). These were all quite patchy, not exceeding 0.06m in depth, with maximum dimensions of 2.00m by 0.68m. Moderate charred remains were present in Sample 16, taken from (8362). Charcoal fragments from this sample were poorly preserved due to mineral deposits. However, four taxa were identified; *Maloideae* (Hawthorn, Rowan, Apple, Pear, Whitebeams), *Corylus* (Hazel), *Quercus* (oak) and *Prunus* (Blackthorn, Cherry). It is probable that further taxa are present in this sample, supporting the interpretation that this deposit was dumped, rather than *in situ.*

7.49 A layer of dark grey silty sand (8388) sealed layer (8367), OA7. This measured 3.22m by 0.98m and had a depth of up to 0.16m. It contained Chaff-tempered ware pottery, occasional inclusions of charcoal and shell flecks, with a large quantity of animal bone. This was probably a later equivelant to the grey layer (OA5) on a smaller scale, namely a dumped or spread out midden deposit.

7.50 Two layers (8646) and (8642) overlay layer (8647), OA7 at the east side of the site, the former measuring 3.00m by 2.40m, the latter measuring 1.30m by 0.94m. These were both very dark brown/grey with lenses of red clayey silt, possibly the result of burning. Daub and charcoal inclusions were prevalent in both deposits, suggesting that these were dumps of burnt material. Layer (8646) was dated to AD550-AD750 by sherds of Chaff-tempered pottery.

7.51 A layer (8760) of mixed light-dark brown gravels and clays sealed layer (8765), OA7. It measured 4.30m by 3.40m and contained sherds of Chaff-tempered ware pottery. Although its constituents differed from those comprising (8765), it appeared to be the result of the same dumping activity. Charred cereal grain was present in a sample (90) taken from layer (8760), dominated by barley with smaller amounts of free-threshing wheat and common mussel. Five taxa were also found to be present in Sample 90; *Corylus* (Hazel), *Ilex* (Holly), *Prunus* (Blackthorn, Cherry), fast-grown *Quercus* (Oak) and *Maloideae* (Hawthorn, Whitebeams, Rowan, Apple, Pear). It is thought that this material represents fire debris, possibly from a hearth.

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OPEN AREA 9 (Figure 7)

7.52 A single sub-square posthole [8393] cut layer (8388), OA8 and was 0.40m by 0.40m with a depth of 0.10m in the northeast part of the site. This contained a loosely compacted dark brown clayey silt (8392) fill with lenses of burnt clay but no datable evidence.

7.53 A layer of green/brown silty sand (8366) with large quantities of animal bone and occasional daub and shell inclusions overlay (8388), OA8, and covered an area of 2.44m by 2.18m. This had a maximum depth of 0.17m and was a layer of dumped material.

7.54 A dump layer of brown silty clay (8385) with charcoal inclusions overlay posthole [8393] (above) and covered an area measuring 2.50m by 2.50m with a maximum depth of 0.10m. This contained a moderate amount of animal bone inclusions. Pottery retrieved from the deposit was North French grey ware and dated to AD600-AD750. Sample 17 from this deposit retrieved charcoal containing four taxa; *Ulmus* (Elm), *Quercus* (Oak), *Corylus* (Hazel) and *Maloideae*. Overlying this was a further dump deposit of burnt grey/red sandy silt (8361) measuring 1.28m by 0.70m with a depth of 0.08m.

7.55 An irregular, roughly linear feature [8365] measured 2.40m by 0.60m with a depth of 0.18m and was cut into layer (8366). Given the slight depth and irregular nature of the 'cut' it is perhaps more likely that this feature was a depression rather than a cut feature. It was filled with a deposit of grey/red sandy silt (8359) containing frequent charcoal flecks and probably represents a phase of dumped demolition material. Chaff-tempered pottery dated this feature to AD600-AD750.

7.56 Partially sealing linear feature [8365] was a loosely compacted light grey sandy ashy silt (8360) covering a small area of 0.90m by 0.40m with a depth of 0.10m. This appeared to be a further deposit of the same event as the demolition debris fill (8359) in the linear feature [8365] it was sealing.

Period V: mid – late 8th century

7.57 No features were found from this period in the southern part of the site. This is due to later, horizontal truncation during the post-medieval period. Period V denotes another change in the use of the site. Several phases of compacted gravel layers were identified although little in the way of associated structural features was found. The presence of these gravel surfaces, postulated as being yard surfaces, does indicate that further to the occupation of the site in Period IV, Period V represents the next stage of occupation, where probable habitation, as opposed to general use of the site, has occurred. Although no clearly defined buildings could be identified, the presence of large postholes indicates that structures on a grander scale than simple animal pens were being constructed. Again, Chaff-tempered ware pottery was the prevalent pottery type in this period

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but an increase in the use of sandy wares is noticeable. Although the dating based on pottery alone does overlap with Period IV, the presence of shell-tempered pottery (AD770-850) in posthole [8530], Structure 7 (below), sealed by a layer (8362) through which many of the features from Period V are cut, provides a clear divide in the dating of the stratigraphy.

STRUCTURE 7 (Figure 8)

7.58 Six circular stakeholes [8507, 8509, 8511, 8513, 8517 and 8519] and two postholes [8528] and [8530] cut grey layer (8505), OA5, in the northwest part of the site. The stakeholes were all approximately 0.06m in diameter with a depth of 0.10m. The stakehole fills (8506, 8508, 8510, 8512, 8516 and 8518) were grey sandy silts none of which contained any inclusions or datable evidence, suggesting that the stakes decayed *in situ*. The two postholes were approximately the same size (0.17m by 0.15m by 0.28m deep) and contained similar fills (8527) and (8529). Posthole [8530] contained pottery sherds of chaff-tempered ware, Ipswich ware and Middle-Saxon shell-tempered ware, dating the posthole to between AD770 – 850. For this reason Structure 7 is located in Period V, rather than Period IV, despite being stratigraphically immediately above grey layer (8505), OA5. Although there were only eight features, they were on a very rough east-west alignment and may represent the remains of a fence line or animal pen

OPEN AREA 10 (Figure 8)

7.59 Layer (8362) measured 6.50m by 5.00m with a depth of up to 0.20m and sealed the stakeholes that comprised Structures 6 and 7. This was a dark grey green sandy silt with occasional charcoal and shell flecks. It was noted that this material was quite cess-like which would suggest that this was a spread of domestic waste, possibly reused for levelling the area.This deposit yielded a wide variety of pottery sherds including three forms of Sandy-ware, Surrey ware type C, North French grey ware, Chaff-tempered ware and other miscellaneous types.

7.60 A sub-circular pit [8504] measured 1.10m by 1.00m and had a depth of 0.21m. This was located in the heavily truncated central, west side of the site, truncating pit [8524]. The fill (8503) of this pit was a dark grey sandy silt with frequent inclusions of animal bone and the only instance of common periwinkle (Appendix P) on the site. Moderate quantities of charcoal flecks were also observed. Pottery retrieved from the fill was shell-tempered ware dating to AD770-AD850. Pit [8504] was recorded as being cut from below layer (8388), OA8. However, as aforementioned, this area had a concentration of intercutting pits, all with similar fairly homogenous fills and it is quite possible that it was in fact cut from higher up the stratigraphic sequence. For this reason the presence of Shell-tempered ware in the fill (8503) has been used as a guide as to its stratigraphic location.

OPEN AREA 11 (Figure 8)

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7.61 Four layers of grey/brown sandy gravels (8325, 8345, 8357 and 8358) were recorded across the northern part of the site, overlying layer (8362), OA10. These measured 2.60m by 2.42m, 1.25m by 1.00m, 1.40m by 0.90m and 6.00m by 2.50m respectively. Chaff-tempered pottery dated layer (8538) to AD600-AD750. These layers contained frequent animal bone and charcoal inclusions. These layers perhaps represent a gravel yard surface akin to those found at the Floral Street (AOC 2001) and the Royal Opera House sites (MoLAS 2003).

7.62 Eight postholes, [8356, 8322, 8320, 8309, 8305, 8300, 8287 and 8289], were identified in close proximity to each other and all cut the above gravel layers except [8320] which cut layer (8362), OA10. These were all approximately the same size (0.40m by 0.25m with a depth of 0.25m) and shape (sub-circular) aligned on a roughly east-west axis. The distribution of these features covered an area of approximately 5.00m but was uneven. The fills (8355, 8321, 8319, 8308, 8304, 8297, 8286 and 8288) were all grey/brown clayey silts with charcoal fleck and occasional animal bone inclusions. Chaff-tempered pottery retrieved from fill (8321) dated to AD600-AD750. Given the apparently random layout of these features, it may be that they are not directly related, or that other features, subsequently lost, might have demonstrated a more cohesive pattern. Looking at postholes [8320], [8305] and [8300] alone they form a reasonably convincing right-angle but with only 1.00m separating them it is not clear what function they may have served.

7.63 A linear feature [8278] also cut the gravels (8358). It was 1.50m by 0.20m with a depth of 0.16m and probably represents a beam slot. It contained a moderately compact grey clayey sand fill (8277) with occasional pieces of animal bone.

STRUCTURE 8 (Figure 8)

7.64 A possible floor layer (8318) of light yellow gravel measuring 2.30m by 0.70m with a depth of 0.15m overlay layer (8345), OA11 and was cut by four postholes, [8313, 8315, 8317 and 8341]. Postholes [8313] and [8317] were both sub-circular measuring 0.30m in diameter with depths of 0.20m. These were 1.00m apart (east-west). Between them posthole [8315] was sub-oval measuring 0.40m by 0.18m with a depth of 0.21m. Just to the south, posthole [8341] was a small circular cut measuring 0.10m in diameter with a depth of 0.11m. The fills of these features (8312, 8314, 8316 and 8342) were uniformly brown sandy silts with moderate quantities of animal bone. Chaff-tempered pottery from fill (8314) was dated to AD600-AD750. This collection of features had the appearance of being quite unified. Possibly posthole [8341] was a later addition to help shore up the original structure, explaining its smaller size and off-kilter location. A further small posthole or stakehole [8338] was recorded 2.40m to the north of Structure 8. This may be associated with this collection of features or possibly with Open Area 12 (see below).

OPEN AREA 12 (Figure 8)

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7.65 Overlying gravels (8325), OA11, was a layer of dark brown silty clay (8324) measuring 5.00m by 4.40m. This was immediately overlain by a thin layer of brown silty sand (8323). Neither of these features contained any datable evidence and are likely to be the result of trample debris. A third layer (8336) overlay stakehole [8338], Structure 8, and appeared to be a dumped deposit of demolition material. This comprised green brown sandy silt with frequent lenses of charcoal, daub and burnt clay. Cutting through it were two further postholes [8328] and [8330] measuring approximately 0.20m in diameter and 0.18m deep. It is possible that stakehole [8338] was also cut through this deposit but missed during the excavation. If so it doesn't form any discernable pattern with these postholes. Both fills (8329) and (8331) were green/brown sandy silts with moderate charcoal fleck inclusions

7.66 Two shallow, sub-circular pits [8343] and [8296] were both approximately 1.00m in diameter and no greater than 0.40m in depth. Pit [8434] cut linear feature [8365], OA9 and contained a brown sandy silt fill (8344) with patches of burnt material throughout. It is probable that this was the result of infilling rather than burning *in situ* given the ratio of burnt material to the main fill. Pit [8296] cut the postholes of Open Area 11 and contained general domestic waste (8295) in a light brown/grey sandy silt matrix. Chaff-tempered pottery dated pit [8296] to AD600-AD750.

OPEN AREA 13 (Figure 9)

7.67 A layer of dark yellow sandy gravel (8332, 8326, 8294 and 8276) was the next stratigraphic deposit following those of Open Area 12. This was no more than 0.10m thick and contained few inclusions, suggesting this it was laid for a purpose, possibly a yard or a similar type of surface where hard-standing would be required. The overall flatness and the compacted nature of the deposit would tend to agree with this. It is likely that these deposits are related to those of Open Area 11, possibly an attempt to consolidate or reinstitute the surface after a period of dumping had obscured the original surface.

7.68 A small number of postholes and linear features were present in the surface of the gravel layer. Two postholes [8256] and [8254] and a small linear feature [8334] were clustered together within a 1m by 1m area. Posthole [8254] was heavily truncated and may, in fact, have been a pit, measuring 0.71m by 0.30 with a depth of 0.25m. Posthole [8256] had a diameter of 0.30m and was 0.22m deep. Both (from what was left) appeared to sub-circular. Linear feature [8334] was 0.48m by 0.10m with a depth of 0.04m. Possibly this was a beam slot although it is hard to see how it would have related to anything else in the area. All fills (8255, 8253 and 8333) were dark grey clayey silts with moderate charcoal flecks and occasional animal bone inclusions.

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7.69 A linear cut [8285] was aligned northeast-southwest cut into the gravel layer (8276). The eastern edge of it was completely truncated away. What remained measured 3.28m by 1.04m and had a depth of 0.25m. This contained a deposit (8282) of burnt material including Sandy ware, type D pottery dating to AD600-AD850.This was parallel to linear feature [8278], OA11, and it may be that the latter was in fact excavated through a later gravel layer that was subsequently lost to horizontal truncation. Alternatively feature [8285] may be a recut of the original feature [8278]. Despite the alignment and proximity of these features, the shallow, broad nature of the cuts would suggest that the features were not structural. Possibly these were for drainage towards the south. Linear cut [8285] did gently slope down towards the south with a drop of 0.07m over a 3.28m distance.

7.70 A sub-square cut [8268] was located 0.60m to the west of cut [8278], cutting gravel surface (8294). It had rounded corners, gently sloping sides and a flat base measuring 1.62m by 1.12m with a depth of 0.20m. It was filled by a dark grey clayey silt that contained large quantities of charcoal and general burning evidence (8266).

OPEN AREA 14 (Figure 9)

7.71 A layer (8279) of light brown sandy silt covered an area measuring 3.30m by 1.16m with a depth of 0.25m., overlying linear cut [8285], OA13. This contained occasional chalk flecks and animal bone inclusions. It was postulated as being a levelling layer.

7.72 Three postholes [8281], [8284] and [8291] cut layer (8279). These were all sub-circular and of similar size, measuring 0.40m in diameter with a depth of 0.40m. The fills (8280), (8283) and (8290) were all moderately compacted light grey clayey silts with occasional inclusions of animal bone and angular small stones or pebbles. These were aligned northeast-southwest although the spaces between them were uneven, the gap between [8284] and [8291] being 0.40m, the gap between [8291] and [8281] being 0.90m. It is not clear what these features were designed to support. It seems likely, however, that these features are indicative of human habitation of the area rather than simply using the space for dumping their waste and keeping livestock.

7.73 On the same alignment, 0.30m to the west, was a shallow linear cut [8271] measuring 2.56m by 0.63m with a maximum depth of 0.08m. This feature partially cut linear feature [8278] and gravel layer (8276), OA13. It had a very gradual profile and undulating base that was probably the result of wear rather than an actual cut. Its proximity and alignment to the postholes above may be coincidental or may indicate a path or route used by people outside the structure. It was filled with a loosely compacted grey/brown sandy silt (8270) containing occasional animal bone inclusions which appeared to have silted up naturally.

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7.74 Overlying layer (8279) was a compact layer of green/grey silty clay (8275) measuring 0.82m by 0.46m with a depth of 0.10m. This was immediately to the north of posthole (8284). It was not clear how, if at all, this related to the features in the vicinity but was probably a spread of trample material accumulated contemporary to the structure represented by postholes [8281], [8284] and [8291].

OPEN AREA 15 (Figure 9)

7.75 Open Area 15 represents a several phases of demolition deposition. These were fairly sporadic and mostly appeared to have been dumped onto the site rather than being from *in situ* demolition activity.

7.76 Sealing posthole [8284] and layer (8275), OA14, was a small spread (1.90m by 0.80m) of burnt grey/brown silt (8267) which was in turn overlain by a deposit (8264) of brown silty clay, representing a period of demolition dumping and measuring 1.70m by 0.50m. This was similar to, and probably was part of the same event as, (8263) which covered an area measuring 1.72m by 1.10m and sealed linear feature [8268], OA13. Both deposits were shallow, being no greater than 0.08m thick. Two further dumped spreads of burnt clay and charcoal (8303) and (8327) measuring 1.80m by 2.30m and 1.40m by 1.30m respectively sealed the features comprising Structure 8 and and postholes [8328] and [8330].

OPEN AREA 16 (Figure 9)

7.77 A firmly compacted, clean yellow sandy gravel layer (8250) covered an area measuring 3.40m by 2.70m and had a maximum depth of 0.20m, sealing layers (8263), (8264), OA15 and linear feature [8271], OA14. Other than small sub-angular stones this deposit was devoid of inclusions and was more than likely a deliberately-laid surface. It also represents the last phase of gravel surfaces on the site and probably served the same or similar function to previous gravel surfaces recorded in Open Areas 11 and 13. To the east of layer (8250) was a further small (1.40m by 0.70m) layer (8148) of yellow gravel which was in effect the same deposit but had been truncated by post-medieval activity.

STRUCTURE 9 (Figure 9)

7.78 A linear feature [8152] cut gravel deposit (8148), OA16 and measured 0.80m by 0.20m with a depth of 0.13m aligned north-south. This contained a fill (8151) of dark yellow/orange clayey silt with few inclusions other than a small amount of animal bone. Probably this represents a beam slot. Immediately to the east of this feature was a deposit of closely packed stone (8147) in a dark grey silty matrix (8149). This was recorded as being within cut [8150] which cut (8151). However, it seems more likely that cut [8150] preceded linear feature [8152] or was at least contemporary with it, resulting in a stone surface with a beam slot running flush down its western extent. Unfortunately the stone deposit (8147) was heavily truncated to its south and east, leaving its interpretation unclear. The remains of

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this deposit measured 1.20m by 0.70m. Although the stone was tightly packed, the bonding material (8149) was loosely packed making it unlikely bonding material for a wall. Either this was a deliberately dumped deposit or the remains of a surface of some kind. In view of the beam slot [8152] and the fact that this stone must have been deliberately imported and was only located in one small part of the site, the latter seems more likely.

OPEN AREA 17 (Figure 9)

7.79 Once the gravel surfaces (8250) and (8148), OA16 had been abandoned and the features comprising Structure 9 had fallen into disuse, further dumping of demolition deposits took place. Overlying the features comprising Structure 9 was a series of dumped thin bands of dark yellow clay (8146-8141) discoloured by burning and separated by lenses of charcoal Chaff-tempered pottery retrieved from deposit (8144) dated to AD600-AD750.

7.80 A single posthole [8249] cut gravel layer (8250), OA16 This was 0.35m in diameter and had a depth of 0.23m with steep sides coming straight down onto a flat base. The fill (8248) was a brown/grey clayey silt with no inclusions.

7.81 Two further postholes [8273] and [8302] were cut into layers (8303), OA15 and (8345), OA11 respectively. They were approximately 10m to the south of posthole [8249] and were roughly the same size (0.40m in diameter with a depth of 0.25m). The fills (8274) and (8301) were both grey/brown sandy silts with occasional charcoal and shell flecks.

Period VI: late 8th – mid 9th century

7.82 Period VI marks a final change in the function of the site. The evidence for human habitation in Period V was replaced with general waste dumps and pits, perhaps reflecting a period of withdrawal or abandonment. Pottery from these deposits was also more varied and in greater abundance, with an increase in later pottery such as Ipswich, North French and Shell-tempered wares. Many of the features from this period contained pottery with the potential to make the dating of them earlier. Stratigraphically, however, their dating was squeezed to a tighter, later timeframe within the range suggested by the pottery.

OPEN AREA 18 (Figure 10)

7.83 An oval pit [8293], filled with a dark brown silty clay (8292) containing frequent animal bone and shell inclusions cut layer (8324), OA12. Ipswich-ware pottery (AD730-850) and charred barley and wheat (Sample 9) were retrieved from this deposit. Hazelnut shell and common mussel (Appendix P) were also present in this sample. The condition and quantity of charcoal, containing 300+ fragments including *Quercus* (Oak), *Fagus* (Beech), *Corylus/Alnus* (Hazel/Alder) and *Acer cf. campestre* (field Maple) is likely to represent dumped fire debris. This was

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partially truncated by a deep pit or well [8262]. This was sub-circular measuring 1.50m in diameter with a depth of 1.43m. It was filled with a compacted dark yellow sandy gravel (8261) thought to be a deliberate infill to provide a solid ground surface. This in turn was cut by a small pit [8260] with steep sides and a concave base. This contained a fill (8259) of grey silty clay. Frequent animal bone and shell fleck inclusions were present, suggesting a general domestic waste pit.

7.84 A layer of dark brown sandy clayey silt was recorded across a substantial part of the northern end of the site. This was given four context numbers (8258, 8223, 8225 and 8227) due to later truncation. Lenses of gravel with charcoal flecks, shell and animal bone inclusions were identified. North French Greyware pottery retrieved from layer (8227) dated to AD600-AD850 while Ipswich ware from layer (8258) dated to AD730-AD850. This deposit had a maximum depth of 0.20m and appeared to be a general dump or 'trample' layer.

7.85 Two dumped layers (8272) and (8269) of brown/grey silty sand overlay layer (8303), OA15 and postholes [8302] and [8273], OA17. They were overlain by a charcoal-rich dumped deposit (8265), containing North French Grey ware and Sandy ware, type D dating to AD600-AD850, and a dumped spread of loosely compacted red/brown silty sand (8257). These all covered areas of approximately 2.00m by 2.00m. While they all exhibited signs of burning activity the ground surface below showed no such damage, suggesting these deposits were dumped rather than produced *in situ*.

7.86 At the south end of the site a further dump deposit (8771) of dark grey/brown sandy silt sealed layer (8791), OA6, covering an area measuring 2.20m by 1.00m. This contained inclusions of 110 fishbones (all vertebrae including eel, salmonid, plaice/flounder and cyprinid), common mussel shell (Appendix P), charcoal, burnt clay and numerous pottery sherds of chaff-temper, shell-temper and north French grey wares, dating the deposit to AD770-AD850. Over 50 examples of charred cereal grain, including barley, wheat, rye and oat were present in Sample 95 taken from deposit (8771). It also contained charred wild plant seeds including vetch/tare/cetchling and stinking mayweed. Five taxa were present in this sample: *Fraxinus* (Ash), Maloideae (Hawthorn, Whitebeams, Rowan, Apple, Pear), *Acer* (Maple), *Corylus* (Hazel) and *Quercus* (Oak). To the east of this was a deposit of yellow/brown sandy silty gravel (8788), thought to be dumped due to its loose compaction.

7.87 Two large pits [8764] and [8311] cut layers (8771) and (8327), OA15 respectively while two small pits [8641] and [8383] cut layer (8642), OA8 and pit [8556], OA6 respectively. The larger pits both contained fills (8763) and (8770), and (8310) and (8306), pertaining to dumps of waste material. Fill (8763) contained two fragments <222> and <224> of quern, one with a slightly worn face, the latter with both the upper and lower faces present. A small quantity of large charcoal fragments was also retrieved, comprising slow grown *Fraxinus* (Ash) and fast-grown immature *Quercus* (Oak). A sample (94) from fill (8770) contained barley

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and free-threshing wheat grains and also some occasional grains of rye and oats. Overlying the fills of pit [8311] were two layers (8299) and (8298) which had slumped into the cut following the subsidence of the dumped fills. These were both loosely compacted, the latter containing chaff-tempered and Ipswich ware pottery sherds dating to AD730-AD850. The smaller pits were both sub-square with rounded corners. Neither fill (8640) nor (8384) contained much in the way of inclusions although animal bone was present in both and Ipswich ware pottery sherds from (8640) dated the feature to AD730-AD850. Possibly these smaller features were deliberately infilled once they had ceased to serve their function, resulting in the more sparse finds assemblage. The larger pits are likely to have been used as waste pits.

7.88 Two circular wells [8767] and [8758] cut layers (8765), OA7, and (8760), OA8, respectively in the southwest corner of the site. These were both recorded as being cut from approximately 16.85mOD although this may well have been higher due to horizontal truncation by later, post-medieval activity. Both bottomed-out at approximately 15.10mOD and had steep, straight sides. The fills of these wells (8766), and (8863, 8757 and 8756) all appeared to be waste dumps with moderate – large amounts of animal bone. Pottery sherds from fill (8766) varied from chaff-tempered wares, North French grey wares to shell-tempered wares, dating the feature to between AD770-850.

OPEN AREA 19 (Figure 10)

7.89 A layer of firmly compacted grey/yellow silty clay (8222, 8224 and 8226) overlay trample deposits (8223, 8225, 8227 and 8258), OA18. This deposit contained few inclusions and no datable evidence. A single posthole [8231] cut through layer (8222) and measured 0.20m in diameter with a depth of 0.15m. The fill (8230) was a grey silty clay containing little other than some occasional charcoal fleck inclusions.

7.90 Two layers (8243) and (8340) of moderately compacted brown/green clayey silts overlay layers (8258), OA18 and (8361), OA9 measuring 3.20m by 5.50m and 0.50m by 0.40m respectively. These were both shallow deposits of no greater than 0.10m depth and other than some occasional animal bone and shell inclusions was barren of datable evidence. It is possible that these layers represent general occupation/trample layers.

7.91 A layer of moderately compacted yellow sandy gravel (8786) overlying layer (8771), OA18 measured 2.60m by 2.40m in the southwest corner of the site. It is likely that this represents a dump of natural gravels produced from the excavation of deep features such as wells [8767] and [8758].

7.92 Five shallow pits [8200, 8221, 8229, 8252 and 8242] (no more than 0.40m deep) were sub-circular or oval in shape, stratigraphically later than Open Area 18. These were all filled with dark grey or brown sandy silts (8199, 8220, 8228, 8251

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and 8241) containing occasional animal bone and shell inclusions. Ipswich ware pottery was retrieved from fill (8199) dating it to AD730-AD850. A sixth, large pit [8187] was recorded measuring 3.00m in diameter with a depth of 0.80m. It had steep, slightly undercutting sides and a flat base. The west side of the pit had slumped into the cut, forming a grey/brown gravelly fill (8216). A patchy light blue/grey sandy silt (8211) formed a primary deposit, thought to be naturally silted due to the general dearth of inclusions. One find <7> was a worked bone needle missing the lower part of the shaft (Appendix J). The final two fills (8186) and (8169) both contained large quantities of animal bone (cow and sheep) and pottery within dark brown/grey sandy silt matrices. Fill (8186) also contained 3 goose bones and 7 chicken bones while fill (8169) contained sherds of North French grey ware, Ipswich ware, Chaff-tempered ware, Surrey type (type B) and Badorf-type ware (E). Given that pit [8187] truncated the surrounding stratigraphy to the natural brickearth, the presence of one sherd of Chaff-tempered ware may well be residual from an earlier context. Allowing for this the date range is AD670-850. It is probable that these represent waste deposits. The size and shape of this pit combined with the silted deposit (8211) would suggest that it was designed for a different purpose to those observed elsewhere on the site. The waste dumps (8186) and (8169) were only deposited once the original purpose of this pit was defunct. Although bigger, this pit echoes the shape of pit [8790] (Open Area 6) and may have performed a similar, albeit unclear, function.

OPEN AREA 20 (Figure 11)

7.93 A layer of moderately compacted brown/grey clayey silt was heavily truncated by later activity and consequently given three context numbers: (8213, 8214 and 8215). These all contained frequent animal bone, charcoal flecks, shell and daub inclusions. North French grey ware, Ipswich ware, and Badorf type ware (B) gave a date range of AD730 – AD850. Due to the amount of bone (over 7kg) it is postulated that this layer represents a dumped or spread out midden that was spread as the site was levelled.

7.94 Three layers (8168, 8167 and 8166) overlay pit [8187], OA19, and were burnt deposits. A well-used, tongue-shaped hone <65> and Chaff-tempered and Ipswich ware pottery sherds were retrieved from layer (8166). Layer (8167) produced approximately one thousand bone fragments weighing 1.1kg. The majority of this assemblage consists of sheep-sized fragments with occasional goose and pig bones. Sample 1 from layer (8167) contained moderate charred cereal remains and charred wild plant seeds which could have been variously grassland plants or arable crops weeds, including seeds from vetch/tare/vetchling and stinking mayweed (Appendix Q). The large amount of charcoal retrieved from the sample (approximately 300 fragments) contained two taxa, *Quercus* and *Prunus*, the former including immature and fast-grown wood. The quantity of charcoal probably represents *in situ* fire debris. Common mussel and common whelk were also present in this sample.

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7.95 Pit [8240] cut pit [8252], OA19 and layer (8257), OA18 and was sub-circular, measuring 2.32m by 1.60m with a depth of 1.00m. This was heavily truncated on all sides by later activity. It contained a fill (8239) of dark brown/grey sandy silt with frequent animal bone and shell inclusions. A second pit [8246] appeared to be sub-circular but was heavily truncated so that the top of the pit had been completely removed. It also cut pit [8252], OA19. The remnants of this pit measured 1.00m by 0.95m with a depth of 0.45m. It contained a fill of loosely compacted dark brown sandy silt (8247) with frequent animal bone, charcoal and daub inclusions which appeared to be a general waste deposit.

7.96 Overlying pit [8240] was a thick (0.25m) layer (8234) of loosely compacted yellow/orange silty sand that measured 2.20m by 1.72m and contained occasional charcoal and shell fleck inclusions. This was probably dumped material.

OPEN AREA 21 (Figure 11)

7.97 Four shallow pits [8210, 8197, 8195 and 8233] all cut features from Open Area 20 apart from pit [8195] which cut pit [8197]. All of these pits contained similar grey/brown clayey sandy silt fills (8209, 8196, 8194 and 8232). Fill (8209) contained Ipswich ware pottery dating to AD730 – AD850, fill (8194) contained miscellaneous imported oxidised wares of the same date range.

7.98 A fifth, much larger pit [8219] measured 1.70m by 1.30m with a depth of 0.85m and cut pits [8246], [8383] and layer (8234), OA20. Pit [8219] was sub-circular in shape. A primary fill (8218) of moderately compacted dark grey sandy silt with frequent charcoal and shell inclusions and moderate amounts of animal bone was dumped into the cut as general waste material. The secondary fill (8217) was much the same in composition but contained a large quantity of animal bone (nearly 7kg), again suggesting the pit was being used as for domestic waste. Two sets of context numbers were assigned to this pit. For the purposes of this text the original set have been used but the cut was also numbered [8380] with the fills being (8381) and (8382).

7.99 Layers of dark orange/yellow sand (8212), grey/yellow sandy silt (8206) and dark yellow sandy clay (8157) overlay features from Open Area 20 and all covered areas of approximately 2.00m. These all appeared to be dumped layers.

7.100 A single posthole [8165] was cut into layer (8157). This was circular and measured 0.30m in diameter and had a depth of 0.07m. Its fill (8164) was a loosely compacted yellow/brown sandy silt containing occasional flecks of charcoal and shell but no datable evidence. What function this posthole had, and how, if at all, it related to layer (8157) is not clear. Given the depth of the cut it is quite possible that it was cut from higher up but was subsequently horizontally truncated by post-medieval activity.

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7.101 A linear cut [8395] measured 2.40m by 0.36m and had a depth of 0.16m. It was aligned roughly east-west, and cut layer (8399), OA5. Both ends were truncated by later activity. Its fill (8394) was a dark grey sandy silt with animal bone and shell inclusions. This feature was probably a ditch. The shallow nature of it can be in part explained by later horizontal truncation, as is demonstrated by the drop in height from east to west (17.20mOD to 17.05mOD).

7.102 A single stakehole [8208] cut layer (8215), OA20 and measured 0.40m by 0.32m and had a depth of 0.40m. It had very straight sides which tapered to a point and was filled with a moderately compacted dark brown/grey sandy silt (8207) with animal bone inclusions, suggesting that the stake had subsequently been removed and backfilled.

OPEN AREA 22 (Figure 11)

7.103 Open Area 22 represents the latest phase of activity dating to the Saxon period. This was characterized by a series of waste pits and dump layers, many of which appeared to have been horizontally truncated by post-medieval activity. A layer (8154) of loosely compacted green/brown sandy silt contained large quantities of animal bone. Pottery retrieved from the fill was Chaff-tempered ware, Ipswich ware, Middle Saxon Shell-tempered and North French grey ware, dating it to AD770-AD850. This was no more than 0.15m thick and appeared to be a dumped deposit.

7.104 Cut into layer (8154) were two pits: [8156] and [8245]. Pit [8156] had an irregular shape with steep sides and a flat base. It measured 2.00m by 1.00m with a depth of 0.35m. Pit [8245] was semi-circular (due to later truncation) with steep sides and a flat base measuring 2.04m by 1.00m with a depth of 0.15m. Given the depth of these two features it is probable that these were both horizontally truncated by later, post-medieval activity. Both fills were dark grey/brown sandy silts (8140) and (8244) containing frequent animal bone and shell inclusions. Fill (8244) also contained Badorf type ware (H) pottery dating to AD675-AD850. These pits were probably waste pits, most likely of originally greater dimensions than those that remained.

7.105 A small pit [8139] also cut layer (8154) and was sub-oval with gradually sloping sides and a concave base measuring 0.44m by 0.30m with a depth of 0.09m. It is possible that this feature was actually a posthole but the presence of animal bone, shell and lenses of gravel within the fill (8138), a grey/brown sandy clay, would suggest that if this were the case the post was subsequently removed and the cut infilled.

7.106 Two large rubbish pits [8173] and [8203] cut pits [8200], OA19 and [8557], OA6 respectively. These were both broad, approximately 2.00m in diameter, and filled with loosely compacted dark grey/brown sandy clayey silts (8172) and (8202). Both fills contained large quantities of animal bone and charcoal flecks. Ipswich

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ware pottery dated pit [8173] to AD730 – AD850. A single sherd of residual East Gaulish Samian ware was also retrieved dating to between AD150-300. Fill (8202) contained Middle Saxon Shell-tempered, Sandy ware (type B) Chaff-tempered and Ipswich ware pottery dating the fill to AD770 – AD850. A secondary fill (8201) within pit [8203] of moderately compacted dark grey/brown sandy clayey silt contained frequent shell and animal bone inclusions. This appeared to be simply a secondary phase of waste dumping rather than marking a change of use, probably after the primary fill (8202) had time to subside.

7.107 A small, semi-circular pit [8181] measuring 0.55m by 0.24m with a depth of 0.30m had steep sides and a concave base and cut pit [8195], OA21. This contained a fill (8180) of firmly compacted brown/grey sandy silt with occasional animal bone inclusions, probably a dumped deposit. It is possible that this was a posthole although there were no features associated with it to confirm this.

7.108 A dumped deposit (8192) of brown/grey sandy silt with frequent animal bone and shell inclusions overlay pits [8233] and [8380], OA21 covering an area measuring 3.24m by 2.98m. This was overlain by a second phase of dumping (8155) of similar consistency and dimensions containing pottery sherds of Badorf type ware, North French grey wares, Chaff-tempered wares and Ipswich wares dating to AD730 – AD850. A large, well-formed hone (or whetstone) <6> was also retrieved from this deposit. It was so well made that it may in fact be of post-medieval date. It is possible that it may be intrusive given that layer (8155) was the latest Saxon event recorded on the site.

Period VII: mid-late 17th century

7.109 Extensive building remains were recorded across the site overlying the Saxon deposits. Dating of these structures was largely based on the bricks as infilling and overlying deposits were a homogenous deposit of backfill dating to the 19th century. However, comprehensive sampling of the structures' bricks has demonstrated that many of these bricks were reused, with dates ranging from 1500 to 1900 across the stratigraphic matrix. In light of this the structural remains have also been compared with the historical maps (AOC 2003) in order to define the period of construction and abandonment more closely.

OPEN AREA 23

7.110 A layer (8130) was stratigraphically the earliest post-medieval deposit. This covered much of the site, overlying Open Area 22, and was a dark brown/grey clayey silt. This deposit represents a trample and general rubbish layer through which all the surviving post-medieval structures were cut. In places this deposit was completely truncated by either horizontal or vertical truncation. Sherds of residual Saxon pottery (Middle Saxon Shell-tempered and Ipswich ware) were retrieved from this layer, along with bricks and a peg-tile dating to 1666-1900. This layer was probably deposited immediately after excavations for the

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subsequent basement buildings were completed and seems likely to represent the events of the 1670's, when the 5th Earl of Bedford was granted a royal charter for the right to hold a market. It was shortly after this that Tavistock Court was first laid out (AOC 2003).

7.111 Cut into this layer were three pits, [8586, 8591 and 8602]. The former two features were both sub-circular and due to truncation were given a second set of context numbers [8588] and [8593] while the latter was sub-rectangular. These all appeared to be waste or rubbish pits, containing fills (8585, 8590 and 8603) of dark grey sandy silts with building material and animal bone inclusions.

Period VIII: late 17th – early 19th century

7.112 The post-medieval structures on site nearly all appeared to be contemporary as they were built on a primarily north-south axis or were at least at right-angles to this. Furthermore, construction did seem to be working to a plan as a central spine wall (8081) running east-west across the centre of the site marked a dividing line from which everything was added to, projecting north or south. It is probable that, having carried out the excavations for these basement structures, construction was undertaken immediately afterwards in the 1670's. The lease plan of Bedford Ground dating to 1795 clearly shows a boundary line corresponding with this wall although further details are not depicted, suggesting that the bulk of the structures identified during the archaeological excavations were in use for the duration of the 18th century and probably up until the mid 19th century. In 1856-61 the Duke of Bedford demolished the buildings on site as part of renovations to ease congestion in the area.

7.113 Two drain cuts [8794] and [8578] (Figure 12) were recorded in the south part of the site aligned north-south. These cuts were both approximately 0.80m wide and lined with red bricks (8751 and 8577), capped with a combination of large limestone slabs or bricks set on edge. The brick lining for these drains had been packed with a dark-light brown silty clay, presumably for waterproofing as much as solidity. Drain [8794] contained a thin silted deposit of grey silty sand (8750) over which was deposited a secondary fill of demolition material similar to the 19th century general demolition material (8002) (see below) noted over the whole site. Part of a broken headstone was used to cap this drain (Appendix D).

7.114 Drain [8794] was widened at its north end to accommodate a square structure (8744). This was contemporary with the drain, being within the same cut and clearly delineating the northern extent of the ensemble structure. The drain was also fed by two smaller drains (8753) and (8759), extending 1.20m to the western limit of excavation. Again these were contemporary, being cut and built in the same phase of construction.

7.115 1.00m to the east of drain [8794] was a square brick-lined soakaway [8795], probably to act as an overflow for the main north-south drain [8794]. This was

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filled with late dumped rubbish material (8745) containing a large quantity of broken pottery, clay pipe and building material. The pottery assemblage included two sherds from a plate with lotus and millet decoration on the front and concentric rings on the underside of the base, dating to the 1730s. Further sherds were decorated with lotus and peony and another with two shades of blue and devolved bamboo motif on the back dating to the mid 18th century. Three glass objects included a shallow moulded polygonal salt with star pattern cut into the base, a small stopper with a hollow spherical head <161> and a near complete small oval-bodied perfume bottle in purple glass <153>, all dating to the late 18th or early 19th century. The base of an onion bottle with high domed kick, a large bottle probably for some form of medical preparation and the rim and neck of an unusual mould-blown bottle in pale green were also recovered from fill (8745). Two of the earliest clay tobacco pipes (type OS10) were retrieved from this deposit dating to 1700-1740. The dating of the assemblage would suggest that the feature had become defunct prior to the Duke of Bedford's demolition of the area in the mid 19th century. All of these features were lined with red bricks.

7.116 Drain [8578] was fed from a soakaway [8584] at its northern extent. This was circular and measured 1.20m in diameter. It was lined with red bricks dated to 1666 – 1900, packed with a compact light grey sandy clay (8582) and infilled with dumped rubbish material (8581). This last context contained 39 sherds of pottery weighing 192kg and ranging from 1745-1780 in date. The earliest sherds included three rare teabowls with celadon glaze and 'anhua' (hidden decoration on the outer surface), two non-matching bowls with the sacred fungus symbol on the underside, one of which has not been seen before by members of the Oriental Ceramic society. A very rare spittoon in tin glazed ware was also retrieved along with a beaker dating to *c*. 1720-40 and a guglet, or bottle-shaped vessel, used for holding water for washing the hands and dating to c. 1750. A stemmed wine glass in clear leaded glass with simple flutes <155>, dating to the 1740's was also recovered from this deposit along with a complete jelly glass <154> dating to the mid 18th century and four nearly complete inverted, slightly marvered bottles dating to the early 18th century. .

7.117 Soakaway [8584] was in turn fed from the northwest by a curvilinear channel [8630], again lined with bricks (8595) dating to 1725-1900 on either side but tiled along its base. This noticeably sloped down towards soakaway [8584]. It measured 1.00m wide and 2.30m long to the point where it was horizontally truncated. The cut was lined with a packing fill (8629) of firmly packed brown silty clay. A silted deposit (8610) of loosely compacted clayey silt filled the brickwork.

7.118 Two drains aligned north-south were recorded in the north half of the site. Drain [8120] was 0.60m wide and 2.60m long, lined with red brick. The top of this drain was lost to later truncation. It was filled with a mid grey/brown sandy silt (8119) with frequent rubble inclusions, similar to the general demolition material (8002), and containing pottery sherds of creamware, English Porcelain and transfer

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printware dating to between 1780 and 1807. Two spoons <111> and <112> were recovered from fill (8119). These were both hallmarked suggesting they were originally silver-plated. A single type AO27 clay tobacco pipe dating to 1780-1820 was also retrieved from this deposit.

7.119 Parallel to drain [8120] and 1.00m to the east was a second drain [8118]. The same method was employed for the construction of this feature and it measured 2.70m by 0.60m. No datable evidence was retrieved from the fill (8117).

7.120 To the south of these drains was an east-west brick-lined drain [8171]. This was lined with red brick (8124) and (8136), and at its west end fed into a sub-square brick-lined pit [8161] measuring 1.40m by 1.60m with a depth of 1.20m. Pit [8161] partially truncated a square, bricklined pit [8741] of unclear function to the south Transfer print ware, creamware and English Porcelain pottery sherds were retrieved from the fill (8159). This pit was capped with substantial sandstone slabs (8125), measuring 550mm by 440mm with a thickness of 130mm. Pit [8161] was also fed by a red-brick drain (8123) from the north. Only the floor surface of this structure survived measuring 1.50m by 0.46m. A farthing-sized coin <4> with a bust right on the obverse with the legend COLUMBIA and a seated figure, probably Britannia, on the reverse was recovered from the brickwork.

7.121 No evidence was found to indicate that these features were used for anything other than water drainage. Had these drains been used as sewers it would be reasonable to have expected some residue to have remained on the brick lining. The location of these drains on either the north or south side of wall (8081) reinforces the significance of it as a starting point for all works carried out in the post-medieval period. On the basis of the pottery dating from these features it would appear that the site was abandoned some years before the demolition of the upper levels, the later sherds dating to the early 19th century.

7.122 A deposit (8573) of loosely compacted dark grey sandy silt was slumped into the top of well [8658], OA6. The depression was allocated a cut number [8574]. This was not observed until layer (8130) had been removed. Its location in this period is based on the pottery retrieved which dates to 1807-1900. Among a range of factory-made wares was a miniature saucer in creamware. Of possible 18th or 19th century date was a near complete small oval bodied perfume bottle in purple glass with raised decoration on the flat faces and sides <153>. A rectangular glass bottle with bevelled corners and a small long-necked bottle or flask were also retrieved from deposit (8573) and may have contained some form of pharmaceutical liquid. Two further pieces of glass were retrieved from this deposit, one piece was thin and may have been part of a lantern, while the other was of uncertain function. Two loomweights <74/75> measured 160mm in diameter and were fairly standard in both fabric and form. Loomweights <102> and <105> contained chalky/calcerous inclusions but no flint. Weight <102> has obvious finger impressions on the other side. A further weight, <103> contained

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a white coating inside the perforation, a feature that has been noted elsewhere. A row of 12 impressions are present on this weight, grouped in fours over 75mm, with 6mm gaps between them. Three large pieces of iron were recovered from deposit (8573), <139>. The longest piece is rectangular in section (length 165mm long, width up to 17mm, thickness 9mm), while the shorter piece is *c* 9-10mm square (length 100mm). The shortest piece has a right-angled return, with a broad flat arm (width *c* 25mm, thickness *c* 6mm); this tapers towards the angle and continues to taper, both in thickness and width, towards the end. This is obscured by corrosion but seems to be a rounded point (length of this arm *c* 87mm). These pieces are probably the remains of structural fittings. The same context contained a sub-triangular fragment of sheet metal (<133>). Part of a sawn sheep bone was also recovered <188>, along with a tine <187> that had knife marks, probably the result of testing to gauge whether the bone had been adequately soaked prior to working tine. Three type AO27 clay tobacco pipes were dated to 1780-1820. Two were decorated with Masonic symbols and the other with abolitionist motifs of Britannia and a grateful freed slave. A large animal bone assemblage (comprising 417 fragments weighing 10.04kg) was collected. This provided the usual mix of cattle, sheep/goat and pig, with occasional chicken and goose. Rabbit and turkey were also present, indicating further the post-medieval date of this context. A number of sawn sheep and cattle-size bones were discovered from the same deposit, signifying a method of butchery seen on London archaeological sites dating from the 18th century onwards

BUILDING 1 (Figure 13)

7.123 The upstanding structures were effectively divided into two basement buildings (being below ground level); one extending north from wall (8081), one to the south. These were then subdivided by their rooms. The rooms to the north varied in size and, apparently, function although nearly all were cellar-type structures designed for storage. The method of building reflects this, demonstrating an organic growth rather than following a detailed plan of works. In the central part of the site a large storage room (8087) was constructed measuring 3.65m by 2.90m. Its east and west walls (8070) (brick sample dating to 1500-1666) and (8080) were of a considerable width (measuring 0.80m and 1.10m respectively) probably in order to take the pressure of a vaulted ceiling, the evidence of which was recorded towards the top of these walls, where they began to curve inwards. Also noticeable about these walls was the presence of a thin plaster covered in paint or whitewash. It seems likely that this had some utilitarian purpose (possibly damp-proofing) for the room would have been too dark, being underground, for one to appreciate any touches of decoration. Room (8087) contained a predominantly tiled floor (each tile measuring 255mm by 255mm) on a sand bedding. In its northwest corner, where the entrance was located, the tile had been replaced with red brick at a later date, presumably due to robbing of the tiles or general wear. This room was filled with 19th century demolition material (8002).

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7.124 Cellar room (8079), to the east of room (8087) was square (1.90m by 1.90m) and again its walls (8081), (8080), (8031) and (8078) were lined with whitewashed plaster. The floor of the room was lined with tiles measuring 260mm by 140mm.

7.125 A room (8021) immediately to the north of room (8079) was stratigraphically later. It measured 2.50m by 2.70m and contained the remnants of a brick-lined floor (8028) overlying a bedding of firmly compacted dark brown gravelly silt (8027). In the southeast corner an apsidal structure (8032) was recorded. This was sunk into the floor by 0.28m with brick-lined sides and a tile-lined base. This was fed by a curvilinear drain (8033) from the northeast. This comprised the same build but was capped with large tiles which in turn were covered by brick floor (8028). At the south side of apsidal structure (8032), where it butted against wall (8031), a hole had been knocked through to room (8079). It is postulated that the apsidal structure was a crude latrine, flushed by drain (8033) into room (8079). Overlying the tile floor (8137) was a thick deposit of light yellow/green sand, possibly intended to cover the smell. If this is the case it seems likely that room (8021), or at least the installation of the apsidal structure (8032), was a later addition given the crudeness of the hole through to room (8079). However, this is belied somewhat by the lack of any entrance to room (8079). Several other rooms were observed as being later blocked up but no evidence could be found for such activity in this instance, implying that it was designed with the one purpose in mind.

7.126 A small room (8035) originally accessed from the northwest corner of room (8021) but subsequently blocked up with wall (8026), measured 2.40m by 1.24m. This had a tiled floor (8044) at the west end. To the east end these were replaced with red bricks, probably because they were more versatile when installing a small ramp (8043) of tile up to room (8021). Possibly this should be seen more as a corridor between rooms (8087) and (8021) than a room in itself.

7.127 A room (8086), adjacent to room (8087) on its west side, measured 3.50m by 1.34m. The floor of this room was largely robbed, leaving only a few broken tiles and bricks on a bedding layer of firmly compacted dark grey silty clay (8083). This room had the remnant of a vaulted ceiling still *in situ* and its entrance, from the north end, had been blocked up with wall (8068). At the south end of the room, butting against wall (8081) was a square, brick structure (8076) measuring 0.58m by 0.46m. Directly below this was a brick-lined pit [8176] filled with 19th century demolition backfill (8174). It is not definite that this pit was related to square structure (8076). Once recorded structure (8076) was machined away and only at this point did pit [8176] become apparent. The location, however, would suggest the two features were related.

7.128 Room (8088), to the west of room (8086) measured 3.50m by 2.60m and was accessed through an entranceway at its northeast corner. Most of the floor (8077) was either robbed or destroyed leaving the dark grey/brown silty clay beneath. The southwest corner of the room had been walled off with a one-brick wide wall

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(8075) which was very flimsy and only built to a height of 0.54m. A deposit (8085) of loosely compacted dark red/brown sandy silt was recorded within the parameters of this wall. While this was distinct from the main 19th century backfill (8002), it still resembled a deposit of rubbish or backfill. Transfer print ware dated it to 1780-1900, while five AO30 clay tobacco pipes decorated with leaves along the stem dated to 1850-1910, indicating it must have been contemporary with the demolition/backfilling episode. Possibly wall (8075) represented the limits of an interior rubbish dump, added to the room once its initial function had gone out of use.

7.129 Aligned north-south in the northeast corner of the site was a brick arch (8015) measuring 5.00m by 0.70m (although it was heavily truncated along its eastern side). This was aligned parallel to wall (8001) and underneath its buttress walls (8005) and (8004). At its north end it butted against wall (8020) and at its south end against (8006). Unless it was accessed from the east there would have been no means of accessing this feature. Possibly this was constructed as a means of shoring up wall (8001). The presence of buttress walls (8005) and (8004) would suggest that there was a certain amount of subsidence that needed to be dealt with on the east side and building an arched structure may have proved to be the most cost-effective means of doing this, certainly in terms quantity of materials. Horizontal truncation was more extensive this far north of the site and the overall function of wall (8001) was not entirely clear. It is reasonable to assume, however, that at a width of up to 0.80m and with the aforementioned buttress walls supporting it, wall (8001) was supporting a significant amount of weight and probably represents a load-bearing (possibly exterior) wall.

7.130 In the corner formed by wall (8001) and (8006) a room (8009) measured 2.70m by 1.86m. This had a tiled floor (8007) on a bedding of firmly compacted light grey mortar. In the northeast corner of the room was a brick-built fire place (8008) which still had the debris from the last fire *in situ* (8018). This contained, among various pieces of building material, five dwarf inkpots, two of which were in London stoneware dating to the late 18th/early 19th centuries (Appendix C). The fireplace, both in terms of its size and contents, was for a domestic function.

7.131 Adjacent to room (8009), on the west side of wall (8011), room (8049) measuring 2.70m by 2.00m was recorded. If a floor surface ever existed it had subsequently been robbed or truncated leaving little to suggest what function this room might have served. On the far side of its northern, east-west wall (8053) was a small brick tunneled structure leading to a stone grate (8051). The grate itself measured 0.30m by 0.30m with several small holes worked through it. The smooth finish of the stone hints at being the result of water action over a period of time. Although the grate did not have any obvious drainage channel below it, the area had been disturbed by later activity. It is postulated that it did originally connect to drain (8054) to the west (see below).

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7.132 A brick-lined drain (8054) was aligned north-south at the north end of the site. This measured 2.00m by 0.40m and differed from the aforementioned drains in being capped with slate sheets rather than limestone slabs or bricks.

7.133 Two substantial brick structures were recorded in the northwest corner of the site. Both of these appeared to be later in date based on their size and the bond (which was much firmer than most of the structures in the area). An 'L' shaped brick wall (8050) measured 1.30m by 1.70m. Immediately to the south an irregularly shaped brick structure (8057) with a recess built into its centre measured 1.90m by 1.70m. A brick sample from structure (8057) was dated to 1500-1666. As already stipulated, this may well have been reused from an earlier structure. These structures did not appear to be related to the cellar rooms discussed above.

BUILDING 2 (Figure 13)

7.134 The southern half of the site was more significantly truncated than the north. Those structures that survived differed from those in the north in that they were larger and of a different function. Evidence for vertical flues suggested that these rooms may have been used to heat the floors above, at ground level. Although the southern half of the site had been subjected to greater truncation, those surviving remains do correspond with the Lease Plan of Bedford Ground dating to 1795 which shows that the southern end of the site was occupied by 32-34 Tavistock Street (AOC 2003).

7.135 A single room (8337) was recorded measuring 3.00m by 3.00m. This comprised brick walls with a tiled floor (8348) which had been partially robbed and replaced with bricks (8350) in its southeast corner. To the southeast of this was an apsidal brick structure (8353), overlying soakaway [8584] and probably forming the upper element of this feature.

7.136 To the west of room (8337) a structure was recorded measuring 3.00m by 5.00m. The western wall (8098) was 0.60m wide and had brick pillars (8104) and (8105) built on top of it at intervals of approximately 1.20m, forming 'windows' between them. It is likely that these were used to provide easy access to whatever lay to the west. In the northeast corner an irregularly shaped brick pillar (8100) had a sub-rectangular hole cut through from the top, emerging near its base on its west face. This contained a moderate amount of burning debris and was thought to represent a heating flue for the structures that would have been above it. Possibly the 'windows' to the west were used to supply fuel to this room which appeared function as a heating area for the structures that would have been above.

7.137 The remnants of a structure were recorded in the southeast corner of the site. This appeared to have several phases of reparations added to it along it northern, east-west wall (8560). These walls only survived to a height of approximately 0.15m due to later truncation. A structure (8565), similar to that recorded in Building 1, (8057) was located in its northeast corner. Immediately adjacent to this was a

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second vertical flue structure (8566). Possibly the proximity of this structure to recessed structure (8565) suggests that the latter's recess was used to store fuel for the flue. This may also indicate a function for the similar structure in the north part of the site (8057).

Period IX: Mid 19th Century

Open Area 24

7.138 Sealing Buildings 1 and 2 was a substantial deposit of demolition material (8002). While this varied in consistency and inclusions, it was generally a loosely compacted dark grey/brown sandy silt with frequent building material inclusions and several pottery types from a broad range of periods but narrowed to 1850-1900 by the presence of Majolica ware pottery. Also included in the pottery assemblage were Chinese porcelain, Creamware, English porcelain, London Stoneware, post-medieval redwares, Surrey Hampshire border redware, Refined white earthenware, Staffordshire type black glazed ware, Sunderland type coarseware. Stafforshire salt glazed stoneware, transfer print wares, yellow earthenware (slip-coated) and various tin glazed wares. Three type AO27 clay tobacco pipes with leaves down the front and back seams of the bowl dated to 1780-1820. A commemorative medallion <1> in honour of Frederick, son of George III, Duke of York and Albany, was retrieved from this deposit, commemorating his death on 5th January 1827 (Appendix E). A glass bottle from deposit (8002) of marvered mallet form, with a slightly inverted body profile is similar to bottles found in America dating to 1729-1735 (Appendix F). Also of interest from deposit (8002) was the base of a mould-blown condiment jar of at least quadripartite form, designed to fit in a tray. A further, small square-sectioned bottle in aqua-coloured glass contained "the original and genuine [R]owland's [M]acassar Oil," from "No. 20 Hatton Garden London" (Appendix F). This represents the period of demolition instigated by the Duke of Bedford in 1856-61, which evidently involved tearing down the buildings above ground level and using the elements to backfill the *in situ* basement rooms. Generally the datable evidence was concentrated towards the base of deposit (8002), where it was more firmly compacted, suggesting that the structures had been abandoned and used for dumping rubbish prior to the deliberate backfilling episode.

Period X: Late 19th - late 20th Century

Open Area 25

7.139 The 19th century backfill (8002) was cut by construction cuts for the Covered Way wall to the west and the London Transport Musuem basement wall to the east. The modern bedding layer (8039) and concrete ground slab (8038) were installed in 1993 when the whole internal area was levelled.

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8 SUMMARY OF SITE ARCHIVE AND WORK CARRIED OUT

Stratigraphic Site Archive

8.1 The quantities of records in the stratigraphic archive for the site are as follows:

Stratigraphic Site Archive	Excavation
Trench Record Sheets	7
Plans	220
Section Sheets	9
Section Register Sheets	1
Levels Sheets	67
Registered Finds Sheets	2
Stratigraphic Matrices	5
Photographic Register Sheets	13
Environmental Sample Register Sheets	4
Photographs, Black & White	7
Colour Slides	6
Digital Photographs	313
Context Sheets	868

Work carried out on the stratigraphic archive

8.2 The work carried out to date is as follows:

- Site records have been completed.
- A cross-referenced context register has been completed – Appendix A of this assessment document.
- A stratigraphic matrix has been compiled (Appendix B).
- The contexts have been put into preliminary period groups based on the stratigraphic information and dating provided by specialists.
- Plans and sections have been digitized and layered according to the stratigraphic period and phase.

9 SUMMARY OF FINDS, FINDS ARCHIVE AND WORK CARRIED OUT

Quantification of finds and samples

9.1 All of the finds have been washed, marked and quantified where appropriate.

9.2 All bulk samples, where appropriate, have been processed.

9.3 The quantities of finds are as follows:

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Find Type	Quantity
Stone objects	56 fragments
Coins	6
Glass sherds	78
Loomweight fragments	69
Metalwork	57 pieces
Saxon Pottery	871 sherds
Post-medieval pottery	220 sherds
Slag	5 pieces
Crucible	6 pieces
Mould	1 piece
Worked Bone	45 pieces
Ceramic building material	2387 pieces (177kg)
Clay tobacco pipe	38 pieces
Worked flint	4 pieces
Animal bone	13,300 pieces (505.7kg) – hand collection 6,710 pieces (19.82kg) – sample residues
Mollusc	125 pieces (1.119kg)
Environmental samples	39 flots
Human Bone	2 inhumation 9 cremation

9.4 Assessments have been made of the finds recovered under the following artefact categories:

- Amber and Worked Stone
- Coins
- Glass
- Loomweight
- Metal finds
- Pottery
- Slag, crucible and mould
- Worked Bone
- Human Bone
- Building material

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- Clay pipe
- Flint

- Animal Bone

- Mollusc

- Conservation

- Environmental

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10 REVISED RESEARCH AIMS

10.1 Initial assessment of the data recovered from the site at London's Transport Museum has answered some questions and raised further questions pertaining to the original aims of the investigation. The revised aims in general terms are focused on the need to put the findings in their local and regional context, with particular reference to important local excavations such as those at the Royal Opera House and Jubilee Hall.

10.2 Additional questions that should be addressed are:

Early Saxon burials.

- Can a more definite date be applied to the inhumation and cremation burials? If so can they be attributed to the pagan 'cemetery' that survived the expulsion of Mellitus in AD616/617 or do they predate the brief christianisation of *Lundenwic*?
- Does the change in burial practice mark the cross-over from Early Saxon pagan burial rites to Middle Saxon Christian?
- Was the alignment of the inhumation burials significant? If so why is the southern burial aligned east-west with grave goods while the northern burial is aligned north-south with no grave goods?
- Does the distribution of the cremation and inhumation burials demonstrate the development of *Lundenwic* towards the north? Can tighter dating of the burials give some idea of how long this progression took?
- How do the inhumation burials compare in date and style to other inhumation burials in *Lundenwic*?
- What is the significance of the presence of the first cremation burials to be found in *Lundenwic*?
- Do any features other than the burials date to the Early Saxon period? If so, how do they relate, if at all, to the burials?
- What can be learned from the juvenile cremation burial given the general absence of Early Saxon children from the archaeological record?
- What can the goods buried with the cremation burials tell us about the status of the individuals?

Middle Saxon Cut Features

- What was the function of the pits? Given the amount of animal bone recovered from them, do they reflect industrial activity, such as an abattoir? Were they originally excavated for this purpose?
- Are the different shapes between the two main types of large pits significant? Do they reflect different functions?
- Why were the wells focused in the southern part of the site? Is this symptomatic of the general encroachment to the north?

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Middle Saxon Gravel deposits

- How do the gravel deposits compare with those found at other sites in the vicinity, such as the streets found at the Royal Opera House site?
- Were the gravel deposits excavated on site, explaining the large quantity of deep pits and 'wells', or were they quarried from the large pits to the west of the site, near the National Gallery?
- What was the function of these gravel deposits?

Structural Evidence

- What can be gleaned from the fragmentary structural evidence? Could the occasional spreads of clay/brickearth represent internal floor surfaces of otherwise undetected buildings?
- What is the significance of the substantial stone feature in the northeast corner of the site? Did this represent a structure or simply a dump? Are there any other examples of stone built structures dating to the Saxon period in the area?

Other Saxon

- How widespread was the phase of demolition activity in the north half of the site? Has it been recorded elsewhere in *Lundenwic*? Was this a deliberate hostile event, deliberate domestic event or accidental? If the former, can it be tied into a documentary or archaeological event?

Summary

10.3 Outlined above are various issues that have been thrown up by the archaeological stratigraphy recorded on site. Together with the original research aims, these need to be addressed both in terms of further analysis of the site archive and research into other, local sites. Some consideration should also be given to the wider context in terms of imports from areas further afield, such as Kent.

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11 RESOURCE ALLOCATION

11.1 Proposed times for further tasks and other project requirements

Item	Task	Resource	Time (days)
	Analysis		
1	Saxon Pottery	Lyn Blackmore	10.5
2	Post-medieval pottery	Lyn Blackmore	2
3	Thin section / chemical analysis of pottery	Alan Vince	1
4	C14 dating of soot deposits	SUERC	2
5	Amber and worked stone	Lyn Blackmore	6.25
6	Glass	Lyn Blackmore	4
7	Loomweights	Lyn Blackmore	5
8	Metalwork	Lyn Blackmore	6.25
9	Slag, crucible and mould fragment	Lyn Blackmore	2.25
10	Worked bone	Lyn Blackmore	1.5
11	Human bone	Melissa Melikian	11
12	C14 dating of human bone	SUERC	4
13	Building material	Ian Betts	6
14	Clay tobacco pipe	Tony Grey	1.75
15	Animal bone	Kevin Reilly	43.5
16	Environmental material	Kevin Reilly	5.5
17	Charcoal	Phil Austin	8
18	Conservation	Liz Goodman	23.5
19	Finds illustration	Les Capon	8
20	Finds photography	Andy Choppin	1
21	Finds reports edit / management	Fiona Seeley	5
	Reporting		
22	Integration of evaluation	Andy Leonard	1
23	Further analysis of archive	Andy Leonard	5
24	Interpretation / matrix / phasing	Andy Leonard	5
25	Research	Andy Leonard	5
26	Archive report narrative	Andy Leonard	15
27	Publication	Andy Leonard	15
28	Illustration	Jon Moller	10
29	Editing/management	Ron Humphrey	5
30	Liaison with EH/Journal	Andy Leonard	2
31	Archiving	Paul Fitz	6

11.2 Catalogue of further post-excavation work

Analysis

1 Saxon Pottery

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Further analysis and preparation of the publication text, with particular focus on the potentially Early Saxon cremations and related early deposits in order to establish the date of the first phase of activity on the site. Also, further research to finalise the fabric codes of the imported wares. Prepare for archive deposition.

2 Post-medieval pottery
Prepare note on the assemblage with discussion of the Chinese porcelain and other sherds of interest.

3 Thin section/chemical analysis of pottery
Undertake thin section/chemical analysis.

4 C14 dating of soot deposits

5 Amber and worked stone
Further analysis and preparation of the publication text. All finds to be prepared for deposition with LAARC archive.

6 Glass
Research finds that have not yet been paralleled and refine the dating of the post-medieval drinking glasses. Analysis of the possible bead from (8829) <236> by XRF. Preparation of the publication text. Finds to be prepared for deposition with LAARC archive.

7 Loomweights
All the objects to be prepared for archive. Comparison of dimensions and fabrics with assemblages from Floral Street and other Lundenwic sites. Preparation of specialist text.

8 Metalwork
All the Saxon finds to be re-xrayed and cleaned prior to analysis. Research parallels for the finds from the grave group and cremation. Consider the distribution of the objects ub the grave and their function, and compile a catalogue. Prepare a discussion of the brooch and other significant metalwork.

9 Slag
Chemical analysis of the crucible fragment <233>. Further analysis and integration into the publication text.

10 Worked bone
All finds to be given proper accession labels. Consideration to be given to the distribution of finds in order to determine the earliest date of the industry. Preparation of the publication text.

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11 Human bone
Full osteological analysis with an inventory of the bones from the inhumations and comparison with other inhumations in Lundenwic. Inventory of the cremations to be created and radiocarbon dating to be carried out on the two better preserved cremation deposits and the inhumations.

12 C14 dating of human bone
The two better preserved cremation deposits and the two inhumations will undergo accelerator mass spectronomy (AMS) radiocarbon dating.

13 Building material
Discussion of the reason for the presence of Roman building material on the site. Discussion of wattle and daub construction techniques, comparison with other sites in London and selection of daub for illustration. Cross-reference the building material assemblage with the stratigraphical sequence and dating evidence. Prepare publication text.

14 Clay tobacco pipe
Research the pipe makers' identities and the Masonic material, illustrate the Prince of Wales feathers pipe, two of the Masonic pipes and the abolitionist pipe, and prepare report text.

15 Animal bone
Record the Saxon and post-medieval animal bones, carry out analysis and prepare report text.

16 Environmental material
Analyse eight rich samples, five less rich samples and prepare report.

17 Charcoal
Analysis of 8 contexts, entailing examination of 100 fragments from each context for fragment identity and, where possible, assessment of the relevant abundance of woods present. Comparison also to be made within and between context types.

18 Conservation
Analysis and investigative work, illustration and stabilisation for the archive.

19 Finds illustration

20 Finds photography

21 Finds reports edit/management

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Reporting

22 Integration of Evaluation and Watching Brief: Andy Leonard
Bring the results of the Evaluation and Watching brief undertaken in 2003 into the results reported in this assessment.

23 Further analysis of the archive: Andy Leonard
Further analysis of the archive needs to be undertaken to address the research questions identified.

24 Interpretation/Matrix/Phasing: Andy Leonard
Incorporation of dating, finds and environmental records, with any necessary updating of the site phasing and interpretation.

25 Research: Andy Leonard
Further research to be done for interpretation and assessment of finds and features in a wider context.

26 Archive Report Narrative: Andy Leonard
Archive report text, with description of sequence of contexts, interpretive publication text to be drawn from this.

27 Publication: Andy Leonard
Publication text and revisions.

28 Illustration: Jonathan Moller
Location, phases, for final report and publication.

29 Editing/Management: Ron Humphrey
Editing of final report text and figures, general project management.

30 Liaison with County Arch/Journal: Andy Leonard

31 Archiving: Paul Fitz
Preparation of the site archive, photographs and finds in line with London Archaeology Archive Resource Centre (LAARC) standards.

32 Publication Costs
Based upon an estimated 30 pages in LAMAS.

33 Expenses and Materials
Materials Inc finds boxes, bags, labels and delivery of finds to museum.

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12 POTENTIAL FOR PUBLICATION

12.1 It is intended that the site will be published to academic standards in the Transactions of the London and Middlesex Archaeological Society. It is anticipated that the publication will be approximately 30 pages long.

12.2 The text of the publication will include:

- a summary of the results;
- a description of the stratigraphic sequence;
- specialist finds reports;
- and a discussion of the significance of the results in their wider context.

12.3 The publication will also require:

- illustrations (site plan, phase plans, detail area plans, sections);
- suitable photographs;
- and illustration of artefacts.

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500m 0 2 km

1:50 000

Figure 1: Site Location

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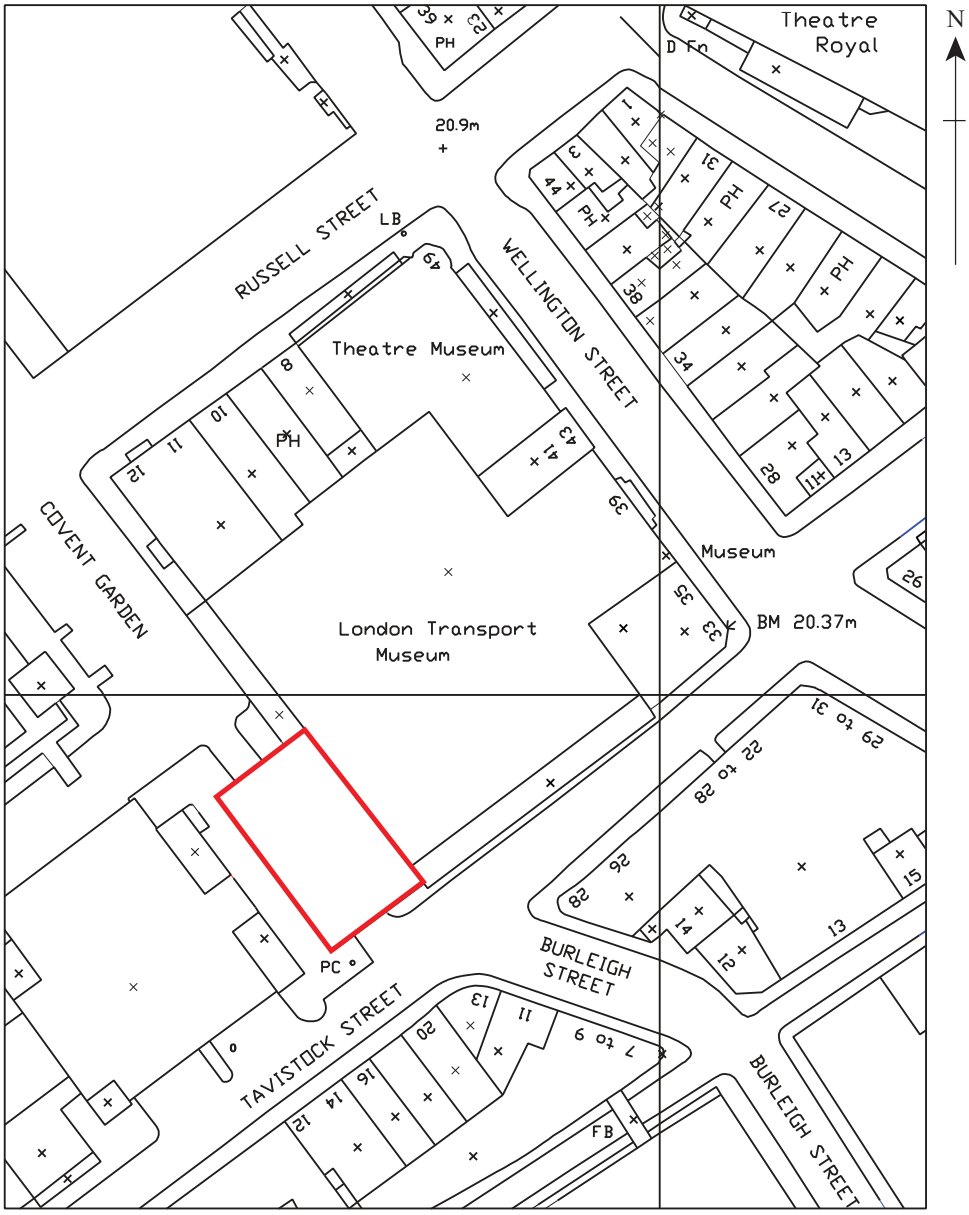

Based on the Ordnance Survey's 1:1250 Superplan of 2001
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Figure 2: Detailed Site Location

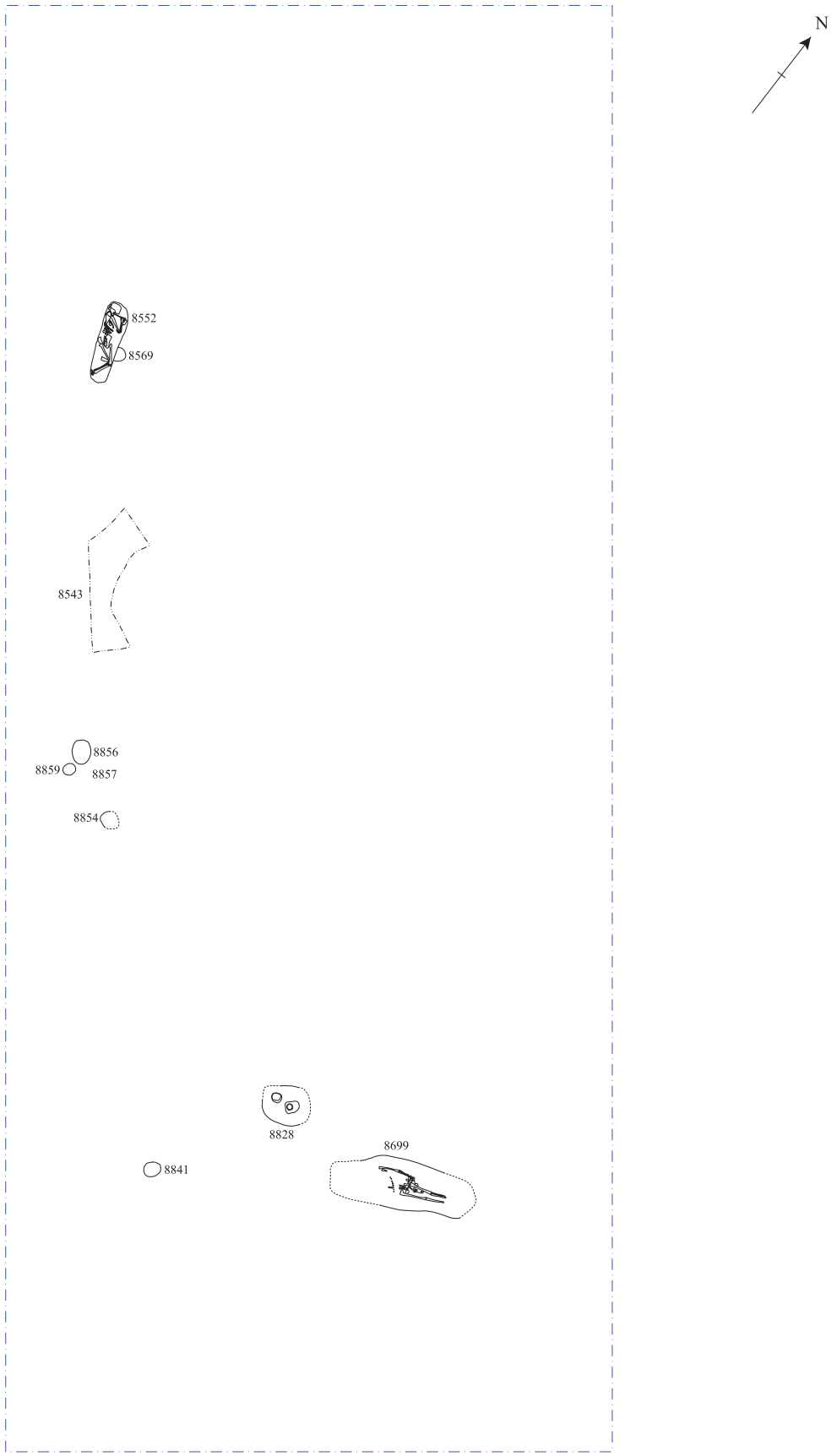

Figure 3: Plan of Period 2

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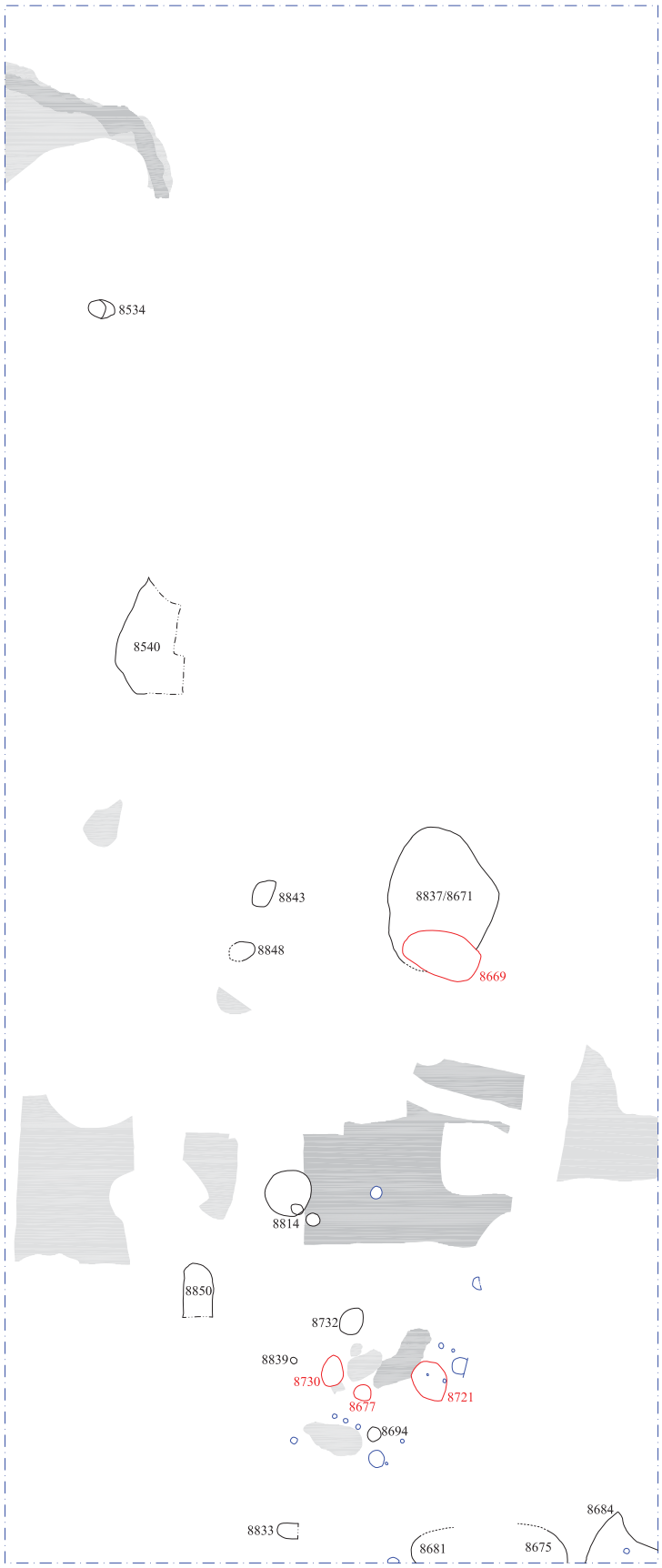

Figure 4: Plan of Period 3

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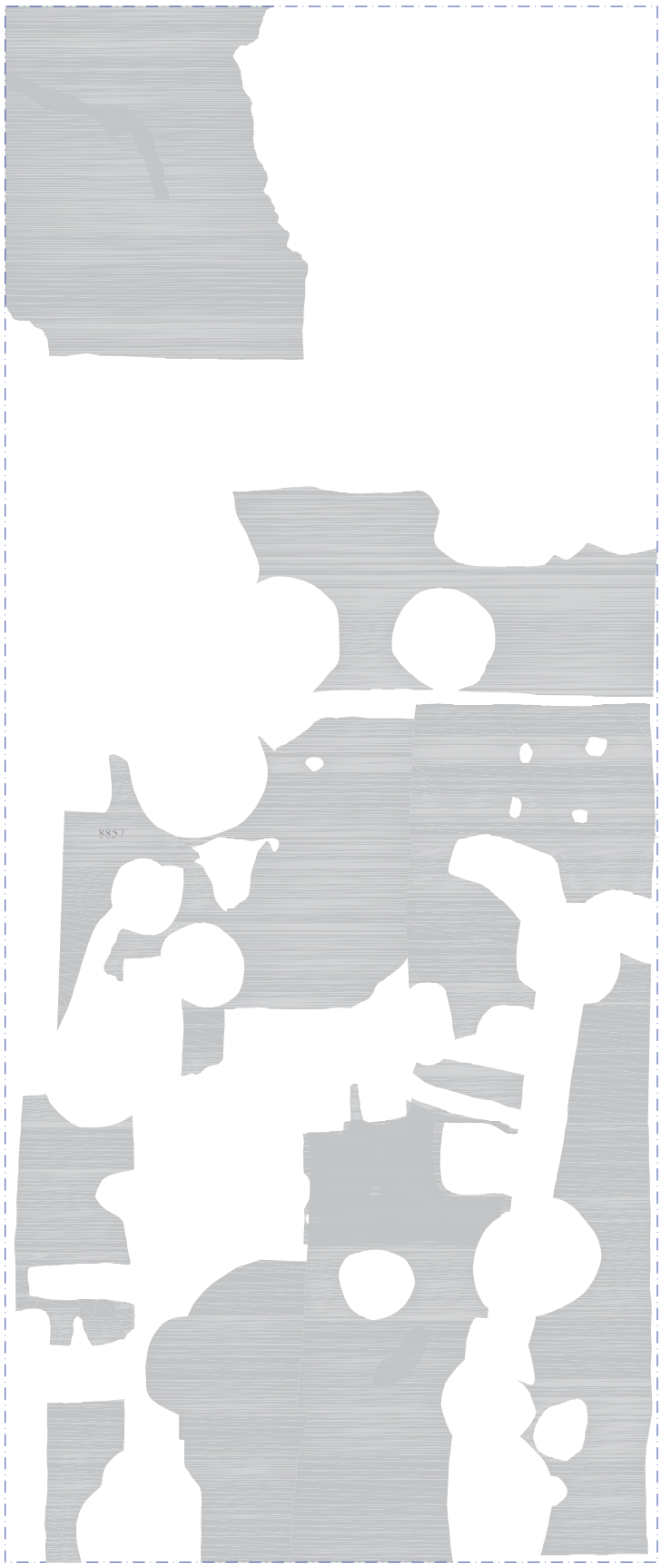

Figure 5: Plan of Period 3: OA5

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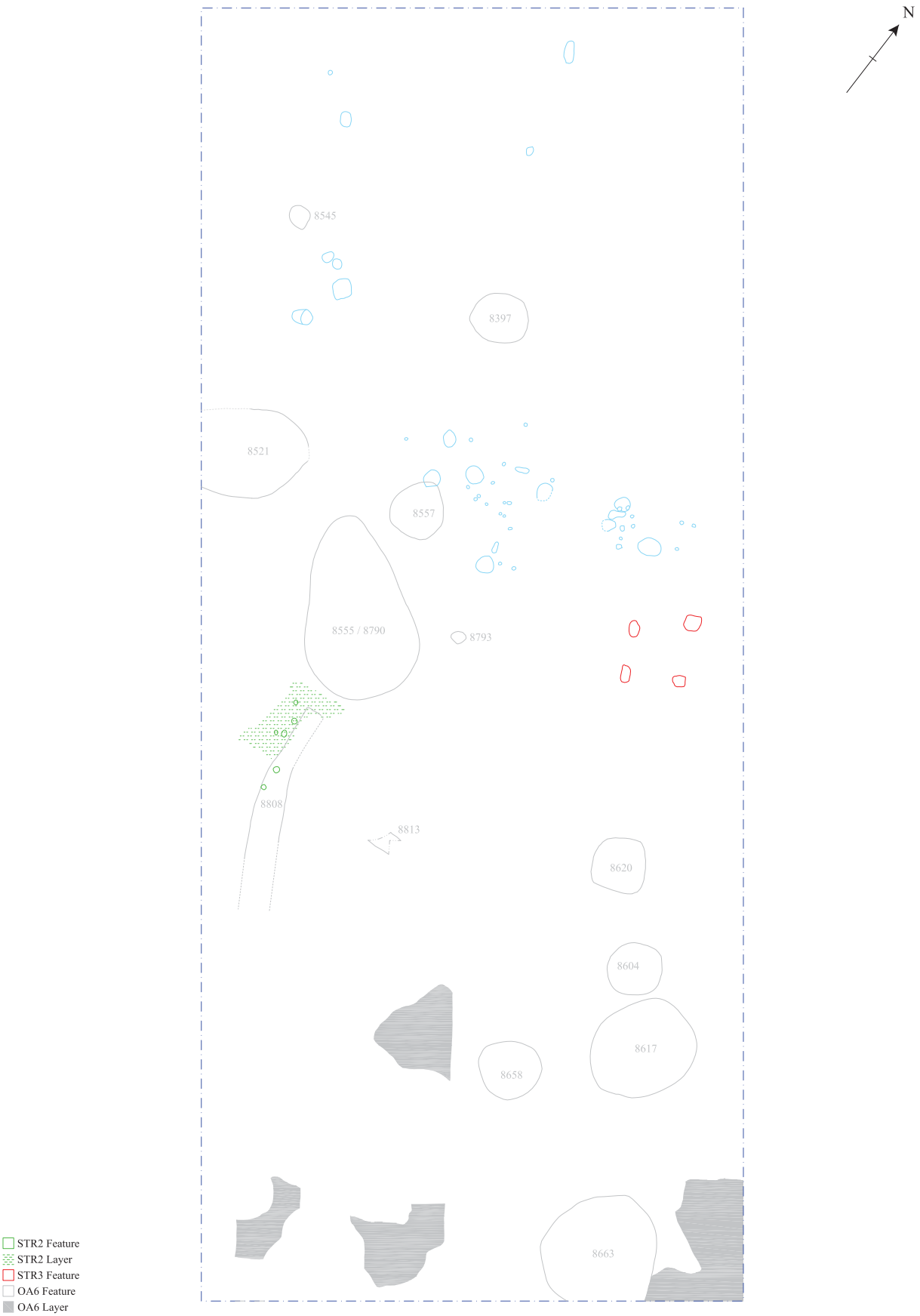

Figure 6: Plan of Period 4: STR2, STR3, OA6 & STR4

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Figure 7: Plan of Period 4: OA7,STR5, STR6, OA8 & OA9

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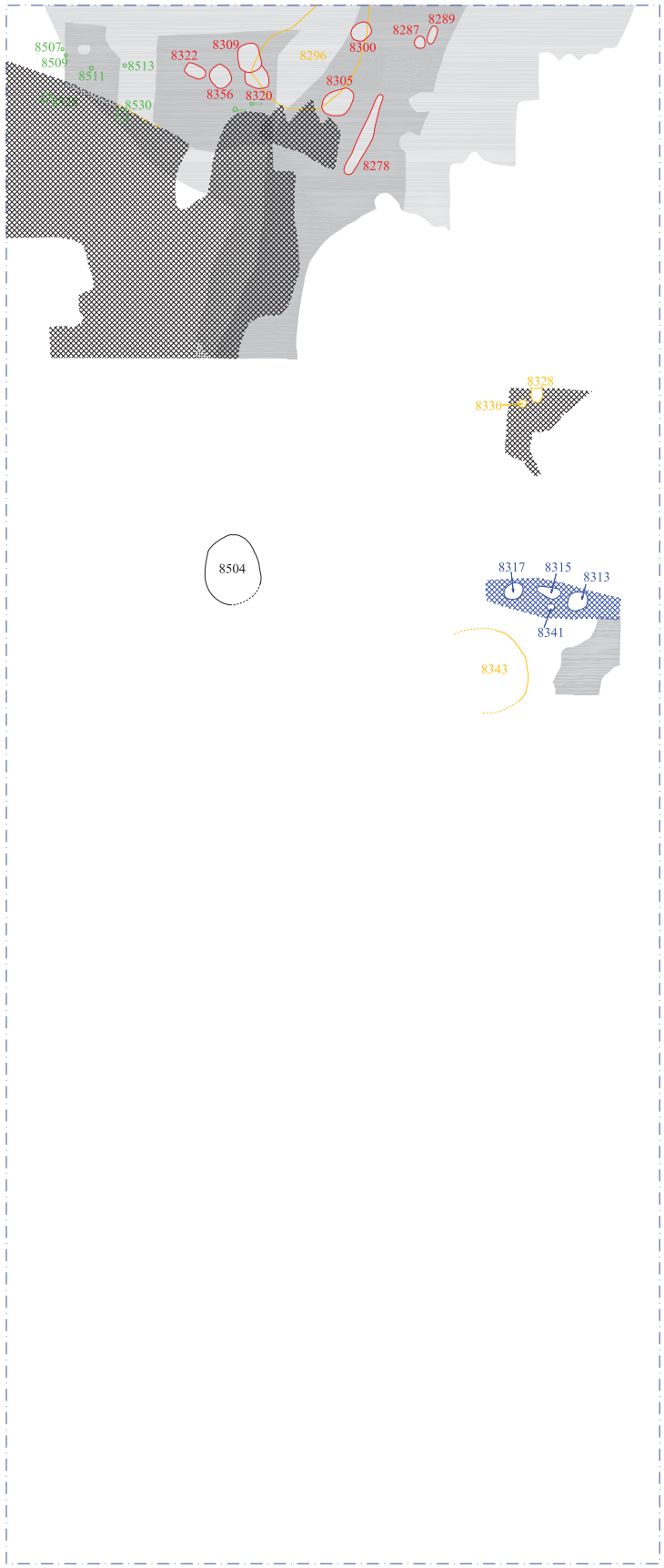

Figure 8: Plan of Period 5: OA10, OA11, OA12 & STR8

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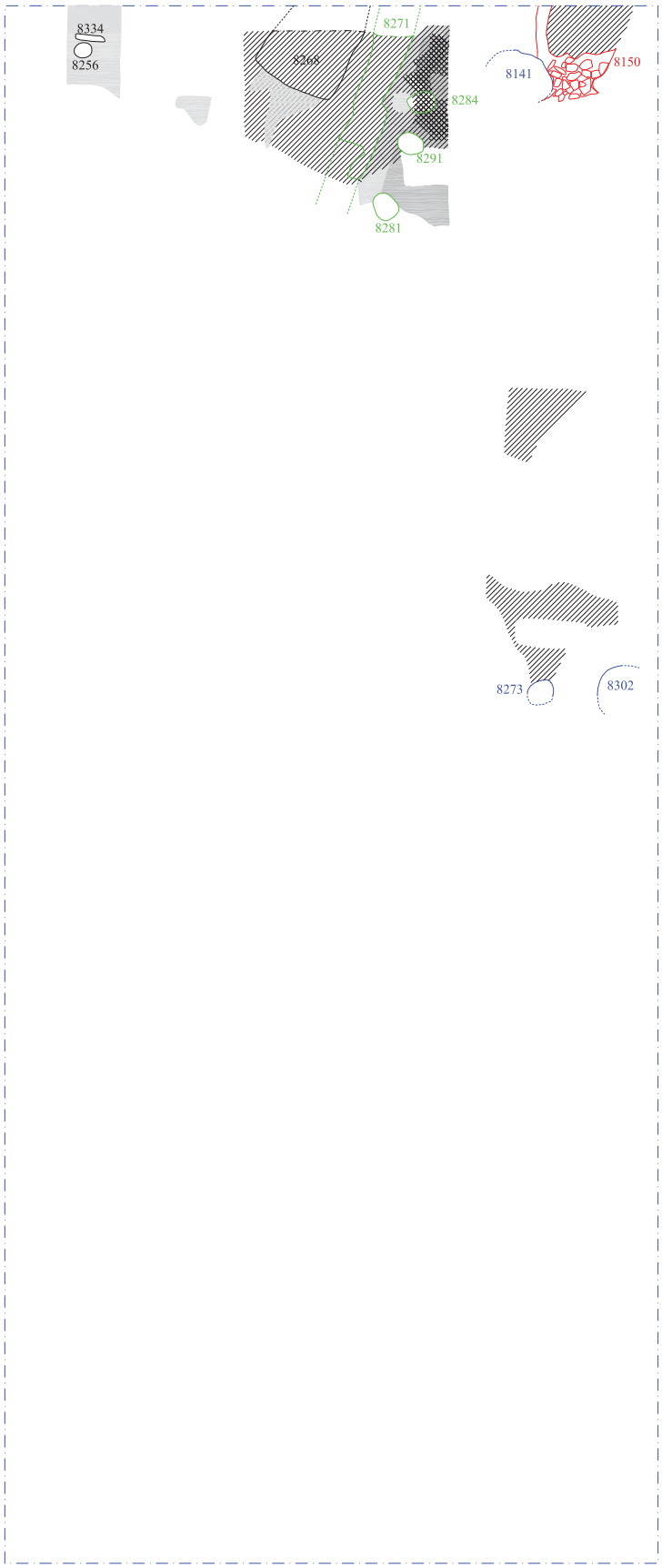

Figure 9: Plan of Period 5: OA13-OA16 & STR9

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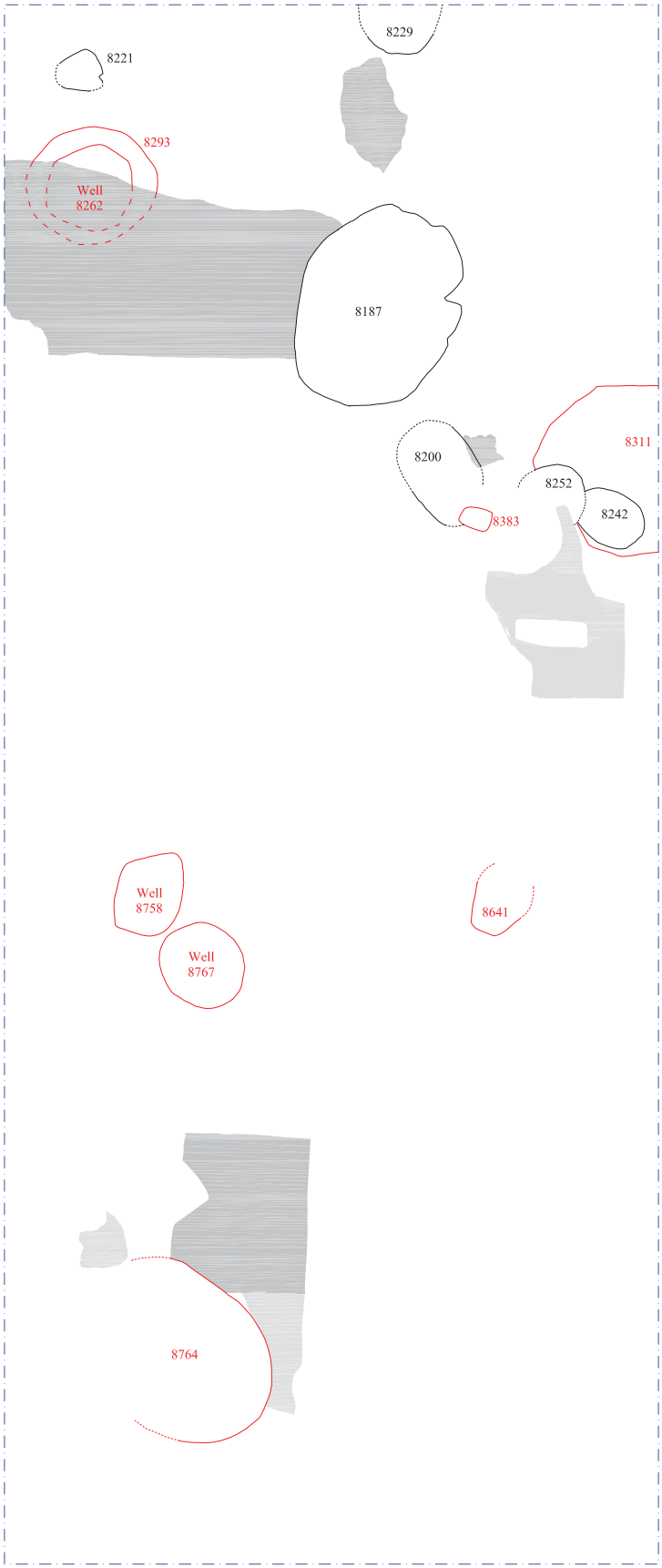

Figure 10: Plan of Period 6: OA18 & OA19

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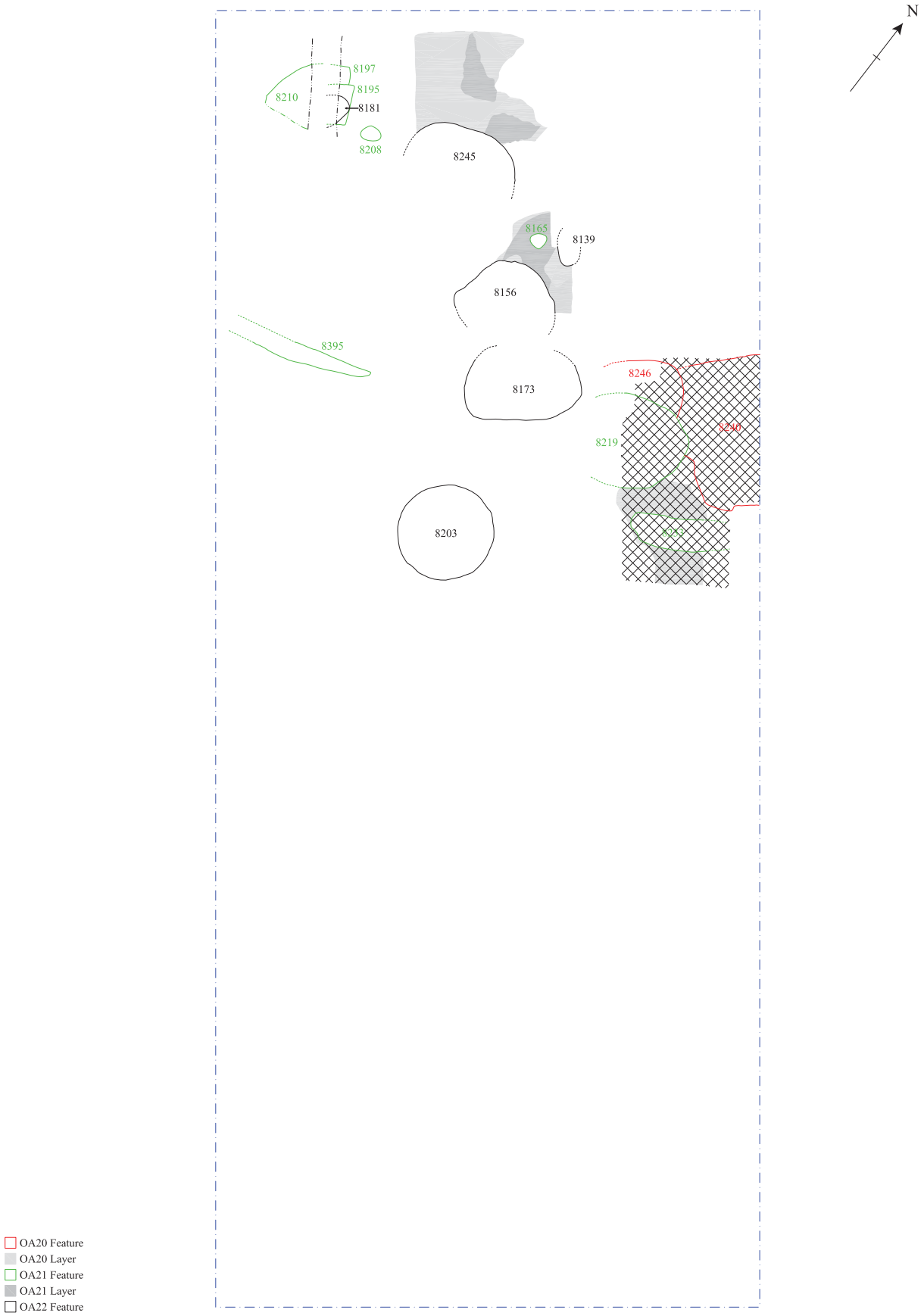

Figure 11: Plan of Period 6: OA20, OA21 & OA22

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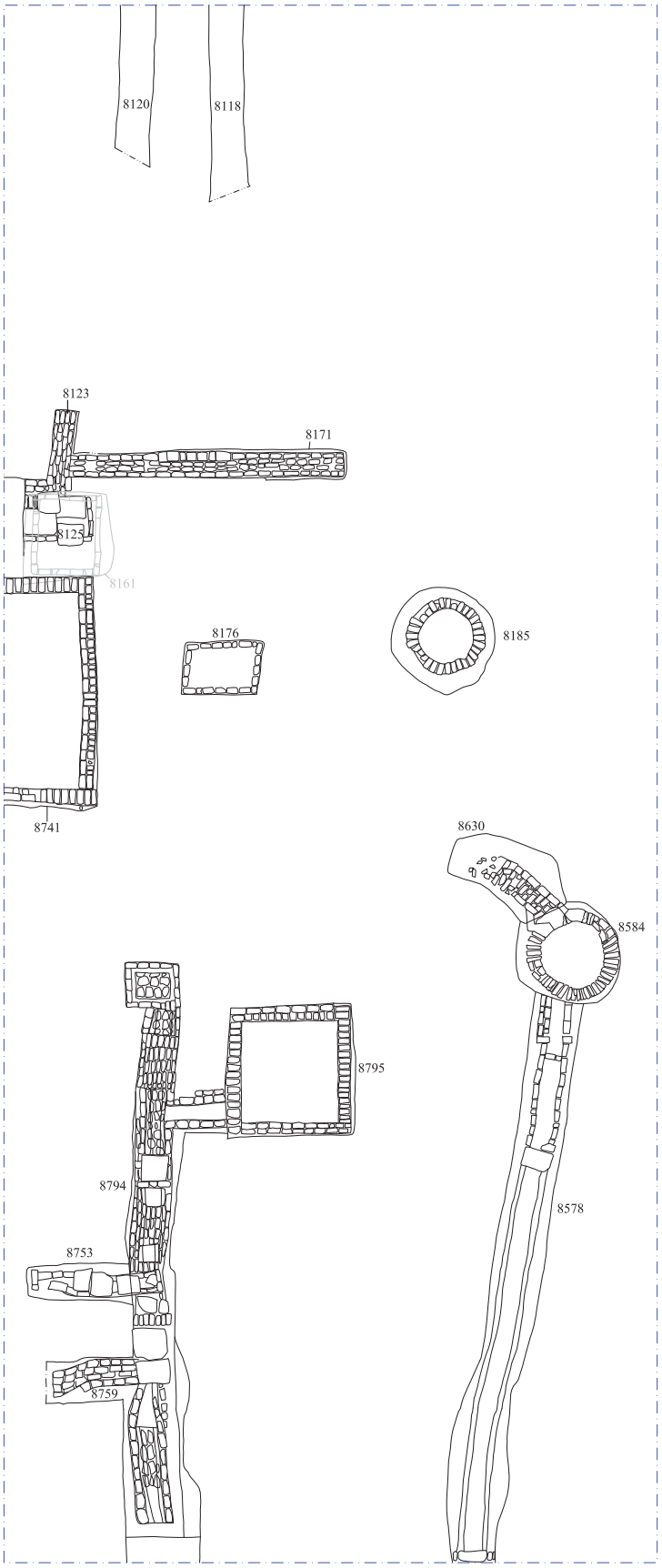

Figure 12: Plan of Period 8: Drains & Foundations

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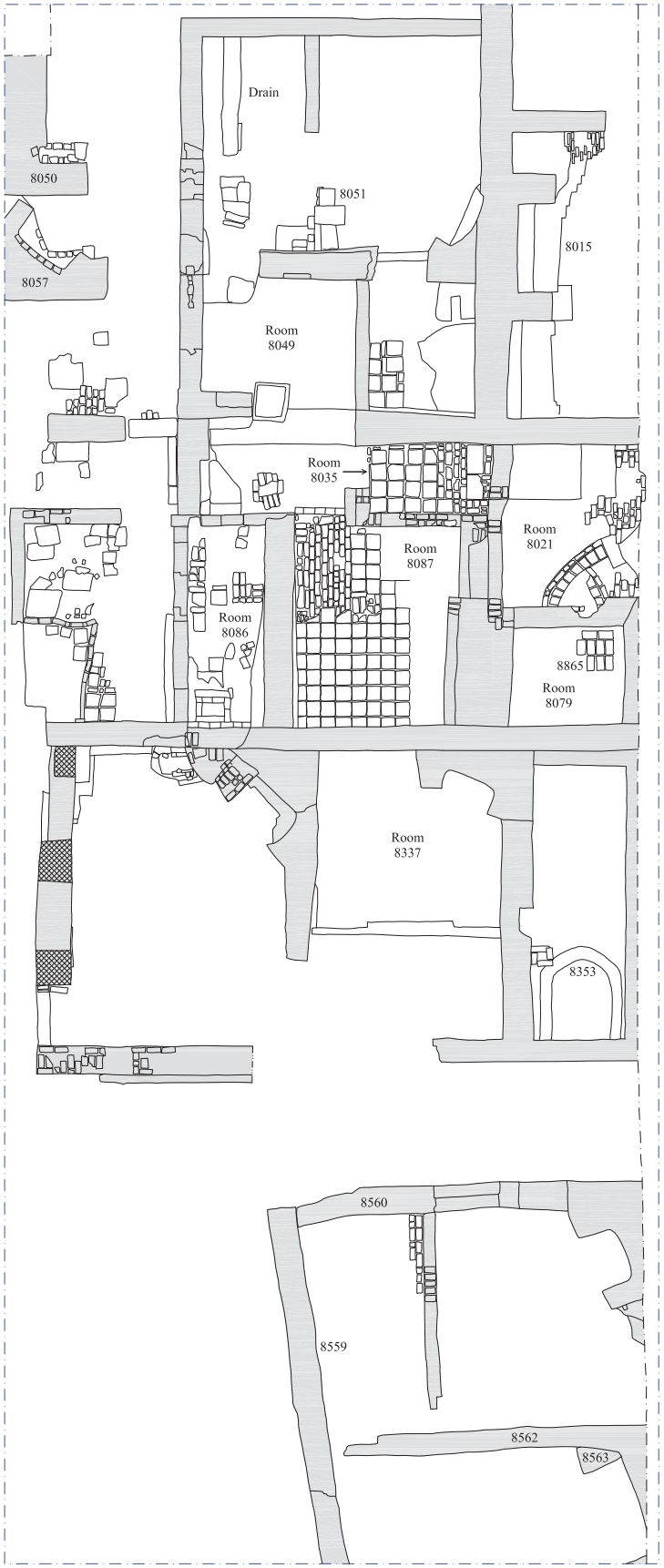

Figure 13: Plan of Period 8: Floors & Walls

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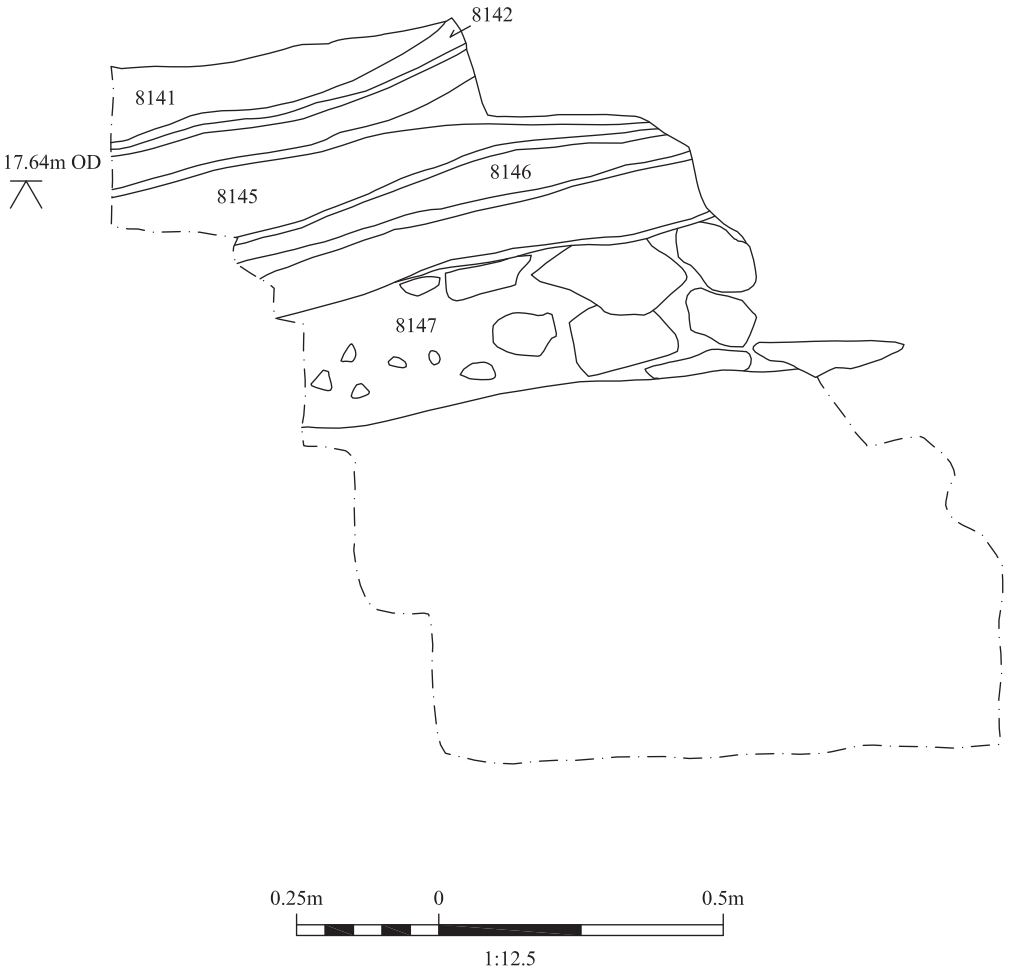

Figure 14: Section

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Appendix A

Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
1/001	Concrete ground slab	Trench	Trench	0.15m	-	No	-	-	-
1/002	C19th backfill	Trench	Trench	3.5m	-	No	-	-	-
1/003	Yellow/brown silty clay	Trench	Trench	1.00m	-	No	-	-	-
1/004	Light brown/yellow sandy gravel	Trench	Trench	4.0m	-	No	-	-	-
1/005	Dark grey/brown clay	Trench	Trench	1.0m	-	No	-	-	-
2/001	Concrete ground slab	Trench	Trench	0.15m	-	No	-	-	-
2/002	C19th backfill	Trench	Trench	4.0m	-	No	-	-	-
2/003	Light brown clayey silt	Trench	Trench	1.0m	-	No	-	-	-
2/004	Light brown sandy gravel	Trench	Trench	4.0m	-	No	-	-	-
3/001	Concrete ground slab	Trench	Trench	0.15m	-	No	-	-	-
3/002	C.19th backfill	Trench	Trench	4.0m	-	No	-	-	-
3/003	Light brown clayey silt	Trench	Trench	1.5m	-	No	-	-	-
3/004	River terrace gravels	Trench	Trench	3.0m	-	No	-	-	-
3/005	Dark grey clay	Trench	Trench	3.0m	-	No	-	-	-
4/001	Brick cobbled surface	Trench	Trench	0.20m	-	No	-	-	-
4/002	C.19th backfill	Trench	Trench	2.50m	-	No	-	-	-
4/003	Dark brown clayey silt	Trench	Trench	2.80m	-	No	-	-	-
4/004	River terrace gravels	Trench	Trench	2.50m	-	No	-	-	-
4/005	Mid brown compact clay	Trench	Trench	1.00m	-	No	-	-	-
4/006	Dark grey compact clay	Trench	Trench	0.5m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
5/001	Brick cobbled surface	Trench	Trench	0.20m	-	No	-	-	-
5/002	C.19th backfill	Trench	Trench	4.80m	-	No	-	-	-
5/003	River terrace gravels	Trench	Trench	2.00m	-	No	-	-	-
5/004	Natural brown clay	Trench	Trench	1.5m	-	No	-	-	-
5/005	Natural dark grey clay	Trench	Trench	1.5m	-	No	-	-	-
6/001	Concrete ground slab	Trench	Trench	0.15m	-	No	-	-	-
6/002	C.19th backfill	Trench	Trench	1.35m	-	No	-	-	-
6/003	Loose dark grey/brown clayey sandy silt	Trench	Trench	1.50m	-	No	-	-	-
6/004	Mid-dark brown sandy clay	Trench	Trench	1.00m	-	No	-	-	-
6/005	Dark brown/grey sandy clay	Trench	Trench	1.5m	-	No	-	-	-
6/006	River terrace gravels	Trench	Trench	1.50m	-	No	-	-	-
6/007	Compact brown clay	Trench	Trench	2.00m	-	No	-	-	-
6/008	Compact dark grey clay	Trench	Trench	1.30m	-	No	-	-	-
7/001	Concrete ground slab	Trench	Trench	0.15m	-	No	-	-	-
7/002	C.19th backfill	Trench	Trench	3.50m	-	No	-	-	-
7/003	Dark sandy silty clay	Trench	Trench	1.00m	-	No	-	-	-
7/004	Light brown clayey silt.	Trench	Trench	2.50m	-	No	-	-	-
8/001	P-med wall	6.90m	0.60m	0.75m	-	No	1+2	-	-
8/002	Generic C19th backfill	Site	Site	3.50m	-	No	-	-	-
8/003	Brick structure	1.60m	0.85m	0.70m	-	No	2	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/004	Brick butress	0.76m	0.50m	0.84m	-	No	2(3)	-	-
8/005	Brick butress	0.70m	0.50m	0.80m	-	No	2(3)	-	-
8/006	Brick wall	5.00m	0.50m	0.75m	-	No	2(3)	-	-
8/007	Tile floor	2.65m	1.82m	0.03m	-	No	2(3)	-	-
8/008	Brick hearth	0.80m	0.68m	0.52m	-	No	2(3)	-	-
8/009	Room in Area 1	2.70m	1.86m	0.80m	-	No	2(3)	-	-
8/010	Mortar bedding for (8/007)	2.70m	1.86m	0.08m	-	No	2(3)	-	-
8/011	Brick wall	2.26m	0.22m	0.80m	-	No	2(3)	-	-
8/012	Brick wall	0.58m	0.50m	0.76m	-	No	2(3)	-	-
8/013	Wood threshold	0.75m	0.17m	0.02m	-	No	2(3)	-	-
8/014	Brick structure	1.00m	0.30m	0.15m	-	No	2(3)	-	-
8/015	Vaulted structure	5.00m	0.70m	0.45m	-	No	2(2+3)	-	-
8/016	Brick underpinning	0.60m	0.36m	0.25m	-	No	2(3)	-	-
8/017	VOID	-	-	-	-	-	-	-	-
8/018	Fill of (8/008)	0.40m	0.18m	0.40m	-	No	2(3)	-	-
8/019	VOID	-	-	-	-	-	-	-	-
8/020	Brick wall	1.60m	0.40m	0.30m	-	No	2(2)	-	-
8/021	Room in Area 1	2.68m	1.04m	1.00m	-	No	2(3+4)	-	-
8/022	Brick wall	1.60m	0.24m	0.60m	-	No	2(1)	-	-
8/023	Brick wall	1.75m	0.38m	0.75m	-	No	2(1)	-	-
8/024	Brick wall	2.85m	0.32m	0.50m	-	No	2	-	-
8/025	Poss. Med. Layer	1.26m	0.10m	0.45m	-	No	-	1	-
8/026	Brick wall	0.94m	0.34m	0.96m	-	No	2(4)	-	-
8/027	Bedding layer for (8/028)	2.84m	2.00m	0.15m	-	No	2(3+4)	-	-
8/028	Brick floor	2.68m	1.04m	0.07m	-	No	2(3+4)	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/029	Sloping cut between (8/021) and (8/035)	1.20m	0.94m	0.15m	-	No	2(3+4)	-	-
8/030	Brick wall	2.16m	0.24m	0.72m	-	No	2(4)	-	-
8/031	Brick wall	1.50m	0.38m	1.10m	-	No	2	-	-
8/032	Brick structure	1.20m	0.90m	0.28m	-	No	2(4)	-	-
8/033	Tile lined drain	0.80m	0.30m	0.30m	-	No	2(4)	-	-
8/034	Brick floor. Same as (8/028)	2.68m	1.04m	0.07m	-	No	2(4)	-	-
8/035	Room in Area 1	2.74m	2.06m	0.96m	-	No	2	-	-
8/036	VOID	-	-	-	-	-	-	-	-
8/037	VOID	-	-	-	-	-	-	-	-
8/038	Concrete ground slab	Site	Site	0.35m	-	No	-	1	-
8/039	Bedding layer for (8/038)	Site	Site	0.18m	-	No	-	1	-
8/040	Brick wall	0.85m	-	1.90m	-	No	-	1	-
8/041	VOID	-	-	-	-	-	-	-	-
8/042	Linear construction cut	7.20m	1.50m	1.50m	-	No	2(1+2)	-	-
8/043	Tiled slope	0.96m	0.46m	0.15m	-	No	2(3+4)	-	-
8/044	Brick and tile floor surface	2.10m	1.18m	0.07m	-	No	2(3+4)	-	-
8/045	Brick wall	1.84m	0.58m	0.56m	-	No	2(4)	-	-
8/046	Brick wall	1.44m	0.50m	1.25m	-	No	2(4)	-	-
8/047	P-med dump layer	Site	Site	0.15m	-	No	2	-	-
8/048	Room in Area 1	-	-	-	-	No	2	-	-
8/049	Post-med dump layer	5.80m	5.10m	0.10m	-	No	-	-	-
8/050	Brick wall	1.70m	1.30m	0.55m	-	No	2	-	-
8/051	Brick structure	1.10m	0.96m	0.55m	-	No	2	-	-
8/052	Brick wall	2.16m	0.22m	0.35m	-	No	2	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/053	Brick wall	2.00m	0.56m	0.49m	-	No	2(5)	-	-
8/054	Slate and brick drain	2.00m	0.40m	0.30m	-	No	2	-	-
8/055	Brick wall	2.30m	0.40m	0.70m	-	No	2	-	-
8/056	Brick wall	2.20m	1.30m	0.52m	-	No	2	-	-
8/057	Brick structure	1.90m	1.70m	0.50m	-	No	2	-	-
8/058	Brick floor	1.00m	0.40m	0.07m	-	No	2	-	-
8/059	Brick lined drain	0.87m	0.35m	0.35m	-	No	2	-	-
8/060	Fill of [8/061]	0.85m	0.30m	-	-	No	2	-	-
8/061	Construction cut for (8/050)	0.85m	0.30m	-	-	No	2	-	-
8/062	Brick wall	0.52m	0.36m	-	-	No	2	-	-
8/063	Room in Area 1	-	-	-	-	No	2	-	-
8/064	Brick wall	1.34m	0.46m	0.40m	-	No	2(7)	-	-
8/065	Brick wall	1.70m	0.32m	0.55m	-	No	2(7)	-	-
8/066	Brick wall	1.50m	0.60m	0.75m	-	No	2(8)	-	-
8/067	Brick structure	0.60m	0.60m	0.55m	-	No	2(8)	-	-
8/068	Brick wall	0.74m	0.70m	0.23m	-	No	2(8)	-	-
8/069	Brick wall	3.40m	0.24m	1.12m	-	No	2(8)	-	-
8/070	Brick wall	3.60m	0.80m	1.50m	-	No	2(8)	-	-
8/071	Brick wall	3.50m	0.60m	0.52m	-	No	2(8)	-	-
8/072	Brick-lined drain	0.65m	0.54m	0.25m	-	No	2(8)	-	-
8/073	Floor surface	1.70m	0.70m	0.06m	-	No	2(8)	-	-
8/074	Tile and brick floor	3.53m	2.85m	0.07m	-	No	2(8)	-	-
8/075	Brick wall	1.70m	1.43m	0.54m	-	No	2(9)	-	-
8/076	Brick flue	0.58m	0.46m	0.65m	-	No	2	-	-
8/077	Floor surface	3.60m	2.40m	0.05m	-	No	2(7)	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/078	Brick wall	1.76m	-	1.00m	-	No	2(4)	-	-
8/079	Room in Area 1	1.90m	1.86m	1.00m	-	No	2	-	-
8/080	Brick wall	2.30m	1.10m	1.00m	-	No	2(4)	-	-
8/081	Brick wall	10.15m	0.50m	1.50m	-	No	2(4)	-	-
8/082	Sand layer	1.90m	1.86m	0.15m	-	No	2(4)	-	-
8/083	Floor surface	3.40m	1.40m	0.07m	-	No	2(8)	-	-
8/084	Backfill layer	0.90m	0.70m	0.50m	-	No	2	-	-
8/085	Backfill layer	0.90m	0.90m	0.40m	-	No	2	-	-
8/086	Room in Area 1	3.50m	1.34m	1.60m	-	No	2	-	-
8/087	Room in Area 1	3.65m	2.90m	1.30m	-	No	2	-	-
8/088	Room in Area 1	3.50m	2.60m	1.60m	-	No	2	-	-
8/089	Room in Area 2	-	-	-	-	No	3	-	-
8/090	Dark brown silty layer	-	-	-	-	No	3	-	-
8/091	Drain cut	3.00m	0.30m	0.30m	-	No	3(1+2)	-	-
8/092	Fill of [8/091]	3.00m	0.30m	0.30m	-	No	-	-	-
8/093	Pit cut	0.63m	0.30m	0.18m	-	No	3(1+2)	-	-
8/094	Fill of [8/093]	0.63m	0.30m	0.18m	-	No	-	-	-
8/095	Bedding layer	2.20m	1.20m	0.05m	-	No	3(1)	-	-
8/096	Pit cut	0.27m	0.21m	0.17m	-	No	3(1)	-	-
8/097	Fill of [8/096]	0.27m	0.21m	0.17m	-	No	-	-	-
8/098	Brick wall	4.00m	0.58m	0.53m	-	No	3(1)	-	-
8/099	VOID	-	-	-	-	-	-	-	-
8/100	Brick flue	1.60m	0.70m	1.40m	-	No	3(2)	-	-
8/101	Brick wall	1.00m	-	1.10m	-	No	3(2)	-	-
8/102	Brick flue	0.65m	0.35m	1.40m	-	No	3(2)	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/103	Bedding layer	5.00m	2.40m	0.30m	-	No	3(1,2,3,4)	-	-
8/104	Brick pillar	0.60m	0.60m	0.37m	-	No	3(1)	-	-
8/105	Brick pillar	0.60m	0.60m	1.00m	-	No	3(1)	-	-
8/106	Brick wall	0.65m	0.23m	0.76m	-	No	3(1)	-	-
8/107	Brick floor surface	0.90m	0.66m	0.07m	-	No	3(1)	-	-
8/108	Brick pillar	0.50m	0.43m	1.00m	-	No	3(1)	-	-
8/109	Brick threshold foundation	1.10m	0.23m	0.15m	-	No	3(1)	-	-
8/110	Brick wall	2.00m	0.50m	0.90m	-	No	3(3+4)	-	-
8/111	Brick wall	1.50m	0.13m	0.40m	-	No	3(3+4)	-	-
8/112	Fill of (8/075)	1.70m	1.00m	0.40m	-	No	2(7+10)	-	-
8/113	VOID	-	-	-	-	-	-	-	-
8/114	green gravel layer - missing								
8/115	Pit cut	1.30m	0.85m	0.30m	-	No	4	-	-
8/116	Fill of [8/115]	1.30m	0.85m	0.30m	-	No	-	-	-
8/117	Fill of [8/118]	2.70m	0.60m	0.30m	-	No	-	-	-
8/118	Drain cut	2.70m	0.60m	0.30m	-	No	4	-	-
8/119	Fill of [8/120]	2.60m	0.60m	0.40m	-	No	-	-	-
8/120	Drain cut	2.60m	0.60m	0.40m	-	No	3	-	-
8/121	Brick wall	1.10m	0.78m	-	-	No	4	-	-
8/122	Brick wall	2.65m	0.32m	0.45m	-	No	4	-	-
8/123	Brick floor	1.50m	0.45m	0.06m	-	No	4	-	-
8/124	Brick floor	2.60m	0.42m	0.06m	-	No	4	-	-
8/125	Sandstone slab capping	1.10m	0.26m	0.23m	-	No	4	-	-
8/126	Construction cut	0.70m	0.66m	0.57m	-	No	4	-	-
8/127	Fill of [8/126]	0.70m	0.66m	0.57m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/128	Construction cut	1.10m	0.46m	1.00m	-	No	4	-	-
8/129	Fill of [8/128]	1.10m	0.46m	1.00m	-	No	-	-	-
8/130	Generic number for post med layer	-	-	-	-	-	-	-	-
8/131	Rubble backfill of [8/133]	2.00m	0.62m	0.60m	-	No	4	-	-
8/132	Mortar dump for wall [8/001]	2.00m	0.62m	0.20m	-	No	4	-	-
8/133	Cut for wall [8/001]	2.00m	0.82m	0.62m	-	No	4	-	-
8/134	Fill of construction cut [8/135]	3.36m	0.30m	0.47m	-	No	3	-	-
8/135	Construction cut	3.36m	0.30m	0.47m	-	No	3	-	-
8/136	Drainage channel wall	0.92m	0.18m	0.30m	-	No	4	-	-
8/137	Tile floor in room [8/079]	1.90m	1.82m	0.03	-	No	5	-	-
8/138	Fill of [8/139]	0.44m	0.30m	0.09m	-	No	-	-	-
8/139	Posthole	0.44m	0.30m	0.09m	-	No	7	-	-
8/140	Dumped layer	1.60m	1.00m	0.10m	-	No	-	-	-
8/141	Layer	0.82m	0.64m	0.19m	-	8/141	-	2	-
8/142	Sandy gravel deposit	1.00m	0.62m	-	-	8/142	-	-	-
8/143	Mixed daub+sand demolition layer	0.88m	0.64m	-	-	8/143	-	-	-
8/144	Mixed charcoal+daub demolition layer	1.20m	0.70m	-	-	8/'144	-	2	-
8/145	Demolition layer	1.54m	1.30m	-	-	8/145	-	2	-
8/146	Demolition layer	1.54m	1.30m	0.12m	-	8/146	-	2	-
8/147	Limestone foundation	0.18m	0.10m	0.13m	-	8/147	-	2	-
8/148	Gravel layer	1.40m	0.70m	-	-	8/148	-	2	-
8/149	Bonding for limestone cobbles	1.25m	0.80m	0.19m	-	8/150	-	2	-
8/150	Possible foundation cut filled with [8/147]	1.25m	0.80m	0.19m	-	8/150	-	2	-
8/151	Fill of [8/152]	20m	0.80m	0.13m	-	8/152	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/152	Beam slot	20m	0.80m	0.13m	-	8/152	-	-	-
8/153	missing								
8/154	Deposit			0.20m	-	No	8	-	-
8/155	Silty sand layer	4.84m	2.80m		-	8/155	-	-	-
8/156	Pit cut	2.00m	1.00m	0.35m	-	No	6	-	-
8/157	Yellow clay deposit	2.00m	2.00m	0.10m	-	No	8/157	-	-
8/158	Burnt deposit	0.60m	0.55m	0.10m	-	No	8/157	-	-
8/159	Fill of [8/161]	1.40m	1.35m	1.20m	-	No	-	-	-
8/160	Brick lining for cess pit [8/161]	1.40m	1.18m	0.90m	-	8/160	-	-	-
8/161	Cess pit	1.60m	1.40m	1.20m	-	8/161	-	-	-
8/162	Fill of [8/163]	2.20m	1.30m	0.40m	-	No	-	-	-
8/163	Post med pit	2.20m	1.30m	0.40m	-	8/163	-	-	-
8/164	Fill of [8/165]	0.30m	0.30m	0.10m	-	8/165	-	-	-
8/165	Posthole	0.30m	0.30m	0.10m	-	8/166	-	-	-
8/166	missing								
8/167	Burnt layer	?	?	0.03m	-	-	-	-	-
8/168	Charcoal rich deposit	?	?	?				-	-
8/169	Fill of [8/187]	?	?	0.25m				-	-
8/170	Construction cut for [8/122]	4.50m	0.40m	?	-	No	4	-	-
8/171	Construction cut for [8/123]	5.50m	0.80m	?	-	No	4	-	-
8/172	Fill of [8/173]	2.30m	1.40m	0.36m	-	No	-	-	-
8/173	Pit cut	2.30m	1.40m	0.36m	-	8/173	-	-	-
8/174	Fill of [8/075]	1.10m	0.70m	0.70m	-	No	-	-	
8/175	Brick structure	1.40m	0.80m	0.70m	-	8/175	-	-	-
8/176	Construction cut	1.35m	0.90m	0.83m	-	8/176	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/177	Fill of [8/175]	1.40m	0.70m	1.04m	-	No	-	-	-
8/178	missing								
8/179	missing								
8/180	Fill of [8/180]	0.55m	0.24m	0.30m	-	No	-	-	-
8/181	Pit cut	0.55m	0.24m	0.30m	-	8/181	-	-	-
8/182	Fill of [8/183]	0.93m	0.88m	nfe	-	No	-	-	-
8/183	Brick well	1.42m	1.35m	nfe	-	8/183	-	-	-
8/184	Fill of [8/185]	1.90m	1.80m	nfe	-	No	-	-	-
8/185	Construction cut for [8/183]	1.90m	1.80m	nfe	-	8/185	-	-	-
8/186	Fill of [8/187]	2.30m	2.30m	0.30m	-	No	-	3	-
8/187	Rubbish pit	3.00m	3.00m	0.80m	-	8/187	-	3	-
8/188	Fill of [8/189]	0.62m	0.48m	0.25m	-	No	-	-	-
8/189	Construction cut for [8/006]	0.62m	0.48m	0.25m	-	8/189	-	-	-
8/190	Fill of [8/191]	3.20m	0.80m	0.13m	-	No	-	-	-
8/191	Wall cut	3.20m	0.80m	0.13m	-	8/191	-	-	-
8/192	Layer	3.24m	2.98m	-	-	8/192	-	-	-
8/193	VOID	-	-	-	-	-	-	-	-
8/194	Fill of [8/194]	0.90m	0.30m	0.25m	-	No	-	-	-
8/195	Pit cut	0.90m	0.30m	0.25m	-	8/195	-	-	
8/196	Fill of [8/196]	0.40m	0.20m	0.32m	-	No	-	-	-
8/197	Posthole - duplicated number	0.40m	0.20m	0.32m	-	8/197	-	-	-
8/197	Fill of [8/198]	2.20m	1.06m	-	-	No	4	-	
8/198	Construction cut for [8/030]	2.20m	1.06m	-	-	No	4	-	-
8/199	Fill of [8/200]	1.30m	0.80m	0.23m	-	No	-	-	-
8/200	Pit cut	1.30m	0.80m	0.23m	-	8/200	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/201	Fill of [8/203]	1.30m	1.20m	0.35m	-	No	-	-	-
8/202	Fill of [8/203]	2.00m	1.83m	1.10m	-	No	-	-	-
8/203	Pit cut	2.00m	1.83m	1.10m	-	8/203	-	-	-
8/204	Fill of [8/205]	10.15m	0.50m	-	-	No	4	-	-
8/205	Construction cut for [8/081]	10.15m	0.50m	1.50m	-	No	4	-	-
8/206	Sandy gravel layer	1.40m	0.60m	0.04m	-	8/206	-	-	-
8/207	Fill of [8/208]	0.40m	0.32m	0.40m	-	No	-	-	-
8/208	Stakehole	0.40m	0.32m	0.40m	-	8/208	-	-	-
8/209	Fill of [8/210]	1.25m	0.90m	0.25m	-	No	-	-	-
8/210	Pit cut	1.25m	0.90m	0.25m	-	8/210	-	-	-
8/211	Fill of [8/187]	3.00m	3.00m	0.80m	-	No	-	3	-
8/212	Sand layer	1.40m	0.70m	0.03m	-	8/212	-	-	-
8/213	Clay silt layer	2.60m	2.60m	012m	-	8/213	-	-	-
8/214	Silty sand layer	1.00m	0.95m	0.15m	-	8/214	-	-	-
8/215	Silty sand layer	2.50m	0.90m	0.15m	-	8/215	-	-	-
8/216	Fill of [8/187]	1.00m	1.00m	0.30m	-	No	-	3	-
8/217	Secondary fill of [8/219]	1.70m	1.30m	0.50m	-	No	-	-	-
8/218	Primary fill of [8/219]	1.10m	1.10m	0.13m	-	No	-	-	-
8/219	Medieval pit	1.70m	1.30m	0.63m	-	8/219	-	-	-
8/220	Fill of [8/221]	0.74m	0.70m	0.12m	-	No	-	-	-
8/221	Pit cut	0.74m	0.70m	0.12m	-	8/221	-	-	-
8/222	Clay layer	1.70m	1.00m	0.15m	-	8/222	-	-	-
8/223	Dumped layer	1.80m	1.00m	0.20m	-	8/223	-	-	-
8/224	Clay layer	2.80m	0.98m	0.10m	-	8/224	-	-	-
8/225	Layer	2.80m	1.00m	0.20m	-	8/225	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/226	Yellow clay layer	2.02m	1.20m	0.06m	-	8/226	-	-	-
8/227	Dumped deposit	3.58m	3.20m	0.12m	-	8/227	-	-	-
8/228	Fill of [8/229]	1.10m	0.30m	0.28m	-	No	-	-	-
8/229	Pit cut	1.10m	0.30m	0.28m	-	8/229	-	-	-
8/230	Fill of [8/230]	0.20m	0.18m	0.15m	-	No	-	-	-
8/231	Posthole	0.20m	0.18m	0.15m	-	8/231	-	-	-
8/232	Fill of [8/233]	1.50m	0.70m	0.41m	-	No	-	-	-
8/233	Medieval pit	1.50m	0.70m	0.41m	-	8/232	-	-	-
8/234	Layer	2.20m	1.72m	0.25m	-	8/234	-	-	-
8/235	Fill of [8/236]	1.50m	0.70m	0.67m	-	No	-	-	-
8/236	Construction cut for wall [8/205]	1.50m	0.70m	0.67m	-	8/236	-	-	-
8/237	Fill of [8/238]	1.50m	0.52m	0.16m	-	No	-	-	-
8/238	Construction cut	1.50m	0.52m	0.16m	-	8/138	-	-	-
8/239	Fill of [8/240]	2.32m	1.60m	0.47m	-	No	-	-	-
8/240	Cut of heavily truncated pit	2.32m	1.60m	0.47m	-	8/240	-	-	-
8/241	Fill of [8/242]	1.46m	1.05m	0.30m	-	No	-	-	-
8/242	Pit cut	1.46m	1.05m	0.30m	-	8/242	-	-	-
8/243	Layer	5.50m	3.20m	0.10m	-	8/243	-	-	-
8/244	Fill of [8/245]	2.04m	1.00m	0.15m	-	-	-	-	-
8/245	Pit cut	2.04m	1.00m	0.15m	-	8/245	-	-	-
8/246	Pit cut	1.00m	0.95m	0.45m	-	8/246	-	-	-
8/247	Fill of [8/246]	1.00m	0.95m	0.45m	-	No	-	-	-
8/248	Fill of [8/249]	0.35m	0.35m	0.23m	-	No	-	-	-
8/249	Posthole	0.35m	0.35m	0.23m	-	8/249	-	-	-
8/250	Gravel layer	3.40m	2.70m	0.20m	-	8/250	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/251	Fill of [8/252]	0.40m	0.20m	0.50m	-	No	-	-	-
8/252	Pit cut	0.40m	0.20m	0.50m	-	8/252	-	-	-
8/253	Fill of [8/245]	0.71m	0.30m	0.25m	-	No	-	-	-
8/254	Posthole	0.71m	0.30m	0.25m	-	8/254	-	-	-
8/255	Fill of [8/255]	0.33m	0.28m	0.22m	-	No	-	-	-
8/256	Posthole	0.33m	0.28m	0.22m	-	8/256	-	-	-
8/257	Daub+gravel demolition layer	2.20m	2.00m	?	-	8/257	-	-	-
8/258	Layer	1.75m	1.20m	0.30m	-	8/258	-	-	-
8/259	Fill of [8/260]	0.72m	0.65m	0.60m	-	No	-	-	-
8/260	Small pit cut	0.72m	0.65m	0.60m	-	8/260	-	-	-
8/261	Fill of [8/262]	1.50m	1.50m	1.43m	-	No	-	-	-
8/262	Robbed well	1.50m	1.50m	1.43m	-	8/262	-	-	-
8/263	Layer	1.72m	1.10m	0.08	-	8/263	-	-	-
8/264	Layer	1.70m	0.50m	0.02m	-	8/264	-	-	-
8/265	Charcoal rich layer	2.20m	1.74m	0.10m	-	8/265	-	-	-
8/266	Fill of [8/268]	1.62m	1.12m	0.10m	-	No	-	-	-
8/267	Charcoal layer	1.90m	0.80m	0.10m	-	8/267	-	-	-
8/268	Shallow pit cut	1.62m	1.12m	0.31m	-	8/268	-	-	-
8/269	Medieval layer	2.40m	2.18m	0.05m	-	8/269	-	-	-
8/270	Fill of [8/271]	2.56m	0.63m	0.10m	-	No	-	-	-
8/271	Shallow ditch cut	2.56m	0.63m	0.10m	-	8/271	-	-	-
8/272	Daub layer	1.60m	1.40m	0.10m	-	8/272	-	4	-
8/273	Posthole	0.40m	0.20m	0.25m	-	8/273	-	-	-
8/274	Fill of [8/273]	0.40m	0.20m	0.25m	-	No	-	-	-
8/275	Clay layer	0.82m	0.46m	0.16m	-	8/275	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/276	Gravel layer	2.92m	0.50m	0.10m	-	8/276	-	-	-
8/277	Fill of [8/278]	1.50m	0.20m	0.15m	-	No	-	-	-
8/278	Beam slot	1.50m	0.20m	0.15m	-	8/278	-	-	-
8/279	Slumped layer	3.30m	1.16m	0.25m	-	8/279	-	-	-
8/280	Fill of [8/281]	0.40m	0.30m	0.45m	-	No	-	-	-
8/281	Posthole	0.40m	0.30m	0.45m	-	8/281	-	-	-
8/282	Burnt ash layer	3.58m	1.15m	0.10m	-	8/282	-	-	-
8/283	Fill of [8/283]	0.40m	0.40m	0.40m	-	No	-	-	-
8/284	Posthole	0.40m	0.40m	0.40m	-	8/284	-	-	-
8/285	Severely truncated shallow cut	3.28m	1.04m	0.25m	-	8/285	-	-	-
8/286	Fill of [8/287]	0.20m	0.20m	0.30m	-	No	-	-	-
8/287	Posthole	0.20m	0.20m	0.30m	-	8/287	-	-	-
8/288	Fill of [8/288]	0.30m	0.15m	0.22m	-	No	-	-	-
8/289	Posthole	0.30m	0.15m	0.22m	-	8/289	-	-	-
8/290	Fill of [8/291]	0.38m	0.33m	0.38m	-	No	-	-	-
8/291	Posthole	0.38m	0.33m	0.38m	-	8/291	-	-	-
8/292	Fill of [8/293]	1.33m	1.28m	0.79m	-	No	-	-	-
8/293	Pit cut	1.33m	1.28m	0.79m	-	8/293	-	-	-
8/294	Gravel layer	1.40m	0.80m	0.10m	-	8/294	-	-	-
8/295	Fill of [8/296]	1.84m	1.12m	0.10m	-	No	-	-	-
8/296	Pit cut	1.84m	1.12m	0.10m	-	8/296	-	-	-
8/297	Fill of [8/300]	0.35m	0.33m	0.25m	-	No	-	-	-
8/298	Silty sand deposit	2.10m	2.00m	0.58m	-	No	-	4	-
8/299	Gravel layer	2.50m	2.00m	0.16m	-	No	-	4	-
8/300	Posthole	0.35m	0.33m	0.25m	-	8/300	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/301	Fill of [8/302]	0.50m	0.36m	0.20m	-	No	-	-	-
8/302	Posthole	0.50m	0.36m	0.20m	-	8/302	-	-	-
8/303	Burnt clay layer+charcoal	2.30m	1.80m	0.10m	-	8/303	-	-	-
8/304	Fill of [8/305]	0.60m	0.40m	0.27m	-	No	-	-	-
8/305	Posthole	0.60m	0.40m	0.27m	-	8/305	-	-	-
8/306	Daub+charcoal demolition dump	2.60m	1.80m	0.25m	-	8/306	-	4	-
8/307	VOID	-	-	-	-	-	-	-	-
8/308	Fill of [8/309]	0.50m	0.40m	0.18m	-	No	-	-	-
8/309	Posthole	0.50m	0.40m	0.18m	-	8/309	-	-	-
8/310	Primary fill of [8/311]	1.50m	1.50m	0.40m	-	No	-	-	-
8/311	Pit cut	1.50m	1.50m	0.40m	-	8/311	-	-	-
8/312	Fill of [8/313]	0.36m	0.32m	0.20m	-	No	-	-	-
8/313	Posthole	0.36m	0.32m	0.20m	-	8/313	-	-	-
8/314	Fill of [8/315]	0.40m	0.18m	0.21m	-	No	-	-	-
8/315	Posthole	0.40m	0.18m	0.21m	-	8/315	-	-	-
8/316	Fill of [8/317]	0.30m	0.30m	0.20m	-	No	-	-	-
8/317	Posthole	0.30m	0.30m	0.20m	-	8/317	-	-	-
8/318	Gravel layer	2.30m	0.70m	0.15m	-	8/318	-	-	-
8/319	Fill of [8/320]	0.43m	0.27m	0.24m	-	No	-	-	-
8/320	Posthole	0.43m	0.27m	0.24m	-	8/320	-	-	-
8/321	Fill of [8/322]	0.40m	0.23m	0.30m	-	No	-	-	-
8/322	Posthole	0.40m	0.23m	0.30m	-	8/322	-	-	-
8/323	Silty sand layer	1.40m	1.22m	0.05m	-	8/323	-	-	-
8/324	Silty clay layer	5.80m	4.40m	0.10m	-	8/324	-	-	-
8/325	Layer	2.60m	2.32m	0.16m	-	8/325	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/326	Gravel layer	0.60m	0.50m	0.03m	-	8/326	-	-	-
8/327	Burnt layer	1.40m	1.30m	0.05m	-	8/327	-	-	-
8/328	Posthole	0.25m	0.20m	0.20m	-	8/328	-	4	-
8/329	Fill of [8/328]	0.25m	0.20m	0.20m	-	No	-	4	-
8/330	Posthole	0.14m	0.14m	0.18m	-	8/330	-	-	-
8/331	Fill of [8/330]	0.14m	0.14m	0.18m	-	No	-	-	-
8/332	Gravel layer	1.15m	0.88m	0.04m	-	8/332	-	-	-
8/333	Fill of [8/333]	0.48m	0.11m	0.04m	-	No	-	-	-
8/334	Small slot	0.48m	0.11m	0.04m	-	8/334	-	-	-
8/335	missing								
8/336	Demolition layer	1.45m	1.40m	0.08m	-	8/336	-	4	-
8/337	Room Number	-	-	-	-	-	-	-	-
8/338	Stakehole	0.08m	0.07m	0.08m	-	8/338	-	-	-
8/339	Fill of [8/338]	0.08m	0.07m	0.08m	-	No	-	-	-
8/340	Small dump layer	0.50m	0.40m	0.04m	-	8/340	-	-	-
8/341	Stakehole	0.10m	0.90m	0.11m	-	8/341	-	-	-
8/342	Fill of [8/341]	0.10m	0.90m	0.11m	-	No	-	-	-
8/343	Pit cut	1.00m	0.90m	0.20m	-	8/343			
8/344	Fill of [8/343]	1.00m	0.90m	0.20m	-	No			
8/345	Gravel deposit	1.25m	1.00m	0.15m	-	8/345			
8/346	Brick floor	1.70m	0.80m	0.07m	-	No	9	-	-
8/347	Brick hearth	2.02m	1.16m	1.40m	-	No	9	-	-
8/348	Brick wall	4.10m	1.70m	0.50m	-	No	9	-	-
8/349	Apsidal brick structure	1.48m	1.40m	0.30m	-	No	9	-	-
8/350	Square brick structure	0.40m	0.33m	0.20m	-	No	9	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/351	Fill of [8/356]	0.42m	0.38m	0.30m	-	No	-	-	-
8/532	Posthole	0.42m	0.38m	0.30m	-	8/356	-	-	-
8/353	Sandy gravel layer	1.40m	0.90m	0.15m	-	8/357	-	-	-
8/354	Sandy gravel layer	6.00m	2.50m	0.15m	-	8/358	-	-	-
8/355	Demolition layer	2.40m	0.60m	0.08m	-	8/359	-	-	-
8/356	Demolition layer	0.90m	0.40m	0.10m	-	8/360	-	-	-
8/357	Demolition layer	1.28m	0.70m	0.08m	-	8/361	-	-	-
8/358	Dumped deposit	6.50m	5.00m	0.20m	-	8/362	-	-	-
8/359	Gravel layer	0.70m	0.64m	0.06m	-	8/363	-	-	-
8/360	Charcoal layer	2.00m	0.68m	0.02m	-	8/364	-	-	-
8/361	Linear cut	2.40m	0.60m	0.30m	-	8/365	-	-	-
8/362	Layer	2.44m	2.18m	0.17m	-	8366	-	-	-
8/363	Dark burnt layer	8.20m	3.42m	0.14m	-	8367	-	-	-
8/364	Fill of [8/365]	0.06m	0.06m	0.10m	-	no	-	-	-
8/365	Stake hole cut	0.06m	0.06m	0.10m	-	no	8369	-	-
8/366	Fill of [8/367]	0.15m	0.11m	0.11m	-	no	-	-	-
8/367	Stake hole cut	0.15m	0.11m	0.11m	-	no	8369	-	-
8/368	Fill of [8/369]	0.10m	0.08m	0.13m	-	no	-	-	-
8/369	Stake hole cut	0.10m	0.08m	0.13m	-	no	8369	-	-
8/370	Fill of [8/371]	0.66m	0.21m	0.14m	-	no	-	-	-
8/371	Gully cut	0.66m	0.21m	0.14m	-	no	8369	-	-
8/372	Fill of [8/373]	0.20m	0.18m	0.08m	-	no	-	-	-
8/373	Posthole	0.20m	0.18m	0.08m	-	no	8369	-	-
8/374	Fill of [8/375]	0.18m	0.15m	0.06m	-	no	-	-	-
8/375	Posthole	0.18m	0.15m	0.06m	-	no	8369	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/376	Fill of [8/377]	0.20m	0.18m	0.08m	-	no	-		
8/377	Posthole cut	0.20m	0.18m	0.08m	-	no	8369		
8/378	Fill of [8/379]	0.18m	0.15m	0.06m	-	no	-		
8/379	Posthole	0.18m	0.15m	0.06m	-	No	8369		
8/380	Pit cut	1.10m	0.80m	0.15m	-	8380	-		
8/381	Fill of [8/380]	1.10m	0.80m	0.15m	-	No	-	-	-
8/382	Fill of [8/380]	1.10m	0.80m	0.15m	-	No	-	-	-
8/383	Pit cut	0.58m	0.36m	0.35m	-	8/383	-	-	-
8/384	Fill of [8/383]	0.58m	0.36m	0.35m	-	No	-	-	-
8/385	Charcoal+clay layer	2.50m	2.50m	0.10m	-	8/385	-	-	-
8/386	Fill of [8/387]	0.08m	0.07m	0.15m	-	No	-	-	-
8/387	Stakehole	0.08m	0.07m	0.15m	-	8/387	-	-	-
8/388	Occupation layer	9.22m	0.98m	0.16m	-	8/388	-	-	-
8/389	Fill of [8/390]	0.07m	0.07m	0.15m	-	No	-	-	-
8/390	Stakehole	0.07m	0.07m	0.15m	-	8/390	-	-	-
8/391	Dumped layer	1.16m	0.68m	0.06m	-	8/391	-	-	-
8/392	Fill of [8/393]	0.40m	0.40m	0.10m	-	No	-	-	-
8/393	Posthole	0.40m	0.40m	0.10m	-	8/393	-	-	-
8/394	Fill of [8/395]	2.40m	0.36m	0.16m	-	No	-	-	-
8/395	Linear cut	2.40m	0.36m	0.16m	-	8/395	-	-	-
8/396	Fill of [8/397]	1.20m	1.06m	0.40m	-	No	-	-	-
8/397	Pit cut	1.20m	1.06m	0.40m	-	8/397	-	-	-
8/398	Layer	3.88m	2.54m	0.07m	-	8/398	-	-	-
8/399	Thin sandy layer	6.98m	3.15m	0.01m	-	No	8/399	-	-
8/400	missing						-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/401	missing						-	-	-
8/402	Fill of [8/840]	0.07m	0.07m	0.10m	-	no	-	-	-
8/403	Stakehole	0.07m	0.07m	0.10m	-	8/403	-	-	-
8/404	Gravel layer	3.04m	2.44m	0.06m	-	8/404	-	-	-
8/405	Layer	4.00m	2.46m	0.10m	-	8/405	-	-	-
8/406	Layer	3.94m	3.46m	0.03m	-	8/406	-	-	-
8/407	Fill of [8/408]	0.40m	0.21m	0.20m	-	no	-	-	-
8/408	Posthole	0.40m	0.21m	0.20m	-	8/408	-	-	-
8/409	Fill of [8/410]	0.22m	0.18m	0.10m	-	no	-	-	-
8/410	Shallow cut, possible posthole	0.22m	0.18m	0.10m	-	8/410	-	-	-
8/411	missing						-	-	-
8/412	missing						-	-	-
8/413	Posthole	0.30m	0.26m	0.20m	-	no	8/399	-	-
8/414	Fill of [8/413]	0.30m	0.26m	0.20m	-	no	-	-	-
8/415	Posthole	0.34m	0.25m	0.15m	-	no	8/399	-	-
8/416	Fill of [8/415]	0.34m	0.25m	0.15m	-	no	-	-	-
8/417	Posthole	0.22m	0.20m	0.14m	-	no	8/399	-	-
8/418	Fill of [8/417]	0.22m	0.20m	0.14m	-	no	-	-	-
8/419	Posthole	0.30m	0.12m	0.15m	-	no	8/399	-	-
8/420	Fill of [8/419]	0.30m	0.12m	0.15m	-	no	-	-	-
8/421	Posthole	0.10m	0.08m	0.11m	-	no	8/399	-	-
8/422	Fill of [8/421]	0.10m	0.08m	0.11m	-	no	-	-	-
8/423	Stakehole	0.09m	0.08m	0.11m	-	no	8/399	-	-
8/424	Fill of [8/423]	0.09m	0.08m	0.11m	-	no	-	-	-
8/425	missing						-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/426	missing						-	-	-
8/427	missing						-	-	-
8/428	missing						-	-	-
8/429	Fill of [8/430]	0.06m	0.06m	0.09m	-	No	-	-	-
8/430	Stakehole	0.06m	0.06m	0.09m	-	8/430	-	-	-
8/431	Clay+gravel layer	2.10m	0.40m	0.04m	-	8/431	-	-	-
8/432	Burnt layer	5.00m	2.80m	0.05m	-	8/432	-	-	-
8/433	Fill of [8/434]	0.24m	0.16m	0.05m	-	No	-	-	-
8/434	Posthole	0.24m	0.16m	0.05m	-	8/434	-	-	-
8/435	Fill of [8/476]	0.06m	0.04m	0.14m	-	No	-	-	-
8/436	Stakehole	0.04m	0.04m	0.07m	-	No	8/399	-	-
8/437	Fill of [8/436]	0.04m	0.04m	0.07m	-	No	-	-	-
8/438	Stakehole	0.08m	0.06m	0.07m	-	No	8/399	-	-
8/439	Fill of [8/438]	0.08m	0.06m	0.07m	-	No	-	-	-
8/440	Stakehole	0.05m	0.05m	0.05m	-	No	8/399	-	-
8/441	Fill of [8/440]	0.05m	0.05m	0.05m	-	No	-	-	-
8/442	Stakehole	0.06m	0.06m	0.06m	-	No	8/399	-	-
8/443	Fill of [8/442]	0.06m	0.06m	0.06m	-	No	-	-	-
8/444	Stakehole	0.06m	0.05m	0.05m	-	No	8/399	-	-
8/445	Fill of [8/444]	0.06m	0.05m	0.05m	-	No	-	-	-
8/446	Stakehole	0.05m	0.04m	0.05m	-	No	8/399	-	-
8/447	Fill of [8/446]	0.05m	0.04m	0.05m	-	No	-	-	-
8/448	Fill of [8/449]	0.06m	0.06m	0.04m	-	No	-	-	-
8/449	Stakehole	0.06m	0.06m	0.04m	-	No	8/399	-	-
8/450	Fill of [8/451]	0.34m	0.24m	0.13m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/451	Stakehole	0.34m	0.24m	0.13m	-	No	8/399	-	-
8/452	Fill of [8/453]	0.05m	0.05m	0.03m	-	No	-	-	-
8/453	Stakehole	0.05m	0.05m	0.03m	-	No	8/399	-	-
8/454	Fill of [8/455]	0.05m	0.05m	0.04m	-	No	-	-	-
8/455	Stakehole	0.05m	0.05m	0.04m	-	No	8/399	-	-
8/456	Fill of [8/457]	0.06m	0.06m	0.08m	-	No	-	-	-
8/457	Stakehole	0.06m	0.06m	0.08m	-	No	8/399	-	-
8/458	Fill of [8/459]	0.05m	0.05m	0.06m	-	No	-	-	-
8/459	Stakehole	0.05m	0.05m	0.06m	-	No	8/399	-	-
8/460	Fill of [8/461]	0.05m	0.05m	0.06m	-	No	-	-	-
8/461	Stakehole	0.05m	0.05m	0.06m	-	No	8/399	-	-
8/462	Fill of [8/463]	0.05m	0.05m	0.03m	-	No	-	-	-
8/463	Stakehole	0.05m	0.05m	0.03m	-	No	8/399	-	-
8/464	Fill of [8/465]	0.38m	0.36m	0.19m	-	No	-	-	-
8/465	Posthole	0.38m	0.36m	0.19m	-	No	8/399	-	-
8/466	Fill of [8/467]	0.36m	0.31m	0.27m	-	No	-	-	-
8/467	Posthole	0.36m	0.31m	0.27m	-	No	8/399	-	-
8/468	Fill of [8/469]	0.36m	0.34m	0.14m	-	No	-	-	-
8/469	Posthole	0.36m	0.34m	0.14m	-	No	8/399	-	-
8/470	Fill of [8/471]	0.42m	0.40m	0.14m	-	No	-	-	-
8/471	Posthole	0.42m	0.40m	0.14m	-	8/471	-	-	-
8/472	Ash layer	1.04m	0.80m	0.05m	-	8/472	-	-	-
8/473	Debris layer	3.54m	0.40m	0.02m	-	8/473	-	-	-
8/474	Stakehole	0.07m	0.05m	0.16m	-	No	8/399	-	-
8/475	Fill of [8/847]	0.07m	0.05m	0.16m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/476	Stakehole	0.06m	0.04m	0.14m	-	No	8/399	-	-
8/477	Fill of [8/478]	0.26m	0.11m	0.04m	-	No	-	-	-
8/478	Posthole	0.26m	0.11m	0.04m	-	No	8/399	-	-
8/479	Fill of [8/480]	0.35m	0.21m	0.16m	-	No	-	-	-
8/480	Posthole	0.35m	0.21m	0.16m	-	No	8/399	-	-
8/481	Fill of [8/481]	0.25m	0.10m	0.07m	-	No	-	-	-
8/482	Posthole	0.25m	0.10m	0.07m	-	No	8/399	-	-
8/483	Fill of [8/484]	0.06m	0.06m	0.06m	-	No	-	-	-
8/484	Stakehole	0.06m	0.06m	0.06m	-	No	8/399	-	-
8/485	Fill of [8/486]	0.05m	0.05m	0.03m	-	No	-	-	-
8/486	Stakehole	0.05m	0.05m	0.03m	-	No	8/399	-	-
8/487	Fill of [8/488]	0.05m	0.05m	0.06m	-	No	-	-	-
8/488	Stakehole	0.05m	0.05m	0.06m	-	No	8/399	-	-
8/489	Fill of [8/490]	0.05m	0.05m	0.03m	-	No	-	-	-
8/490	Stakehole	0.05m	0.05m	0.03m	-	No	8/399	-	-
8/491	Fill of [8/492]	0.08m	0.06m	0.05m	-	No	-	-	-
8/492	Stakehole	0.08m	0.06m	0.05m	-	No	8/399	-	-
8/493	Fill of [8/494]	0.05m	0.05m	0.02m	-	No	-	-	-
8/494	Stakehole	0.05m	0.05m	0.02m	-	No	8/399	-	-
8/495	Fill of [8/496]	0.05m	0.05m	0.02m	-	No	-	-	-
8/496	Stakehole	0.05m	0.05m	0.02m	-	No	8/399	-	-
8/497	Fill of [8/498]	0.06m	0.06m	0.04m	-	No	-	-	-
8/498	Stakehole	0.06m	0.06m	0.04m	-	No	8/399	-	-
8/499	Fill of [8/500]	0.08m	0.08m	0.08m	-	No	-	-	-
8/500	Stakehole	0.08m	0.08m	0.08m	-	No	8/399	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/501	Fill of [8/502]	0.07m	0.06m	0.05m	-	No	-	-	-
8/502	Stakehole	0.07m	0.06m	0.05m	-	No	8/399	-	-
8/503	Fill of [8/504]	1.10m	1.00m	0.22m	-	No	-		
8/504	Pit cut	1.10m	1.00m	0.22m	-	8/504	-	-	-
8/505	Ash layer	7.00m	5.20m	0.12m	-	8/505	-	-	-
8/506	Fill of [8/507]	0.05m	0.05m	0.08m	-	No	-	-	-
8/507	Stakehole	0.05m	0.05m	0.08m	-	No	8/507	-	-
8/508	Fill of [8/509]	0.06m	0.04m	0.06m	-	No	-	-	-
8/509	Stakehole	0.06m	0.04m	0.06m	-	No	8/507	-	-
8/510	Fill of [8/511]	0.06m	0.06m	0.05m	-	No	-	-	-
8/511	Stakehole	0.06m	0.06m	0.05m	-	No	8/511	-	-
8/512	Fill of [8/513]	0.07m	0.07m	0.11m	-	No	-	-	-
8/513	Stakehole	0.07m	0.07m	0.11m	-	No	8/511	-	-
8/514	Fill of [8/515]	0.10m	0.10m	0.17m	-	No	-	-	-
8/515	Stakehole	0.10m	0.10m	0.17m	-	8/515	-	-	-
8/516	Fill of [8/517]	0.08m	0.08m	0.17m	-	No	-	-	-
8/517	Stakehole	0.08m	0.08m	0.17m	-	No	8/511	-	-
8/518	Fill of [8/519]	0.05m	0.05m	0.07m	-	No	-	-	-
8/519	Stakehole	0.05m	0.05m	0.07m	-	No	8/511	-	-
8/520	Fill of [8/521]	1.86m	1.84m	1.60m	-	No	-	-	-
8/521	Pit cut	1.86m	1.84m	1.60m	-	8/521	-	-	-
8/522	missing						-	-	-
8/523	Fill of [8/524]	1.00m	1.00m	0.58m	-	No	-	-	-
8/524	Pit cut	1.00m	1.00m	0.58m	-	8/524	-	-	-
8/525	Fill of [8/526]	1.94m	1.86m	1.54m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/526	Pit cut	1.94m	1.86m	1.54m	-	8/526	-	-	-
8/527	Fill of [8/528]	0.18m	0.15m	0.15m	-	No	-	-	-
8/528	Posthole cut	0.18m	0.15m	0.15m	-	8/528	-	-	-
8/529	Fill of [8/530]	0.17m	0.15m	0.28m	-	No	-	-	-
8/530	Posthole cut	0.17m	0.15m	0.28m	-	8/530	-	-	-
8/531	Firmly compacted light brown sandy clay layer	2.54m	2.10m	0.05m	-	8/531	-	-	-
8/532	Firmly compacted grey sandy clay	2.86m	2.20m	0.05m	-	8/532	-	-	-
8/533	Fill of [8/534]	0.48m	0.32m	0.17m	-	No	-	-	-
8/534	Posthole cut	0.48m	0.32m	0.17m	-	8/534	-	-	-
8/535	Fill of [8/536]	2.30m	2.20m	1.30m	-	No	-	-	-
8/536	Well cut	2.30m	2.20m	1.30m	-	8/536	-	-	-
8/537	Fill of [8/538]	0.82m	0.80m	0.40m	-	No	-	-	-
8/538	Well cut	0.82m	0.80m	0.40m	-	8/538	-	-	-
8/539	Fill of [8/540]	2.00m	1.20m	0.45m	-	No	-	-	-
8/540	Pit cut	2.00m	1.20m	0.45m	-	8/540	-	-	-
8/541	Fill of [8/542]	0.40m	0.22m	0.19m	-	No	-	-	-
8/542	Posthole cut	0.40m	0.22m	0.19m	-	8/542	-	-	-
8/543	Firmly compacted light yellow sandy clay layer	2.76m	1.18m	0.30m	-	8/543	-	-	-
8/544	Fill of [8/545]	0.50m	0.44m	0.13m	-	No	-	-	-
8/545	Pit cut	0.50m	0.44m	0.13m	-	8/545	-	-	-
8/546	Fill of [8/547]	0.24m	0.22m	0.15m	-	No	-	-	-
8/547	Posthole cut	0.24m	0.22m	0.15m	-	8/547	-	-	-
8/548	Fill of [8/549]	0.21m	0.19m	0.18m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/549	Posthole cut	0.21m	0.19m	0.18m	-	8/545	-	-	-
8/550	Posthole cut	0.43m	0.22m	0.16m	-	8/550	-	-	-
8/551	Fill of [8/550]	0.43m	0.22m	0.16m	-	No	-	-	-
8/552	Grave cut	1.50m	0.50m	0.20m	-	8/558	-	-	-
8/553	Fill of [8/552]	1.50m	0.50m	0.20m	-	No	-	-	-
8/554	Fill of [8/555]	1.46m	1.36m	0.96m	-	No	-	-	-
8/555	Pit cut	1.46m	1.36m	0.96m	-	8/555	-	-	-
8/556	Fill of [8/557]	1.22m	1.10m	0.20m	-	No	-	-	-
8/557	Pit cut	1.22m	1.10m	0.20m	-	8/557	-	-	-
8/558	Skeleton	1.50m	0.50m	0.20m	-	8/558	-	-	-
8/559	Brick wall	5.50m	0.40m	0.25m	-	No	10 (1+4)	-	-
8/560	Brick wall	2.46m	0.46m	0.15m	-	No	10 (1+2)	-	-
8/561	Brick floor	1.80m	1.75m	0.07m	-	No	10 (1+2)	-	-
8/562	Brick wall	5.50m	2.80m	0.80m	-	No	10 (3)	-	-
8/563	Brick wall	0.70m	0.50m	1.20m	-	No	10 (3)	-	-
8/564	Brick wall	0.90m	0.46m	0.80m	-	No	10 (2)	-	-
8/565	Brick wall	2.30m	1.20m	0.20m	-	No	10 (2)	-	-
8/566	Brick flue	0.80m	0.45m	0.80m	-	No	10 (2)	-	-
8/567	Brick wall	3.40m	0.23m	0.08m	-	No	10 (2)	-	-
8/568	Brick wall	1.20m	0.23m	0.60m	-	No	10 (2)	-	-
8/569	Cut for cremation 10	0.30m	0.20m	0.15m	-	8/569	-	-	-
8/570	Fill of [8/569]	0.30m	0.20m	0.15m	-	No	-	-	-
8/571	Fill of [8/572]	1.22m	0.94m	0.28m	-	No	-	-	-
8/572	Pit cut	1.22m	0.94m	0.28m	-	8/572	-	-	-
8/573	Fill of [8/574]	1.08m	1.06m	0.40m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/574	Pit cut	1.08m	1.06m	0.40m	-	8/574	-	-	-
8/575	Fill of brick-lined drain (8/577)	10.25m	0.84m	0.52m	-	No	-	-	-
8/576	Packing fill within cut [8/578]	10.25m	0.84m	0.52m	-	No	-	-	-
8/577	Brick-lining for drain cut [8/578]	10.25m	0.84m	0.52m	-	8/577	-	-	-
8/578	Post-med drain cut	10.25m	0.84m	0.52m	-	8/578	-	-	-
8/579	Firmly compacted mid-grey sandy silt layer	2.20m	0.80m	0.02m	-	8/579	-	-	-
8/580	Brick blocking-up of drain (8/577)	0.78m	0.12m	0.52m	-	8/577	-	-	-
8/581	Fill within brick-lining (8/583)	1.20m	1.10m	0.76m	-	No	-	-	-
8/582	Packing fill within cut [8/584]	1.20m	1.10m	0.76m	-	No	-	-	-
8/583	Bricklining for possible soakaway	1.20m	1.10m	0.76m	-	8/583	-	-	-
8/584	Cut for possible soakaway	1.20m	1.10m	0.76m	-	8/584	-	-	-
8/585	Fill of [8/586]	0.90m	0.30m	0.22m	-	No	-	-	-
8/586	Small p-med pit cut	0.90m	0.30m	0.22m	-	8/586	-	-	-
8/587	Fill of [8/588]	0.68m	0.27m	0.20m	-	No	-	-	-
8/588	Small p-med pit cut	0.68m	0.27m	0.20m	-	No	11	-	-
8/589	P-med mid-grey sandy silt layer	1.23m	0.47m	0.02m	-	8/589	-	-	-
8/590	Fill of [8/591]	0.70m	0.29m	0.35m	-	No	-	-	-
8/591	Small p-med pit cut	0.70m	0.29m	0.35m	-	No	11	-	-
8/592	Fill of [8/593]	0.69m	0.40m	0.36m	-	No	-	-	-
8/593	Pit cut	0.69m	0.40m	0.36m	-	No	11	-	-
8/594	Greyish-green sandy clay layer	0.90m	0.72m	0.05m	-	8/594	-	-	-
8/595	Brick-lining for [8/630]	1.20m	0.60m	0.12m	-	8/595	-	-	-
8/596	Fill of [8/597]	0.29m	0.27m	0.10m	-	No	-	-	-
8/597	Small pit cut	0.29m	0.27m	0.10m	-	8/597	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/598	Dump layer	0.80m	0.73m	0.04m	-	8/598	-	-	-
8/599	Secondary fill of [8/601]	0.60m	0.40m	0.10m	-	No	-	-	-
8/600	Primary fill of [8/601]	0.80m	0.53m	0.06m	-	No	-	-	-
8/601	Pit cut	0.80m	0.53m	0.16m	-	8/601	-	-	-
8/602	P-med pit cut	1.40m	1.40m	0.35m	-	8/602	-	-	-
8/603	Fill of [8/602]	1.40m	1.40m	0.35m	-	No	-	-	-
8/604	Deep pit/well cut	1.15m	1.10m	1.40m+	-	8/604	-	-	-
8/605	Latest fill of [8/604]	1.15m	1.10m	0.50m	-	No	-	-	-
8/606	Dump layer	3.60m	2.60m	0.15m	-	8/606	-	-	-
8/607	Fill of brick structure (8/607)	1.60m	0.60m	0.75m	-	No	-	-	-
8/608	Deep p-med brick structure	2.00m	0.80m	0.75m+	-	8/608	-	-	-
8/609	P-med cut for (8/608)	2.00m	0.80m	0.80m+	-	8/609	-	-	-
8/610	Fill of (8/595)	1.20m	0.30m	0.12m	-	No	-	-	-
8/611	Fill of pit [8/604]	1.15m	1.10m	0.10m	-	No	-	-	-
8/612	Fill of pit [8/604]	1.15m	1.10m	0.10m	-	No	-	-	-
8/613	Fill of pit [8/604]	1.15m	1.10m	0.30m	-	No	-	-	-
8/614	Fill of pit [8/604]	1.15m	1.10m	0.20m	-	No	-	-	-
8/615	Secondary fill of [8/617]	2.18m	2.18m	0.55m	-	No	-	-	-
8/616	Primary fill of [8/617]	1.96m	1.96m	0.80m	-	No	-	-	-
8/617	Pit cut	2.18m	2.18m	1.35m	-	8/617	-	-	-
8/618	Secondary fill of [8620]	1.15m	1.12m	0.45m	-	No	-	-	-
8/619	Primary fill of [8/620]	1.15m	1.08m	0.65m	-	No	-	-	-
8/620	Cut of possible well	1.15m	1.12m	1.10m+	-	8/620	-	-	-
8/621	Fill of [8/622]	0.60m	0.50m	0.35m	-	No	-	-	-
8/622	P-med pit cut	0.60m	0.50m	0.35m	-	8/622	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/623	Linear cut	3.00m	0.28m	0.15m	-	No	11	-	-
8/624	Fill of [8/623]	3.00m	0.28m	0.15m	-	No	-	-	-
8/625	Sub-rectangular cut	1.60m	0.68m	0.50m	-	8/625	-	-	-
8/626	Fill of [8/625]	1.60m	0.68m	0.50m	-	No	-	-	-
8/627	Sandy clay layer	2.28m	2.16m	0.16m	-	8/627	-	-	-
8/628	Gravelly clay layer	2.44m	1.40m	0.08m	-	8/628	-	-	-
8/629	Packing fill within [8/630]	1.90m	0.90m	0.13m	-	No	-	-	-
8/630	Cut for p-med water channel	1.90m	0.90m	0.13m	-	No	11	-	-
8/631	Fill of [8/632]	1.48m	0.90m	0.50m	-	No	-	-	-
8/632	P-med pit cut	1.48m	0.90m	0.50m	-	No	11	-	-
8/633	Fill of [8/634]	1.80m	0.80m	0.11m	-	No	-	-	-
8/634	P-med linear cut	1.80m	0.80m	0.11m	-	No	11	-	-
8/635	Fill of [8/636]	0.88m	0.86m	0.32m	-	No	-	-	-
8/636	P-med pit cut	0.88m	0.86m	0.32m	-	8/636	-	-	-
8/637	Fill of [8/638]	1.22m	0.67m	0.56m	-	No	-	-	-
8/638	Sub-circular pit cut	1.22m	0.67m	0.56m	-	8/638	-	-	-
8/639	Mixed gravel layer			0.10m	-	8/639	-	-	-
8/640	Fill of [8/641]	0.80m	0.64m	0.40m	-	No	-	-	-
8/641	Pit cut	0.80m	0.64m	0.40m	-	8/641	-	-	-
8/642	Layer of burning debris	1.30m	0.94m	0.10m	-	8/642	-	-	-
8/643	Fill of [8/645]	1.00m	0.70m	0.15m	-	No	-	7	-
8/644	Dumped fill in [8/645]	0.80m	0.70m	0.04m	-	No	-	7	-
8/645	Pit cut	2.26m	0.80m	0.60m	-	8/645	-	7	-
8/646	Layer of burning debris	3.00m	2.40m	0.06m	-	8/646	-	-	-
8/647	Gravel layer	4.32m	2.40m	0.10m	-	8/647	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/648	Fill of [8/645]	0.40m	0.30m	0.25m	-	No	-	-	-
8/649	Fill of [8/645]	0.86m	0.70m	0.05m	-	No	-	-	-
8/650	Fill of [8/651]	0.24m	0.20m	0.09m	-	No	-	-	-
8/651	Posthole	0.24m	0.20m	0.09m	-	8/651	-	-	-
8/652	Fill of [8/653]	0.35m	0.35m	0.18m	-	No	-	-	-
8/653	Posthole	0.35m	0.35m	0.18m	-	8/651	-	-	-
8/654	Fill of [8/658]	1.27m	1.30m	0.40m	-	No	-	-	-
8/655	Grey clayey silt layer	5.96m	4.00m	0.15m	-	8/655	-	-	-
8/656	Grey sandy silt layer	10.58m	2.60m	0.35m	-	8/656	-	-	-
8/657	Grey sandy silt layer	8.40m	2.50m	0.30m	-	8/657	-	-	-
8/658	Well cut	1.30m	1.27m	1.10m+	-	8/658	-	-	-
8/659	Fill of [8/663]	2.40m	2.20m	1.00m	-	No	-	6+7	-
8/660	Fill of [8/663]	2.00m	1.75m	0.12m	-	No	-	6	-
8/661	Fill of [8/663]	0.65m	0.65m	0.75m	-	No	-	6	-
8/662	Fill of [8/663]	1.25m	1.00m	0.20m	-	No	-	6	-
8/663	Possible rubbish pit cut	2.48m	2.20m	1.20m	-	8/663	-	6+7	-
8/664	Fill of [8/665]	0.36m	0.27m	0.14m	-	No	-	-	-
8/665	Posthole	0.36m	0.27m	0.14m	-	8/651	-	-	-
8/666	Fill of [8/667]	0.38m	0.22m	0.10m	-	No	-	-	-
8/667	Posthole	0.38m	0.22m	0.10m	-	8/651	-	-	-
8/668	Fill of [8/669]	1.34m	0.82m	0.30m	-	No	-	-	-
8/669	Pit cut	1.34m	0.82m	0.30m	-	8/669	-	-	-
8/670	Fill of [8/671]	1.66m	1.56m	0.32m	-	No	-	-	-
8/671	Possible rubbish pit cut	1.66m	1.56m	0.32m	-	8/671	-	-	-
8/672	Fill of [8663]	0.50m	0.50m	0.12m	-	No	-	6	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/673	Redeposited natural layer	2.40m	1.30m	0.10m	-	8/673	-	-	-
8/674	Fill of [8/675]	0.50m	0.47m	0.41m	-	No	-	-	-
8/675	Pit cut	0.50m	0.47m	0.41m	-	8/675	-	-	-
8/676	Fill of [8/677]	0.36m	0.27m	0.14m	-	No	-	-	-
8/677	Pit cut	0.36m	0.27m	0.14m	-	8/677	-	-	-
8/678	Fill of [8/679]	0.20m	0.18m	0.10m	-	No	-	-	-
8/679	Posthole	0.20m	0.18m	0.10m	-	8/679	-	-	-
8/680	Fill of [8/681]	0.50m	0.45m	0.11m	-	No	-	-	-
8/681	Pit cut	0.50m	0.45m	0.11m	-	8/681	-	-	-
8/682	Redeposited brickearth layer	1.90m	1.90m	0.08m	-	8/682	-	-	-
8/683	Fill of [8/684]	1.02m	0.86m	0.23m	-	No	-	-	-
8/684	Pit cut	1.02m	0.86m	0.23m	-	8/684	-	-	-
8/685	Fill of [8/686]	0.22m	0.16m	0.44m	-	No	-	-	-
8/686	Posthole	0.22m	0.16m	0.44m	-	8/686	-	-	-
8/687	Fill of [8/688]	0.26m	0.25m	0.28m	-	No	-	-	-
8/688	Posthole	0.26m	0.25m	0.28m	-	8/688	-	-	-
8/689	Fill of [8/690]	0.09m	0.09m	0.18m	-	No	-	-	-
8/690	Posthole	0.09m	0.09m	0.18m	-	8/690	-	-	-
8/691	Redeposited natural layer	3.60m	2.50m	0.10m	-	8/691	-	-	-
8/692	Redeposited clay layer	1.94m	0.60m	0.08m	-	8/692	-	-	-
8/693	Fill of [8/694]	0.28m	0.26m	0.15m	-	No	-	-	-
8/694	Sub-circular pit cut	0.28m	0.26m	0.15m	-	8/694	-	-	-
8/695	Fill of [8/696]	0.28m	0.28m	0.29m	-	No	-	-	-
8/696	Posthole	0.28m	0.28m	0.29m	-	8/696	-	-	-
8/697	Fill of [8/698]	0.08m	0.08m	0.10m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/698	Stakehole	0.08m	0.08m	0.10m	-	8/694	-	-	-
8/699	Grave cut	1.50m	0.90m	0.46m	-	8/700	-	-	-
8/700	Skeleton	?	?	?	?	8/700	-	-	-
8/701	Primary grave fill			0.12m	-		-	-	-
8/702	Fill of [8/699]			0.40m			-	-	-
8/703	Fill of [8/704]	0.04m	0.04m	0.07m	-	No	-	-	-
8/704	Stakehole	0.04m	0.04m	0.07m	-	No	[8/696]	-	-
8/705	Fill of [8/706]	0.05m	0.05m	0.07m	-	No	-	-	-
8/706	Stakehole	0.05m	0.05m	0.07m	-	No	[8/696]	-	-
8/707	Sandy layer	2.85	-	0.34m	-	8/707	-	8	-
8/708	Organic layer	0.85m	-	0.15m	-	No	-	8	-
8/709	natural layer				-	No	-	8	-
8/710	Gravelly, sandy layer	1.02m	1.02m	0.03m	-	No	8/710	-	-
8/711	Fill of [8/712]	0.10m	0.08m	0.15m	-	No	-	-	-
8/712	Stakehole	0.10m	0.08m	0.15m	-	No	8/710	-	-
8/713	Fill of [8/714]	0.08m	0.08m	0.12m	-	No	-	-	-
8/714	Stakehole	0.08m	0.08m	0.12m	-	No	8/710	-	-
8/715	Fill of [8/716]	0.08m	0.08m	0.07m	-	No	-	-	-
8/716	Stakehole	0.08m	0.08m	0.07m	-	No	8/716	-	-
8/717	Fill of [8/718]	0.07m	0.07m	0.06m	-	No	-	-	-
8/718	Stakehole	0.07m	0.07m	0.06m	-	No	8/716	-	-
8/719	Dumped levelling layer	0.60m	0.42m	0.05m	-	8/719	-	-	-
8/720	Fill of [8/721]	0.68m	0.66m	0.13m	-	No	-	-	-
8/721	Sahllow pit	0.68m	0.66m	0.13m	-	No	8/721	-	-
8/722	Fill of [8/723]	0.06m	0.06m	0.06m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/723	Stakehole	0.06m	0.06m	0.06m	-	No	8/721	-	-
8/724	Fill of [8/724]	0.08m	0.08m	0.08m	-	No	-	-	-
8/725	Posthole	0.08m	0.08m	0.08m	-	No	8/721	-	-
8/726	Fill of [8/727]	0.22m	0.22m	0.15m	-	No	-	-	-
8/727	Posthole	0.22m	0.22m	0.15m	-	8/727	-	-	-
8/728	Sandy layer	0.80m	0.50m	0.06m	-	8/728	-	-	-
8/729	Fill of [8/730]	0.55m	0.39m	0.45m	-	No	-	-	-
8/730	Pit	0.55m	0.39m	0.45m	-	No	8/730	-	-
8/731	Fill of [8/732]	0.47m	0.40m	0.30m	-	No	-	-	-
8/732	Pit	0.47m	0.40m	0.30m	-	No	8/730	-	-
8/733	Burnt layer	0.20m	0.15m	0.02m	-	8/733	-	-	-
8/734	Ashy layer/lens	0.25m	0.20m	0.04m	-	8/734	-	-	-
8/735	Linear masonary structure	4.50m	0.60m	0.15m	-	8/735	-	-	-
8/736	Rectangular brick structure	1.80m	1.55m	0.25m	-	No	8/736	-	-
8/737	Fill of [8/790]	1.60m	1.60m	0.22m	-	No	-	-	-
8/738	Fill of [8/790]	1.90m	1.90m	0.16m	-	No	-	-	-
8/739	Fill of [8/740]	4.80m??	0.65m	0.10m	-	No	-	-	-
8/740	Pit	4.80m??	0.65m	0.10m	-	8/740	-	-	-
8/741	Construction cut for [8/736]	1.80m	1.50m	0.30m	-	No	8/736	-	-
8/742	Fill of [8/736]	0.50m	0.50m	0.30m	-	No	8/736	-	-
8/743	Fill of [8/736]	0.50m	0.50m	0.30m	-	No	8/737	-	-
8/744	Square red brick structure	0.22m	0.10m	0.08m	-	:?	-	-	-
8/745	Fill of [8/?]	1.55m	1.55m	2.5m	-	No	-	-	-
8/746	Brick soakaway	2.20m	1.80m	2.44m	-	No	13	-	-
8/747	Fill of [8/790]	2.37m	2.30m	0.80m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/748	Red brick channel	1.10m	0.70m	0.35m	-	No	13	-	-
8/749	Fill of [8/751]	1.15m	0.30m	0.20m	-	No	-	-	-
8/750	Fill of [8/751]	1.15m	0.30m	0.20m	-	No	13	-	-
8/751	Post med drain	9.80m	0.78m	0.40m	-	No	13	-	-
8/752	Amended brick alteration to drain	0.60m	0.10m	0.10m	-	No	13	-	-
8/753	Brick drain	2.22m	0.42m	0.40m	-	No	13	-	-
8/754	Support timber beam for [8/746]	0.45m	0.15m	-	-	No	13	-	-
8/755	Support timber beam for [8/746]	1.00m	0.14m	-	-	No	13	-	-
8/756	Fill of [8/758]	0.70m	0.60m	0.45m	-	No	-	-	-
8/757	Fill of [8/758]	1.44m	1.22m	1.43m	-	No	-	-	-
8/758	Well cut	1.44m	1.22m	1.43m	-	8/758	-	-	-
8/759	Brick channel/flue	1.55m	0.46m	0.20m	-	No	13	-	-
8/760	Mixed layer	4.30m	3.40m	0.15m	-	8/760	-	-	-
8/761	Post med trample layer	2.70m	1.50m	0.10m	-	8/761	-	-	-
8/762	Fill of [8/753]	2.22m	0.42m	0.40m	-	No	-	-	-
8/763	Fill of [8/764]	1.70m	1.60m	1.60m	-	No	-	-	-
8/764	Large pit	1.70m	1.60m	1.60m	-	8/764	-	-	-
8/765	Silt clay layer	3.60m	1.70m	0.20m	-	8/765	-	-	-
8/766	Fill of [8/767]	1.50m	1.45m	1.10m	-	8/767	-	-	-
8/767	Well cut	1.50m	1.45m	1.10m	-	8/767	-	-	-
8/768	Post-med drain cut	1.90m	0.66m	0.13m	-	No	14	-	-
8/769	Fill of [8/768]	1.90m	0.66m	0.13m	-	No	-	-	-
8/770	Fill of [8/764]	1.70m	1.60m	1.60m	-	No	-	-	-
8/771	Mixed layer	2.20m	1.00m	0.06m	-	8/771	-	-	-
8/772	Fill of [8/785]	0.64m	-	0.17m	-	No	-	9	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/773	Fill of [8/772]	0.51m	-	0.04m	-	No	-	9	-
8/774	Fill of [8/785]	0.46m	-	0.03m	-	No	-	9	-
8/775	Fill of [8/785]	0.55m	-	0.09m	-	No	-	9	-
8/776	Fill of [8/785]	0.50m	-	0.10m	-	No	-	9	-
8/777	Fill of [8/785]	1.24m	-	0.19m	-	No	-	9	-
8/778	Fill of [8/785]	1.25m	-	0.69m	-	No	-	9	-
8/779	Fill of [8/785]	0.31	-	0.21m	-	No	-	9	-
8/780	Fill of [8/785]	0.47m	-	0.25m	-	No	-	9	-
8/781	Fill of [8/785]	0.59m	-	0.20m	-	No	-	9	
8/782	Fill of [8/785]	0.56m	-	0.07m	-	No	-	9	-
8/783	Fill of [8/785]	1.54m	-	0.35m	-	No	-	9	-
8/784	Fill of	1.64m	?		-	No	-	-	-
8/785	Well cut	1.64m	?	1.68m	-	8/785	-	9	-
8/786	Gravel layer	?	?	0.15m	-	8/786	-	-	-
8/787	Clean clay layer	1.90m	1.80m	0.15m	-	8/787	-	-	
8/788	Yellow gravel layer	0.98m	0.82m	0.05m	-	8/788	-	-	-
8/789	Grey sand silt layer	6.60m	5.20m	0.20m	-	8/789	-	-	-
8/790	Pit cut	2.37m	2.30m	0.81m	-	8/790	-	-	-
8/791	Green silt layer	2.00m	1.50m	0.08m	-	8/791	-	-	-
8/792	Fill of [8/793]	0.32m	0.26m	0.07m	-	8/793	-	-	-
8/793	Posthole	0.32m	0.26m	0.07m	-	8/793	-	-	-
8/794	Cut for post-med drain	?	?	?	-	?	-	-	-
8/795	Cut for post-med brick structure	?	?	?	-	?	-	-	-
8/796	Gravel clay layer	1.70m	1.40m	0.10m	-	8/796	-		-
8/797	Fill of [8/798]	1.90m	1.40m	0.33m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/798	Pit cut	1.90m	1.40m	0.33m	-	8/798	-	-	-
8/799	Sand silt layer	6.40m	4.40m	0.20m	-	8/799	-	-	-
8/800	Grey layer	7.60m	4.70m	0.20m	-	8/800		-	-
8/801	Secondary fill of [8/803]	2.00m	1.12m	0.73m	-	No	-	-	-
8/802	Primary fill of [8/803]	0.80m	0.50m	0.39m	-	No	-	-	-
8/803	Rubbish pit cut	2.00m	1.12m	0.98m	-	8/803	-	-	-
8/804	Grey sandy silt layer	3.00m	1.40m	0.20m	-	8/804	-	-	-
8/805	Latest fill of [8/808]	1.60m	0.40m	0.03m	-	No	-	-	-
8/806	Secondary fill of [8/808]	2.12m	0.22m	0.05m	-	No	-	-	-
8/807	Primary fill of [8/808]	3.00m	0.60m	0.14m	-	No	-	-	-
8/808	Possible linear cut	3.00m	0.60m	0.14m	-	8/808	-	-	-
8/809	Sandy clay layer	1.60m	0.90m	0.04m	-	8/809	-	-	-
8/810	Sandy silt layer	1.40m	0.90m	0.12m	-	8/810	-	-	-
8/811	Yellow/brown silty sand layer	0.36m	0.32m	0.12m	-	8/811	-	-	-
8/812	Fill of [8/813]	0.70m	0.47m	0.07m	-	No	-	-	-
8/813	Possible beam slot	0.70m	0.47m	0.07m	-	8/813	-	-	-
8/814	Pit cut	0.70m	0.70m	0.28m	-	8/814	-	-	-
8/815	Secondary fill of [8/814]	0.70m	0.70m	0.18m	-	No	-	-	-
8/816	Fill of [8/817]	0.08m	0.08m	0.13m	-	No	-	-	-
8/817	Stakehole cut	0.08m	0.08m	0.13m	-	8/817	-	-	-
8/818	Fill of [8/819]	0.12m	0.12m	0.16m	-	No	-	-	-
8/819	Stakehole cut	0.12m	0.12m	0.16m	-	8/817	-	-	-
8/820	Fill of [8/821]	0.07m	0.07m	0.15m	-	No	-	-	-
8/821	Stakehole cut	0.07m	0.07m	0.15m	-	8/821	-	-	-
8/822	Fill of [8/823]	0.13m	0.11m	0.13m	-	No	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/823	Stakehole cut	0.13m	0.11m	0.13m	-	8/821	-	-	-
8/824	Fill of [8/825]	0.12m	0.09m	0.14m	-	No	-	-	-
8/825	Stakehole cut	0.12m	0.09m	0.14m	-	8/821	-	-	-
8/826	Fill of [8/827]	0.10m	0.08m	0.12m	-	No	-	-	-
8/827	Stakehole cut	0.10m	0.08m	0.12m	-	8/821	-	-	-
8/828	Pit cut containing cremations 38 + 39	1.30m	1.10m	0.20m	-	8/828	-	-	-
8/829	Fill of [8/828]	1.30m	1.10m	0.20m	-	No	-	-	-
8/830	Spread of silty sand	1.47m	0.78m	0.11m	-	8/830	-	-	-
8/831	Discoloured natural deposit	7.60m	3.00m	0.20m	-	No	PX	-	-
8/832	Fill of [8/833]	0.28m	0.26m	0.26m	-	No	-	-	-
8/833	Pit cut	0.28m	0.26m	0.26m	-	8/833	-	-	-
8/834	Discoloured natural deposit	2.70m	1.90m	0.19m	-	8/834	-	-	-
8/835	Brown silty clay layer	2.22m	1.64m	0.05m	-	8/835	-	-	-
8/836	Fill of [8/837]	2.08m	0.65m	0.19m	-	No	-	-	-
8/837	Pit cut	2.08m	0.65m	0.19m	-	8/837	-	-	-
8/838	Fill of [8/839]	0.12m	0.10m	0.10m	-	No	-	-	-
8/839	Pit cut containing cremation 41	0.12m	0.10m	0.10m	-	8/839	-	-	-
8/840	Fill of [8/841]	0.24m	0.10m	0.03m	-	No	-	-	-
8/841	Pit cut containing cremation 42	0.24m	0.10m	0.03m	-	8/839	-	-	-
8/842	Fill of [8/843]	0.47m	0.37m	0.10m	-	No	-	-	-
8/843	Pit cut	0.47m	0.37m	0.10m	-	8/843	-	-	-
8/844	Fill of [8/845]	0.14m	0.10m	0.30m	-	No	-	-	-
8/845	Posthole cut	0.14m	0.10m	0.30m	-	8/845	-	-	-
8/846	Green silty clay layer	4.90m	3.06m	0.15m	-	8/846	-	-	-

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Context Number	Context Description	Length	Width	Depth	Image No	Single Context Plan?	Plan No	Section No.	Specialist Drwg No.
8/847	Primary fill of [8/814]	0.30m	0.30m	0.05m	-	No	-	-	-
8/848	Pit cut	0.30m	0.25m	0.28m	-	8/848	-	-	-
8/849	Fill of [8/848]	0.30m	0.25m	0.28m	-	No	-	-	-
8/850	Pit cut	0.80m	0.40m	0.12m	-	8/850	-	-	-
8/851	Fill of [8/850]	0.80m	0.40m	0.12m	-	No	-	-	-
8/852	Grey sandy silt layer			0.15m	-	8/852	-	-	-
8/853	Fill of [8/854]	0.30m	0.13m	0.08m	-	No	-	-	-
8/854	Pit cut for cremation 45	0.30m	0.13m	0.08m	-	8/854	-	-	-
8/855	Fill of vessel 46	0.38m	0.24m	0.25m	-	No	-	-	-
8/856	Pit cut for cremation 46	0.38m	0.24m	0.25m	-	8/856	-	-	-
8/857	Burnt deposit	0.78m	0.50m	0.02m	-	8/857	-	-	-
8/858	Fill of [8/859]	0.25m	0.21m	0.28m	-	No	-	-	-
8/859	Pit cut for cremation 47	0.25m	0.21m	0.28m	-	8/859	-	-	-
8/860	Discoloured natural deposit	8.30m	1.98m	0.25m	-	No	PX	-	-
8/861	Discoloured natural deposit	7.04m	6.95m	0.28m	-	No	PX	-	-
8/862	Natural brickearth	Area	Area	0.60m	-	No	PX	-	-
8/863	Primary fill of [8/758]	0.91m	0.91m	0.37m	-	No	-	-	-
8/864	Linear cut for p-med wall (8/071)	3.36m	0.30m	0.40m	-	No	4	-	-
8/865	Fill of [8/198]	2.20m	1.06m	0.20m+	-	No	-	-	-
8/866	Fill of [8/856]	0.38m	0.24m	0.25m	-	No	-	-	-
8/867	Fill of cremation vessel 38	0.10m	0.10m	0.14m	-	8/828	-	-	-
8/868	Fill of cremation vessel 39				-	8/828	-	-	-

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Appendix B

Landscape Group Matrix

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Appendix C

Pottery

Lyn Blackmore

Quantification

Summary/Introduction

The site is centrally located in the Middle Saxon settlement known as *Lundenwic,* which covered most of the area now known as Covent Garden. Saxon pottery has been found on most sites within this area, including Jubilee Hall, Southampton Street just to the west of the site. The largest collection of pottery is from the Royal Opera House site, immediately to the north-west of the site, where a long stratigraphic sequence was investigated. From these assemblages a broad ceramic sequence has been established (Blackmore 1988; 1989; 1993; 1999; 2003; in prep, a; Blackmore and Redknap 1988), although many questions remain to be answered. In all 1100 sherds of pottery were found on the present site (39.790kg), ranging in date from prehistoric to post-medieval; each period is discussed separately below.

Table 1. The broad distribution of the pottery by Area, period, sherd count/ENV

Area	Preh	Rom	Saxon	Pmed	Total
1	1/1	1/1	326/179	72/62	400/243
2		2/1	128/60	22/17	152/78
3	2/2	2/2	383/109		284/113
123			4/4		4/4
SH		1/1	22/11	113/96	136/108
NH			8/7	9/9	17/16
WB				4/2	4/2
	3/3	6/6	871/370	220/186	

Methodology

All the pottery was examined macroscopically and where necessary using a binocular microscope (x20). Sherds from each different vessel were then recorded (for the most part individually) by sherd count and minimum vessel count (ENV) and weight on an Excel spreadsheet using Museum of London fabric and form codes (for expansions see Tables 3, 4 and 5). The exception was the imported reduced wares, a number of which which were simply recorded as NFGW pending more detailed work. The Saxon pottery was also separated by fabric type within each context and quantified by the percentage of rim diameter present (EVE). The finds were briefly considered in relation to the stratigraphy, as understood from the site matrices, and with reference to other sites in the general area. Dating is problematic. Contexts with Ipswich ware can be dated to the 8th

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or 9th centuries, but the earlier levels could span the 5th to 8th centuries. For now the cremations have been dated to *c* 550-650 while the subsequent pre-Ipswich deposits are dated to 550+, 600+, 650+ or 675+ depending on the presence/absence of other ware types. This will need to be tested at the analysis stage and some dates could become earlier or later.

The prehistoric pottery

Three small residual body sherds of flint-tempered pottery were recovered (11g). One hand-collected sherd was in fill [8295] of pit [8296] in Area 1, while the others are sieved samples taken from Area 3, [8834] (natural) and [8836], the fill of pit [8837]. Dating is problematic but is likely to be in the Bronze or Iron Age.

The Roman pottery

Six sherds of Roman pottery were found, all residual. That from Area 1 was in one of the latest Saxon pits ([8172]). One is from Area 2 ([8657])[8575], two are from Area 3, cremation <46> ([8855]) and cremation <47> ([8856]), while one is from the southern half of the site. Given the small size of the sample it is difficult to comment on this distribution, but the sherds are all of later, rather than earlier date. Two are of Samian ware (a bowl and a dish) dating to AD 150-300, while one is Oxfordshire colour-coated ware (AD 270-400); those from the cremations are very small and undiagnostic body sherds,

The Saxon pottery

The pottery was received in six shoe boxes, plus two complete pots. Many boxes were extremely full and heavy, and the assemblage now fills eight boxes. Sherd sizes ranges considerable from complete pots to tiny fragments but on the whole the sherds are of medium size and in average condition.

The Saxon pottery amounts to 871 sherds from xx contexts (370 ENV; 23.053kg, 6.46 EVEs). The broad distribution of the different fabrics is shown in Table 1. In all five main ware groups are represented (Table 2). A few cross-fits, or sherds from the same pots, were noted between different features, and it is possible that more will be detected at the analysis stage. A number of rim sherds and decorated pieces merit illustration and/or photography.

Table 2 The broad distribution of the Saxon pottery

Category	Sherds	ENV	Weight	EVE
Chaff-tempered wares	614	207	13588	5.21
Ipswich wares	94	75	5206	0.56
Other non-local	92	35	2641	1.15
Shell-tempered	15	11	301	0.08
'North French' wares	42	31	753	0.35

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Category	Sherds	ENV	Weight	EVE
Rhenish wares	12	10	562	0
Totals				

Chaff-tempered wares

These wares are by far the most abundant on this site, with 491 hand-collected sherds and a further 123 from sieved samples. Many sherds are from the same pots, but the estimated total vessel count is nonetheless 207. Many of the 38 rims/profiles are suitable for illustration, and it is possible that the classification of vessel shapes can be refined at the analysis stage

Chaff-tempered wares are long-lived, appearing in the 5th century and continuing into the mid-8th century, if not later (Blackmore 1988, 106; 1989, 104-7; 2001, 25; 2003, 229-34). This means that dating is problematic on sites such as this where there is a long stratigraphic sequence. It would appear, however, that the earlier wares are predominantly sand-tempered with only sparse organic matter, and that there is a trend towards greater amounts of organic temper during the 6th and 7th centuries. Most sherds from the present site have a sandy fabric with moderate organic matter and have been coded as CHSF. Sherds with a sand-free matrix and sparse sand were coded as CHFS, while the same with only organic temper was coded as CHAF. This is slightly different to earlier practice, but is in keeping with the results of thin section analysis (Vince 2003a).

Most sherds were recorded as coming from jars (567 fragments from 136 vessels). These include two complete cremation pots ([8829] <38>, [8858], <47>), and sherds from four other cremation vessels ([8570], <10>; cremation <39>, [8829]; cremation <42>, [8840]). The complete pots are currently unwashed and still in the bandages in which they were lifted from site; they will need to be cleaned before the analysis stage to permit closer examination and illustration. Pot <47> is complete but split in two vertically; it is of interest in that it is quite lopsided (height 193-205mm; rim diameter 132-135mm). Cremation jar <39>, which is reconstructable, is more rounded than <47> with a slightly biconical profile. The jar used for cremation <42> is rounded with a short upright neck and no burnish; there are many joining sherds but the vessel is incomplete. Sherds from [8841] were also given accession number <42> but are from a different pot.

Of the other forms, 19 sherds from ten vessels are sufficiently sooted to be recorded as cooking pots, while 13 sherds are from eight bowls. Two of these are of interest: [8791], a large internally abraded vessel, possibly used for some industrial process(?), and [8804], another large bowl. Taking this ware group as a whole, 38 rims/vessel profiles are present, mostly upright or slightly everted.

Surface treatment mainly comprises wiping and burnishing, but two important decorated vessels are represented. One of these, from [8543] has stamped segmented circles, while the other, from [8851] (Area 3) has an incised geometric design (horizontal lines and pendant triangles) with rosette stamps. Both could be derived from burials. Residues were noted on several sherds, notably [8657], which has a white deposit over the inner surface.

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A few sherds, notably from [8760] have excellent carbon-rich deposits inside that may be of use for dating.

Ipswich wares

Ipswich wares characterise the second main ceramic phase within Lundenwic. They seem to first appear between *c* 730-750 and continued until *c* 850 (Blackmore 1988, 106; 1989, 104-7; 2001, 27; 2003, 234-5). These wares are less common than chaff-tempered wares, with 94 sherds from 75 vessels (5206g). Most of these (77 sherds) are from Area 1 with one sherd from Area 2, eleven from Area 3, two from general layers and three from the northern half of the site. Most sherds are typically reduced but a few oxidised sherds are also present. Two sherds currently recorded as MSRW (see below, imports) could also be of Ipswich ware. One is from an upper Saxon level, but the other is well down in the sequence.

Jars are the most common form, but at least eight vessels were used as cooking pots. In addition there are at least eleven spouted pitchers, one represented by a strap handle ([8865]). These are unusual, but represented at the Royal Opera House (Blackmore 2003, 235, fig 104, <P142>). Most of the forms are quite typical for Lundenwic, but the collection is of interest as it includes four vessels with stamped decoration, all from Area 1 and all different.

Of these, two finds are from pit [8187]. The first, from [8169], has two rows of double bisected diamond stamps, one around the angle of the carination, the other some distance above it on the shoulder. This is the first occurrence of this stamp known to the writer from Lundenwic. The second, from [8172] is a large jar/pitcher with upright rim and a single row of large closely spaced gridded circle stamps (3 x3 rows, diameter *c* 11mm) around the shoulder, just below the neck.

Gridded circles also occur on two other sherds. That from pit [8203] (fill [8202]) has closely, but randomly spaced stamps all over the shoulder; they have a denser grid and are rather smaller than those on [8172] (4x4 rows, diameter c 9.5-10mm). It is unfortunate that this sherd is very battered. The other find, from pit [8219], is a jar/pitcher with upright rim similar to that from [8172], with two rows of large stamps around the shoulder (4x4 rows, diameter 13mm). The same context has part of a lugged pitcher with an incised geometric design and small blind circle stamps (cf Hurst 1976 fig 7.8). A similar vessel was found at the Royal Opera House (Blackmore 2003, 235, fig 112, <P151>).

Non-local/regional wares

The earliest diagnostic fabrics are three sherds containing sandstone. The first, from [8090] and [8657], is in a very coarse fabric that is thought to contain sandstone derived from the Millstone grit/north of the Pennines (fabric ESSTC; Blackmore et al 2004; Blackmore and Vince in prep). The other, from [8766], is a large thick-walled sherd that contains sugary sandstone with ooliths (ESSTOL; ibid). It is visually similar to a sherd

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from Jubilee Hall that was thought to derive from the Charnwood Forest area of Leicestershire (MSIG; Blackmore 1988, 89).

Of the sand-tempered wares, a few sherds are slightly sandier than the usual SSAND and may also be early wares. They comprise part of a bowl/small jar from [8237] and body sherds from [8282], [8362] and [8801], and resemble fabric ESANA/ESANAO as defined on early Saxon rural sites around London (Blackmore in prep). It is possible that these sherds date to the later 6th century.

The other sand-tempered wares mainly fall into sub-groups B (medium sandy) and D (fine) of the type series (Blackmore 1988, 87), and although some of the SSANB sherds are slightly coarser, or contain more organic matter than the type sherds they are not as coarse as fabric SSANH ([8202], [8362], [8762], [8800]). The most complete of these is the cremation jar <46> ([8855]). Two vessels have been recorded as SSANC, one of which is a large straight-sided bowl or jar ([8804]) while the other is from a large bowl or jar ([8362]). At first sight this resembles Ipswich fine ware but the form is unknown in that ware and the fabric has voids in the fabric and impressions on the surface suggesting the presence of organic matter, which is not found in Ipswich ware. A vertically burnished sherd from [8757] is possibly from an Ipswich ware pitcher (check IPSM) but the fabric is slightly atypical and is similar to fabric SHGS (Blackmore 1989, 87).

Greensand-tempered wares (see Blackmore 1988, 87; 1989, 82; 2003, 236) include sherds from a large thick-walled jar in [8169] and [8186]. This is closest to fabric SLGSB in appearance, and is probably made of a white-firing clay; firing varies from oxidised to reduced. In terms of inclusion size and sorting, however, it is closer to SLGSD, and also resembles fabric SSANE. A slack-shouldered jar or bowl from [8771] is similar to the type sherd of SLGSE, but the quartz grains are rather larger. The most significant finds in this group are from a jar with stamped decoration ([8362]) and a thick-walled lamp in SLGSC with crude combed geometric pattern on the outer surface. The carbon deposits inside the bowl could be good for dating.

A new fabric, currently assigned to the MSFG group, is a mixed gritted ware that contains moderate large rounded quartz grits and flint p to 7mm across. The one example is large pot used for cremation <45> ([8853]; further sherds from the same pot were also found redeposited in [8757]; some join to make up *c* 20% of the lower body. This fabric needs to be analysed in thin section and chemically to determine its provenance.

One sherd from [8310] belongs to MSLQ group (1989, 84; 2003, 237); further identification to sub-type must wait the analysis stage and would be helped by thin section/chemical analysis.

Shell-tempered wares

Shell-tempered wares characterise a third phase of activity in Lundenwic, which probably started between 770-800 and continued until *c* 850 (Blackmore 1988, 88-9; 1989, 106; 2001, 26-7; 2003, 237-8). This category is not well-represented on the site, with only 13

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sherds from ten vessels. These have not yet been divided into fabric groups. Most are of Woolwich Beds clay with fossil shell and probably from Kent (eg [8201], [8202], [8259]), but the two fragments from [8130] are more sandy and could be from further afield. The lack of medieval pottery on the site would rule out their being of later date, despite being found at the interface of the Saxon and post-medieval levels. One sherd from [8670] is a new fabric that has not yet been assigned a code. It is thin-walled, highly fired and contains abundant streaks of plant matter/calcareous algae. This sherd and that from [8130] need to be studied in thin section and chemically to aid their identification.

Imports

These fall into two main groups, reduced and oxidised wares from northern France and oxidised wares from the Rhineland.

North French/reduced wares
Some fabrics are known types but a few need further work before they can be classified. The dating of these wares is problematic, but Evison's survey shows that such vessels first occur in graves of the second half of the 7th century, and that they continue through the 7th century (Evison 1971, 45). It is not clear when they first started to reach London; sherds of 'early' type are present at Long Acre (LGC00; Vince 2002; Blackmore et al 2004), but could still date to the 7th century. The present finds need to be compared with the sherds from Long Acre, the Royal Opera House site and other relevant material, and a selection should be studied in thin section/chemically to help define their dating and source. The forms present include a bowl in an extremely thin-walled fine fabric from [8169], which has a metallic burnish, a cooking pot in a coarser fabric from [8213], a jar/pitcher in a fine fabric with large quartz grits, and several sherds from one or two markedly biconical vessels, found in [8385], [8647], [8655], [8771] and other contexts). A large jar or pitcher from [8154] has a simple slightly everted, rounded rim and is rather larger in diameter than usual (200mm). In addition to the reduced wares, one sherd is from an oxidised spouted pitcher very similar to that from Jubilee Hall (Blackmore 1988, 91; fig 22, no. 36).

Rhenish/odixised wares
Seven sherds from six vessels are Walberberg/Badorf-type wares from the Rhineland. The most impressive is a large sherd from a thick-walled, flat-based vessel from [8535], which should, from the German chronology, be an early form (Blackmore 2003, 240). The fine fabric, BADOA, is very like that of a rim sherd from Jubilee Hall (Blackmore 1988, 92). Five undecorated body sherds in fabrics BADOE and BADOH could be from jars or amphorae, while a sherd in BADOB with an applied thumbed strip is from a small *Reliefbandamphora* ([8214]); this should be the latest form present.

Two sherds of fine oxidised redware from [8194] and [8367] are problematic as they appear at first sight to be Tudor redwares but are from Saxon levels. They were recorded as MSRW as they differ from the oxidised Ipswich wares in being quite thin-walled and have iron-rich pellets and/or white streaks in them. It is likely that these are imports, not from the Rhineland as such but perhaps from the Meuse valley. A coarse fabric was also

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recorded using this code pending identification; the fabric is not unlike that of Roman tiles but this is neither a Roman sherd, nor a piece of building material. Thin section/ chemical analysis are needed to help aid the identification of these finds.

Two sherds from [8804] are also problematic. The inclusions and firing resemble Beauvais ware, but the size of the quartz grains (mostly 0.5mm-1mm) is much coarser than the type sherd. The fabric is also coarser than the sherd of NFGWF from Jubilee Hall (subsequently placed with the SLGS wares) or the oxidised fragments of SLGSB noted above. It is possible that this sherd is a coarse variant of the Roman Porchester D ware and of late Roman date. Thin section/chemical analysis would help to aid its identification.

Distribution of the Saxon pottery

There are no very large groups, and many contexts contain less than five sherds. The stratigraphic distribution of the Saxon pottery was scanned for Area 1 but not for the other areas, but it can be said that the cremation pots and other early contexts are probably the most important groups on the site as much less is known about this early period. In Area 1 there are two significant clusters. The first includes cremation [8570] <10>, the overlying grave [8553], and contexts [8532], [8505] and [8529]. The latter is problematic as it also contains Ipswich ware and shell-tempered ware and must have been disturbed at some point. The second group comprises the stamped vessel from [8543] and a sherd from [8539]. Context [8525] contains Ipswich ware and shell-tempered ware, and the latter is also present in the slightly later level [8503], indicating some disturbance in this area. The stamped sherd is, however, from one of the lowest deposits on the site. Above this the sequence follows the usual pattern, with a gradual increase, both in the amount of chaff-tempered ware and in the range and quantity of non-local/regional and imported pottery. This is followed by a change to Ipswich wares approximately mid-way through the sequence, with shell-tempered wares appearing in the uppermost levels. The two early clusters in Area 3 comprise cremations <43>, <46> and <47>, and cremations <38> and <39>.

The post-medieval pottery

The post-medieval pottery fills six boxes. The finds are in good condition, with some complete or near complete items and numerous large sherds. The main groups are from [8002], [8573], [8581] and [8745].

Possibly the earliest find is an unusual tin-glazed vessel from [8762], dated to 1600-1800. Context [8746] could also be of 17th-century date (after 1670), but most finds are of 18th- or 19th-century date. Context [8581] (39 sherds 29 ENV, 3.192kg) comprises a good group of wares dating from 1745-1780; of particular note are a complete chamber pot and a very rare spittoon in tin-glazed ware and several pieces of Chinese porcelain (see below). A number of small groups date to the late 18th/early 19th centuries, including [8018], which contained two dwarf inkpots in London stoneware. Context [8573] dates to 1807-1900 and includes a complete miniature saucer in creamware

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alongside a range of other factory-made wares, the latest in refined whiteware. Contexts [8575] and [8610] are small groups dating to after 1825.

Contexts [8621] and [8575] date to after 1840, and the latter is one of the largest single deposit (50 sherds, 45 ENV, 2.603kg) with a good group of tablewares (mainly transfer-printed and other factory-made wares). Of particular interest are cream ware strainer and a pearl ware ladle with painted decoration that was found together with an eggshell. Also present are a number of important pieces of Chinese porcelain (see below).

The latest deposits are [8174] and [8002], which date to after 1850. The latter is the largest group from the site, with 55 sherds (48 vessels, 8.46 kg) reflecting a variety of activities. Of note are six stoneware bottles/flagons associated with drinking and storage of liquids, one of which is stamped Mumford, Coppice Row. This road is in London EC4 (?Clerkenwell); the bottle is distorted on one side, presumably after the stamp was applied. It has a hard shoulder, concave neck and double ring lip; it probably contained ale or porter. Two sherds from a similar bottle are stamped Kinsey, Holborn, while a large flagon is stamped W Walter Spirit Warehouse, 75 Drury Lane. A small cylindrical bottle (porter shape but harder shoulder and narrower neck) could have been used for something other than alcohol.

Personal items include two complete ointment pots in plain white tin-glazed ware and one cylindrical jar, TGW with dark blue exterior. There are also various jars in refined white earthernware and English porcelain and two lids for cold cream jar. A small handled baluster-shaped, or bellied, stoneware bottle is similar to forms produced by Doulton and Watts, Lambeth; it was probably used for scent (cf Green 1999, 368) and has a handle. The complete lower part of a toilet box in transfer-printed ware was also found in [8174].

Items associated with food include a tin-glazed French mustard jar inscribed 'Moutarde de MAILLE; Vinaigrier du Roi de LL.; MM le Roi d'Angleterre; et les Empereurs; d'Autriche et de Russie; a Paris' and two squat cylindrical jars, possibly for relish. Tablewares include two English porcelain saucers with gilded rims and floral motifs at the centre, and sherds from bowls, cups and plates in a range of wares.

Most of the pottery is of English manufacture, and not surprisingly for the period, all the imports are of Chinese porcelain. The earliest finds are from [8581], which includes three rare teabowls, almost certainly part of a set, with celadon glaze and 'anhua' or hidden decoration on the outer surface and floral motifs in blue inside the bowl. Two non-matching bowls have the sacred fungus symbol on the underside, while one has a floral symbol that has not been seen before by member of the Oriental Ceramic society (C Beecher, J Martin pers comm). A bowl from the same group, also with a plant symbol in the base and probably from Dehua, dates to between 1700/25-1750, while a beaker dates to *c* 1720-40. The latest find is a guglet, or bottle-shaped vessel that would have held water for washing the hands and dates to *c* 1750.

Some of the finds from [8745] are not much later, with two sherds from a very fine plate with lotus and millet decoration on the front and concentric rings on the underside of the

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base, which dates to the 1730s. A plate with lotus and peony decoration and another with decoration in two shades of blue and devolved bamboo motif on the back both date to the mid-18th century. This group, however, also includes part of a deep saucer with a river scene that dates to *c* 1780. The latest find is a sherd from [8002], which dates to the late 18th or early 19th century.

Analysis of Potential
Saxon

The assemblage is importance as it can help to address a number of themes relevant to the study of early Lundenwic.

Dating
It was first thought that the occupation of Lundenwic did not start until the mid-7th century, and the pottery was thus dated accordingly as there was nothing to indicate otherwise. Over time, however, this dating was pushed back to *c* 600, and following the discovery of early material in the northern part of the settlement (for example at LGC00 and LCR00), the possibility of activity in the 6th century was envisaged (Blackmore et al 2004). The discovery of cremation burials and potentially 6th-centuy finds at the present site supports this theory, but also suggests that the activity was more widespread than first thought. How early in the 6th century is uncertain. The stamp-decorated chaff-tempered wares ([8543], [8551]) probably date to the later 6th/early 7th century, while the cremation pots have been dated to 550-650. On balance the relative scarcity of sandstone-tempered wares suggests that the real date is closer to AD 575-600 than AD 550. This needs to be tested by comparison with assessing the date of the grave goods and any C14 samples. Several sherds have very good carbon deposits on the inner surface that have potential for scientific dating, notably [8263] CHAF and [8298] (SLGSC). For the later levels, the site follows the usual sequence from chaff-tempered to Ipswich wares and then shell-tempered wares, but the picture across the area may not be uniform due to truncation. Further research into the non-local imported wares (fabric analysis and typological research) and the distribution and association of the different types may help to refine the dating of some features. The Saxon pottery from [8217] was thought to be from a medieval pit, but this seems doubtful as no medieval pottery was found on the site and all the indications are that the 'medieval' contexts are in fact of Saxon date.

Burial practice
Various theories have been put forward regarding the symbolism of the shape and size of cremation vessels, recently summarised by Blinkhorn (1997, 122). It is generally held that the pot makes a statement about the sex, age and status of the deceased, which is reinforced by the presence or absence of grave goods. Richards (1987) has proposed that cremations without grave goods are usually in shorter, wide-mouthed vessels, while those with grave goods are usually in taller, narrow-necked vessels. He also suggests that males are typically buried in narrow pots, while females are associated with wider pots with wider mouths. Status can be indicated by whether the pot was purpose made (upper class) or reused (lower status), while the dimensions (height, width and height of maximum diameter) are related to age and status (infants = small, adults = tall). It will be of great

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interest to compare the dimensions of the vessels found at LTM03 with the results of the bone analysis and see if the assemblage conforms to these theories and what degree of variation there is within it once the fragmented pots are reconstructed.

Trade and economy
As found on other sites in *Lundenwic*, the main international connection was with Northern France/the Low Countries, but Rhenish wares are also present. The main interest here is that the assemblage includes vessels that may be among the first to have reached Lundenwic. More work is needed on the description and dating of these finds, ideally using thin section and chemical analysis, which will help to relate them to the work carried out by Evison (1979). Scientific analysis of the selected non-local wares to identify their likely source would also help to develop knowledge of trade connections at different times.

Typology
The pottery is also of intrinsic interest. The complete and fragmented cremation pots are a particularly important addition to the range of forms from Lundenwic, and merit illustration to demonstrate the range of types and their relationship to both Early and Middle Saxon vessel profiles. Another interesting feature of this collection is the number of decorated sherds, in particular those in chaff-tempered ware, which are probably of 6th- to mid- 7th-century date and could be from burials. Although chaff-tempered wares with comb-stamped decoration have been found in the settlement (Blackmore 1988, fig 24, no.1; 1989, 75-6, 97; fig 29, nos 20-22; Jarrett 2004a, 51, fig 37, no.4; 2004b, 78, fig 47, no.2), the only other vessel with stamped decoration is from Cubitt's Yard, James Street (Blackmore in prep). The pot from [8851] is the first to combine linear and stamped decoration. This pot and that from [8543] probably date to the later 6th/early 7th century. Stamped Ipswich wares are more common in the settlement, but this collection includes a high proportion of gridded circle stamps, while the bisected lozenge stamp ([8169]) has not been seen before in the settlement. These finds and the stamped sherd of SLGSB ([8362]) should be added to the Archive of Anglo-Saxon pottery stamps maintained by Diana Briscoe and parallels sought for them. A number of other forms are also of note, in particular the lamp(?) from [8298] with its crude geometric decoration incised with a three-pronged comb-like object.

Post-medieval

Aspects of the post-medieval assemblage merits publication, although perhaps treated separately rather than with the Saxon sherds, as each could detract from the other.

One of the most interesting elements of the collection is the Chinese porcelain, which includes some pieces of exceptional rarity and quality. The earliest finds, from [8581], are the three teabowls with celadon glaze and '*anhua*' or hidden decoration on the outer surface, which are not only extremely uncommon but include one with a plant symbol on the back that has not been seen before by members of the Oriental Ceramic society (C Beecher, J Martin pers comm). Also of particular note are the two sherds from a very finely painted plate with lotus and millet decoration from [8745]. These finds are of

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intrinsic interest and could be published in their own right as well as part of the general assemblage. The tin-glazed wares include a very rare early spittoon, a spouted vessel with a small perforation at the centre of the dished upper surface. This is in a plain glaze with greenish/blue tint; almost intact apart from slight damage to the spout. The closest parallel is a decorated find from Williamsburg (Austin 1994). Another feature of the collection is the number of complete stamped stoneware bottles which together with some of the other ceramic finds and the glass would be very displayable.

Illustration, conservation and analysis
All the new Saxon forms and decorated sherds merit illustration, and it is recommended that all the diagnostic forms are illustrated; these are listed in the Excel spreadsheet. This would mean *c* 50 rims/vessels, plus six decorated pieces, plus possibly a few others. A total of *c* 70 items in all could therefore be drawn or photographed, of which *c* 40 are considered essential.

Photography with drawn profiles is recommended for the Chinese porcelain and the tin-glazed spittoon. Some of the other finds such as the stoneware bottles could be photographed as a group.

Conservation of the complete cremation pots is required, and some of the fragmented jars could also be reconstructed, notably <39> and perhaps <45>, and the decorated chaff-tempered ware from [8851].

Thin section and chemical analysis would be extremely valuable to set a bench mark for the earliest wares used in the settlement and to help relate the finds to those from other sites/area. This would be particularly valuable for the early imported wares. Some 25 sherds have been selected as having the potential for such analysis. At *c* £25 per sample, this means £1250 for the full set, but the number of samples could be reduced after discussion of the sherds with Alan Vince (day rate c £188).

If the material is to be deposited with the Museum of London, samples of the new fabric types should be added to the Museum of London Saxon reference collection. If the material is to be deposited elsewhere, a request should be made that the samples are lent to the Museum.

Significance of data

Prehistoric
The prehistoric pottery is of local significance.

Roman
Scattered sherds of Roman pottery occur on most sites in Covent Garden. They can only be regarded as 'background noise'; there is no evidence at present for any occupation in the area.

Saxon

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The Saxon pottery forms a highly significant collection, in the local, regional and wider context. The most important aspect is the presence of complete or substantially complete cremation pots, the first to be found in Lundenwic, which are of national importance.

Post-medieval
The post-medieval assemblage is mainly of local significance, but it comprises one of the better collections from the area, and some of the forms are of intrinsic interest (notably the tin-glazed spittoon and the Chinese porcelain). The assemblage merits publication, although perhaps treated separately rather than with the Saxon sherds, as each could detract from the other.

Revised Research Aims

Prehistoric
None.

Roman
None.

Saxon
The chronology of the site and its finds would be helped if C14 dates can be obtained. The residues on the pottery might be suitable for this purpose (this has been successfully carried out for samples from Perth).

Other questions to be asked of the Saxon material include:

- What is the source of the early imported reduced wares? How do they compare chemically and in thin section with the finds from Long Acre (LGC00) and those studied by Vera Evison?
- What is the source of the problem regional wares?
- How do the fabrics of the cremation pots compare with those of other early Saxon wares from the London region?
- Were the cremation pots made especially for burial?
- Can the forms of the cremation jars be lined to the sex/age of the deceased?
- Can the dating of the pottery be refined?
- Can the stamps on the Ipswich and chaff-tempered wares be paralleled in the Archive of Anglo-Saxon pottery stamps (maintained by Diana Briscoe)?

Post-medieval
The main emphasis of further research should be on the Chinese porcelain. It would also be of interest to see if the larger dumps can be related to specific properties.

Method Statements
Further work should be concentrated on the Saxon material, especially on the potentially Early Saxon cremations and related early deposits in order to establish the date of the first phase of activity on the site. Further research is required to finalise the fabric codes of the

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some imported wares and the association of different types may help to refine the dating of some features.

1. Write note on the prehistoric and Roman sherds: **0.25 day**
2. Discuss problem non-local/regional wares, imports and shell-tempered wares with Alan Vince in order to discuss identifications and select the best examples for analysis. Even if no thin section/chemical analysis is carried out this would be a most helpful exercise: **0.5 day** plus *c* £100 for Alan Vince
3. Scientific analysis (25 Thin section, 25 ICPS) at c £25 per samples: up to £1250 (note this work will take up to six weeks and needs to be planned in advance).
4. Study the pottery is relation to the stratigraphic text/phasing and check for sherd links that might have been overlooked: **1.5 day**
5. Research parallels for the decorated sherds **0.5 day**
6. Discuss stamped sherds with Diana Briscoe **0.5 day**
7. Finalise coding of the imported wares in the light of analytical work: **0.5 day**
8. Analyse assemblage by form type (especially cremation pots): **05 day**
9. Write up assemblage by ware type and function: cremation vessel and other vessels, with discussion: **3 days**
10. Make final selection of sherds for illustration and prepare instructions for illustrator: **1 day**

General
11. Text on the distribution of the metalwork by landuse will be best undertaken together with that of all the other finds, if required. Contribution to this **1.25 day**
12. The same applies to liaison with illustrator: **0.25 day**
13. Liaison with field archaeologist/conservators/other specialists: **0.5 day**
14. Archive deposition: **0.25 day**

Total time for Saxon pottery: **10.5 days**

Post-medieval
15. Prepare note on the assemblage with discussion of the Chinese porcelain and other sherds of interest: **2 days**

Bibliography

See combined bibliography

Appendix 1. Key to the Saxon and later fabric and form codes

Table 4. Prehistoric and Roman pottery fabric codes, with quantification

Fabric	Code	Date	Sherds	ENV
Flint-tempered ware	FLIN	-1500-50	3	3

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East Gaulish samian ware	SAMEG	150-300	2	2
Grog-tempered ware	GROG	50-400	1	1
Oxfordshire red/brown colour-coated ware	OXRC	270-400	2	1
Oxidised ware	OXID	50-400	1	1
Samian ware, Central Gaul	SAMCG	120-250	1	1

Table 5. Saxon pottery fabric codes

Fabric	Code	Date
Badorf-type wares (A)	BADOA	670-750
Badorf-type wares (B)	BADOB	670-850
Badorf-type wares (E)	BADOE	670-850
Badorf-type wares (H)	BADOH	670-850
Beauvais ware?	BEAV	600-800
Chaff-tempered ware	CHAF	450-750
Chaff-tempered ware	CHFI	450-750
Chaff-tempered ware	CHFQ	450-750
Chaff-tempered ware	CHFS	450-750
Chaff-tempered ware (fine)	CHSF	450-750
Early Saxon sandy ware (fine with organic matter)	ESANAO	450-650
Early Saxon, coarse sandstone-tempered	ESSTC	450-600
Early Saxon, sandstone-tempered with ooliths	ESSTOL	450-600
Ipswich coarse ware	IPSC	730-850
Ipswich fine ware	IPSF	730-850
Ipswich medium ware	IPSM	730-850
Miscellaneous/unidentifiable	MISC	450-850
Mixed gritted ware (type C)	MSFG	670-850
limestone(?) and quartz-tempered	MSLQ	650-850
Misc imported oxidised wares	MSRW	650-850
Middle Saxon shell-tempered	MSS	770-850
North French blackwares (misc)	NFBWE	600-850
North French greywares (misc)	NFEBB	600-850
North French greywares (misc)	NFGW	600-850
North French greywares (misc)	NFGWA	600-850
North French greywares (misc)	NFGWD	600-850
North French greywares (misc)	NFGWD COAR	600-850
North French redwares	NFRWB	600-850
Coarse sand-tempered (Surrey-Hampshire?)	SHGSA	600-850
Surrey-type (Lower Greensand, type A)	SLGSA	650-850
Surrey type (type B)	SLGSB	650-850
Surrey type (type C)	SLGSC	650-850
Surrey type (type D)	SLGSD	650-850
Surrey type (type E)	SLGSE	650-850
sandy wares (misc)	SSAN	600-850
sandy ware (type B)	SSANB	650-850

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Fabric	Code	Date
sandy ware (type C)	SSANC	650-850
sandy ware (type D)	SSAND	650-850
sandy ware (type I)	SSANI	650-850

Table 6. Post-medieval pottery fabric codes, with quantification

Fabric	Code	Date	Sherds	ENV
black basalt ware	BBAS	1770-1900	3	3
bone china	BONE	1794-1900	1	1
Surrey-Hampshire border wares	BORDG/Y	1550-1700	3	3
Chinese porcelain	CHPO	1580-1900	8	4
Chinese blue and white porcelain	CHPO BW	1590-1900	11	8
creamware	CREA	1740-1880	19	16
English stoneware	ENGS	1700-1900	5	4
English porcelain	ENPO	1745-1900	15	13
English porcelain (underglaze polychrome painting)	ENPO PNTD	1745-1900	8	6
London stoneware	LONS	1670-1900	16	15
majolica	MAJO	1850-1900	2	2
Nottingham stoneware	NOTS	1700-1800	2	2
pearl ware (blue and white)	PEAR BW	1770-1850	4	4
pearl ware (painted)	PEAR PNTD	1770-1850	5	5
post-medieval fine ware	PMFR/PMFRG	1580-1700	2	2
post-medieval redware	PMR	1580-1900	3	2
Surrey-Hampshire border redware	RBOR/RBORG	1580-1800	6	5
Refined white earthenware	REFW	1800-1900	6	5
Refined white earthenware	REFW SLIP	1800-1900	1	1
Staffordshire-type black-glazed ware	STBL	1740-1780	1	1
Staffordshire-type mottled brown-glazed ware	STMO	1650-1800	1	1
Staffordshire-type slipware	STSL	1660-1870	2	2

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Fabric	Code	Date	Sherds	ENV
Sunderland-type coarseware	SUND	1800-1900	1	1
Staffordshire salt-glazed stoneware	SWSG	1720-1780	3	3
tin-glazed ware	TGW	1570-1800	9	8
tinglazed ware (plain white)	TGW C	1630-1800	23	17
tinglazed ware (French)	TGW FR	1780-1900	1	1
transfer-printed wares	TPW	1780-1900	54	47
yellow earthenware (plain/slip-coated)	YELL/YELL SLIP	1800-1900	5	4

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Appendix D

The amber and worked stone
Lyn Blackmore

Quantification

Introduction

Five stone tools and 39 fragments from 18 or 19 quernstones (26.156kg) were recovered from 14 contexts on the site. In addition, one fragment of unworked dense quartzitic sandstone ([8202] <214>) and one worked fragment were recovered; the latter ([8791] <229>) is included in the building materials assessment. The burnt flints are also considered separately.

Methodology

The finds were examined macroscopically and sorted into lava querns and other stones; the latter were petrologically identified by Ian Betts. All the fragments were weighed and recorded on an Excel spreadsheet. The distribution of the material was considered in relationship to the site matrices.

Description of the amber beads

The amber beads (currently all listed as <16>) were found together with a glass bead in grave [8699]. It is hard to estimate correctly the number and nature of the amber beads when they are in an uncleaned state, but it would appear that there are *c* 19 of them and that they fall into three sizes. Three are, or were, relatively large (13 x 14 x 13mm), eight are similar but thinner, while eight are noticeably smaller (10 x 10 x 8mm) with a more triangular section. Most beads are complete but at least one is shattered. One appears to have some metal adhering.

Description of the hones and burnishers

Three hones (objects that were purposely made as sharpeners, also known as whetstones) were found. There are no secondary hones (made out of another object) or sharpeners (unshaped stones that have evidence for use as hones; Goffin 2003, 197). Two hones are of fine-grained sandstone ([8155] <6>, [8169] <65>), while one is of very fine-grained sandstone ([8646] <220>). Of these, <6> is an extremely large and well-formed example, possibly the most impressive to be found in Lundenwic, with a length of 210mm, width of 40mm and thickness of 30mm. It is rectangular in section with bevelled faces along both the longer and shorter sides and shows no sign of wear. This hone is so well made that its dating is problematic, and it may, as already suspected, be a post-medieval object.

Hone <65> from [8166] is extremely well used, with concave surfaces on sides as well as the main faces. It is 150mm in length, and somewhat tongue-shaped, ranging from 45mm wide and 22mm thick at one end to 34mm wide and 12mm thick at the other.

The smallest fragment is hone [8646] <218>, which has a maximum length of 57mm (width 35mm, thickness 16mm). It is similar to <65> but a denser stone and less worn.

The two burnishers are both from [8657]). One is in a grey siltstone/mudstone (<49>, length 100mm, width 29–35mm, thickness 14–26mm.); all the surfaces are highly polished, but two are more so than the others, suggesting that these were the working faces. The other find is in a black siltstone/mudstone (<221>). The underside is completely flat, while the upper surface is flat with rounded sides.

Description of the querns

Only small rotary querns are represented, the measurable diameters ranging between *c* 320mm and 400mm. All but one of the 39 fragments (18 or 19 quernstones, 26.156kg) are of Niedermendig lava, or nepheline-tephrite, from the Eifel hills (Cologne Vorgebirge) of Germany (Blackmore and Williams 1988, 132–3; Williams 1989, 129–30; Goffin 2003. The exception is a fragment from the edge of a quern made of medium-grained ferruginous sandstone ([8763] <223>). This has a diameter of 320mm. The lower face is present and the thickness exceeds 62mm.

The lava quern fragments include both upper and lower stones. Several of have one or two flat surfaces, but only two have a definite outer edge. One of these is a residual find ([8606] <216>) which is a thin quern with both upper and lower surfaces and a diameter of 300–320mm (thickness *c* 45mm). The lower surface is smooth, showing that this quern had been used. The other is slightly thicker ([8791] <228>, 65mm). Other possible finds are [8770] <225> and [8791] <227>.

One of the earliest finds, stratigraphically, is a fragment from Area 1 that may from a pre-Ipswich ware context. This is a large thick fragment (64–67mm) with two flat faces and part of a waisted perforation bored from both sides ([8279] <231>).

The finds from Area 2, [8615] comprise fragments of three querns of differing thickness; none have any of the other edge present, but all have two flat faces. The thinnest is <12> (64–67mm), represented by one large fragment from what may be a small upper quern with part of the central hole, or hopper (diameter 66mm); one of the flat surfaces is worn, but not overly smooth. A slightly thicker quern is <218> (71–75mm), which has two worked faces, one well-tooled, the other possibly slightly worn. This is represented by three non-joining fragment; the small in diameter of the central hole (estimated as 33mm), suggests that this was a small lower stone, or bedstone (Goffin 2003, 206-7). The thickest find, again probably a lower stone, is <219> (up to 81mm), represented by three joining fragments with a possibly unfinished perforation bored from both side. It is unclear whether these last two querns have been used or not.

Context [8763] contained two fragments, one thin with one slightly worn face and possibly one roughly tooled face (<222>, thickness 40mm), the other thicker and with both the upper and lower faces present (<224>, thickness 86mm).

The fragments from [8770] and [8791] are of a similar thickness (85mm). The find from [8770] (<225>) is represented by five large joining fragments, with rough tooling on one of the flat surface and around what remains of the edge; it is likely that this quern was originally *c* 400mm in diameter. The fragments from [8791] <227> are also large, but although two or three pieces join it has not yet been possible to make up the whole. Again there is obvious tooling on the upper and lower faces and on what seems to be the outer edge, which could be unfinished. In the same context is an edge fragment from a thinner quern with a diameter of *c* 400mm (<228>, thickness 65mm). This piece is burnt, and the same may apply to some of the pieces in <227>.

Distribution

The amber beads are all from the burial [3699]. All the hones are from deposits that appear to be of Saxon date. Two are from the upper Saxon levels in Area 1 ([8155] <6>, [8169] <65>), but <6>, the best preserved example, could be an intrusive post-medieval object. The other is from Area 2 and again from one of the uppermost Saxon levels ([8646] <220>). The two burnishers, however, are from a slightly earlier level in Area 2.

The querns are also mainly from the uppermost levels and/or associated with Ipswich ware ([8169] <212>, [8199] <213>), but two from Area 1 are from earlier contexts ([8367] <234>, [8279], <231>). There is a slight possibility that the finds from [8771] and [8791] were mixed at the time of assessment. The context information needs to be checked with the field archaeologist in order to resolve this.

The finds from Area 2 are from contexts that are close together, none of which contain Ipswich ware. The main group is from [8615], one of the uppermost Saxon levels, which also contained two sherds of post-medieval pottery. The stone comprises seven large fragments from three querns (<12>, <218>, <219>) amounting to 11.828kg. The other finds from [8605] (<215>) and [8613] (<217>) are much smaller.

The querns from Area 3 are also from contexts that are closely grouped on the matrix, again possibly predating the use of Ipswich ware. The main groups are from [8791] and [8771]. The former, the lowest of the four contexts, is a green silty layer that contained 12 fragments from two querns (<227>, <228>, total 5.667kg) and also a large fragment of worked stone (<229>, see building materials assessment). Above this, mixed layer [8771] contained one possibly unfinished fragment (<226>). Pit [8764] contained eight fragments from four querns (<222>, <223>, <224>, <225>).

In summary, two hones and four quern accessions and one unworked fragment are from Area 1, five querns, one hone and two burnishers are from Area 2, and eight querns area from Area 3. Quern [8606] <216> was residual in a post-medieval context in the southern part of the site.

Analysis of Potential

The amber beads can aid the dating of the burial [8699] and inform on burial practice. They also suggest trade or familial links with other parts of the country. Such beads are most typical of the mid to late 6th century, when they often occur in long strings (Huggett 1988, 64; Geake 1997, 47). The fashion largely died out in the early 7th century, but amber beads occur up to the late 7th century, usually singly and in children's graves. Amber was particularly favoured in the Saxon and Anglian parts of the country, but has been found in some quantity at a few sites in East Kent (Huggett 1988, 64, 76; fig 1) such as Mill Hill, Deal (Brugmann 1997, 55-6) and Dover Buckland (Evison 1987, 57-60).

The number of querns is not great, and few have an outer edge. The collection is nonetheless an important one for two reasons. Firstly, it includes some extremely large fragments with features such as central holes. The only published sites on which such substantial pieces have been found are the Royal Opera House extension (Goffin 2003) and James Street (Riddler 2004a, 24-5, fig 23). Comparison of the measurable diameters from these and other sites (Blackmore and Williams 1988, 133-4; Goffin 2003, 205, tables 26, 27; Riddler 2004a, 24; 2004b, 54) shows that the finds are, on the whole, consistent, although some of the present finds seem to be on the small side. It also suggests that the average quern used in Lundenwic was rather smaller than in the later Saxon period, although comparable with continental sizes (Goffin 2003, 205, tables 26, 27).

Secondly, there seems to be a mix of both used and unused fragments. Some querns have at least one worn surface (eg <12>, <123>, <126>), indicating that they were finished objects used in the settlement. Other fragments have flat surfaces, but are less worn or unworn, and most are missing the outer edges. In some cases unfinished outer edges appear to be present; the most convincing is [8770] <225>, while another possible example is [8763] <224>. The holes in querns [8615] <219> and [8279] <231> have been bored from both sides, making a waisted perforation, a feature not noted in the Royal Opera House assemblage. These pieces could all represent waste from quern dressing, as has been observed in Dorestad (Parkhouse 1976, 185) and suggested for Hamwic (Andrews with Phillips 1997, 240). This is hard to prove given the way in which the lava stone is prone to fracture, and the lack of small stone chips that might be expected (although there is no mention of this in the Hamwic report, where the size of the probable waste fragments is unstated). The presence of fragmented tooled stones with no evidence of wear, does however, support the argument for quern dressing in the area, especially as the same was noted at the Royal Opera House site (Goffin 2003, 205-6). This is, therefore, an area of research that merits further work.

The hones are consistent with the pattern noted elsewhere in Lundenwic in that all are of sandstone (Blackmore and Williams 1988, 132-4; Williams 1989, 129-31; Goffin 2003, 202). Kentish ragstone was also used for hones, but other stones, and especially imports, are extremely rare, both in Lundenwic and in Hamwic (Andrews with Phillips 1997, 240). Hone [8155] <6> is the finest example to be found in Lundenwic and from a Saxon layer, but it seems likely that it is intrusive, possibly introduced by the post-medieval

cesspit in this area. It is, nonetheless, an important find and merits illustration. Hone [8169] <65> is also a good example and should be drawn to illustrate the range of finds from the site.

The burnishers are of interest as the only published examples from Lundenwic are two finds from the Royal Opera House site, and one of these may have been a touchstone rather than a polisher (Goffin 2003, 202-3). As above, the burnishers have the potential to extend the typology of this class of tool and to inform on craft activity within the settlement.

Another point that needs considering, for all the stone, is the distribution and dating of the finds. Most finds from the Royal Opera House site were from contexts associated with Ipswich ware (Goffin 2003, table 28), but here most seem to be from earlier levels.

Illustration
Two hones (<6>, <65>), two burnishers (<49>, <221>) and at least three querns (<12>, <219>, <231>) merit illustration. These objects are all quite stable but the amber beads require conservation for illustration and photography.

Significance of data
The amber beads are highly significant as they are the first from a burial context in Lundenwic; the only other is a loose find from Maiden Lane (Evison 1988, 122, fig 34, no. 14). The use of amber is primarily a 6th-century fashion, when it could be interpreted as a status symbol. By the 7th century it would appear to occur as heirlooms kept for amuletic purposes (Dickinson 1973, 252; Meaney 1981, 67-71; Geake 1997, 12, 47).

As for the other categories of finds, the querns and other finds are primarily of local significance, but they add to the corpus of finds from a trading settlement that was involved in both national and international trade. Lava querns were a major import in the Saxon period, and if it can be demonstrated that the dressing of querns imported in an unfinished state was taking place on site this will not only add to the picture of industry within Lundenwic but will be of considerable interest to specialists on both sides of the channel.

It has been suggested for the later Saxon/early medieval period that hones made of English stone were used for sharpening for the initial sharpening of tools, and subsequently for maintaining everyday tools. Hones of imported stone would have been used for sharpening fine points and blades (MacGregor 1982, 79; Goffin 2003, 202). For Lundenwic however, it would seem that there were few fine blades in the settlement, or that the English hones were used for all types of blade. Alternatively, imported hones were more valued and travelled with their owners.

The burnishers are of interest as they were found together with two loomweights and a spindlewhorl, and thus may have been used in cloth finishing.

Revised Research Aims

The following can be suggested as avenues for further research:

- What is the total number of amber beads?
- Do the beads fit into known typologies?
- Is there any evidence for cord or metal fittings?
- Is the amber imported or English?
- Is hone <6> a post-medieval object?
- Is there any definite evidence for quern finishing on or near the site?
- Can any parallels for the waisted perforations in <219> and <231> be found?
- What is the range and frequency of the types of lava used for the querns (ie fine, medium, coarse)?
- What is the significance of the distribution of the querns? Does this have any implications for the date of any quern-related industry?
- What is the ratio of upper to lower stones?

Method Statements

All the finds should be given proper accession labels, and ideally accession cards as they are studied in order to conform with LAARC standards.
Task nos 1-3 are dependent on funding; nos 4-7 are essential.

1. Consider the petrology of the quern stone in order to determine whether they are all from the same source and compare with other sites. David Williams: **0.5 day**
2. Source the amber and finalise the petrology and hones by comparison with samples in the Natural History Museum in order to pinpoint possible sources. Ian Betts: **1 day**
3. Record all quern measurements (thickness, diameter) in a consistent manner on an Excel spreadsheet: **0.5 day**
4. Write catalogue if required: **0.75 day**
5. Research the number and typology of the amber beads: **0.5 day**
6. Consider the evidence for finished/unfinished querns together with other specialists such as Richenda Goffin and/or David Williams: **0.5 day**
7. Consider the distribution of the finished/unfinished querns and their dating: **0.5 day**

Write discussion of the amber, hones, querns and burnishers querns: **1 day**

General

7. Text on the distribution of the amber and stone by landuse will be best undertaken together with that of all the other finds, if required. Contribution to this **0.25 day**
8. The same applies to liaison with illustrator: **0.25 day**
9. Liaison with field archaeologist/other specialists: **0.25 day**
10. Archive deposition: **0.25 day**

Total: up to 6.25 days

Editorial work will need to be budgetted separately

Bibliography

See combined bibliography

Appendix E

Coins
Nicola Powell

Quantification

Summary/Introduction

Six copper alloy coins were recovered during the excavation at the London Transport Museum, Covent Garden, City of Westminster (LTM03). The coins were examined by eye and the initial identifications confirmed or amended. All were subject to x-radiography and conserved by the Museum of London Specialist Services conservators.

Methodology

COINS

Copper alloy

All of the coins appear to be post medieval in date and are probably late post medieval.
Context [8002], the 19th century backfill, produced a commemorative medallion <1> in honour of Frederick, second son of George III, Duke of York and Albany. It commemorates his death on January 5 1827. The reverse carries the legend COMMANDER IN CHIEF and the date of his death. In the centre is a plinth and urn, with a soldier leaning against it. The plinth bears the legend BELOVED OF THE ARMY.
The post medieval dump layer [8047] produced a concave copper alloy object <2>, suggesting it may be the remains of a button. Also recovered was an illegible coin <3>, in poor condition.
A farthing-sized coin <4> was found in the brick floor [8123]. It has a bust right on the obverse, with the legend COLUMBIA. The reverse has a seated figure, probably Britannia, right.
Two unstratified coins were recovered, including a farthing of George V or VI <5>, dating from 1910–52. The second coin <120> is illegible, but likely to be 19th century in date.

Analysis of Potential
The coin assemblage has potential for dating the site. The occurrence of coins with clear dates (<1> and <5>) does help to provide a TPQ for one of the contexts [8002].

Significance of data
The coins are significant in helping to date contexts within the site and also historically significant. The commemorative medal of 1827 <1> is an interesting object and coin <4> appears to be of foreign origin.

Revised Research Aims
None

Method Statements
The coins should be included in any publication of the site.

Bibliography
Seaby Standard Catalogue of British Coins, 32nd Edition, 1997. Batsford

Appendix F

The glass
Lyn Blackmore

Quantification

Introduction

The bulk glass amounts to 55 fragments, all of post-medieval date (39 items, 5869g). In addition there are 23 accessions (46 fragments from *c* 33 objects). These mainly comprise post-medieval vessel glass but a few fragments of Roman and Saxon glass are also present.

Methodology

All the vessel glass and other objects were accessioned. The bottles and window glass were retained as bulk finds, although the complete bottles should be accessioned if loaned for display. The finds were recorded on Excel spreadsheets and dated as accurately as possible in the time available, although these dates should be regarded as provisional. Rather more data was noted for the bulk finds in case these do not receive any further attention. The Roman and Saxon vessel glass was discussed with John Shepherd, while the supposed beads from the cremation pit were sent to David Dungworth for analysis at English Heritage, Centre for Archaeology, in order to see if it was possible to determine their original colour.

Description of the Roman glass

Bottle glass
One fragment of thick blue-green glass was found in Area 2 ([8656] <143>); this is from a square-sectioned prismatic bottle dating to between the late 1st and early 2nd centuries (Isings 1957, type 50).

Vessel glass
The vessels comprise the rim of a bulbous jar ([8389] <141>; Isings 1957, type 67c; diameter 140mm) and the rim of a bowl in a pale green glass ([8701] <144>). The former is of the same date range as the bottle. The latter was found in the Saxon grave [8699] but the outwardly folded rim (diameter 120mm) suggests a 1st-3rd century date. Two other fragments of blue-green glass could be of Roman or Saxon date ([8290] <140>, [8766] <145>).

Description of the Saxon glass

Vessel glass
Two fragments are from a vessel of dark green-brown glass with *reticella* decoration in yellow, found in Area 2 ([8656] <142>); similar decoration can be seen on a bell beaker

from Howletts, Kent (Evison 2000, pl 1h). Other possible finds comprise the rim of a bowl in a pale green glass found in grave [8699] (see above) and two other fragments of blue-green glass that could be of Roman or Saxon date ([8290] <140>, [8766] <145>).

Beads
The only complete glass bead (<233>) is a large drum-shaped red polychrome bead with herringbone decoration from fill [8701] of grave [8699]. This falls into Guido's schedule 8 xvii, and is closely paralleled by two finds from Dover Buckland, graves 42 and 43 (Evison 1987, 65, 78, 82, 228-9, 237-8, figs 42.3d, 43.1, col pl IV, D67, D68; Guido 1999, 64-5; plate 7, 8xviia). This was made by preparing two rods of contrasting colours, one twisted clockwise, the other anti-clockwise. These were wound (three rows of black/yellow with red alternating two rows of with red/yellow) around a bead of red and yellow glass twisted to give a whorl effect on the flat surface. The entire bead was then marvered to give a drum-shaped form and a herringbone pattern around the wall (ibid, 65). The technique was described by Evison (1987, 65) as *reticella*, but differentiated from other *reticella* beads by Guido (1999, 64–5). It is possible that iron or mineralised thread is preserved inside the perforation.

The other possible beads are from the fill of the pit that contained cremations <38> and <39> ([8829]). Some fragments were collected by hand (<146>) while others were recovered by sieving. The latter were sorted as far as possible by colour and given two accession numbers (<147>, <148>). All fragments were analysed using XRF. It was found that none contain the high levels of soda that might be expected for beads of this date, but this could be due this their being melted and weathered. The five hand collected fragments and ten of the sieved fragments (<147>) probably represent the remains of yellow beads, while the seven fragments in <148> are blue.

As they are burnt it is impossible to quantify or classify the beads by form, and several fragments in <148> could be from the same bead. Most were probably of cylindrical form or barrel-shaped (Evison 1987, fig 11, types B10, B18, B19, B56; Hirst 2000, fig 1, D1, G1), but one is of double drawn globular form (Evison 1987, fig 11, type C06; Hirst 2000, fig 1, A3). The central perforation is visible in this bead and two of the probable cylindrical beads (<146>, <147>) while in two cases two or more are fused together, creating a larger lump (<146>, <147>).

Description of the post-medieval glass

Vessel glass
Four stemmed wine glasses were found. All are in clear leaded glass, although that from [8745] appears brown due to decomposition of the surface. Two are simple flutes represented by the upper part of the stem and the lower part of the drawn trumpet-shaped bowl; the larger of the two is <155> from [8581], which probably dates to the 1740s (cf Bickerton 1993, 12). The smaller find <151> from [8002] could date to *c* 1750 (cf ibid, 14). Another trumpet-shaped form ([8174] <152>) has a knop at the junction of the stem and the bowl, the lower part of which is facetted; this appears to be of later 18th- or 19th-century date. The basal diameter and thickness of the plain stem of the fourth glass

([8745] <156>) are both large in proportion to the size of the small round funnel-shaped bowl; this glass could have been used for drinking wine or cordial and dates to the 1760s (cf ibid, 18). This context also includes the base of a plain beaker or tumbler <159>.

Other vessels comprise a complete jelly glass ([8581] (<154>; height 82mm) and two glasses with larger, open bowls ([8745]) that were probably used for sweetmeats. Of these <158> has a plain stem while <157> has a flattened knop at the mid-point of the stem. All three items probably also date to the mid-18th century.

The three other finds include remaining pieces comprise a shallow moulded polygonal salt with star pattern cut into the base ([8745] (<161>), a small stopper with hollow spherical head ([8749] <161>) and near complete small oval-bodied perfume bottle in purple glass with raised decoration on the flat faces and sides ([8573] <153>); this is made in a two-part mould. All three items could be of late 18th or 19th-century date.

Bottles

The main feature of this collection is the presence of five (near) complete bottles that can be well dated. That from [8002] is of marvered mallet form, with a body profile that is only slightly inverted; it is very similar to bottles found in America and dated to 1729 and 1735 (Noel Hume 1970, 64–5). The others, all from [8581], have a squatter profile and are slightly earlier in date. Two are either small whole measures or half measures; the sides are slightly marvered but not flattened and the profiles are more noticeably inverted than the above. The larger of these two bottles is noticeably lop-sided. The other bottles are smaller versions of the above, either half or quarter measures; one is lop-sided and oval in section.

Of the other finds, the earliest is the base from an onion bottle with high domed kick [8745]. In addition, the rims and necks of two late 18th- to 19th-century cylindrical wine bottles were found in [8002].

Of interest is the rim and neck of a mould-blown bottle in pale green (aqua-coloured) glass from [8575], the neck of which is slightly polygonal; this unusual find needs further work.

Phials, medicinal bottles and sauce bottles

Six cylindrical phials were found, all in clear glass. Complete medium-sized tall narrow examples were found in [8002] and in fill [8162] of pit [8163], while the others, from [8573], are fragmented examples with a larger diameter (two complete and one incomplete rims, one complete base).

One small bottle square-sectioned bottle in aqua-coloured glass from [8002] contained 'The original and genuine [R]owland's [M]acassar Oil,' from 'No 20 Hatton Garden London'. Macassar oil was originally derived from seeds of the ylang-ylang tree, used for smoothing the hair, allegedly imported from an island in what is now Indonesia. The term was first used in 1809 (etymologyonline.com).

Two larger bottles probably also contained some form of medical preparation. One is rectangular with bevelled corners (from [8573]) while the other is octagonal in section ([8745]). A complete pale green glass long-necked rectangular bottle with bevelled corners from [8002] may have been used for sauces. A small long-necked bottle or flask from [8573], possibly with a body of bulbous form, may have contained some form of pharmaceutical concoction, oil or sauce; the quality of the glass is so good that this could be an import.

Other forms
Of interest in [8002] is the base of a mould-blown condiment jar of at least quadripartite form. The base itself is circular, but the body above it is square with facetted sides, and designed to fit in a tray. Above this is a deeper section of roughly octagonal form that tapers towards the top. Only tiny area of the fourth part survives; it suggests that the body splays out again, either to the same shape as the second section or to the rim. This find is probably of late 18th-/19th-century date.

Window glass

Very little window glass was found, and one piece ([8701] <18>) is intrusive in the fill of the Saxon burial [8699]. Two of the pieces are not from windows as such but from other objects such as a lantern ([8573] that required small panes of thin glass. Another piece from [8573] is a small rectangular strip of unknown function.

Analysis of Potential

Saxon
The vessel glass is limited, but nonetheless of importance given that it includes a fragment with *reticella* decoration. The latter merits discussion in the light of other finds from the settlement (eg Evison 1988, fig 34, no.10; 1989, 115; Stiff 2003, 245, fig 158, <G27>); possibly the closest parallel is a squat jar found at Southampton Row (Stiff in prep, <G96>). The presence of Roman glass may be fortuitous or indicate that it was collected for recycling.

The glass beads are not the first to be found in a burial context in Lundenwic, but they are the first of such early date, predating the Floral Street finds by some 75 years. They are of importance for dating, understanding burial practice and as they extend the present corpus of types for Lundenwic. Drum-shaped cylindrical beads first came into fashion in the 6th century. Although drum-shaped polychrome beads with herringbone decoration are not uncommon, <233> is the first from London. It has been suggested that the fashion was introduced in Ireland and spread from there to Frisia and beyond via England. Similar beads are, however, also known in numerous German cemeteries and the picture is far from clear; production in England cannot be ruled out. The use of five herringbone bands on <16> is consistent with the find from grave 42 at Dover and the beads from Schretzheim, Germany, which have three of five bands (Evison 1987, 65). Most of the Schretzheim beads are from contexts dated to 550-600 (ibid) and most of the English examples listed by Guido (1999, 313–6) are also dated to the 6th-century. Some,

however, are from 7th-century contexts. Of the finds from Dover Buckland, grave 92 is dated to 525-575 (Evison 1987, 137), while grave 42 is dated to 625-650 (ibid, 141; Guido 1999, 314).

Post-medieval
The post-medieval glass can aid the dating of the site as most comes from features that do not contain any pottery or only apparently residual Roman or Saxon pottery. It would appear that the finds span the late 16th to 19th centuries and this may help with the interpretation of the strata and the social status if the area.

Illustration and conservation
The Roman and Saxon vessel glass and the large polychrome bead <233> all merit illustration; the latter and the *reticella* glass <142> could also be photographed.
The complete/near complete bottles from [8002] and [8581] have considerable display potential and would make a nice photograph for the post-medieval aspects of the site. The wine glasses and other accessioned finds could be included in this photograph or illustrated separately. The glass bottle with facetted neck ([8573]) is also of intrinsic interest.

The bead needs to be investigated for any surviving thread, and all finds to be photographed should be cleaned thoroughly first.

Significance of data

Saxon
The Roman and Saxon glass is mainly of local importance, but given that the beads are from early burials, including the first cremation group from Lundenwic they are also of regional, national and even international interest, especially as the polychrome bead appears to have parallels in Germany.

Post-medieval
The finds are of local importance, and there is nothing particularly significant about the English glass in terms of form, although the survival of the complete/near complete wine bottles from [8002] and [8581] is remarkable and certainly merits note. The unusually moulded bottle with polygonal neck from [8575] is of wider interest as this is an unusual form that merits further work; the study of post-medieval glass as a whole is under-developed area of research in London.

Revised Research Aims
The following research questions can be suggested for the glass:

- What is the origin of the polychrome Saxon bead <233>? Is it imported or English?
- Is the glass stratified or intrusive? Is any residual
- Can the complete post-medieval bottles and vessel glass be related to specific properties?
- What are the capacities of the complete post-medieval bottles?

- Is the post-medieval bottle from [8575] an import or not?
- Can the dating of the finds be refined when married with other dating evidence?
- What can the finds tell about the social context of the site over time?

Method Statements
All the accessioned finds should be given proper accession labels, and ideally accession cards as they are studied in order to conform with LAARC standards.

To some extent further work depends on how much emphasis will be given to the post-medieval aspects of the site. The following assumes a full conventional report with catalogue. It is suggested that Vera Evison be invited to write up, or comment on verbally, the Roman and Saxon glass.

1. Library work to research finds that have not yet been paralleled: **0.5 day**
2. Ditto to refine the dating of the post-medieval drinking glasses (if needed): **0.25 day**
3. Analyse possible bead [8829] <236> by XRF as already done for the other beads
4. Write specialist report on the Roman and Saxon finds, with catalogue: **0.75 day**
5. Write specialist report on the post-medieval glass, taking the pottery into consideration and discuss their contribution to understanding the social context of the site: **1 day**

General
6. Text on distribution of the glass will be best undertaken together with that of all the other finds, if required. Contribution to this **0.5 day**
7. The same applies to liaison with illustrator: **0.25 day**
8. Liaison with field archaeologist/other specialists: **0.25 day**
9. Archive deposition: **0.25 day**

Total time: 4 days

Bibliography
See combined bibliography.

Appendix G

The ceramic loomweights
Lyn Blackmore

Quantification
Summary/Introduction

Loomweights were used on a vertical loom to taughten the warp threads. A good collection was found on this site, with 69 accessions from 64 weights, found in 30 contexts (14.039kg) filling five standard shoe boxes. No cross-joins between contexts were noted, although some may exist. The largest concentrations were in [8310] (five or six weights), [8747] (up to 13 weights).

Methodology

All the finds were examined and quantified by weight and percentage of the approximate circumference present; the data was recorded on an Excel file. Basic profile was recorded using a series of letters codes: U (broad with flattened upper and lower faces, usually annular); D (narrower, one flattened face, usually intermediate form); C (rounded profile, intermediate or bun-shaped forms); V (biconical). Some weights have a combination of features. The distribution of the finds was briefly considered in relation to the matrices and the pottery dating. Some of the closely related contexts (eg [8262] and [8292]) were checked for cross joins, but none were found.

Description of the loomweights

The weights vary considerably and it is possible that weight was more important than shape or size. There are no complete weights, but one near complete example was found in [8766] (<48>). Several others are fragmented but *c* 40-50% complete. As found at Mucking and on other Saxon sites (Hamerow 1993, 66-68) most weights are *c* 120-140mm in diameter, although the width of the ring varies from side to side and it is difficult to be precise when measuring small pieces. Two weights are smaller than most, with a diameter of *c* 100mm ([8656] <99>, [8747] <85>), while a few are 160mm ([8747] <24/25>, [8771] <77>, [8573] <74/75>). The majority are also standard types for *Lundenwic,* both in fabric and form (Blackmore 1988b; Williams 1989; Goffin 2003; Blackmore in prep).

Fabric
All the weights appear to be made of local brickearth, and most appear to contain fine scattered flint. Some, however, are quite fine, with no obvious flint (eg <56>, <61>, <62>, <204>), while others are more sandy than most (eg <63>, with flint). Several weights have large flint pebbles up to 25-30mm across (*eg.* <55>, <57>). Loomweights [8310] <63> and [8573] <103> include chalky/calcareous matter as well as flint, and possibly some quartz sandstone. Three/four weights from [8573] contain

chalky/calcareous inclusions, but no flint (<102>-<105>). Chalk/calcareous matter is also present in most of the fragments from [8747] (<22>, <23><24>, <25>, <83>, <84>, <86>) and in <77> from [8771]. Loomweight [8292] <66> is very soft and barely fired. Some weights, notably [8217] <60>, [8573] <103> and [8766] <29> have a white coating inside the central perforation, a feature that has been noted elsewhere (Blackmore 1988, 114).

Forms

Most weights fall into three main categories. Annular weights are usually associated with the Early Saxon period (Blackmore 1988a, 112; Hamerow 1993, 66); examples include <56>, <72/73> and possibly <68>. Bun-shaped weights are taller and have a smaller central perforation; they include <54>, <61>, <204>. Intermediate forms include <57>. A few weights have a more biconical section (eg <55>, <60> and possibly <101>). Several weights, however, have a rather triangular or irregular outline (eg <63>, <68>, <77>), which makes it hard to be sure of their true diameter. One small fragment ([8656] <51>) appears to have a flat base and central hole that is either very flaring or extremely skewed (alternatively the profile is biconical).

The most unusual forms, all in the calcareous fabric, have a broad flat base with a slightly convex upper surface; the height varies. Those from [8573], have a base width of *c* 54-56mm (<102>, <104>, <105>); the height of <105> is 37mm. The finds from [8747] comprise one well-finished weight (<24>) of the same width as the above, and an other up to 62mm wide and more irregular (<25>). This weight has a low height (35mm), but <77> from [8771] has a height of *c* 48mm. Also of interest is a broad thin weight with a markedly carinated profile from [8747] (<91>).

Some weights (eg <102>) have clear evidence for their manufacture. Among them, the well finished weight <28>/<76> from [8763] was made using a flattened piece of clay that was folded to the required profile; additional clay was added to smooth over the central perforation; the same technique was probably used on [8766] <29>. The very small weight <85> ([8747]) has a very crudely finished surface, while [8573] <102> has obvious finger impressions on the underside. One of the most uneven is [8778] <32>, which has many finger impressions and varies both in height and diameter; unusually, this weight was finished by wiping it horizontally. Weight [8613] <88> has a linear groove near the outer edge, probably accidental rather than intentional, while loomweight <37> from [8747] has two small finger impressions on the side. These could be taken as intentional, but there are also numerous other depressions, one quite large, that are clearly accidental.

Marks

Loomweight <103> from [8573] has a row of 12 impressions that extend over 75mm and appear to have been made by a long comb. Closer inspection shows that the row is actually made up of four groups, each with three impressions set 6mm apart; the gap between the different sets is just over 7mm. Weight [8613] <53> has a large oval impression (15x8mm) in the upper surface that could perhaps be classified as an intentional mark.

Distribution

Most finds are from Area 3, where 34 fragments from 29 weights were found in ten contexts. Almost half of these were found in [8747], which contained 16 fragments from 13 weights. The second largest amount was found in Area 1 (26 fragments from 25 weights); these are more evenly distributed through 12 contexts, although seven are from [8310]. Context [8525] contains five accessions, but three fragments join, so only two or three weights are represented. Fourteen weights are from seven contexts in Area. Here the best group was found in [8573], an uppermost Saxon deposit, which contained three or four weights, including two interesting forms.

Analysis of Potential

This collection of loomweights is of average size for Lundenwic. It is larger than that from Maiden Lane (Blackmore 1988, 114), more or less the same size as that from Jubilee Hall, which amounts to 66 fragments (11.44kg; Blackmore 1988, 112) and considerably smaller than that from the Royal Opera House site, which amounts to 1024 fragments, or 157.4kg (Goffin 2003, 216). The finds from LTM03, however, may have a longer sequence than most other sites in Lundenwic.

The collection is also important since, despite the lack of complete weights, some distinctive fabrics and forms are present. Of note is the presence of several weights in an oxidised calcareous fabric, which has been classed as fabric 3 in two recent analyses of finds from the settlement (Blackmore in prep; Keily in prep). It appears to be rare in Lundenwic, but one example was noted at the Royal Opera House (Goffin 2003, 216) and two at Floral Street (Blackmore in prep). Occasional fragments are also scattered on other sites, notably Bruce House, Kemble Street, Long Acre, Shorts Gardens and Southampton Row, although there is some variation in fabric and form (Keily in prep). Plotting the chronological distribution of the finds would be of interest as those from Kemble Street are early while those from Shorts Garden should be late.

The general distribution of the finds is also of interest. While the main cluster of weights in [8747] and other finds support the view that the intensity of weaving increased after the introduction of Ipswich ware (Malcolm et al 2003, 169-70), numerous loomweights from the site are from earlier contexts. This may help to understand the early development of the industry, although the finds from [8503] and [8525] are suspect as despite their apparently early situation in the matrix they are associated with Ipswich ware and shell-tempered wares.

The weights found at LTM03 also include some new form types, which have the potential to enlarge the existing range; most notable are the large weights with flattened underside, such as [8573] <105>. The closest London parallels for these finds are from Beckenham (Keily 2003, 174–6), and there is scope to purse the possible implications of this link with a site outside Lundenwic. A number of good profiles exist which also allow a typology for the site to be presented. The comb-stamped weight can be compared to other

examples from Jubilee Hall (Blackmore 1989, fig 29, no.1), Bedfordbury (Williams 1989 fig 37, no.130), the Royal Opera House (Goffin 2003, 221, fig 151) and other sites.

Some weights have features that may help in the interpretation of their use and/or the site. For example, blackening on one side (eg [8155] <61>, [8771] <52>, [8777] <30>) might indicate that the weights were suspended from the loom when the building caught fire.

In all 27 weights merit illustration, of which 14 are definitely recommended for publication.

Significance of data

The finds are mainly of local interest in that they will help in the interpretation of the site and add to the picture of craft and industry within the settlement. When the data is combined with that for other sites in Lundenwic, however, the assemblage is of national interest and all new additions to the existing fabrics or forms are of importance.

Revised Research Aims

The following points can be noted as needing further research:

- Can a chronological progression from annular weights to other forms be observed?
- Do the fabrics change over time?
- How does the calcareous fabric compare with examples noted on other sites? Can the other finds help with the dating of this group?
- Can any parallels be found for the large weights in the calcareous fabric? Do the larger forms have a special function? Could they be thatch weights rather than loomweights?
- How do the finds relate to structures on the site?

Method Statements

All the objects should be given proper accession labels, and ideally accession cards as they are studied in order to conform with LAARC standards.

1.Record full dimensions and fabrics in line with Floral Street and other Lundenwic sites: **1.25 day**
2. Compare the distribution of the different forms against the landuse text: **0.25 day**
3. Prepare specialist text, discussing fabrics, forms, chronological trends, function and the evidence for textile production: **1.25 days**
4. Prepare tables and catalogues as required: **0.5 day**
5. Liaison with textile specialist Penelope Walton Rogers re large weights: **0.25 day**

General

6. Text on distribution of the loomweights by landuse will be undertaken together with that of all the other finds, if required. Contribution to this **0.5 day**
7. The same applies to liaison with illustrator: **0.25 day**
8. Liaison with field archaeologist: **0.25 day**
9. Archive deposition: **0.25 day**

Total time: 5 days

Further funding will be required for editing

Bibliography
See combined bibliography

Appendix H

Iron, Silver, copper alloy and composite metals
Lyn Blackmore

Quantification

Introduction
This site lies near the centre of Lundenwic, between the Royal Opera House site and the Thames. The stratigraphic sequence includes both Saxon and post-medieval deposits; the former include not only inhumation burials but also cremations. As it is currently uncertain whether Saxon objects are present in later deposits all the finds are discussed in the same assessment, but by period/stratigraphy. Excluding coins, which are discussed separately, there are 24 fragments of copper alloy (17 objects), of which eight are currently dated to the Saxon period, one is possibly so ([8606]), and eight are post-medieval. The 31 fragments of iron derive from *c* 24 objects, of which four are definitely post-medieval; some of the finds from the upper Saxon levels could also be of post-medieval date. Also present are two composite items, one Saxon, the other post-medieval.

Methodology
The finds were listed by material and object type in an Excel file; finds that did not already have 'small find' or accession numbers were numbered so as to aid their identification and data manipulation. All but two of the finds were X-rayed ([8766] <237>, iron; [8829] <149> copper alloy) and most comments below are based on what can be seen in the X-ray plates. It is possible that interpretations will change once the finds have been cleaned.

Description of the Saxon composite metalwork

Brooch
Brooch <14> is a silver disc brooch (original diameter *c* 31mm) set with four cut garnets, all backed by gridded foil, with pin holder and catch on the back; the pin is missing. The design on the front comprises five concentric rings, starting with a central circular garnet. Radiating from this are three equally spaced triangular garnets, encircled by a narrow band, a broader band, and a beaded border (mostly missing). Following Avent's classification the outer rim is of type 3, the shape of the garnets are type 5.2, while the brooch as a whole belongs to his class 2.5 or 2.6 (Avent 1975, 27-8, figs 4, 7). It is difficult to be more specific at this stage as the design is unclear, even on the X-rays, but it is likely that that the panels between the triangular garnets contain style 1 animal ornament (probably Avent's type 7; ibid, fig 12), and the surrounding band may also be decorated. It is possible that the brooch was originally gilded. Dating is problematic (see below); the form as a whole spans the period 525-625 (Evison 1987, 39-41).

Description of the post-medieval composite metalwork

Knife
This object is represented by the more or less complete handle with the tang inside it; the blade is missing. The handle form, which expands towards the rounded end, is a long-lived type that first appeared in the later 17th century. This example is probably contemporary with the 19th-century deposit in which it was found.

Description of the Saxon copper alloy and silver

Buckle
The complete shield-on-tongue buckle from female grave [8699] ([8701] <19>) is the third most impressive find after the brooch and ?tweezers <43>. This form, with oval loop (dimensions 20x30mm) and cello-shaped shield at the base of the tongue is a well-known form that is particularly common in Kent (Marzinzik 2003, Typegroup 1.2). In shape and size the loop is more or less identical to those from graves 10 and 105c at Mill Hill Deal, although the tongue and shield of the latter are rather larger (Marzinzik 2003, 19-21, pl 5.4, left; pl 6.4, left). Other examples are known from Dover Buckland (eg Evison 1987, fig 16, no. 2). The form is long-lived, originating on the continent in the 5th century, reaching England and eventually being copied in Kentish workshops by the early 7th century (Evison 1987, 87; Marzinzik 2003, 19, 21). The cross-section of the loop is currently hidden, but a rounded cross-section and a delicate frame are generally considered to be early traits, while a wider frame and more 'massive' appearance are considered to be later (ibid, 19).

Buckle?
Object <17>, found in the same grave as the above, is problematic. It comprises a rectangular frame with a part of a ?circular loop. It is currently unclear whether the latter originally joined with the other end of the frame. Although similar buckle fittings are known in the medieval period (Egan 19991, 102, no 472), there is no parallel in the typology of English forms compiled by Marzinzik (2003) and none has yet been found elsewhere. Since the other finds from the grave include both Roman and ?modern Roman glass the date and function of this object must remain in doubt until it has been cleaned up. It is possible that it is associated with the iron object <20> (see below).

Tweezers/girdlehanger?
Find <43> from cremation [8828] ([8829]) is currently listed as a pair of tweezers, but could be a small girdle hanger. It appears from X-ray to be complete (length 79mm) and quite ornate, with a suspension loop at the top, bead-and-reel decoration on the shaft and decorative sides to the terminals. The object differs from the standard form of tweezers in that the loop at the top is not in the same plane bottom of the arms, while the latter are expanded at the ends, rather than straight-sided. In these features the object resembles the girdlehangers found at Rainham (Evison 1955, 65, fig 4.3), albeit in miniature. If these are tweezers, therefore, they are most unusual in form and the arms must have been twisted. Another possibility suggested by the X-ray is that there are in fact two objects from a cosmetic set corroded together, one with a pointed blade (possibly curved) for

cleaning nails etc, the other with a broad, spatulate blade for scraping (cf MacGregor, A, and Bolick, E, 1993, 216–26). Conservation work is needed to resolve the identification and date of this important find.

Other
Fragments of what appears to be folded/crumpled sheet metal were found in [8553] (<9>), [8570] (<113>), [8831] (<40>) and possibly in [8606] (<11>). Little can be said of these or what they may derive from, but a few fragments from [8382] (<8>) are rather denser and could be from an ingot. A small fragment <149> from the cremation [8829] remains to be X-rayed.

Description of the post-medieval copper alloy and silver

Spoons
Four complete spoons were found, of which the smallest is of silver and has an elongated, spatulate bowl ([8749] <27>, length 83mm). Two of the others are a pair from [8119] and are hallmarked, suggesting that they were silver-plated (111>, <112>; length 140mm). The fourth spoon is from [8749] and has a simple, straight-sided handle (<110>, length 134mm).

Buttons
One of the two buttons is flat and has a loop on the back ([8047] <114>); the other comprises the outer casing for a button, with convex surface and hole in the back for a separate loop ([8002] <115>).

Other
Two short lengths of wire (diameter 2-3mm), were found in [8573], one straight (length 62mm), the other curved (diameter c 30mm), it is possible that both are from the same object. Two small fragments from [8573] (M<117> are unidentifiable.

Description of the Saxon iron/iron from Saxon deposits

Knife
The most readily identifiable object is small knife (<69>), which has a total length of 105mm and a blade length of *c* 80mm (width 12mm). The blade is complete, but the nature of the front part is unclear. It appears to be concave, or incurved, with a cutting edge that curves up to the tip (Evison 1987, 113, type F; Ottaway 1991, 559, type B). It could, however, be angle-backed (Evison 1987, 113, type 3; Ottaway 1991, 559, type A).

Chatelaine/chain?
The X-ray of the five pieces from grave fill [8701] (currently listed as <20>) shows two thick oval rings *c* 36-37mm x 40mm, one butt-joined, the other probably so. The former seems to be linked to a smaller ring *c* 25mm in diameter. Two other pieces appear to be from one or more thinner rings with attachments. The fifth piece comprises another small ring (diameter again *c* 25mm) from which other items project. It is possible that these fragments form part of a chain or chatelaine.

Other finds from grave [8699]
The other fragments from fill [8701] of the grave [8699] are very small. One (<125> is a tapering strip that appears to have an eye at the wider end (length 22mm, width 5mm to 3mm). The two fragments listed as <121> join; they are straight-sided, possibly with rounded ends (lengths 14mm, 19mm; width *c* 5mm). It is possible <121> and <125> are parts of the same object or a pair.

Objects from the cremation pit
Two non-joining fragments from a very thin straight-sided object were found in this feature. Of these, <127> appears to be from the end, with a more-or-less straight edge (length 29mm, width 7mm, expanding to 9mm at the end. The other, <129> is broken at both ends (length 53m, width 7mm, thickness 1mm).

Key?
The scrolled terminal and part of the shaft of a possible key were found in [8292] (<130>; length 57mm).

Mounts(?)
Ash layer [8505] contained what appears to be a pair of touching circular mounts (<137>; diameter *c* 20mm); these are totally obscured by corrosion products and it is not known whether they are flat or domed.

Nails
A complete nail with large head (<138>, length 60mm, width at head 23mm) was found in [8398] together with the shank of another nail (length 28mm). This is from one of the lower Saxon levels in Area 1. A possible nail shank was also found in [8169] <131>, length 40mm).

Miscellaneous
A large flat strip, slightly tapering to one end, was found in one of the uppermost Saxon levels in Area 2; it may well be of post-medieval date and is presumed intrusive ([8646] <135>, length 138mm, width at head *c* 14mm). The object is puzzling in that it appears to bifurcate at one end. Whether this is real or due to corrosion and splitting is currently unclear but it could be part of a lock mechanism.

Two joining fragments with roughly rectangular section were found in [8209] (<123>; length 56m, 7x5mm). A larger piece, apparently straight-sided, was found in [8169] (<134>; length *c* 60mm). Small amorphous fragments were recovered from [8292] (<128>, [8362] (<122>) [8771] (<126>); of these, <128> and <122> could be mounts or nail heads. A fragment from [8766] (<237>) remains to be X-rayed (found in the slag) but appears to be a strip or piece of sheet metal.

Description of the post-medieval iron

Chisel, tack, nails

A possible chisel was found in [8575] (<136>, length *c* 140mm, width at head 12mm), while a small tack was found in fill [8621] of pit [8622] (length 14mm). Some possible nails/structural items noted above may also be of post-medieval date.

Miscellaneous
Three large pieces were found in [8573] (<139>). The longest piece is rectangular in section (length 165mm long, width up to 17mm, thickness 9mm), while the shorter piece is *c* 9-10mm square (length 100mm). The shortest piece has a right-angled return, with a broad flat arm (width *c* 25mm, thickness *c* 6mm); this tapers towards the angle and continues to taper, both in thickness and width, towards the end. This is obscured by corrosion but seems to be a rounded point (length of this arm *c* 87mm). These pieces are probably the remains of structural fittings. The same context contained a sub-triangular fragment of sheet metal (<133>).

Distribution

The Saxon copper alloy is spread between Areas 1, 2 and 3 but the iron is mainly from Area 1. The two most important groups are from the cremation [8829] and from the female grave fill [8699] in Area 2, which contained six or more metal objects. The spatial relationship of the latter in the grave may help with their identification and interpretation. It is unfortunate that the composite brooch is residual, as it is very likely to derive from a burial in the general area. The post-medieval finds seem to be randomly distributed.

Analysis of Potential

Saxon
It is hard to appreciate the full potential of objects that have not been cleaned. The X-rays help, but cannot always convey the full picture. Nonetheless, the Saxon finds are of importance, despite their limited number. The three most important finds (brooch <14>, buckle <17> and tweezers/cosmetic instruments <43> are types that have either not been found before in Lundenwic, or only in a much more fragmented state. The fact that these and some other items are from burials increases their potential as they will help to understand not only the burial rites (Geake 1997) but also the early development of Lundenwic, when this began to take place and links with other areas such as Kent. They may also help to identify the sex and status of the deceased.

Brooch <14> in particular is an important addition to the corpus of items associated with personal ornament from the settlement. It is earlier in style than the find from Floral Street (Blackmore 2002), and an important extension of the mainly Kentish distribution of the type. Brooches of this type with keystone garnet settings are most common in Kent and were probably made there. The majority have garnets that are trapezoidal (hence the term keystone). Brooches with triangular settings (Avent types 2.5, 2.6) have, however, been found in grave 38 at Dover Buckland (Avent 1975, pl 10, no.56; Evison 1987, 226-7, fig 22, no.1) and Howletts (Avent 1975, pl 10, nos 56, 57), Faversham and Westbere (ibid, pl 11, nos 59, 60), although none are exactly the same as the present find. The

origins and dating of these brooches have been discussed by Evison (1987, 41–2), who has noted that the examples with four triangular garnets (Avent types 1.2, 7.1, 7.2, 7.4) are associated with finds dating to the late 6th or 7th century and has suggested that all three types might be a later development of the tradition (Evison 1987, 41-2). This needs to be verified for the examples with three triangular garnets, but would fit with the early context of the LTM03 find. It seems most likely that <14> is of late 6th-century date, although it could be an heirloom. This find will help the understanding of early links with Kent, and has also has the potential to help understand contemporary technology.

The possible tweezers/miniature girdle hanger from the cremation is also an important find and it is important its identification is resolved as this may help to sex the individual with whom they were buried. Fragmented tweezers have been found before in Lundenwic but these would be the most complete and the most ornate. Tweezers usually occur in male graves (Evison 1987, 118), but if object <43> is a miniature girdle hanger or part of a cosmetic set this would point to a female cremation. Unfortunately the other finds from the cremation do not help much in this matter. Shield on tongue buckle <19> from grave [8869] conforms to the usual pattern in England in that it is from a female grave.

Of the iron objects, the knife and the chain/chatelaine from grave [8699] have the greatest potential. The form of the knife will be of particular interest as it could aid the dating of the burial; blades with concave fronts to the back are thought to date to the 7trh century, and Evison (1987, 115, 140) has placed them at after 675, with the proviso that some variants occur earlier than this. Angle-backed knives could be rather earlier, spanning the period 525-750 (ibid, 115, 138–9)

Post-medieval
These finds have no further potential.

Illustration and conservation
The following need to be X-rayed from another angle to aid their interpretation:
[8646] <135>; is this Saxon or post-medieval?
[8505] <137>
[8169] <134>

The following need to be cleaned/investigated to aid their interpretation:
[8645] <14> composite brooch to clean for photography/display
[8829] <43> copper alloy tweezers/cosmetic set ?one or more objects? How decorated? Technology?
[8701] <17> copper alloy buckle; is it gilded?
[8701] <19> copper alloy ?buckle ?do the two pieces join? What is their function?
[8505] <130> iron ?key terminal; investigate end and section
[8701] <69> iron; is the back of the knife angled or concave? Are there any MPOs?
[8701] <20> iron; clean/investigate to see how the finds inter-relate
[8701] <121>, <125> iron; does this have an eye at the wider end?
[8829] <127>, <129> iron; are these definitely the same object? Do they join?

All the above merit illustration and/or photography

Significance of data

Saxon
The main significance of the Saxon finds is that some are from burials, and some are from the first cremations to be found in Lundenwic. For this reason they are of regional, if not national interest. The brooch is the first of its kind to be found in Lundenwic. It is earlier in style than the find from Floral Street, and is an important indication of links with Kent in the late 6th/early 7th century. Tweezers are usually found in male graves (Evison 1987, 118), while shield on tongue buckles are more commonly associated with women.

Post-medieval
These finds are purely of local significance.

Revised Research Aims
The following are some of the research questions to be addressed; more will inevitably arise once the finds have been cleaned.

- What is the method and construction of the disc brooch? What is the style of ornament between the garnet settings?
- Can any direct parallels be found for the brooch? Can its dating be refined?
- Can any parallels be found for the tweezers/cosmetic instruments?
- Can any parallels be found for <17>?
- What was the distribution of the finds in grave [8699]? Can this help to identify them?
- Are there any mineralised organics on these finds?
- Are <17>, <19> and <20> all related or are they different objects?

Method Statements
All the Saxon finds should be re-Xrayed and cleaned as above prior to analysis. The objects should be given proper accession labels, and ideally accession cards as they are studied in order to conform with LAARC standards.

1. Research parallels for the finds from the grave group and cremation **1.5 days**
2. Write catalogue if required, with description of brooch according to the terminology devised by Avent and others: **1.5 days**
3. Consider the distribution of the objects in the grave and their function: **0.25 day**
4. Write discussion of the brooch and other significant metalwork: **1.5 days**

General
5. Text on the distribution of the metalwork by landuse will be best undertaken together with that of all the other finds, if required. Contribution to this **0.5 day**
8. The same applies to liaison with illustrator: **0.25 day**

9. Liaison with field archaeologist/conservators/other specialists: **0.5 day**
10. Archive deposition: **0.25 day**

Total: up to 6.25 days

Editorial work will need to be budgeted separately

Bibliography

See combined bibliography

Appendix I

The slag, crucible and mould fragment
Lyn Blackmore

Quantification
Introduction

A total of five contexts contained slag. Some other contexts were thought to contain slag but the finds proved to be iron ([8766]), glass/bone ([8829]), quernstone ([8367], [8771]), and daub ([8384]). In addition to slag, there are four crucible fragments and part of a mould.

Methodology

The finds were examined macroscopically, weighed and recorded on an Excel spreadsheet; the maximum dimensions were also noted.

Description of the slag

Most pieces appear to be smithing hearth bottoms, four of which were found in three contexts. One is small and possibly complete ([1855]), while two are larger and appear to represent *c* 50% of the hearth bottom. One small fragment from cremation <38> ([8867]) was first thought to be a molten bead, but XRF analysis suggests it is a form of fuel ash slag (D Dungworth pers comm).

Description of the crucibles

One large sherd from an externally thickened crucible was found in [8155] (<233>). This is either from the base of an oval-shaped crucible, or from the base/wall of a deep narrow one like those described as Type A at Coppergate (Bayley 1992, fig 323, no. 2333). Three small crucible fragments were also found in [8396] (<238>) and in [8535] (<239>, two fragments).

Description of the mould

The mould ([8166] <232>) is made of extremely fine reduced clay and is *c* 29mm thick; the extant dimensions of the inner face, which is gently curved, are 55x66mm. The purpose of the mould is unclear but it may have been used for making frying pans or vessels made in component parts that could not be made by beating a piece of sheet metal.

Distribution

With the exception of the small fragment from cremation <38> in Area 3 ([8867]), all the slag was found in Area 1, and appears to be stratified in Saxon contexts. Two hearth

bottoms in fill [8301] of [8311], while a fragment of hearth lining was found in the overlying demolition dump. The largest fragment is from fill [8259] of pit [8260], while three undiagnostic pieces, possibly fragmented smithing hearth bottom, were found in a later pit in the same general area ([8186]). The other fragments are from others parts of the site. Crucible <233> was found in the same context as one of the hearth bottoms near the top of the sequence, but unlike the associated hone it is not thought to be intrusive.

Analysis of Potential

Despite lacking a rim, crucible fragment <233> is one of the largest found in Lundenwic (Blackmore with Dennis 2003, 271–3). It has excellent internal residues and should give a good indication of what it originally contained. The mould is also of importance in that very few have so far been recognised in Lundenwic (Blackmore 1989, 128–9; Blackmore with Dennis 2003, 273). It should be analysed chemically (XRF) to determine if there is any residual non-ferrous metal content that might confirm the identification as a mould (ibid) and aid its interpretation.

The slag is of interest in that it indicates ironworking in the general area but of limited potential unless it can be shown that any of the finds are directly associated with hearths. It is quite likely that it represents random redeposition.

Illustration
Crucible <233> and the mould should be drawn.

Significance of data
The finds are of local interest, but add to the general picture of industry in what was a nationally important trading settlement.

Revised Research Aims
The following points can be noted as needing further research:

- Can any metal be detected in the crucible or mould fragments?
- How do the finds relate to structures on the site? Are any related to hearths?

Method Statements
The slag should be examined by a specialist more familiar with the subject (eg Lynne Keys), but could then by written up by the present writer. The mould and crucible can be written up by the present writer.

1. Liaison with English Heritage (Justine Bayley/David Dungworth) re XRF of the crucible and mould: **0.25 day**
2. Scanning of slag by external specialist: **0.25 day**
3. Preparation of reports on slag, crucible and mould fragment: **0.75 day**

General
4. Text on distribution of the slag, crucible and mould will be best undertaken together with that of all the other finds, if required. Contribution to this **0.5 day**

5. The same applies to liaison with illustrator: **0.25 day**
6. Liaison with field archaeologist: **0.25 day**
7. Archive deposition: **0.25 day**

Total time: up to 2.25 days

Further funding will be required for editing

Bibliography
See combined bibliography

Appendix J

The worked bone
Lyn Blackmore

Quantification

Introduction

There are 45 bone accessions, of which 42 are Saxon; 37 of these are stratified in Saxon contexts. In addition there are three post-medieval objects a composite post-medieval knife with bone handle. Most of the Saxon finds comprise waste, but six objects were also found.

Methodology

Those finds that were not already accessioned were given individual numbers and all finds were recorded on a general excel spreadsheet. The dimensions of the objects are noted below where relevant but no measurements were taken of the waste material at this stage.

Description of the Saxon finds

Combs
The comb fragments are from [8172], [8292], [8525] and [8771]. The most useful finds are [8172] <168> and [8771] <200>, both of which are from the central parts of double-sided combs both with undecorated connecting plates that are rounded in section. This form is typical of the period and is the most common on other sites in the area (Blackmore 1988, 137, fig.38, nos.4, 5; 1989, 131; fig.45, nos.286-288; 2003, 310–12). The teeth on <203> are missing but those on <168> survive, showing that they are closely spaced (ten per 10mm) and quite short (*c* 10mm). From the size of the connecting plates it would appear that <200> was a smaller comb than <168>. The other two finds are both from connecting plates That from [8282] is plain and flat-topped with a bevelled edge (cf ibid, fig 175, <B100>), while that from [8525] (<186>) is from the end of a plate with rounded cross-section; it has grouped transverse lines and part of a rivet hole.

Pins/needles
Three pins/needles made of pig fibulae were found (for discussions see Blackmore 2003, 306, 309). Two ([8186] <106> and [8503] <107>) are complete and unperforated at the head; [8211] <7> has a round eye and could have been a needle; only the head and upper part of the shaft survive.

Spindlewhorl
The one spindlewhorl ([8657], <15>) is of hemispherical form with horizontal grooves around the shoulder; the total diameter is 41mm, while that of the spindle hole is 7mm. In

form, decoration, weight and size this find is quite typical for Lundenwic (Blackmore 2003, 304).

Waste material
This is the dominant category on this site, with 36 fragments (1723g). One fragment of sawn goat horncore was found ([8778] <203>), while part of a sawn sheep bone was found in [8573] (<188>), but the waste otherwise consists entirely of antler. Most comprises antler tines, amounting to 35 fragments in all (1687g). The largest fragment is from [8657] (<194>) and comprises a section of the beam with one complete tine and the lower parts of three other tines. Almost all the fragments are single tines/tine fragments, but two ([8155] <165> and [8659] <195>) are double tines.

Seven tines are complete, presumably discarded because they were too small or too crooked to be useful ([8172] <170>, [8213] <173>, <176>, [8215] <178>, [8244] <181>, [8298] <184>; [8771] 201>). Of these, [8172] <170> is *c* 170-200mm long; [8244] <181> is 130-150mm long, [8298] <184> is *c* 155-165mm. Tine <183> from [8298] is also almost complete (length *c* 160-180mm). Tine [8771] <201> has been removed from the palm by lateral sawing and longitudinal splitting. Tine [8213] <176> is complete and *c* 60mm long; it has been detached from the palm by sawing laterally and near vertically on the inner side. Several of the tine fragments are cut off *c* 80mm from the tip, but some are longer; [827] <180> is 110-120mm long. The shortest is [8766] <199>, which is only 25mm. Fragment [8213] <175>, which is sawn at both ends, is one of the few pieces that are from the lower part of the tine and lack the tip. Some of the smaller tines were cut off the beam longitudinally, rather than laterally. These include [8186] <171> [8213] <174>.

Two fragments of beam are present. Of these [8785] <202> is cut from near the base and has three sawn faces, one lateral and two oblique. [8523] <185>, which has a smaller branch projecting from it and three cut faces. A palm fragment ([8738] <196>) has lateral and longitudinal cuts and also an oblique cut to remove a tine; one tine and one split tine remain.

Very few pieces have evidence for working but one small wedge with facet cuts at the tip was found that was probably used in the process of boneworking ([8639] <13>; cf Blackmore in Malcolm et al 2003, 174, fig 138, <B86>). Several tines have knife marks suggesting that they were tested to gauge whether the bone had been adequately soaked prior to working tine (ibid, 170–74). These include [8573] <187>, which has been cut obliquely across the tip and [8186] <171>, which has a series of facet cuts along one side of the tine. The complete tine [8298] <184> also has cut mark along the edge and facet cuts at the tip. The same applies to [8244] <181>, the tip of which has been roughly removed and which has numerous knife cuts along the outer edge. There is also a small saw mark just a little in from the cut edge, as if the point of cutting was moved from that first selected. Tine [8594] has two lateral saw marks on one side a short distance in from the tip.

Description of the post-medieval finds

Three objects were found, all complete and in good condition. Two buttons are both simple discs with a central perforation; [8047] <162> is 16mm in diameter, while [8745] <198> is 15mm. The third find is back of a brush, [8745] <197> (106x 38mm); as this lacks a handle it was probably used for scrubbing or polishing. In addition there is a composite knife with bone handle and iron blade ([8745], <132>; see metal finds).

Distribution of the finds

Saxon
Most of the bone was found in Area 1 (28 accessions); Areas 2 and 3 each have six accessions. These finds all appear to be from Saxon contexts, but the five fragments of waste from the southern half of the site are all residual in post-medieval levels. Of the artefacts, three comb fragments and all three pin fragments are from Area 1, the wedge and spindlewhorl are from Area 2, and one comb fragment is from area 3 ([8771] <200>). There are no obvious clusters in any single context, the largest group being five waste fragments from [8213].

Post-medieval
Button <162> was found in Area 1 (layer [8047]), while the other finds, including the composite knife, are all from an upper deposit in the southern half of the site ([8745]).

Analysis of Potential

Saxon
The assemblage indicates the bone/antler as being worked on or near the site, but has limited potential as the amount is not great, there are no large clusters and the objects are all known types. Consideration of the relationship of the various contexts might suggest wider clusters (eg between [8211]/[8186]/[8169]), but even so the numbers are too limited to make any meaningful statements. As noted above, there is some potential for comment on the different boneworking techniques that are evident; for example, [8294] <70> and [8155] <165> sawn through most of the way then snapped. The tines from [8169] <166> and [8186] <171> have been sliced off the branch longitudinally, again sawn/snapped. The main interest will doubtless be in seeing whether the stratigraphic distribution of the material, together with that of other finds such as pottery, can inform on the use of the site or the date at which the industry first began. The earliest objects in Area 1 are a comb fragment and a pin from [8525] and [8503]. These are unfortunately from an area that seems to have been disturbed and are not reliable, and most finds are from the middle or upper Saxon levels.

Post-medieval
Unless this period of the site is to be studied in detail these finds have limited potential for further work.

Illustration and conservation
Of the Saxon objects, the spindlewhorl <15> and two comb fragments (<168>, <200>) merit illustration. At least two pieces of waste, [8186] <171> (facet cuts and sawing in

two planes) and [8523] <185> (beam segment, three cut faces) could be drawn, while at least three could be photographed: [8186] <171> (knife marks), [8244] <181>, [8298] <184>

Combs [8172] <168>, [8771] <200> should be conserved.

Significance of data

Saxon
The bone objects and antler waste are of local significance. All the artefacts are known types that are represented elsewhere within the settlement, while the small amount, and limited range of the antler waste suggest random redeposition rather than bone working actually on the site.

Post-medieval
The three post-medieval finds are of local significance only.

Revised Research Aims

- What is the chronological distribution of the bone waste and the artefacts? Can this help determine when the industry started?

Method Statements
All the finds should be given proper accession labels, and ideally accession cards as they are studied in order to conform with LAARC standards.

1. Consider the distribution of the finds in order to determine the earliest date of the industry: **0.25 day**
2. Write catalogue of Saxon objects: **0.25 day**
3. Prepare specialist report: **0.5 day**

General
4. Contribution to landuse report, if required: **0.5 day.**

Total time: 1.5 days

Bibliography
See combined bibliography

Appendix K

An Assessment of the Human Bones from London's Transport Museum (LTM03)

Melissa Melikian
AOC Archaeology Group

1 INTRODUCTION

This report describes the results of an assessment of the human bones recovered from the excavations at London's Transport Museum, Covent Garden, London (NGR: TQ 3042 8085). A programme of archaeological works was undertaken by AOC Archaeology Group, between June and October 2005 on behalf of the Wates Group. The works comprised a watching brief on seven pile holes, followed by the stripping and recording of the remaining post-medieval structures and the subsequent open area excavation of any underlying archaeological stratigraphy.

The works revealed a large number of features in the form of wells, large pits and postholes and layers of general dumping or possible levelling. Two inhumations, and ten cremation deposits, were also recorded cutting the natural deposits. All these features are tentatively dated to the Saxon period *pro temps*. These burials were localised in the south-west portion of the site. For the inhumations, skeleton (8558) was orientated north-south and skeleton (8700) east-west. Skeleton (8558) was found with a copper alloy brooch and *c.*10 glass beads. In most instances there was no stratigraphic relationship between the burials. However, grave cut [8552] for skeleton (8558) cut (8570); a cremation deposit. This tentatively suggests that the inhumations may have been later. One cremation pit [8828] contained two cremation vessels SF 38 & 39.

Several of the cremation deposits were within vessels. Where these were relatively complete they were hand excavated in 'spits' following the methodology of McKinley (1994). Prior to the assessment, the human bone was processed. For the cremated bone this involved flotation of the cremation deposits. The residue was then sorted. For the inhumations the bone was washed with lukewarm water and allowed to dry at room temperature.

2 METHODS

The human bones were analysed in accordance with recommendations by English Heritage (1991) and English Heritage & BABAO (2002). The assessment involved a scan of the skeletal material in association with the context sheets and plans from the excavation.

2.1 INHUMATIONS

2.1.1 Quantification

Primarily, the assessment involved quantification of the material; the number of individuals was ascertained and the percentage completeness of each skeleton was recorded. The percentage completeness of each skeleton was noted. This was calculated on the basis that the skull equated to 20% of the skeleton, the upper limbs 20%, the torso 40%, and the lower limbs 20%. Following Museum of London guidelines the degree of surface preservation for the skeleton was classed using the following criteria:

1 = Bone surface is in **good** condition with no erosion, fine surface detail such as coarse woven bone deposition would be clearly visible (if present) to the naked eye

2 = Bone surface is in **moderate** condition with some post-mortem erosion on long bone shafts but the margins of articular surfaces are eroded and some prominences are eroded

3 = Bone surface is in **poor** condition with extensive post-mortem erosion resulting in pitted and eroded cortical surfaces and long bones with articular surfaces missing or severely eroded

An inventory of those elements present was created. For each individual the following elements were scored as present or absent: the skull, dentition, torso, pelvis, legs, feet, arms and hands. The skull and pelvis have implications for sex determination and the dentition and pelvis are used for age estimation. Therefore an assessment of the elements present enables us to determine the potential of the sample for complete osteological analysis.

2.1.2 Demography

Due to the time constraints of an assessment a biological age in years was not given. Instead, the individuals were classed as foetal or neonate, juvenile, young adult, middle adult or old adult. If the individual was known to be an adult but the age category could not be refined within this category the individual was classed simply as adult. This classification was based on fusion (Scheuer & Black 2000), (Sundick 1978) and dental development (Ubelaker 1978).

If possible a biological sex was determined for the adult sample. This was based on the morphology of the pelvis and cranium following Acsadi & Nemeskeri (1970), Phenice (1969) and Buikstra & Ubelaker (1994). The sex of an individual was based on as many methods as applicable. From this an overall biological sex was assigned to the individual. Individuals were classed as male, probable male, intermediate, probable female or female. If it was not possible to assign a sex to the individual they were classed as undetermined.

2.1.3 Pathology

Any pathology was noted and diagnosis was based on findings in Ortner & Putschar (1981) and Aufderheide & Rodriguez-Martin (1988). It must be emphasised that all cases of pathology were identified during rapid scanning of the material and therefore may be

under-estimates of the true prevalence of the disease, which would be ascertained during the full osteological analysis. It was noted if the presence of pathology warranted photographs or x-radiography.

2.2 CREMATIONS

The assessment of the cremated bone consisted of a scan of the material noting the level of oxidation (colour), the (minimum number of individuals) MNI, and a note of the possible presence of animal bone or other potential pyre goods. Using the methods previously detailed an age and sex estimation was established where possible. The cremated bone from each deposit was weighed.

3 RESULTS

The sample consists of a total of two articulated inhumations and nine cremation deposits. The inventory and catalogue can be found in Appendix A.

3.1 INHUMATIONS

Two inhumations were identified on site, (8558) and (8770), for results see Appendix A. For skeleton (8558), the bone surface was in moderate condition and approximately 85% complete. All elements of the skeleton were present, including the skull, dentition and pelvis. The individual was classed as a 'middle' adult and was female. No pathology was noted. Skeleton (8770) was heavily truncated at the chest and in poor condition. Consequently the skeleton was only 20% complete (pelvis, legs, arms and hands). The skeleton was insufficiently complete to derive an age or sex determination. No pathology was noted.

In addition, disarticulated human bones were recovered from three contexts (8327), (8382) and (8384). In all instances these were bone of the skull. Deposits (8382) & (8384) were fills within pits and (8327) was a charcoal layer. It is probable the bones originated from truncation or the re-working of cemetery deposits by later features.

3.2 CREMATIONS

Ten deliberately placed cremation deposits were identified, for details see Appendix A. One deposit consisted of burnt animal bone (8167) and therefore was given to a zooarchaeologist to assess further. The remaining deposits varied in weight; from 27g (8853) to 928g (8840). The cremation deposits consisted of seven adults, one juvenile and one individual of unidentified age. Two individuals could be sexed; one female and one male. No pathology was recorded. All the deposits had a MNI of one. Three deposits contained goods from the funeral pyre. Deposits (8829) and (8867) had evidence of molten glass objects and ((8570) had copper alloy fragments adhering to the bone.

Several deposits contained a small amount of burnt bone. These were mainly identified as a result of bulk environmental sampling of the deposits. In all instances the amount of

bone was so small and fragmentary it could not be ascertained if this was burnt animal or human bone. The occurrence of burnt bone within these deposits is not likely to be as a result of primary deposition. The results are summarised in Table 1 below.

Table one. Deposits containing small amounts of burnt bone

Context Number	Environmental Sample Number	Context Description	Weight (g)	An Bn/ Hm Bn
8202	2	Fill of rubbish pit	3	Unknown
8571	47	Fill of pit?	4	Unknown
8605	-	Fill of pit/well	2	Unknown
8683	69	Fill of pit	17	Unknown
8787	98	Redeposited natural layer	1	Unknown
8801	104	Fill of rubbish pit	5	Unknown
8804	107	Levelling layer	5	Unknown
8811	110	Dump	1	Unknown

4 CONCLUSION

The human bones from London's Transport Museum consisted of two articulated inhumations and nine deliberate cremation deposits. Evidence of pyre goods was found in three of the cremation deposits.

5 DISCUSSION

The site of London's Transport Museum in situated on an area which was once, *Lundenwic*, the Saxon settlement of London. The discovery of the location of *Lundenwic* is relatively recent and to date *c*.40 excavations have been carried out; only 1.5% of the total area. *Lundenwic* developed into a port in the late 7th century. It was principally a centre for manufacture and commerce, trading with similar *emporia* in England and on the continent via the River Thames. It was along the shoreline where wharves and storehouses for trading would have been erected and, therefore, presumably, the original settlement would have been located. Archaeological investigations on the higher ground to the north, in the Covent Garden area, have revealed extensive evidence of the Middle Saxon settlement.

Two cemetery areas have been identified in *Lundenwic*; St Martin-in-the-Fields and a dispersed 7th century cemetery in the Covent Garden area. Excavations at the Royal Opera House revealed evidence for a cemetery area in the form of two *in situ* inhumations, three possible grave cuts, a number of barrow-type features (three ring ditches) and residual human bone. The skeletons were dated to AD 604-60 and AD 640-73 by radiocarbon dating. It is thought the circular gullies may be remnants of ring ditches enclosing central burials as at other 7th century cemeteries. Excavations at 45 Floral Street/51-54 Long Acre revealed six burials and two 'grave-like' features. The burials appeared to be amongst the earliest features on the site and all eight features were backfilled with clean brickearth, suggesting that the graves were dug before the main period of activity on the site. One grave contained a mid to late 7th century highly

decorative brooch, which appears to be a good indicator of the general date of the burials. All the burials were roughly orientated east–west, suggesting a Christian context. A concentration of burnt bone (41g) was also recovered from a charcoal layer. However, the remains were too fragmentary to determine if these were animal or human bones. An archaeological excavation and watching brief carried out at 67-68 Long Acre revealed two Saxon inhumations. One of the burials contained a belt fitting thought to be of mid 7th century date. A probable Saxon inhumation was also recorded at 28-20 James Street. At Cubitts Yard, James Street two Saxon inhumations were found. One burial was aligned north-south, the second, aligned east-west, was found with a probable spear, knife and shield. At Jubilee Hall the earliest archaeological evidence was a single burial dated to AD 630-75.

In 1775 burials were recorded in King Street, on the northern side of Covent Garden Square. These are thought to be Saxon burials associated with the cemetery of St Martin. During the construction of the new church of St Martin, in 1722-6, a number of north-south orientated stone sarcophagi were found. The burials were dated through their grave goods and the cemetery is thought represent the founding of the church in the middle Saxon period. At Bedford Bury a west-east Saxon inhumation with a socket iron object was found.

No other cremation burials have been found in *Lundenwic* to date and consequently the site is of local, regional and national importance. In addition, Saxon cremation burials tend to be rare in the south of England; suggesting the method of funerary rite may have regional or tribal significance. Cremation was an early (5th to 6th century) Saxon funerary rite up until inhumation became the preferred method of burial in the 7th century. The presumption is that if these cremations are Saxon, they are likely to be early and will possibly pre-date the inhumations on site. The Saxons tended to bury their dead away from their settlements, on higher ground. It is feasible that as the site is the most southerly of excavations in the area this may be where early burials took place before the settlement encroached northwards.

6 RECOMMENDATIONS

6.1 Further work

Due to the absence of other Saxon cremation burials within *Lundenwic* the material has local, regional and national significance. It is recommended that the material under-go full osteological analysis. For the inhumations an inventory of the bones will be created, age and sex determination, and metric and non-metric traits will be recorded following BABAO & IFA (2004). Any pathological changes will be examined and if possible a diagnosis suggested. The inhumations from London's Transport Museum will be compared with findings reported from other inhumations within *Lundenwic* to identify any patterns in the group; osteological or funerary. For the cremation burials an inventory will be created, weight of bone present, estimations of mean fragment size, level of oxidation, MNI and where possible age and sex will be recorded following McKinley (1994) and BABAO & IFA (2004). Attempts will be made to diagnose any pathological

changes encountered. For the hand excavated cremation vessels, the strata will be examined in an attempt to identify the sequence of deposition within the vessel. Due to the small sample size the results should be expressed by individual rather than adopting a population-based approach. For the disarticulated material, an inventory should be created and a MNI established.

It is recommended that two better preserved cremation deposits and the two inhumations undergo accelerator mass spectronomy (AMS) radiocarbon dating. This will establish a firm date for the burials and may assist in phasing the cemetery to some extent.

6.2 Conservation requirements and retention policy

The bones in this collection have no special conservation requirements. The skeletons should be archived in consultation with London Archaeological Archive Resource centre (LAARC) and utilised as a research resource.

7 TASKS REQUIRED FOR ARCHIVING

TASK	DESCRIPTION	
1	Osteological recording (*n*=11) @ c.2.5 days	4.5 days
2	Inputting of data and integrity checking	1 days
3	Analysis of data	1 day
4	Research	0.5 day
5	Write report	4 days
	TOTAL	**11 days**
6	**C^{14} dating of four samples**	

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APPENDIX A

INHUMATIONS

Context number	Pr	%	Sk	D	T	P	L	F	A	H	Age	Sex	Comments	Photo	X-ray	C^{14}
8558	2	85	1	1	1	1	1	1	1	1	MA	F	Copper alloy brooch and c.10 glass beads found in grave fill (8553)	×	×	✓
8700	3	20	0	0	0	1	1	0	1	1	A	n/a	-	×	×	✓

CREMATION BURIALS

Context Number	Weight (g)	Age	Sex	MNI	An Bn/Pyre Goods etc	Oxidation	Comments	Exc. in lab?	C^{14}
8167	1132	n/a	n/a	n/a	n/a	n/a	Enviro. sample number 1. Consists of animal bone- ritual deposit?	×	×
8543	207	-	-	1	-	White	Enviro. sample number 39.	×	×
8570	491	A	-	1	Copper alloy adhering to bone	White, some small frag's blue black	Within vessel (SF 10)	×	×
8829	642	A	-	1	Molten glass	White, except grey/black tooth roots	Enviro. sample number 114) Fill of pit containing cremation vessels SF 38 & 39.Glass beads and two small iron nails found within deposit.	✓	×
8840	928	A	-	1	-	White	Within vessel (SF 42)	✓	✓
8853	27	A	M	1	-	Skull frag black on internal, white external, remaining frag's white	Within vessel (SF 45)	×	×
8855	236	A	F?	1	-	White	Within vessel (SF 46)	✓	✓
8858	181	J	-	1	-	White/Grey blue	Within vessel (SF 47)	✓	✓
8867	708	A	-	1	Molten glass	White	Within vessel (SF 38)	✓	✓
8868	444	A	-	1	-	White	Within vessel (SF 39)	✓	✓

Appendix L

Building Material
Ian M. Betts

Summary/Introduction

The large ceramic building material assemblage from London's Transport Museum, Covent Garden comprised 177 kg (2387 fragments) of ceramic building material from 164 contexts. There are also two fragments of stone and a solitary weathered fragment of mortar.

The building material is of Roman, middle Saxon and post-medieval date. There is no evidence of medieval building activity on the site. Most of the assemblage comprises daub, roofing tile and brick, but there are a few combed box-flue tiles, plain unglazed floor tiles and decorated delftware wall tiles present.

Methodology

All the building material has been recorded using the standard recording forms used by the Museum of London. This has involved fabric analysis undertaken with a x10 binocular microscope. The information on the recording forms has been added to an Excel database (bmdata01.xls).

Dating

Very little of the building material can be closely dated, although when the information is fully integrated with the stratigraphic record it should be possible to produce more precise dating, particularly of the various brick samples collected. The dating in the database refers to the fired ceramic component. It is not possible to date the daub present, except by reference to the associated pottery and other artefacts (see below)

There is no evidence of Roman occupation on the site so it is presumed that all the Roman tile and brick was brought on to the site during the Saxon period. The daub is believed to be Saxon, although it would be very difficult to distinguish from any Roman daub which also happened to be on the site.

There is however a considerable quantity of Roman ceramic building material on the site, so at least the possibility of some sort of Roman occupation in the area perhaps should not be entirely discounted. A late Roman tile kiln was recently discovered at St Martin's-in-the-Fields to the south-west of Covent Garden (Betts 2006).

Roman
Fabric types: 2815 group, 2453, 2454, 32459B, 2459C, 3023, 3024?, 3029, 3060, 3226, 3238

The Roman building material is chiefly of second– mid third century AD date, although there are a few fragments of imported roofing tile which may be slightly later (fabrics

2453, 3029). Only one fragment of first century AD fabric type 2454, from north-west Kent, was present on the site.

Most of the remainder of the building material is in London area fabric group 2815, dating to around AD 50-160, and fabric group 2459B/2459C, believed to be from north-east London or Essex, dating to around AD 120-250. Both are very common on Roman sites in London.

A variety of other fabric types are present, in addition to those mentioned above. These are fabrics 3023 and 3060 from Radlett, Hertfordshire, fabric 3226, probably from a tilery in north Kent and slightly silty fabrics 3028, 3238 from unknown production sources.

The majority of the Roman tile present is tegula roofing tile and brick. There are far fewer imbrex tiles, but this is to be expected as curved imbrices were not really suitable for reuse in Saxon structures, unlike flat tegulae and bricks. A few combed box-flue tiles are also present, at least one of which has been keyed with a five tooth comb.

Two fragments of stone were found associated with a Roman roofing tile in a pit fill ('Context 8217'). These are probably Roman in date, although the pit contained middle Saxon pottery. The stones comprise a fragment of Hassock sandstone rubble, probably quarried in the Maidstone area of Kent and a piece of fine grained laminated sandstone from an unknown quarry source. The latter is 18 mm thick and may have been used as roofing or paving in a late Roman building.

Middle Saxon

Although a vast quantity of daub was recovered, very few large fragments showing construction details have survived. Much of the daub clearly came from wattle and daub structures, as a considerable number of fragments have at least one or two wattle marks preserved. These range in size from 8 mm to 25 mm in diameter, although the majority are only 11 mm to 20 mm in diameter. The surface of the daub is often only crudely flattened to an approximate flat surface. There are, however, a number of fragments with a curved top surface. These have been examined by the Registered Find Specialist who believes they are daub rather that loom weights, spindle whorls or other items which are also made from daub-like material.

A number of fragments have a white deposit which may be the remains of some sort of limewash coating applied to the daub wall surface.

Most of the better preserved daub pieces were found in a clay silty layer ('Context 8213'), the fill of a construction cut ('Context 8237'), a daub and gravel demolition layer ('Context 8257'), a daub and charcoal demolition dump ('Context 8306'), from the fill of pit 8604 ('Context 8613'), a from the fill of two wells ('Contexts 8766, 8772').

Medieval

No building material.

Post-medieval

Brick

Fabric types: 3032, 3033, 3034, 3035, 3046

A considerable number of brick samples were collected from the various brick strictures on the site. These bricks fall into one of three main groups. The earliest (fabrics 3033, 3046) are generally red and orange in colour and date to around 1500-1666. The second, which form the majority of bricks collected, are generally dark red, although underfired examples can be brown or orangey-brown (fabrics 3032, 3034). These date to the period 1666-1900, with the shallow frogged examples no earlier than around 1700. The last group comprises yellow London stock bricks which were first used in London around 1725-1750, but were in more general use in the late eighteenth and throughout the nineteenth century AD (fabric 3035). All these bricks have a shallow frog.

In should be noted the there is clear evidence for the reuse of certain bricks from earlier structures. This evidence is in the form of two different coloured mortar layers attached to the brick sides. Bricks showing clear evidence of reuse are present in 'Contexts 8023, 8056, 8066' (fabric 3033), 8068 and 8759 (fabric 3032). The majority of these bricks clearly relate to the building development in the area during the eighteenth century AD, but seem to have incorporated bricks from earlier structures either on the site or nearby.

A particular feature of the bricks from the site is the high number with a white coating: either paint or, more likely, whitewash. This white coating can be on either a stretcher or header face and is found on many of the mid seventeenth- eighteenth century AD bricks in fabric 3032.

All the bricks have been measured, and there overall size by fabric type is listed below. The bricks in early fabric types 3033 and 3046 are slightly larger in size, but within each fabric ground there is a high degree of uniformity. This may well reflect the various Acts of Parliament which were introduced in the eighteenth century AD to regulate the minimum size of bricks made 'within 15 miles of London' (Lloyd 1925, 48-50).

Average brick size by fabric and date (in millimetres)

Fabric	Length	Breadth	Thickness
group 1			
3033	222-234	101-111	56-63
3046	228-231	105-106	58-63
group 2			
3032	211-226	95-107	58-67
3034	-	102	61
group 3			
3035	214-223	93-105	60-63

Roofing Tile
Fabric types: 2271, 2276, 2816

A number of fragments of peg roofing tile were recovered from the site, including one complete and two almost complete examples. All these have small distorted nail holes which on one tile are 7mm in diameter. They are difficult to date precisely, but the small nail hole size suggests an eighteenth century AD date. The three most complete tiles are listed below:

Peg tile size (in millimetres)

Context	Fabric	Length	Breadth	Thickness
008	2816	-	156-157	12
8032	2271	270	155-158	12-13
8748	2276	267	157-160	13

The peg tile from 'Context 8032' came from a brick structure whilst that from 'Context 8748' formed part of a red brick channel.

Floor tile
Fabric types 2317? (sandier variant), 2850, 3047

There are two types of floor tile present: one fragment with straight sides, and complete tiles with more traditional bevelled edges.

The former appears to be have been broken in half before it was placed into a floor. It is in a brick fabric (type 3047) and the straight sides indicate that it may well have been made as a thin brick which was used, or possibly reused, as a paving slab. It measures 227 mm by 42 mm in thickness and was found in a nineteenth century AD dump with pottery dated to 1850-1900 ('Context 8002').

The 'proper' floor tiles are of two sizes (see below). The floor tiles of small size have silty fabrics and those in fabric 2850 have nail holes and are clearly imports from the Low Countries. They were probably brought over sometime during the mid seventeenth- eighteenth century AD. The examples from 'Contexts 8044' and '8074' came from brick and tile floor surfaces, whilst that from 'Context 8083' came from another floor surface.

The larger floor tile, which is also an import from the Low countries, was recovered from another tiled floor. This too has a nail hole in one corner.

Floor tile size (in millimetres)

Context	Fabric	Length	Breadth	Thickness
8007	2850	302	299	45
8044	2317?	254	251	27-32
8083	2317?	251	245	29-31
8074	2850	250	246	28?
8074	2850	253	249	30

Wall tile
Fabric types: 3064, 3067

Two fragments of Dutch delftware wall tile were found in a backfill deposit dating to the period 1850-1900. These probably came from a kitchen area or fire surround in one of the eighteenth century AD buildings in the area.

Both are landscape tiles in blue on white but two are painted in two different decorative styles. One shows a landscape scheme with spider head corners whilst the other shows another landscape in a circular border with barred ox-head style corner decoration.

The former tile, which measures 124 mm in height by 8 mm in thickness, is late seventeenth- mid eighteenth century AD in date, whilst the second tile, which measures 7 mm in thickness, probably dates to the eighteenth century AD.

Drain pipe

Two fragments of nineteenth or even twentieth century AD brown glazed drain pipe were found in 'Contexts 4002 and 5002'.

Analysis of Potential

It seems probable that most, if not all the Roman building material was brought on to the site during the middle Saxon period. Therefore, it tells use little or nothing about the site during the Roman occupation. However, the building material must have been brought in for a reason, so it is of some importance when discussing middle Saxon occupation and building construction techniques.

Direct evidence of middle Saxon clay and timber structures comes from the daub scattered on the site, many of the larger fragments of which have wooden wattle impressions. Regrettably, most of the daub is relatively small and abraded, only a few fragments show direct evidence of wattle and daub construction techniques. Although limited, this evidence is still of importance as it can be compared with the daub showing similar construction techniques found on other sites in *Lundenwic*.

The distribution of the daub across the site may be of importance is establishing the probable location of clay and timber structures.

The post-medieval building material comprises mainly brick samples from the various brick features on the site. Based on date and fabric type three main brick groups can be identified on the site. There is also evidence for reuse of brick from earlier structures. The brick from the various brick structures on the site still needs to be examined in detail but most probably relates to the development of the area during the eighteenth century AD. The plain glazed floor tiles imported from the Low Countries probably belong to the same period.

The tin-glazed wall tiles almost certainly came from a prosperous town house built in the Covent Garden area during the same eighteenth century AD development.

Significance of data

The building material shows evidence for buildings, and perhaps other structures, of wattle and daub construction during the middle Saxon period. Roman building material was also brought into the area for various construction purposes.

The absence of any medieval roofing tile or brick indicates that the Covent Garden area was still open fields during this period.

The post-medieval bricks belong to the eighteenth century AD and later development of the area as do the Dutch decorated tin-glazed wall tiles. The large plain floor tiles are probably of similar date.

Revised Research Aims

Was all the Roman building brought on to the site during the middle Saxon period and if so what was its purpose?

Can the daub tell us anything about the construction techniques used in this part of middle Saxon London? How do these techniques compare with the impressed daub found elsewhere in *Lundenwic*?

Can the various post-medieval brick samples help to identify the date of the different brick structures found on the site?

Do the floor tiles indicate building function?

Method Statements
Task 1: Discussion of the reason for the presence Roman building material on the site

Task 2: Discussion of wattle and daub construction techniques and comparison with daub found on other middle Saxon sites in London

Task 3: Selection of daub for illustration

Task 4: The building material assemblage, particularly the bricks and floor tiles, should be compared with the stratigraphical sequence and all available dating evidence

Task 5: Write publication report

Task 6: Editing publication report

Total = 6 Days

Illustration

Draw: daub showing construction techniques (best examples from Contexts 8213, 8237, 8257, 8303, 8613, 8766, 8772)

Photography: decorated delftware tiles (Context 8002)

Bibliography
Betts, I M 2006 'South terrace excavations, St Martin-in-the-Fields (SMD01): building material', unpub MoLSS report

Lloyd, N 1925 *A history of English brickwork* (reprinted by Antique Collectors Club 1983), Woodbridge

LTM03										
context	fabric	form	Contx Date	corners	weight	length	breadth	thickness	no.	comments
1/007	3032	brick	1700-1900	4	1	216	97	60	1	sample, shallow frog, yellow 'sanding', T=59-61mm
1/007	3032	brick	1700-1900	4	1	219	103	64	1	sample, very near fabric 3046, T=63-65mm
8	2816	peg	1700-1900	2	800		157	12	1	90% complete, x2 distorted 7mm dia round n hls
12	3046	brick	1500-1700	2	1		106	58	1	sample, near 3033, reused?, T=55-60mm
12	3046	brick	1500-1700	2	1		105	59	1	sample, T=54-64mm
2061	2276	peg	1480-1800	0	50			13	1	or RCBM tegula fabric 2459B!
3003	3033	brick	1500-1700	0	600			62	1	reused, near 3032
3535	2815	brick	50-160	0	550			29	3	x1 very thin (T=28-29mm), L/B =155mm+
3535	3102	daub		0	100				1	part burnt
4002	3498	drain	1800-1900	0	100			17	1	circular drain, brown glazed inside & out
4002	3033	brick	1900-2000	3	3200	229	111	63	1	hard brown shaped mortar, cream & white paint (see sheet)
5002	3498	drain	1800-1900	0	100			19	1	circular drain, brown glazed inside & out
6003	3032	brick	1666-1900	0	10				1	
6003	3102	daub?	1666-1900	0	10				2	part burnt
8002	3064	wall	1680-1760	0	100		124	8	1	dec, tin-glaze, blue on white landscape
8002	3067	wall	1700-1800	1	25			7	1	dec, tin-glaze, blue on white landscape
8007	2850	floor	1630-1900	4	7150	302	299	45	1	plain unglazed, Flemish, part worn, distorted square? nail hole
8008/8015	3032	brick	1666-	3	1850	224	107	65	1	x2 context lables, brown underfired, T=64-66mm

			1900							
8011	3032	brick	1666-1900	4	1900	216	102	60	1	orangy-brown, underfired, whitewash (or paint?) header ends
8014	3035	brick	1725-1900	4	2100	218	98	62	1	shallow frog
8015	3032	brick	1666-1900	4	2100	209	95	61	1	light grey mortar, slightly overfired, yellow 'sanding'
8016	3032	brick	1666-1900	4	2150	211	99	65	1	sharp edged, shallow frog, white paint on header end
8020	3033	brick	1500-1666	4	2600	224	104	61	1	B=102-106mm, T=59-62mm
8022	3033	brick	1500-1666	3	2400	234	107	63	1	T=62-64mm
8023	3033	brick	1500-1666	4	2400	228	105	60	1	reused, indented border, white & cream mortar &.. (see sheet)
8026	3032	brick	1700-1900	4	2000	222	98	64	1	shallow frog, hard grey mortar, yellow sanding, part worn?
8028	3032	brick	1666-1900	4	2200	221	105	62	1	nr 3033/3046, sharp edged, B=104-105mm, T=60-63mm
8030	3033	brick	1500-1666	4	2400	224	105	60	1	nr 3046, indented border, B=104-106mm, T=57-62mm
8032	2271	peg	1700-1900	3	1000	270	157	13	1	97% complete, 2 small distorted n hls, B=155-158, T12-13mm
8033	3032	brick	1666-1900	4	2150	212	96	63	1	slightly overfired, B=95-96mm, T=62-63mm
8044	3032	brick	1600-1900	4	2100	227	102	65	1	slightly overfired & warped, B=101-102mm
8044	2317?	floor	1630-1900	4	3850	254	251	30	1	plain unglazed, T=27-32mm, 2317- but sandier variant
8045	3032	brick	1700-1900	4	2200	217	98	65	1	nr 3035, sharp edged, yellow 'sanding'
8045	3032	brick	1700-1900	1	1650		101	54	1	T=63-65mm
8052	3034	brick	1666-1900	2	1		102	61	1	sample, slight indented border, headers worn & whitewash?
8052	3032	brick	1666-	4	1	219	100	59	1	sample, whitewash (paint?) header end, yellow 'sanding'

			1900							
8053	3033	brick	1500-1666	2	1		105	63	1	sample, T=60-65mm
8053	3033	brick	1500-1666	2	1		105	60	1	sample, indented border, T=58-61mm
8055	3033	brick	1500-1666	4	1	224	101	62	1	sample, T=59-65mm
8055	3033	brick	1500-1666	2	1		106	64	1	sample, B=105-106mm, T=61-66mm
8056	3033	brick	1500-1666	2	1	228		59	1	sample, worn stretcher face, whitewash?, & x2 mortar layers
8056	3033	brick	1500-1666	3	1	222	102	56	1	sample, whitewash? & x2 mortar layers -thus reused T=54-58
8057	3033	brick	1500-1666	3	1	225	105	63	1	sample, T=57-66mm
8058	3032	brick	1666-1900	2	1		103	61	1	sample, reused?, near fabrics 3033/3046
8064	3033	brick	1500-1666	4	1	227	107	62	1	sample, near 3046, B=106-108mm, T=61-63mm
8065	3032	brick	1666-1900	4	1	225?	103	61	1	sample, nr 3046, whitewash/painted stretcher, grey mortar
8066	3033	brick	1500-1666	4	1	224	102	62	1	sample, cream mortar + light grey mortar above, T=60-63mm
8067	3032	brick	1666-1900	4	1	220	100	63	1	sample, yellow 'sanding', l grey mortar & whitewash? Above
8068	3032	brick	1666-1900	4	1	215	103	64	1	sample, nr3034, T=63-64mm, white mortar + grey above
8069	3033	brick	1666-1900	4	1	222	104	60	1	sample, indented border, B=103-104mm, T=58-61mm
8069	3032	brick	1666-1900	3	1	220	101	61	1	sample, sharp edged, grey core, B=100-101mm, T=60-61mm
8070	3046	brick	1500-1666	4	1	231	105	61	1	sample, B=103-106mm
8072	3032	brick	1666-1900	4	1	213	103	62	1	sample, sharp edged, near fabric 3033
8074	2850	floor	1630-	4	2800	250	246	28?	1	plain, Flemish, unglazed, 2 nail holes, very worn (see sheet)

			1900							
8074	2850	floor	1630-1900	4	3050	253	249	30	1	plain, Flemish, unglazed, 1 nail hole surviving
8074	3032	brick	1630-1900	4	1	222	101	66	1	sample, yellow 'sanding', T=65-67mm
8074	3032	brick	1630-1900	4	1	226	98	63	1	sample, yellow 'sanding', poss shallow frog, T=96-99mm
8075	3032	brick	1666-1900	4	1	216	95	64	1	sample, white mortar +l brown mortar above, reused
8076	3032	brick	1700-1900	4	1	225?	88?	70?	1	sample, slighly warped, white mortar + cream mortar above?
8083	2317?	floor	1630-1900	4	4050	251	245	30	1	plain, unglazed, unworn, T=29-31mm, 2317-but sandier variant
8083	3032	brick	1666-1900	4	1	218	99	62	1	sample, sharp edged, yellow 'sanding', T=61-63mm
8098	3032	brick	1666-1900	4	1	220	105	57	1	sample, brown+reddish-orange-underfired, B=104-5,T=57-8mm
8100	3032	brick	1666-1900	2	2250		100	58	1	very near 3046, light grey mortar, T=56-60mm
8102	3047	floor	1666-1900	2	1350		227	42	1	plain unglazed, straight edged, worn, frag tile only (see sheet)
8105	3032	brick	1666-1900	4	1	226	102	58	1	sample, near 3046, brown & orange - underfired
8110	3032	brick	1666-1900	4	1	226	104	58	1	sample, pebble-57x32mm in clay!, whitewash? (see sheet)
8130	2815	brick	1666-1900	0	100				1	
8130	2271	peg	1666-1900	0	50				1	reused, sanding near 2276
8130	3032	brick	1666-1900	0	150				1	
8130	3033	brick	1666-1900	0	50				2	
8140	2815	brick	120-250	0	250			42	1	T=39-44mm
8140	2815	tegula	120-250	0	200				1	
8140	2459B	brick	120-250	0	100			33	1	

8147	2458B	brick	120-250	0	1400			40	1	internal fabric 2452!, fine sanding, T=39-41mm
8154	2815	brick	50-160	1	600			37	2	3006, indented border, T=35-39mm
8154	2815	?	50-160	0	100				2	tegula or brick
8154	3102	daub	50-160	0	50				3	wattle marks c,15mm dia, part burnt
8155	2815	brick	1450-1666	0	400			34	2	T=29-41mm
8155	2815	tegula	1450-1666	0	200				1	
8155	3238	brick	1450-1666	0	50			38	1	
8155	3033	brick	1450-1666	0	50				1	
8155	3102	daub	1450-1666	0	25				1	wattle marks & crudely smoothed surface
8166	3238	?	1450-1666	0	25				1	tegula or brick
8166	2815	tegula	1450-1666	0	50				1	
8166	2815	flue	1450-1666	0	300				1	combed, 5 teeth
8166	2459B	tegula	1450-1666	0	200				2	
8166	3102	daub?	1450-1666	0	25				1	or fabric 3033- post-med brick!
8166	3033	brick	1450-1666	0	50				1	
8167	2815	?	50-160	0	10				3	
8167	3102	daub	50-160	0	10				3	part burnt
8169	2815	flue	120-250	0	150				1	2452 combed
8169	2815	brick	120-250	0	950			40	8	x1 3006 nr2459A ridge in base (racking mark?), T=36-45mm
8169	2815	tegula	120-250	0	250				1	
8169	2459	brick	120-250	0	25			36	1	
8169	3102	daub	120-250	0	100				5	some burnt, wattle marks c.20mm, & flattish surface
8175	3033	brick	1500-1666	4	2200	227	109	62?	1	abraded/weathered

8183	3033	brick	1500-1666	4	2700	224	108	63	1	B=107-108mm, T=62-64mm
8190	3238	brick	1500-1666	0	800			43	1	near fabric 3018
8190	2459B	brick	1500-1666	0	150			39	1	
8190	2815	?	1500-1666	0	50				1	tegula or imbrex
8190	2276	peg	1500-1666	0	100				1	
8190	3046	brick	1500-1666	0	400			63	4	near fabric 3033
8201	3023	tegula?	50-120	0	10				1	
8202	3102	daub		0	250				16	part burnt, wattle marks c.19mm dia & curved frags-see sheet
8213	2815	tegula	50-160	0	200				1	
8213	3102	daub	50-160	0	300				9	some burnt, wattle marks, 13mm dia interlocking - 90 degress
8217	3106	rubble	200-400	0	150				1	
8217	2815	tegula	200-400	0	300				1	
8217	3121	?	200-400	0	100			18	1	roofing / paving
8223	2815	brick		0	100			43	1	
8225	3102	daub		0	200				1	wattle marks 8mm, 20mm dia
8227	2815	brick	120-250	0	100			32	1	
8227	2459B	brick	120-250	0	200			35	1	
8227	3102	daub	120-250	0	10				2	x1 part burnt
8237	2459B	tegula	120-250	0	200				1	
8237	3102	daub	120-250	0	2000				300	c.300 frags, part burnt, wattles 10 to 24mm (see sheet)
8239	2815	brick	50-160	0	600			34	2	T=29-39mm
8239	2815	tegula	50-160	0	200				2	
8239	2815	?	50-160	0	50				1	tegula or brick
8239	3108	?	50-160	0	50				1	burnt (largely grey), cream at edge
8247	2815	?	50-160	0	25				1	tegula or brick
8257	2815	tegula	50-160	0	450			37	1	T=34-39mm
8257	2815	brick	50-160	0	200				1	

8257	3102	daub	50-160	0	250				3	part burnt, good wattle marks, 9mm to 22mm dia (see sheet)
8262	2815	?	1666-1900	0	200				1	tegula or brick
8262	3032	brick	1666-1900	1	100			61	1	reused, yellow 'sanding'
8265	3102	daub		0	100				3	wattle marks 12m dia & crude flattened surface
8269	2815	?	50-160	0	200				1	reused?, tegula or brick
8272	3102	daub		0	1810				400	c.400 frags, some burnt, some whitewash? top, wattle marks
8279	3102	daub		0	5				1	burnt black
8292	3102	daub		0	150				100	c.100 frags, mostly very small & abraded
8295	3102	daub		0	50				52	mostly very small & abraded, some part burnt
8298	2815	brick	50-160	0	1250			38	4	T=30-45mm
8298	3102	daub	50-160	0	350				4	wattle marks, part burnt
8306	3102	daub		0	3150				75	some burnt, wattle marks 11 to 17mm & flattish top -see sheet
8310	2815	brick	50-160	0	800			41	1	
8310	2815	imbrex	50-160	0	150				1	
8310	3102	daub	50-160	0	10				1	mainly grey (reduced), sight curved surface
8312	3102	daub		0	10				1	
8316	3102	daub		0	50				6	mortar & whitewash? attached, part burnt, wattle mark &curved
8327	2459B	brick	120-250	0	600			40	1	lumpy clay -near fabric 2452, chamfered edge (see sheet)
8347	3032	brick	1666-1900	3	1	222	101	59	1	sample, whitewash? on stretcher (see sheet) B=100-102mm
8350	3035	brick	1725-1900	2	1450		93	60	1	shallow frog, B=92-94mm, T=58-62mm
8351	3032	brick	1666-1900	4	2200	219	102	60	1	whitewash? on header & above?! mortared base, sharp edged
8352	3032	brick	1666-1900	4	2000	224	105	58	1	orangy-brown- slightly underfired, B=104-105mm
8353	3032	brick	1666-1900	4	2200	217	100	59	1	near fabric 3046, B=99-101mm, T=57-61mm
8354	3035	brick	1725-1900	4	2250	223	105	62	1	shallow frog
8357	3102	daub		0	950				29	some burnt, some whitewashed? top, wattle marks 18 & 19mm
8359	3102	daub		0	25				2	mainly black (reduced), wattle marks 12mm dia

8362	2815	brick	120-250	0	500			36	3	T=35-37mm
8362	2815	flue	120-250	0	50				1	fabric 3006, combed
8362	2815	?	120-250	0	100				2	x1 tegula or brick
8362	2459B	brick	120-250	1	550			39	2	T=34-44mm
8362	2459B	tegula	120-250	0	350				1	abraded
8362	3102	daub	120-250	0	50				19	grey, greyish-brown, brown, whitewash? layer, most abraded
8367	2815	imbrex	120-250	0	250				1	
8367	2459B	brick	120-250	0	1000			34	2	T=32-35mm
8367	3102	daub	120-250	0	200				5	some burnt, wattle marks -11, 16, 17mm, crude smoothed top
8382	3029	tegula	140-300	0	100				1	good fabric match
8385	2459B	brick	120-250	0	550			37	1	T=35-38mm
8385	2815	tegula	120-250	0	300				1	
8385	3102	daub	120-250	0	50				24	reduced (grey) & brown, small & abraded
8396	2815	?	50-160	0	25				1	tegula or brick
8396	3102	daub	50-160	0	100				3	top surface burnt/part vitrified (kiln structure?)
8398	3102	daub		0	5				6	very small & abraded
8407	3102	daub		0	10				2	greyish-brown, x1 whitewash? On one surface
8464	3102	daub		0	25				6	part burnt, x1 crudely flattened surface
8466	3102	daub		0	100				10	mainly reduced (grey), wattle marks
8468	3102	daub		0	1				1	
8535	3102	daub		0	10				18	very small & abraded, x1 part grey
8537	3102	daub		0	10				21	extremely small & abraded
8551	3102	daub		0	25				8	part reduced (x2 frags), small & abraded
8559	2459B	brick	1666-1900	0	150			35	1	
8559	3032	brick	1666-1900	4	2150	225	98	61	1	near fabric 3046, B=96-100mm, T=58-63mm
8560	3033	brick	1500-1666	2	1500		102	59	1	reused?
8561	3032	brick	1666-1900	2	2200		106	66	1	sharp edged, shallow frog, yellow 'sanding' T=65-67mm
8562	3032	brick	1666-1900	4	2400	229	105	60	1	yellow 'sanding' light grey mortar, cracked in firing

8563	3032	brick	1666-1900	3	2200	223	104	67	1	yellow 'sanding', sharp edged, B=102-106mm, T=63-70mm
8565	3032	brick	1666-1900	3	2200	222	105	61	1	light grey mortar
8567	3032	brick	1666-1900	4	2050	222	102	61	1	yellow 'sanding', sharp edged, l.grey mort,B=101-3,T=58-63mm
8573	2276	peg	1480-1666	1	150				1	
8573	3046	brick	1480-1666	0	200				2	
8575	2276	peg	1480-1800	2	400			12	3	x1 reused, sanding near fabric 2271, part diamond nail hole
8577	3032	brick	1666-1900	4	1	222	103	57	1	sample, narrow indented border, slight underfired, T=56-58mm
8577	3032	brick	1666-1900	4	1	224	100	60	1	sample, fairly nr fabric 3046, brown-underfired, T=59-60mm
8583	3032	brick	1666-1900	4	2200	226	100	59	1	T=58-60mm
8595	3035	brick	1725-1900	3	2250	221	97	62	1	nr 3032, shallow frog, slight overfired, shaped mortar-see sheet
8595	3032	brick	1725-1900	3	2100	221?	102	62	1	near fabric 3046, orange
8608	3032	brick	1666-1900	4	1	224	101	60	1	sample, T=58-61mm
8613	2815	tegula	50-160	0	100				1	
8613	3102	daub	50-160	0	1400				81	part burnt, wattle marks 13-19mm, irregular top (see sheet)
8615	2815	tegula	1500-1666	0	550			28	1	T=26-29mm, 3006 near fabric 3226
8615	3033	brick	1500-1666	2	750		103	58	1	near fabric 3046, indented border
8615	3102	daub	1500-1666	0	10				100	c.100 frags, very small & abraded
8619	3060	brick	50-120	0	200			36	1	near fabric 2459B
8621	3032	brick	1666-1900	0	150				200	c.200 frags mostly very small, all abraded
8626	3046	brick	1500-	0	750		105	59	1	T=58-60mm

			1666							
8631	2815	imbrex	50-160	0	200				1	
8635	2815	tegula	50-160	0	100				1	
8637	3101	mortar?		0	5				3	brown, decayed
8654	2815	brick	50-160	0	600			36	1	
8654	3102	daub	50-160	0	20				67	x1 whitewashed? top, small & abraded
8655	2815	brick	50-160	0	50			36	1	
8656	2459B	imbrex	120-250	0	50				1	
8656	2459B	tegula	120-250	0	300				1	
8656	2815	tegula	120-250	0	250				2	
8656	2815	brick	120-250	1	2800			31	13	T=28-33mm
8656	3102	daub	120-250	0	10				5	
8657	2815	brick	1450-1666	0	1350			36	1	
8657	2815	tegula	1450-1666	0	1350				1	
8657	3046	brick	1450-1666	0	100				1	
8657	3102	daub	1450-1666	0	100				1	wattle marks 9mm dia, crudely curved? Surface
8664	3102	daub		0	10				2	wattle mark, 16mm dia
8670	2459B	brick	120-250	0	350			29	1	T=28-29mm
8683	3102	daub		0	2				1	
8710	2459B	brick	120-250	1	800			35	1	paw print in top edge
8736	3046	brick	1500-1666	4	1	228	106	60	1	sample, near fabric 3033, indented border, T=57-62mm
8737	2815	brick	50-160	0	200			49	1	
8737	3102	daub	50-160	0	25				1	
8738	2815	imbrex	50-160	0	50				1	
8738	2815	brick	50-160	0	400			35	1	T=34-35mm
8747	2815	brick	120-250	1	1750			51	2	2452 nr3006, sign mark 2, pink opus signinum top, T=48-53mm
8747	2815	tegula	120-250	0	900				1	
8747	2459B	brick	120-250	1	2050			36	2	sign mark 9?, hob nail boot print, T=34-38mm, L/B=240mm+

8747	3102	daub	120-250	0	25				7	wattle mark c.16mm dia & crude smoothed top, part burnt
8748	3032	brick	1666-1900	4	1	216?	98	61	1	sample, slightly warped, stacking? mark (see sheet)
8748	2276	peg	1666-1900	4	1	267	159	13	1	sample, complete, 2 distorted small (round?) n hls, B=157-160
8752	3035	brick	1725-1900	4	1	214	103	63	1	sample, shallow frog, B=102-103mm, T=62-63mm
8753	3032	brick	1666-1700	2	1		103	63	1	clay pipe stem in clay matrix, T=60-65mm
8757	3102	daub		0	50				38	mostly very small & abraded
8759	3032	brick	1666-1900	4	1	217	97	65	1	sample, reused - white mortar with hard grey mortar above
8760	2815	brick	50-160	0	2250			36	4	T=30-42mm, 2459A, sign mark 5
8760	3102	daub	50-160	210					127	c. 127 frags, wattle mark, some burnt, lot small & abraded
8763	2454	brick	120-250	0	650			35	1	
8763	2815	brick	120-250	0	950			35	1	T=34-36mm & 35mm
8763	2815	tegula	120-250	1	1300				7	3006 tapered side (see sheet), sign mark (too small to ID)
8763	2815	imbrex	120-250	0	50				1	
8763	2459B	tegula	120-250	0	300				1	
8763	2459B	brick	120-250	0	850			35	2	sign mark (too small to ID), T=33-36mm & 35mm
8763	2459C	tegula	120-250	0	200				1	sign mark 6
8763	3023	brick	120-250	0	600			42	1	sign mark 6
8763	3024?	brick	120-250	0	150				1	may be fabric 3024 but normal sanding (not shelly like 3024)
8763	3226	brick	120-250	0	150			58	1	T=57-58mm
8763	3102	daub	120-250	0	25				16	wattle mark c.12mm dia
8765	2815	?	120-250	0	25				1	tegula or brick
8765	2459B	brick	120-250	0	800			34	2	marks in edge (see sheet), T=32-35mm
8766	2815	tegula	50-160	0	600				2	x1 3006 near fabric 2452, cutaway B, x1 3006 near 3028
8766	2815	brick	50-160	0	900				2	x1 burnt? - blackened broken edges
8766	3060	brick	50-160	0	2950			41	1	T=40-42mm, L/B =225mm+
8766	3102	daub?	50-160	0	10				1	or loomweight/spindle whirl
8766	3102	daub	50-160	0	1260				23	part burnt, wattle marks 14 to 20mm dia (see sheet) & tops
8770	2815	brick	70-160	1	4600			33	9	T=32-34mm

8770	2815	tegula	70-160	2	2900				8	3006 cutaway B, 2459A sign mark 5, 2452 nr3006 sign mark 1
8770	2815	imbrex	70-160	0	200				2	
8770	3023	tegula	70-160	0	150				1	
8770	3028	tegula	70-160	0	250				1	
8770	3102	daub?	70-160	0	10				3	wattle mark/hole, part burnt, curved surface
8771	2815	brick	50-160	0	50			36	1	
8771	2815	?	50-160	0	10				1	tegula or brick
8771	3102	daub	50-160	0	150				100	c.100 frags, wattle marks, some part burnt, lot small & abraded
8772	3102	daub		0	2950				112	some burnt, good wattle marks (see sheet), flat & curved tops
8772	3500	?		0	25				1	2459 (type A, B or C -no sanded surface) tegula or brick
8778	3102	daub		0	150				2	burnt, wattle 25mm dia & curved outer surface (corner?)
8789	2459B	tegula	120-250	1	425				1	base completely scrapped smooth
8789	2815	brick	120-250	0	550				2	x1 2452 (near 2459A) worn edge (see sheet) - paving
8791	3102	daub		0	2				2	small & abraded
8799	2815	brick	50-160	0	800			37	1	T=35-38mm
8799	2815	tegula	50-160	0	350				1	
8799	2815	imbrex	50-160	0	100				1	label says 'context could be 8796'
8800	2459B	brick	140-300	0	400			28	1	reused
8800	2815	brick	140-300	1	2200			34	5	T=33-35mm
8800	2815	tegula	140-300	0	650				1	
8800	2815	?	140-300	0	200				1	tegula or brick
8800	2453	tegula	140-300	0	50				1	
8800	3100	daub	140-300	0	27				3	part burnt, wattle mark
8801	3102	daub		0	250				4	or mudbrick
8804	3102	daub		0	10				3	wattle mark
8807	2815	tegula	50-160	0	300				1	
8829	3102	daub		0	5				19	minute abraded frags
8836	2815	?	50-160	0	10				1	tegula or brick
8842	3102	daub		0	100				12	wattle mark
8863	3102	daub		0	10				5	
8991	3102	daub		0	5				9	minute abraded frags

Appendix M

CLAY TOBACCO PIPES

Tony Grey

Quantification

Summary/Introduction

A total of 38 clay pipe fragments was submitted for assessment. This included 25 pipe bowls, 10 stems and three mouthpieces. There were 13 marked pipes and 20 decorated pipes. There were no kiln fragments and no imported pipes. The pipe fragments were recovered from a total of 13 contexts. A detailed breakdown of the assemblage is given in Table 1 and the accompanying excel file.

The pipe bowls were dateable from Atkinson and Oswald's London clay pipe typology (Atkinson and Oswald, 1969). The pipes are probably of local London manufacture.

The decorated pipes include a type AO26 bowl dated c1740-1800 from Context [8749] decorated with the Prince of Wales feathers, a thistle surmounted by a crown. There are three type AO27 dated c1780-1820 from Context [8002] with leaves down the front and back seams of the bowl, a similarly decorated AO27 from Context [8047], two similarly decorated AO27 from Context [8084], a type AO27 dated c1780-1820 decorated with Masonic symbols and an unusual and particularly interesting AO27 decorated with abolitionist motifs of Britannia and a grateful freed slave both from Context [8573], a type AO27 decorated with vertical ribbing and wheatsheaves down the front and back seams of the bowl along with another AO27 decorated with Masonic symbols and wheatsheaves down the front and back seams of the bowl both from Context [8749] and an AO27 with the same Masonic and wheatsheaves decoration from Context [8749]. There is a type AO28 dated c1820-60 decorated with leaves down the front and back seams of the bowl from Context [8575]. There is a type AO30 dated c1850-1910 decorated with wheatsheaves within vertical ribbing from Context [8084] and five similarly decorated AO30 pipes along with an AO30 decorated with leaves along the stem all from Context [8085].

The marked pipes (most of which are also decorated) include a type AO26 Prince of Wales feathers pipe dated c1740-1800 with an illegible mark from Context [8749], an AO27 (dated c1780-1820) marked **DH** and two AO27 pipes marked **WJ** all from Context [8002], two AO27 pipes also marked **WJ** from Context [8084], the abolitionist AO27 pipe from Context [8573] marked **IE** (and from the same context a Masonic pipe with an illegible mark), an AO27 marked **WS** and an AO27 marked **WP** both from Context [8575] and an AO27 Masonic pipe marked **WE** from Context [8749]. An AO28 dated c1780-1860 from Context [8575] has an illegible mark. All the above makers' initials are moulded in relief on the sides of the heel. An AO30 pipe dated c1850-1910 has a hard-to-read maker's name in relief along the stem.

The maker **IE** could represent Jonas Edwards 1774-84 at Bedfordbury, Westminster or John Edwards 1784-1812 at Wapping, Aldgate (Oswald 1975, 136). The

maker **WS** could represent William Smith 1781 at St. Andrew, Holborn or William Showell 1784 at Whitecross Street or William Squalfield 1799-1805 at Whitechapel or William Swan 1805 (Oswald 1975, 146). There are no suggestions at present for the identities of the other pipe makers.

The earliest pipes are two type OS10 dated c1700-40 from Context [8745]. Other early pipes are an OS12 dated c1730-80 from Context [8084] and an AO26 dated c1740-1800 from Context [8749]. AO27 pipes dated c1780-1820 are present in Contexts [8002] (three), [8047] (one), [8084] (two), [8119] (one), [8573] (two), [8575] (two) and [8749] (one). The most recent pipe group by date is Victorian and includes AO30 pipes dated c1850-1910 from Contexts [8002] (one), [8084] (one) and [8085] (six).

There is a mouthpiece from Context [8573] with red waxed end that cannot be closely dated, a mouthpiece from Context [8615] with a nipple-shaped tip that dates after c1800 and another mouthpiece with red waxed end from Contest [8762]. The ten stem fragments are undiagnostic and not datable.

There are no complete or reconstructable pipes and all are fragmentary. Most of the bowls are complete and most show signs of having been smoked, some heavily. None appear to be of a particularly high quality with none showing signs of burnishing.

Table 1: *Clay tobacco pipe quantification*

Total no. of fragments	38
No. of bowl fragments	25
No. of stem fragments	10
No. of mouthpieces	3
Accessioned pipes	0 (24 accessionable)
Marked pipes	13
Decorated pipes	20
Imported pipes	0
Complete pipes	0
Wasters	0
Kiln material fragments	0

Table 2: *Clay tobacco pipes by context (B-bowl; M-mouthpiece; S-stem)*

Context	**TPQ**	**TAQ**	**B**	**S**	**M**	**Total**
2061	1580	1910		1		1
8002	1850	1910	4			4
8047	1780	1820	1			1
8084	1850	1910	4	2		6
8085	1850	1910	6			6
8119	1780	1820	1	3		4
8573	1780	1820	2		1	3
8575	1820	1860	3			4
8581	1580	1910		2		2
8615	1800	1910		2	1	3
8745	1700	1740	2			2
8749	1780	1820	2			2
8762	1800	1910			1	1
Total			**25**	**10**	**3**	**38**

Methodology

The clay pipe assemblage was recorded in accordance with current MoLSS practice and entered onto an Excel file. Reference was made to the London clay pipe typology (Atkinson and Oswald, 1969). The prefix AO for a pipe type indicates the Atkinson-Oswald London typology and the prefix OS indicated the Oswald typology (Oswald 1975). Quantification and recording follow guidelines set out by Higgins and Davey (1994; Davey 1997).

Analysis of Potential

Most of the material is fragmentary and probably residual. There is potential for further research into the identity of the makers of the marked pipes. The Masonic pipes might warrant further research to identify the maker and and to establish a connection with the lodge or public house disseminating these pipes and of any traceable related craft or trade. The Freemasons met at the Apple Tree Tavern, 28 Charles Street (now Wellington Street) which bounds Covent Garden. In 1717 the first Grand Lodge was established there which subsequently changed its location several times. By 1799 it was located at the Shakespear Head.

Significance of data

None of the pipes are early in date. The material dates to four periods: the earlier seventeenth century, the mid and later seventeenth century, c1780-1829 and the Victorian period of the later nineteenth century. The number and range of forms is limited. The pipes probably originate from local London makers. Several of the pipes are of intrinsic interest and include the Masonic pipes and the abolitionist pipe.

Revised Research Aims

To identify the pipe makers and the significance of the Masonic pipes and the abolitionist pipe.

Method Statements

- Research the pipe makers' identities and the Masonic material. Est. specialist time 0.75 day
- Illustrate the Prince of Wales feathers pipe, two of the (complete) Masonic pipes and the abolitionist pipe. Est. specialist time 2 days (drawing), 0.25 day (photography).
- Write a report. Est. specialist time: 1 day

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Appendix N

FLINT

Tony Grey

Quantification

Summary/Introduction

Four pieces of struck/worked flint were submitted from four contexts. These comprised two flakes from Contexts 8505 and 8858, one blade-like flake from Context 8866 and a double-sided and end scraper from Context 8655. The scraper was worked on a fairly broad and thick flake of poor quality banded black flint with inverse retouch across the end and down one side. The material is quantified in Table 1 below and in an accompanying Excel file.

In addition, there were twenty-three pieces of burnt flint weighing 118g from six contexts quantified in an accompanying Excel file.

Table 1: The struck/worked flint

Context	Flakes	Blades	Cores	Retouch	Total	Comments
8505	1				1	Black flint, orange patina one face
8655				1	1	WS – double-sided/end scraper, cortex
8858	1				1	Tiny flake, cortex
8866		1			1	Blade-like flake, grey flint
Total	**2**	**1**		**1**	**4**	

Methodology

The struck/worked flint was identified and recorded using standard Museum of London guidelines.

Analysis of Potential

This very small assemblage is residual and has only one diagnostic piece of flint. There is no potential for further work.

Significance of data

The assemblage is of limited significance and is residual. The dating is probably Bronze Age.

Revised Research Aims

None.

Method Statements

None.

Bibliography

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Appendix O

ANIMAL BONES

Kevin Rielly

Quantification

Summary/Introduction

The various phases of excavation at this site provided 13,300 fragments of animal bone from hand collection, weighing 505.7kg, and 6,710 fragments (19.82kg) from the sorted sample residues. These were recovered from a total of 191 deposits and 71 samples respectively.

Methodology

Saxon bone assemblages from Lundenwic have tended to be extremely uniform in terms of species and skeletal part distributions (see Potential and Research Aims), with cattle, sheep/goat and pig dominated assemblages represented by a wide array of skeletal parts. In addition, the great majority of such assemblages have provided large proportions of age (mandibles as well as epiphyseal ends) and size (measurable bones) data. However, other species have been recovered and, on occasion, sites have provided deposits were particular species were represented by a concentration of certain skeletal parts. With these facts in mind, the assessment method employed for the LTM bone collection firstly aimed to establish the extent to which the bones followed the described 'normal' pattern, and secondly to show any deviations from this pattern. These aims could be achieved using a rapid recording method. Following their quantification (estimated number and weight), the bones were scanned for any inconsistencies. Notes were then made of species representation, in particular whether one of the three major domesticates was obviously in ascendancy and the presence of other species, which were quantified (estimated number of bones). Other points of interest included the presence of very young individuals, which could point to looking animal keeping/rearing and also the proportion of identifiable bones within the sample assemblages. The later information has a major bearing on recording rates, especially when the samples provided large quantities of fish, small mammal or bird bones. All of this information was recorded onto an Excel spreadsheet compiled for this particular purpose.

It should be stressed that this method was applied to both the Saxon and post-Saxon collections. While the latter may well be quite different from the former, from previous excavations in the Lundenwic area, it is clear that the great majority of the bones were very likely to date to the Saxon period. Thus, no attempt was made to provide a two tier recording method, to take account of the presence of later material. In addition, an 'improved' method was not practical at this stage of the stratigraphic and dating analyses.

Description of the bones

The bones described in this section have been placed into two main periods i.e. Saxon and postmedieval. This follows the dating as well as the stratigraphic evidence. In essence, the site deposits divided into Areas 1, 2 and 3 appear to be almost entirely Saxon

in date, here with the notable exceptions of layers [8573] in Area 1 (see below) and [8130]. This last deposit sealed most of the underlying deposits in each of these three areas. The stratigraphic levels overlying these areas, divided into the northern (N) and southern (S) halves, appear to be largely postmedieval in date. Thus, with the previously mentioned exceptions, the bone assemblages from Areas 1, 2 and 3 are referred to as Saxon and those from the upper levels as postmedieval. It was possible to further refine the Saxon dating, due to the presence of particular pottery wares, into an earlier (S1) and later (S2) phase, these corresponding to AD600-750 and AD730-850 respectively. Certain collections have been placed into the S1 or S2 phases on the basis of associated stratigraphy, while other Saxon assemblages, with no appropriate dating or stratigraphic data, were placed into a general phase (S). Several of the postmedieval bone collections could be dated, these from 17th through to 19th century deposits. It should be pointed out that this phasing will be subject to change following the completion of the full dating and stratigraphic analyses.

The distribution of the bones throughout the main areas are shown in Table 1. Each context was defined by the area of excavation, with the exception of [8130] (see above) which was clearly spread throughout Areas 1, 2 and 3. 19th century truncation through the southern half of the site and then into Areas 2 and 3 no doubt account for the greater proportion of Saxon deposits and bones from Area 1. The postmedieval collection is largely from the southern area (here including the aforementioned deposit in Area 2), these mainly arising from 19th century fills (and see below).

Throughout these deposits, the bones are well preserved and minimally fragmented. This is shown by the good proportion of age and size data amongst the cattle, sheep/goat and pig bones. These three domesticates, in close comparison to other Lundenwic assemblages, provide the great majority of the bones from each collection. There were a few other species represented, principally domestic birds, and these, alongside any other points of interest are described below.

Table 1. Distribution of bones in each area

Area	Hand recovered		Sieved	
	N	Wt	N	Wt
1	7870	279.26	2531	19.31
2	2395	96.18	76	1.81
3	3213	110.17	2616	9.25
123	70	1.65		
N	76	2.08		
S	349	11.48	420	1.67
Unknown	25	0.56	350	0.29
Total	13998	501.38	6593	32.33

N/Wt Number and weight of bones. All weights in kilograms.

Table 2. Distribution of deposits with bones by area and phase

Recovery	Area	Phase							
		S	S1	S2	PM	17/18	18/19	19	Undated
Hand collected	1	67	20	22	1				
	2	12	8	1				1	
	3	17	6	7					
	123				1				
	N				3		1	1	
	S				8	2		3	
	Unknown								5
Total		96	34	30	13	2	1	5	5
Sieved	1	14	8	6					
	2	9	5	1					
	3	11	6	6					
	S				1				
	Unknown								1
Total		34	19	13	1				1

See text for definition of phases and areas.

Saxon

The Saxon assemblage was recovered from a large number of deposits, mainly taken from Area 1 (Table 2) and from a variety of features within Areas 1, 2 and 3 (see Table 3 and Table 4). The Saxon strata can be divided into two broad groupings, defined by a series of 'grey' layers (GL) which covered the earliest features (BGL) in all three areas. Above the 'grey' layers were a number of cut features, including a large array of pits and stake/postholes (F) with intermittent layers of various types (L) as well as a number of gravel horizons (GRL), these confined to Area 1. The lowest deposits include the cremations and inhumations recovered from Areas 1 and 2, as well as a number of pits and layers. All of these date to the earliest phase (S1) or to the general Saxon phase (S), with the exception of a posthole fill [8533] in Area 1 which is dated to S2. However, this deposit appears to be below the GL deposit [8505] which is clearly dated to S1. The GL deposits as the name suggests, are all layers, and they are consistently dated either to S or S1. There is no obvious dating pattern amongst the overlying strata, although there is perhaps a greater tendency towards S2 deposits within the upper part of the area sequences. Most of the bones were found in pitfills and associated dump levels, while the gravel deposits (GRL) generally provided relatively small assemblages.

The BGL deposits, as mentioned, feature a number of inhumation/cremation deposits. Animal bones were found within the backfills of both inhumations, one each from Areas 1 and 2. While these probably represent redeposited waste items rather than gravegoods, it is interesting to note that a sample assemblage taken from gravefill [8553] in Area 1 was entirely composed of calcined cattle and sheep-size fragments. This could represent a burnt offering added to the grave. Similar collections of burnt animal bones were found within a pitfill [8832] in Area 3, as well as within a later deposit [8167], see below. The absence of human bones may suggest they represent waste from raked out hearths or

cooking pits. However, these bones have all been subjected to high temperatures and are consistently burnt white. Bones derived from a hearth would undoubtedly display a greater distribution of colours, from charred through to white. It can be supposed that these calcined animal bones either represent redeposited or in situ animal offerings originally placed in close association with human inhumations and/or cremations.

Table 3. Distribution of Saxon animal bones by area and phase

Recovery	Area	Number of bones			Weight of bones (kg)		
		S	S1	S2	S	S1	S2
Hand	1	1570	1390	4722	65.96	46.45	162.65
	2	836	1122	20	40.93	44.71	0.5
	3	1402	1081	730	41.81	36.08	32.28
Total		3808	3593	5472	148.7	127.24	195.43
Sieved	1	1299	626	606	12.3	2.6	4.41
	2	324	327	25	0.7	1.1	0.01
	3	1252	513	851	4	3.71	1.54
Total		2975	1466	1482	17	7.41	5.96

See text for description of phases S, S1 and S2.

With the exception of pitfill [8670] in Area 2, with 95 fragments (3.45kg), the BGL deposits provided only moderate quantities of bones. The species range is essentially limited to cattle, sheep/goat and pig, although a single chicken bone was recovered from pitfill [8836] and a cat bone from the saved contents of layer [8834], both in Area 3.

The GL deposits provided copious quantities of animal bones and in particular from Areas 2 and 3, these with combined totals of 490 bones, weighing 16.91kg (from 3 deposits) and 1,410 bones, 46.75kg (from four deposits) respectively. The species range was again dominated by the major mammalian domesticates, with the only addition being a goose bone from [8800] in Area 3. A fragment of red deer antler from [8657] is perhaps more likely to represent working rather than food waste (see below). A single human bone, a metapodial, was recovered from [8655], which was undoubtedly redeposited from one of the BGL inhumations.

There were several large assemblages recovered from the various F and L deposits, with the largest single feature collection from the three fills within pit [8187] in Area 1, these providing 2,085 fragments (63.76kg) with the majority from [8186] – 1,075 bones (34.53kg). A few of these deposits appeared to be dominated by cattle, although the majority tended towards a thorough mix of cattle, sheep/goat and pig. Goat was clearly represented in several deposits, usually by large horncores, which may be indicative of tanning or hornworking waste, rather than food waste (see Research aims). Other industrial/craft waste was limited to red deer antler fragments, which were widely, albeit thinly, distributed throughout these levels. There was one example of an antler which had been chopped through the pedicle, from layer [8385], i.e. removed from the skull rather than dropped. This may suggest the import of deer carcasses as well as just their antlers. However, in the absence of deer postcranial parts, it is more likely that the [8385]

example represents imported raw material for local craftsmen. The only clear example of wild game was a single hare bone from Layer [8257] in Area 1. Chicken and goose, as with the BGL and GL levels, formed a larger, although clearly a supplementary, part of the meat diet. These tended to comprise no more than about 10 fragments, even within the larger collections, as [8186] (3 goose and 7 chicken bones). There was also a single duck bone, the size of a mallard and presumably domestic rather than wild, from layer [8166] in Area 1. The sample collections, similar to those from BGL and GL, were rather disappointing, although with one notable exception, with relatively few identifiable bones and very few of the smaller species which tend to be better represented in sieved compared to hand collected assemblages. The exception is the large sieved assemblage taken from layer [8771] in Area 3, which provided about 110 fishbones, all vertebrae, these including eel, salmonid (salmon or trout), plaice/flounder and cyprinid (carp family). In addition, a few fishbones, not identifiable to species, were recovered from pitfill [8292] in Area 1, while a gadid (cod family) head part was hand recovered from layer [8166]. A few non-food species were recovered, including a horse metapodial from layer [8385] in Area 1 and a mouse/vole tooth from layer [8362], also in Area 1. Finally, another human metapodial was recovered from pitfill [8640] in Area 2. Notably, one of the two inhumations found at this site was recovered in this area.

Table 4. Distribution of Saxon animal bones by phase and type of deposit

Recovery	Context type	Number of bones			Weight of bones (kg)		
		S	S1	S2	S	S1	S2
Hand	BGL	104	130		1.04	4.7	
	GL	736	1255		26.4	40.13	
	GRL	38	45		1.06	2.45	
	F	1909	980	3674	87.83	42.75	133.04
	L	1021	1183	1798	32.37	37.21	62.39
Total		3808	3593	5472	148.7	127.24	195.43
Sieved	BGL	328	78	70	1.49	0.31	2.13
	GL	156	452		0.62	3.46	
	GRL	77			5.06		
	F	622	411	817	7.07	1.8	2.87
	L	1692	525	595	2.76	1.84	0.96
	misc	100			0.04		
Total		2975	1466	1482	17.04	7.41	5.96

See text for description of phases and context types.

Of some interest was the discovery of another concentration of calcined animal bones, this from layer [8167] in Area 1. The sieved sample produced about a thousand bone fragments, weighing 1.1kg, of which only a very small proportion could be identified to species. The major part of the collection consists of sheep-size fragments, amongst which there is one pig tooth, one or two goose femurs and a number of goose toe bones. This deposit clearly postdates the ritual activity within the BGL levels. While redeposition cannot be discounted, the large number of bones and the obvious concentration of material may in fact suggest it was in situ.

A few very young cattle and sheep bones were recovered from a number of deposits, including two fragments from foetal calves, from pitfill [8186] and wellfill [8654]. The later fragments are clear indicators of the presence of infant mortalities which therefore suggests the presence of some on-site breeding/keeping of stock animals. The older individuals, infant calves and lambs, could be associated with similar activities or perhaps represent choice cuts of meat.

The gravel levels (GRL) provided small to moderately sized assemblages, which were entirely composed of cattle, sheep/goat and pig bones.

Postmedieval

As mentioned in the introduction to this section, most of the postmedieval collections were taken from the upper strata, this divided into two parts, the Northern (N) and Southern (S) halves. However, a small number of deposits from lower levels were also deemed to be within this phase, these including the major spread [8130] located over each of the three lower areas, as well as layer [8573], directly below [8130] in Area 2. This deposit not only contained 19th century pottery, it also provided a bone assemblage with clear postmedieval traits (see below).

A large proportion of the postmedieval collections were recovered from the southern half of the site, these also providing the majority of the bones (comparing the data from Table 1 and Table 5). There are 17th through to 19th century assemblages, with an obvious bias, in terms of the quantity of deposits and bones, for 19th century collections. The major component here is the assemblage from [8573] with 417 fragments weighing 10.04kg. Other reasonably large collections were confined to the general postmedieval assemblages, in particular the pitfill [8600] in the southern half of the site with 135 bones (4.4kg) and the aforementioned layer [8130] with 70 bones (1.65kg). These two deposits add to the generally better representation of bones, amongst the PM deposits, from pits and layers compared to other feature types (see Table 6).

The species range is very similar to that shown by the underlying strata, with one notable exception. While most deposits provided the usual mix of cattle, sheep/goat and pig, with the occasional domestic chicken and goose, [8573] also produced rabbit and turkey. Both species mark this deposit as post-Saxon, while the turkey is clearly indicative of postmedieval occupation. This bird was introduced to Britain from North America in the early 16th century (Davis 1987, 194). A number of sawn sheep and cattle-size bones were discovered from the same deposit, signifying a method of butchery seen on London archaeological sites dating from the 18th century onwards (information compiled from various MoLAS animal bone studies). There is undoubtedly some mixture of Saxon material within these fills and layers, as possibly shown by the presence of sawn and worked red deer antler fragments. However, there is the possibility that some of these assemblages may in fact date entirely to the Saxon era. Certainly, there is the typically Saxon limited range of species. Other than the species described, there was only one instance each of horse, hare, gadid and plaice/flounder, with the last three species all from [8573] and the horse, represented by a tooth from PM pitfill [8637]. The species range is

obviously hampered by the lack of later period samples, these confined to the single example from the PM pitfill [8621]. This provided a large assemblage entirely confined to the major mammalian domesticates.

Table 5. Distribution of postmedieval bones by area and phase

Recovery	Area	Number of bones				Wt of bones			
		PM	17/18	18/19	19	PM	17/18	18/19	19
Hand	1	35				0.4			
	2				417				10.04
	123	70				1.65			
	N	55		5	2	1.75		0.06	0.01
	S	300	32		13	10.34	0.69		0.25
Total		460	32	5	432	14.14	0.69	0.06	10.3
Sieved	S	420				1.67			

Table 6. Distribution of postmedieval animal bones by phase and type of deposit

Recovery	Type	Number of bones				Wt of bones			
		PM	17/18	18/19	19	PM	17/18	18/19	19
Hand	Brick-lined drain	15	20	5	4	0.35	0.65	0.06	0.01
	Brick soakaway		12				0.04		
	Brick structure	55				1.75			
	Pitfill	184			9	5.82			0.24
	Const. fill	35				0.4			
	Dump	55			2	2.25			0.01
	Layer	116			417	3.57			10.04
Sieved	Pitfill	420				1.67			

Analysis of Potential

There are clearly large quantities of early (7th/8th c) and later (8th/9th c) Middle Saxon bones. Several deposits are yet to be more accurately dated and, of course, the dating of some of those placed into either the early or later phases may change following a more thorough review of the dating and stratigraphic data. However, the present information is strongly indicative of the potential value of this assemblage in terms of a comparison of animal usage across the full Middle Saxon occupation period. This potential is enhanced by the good condition of the bones and the wealth of information available from the major domesticate bones in terms of age and size analyses. A large number of samples were taken from Saxon deposits. The resultant assemblages will act as a test of the efficiency of hand recovery, as well as providing species which are generally difficult to recover by hand. There was a notably poor representation of such species from the sieved assemblages, with the exception of the moderate quantity of fish bones from layer [8771]. Given the quantity of samples, it must be assumed that any absence, or near absence, of these species is likely to be a reflection of Saxon dietary preferences or perhaps of the types of food supplied to the local Saxon population (and see Research aims).

The postmedieval assemblage is somewhat smaller in size, but appears to be similarly well dated, perhaps with a particular bias towards the 19th century. The bones are again in good condition and there is a high proportion of both ageable and measurable bones. There was just one sample with bones and this failed to provide any additions to the rather small array of species found in the hand collected assemblages. It is possible that this sample was actually taken from a Saxon feature, which could perhaps explain the poor range of species. There is undoubtedly some work to be done on clarifying the dating of these later levels. However, assuming that most of these collections are in fact postmedieval in date, there is undoubtedly sufficient data to provide useful information on animal usage during the later occupation of the Covent Garden area.

Significance of data

There are a number of important questions that this very large and well dated Saxon assemblage can help to answer. In particular with reference to changing exploitation patterns throughout the occupation period and the status of the settlement The Saxon assemblages will have a profound local significance in terms of the information it can provide regarding domesticate exploitation throughout the Middle Saxon period both within this part of Lundenwic and within the settlement as a whole. Particular major points of interest concerning the status of the settlement as an emporium and changes in exploitation patterns through time can be addressed. In addition, and of some considerable importance due to their rarity, the cremated animal remains can provide information on early Middle Saxon ritual activities. The significance of the postmedieval collections is largely related to its importance as one of the very few suitably sized assemblages (i.e. to warrant further analysis) so far recovered from this part of post-Saxon London.

Revised Research Aims

Saxon

How was the meat supplied to the Saxon occupants of this area? Is there evidence for a supply network conducive with the arguments for an 'emporium model' described by O'Connor (1991 and 2001, and following Hodges 1989)?

It has been postulated that the various trading centres or emporia, here including Lundenwic, were ruled and provisioned by a local king or chieftain. The local elite were maintained by periodic food rents, and these then formed the basis of the food remains recovered from these settlements. Such provisioning, it has been suggested, can be recognised amongst bone assemblages which show a very low species diversity and also an absence of a home element i.e. local production, which, in an urban environment, would generally involve pigs and/or poultry. Various studies of a number of bone assemblages from Lundenwic (see Rielly 2003 and forthcoming) have shown that there is certainly a rather slight range of food species from most sites, indicating perhaps the unavailability of various food groups as wild game and, in many cases, of fish. However, while the proportion of poultry is generally small (which is clearly a feature of the London Transport Museum site), most have large numbers of pig bones. In addition,

several have produced evidence for the local breeding of domestic animals, here including clear evidence for a piggery at the Royal Opera House (Malcolm and Bowsher 2003, 103). The general evidence clearly does not completely follow the 'emporium model', and there is undoubtedly some variation throughout the Lundenwic sites regarding the two main elements, species range and home production, of this argument. The inclusion of more evidence is clearly required to provide a better understanding of the provisioning problem.

Are there any changes in meat use between the early and later phases of the Middle Saxon period?
Previous analyses at a variety of Lundenwic sites, including the Royal Opera House, has revealed a general rise in the importance of sheep during the latter stages of the Middle Saxon settlement (Rielly forthcoming). This may be indicative of a lowering in status, were sheep during the Saxon period were clearly of lesser status in comparison to cattle or pigs (see Hagen 1995, 92). However, this difference may also relate to a change in exploitation strategies and the value of particular animal commodities. While there appears to be no obvious difference in sheep age structure between the early and later phases within these site assemblages, there is slight evidence to show an increased use of male animals. This could be indicative of a move towards wool production. A large proportion of wethers (castrated males) can be interpreted as being derived from wool producing flocks (see Hagen 1995, 85). It would be of some interest to see if the LTM site followed these general patterns.

Is there any evidence for specialist activity?
The Saxon collections are clearly composed of mixed processing and food waste. While there is evidence for some specialist butchering activity in Lundenwic, most notably at the Royal Opera House (Rielly 2003) and Exeter Street (Brown and Rackham 2004), most sites have provided mixed assemblages. A more detailed analysis of the bones from the LTM site may, however, suggest biases towards particular parts of the carcass. This may be illuminating with regard to status and/or the local presence of butchers establishments/markets. This site, in common with all other Lundenwic sites, has produced a number of worked red deer antler fragments. It is obvious that artisan activity was taken place throughout the settlement in all phases of occupation. Notably, a few large goat horncores were also recovered, again a similar situation to other sites in this area, which may point to some small scale tanning and/or hornworking activities.

What is the significance of the potentially ritual bone assemblages?
There were three deposits with calcined animal bones, two approximately contemporary with the human inhumations and cremations forming some of the lower strata at this site, and one approximately midway up the Saxon sequence. This last example provided the largest quantity of bones. It is very likely that these represent ritual deposits, as suggested from the uniform calcined nature of the bones. These collections appear to be unique. Similarly burnt concentrations of bones are certainly absent from the various DGLA and MoLAS Lundenwic sites and no examples were found within the published sites excavated by other units. It is notable that human burials have been found at a number of other Lundenwic sites, generally contained within the earliest pre-development levels.

However, this is the only site in this area which has provided human cemations (Natasha Powers pers comm). It may therefore be no coincidence that this site has also produced the only known examples of burnt animal bone 'offerings'.

Post-medieval

What is the nature of the post-medieval occupation of this area?
The post-medieval assemblages also represent mixed dumps of processing and food waste. The dating evidence would suggest that most of the bones date to the 19th century, and so it may not be possible to compare food use throughout the postmedieval period. There is a notable post-medieval indicator – turkey, which in turn could suggest the presence of at least one high status household in the vicinity. A number of sites within the Lundenwic area have produce postmedieval bone collections, but these were either deemed a low priority in comparison to the underlying Saxon evidence or were too small to warrant any further analysis beyond the assessment stage (see for example Rielly 1998, being an assessment of the animal bones from 10 DGLA and 2 MoLAS sites dug between 1988 and 1991). The only comparison to date is actually located just outside the Lundenwic area, at the Inner Temple (Bendry 2005).

Method Statements
It has been strongly indicated (see Potential of the data and Research aims) that the Saxon and postmedieval assemblages can provide significant contributions to the study of animal usage within this part of London. To achieve these aims it is recommended that each of the context assemblages be recorded (with the exception of those collections which could not be provenanced i.e. unknown area in Table 1). It will not be necessary, however, to record all of the bones from these deposits. The major aim is to maximize the data available for species representation, skeletal part, age, sex and size studies. The recording will therefore concentrate on bones identifiable to species, generally excluding vertebrae, ribs and various indeterminate pieces. Exceptions to this list of exclusions are all atlas, axes and sacrums, as well as most of the cattle-size vertebrae i.e. central body fragments with articular ends. The latter can provide information on the survival of elderly cattle (the vertebrae epiphyses fusing between the years of 7 to 9 years, after Schmid 1972, 75). Butchery and pathology will be secondary considerations, to be recorded in broad terms only. Finally, an effort will be made to inspect the relative fragmentation of the bones, by noting the completeness of each bone fragment (divided into four stages from complete to less than 25% complete) as well as the possible causes of such damage, as dog gnawing and burning.

The selected bones will be recorded onto a post assessment animal bone database set up in Access at the MoLSS environmental department. This analysis will involve identification of all bones to species (or size equivalent) and to skeletal part. There will be a thorough record made of all mandibular toothwear/eruption (after Grant 1982) and of the state of fusion of each and every epiphysis. The sexing of various bones will follow information available from a number of authors, principally Schmid (1972) and Prummel and Frisch (1986). Measurements (largely following von den Driesch 1976) will be restricted to all whole long bones, adult dentition and all late fusing fused articular ends.

Then, as mentioned, notes will also be taken regarding any pathological and butchered bones, as well as on the general condition of the bones, including burning and gnawing.

The chosen assemblages amount to hand collected totals of 12,873 fragments (471.37kg) from Saxon levels and 929 (25.19kg) from postmedieval deposits. or 14.57kg, and a sieved total of 190 fragments or 0.17kg. It is recommended that only a portion of the bones from each deposit should be recorded. This system has been applied to other Lundenwic sites (see Rielly forthcoming) and using this method it was possible to record the equivalent of about 300 fragments or 10kg of bone per day i.e. referring to the total number of bones prior to selection of identifiable fragments and certain cattle-size vertebrae. The same rate can be applied to both the Saxon and postmedieval bones, as the latter proved to be rather similar to the former, with then exception of a few extra species. Estimates concerning the sieved bones will be reliant more on the quantities of identifiable bones, and, in particular, of identifiable fish bones. Neither of these are in abundance in either the Saxon or postmedieval sample assemblages.

RH note:

Following discussions, a re-assessment of the animal bone was carried out by Kevin Rielly of MoLSS. This is appended below:

Introduction

The site produced a very large, well dated and well preserved animal bone assemblage. It features notable concentrations of identifiable (to species) and ageable (mandibles and articular ends) fragments within the Saxon phases III (mid 7th to early 8th centuries) to VI (late 8th to mid 9th centuries), as well as within the post-medieval phase VIII (late 17th to early 19th century). While relatively less bones were produced from Saxon phase II (mid 6th to mid 7th centuries), they are nonetheless of some significance, due to their likely association with the early Saxon graves and cremations.

Table 1. Distribution of animal bones by phase and recovery method

	Phase						
Recovery	II	III	IV	V	VI	VIII	Grand Total
HC	12	2132	3257	1196	6122	893	13612
SIV	259	778	1816	463	2402	670	6388

Priorities

The quantity and quality of the data is clearly conducive to detailed inter- and intra-site comparisons. Owing to various constraints, it will not be possible to for this assemblage to attain its full potential at this time. The requirement for a more limited analytical approach can be met in two ways i.e. the use of a 'representative sample' or an analysis based on answering certain key research questions for Saxon Lundenwic. The first approach could be useful, assuming that a reasonably sized 'sample' could be agreed, but

would inevitably severely reduce the potential value of these collections. The advantage of following the second method would be the eventual production of a more focused report, geared towards an efficient use of the available resource. The key questions, based on previous work on Lundenwic assemblages, cover the possible changes in animal usage (exploitation strategies) between the earlier and later parts of the Middle Saxon occupation sequence (see previous document). Such changes can be plotted by limiting the recording to species representation, age and sex data. This will enable an analysis of whether sheep became the more dominant species at this site (as has clearly been discovered elsewhere in Lundenwic) and whether this change was associated with changes in exploitation patterns. For example, an increase in the importance of wool production can be seen with a similar increase in the presence of older individuals and in particular of older males (wether flocks).

The early Saxon 'ritual' landscape will obviously be a major part of the eventual report, and the incidence of possible animal gravegoods is clearly of some interest. These bones should be recorded in some detail.

Finally, the post-medieval collections are of some importance due to the relative lack of comparative studies within this general area.

Revised Method Statement

Following the major priorities detailed in the last section, recording can be limited to species counts, limb bone and some vertebral fusion, cattle and sheep pelves, mandibular toothwear/eruption data and cattle metacarpal measurements. It is recommended, in order to achieve a statistically valid sample, that a large proportion of the site assemblage should be recorded. This could be limited to deposits with greater than 100 fragments, with a further reduction, considering the species and epiphysis fusion data, to about half the deposits from phases IV and VI. Thus the recorded asemblage will amount to about 10,000 bones weighing 375kg, with species and epiphysis fusion recorded with about 7,000 fragments weighing 245kg.

The recording method will be as follows:-
Species representation – a count of all bones identifiable to species
Epiphysis fusion – a division of species limbbones and vertebrae into age groups and a count of fused and unfused fragments within each of these groups,
Mandible data – input of cheekteeth present and their state of eruption and/or wear
Pelves and metacarpals – aimed at quantifying the cattle and sheep sex ratio, using sexually dimorphic traits in the pelves and, cattle only, selected measurements of the distal end of the metacarpus.

In addition, notes will be taken, concerning the presence or otherwise of bones belonging to particularly young individuals, unless they have already been noted (i.e. if they have articular ends or teeth). Finally, a little more detail will be required for the probable 'ritual' assemblages, involving species, skeletal part and age data. The sieved collections can be recorded as described in the previous assessment document.

Time Requirements

Taking account of the limited recording methods described above, the time required will be as follows:-

Task 1. Recording the hand collected general Saxon bones	20 days
Task 2. Recording the 'ritual' Saxon bones	0.5 days
Task 3. Recording the sieved Saxon bones	0.75 days
Task 4. Recording the hand collected postmedieval bones	2 days
Task 5. Recording the sieved postmedieval bones	0.25 days
Task 6. Analysis	10 days
Task 7. Writing the report	10 days
Total:	
Animal bone specialist	43.5 days

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Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
6003	0	HC	0		lyr	L	?pm	?			5	0.06	
7003	0	HC	0		lyr	L	?pm	?			2	0.07	
8002	0	HC	S		b'fill	F	pm	19	1780	1910	6	0.16	chicken hum(2)
8025	0	HC	0		lyr	L	?medieval	?			5	0.36	
8047	0	HC	N		dump	L	pm	19	1780	1820	2	0.01	
8090	0	HC	S	0	silty lyr	L	S	PM	450	650	4	0.2	red deer worked antler
8094	0	HC	N	8093	pit fill	F	?S	PM			9	0.14	
8116	0	HC	N	8115	pit fll	F	S	PM	730	850	5	0.12	
8119	0	HC	N	8120	drain fill	F	pm	18/19	1780	1820	5	0.06	
8130	0	HC	123	0	pmed lyr	F	S	PM	775	850	70	1.65	goose tib
8138	0	HC	1	8139	PH fll	L	?S	S			5	0.08	
8140	0	HC	1		dump	L	?S	S			120	3.78	chicken fem+tib; goose uln
8143	0	HC	1		demo lyr	L	?S	S2	?600	?750	15	0.12	
8144	0	HC	1	0	demo lyr	L	S	S1	600	750	6	0.01	calcined rib
8145	0	HC	1		demo lyr	L	?S	S1	?600	?750	15	0.34	
8145	6	SIV	1		demo lyr	L	?S	S1	?600	?750	45	0.6	lots ribs
8146	0	HC	1		demo lyr	L	?S	S1	?600	?750	20	0.52	
8149	0	HC	1		cobble surf	L	?S	S			15	0.25	
8151	0	HC	1	8152	beam slot f	F	?S	S			15	0.22	
8154	0	HC	1	0	deposit	L	S	S2	775	850	642	17.89	large goat hc(2);chicken fem,tib(3),tm;goose cor,tib,tm;crow fem;raven uln;infant sheep
8154	0	HC	1	0	deposit	L	S	S2	775	850	2	0.02	sawn antler tine+beam frg
8155	0	HC	1	0	silty sand	L	S	S2	730	850	281	10.77	large goat hc(2)
8155	0	HC	1	0	silty sand	L	S	S2	730	850	1	0.03	sawn antler tine
8158	0	HC	1	0	burnt depo	L	S	S2	730	850	4	0.06	
8166	0	HC	1	0	missing	?	S	S2	730	850	260	9.42	goose hum,cm+fem;mall hum;gadid head part
8167	1	SIV	1		lyr burnt	L	S	S			1000	1.1	crem with pig tooth and goose fem+phalanges

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8168	0	HC	1		lyr	L	?S	S			30	1.05	large goat hc(2)
8169	0	HC	1	8187	pitR	F	S	S2	730	850	650	16.36	infant sheep;chicken fem;goose cor,fem+tm
8169	0	HC	1	8187	pitR	F	S	S2	730	850	1	0.03	sawn antler tine+beam frg
8172	0	HC	1	8187	pitR	F	S	S2	730	850	360	12.87	infant cattle mt;juv cattle mand;large goat hc(2)
8172	0	HC	1	8187	pitR	F	S	S2	730	850	1	0.06	sawn antler tine(2)
8177	0	HC	N	8175	brick struc	F	pm	PM			55	1.75	chicken fem
8186	0	HC	1	8187	pitR	F	S	S2	730	850	1075	34.53	large goat hc;cat femur;goose scp,hum,tib;chicken rad,syn,fem(2)+tib(3);foetal and infant cattle
8186	0	HC	1	8187	pitR	F	S	S2	730	850	1	0.02	sawn antler tine
8188	0	HC	1	8189	construction	F	pm	PM			35	0.4	chicken+goose fem:mainly pig and sheep
8194	0	HC	1	8195?	?	?	S	S2	730	850	9	0.08	chicken cor
8194	0	HC	1	8195?	?	?	S	S2	730	850	1	0.02	sawn antler tine
8197	0	HC	1				DISC	DISC			135	3	goose tib
8199	0	HC	1	8200	pit fll	F	S	S2	730	850	75	3.34	large bits incl 2 cattle hcs
8201	0	HC	1	8203	pit fll	F	S	S2	775	850	60	2.85	goose hum
8202	0	HC	1	8203	pit fll	F	S	S2	775	850	70	2.95	goose hum
8202	0	HC	1	8203	pit fll	F	S	S2	775	850	185	6.6	goose hum+tib
8202	2	SIV	1	8203	pit fll	F	S	S2	775	850	15	0.09	4 iden
8207	0	HC	1	8208	SH fll	F	?S	S			2	0.02	
8208	0	HC	1	8208	SH fll	F	?S	S			12	0.32	
8209	0	HC	1	8210	pit fll	F	S	S2	730	850	5	0.12	
8213	0	HC	1	0	clay silt lyr	L	S	S2	730	850	210	6.5	
8213	0	HC	1	0	clay silt lyr	L	S	S2	730	850	5	0.22	sawn antler tine(4)+beam frg
8214	0	HC	1	0	silty sand	L	S	S	0	0	15	0.38	worked antler fragment
8215	0	HC	1	0	silty sand	L	S	S	0	0	20	0.22	juv sheep mc
8215	0	HC	1	0	silty sand	L	S	S	0	0	2	0.07	sawn antler tine(2)

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8217	0	HC	1	8219	med pit fll2	F	S	S2	730	850	200	6.77	large goat hc; infant cattle rad
8218	0	HC	1	8219	med pit fll1	F	S	S2	730	850	50	1.7	chicken tib
8222	0	HC	1		lyr	L	?S	S			6	0.2	
8223	0	HC	1		dump	L	?S	S			145	4.17	
8225	0	HC	1		lyr	L	?S	S			70	2.95	
8227	0	HC	1	0	dump	L	S	S	0	0	80	2.75	
8227	0	HC	1	0	dump	L	S	S	0	0	1	0.05	sawn antler tine
8228	3	SIV	1	8229	pit fill	F	?S	S			100	3.65	
8237	0	HC	1	8238	cnstr cut fll	F	S	S	0	0	137	5.25	goose tib
8239	0	HC	1	8240	pit fill	F	?S	S			4	0.04	
8241	0	HC	1	8242	pit fill	F	?S	S			6	0.3	
8244	0	HC	1	8245	pit fll	F	S	S	0	0	10	0.82	
8244	0	HC	1	8245	pit fll	F	S	S	0	0	1	0.06	sawn antler tine
8247	0	HC	1	8246	pit fll	F	S	S1	600	750	30	0.87	chicken tib
8251	0	HC	1	8252	pit fill	F	?S	S			15	0.65	
8253	0	HC	1	8245	pit fill	F	?S	S			15	0.62	
8255	0	HC	1	8255?	fill	F	S	S1	600	760	15	0.35	
8257	0	HC	1		demo lyr	L	?S	S			20	0.46	hare tib;goose fem/tib
8258	0	HC	1	0	lyr	L	S	S2	730	850	30	0.72	
8259	0	HC	1	8260	pit fill	F	?S	S			3	0.12	
8261	0	HC	1	8262	well (robbed)	GRL	?S	S			12	0.5	goat mt
8263	0	HC	1	0	lyr	L	S	S1	650	750	11	0.46	
8265	0	HC	1	0	charcoal rich lyr	L	S	S	0	0	8	0.32	
8266	0	HC	1	8268	pit fill	F	S	S			30	0.77	
8267	0	HC	1		lyr burnt	L	?S	S			3	0.25	
8269	0	HC	1		lyr	L	medieval	S			2	0.22	
8272	0	HC	1		lyr	L	?S	S			7	0.07	
8276	0	HC	1		lyr gravel	GRL	?S	S			1	0.03	
8279	0	HC	1	0	slmpd lyr	L	S	S	0	0	15	0.75	large goat hc
8280	0	HC	1	8281	PH fll	F	?S	S			1	0.01	

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8282	0	HC	1	0	burnt ash lyr	L	S	S	0	0	15	0.55	goat rad/uln
8283	0	HC	1	8284	PH fll	F	?S	S			12	0.15	
8286	0	HC	1	8287	PH fll	F	?S	S			2	0.35	
8288	0	HC	1	8289	PH fll	F	?S	S			20	1.25	
8290	0	HC	1	8291	PH fll	F	S	S			4	0.27	
8292	0	HC	1	8293	pit fll	F	S	S2	730	850	100	4.77	goose uln
8292	9	SIV	1	8293	pit fll	F	S	S2	730	850	330	1.3	a20 iden;some fish
8292	9	SIV	1	8293	pit fll	F	S	S2	730	850	1	0.01	Incised antler fragment
8294	0	HC	1		lyr gravel	GRL	S	S			10	0.15	
8294	70	SIV	1		lyr gravel	GRL	S	S			77	5.06	
8295	0	HC	1	8296	pit fll	F	S	S1	600	750	15	1.35	
8295	7	SIV	1	8296	pit fll	F	S	S1	600	750	95	0.6	a10 iden
8298	0	HC	1	0	silty sand	L	S	S2	730	850	185	8.94	large goat hc(2)
8298	0	HC	1	0	silty sand	L	S	S2	730	850	2	0.2	sawn antler tine(2)
8299	0	HC	1		lyr gravel	L	?S	S			15	0.42	
8303	0	HC	1		lyr burnt	L	?S	S			7	0.12	juv pig hum
8304	0	HC	1	8305	PH fll	F	?S	S			1	0.1	
8306	0	HC	1		demo lyr	L	?S	S			3	0.22	
8308	0	HC	1	8309	PH fll	F	?S	S			5	0.07	
8310	0	HC	1	8311	fill1	F	S	S	0	0	165	13.01	mainly cattle;large goat hc(2);chicken fem
8312	0	HC	1	8313	PH fll	F	?S	S			3	0.2	
8312	10	SIV	1	8313	PH fll	F	?S	S			11	0.42	
8314	0	HC	1	8315	PH	F	S	S1	600	750	6	0.25	
8314	11	SIV	1	8315	PH	F	S	S1	600	750	5	0.04	
8316	0	HC	1	8317	PH fll	F	?S	S			5	0.27	juv cattle mand
8316	12	SIV	1	8317	PH fll	F	?S	S			5	0.34	
8318	0	HC	1		lyr gravel	GRL	?S	S			3	0.18	
8319	0	HC	1	8320	PH fll	F	?S	S			20	0.77	
8321	0	HC	1	8322	PH	F	S	S1	600	750	2	0.01	goose hum
8324	0	HC	1		lyr	L	?S	S			12	0.26	goose cm

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8327	0	HC	1				DISC	DISC			18	0.8	cat hum
8329	0	HC	1	8328	PH fll	F	?S	S			37	0.74	
8336	0	HC	1		demo lyr	L	?S	S			15	0.34	chicken tib
8355	0	HC	1		demo lyr	L	?S	S			45	1.02	
8357	0	HC	1		demo lyr	GRL	?S	S			12	0.2	
8358	0	HC	1	0	dump	GRL	S	S1	600	750	45	2.45	
8359	0	HC	3	0	gravel	L	S	S1	600	750	25	0.45	chicken tm
8361	0	HC	1		linear cut	F	?S	S			1	0.05	
8362	0	HC	1	0	lyr	L	S	S1	600	750	650	19.99	infant cattle mp;goat hc;mouse/vole tooth;goose cm+hum
8362	16	SIV	1	0	lyr	L	S	S1	600	750	195	0.6	a10 iden; lots v small frgs, some calcined
8364	0	HC	1	8365	SH fll	F	?S	S			15	0.55	
8366	0	HC	1	8367	SH fll	F	S	S1	600	750	100	4	chicken hum
8367	0	HC	1	8367	SH	F	S	S1	600	750	150	6.35	lamb hum
8381	0	HC	1	8380	pit fill	F	?S	S			1	0.07	poor cond
8384	0	HC	1	8383	pit fill	F	?S	S			4	0.04	
8385	0	HC	1	0	charc/cly lyr	L	S	S1	600	750	95	3.65	horse mc;red deer antler/skl base
8385	17	SIV	1	0	charc/cly lyr	L	S	S1	600	750	80	0.23	a5 iden
8388	0	HC	1	0	occ lyr	L	S	S1	600	750	45	1.75	
8394	0	HC	1	8395	linear cut	F	?S	S			7	0.9	
8394	19	SIV	1	8395	linear cut	F	?S	S			10	0.04	poor cond
8396	20	SIV	1	8397	pit fll	F	S	S1	600	750	16	0.21	
8398	23	SIV	1		lyr	L	?S	S			1	0.03	
8405	0	HC	1	0	lyr	L	S	S1	600	750	29	1.17	
8405	24	SIV	1	0	lyr	L	S	S1	600	750	120	0.17	a5 iden
8406	0	HC	1		lyr	L	?S	S1	?600	?750	50	0.04	?remains of just 3 sheep bones
8407	0	HC	1	8408	PH fll	F	S	S1	600	750	7	0.15	
8407	26	SIV	1	8408	PH fll	F	S	S1	600	750	70	0.15	a10 iden
8423	0	HC	1		SH fll	F	?S	S			15	0.68	

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8432	0	HC	1		lyr burnt	L	?S	S			5	0.05	
8464	0	HC	1	8465	PH fll	F	?S	S			32	1.42	
8472	0	HC	1		lyr burnt	L	?S	S			1	0.02	sawn antler tine
8503	0	HC	1	8504	pit fll	F	S	S2	775	850	70	1.82	
8503	29	SIV	1	8504	pit fll	F	S	S2	775	850	30	0.26	a10 iden; chicken tib
8505	0	HC	1	0	ash lyr	GL	S	S1	600	750	90	2.52	
8520	0	HC	1	8521	pit fill	F	?S	S			25	1.05	
8520	30	SIV	1	8521	pit fill	F	?S	S			2	0.07	sawn antler tine(2)
8523	0	HC	1	8524	pit fll	F	S	S	0	0	15	0.85	
8523	0	HC	1	8524	pit fll	F	S	S	0	0	1	0.17	sawn beam/trez junction frg
8525	0	HC	1	8526	pit fll	F	S	S2	730	850	140	9.95	
8525	0	HC	1	8526	pit fll	F	S	S2	730	850	1	0.01	Incised antler fragment
8525	39	SIV	1	8526	pit fll	F	S	S2	730	850	90	0.27	a5 iden
8533	32	SIV	1	8534	PH fll	BGL	?S	S2	?730	?850	70	2.13	
8535	0	HC	1	8536	well fll	F	S	S2	730	850	31	2.91	mainly cattle
8535	36	SIV	1	8536	well fll	F	S	S2	730	850	70	0.35	a15 iden
8537	37	SIV	1	8538	well fill	F	?S	S			10	0.12	
8539	0	HC	1	8540	pit fll	F	S	S1	0	0	9	0.22	
8544	0	HC	1	8545	pit fill	F	?S	S			190	11.32	
8546	0	HC	1	8547	PH fll	F	?S	S			7	0.01	
8546	41	SIV	1	8547	PH fll	F	?S	S			15	1	goose tm
8551	44	SIV	1	8550	PH fll	F	S	S	0	0	15	0.15	
8553	0	HC	1	8552	grave fll	BGL	S	S	0	0	9	0.36	
8553	43	SIV	1	8552	grave fll	BGL	S	S	0	0	25	0.27	
8553	46	SIV	1	8552	grave fll	BGL	S	S	0	0	25	0.02	cssz calcined
8554	45	SIV	1	8555	pit fill	F	?S	S			3	0.03	
8558	0	HC	1		skel	BGL	S	S			3	0.03	1 of 2 inhumations at this site
8571	0	HC	2	8572	pit fll	F	S	S1	0	0	185	5.49	
8571	47	SIV	2	8572	pit fll	F	S	S1	0	0	35	0.22	
8573	0	HC	2	0	void	L	pm	19	1780	1910	416	9.98	sawn sheep limb bones;goose uln

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8573	0	HC	2	0	void	L	pm	19	1780	1910	1	0.06	sawn antler tine
8575	0	HC	S	8577	b-lined drain	F	pm	19	1780	1820	4	0.01	
8587	0	HC	S	8588	pit fill	F	pm	19			3	0.08	
8594	0	HC	S		lyr	L	S	PM			45	1.8	complete adult pig hum
8594	0	HC	S		lyr	L	S	PM			1	0.12	upper antler frg with two tines-sawn
8600	0	HC	S	8601	pit fill	F	S	PM			5	0.08	
8600	0	HC	S	8601	pit fill	F	S	PM			130	4.32	
8605	0	HC	2	8604	well fll (top)	F	S	S	0	0	7	0.2	
8606	0	HC	S		dump	L	?S	PM			55	2.25	
8610	0	HC	S	8630	b-lined drain	F	pm	PM			15	0.35	
8613	0	HC	2	8604	pit fll	F	S	S1	0	0	35	1.7	
8613	50	SIV	2	8604	pit fll	F	S	S1	0	0	160	0.43	a10 iden; some calcined
8615	50	SIV	2	8617	pit fll 2	F	S	S	1840	1910	90	0.02	v small frgs some calcined w some later finds (pipes)
8616	0	HC	2	8617	pit fll 1	F	S	S1	0	0	305	17.14	
8618	0	HC	2	8620	well fill	F	?S	S			1	0.01	
8618	51	SIV	2	8620	well fill	F	?S	S			10	0.27	
8619	0	HC	2	8620	well fill	F	?S	S			3	0.12	
8621	53	SIV	S	8622	pmed pit	F	S	PM	0	0	420	1.67	a40 iden
8626	0	HC	S	8625	sub-rect cut	F	S	PM	0	0	27	0.95	juv cattle uln
8627	54	SIV	2	0	clay lyr	L	S	S	0	0	3	0.03	
8631	0	HC	S	8632	pit fill	F	pm	PM			12	0.2	
8637	0	HC	S	8638	pit	F	S	PM	0	0	10	0.27	horse mand molar
8639	0	HC	2	0	gravel lyr	L	S	S	0	0	130	4.67	goat rad
8639	0	HC	2	0	gravel lyr	L	S	S	0	0	1	0.05	sawn antler tine
8639	13	SIV	2	0	gravel lyr	L	S	S	0	0	1	0.02	sawn antler tine
8639	57	SIV	2	0	gravel lyr	L	S	S	0	0	12	0.02	
8640	0	HC	2	8641	pit	F	S	S2	730	850	20	0.5	human mp
8640	200	SIV	2	8641	pit	F	S	S2	730	850	25	0.01	? Sample, calcined small frgs
8646	0	HC	2	0	burnt lyr	L	S	S1	0	0	87	3.6	large goat hc;goose rad
8647	0	HC	2	0	grvl lyr	L	S	S1	0	0	125	4.68	dog scp

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8652	0	HC	2	8653	PH fll	F	?S	S			100	3	horse mand
8654	0	HC	2	8658	well cut	F	S	S	0	0	140	10.67	large goat hc;horse fem;fn/young inf cattle hum
8654	62	SIV	2	8658	well cut	F	S	S	0	0	180	0.12	a5 iden incl sheep teeth and chicken cor;plus a large prop v small fragments, some calcined
8655	0	HC	2	8658	well cut	GL	S	S1	0	0	90	2.2	
8655	63	SIV	2	8658	well cut	GL	S	S1	0	0	32	0.1	a5 iden;human mp
8656	0	HC	2	0	sndy silt	GL	S	S1	0	0	200	6.45	
8656	67	SIV	2	0	sndy silt	GL	S	S1	0	0	80	0.29	a7 iden
8657	0	HC	2	0	sndy silt	GL	S	S	0	0	200	8.26	
8657	0	HC	2	0	sndy silt	GL	S	S	0	0	1	0.3	sawn antler crown
8657	15	SIV	2	0	sndy silt	GL	S	S	0	0	1	0.02	Antler spindkle whorl
8659	0	HC	2	8663	pit?	F	S	S	0	0	215	10.61	mainly cattle;chicken fem
8659	0	HC	2	8663	pit?	F	S	S	0	0	1	0.08	sawn antler tine
8662	0	HC	2	8662	pit?	F	S	S	0	0	20	2.62	
8664	0	HC	2	8665	PH fll	F	?S	S			5	0.17	
8666	0	HC	2	8667	PH fll	F	?S	S			4	0.03	calcined dom mammal and goose
8670	0	HC	2	8671	pit?	BGL	S	S1	0	0	95	3.45	
8670	66	SIV	2	8671	pit?	BGL	S	S1	0	0	20	0.06	two calcined
8674	0	HC	2	8675	pit fill	BGL	?S	S			8	0.14	
8683	69	SIV	2	8684	pit fill	F	?S	S			10	0.01	2 iden
8693	71	SIV	2	8694	pit fill	BGL	?S	S			8	0.07	
8701	73	SIV	2		grave fll	BGL	S	S			9	0.12	1 iden - 1 of 2 inhum at this site
8737	0	HC	3	8790	pit cut	F	S	S	0	0	125	4.43	
8737	83	SIV	3	8790	pit cut	F	S	S	0	0	65	0.25	
8738	0	HC	3	8790	pit fill	F	S	S			70	0.74	a15 iden;infant sheep
8738	0	HC	3	8790	pit fill	F	S	S			15	0.05	2 iden
8738	84	SIV	3	8790	pit fill	F	S	S			25	0.35	a10 iden;chicken hum
8746	0	HC	S		b soakaway	F	pm	17/18			12	0.04	2 iden; some calcined

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
8747	0	HC	3	8790	pit cut	F	S	S	0	0	77	2.78	
8756	88	SIV	3	8758	well fill	F	S	S2	775	850	50	0.04	a3 iden;lots v small frgs, some calcined
8757	0	HC	3	8758	well cut	F	S	S2	775	850	80	3.7	
8757	0	HC	3	8758	well cut	F	S	S2	775	850	190	8.7	goose hum+tib;infant sheep scp;worked antler frg
8757	89	SIV	3	8758	well cut	F	S	S2	775	850	130	0.36	a5 iden
8760	0	HC	3	0	lyr	L	S	S	0	0	192	6.49	
8760	90	SIV	3	0	lyr	L	S	S	0	0	585	0.84	a30 iden, with lots v small frgs, some calcined
8762	0	HC	S	8753	b drain	F	pm	17/18	1700	1910	20	0.65	
8763	0	HC	3	8764	pit	F	S	S2	730	850	87	4.5	
8763	93	SIV	3	8764	pit	F	S	S2	730	850	70	0.15	a5 iden
8765	0	HC	3		lyr	L	?S	S			12	0.01	one calcined csz
8766	0	HC	3	8767	well cut	F	S	S2	775	850	195	7.13	horse 1st phal;sawn ant frg
8766	91	SIV	3	8767	well cut	F	S	S2	775	850	1	0.01	sawn antler tine
8770	0	HC	3	8764	pit	F	S	S	0	0	75	3.3	goose furc+cm+tib
8770	94	SIV	3	8764	pit	F	S	S	0	0	70	0.2	a10 iden
8771	0	HC	3	0	lyr	L	S	S2	775	850	140	6.85	
8771	0	HC	3	0	lyr	L	S	S2	775	850	1	0.05	sawn antler tine
8771	95	SIV	3	0	lyr	L	S	S2	775	850	595	0.96	a50 iden;plus a110 fish vert; some calcined frgs
8776	0	HC	3	8785	well fill	F	S	S			1	0.01	
8778	0	HC	3	8785	well cut	F	S	S	0	0	81	1.93	sawn large goat hc
8783	0	HC	3	8785	well cut	F	S	S	0	0	70	3.22	complete adult pig tib
8783	0	HC	3	8785	well cut	F	S	S	0	0	1	0.05	sawn antler beam frg
8787	98	SIV	3		lyr	L	?S	S			90	0.72	a10 iden
8788	0	HC	3	0	grvl lyr	L	S	S2	730	850	20	0.6	
8789	0	HC	3	0	gry snd slt lyr	GL	S	S	0	0	455	14.34	infant sheep
8791	0	HC	3	0	grn slt lyr	L	S	S1	0	0	25	0.55	
8791	101	SIV	3	0	grn slt lyr	L	S	S1	0	0	85	0.24	a5 iden;with some small calcined

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
													frgs
8796	0	HC	3	0	grvl cly lyr	L	S	S	0	0	4	0.13	
8799	0	HC	3	0	snd slt lyr	GL	S	S1	0	0	220	8.05	
8799	106	SIV	3	0	snd slt lyr	GL	S	S1	0	0	70	0.7	
8799	106	SIV	3	0	snd slt lyr	GL	S	S1	0	0	70	0.65	
8799	106	SIV	3	0	snd slt lyr	GL	S	S1	0	0	140	1.35	a20 iden
8800	0	HC	3	0	gry cly lyr	GL	S	S1	0	0	655	20.91	goose fem
8800	108	SIV	3	0	gry cly lyr	GL	S	S1	0	0	60	0.37	a5 iden
8801	0	HC	3	8803	pit fll 2	F	S	S1	0	0	121	4.87	goose tib
8801	104	SIV	3	8803	pit fll 2	F	S	S1	0	0	30	0.15	a5 iden
8804	0	HC	3	0	gry snd slt lyr	GL	S	S	0	0	80	3.5	
8804	107	SIV	3	0	gry snd slt lyr	GL	S	S	0	0	155	0.6	a10 iden
8807	0	HC	3	8808	linear cut	F	?S	S			30	0.2	
8812	112	SIV	3	8813	beam slot f	F	?S	S			1	0.03	sawn antler tine
8824	0	HC	3	8825	SH fll	F	?S	S			30	0.12	
8829	114	SIV	3	8828	crem pit	BGL	S	S	0	0	200	0.03	v small fragments,mostly calcined (?ALL HUMAN)
8830	115	SIV	3	0	slty snd	BGL	S	S1	0	0	3	0.03	
8832	0	HC	3	8883	pit fill	BGL	?S	S			30	0.15	cattle fem plus lots calcined csz+ssz frgs
8834	0	HC	3		nat	BGL	?S	S			50	0.35	
8834	117	SIV	3		nat	BGL	?S	S			21	0.74	a5 iden;cat fem
8836	0	HC	3	8837	pit fill	BGL	S	S1	0	0	35	1.25	
8836	118	SIV	3	8837	pit fill	BGL	S	S1	0	0	55	0.22	a10 iden;chicken tib
8842	0	HC	3	8843	pit fill	BGL	?S	S			4	0.01	
8842	119	SIV	3	8843	pit fill	BGL	?S	S			15	0.04	1 iden
8852	121	SIV	3		lyr	BGL	?S	S			25	0.2	
8863	0	HC	3	8758	well fll 1	F	S	S2	730	850	17	0.75	
8863	123	SIV	3	8758	well fll 1	F	S	S2	730	850	5	0.02	
8880	0	HC	0			?	UNDAT	?			10	0.05	
8991	201	SIV	0	0	check	?	S	S	0	0	100	0.04	?sample. Few calcined
9381	0	HC	0			?	UNDAT	?			3	0.02	

Context	S.No	Recov	Area	P.Con	Type	Type2	Period	P2	Edate	Ldate	N	Wt	Comments
9637	202	SIV	0			?	UNDAT	?			250	0.25	?sample. a10 iden

Appendix P

THE MOLLUSC SHELL
Alan Pipe

Quantification

Summary/Introduction
Mollusc shells from 24 context and sample groups were submitted for assessment. These were obtained from hand-collection and wet-sieving from layers, silts and the fills of pits and wells. The samples were dated to the early and middle Saxon period. The mollusc shells derived entirely from economically important marine/estuarine species; particularly common/flat oyster *Ostrea edulis*, with fragments of common mussel *Mytilus edulis* and single examples of common whelk *Buccinum undatum* and common periwinkle *Littorina littorea*. Although common/flat oyster was recovered from every sample, common mussel occurred only in deposit [8167], pit [8292] and layers [8760] and [8771]; common whelk only in deposit [8167] and common periwinkle only in pit [8503]. There were no terrestrial or freshwater molluscs. Context/sample group size varied between a few fragments and 0.300 kg, 39 fragments, with most groups consisting of only one or two distinct oyster shells plus fragments. Preservation was generally poor, with considerable surface damage and extensive fragmentation. No boring or encrusting organisms were identified from any shell fragment.

Methodology
The mollusc groups were weighed (kg) and counted in terms of numbers of distinct shells. Species identification followed Hayward, Nelson-Smith & Shields 1996. The results are tabulated on an Excel file (*molltab01.xls*) as *Table 7: The mollusc shell from LTM03/detailed summary* in terms of date, feature, context/sample, total weight (kg) and numbers of oyster, mussel, whelk and winkle shells.

Analysis of Potential
This small and poorly-preserved marine/estuarine assemblage has no real potential for further study. All the recovered species are commonly recovered from archaeological sites throughout central London, and have long been exploited from the outer Thames estuary and adjacent coasts. The lack of associated boring or encrusting flora or fauna, together with the considerable level of surface and edge damage, effectively preclude either ecological or metrical interpretation. The absence of terrestrial or freshwater taxa prevents any interpretation of local habitats.

Significance of data
This assemblage has no local, regional or wider significance.

Revised Research Aims
Further analysis of this material will not allow contribution to any research aim.

Method Statements

No further analysis is recommended.

Bibliography

Hayward, P; Nelson-Smith, A; & Shields, C, 1996 Seashore of Britain and Europe London. HarperCollins

Tables (see molltab01.xls)
Table 8: The mollusc shell from LTM03/detailed summary

DATE	FEATURE	CONTEXT	SAMPLE	WEIGHT (kg)	oyster	mussel	whelk	winkle	NOS. (total)
AD730-850		8166		0.005	1				1
		8167	1	0.025	1 + frags	frags	1		2
AD730-850	pit, rubbish	8169		0.01	2+ frags				2
AD730-850	pit, rubbish	8172		0.01	1				1
AD730-850	pit, rubbish	8186		0.01	2				2
AD770-850	pit	8201		0.01	3				3
AD730-850	pit	8292	9	0.15	20+ frags	frags			20
AD600-750	pit	8295	7	0.06	5				5
AD770-850	pit	8503	29	0.3	39			1	40
AD730-850	pit	8525	34	0.01	2+ frags				2
		8537	37	0.01	1+ frags				1
AD550-750	pit	8613	50	0.001	frags				frags.
AD600-750	pit	8621	53	0.001	1 + frags				1
AD550-750	layer	8639	57	0.001	1				1
AD600-750	well	8654	62	0.01	1 + frags				1
AD550-750	**silt**	**8656**		**0.15**	**1 + frags**				**1**
AD770-850	well	8757		0.01	4 + frags				4
AD550-750	layer	8760	90	0.001	frags	frags			frags.
AD730-850	pit	8763	93	0.025	5 + frags				5
AD550-750	pit	8770	94	0.05	10 + frags				10
AD770-850	layer	8771	95	0.265	20 + frags	frags			20
AD600-750	silt	8791	101	0.002	2				2
AD600-750	layer	8800		0.002	1				1
		8991		0.001	frags				frags.
TOTAL				**1.119**	**123+frags**	**frags**	**1**	**1**	**125**

Appendix Q

THE PLANT REMAINS
Kate Roberts

Quantification

Summary/Introduction
Flots and residues from thirty-nine samples were received by the author for assessment. These were produced from the flotation of bulk soil samples, which were taken from a variety of features, including cremation fills, well fills, pit fills and layers. Sample size varied between two and twenty-two litres. These samples were dated to the early and middle Saxon period and the post-medieval period.

Methodology
Samples were processed by flotation by staff at AOC and the resultant thirty-nine flots were then dried before being received by the author for assessment. Assessment involved a brief scanning of the flots using a low-powered binocular microscope. Abundance, species variety, method of preservation and general nature of the plant assemblages were recorded as were the total flot volumes. The tables at the end of the report summarise all of the resulting information.

A sliding scale was used to estimate abundance and diversity of plant remains. This is listed below:
Abundance 1 = 1 – 10 items; 2 = ≤ 50 items; 3 = > 50 items;
Diversity low = 1 – 3 different taxa; medium = 4 – 6; high = 7+;

Analysis of Potential
Charring was the main form of preservation in these samples. Where charred remains were present they were relatively well preserved, with a high level of surface texture remaining visible. Fragmentation does not appear to have been common in these samples. Charred cereal grain was the most common plant remain other than charcoal in these samples and over 50 examples of grain were present in Sample 36, well fill (8535) and Sample 95, layer (8771). These were both middle Saxon samples.

The samples from the early Saxon phase of the site only contained small amounts of charred plant remains. Charred cereal grain was the most common of these, but only two samples, Sample 90, layer (8760) and Sample 101, from layer (8791), contained more than one or two cereal grains. These samples were dominated by barley (*Hordeum vulgare* ***s.l.***), with smaller amounts of free-threshing wheat (*Triticum aestivum/compactum/turgidum*) in both of these samples. Three other samples contained small quantities of charred cereal grain. These were Sample 54, layer (8627), Sample 62, well fill (8654) and sample 94, pit fill (8770). In addition to free-threshing wheat and barley there were also occasional grains of rye (*Secale cereale*) and oats (*Avena* spp.). Sample 90, layer (8760) also contained a small amount of seeds from wild plants, including stinking mayweed (*Anthemis cotula*) and vetch/tare/vetchling (*Vicia/Lathyrus* spp.).

The cremation samples were all dated to the early Saxon period, however these samples were generally devoid of charred plant remains, apart from occasional grass seeds and small charcoal fragments. Sample 114 and 124, cremation pit fill (8829), contained interesting material, possible tubers from false oat grass (*Arrhenatherum elatius*). This is interesting as they have been found in association with Bronze Age cremations and interpreted as a fuel, but not generally in the Saxon period and it would be interesting to carry out further research into other parallel assemblages from other early Saxon cremations. It is possible that this may provide evidence for fuels used in early Saxon cremations.

Moderate charred remains were present in six samples; Sample 1, layer (8167), Sample 9, pit fill (8292), Sample 16, layer (8362), Sample 34, pit fill (8525), Sample 36, well fill (8535) and Sample 95, layer (8771). There were also two samples with small amounts of charred material, which should be looked at since they contained rye and oats, which were less common than the other cereals. These were Sample 62, well fill (8654) and Sample 71, pit fill (8693). These eight samples were dominated by cereal grain, mainly hulled barley. Also present, in order of importance, were grains of free-threshing wheat, rye and possibly oats. Apart from culm nodes there was no cereal chaff present in these samples. Sample 1, layer (8167) and Sample 95, layer (8771) contained moderate amounts of charred wild plant seeds, which could have been variously grassland plants or arable crops weeds, these included seeds from vetch/tare/vetchling and stinking mayweed. Wild plant remains were even more rare in the other samples. Hazelnut shell (*Corylus avellana*) fragments were also present in Sample 9, (8292).

Occasional non-charred remains were present in these samples, although it seems likely, based on their rarity, that these were intrusive; only single seeds were found. These were present in Sample 39, layer (8543) and Sample 94, pit fill (8763).

Significance of data

Botanical material is rare from early Saxon London sites and therefore the five early Saxon samples containing cereal remains, despite the fact that some of these samples are not particularly rich, should all be looked at in order to increase our knowledge of early Saxon diet and arable agriculture in and around London at that date. The middle Saxon samples are also interesting since they can be directly compared to the nearby Royal Opera House site (Davis 2003) as well as to the early Saxon samples from this site. The cremation samples with their false oat grass tubers are also interesting since this has been found as a fuel in cremations in the Bronze Age but is not usually found in Saxon cremations. It is possible that this material is being used as a fuel and it would be interesting to compare this find to other Saxon cremations.

These samples should provide information on the consumption of cereals in early and middle Saxon London and possibly on their growing conditions, since the seeds from wild plants might point to different soil preferences.

Revised Research Aims

RRA1 To look at cereal production and consumption in early and middle Saxon London at this site and compare it to other nearby sites of a similar date.

RRA2 To research fuels used in early Saxon cremations and compare them to the possible use of false oat grass as tinder as is postulated here.

Method Statements

To extract and identify the charred remains from the eight moderately rich samples and five less rich samples and to compare this to existing Anglo-Saxon archaeobotanical assemblages as well as between the two different periods on this site and produce a report. Identification will be carried out using seed manuals and the reference collection of the Museum of London. A comparison of these plant remains should be made to other plant remains found at sites in the area of a similar date. A table of the results will be compiled, and interpretation of the results, in the light of stratigraphic information, will be carried out and a brief report written.

Analysis of eight rich samples	3.0 days
Analysis of five less rich but interesting samples	0.5 days
Creation of tables	0.5 days
Analysis and report writing	1.5 days
Total	**5.5 days**

Bibliography

Davis, A 2003 The plant remains in Malcolm, G, Bowsher, D and Cowie, R *Middle Saxon London: excavations at the Royal Opera House 1989–99*. London:MoLAS

Samp no	Crem no	Spit no	Cont no	Process involved	Constituent	Abundance	Diversity	Comments
1			8167	flot	bone s mam	2	low	
1			8167	flot	chd chaff	1	low	culm node
1			8167	flot	chd grain	1	low	(c5) ft wehat,barley,indet
1			8167	flot	chd misc	2	low	chd stems
1			8167	flot	chd seeds	3	medium	cary/chen,che,ele,grass,v/l,monfo,rum,t/m
1			8167	flot	chd wood	3	low	
1			8167	flot	molsc tr	2	low	
1			8167	residue	chd wood	1	low	
9			8292	flot	bone s mam	1	low	
9			8292	flot	chd grain	2	low	c15 horvu,rye,wheat ft,indet
9			8292	flot	chd seeds	1	low	che,grass
9			8292	flot	chd wood	3	low	
9			8292	residue	bone fish	1	low	
9			8292	residue	chd grain	2	low	(20) barley,rye,ft wheat
9			8292	residue	chd misc	1	low	corav nutshell fragments
9			8292	residue	chd seeds	1	low	grass
10			8570	flot	chd wood	2	low	
16			8362	flot	bone s mam	1	low	
16			8362	flot	chd grain	2	low	(13) rye,barley,ft wheat
16			8362	flot	chd seeds	2	low	v/l,grasses
16			8362	flot	chd wood	3	low	
34			8525	flot	chd grain	2	low	(15) barley,wheat,rye,indet
34			8525	flot	chd seeds	1	low	grass,polav
34			8525	flot	chd wood	3	low	
36			8535	residue	chd grain	3	low	(50+) mainly barley, less rye and ft wheat
37			8537	flot	chd grain	1	low	barley (1)
37			8537	flot	chd wood	1	low	
	38	1	8867	flot	bone s mam	1	low	

Samp no	Crem no	Spit no	Cont no	Process involved	Constituent	Abundance	Diversity	Comments
	38	1	8867	flot	chd misc	1	low	stem
	38	1	8867	flot	chd seeds	1	low	grass
	38	1	8867	flot	chd wood	2	low	
	38	2	8867	flot	bone s mam	1	low	
	38	2	8867	flot	chd seeds	1	low	grass
	38	2	8867	flot	chd wood	2	low	
	38	3	8867	flot	bone s mam	1	low	
	38	3	8867	flot	chd seeds	1	low	indetf
	38	3	8867	flot	chd wood	2	low	
	38	4	8867	flot	bone s mam	1	low	
	38	4	8867	flot	chd wood	3	low	
	38	5	8867	flot	bone s mam	1	low	
	38	5	8867	flot	chd seeds	1	low	grass
	38	5	8867	flot	chd wood	3	low	
	38	6	8867	flot	bone s mam	1	low	
	38	6	8867	flot	chd wood	2	low	
39			8543	flot	chd seeds	1	low	grass
39			8543	flot	chd wood	2	low	
39			8543	flot	wlg seeds	1	low	pot/fra
	39	1	8868	flot	chd wood	2	low	
	39	2	8868	flot	chd wood	1	low	
	39	3	8868	flot	chd wood	1	low	
	39	4	8868	flot	chd wood	1	low	
41			8546	flot	chd wood	1	low	
	42	4	8840	flot	chd misc	1	low	stem
	42	4	8840	flot	chd seeds	1	low	chen
	42	5	8840	flot	chd wood	2	low	
46			8855	flot	chd wood	2	low	
	47	2	8858	flot	chd wood	1	low	
	47	5	8858	flot	chd wood	2	low	

Samp no	Crem no	Spit no	Cont no	Process involved	Constituent	Abundance	Diversity	Comments
	47	9	8858	flot	bone s mam	1	low	
	47	9	8858	flot	chd seeds	1	low	grass
	47	9	8858	flot	chd wood	2	low	
50			8613	flot	chd seeds	1	low	grass
50			8613	flot	chd wood	3	low	
53			8621	flot	bone s mam	1	low	
53			8621	flot	chd wood	3	low	
54			8627	flot	chd grain	1	low	indet,barley
54			8627	flot	chd wood	2	low	
57			8639	flot	chd wood	2	low	
62			8654	flot	chd grain	1	low	rye,wheat,barley,indet
62			8654	flot	chd seeds	1	low	grass
62			8654	flot	chd wood	2	low	
71			8693	flot	chd grain	1	low	ft wheat,horvu (2)
71			8693	flot	chd seeds	1	low	v/l
71			8693	flot	chd wood	2	low	
90			8760	flot	bone s mam	1	low	
90			8760	flot	chd grain	3	low	horvu,indet,wheat ft
90			8760	flot	chd seeds	1	low	v/l,grass,antco,atr
90			8760	flot	chd wood	3	low	
93			8763	flot	chd wood	2	low	
94			8770	flot	bone s mam	1	low	
94			8770	flot	chd grain	1	low	ft wheat (1)
94			8770	flot	chd seeds	1	low	grass
94			8770	flot	chd wood	1	low	
94			8770	flot	wlg seeds	1	low	rubid
95			8771	flot	chd chaff	1	low	
95			8771	flot	chd grain	3	low	(50+) barley,ft wheat,rye,oat
95			8771	flot	chd misc	2	low	stem

Samp no	Crem no	Spit no	Cont no	Process involved	Constituent	Abundance	Diversity	Comments
95			8771	flot	chd seeds	3	medium	ste,car,v/l,grass,rum,ele,antco,t/m,che
95			8771	flot	chd wood	3	low	
95			8771	flot	molsc tr	1	low	
101			8791	flot	bone s mam	1	low	
101			8791	flot	chd grain	2	low	(c 15) mainly barley,wheat
101			8791	flot	chd seeds	1	low	grass
101			8791	flot	chd wood	3	low	
114			8829	flot	chd misc	2	low	stems (++) and false oat grass tubers (+)
114			8829	flot	chd seeds	1	low	cype,atr,rum
114			8829	flot	chd wood	3	low	
124			8829	flot	chd misc	1	low	false oat grass tuber
124			8829	flot	chd seeds	1	low	indet
124			8829	flot	chd wood	2	low	

Appendix R

Conservation
Liz Goodman

Quantification

Table 1 Summary of conservation work of the accessioned finds from LTM03

	Material	**No. accessioned**	**No. conserved**	**No. to be treated** (see below)
Organics	Amber	1	0	1
	Bone	47	0	3
Composite		2	0	1
Metals	Copper alloy	23 (5 coins)	6 (5 coins)	8
	Iron	21	0	12
	Silver	1	0	0
Inorganics	Ceramics	90	0	3
	Glass	23	0	2
	Stone	26	0	0

Summary/Introduction

The following assessment of conservation needs for the accessioned and bulk finds from the excavations at London Transport Museum, Covent Garden, encompasses the requirements for finds analysis, illustration, analytical conservation and long term curation. Work outlined in this document is needed to produce a stable archive in accordance with MAP2 (English Heritage 1992) and the Museum of London's Standards for archive preparation (Museum of London 1999).

Conservation support at the time of the excavation was provided by conservators working for the Museum of London Specialist Services. Records of conservation carried out at the fieldwork stage are held in the conservation department of the Museum of London.

Methodology

Treatment of objects at the fieldwork stage includes the stabilisation of vulnerable materials and composites, cleaning of coins for dating purposes and investigative cleaning and conservation according to archaeological priorities.

Treatments are carried out under the guiding principles of minimum intervention and reversibility. Whenever possible, preventative rather than interventive conservation strategies are implemented. Procedures aim to obtain and retain the maximum archaeological potential of each object: conservators will therefore work closely with finds specialist and archaeologists.

All conserved objects are packed in archive quality materials and stored in suitable environmental conditions. Records of all conservation work are prepared on paper and

on the Museum of London collections management system (Multi MIMSY) and stored at the Museum of London.

Finds analysis/investigation

The accessioned finds were assessed by visual examination of both the objects and the X-radiographs, closer examination where necessary was carried out using a binocular microscope at high magnification. The accessioned finds were reviewed with reference to the finds assessments by Lyn Blackmore

A number of metal items were identified as requiring conservation input to prepare them for the find specialists.

Experience of other Lundenwic sites suggests that the preservation of this material will be poor this has been taken into account when estimating the costs for this project. The following revised costs were produced in discussion with Lyn Blackmore.

[8169] <134> iron		
[8646] <135> iron		
[8505] <137> iron		
[8766] <237> iron		
[8829] <149> copper alloy – re X-ray from a different angle	all 5 objects	0.25 pd
[8701] <16a> amber, beads – clarify detail		0.75 pd
[8172] <168> bone, comb – clarify detail		
[8525] <186> bone, comb – clarify detail		
[8771] <200> bone, comb – clarify detail	all 3 objects	0.5 pd
[8829] <147> glass, bead – clarify detail		0.75 pd
[8701] <233> glass, bead – clarify detail		0.25 pd
[8382] <8> copper alloy, ingot – clarify detail		1.5 pd
[8606] <11> copper alloy unident – clarify detail	possibly active see archive deposition	
[8701] <17> copper alloy, buckle – clarify detail		0.75 pd
[8701] <19> copper alloy, buckle – clarify detail		1 pd
[8831] <40> copper alloy, unident – clarify detail		0.75 pd
[8699] <43> copper alloy, tweezers – clarify detail		2 pd
[8570] <113> copper alloy, unident – clarify detail		1.5 pd
[8701] <20> iron, unident – clarify detail to aid identification		4 pd
[8701] <69> iron, knife – clarify detail, investigate if MPO remain		1 pd
[8701] <121> & <125> iron, unident – clarify detail, possibly one object		0.75 pd
[8829] <127> & <129> iron, unident – clarify detail, possibly one object		1 pd
[8505] <130> iron, unident – possible key, clarify detail		0.75 pd
[8505] <137> iron, mounts – clarify detail		0.5 pd

[8645] <14> silver/garnet, brooch – clarify detail 2 pd

Total for analysis and investigation 19.75 pd
NB <113> is associated with human bone, this cost is to separate the copper alloy from the bone, if it is decided that this is unnecessary then this cost can be removed

Work required for illustration/photography

One item was identified as requiring conservation input to prepare it for drawing and photography.

[8543] ceramic, stamped 0.75 pd

Total for illustration and photography 0.75 pd

Preparation for deposition in the archive

If the material is to be deposited in the LAARC the Museum of London's archive standards (1999) need to be considered. These state that the accessioned finds need to be appropriately packed and stabilised before the site can be accepted into the archive. The following work is required to bring them into line with the set standards and ensure that the archive is stable before transfer.

At present all of the metal is stored in Stewart boxes with silica gel to maintain a low relative humidity and all appears stable. At a minimum the accessioned objects should be supported within the bags with a sheet of 'Jiffy foam' with the object visible from one side. There should also be two Tyvek finds label must be placed within the bag, the guidelines also suggest that pre-printed labels are used.

The material appears to be stable except one copper alloy object, which will need stabilising before deposition in the archive.
[8606] <11> copper alloy unident 1 pd

Repacking of accessioned objects, in addition to the objects Lyn Blackmore has agreed to repackage whilst undertaking the analysis phase 0.5 pd

Three vessels were excavated whole on site and are currently supported with bandages, these require conservation before deposition in the archive.
[8829] <38> ceramic, vessel 0.5 pd
[8829] <39> ceramic, vessel 0.5pd
[8829] <47> ceramic, vessel 0.5 pd

Total for stabilisation of the archive 3 pd

Analysis of Potential

Significance of data

Revised Research Aims

Method Statements

Task list for recommended future work

Task 1 Analysis and investigative work 19.75 days
NB <113> is associated with human bone, this cost is to separate the copper alloy from the bone, if it is decided that this is unnecessary then this cost can be removed

Task 2 Illustration 0.75 days

Task 3 Stabilisation for the archive 3 days

Total 23.5 days

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Appendix R

Wood Charcoal Macro-remains

P. J. Austin

Introduction

Investigation of wood charcoal recovered during excavation of deposits underlying the London Transport Museum, Covent Garden, provides an important opportunity to investigate wood use on the site of the Saxon settlement and trading centre *Lundenwic*; prior to its abandonment and relocation, to within the walled remains of Roman *Londinium,* at the end of the 9th Century AD. In addition to identifying the range of woods exploited and modes of exploitation, information about the likely source(s) of the woods used, the nature of its acquisition and the management of wood resources may be inferred following detailed analysis. Investigation of the wood remains may also lead to a better understanding of the function of particular features.

The purpose of this assessment is to identify the contexts/samples most likely to provide identifiable charcoal from which meaningful information can be obtained concerning fuel-wood use, structural wood and wood associated with crematory activities.

Methodology

Charcoal was recovered alongside other plant macro-remains from 40-60*l*(?) bulk samples taken as part of the wider environmental investigation. In total 69 samples from 37 contexts, most provisionally dated to the middle Saxon period, were available for assessment. All samples were catalogued and an estimate of the number of fragments in each sample was made. To better assess fragment condition and gain an insight into sample composition 10 fragments from samples containing >50 fragments and 5 fragments from samples containing <50 fragments were randomly picked for examination under the microscope. Fragments from only 1 sample were examined for contexts for which more than 1 sample was available. All fragments examined were >2mm, and when possible, >4mm. Fragment preparation and examination followed standard procedures as described in Hather (2000). Nomenclature follows Stace (1997).

Results

Details of all contexts/samples and a summary of the taxa identified in each sample are listed in Table 2. In the final column context/samples recommended (R) or not recommended (NR) for further study are indicated.

Contexts 8615 and 8621 contained pottery of two periods (Saxon and 18th/19th century) suggesting that these are not secure deposits and it is possibile that the charcoal may be a mix of material from distinct periods. For this reason these samples are not recommended for further study. No further work is necessary for Contexts 8169, 8295, 8546, 8548 and 8639 because each contained 1-10 fragments all of which were identified. In all other instances where further work is not recommended it is for one or more of the following reasons: too few fragments are present for meaningful analysis, preservation of fragments

is consistently poor and likely to prevent successful identification and, lastly, no further significant information is likely to be recovered.

Identification was made to the lowest level possible, typically to genus. Instances where fragment identity could not be determined with great certainty are indicated by 'c.f.' preceeding the name of the most likely taxon. The anatomically similar woods of *Salix* and *Populus* and that of *Corylus* and *Alnus* could not always be differentiated and is are listed as *Salix/Populus* and *Corylus/Alnus*, respectively. Whilst some fragments were positively identified as *Corylus* no fragments were positively identified as *Alnus*. The 2 native species of *Quercus* nor members of the Maloideae, a sub-family of the Rosaceae, cannot be differentiated anatomically.

In total, 10 taxa (listed in Table 1.) were identified among the 255 fragments examined. All are hardwoods (angiosperms) indigenous to the UK. No softwoods (gymnosperms) or exotic taxa were identifed.

Table 1. Taxa identified

Taxon	English Name	Total No. frags	No. samps present
Acer (c.f. *A. campestre*)	Maple (Field Maple)	10	9
Corylus avellana	Hazel	18	13
Corylus/Alnus	Hazel/Alder	11	5
Fagus sylvatica	Beech	7	5
Fraxinus excelsior	Ash	9	6
Ilex aquifolium	Holly	2	2
Maloideae includes: *Crataegus, Sorbus,* *Malus, Pyrus*	Hawthorn, Whitebeams, Rowan, Apple, Pear.	25	14
Prunus sp.	Blackthorn, Cherries	6	6
Quercus sp.	Oak	164	34
Salix/Populus sp.	Willow/Poplars	2	2
Ulmus sp.	Elm	1	1

Postholes

Contexts 8546, 8548 & 8407

Material recovered from the fill of postholes may contain charcoal derived from the original structural timbers or, alternatively, represent unrelated material deposited following decay or removal of the posts.

8546. 1 of the 2 fragments present was identified as *Corylus*. The other fragment could not be identified. While *Corylus* has been widely used for structural purposes from prehistory onwards, it cannot be reliably inferred from this single fragment whether or not the remains of a *Corylus* post are represented in this deposit.

8548. All 8 fragments were examined. Three taxa were identified: *Quercus* (n=3), Maloideae (n=1) and *Corylus/Alnus* (n=1). The remaining fragments could not be identified. The mix of taxa and the presence of bone fragment suggests that this charcoal is unrelated to the original timber post.

8407. Charcoal in this context was significantly more abundant (n=100+) than the other posthole deposits. *Quercus* (n=7) is apparently the most frequent taxon. The other taxa identified: *Corylus*, Maloideae and *Prunus*. were each represented by 1 fragment. Fragment characteristics suggest that the large majority of unexamined fragments are also *Quercus.* Further work would confirm if *Quercus* is the dominant taxon and provide a more reliable account of the full range of taxa present. Again the mix of taxa, and the presence of *Prunus* twig-wood, suggests that this deposit does not derive from structural timbers. However fragments of *Quercus* heartwood, indicated by the presence of tyloses, suggests that some of the charcoal derived from mature timber.

Pit deposits

Contexts 8169, 8292, 8295, 8525, 8615, 8621, 8637, 8763, 8770, 8836

Pit deposits are likely to represent the purposeful or incedental deposition of debris from hearths or other fires. The range of taxa identified is likely to provide evidence of the woods used for fuel.

8169. A single fragment of *Quercus* was present in this sample.

8292. This is a large sample containing 300+ fragments. The condition of many fragments is poor. Anatomical features were frequently obscured by heavy mineral deposits. *Quercus* (n=5), *Fagus* (n=2), *Corylus/Alnus* (n=1) and *Acer* cf. *campestre* (n=1) were identified and are thought to represent dumped fire debris. Further study is recommended to recover a more complete account of the woods used for fuel and help determine if taxa were used selectively.

8295. The 5 fragments present were identified as *Quercus* (n=4), including fragments of twig-wood, and Maloideae (n=1) and probably represent two of the woods used for fuel.

8525. Five taxa were identified: *Quercus* (n=4), *Prunus* (n=1), *Fraxinus* (n=1), Maloideae (n=3) and *Fagus* (n=1). *Quercus* fragments included fast grown immature wood. Based on fragment characteristics, the unexamined fragments from this sample are believed to be *Quercus*. Further work is unlikely to contribute additional information.

8615. A relatively large quantity of charcoal (n=150+) was recovered from this deposit and, despite poor fragment condition, 3 taxa were identified: *Corylus* (n=1), *Faxinus* (n=1) and *Quercus* (n=8). The *Quercus* fragments included both mature and immature wood. The fragment

of *Fraxinus* came from slow grown mature wood. Dating of pottery from this context suggests that the deposit is insecure and that the charcoal may be a mix of material from the 18th and 19th centuries and the more ancient past. If so, the information recovered is unlikely to be reliable. No further work is recommended.

8621. The content of this pit is also possibly a mix of material from the Saxon period and the 19th Century. *Quercus* (n=3) *Corylus* (n=2), *Fagus* (n=2) and *Salix/Populus* (n=1) were identified. The condition of all fragments is poor. Again this is due to heavy mineral deposits. No further work is recommended.

8637. Fragment identification was made difficult by heavy mineral deposits. Nonetheless, two taxa: *Quercus* (n=3) and cf. *Corylus* (n=1) were identified. Most, if not all, of the unexamined fragments are believed to be *Quercus*, based on fragment characteristics. Further work is unlikely to contribute additional information.

8763. This small sample of 15 fragments contained large fragments of slow grown *Fraxinus* (n=4), and fast grown immature *Quercus* (n=1). No further work is recommended because of the small size of the sample and poor preservation due to mineral encrustation.

8770. This sample, like 8763, is taken from the fill of a large pit (8764) though it may be earlier in date. Fragments are in the same poor condition. *Acer* (n=1), large fragments of *Maloideae* (n=2) and *Quercus* (n=2) heartwood were identified. No further work is recommended because of the low quantity of material and fragment condition.

8836. A single *Quercus* fragment was recovered from this deposit.

Well deposits

Contexts 8535, 8537, 8613 & 8654

Charcoal in well contexts is most likely to represent dumped fire debris deposited sometime after the wells fell into disuse. Though the charcoal is likely to represent the remains of several fire episodes, the rate of charcoal accumulation is unclear. Further study may help clarify this.

8535. The range of taxa identified, Maloideae (n=1), *Corylus* (n=2), *Fagus* (n=1) and *Quercus* (n=1), suggest that this is probably fire debris. Fragments were again adversely affected by mineral deposition. The unexamined material is believed to include several fragments of *Quercus*. Further study is recommended to recover a more complete account of the taxa present.

8537. All fragments from the sample examined (1 of 3) were in poor condition due to heavy mineral deposits, acute thermal degradation and, possibly, biological degradation. *Quercus* was represented by 2 fragments of the inner-most wood probably derived from small diameter round-wood. *Corylus/Alnus* (n=4) and cf. *Acer* (n=1) were also present. Further work is recommended on material from the 2 unexamined samples.

8613. It is not clear if the feature (8604) from which this sample (1 of 3) was recovered is a deep pit or a well. Nonetheless, mineral deposition in fragments was less severe and it

was possible to identify 5 taxa: slow grown *Quercus* heartwood (n=3), *Fraxinus* (n=1), cf. *Acer* (n=1), *Corylus/Alnus* (n=4) and *Fagus* (n=1). Further study is recommended to recover a more complete account of the woods present.

8654. This deposit appears to be dominated by *Quercus* (n=8), including both heartwood and fast grown immature wood. *Fraxinus* (n=1) was also represented. It is unlikely that these are the only taxa in this deposit and further work is recommended to identify the other taxa present.

Cremation deposits

Contexts: 8829, 8840, 8841, 8855, 8858 & 8868

Charcoal associated with cremation deposits almost certainly represents the woods used in the cremation process. Unlike charcoal from the other context types, material from crematory samples was generally in good condition and mineral deposits were significantly less, but average fragment size was noticably smaller. The majority of fragments are closer to 2mm than 4mm+. It is unclear why the fragments in these deposits are more reduced in size than in other contexts.

8829. This sample was taken from a pit containing the remains of cremations 38 and 39 and may therefore contain wood from two distinct burning episodes. *Quercus* (n=10) was the only taxon identified. Fragments included possible twig-wood and branch wood. Thermal degradation was often acute, suggesting exposure to extreme temperatures, though none of the fragments examined were vitrified. Further investigation will establish if *Quercus* is the only taxon present.

8840 & 8841. Charcoal from these contexts (pit fill and pit, respectively) is associated with cremation 42. *Quercus* (n=9) appears to be the most abundant taxon in this sample. However cf. *Acer* (n=1) was also identified and other taxa may be present. Thermal degradation was frequently severe and in at least 1 fragment areas of vitrification were observed. Further study will establish if *Quercus* is the domnant taxon and if other taxa are present.

8855. *Quercus* (n=8) again seemingly dominates this sample (1 of 4), from the fill of cremation vessel 46, and again *Acer* (n=1) is the only other taxon identified. It is not clear if the *Quercus*/*Acer* association is significant, further investigation may help clarify this. *Quercus* fragments include slow grown heartwood, suggesting the use of large mature timbers. Thermal degradation was severe in most fragments and some fragments exhibited signs of possible biological degradation. Further examination will provide more information about fragment condition and what it may indicate, and establish if *Quercus* is the most abundant taxon.

8858. Fragments in this sample (1 of 6), from the fill of pit 8859 containing cremation 47, were poorly preserved. Of the 10 fragments examined 8 could not be identified. *Quercus* heartwood (n=2) was identified. Mineral deposits, acute thermal degradation and possble

biological degradation each contributed to the poor conditon of the fragments. Examination of material from the unexamined samples should provide more useful information concerning the range of taxa present.

8868. Fragment condition was generally good. All 10 fragments examined were identified as *Quercus*, including 2 fragments from fast grown wood lacking tyloses. Further study will establish if *Quercus* is the only taxon present.

Layer deposits

Contexts 8167, 8362, 8385, 8398, 8405, 8639, 8656, 8760, 8771, 8791 & 8811.

8167. Described as a 'burnt layer' the large amount of charcoal (n=300+) from this context probably represents *in situ* fire debris. This may be supported by the large size of some fragments (>15mm) which suggests that physical disturbance, a significant factor contributing to reduction in fragment size, was not great. Two taxa, *Quercus* (n=9) and cf. *Prunus* (n=1) were identified. *Quercus* fragments include immature and fast grown wood. The composition of this sample is similar to that of the cremation samples described above and further investigation is necessary to fully assess the range of taxa present and help clarify what the remains in this deposit actually represent.

8362. Fragment preservation was sometimes poor because of mineral deposits. Four taxa Maloideae (n=2), Corylus (n=3), Quercus (n=4) and Prunus (n=1) were identified. *Quercus* fragments included twig-wood and fast grown wood lacking tyloses. It is likely that this material represents redeposited fire debris and probably contains more taxa than those identified. Further work is recommended to identify other taxa that may be present.

8385. Described as a 'charcoal and clay layer' the charcoal probably represents redeposited fire debris. Fragments of unidentified bone were also present. Four taxa were identified: *Ulmus* (n=1), *Quercus* (n=6), *Corylus* (n=2) and Maloideae (n=1). *Quercus* fragments include both heartwood and fast grown wood. Further investigation is recommended to identify what other taxa are present.

8398. All 5 fragments examined were identified as *Quercus,* as were the 15 unexamined fragments, based on fragment characteristics.

8405. Severe thermal degradation, probable biological degradation and mineral encrustation all contributed to the poor state of preservation. Nonetheless, 3 taxa were identified: *Salix/Populus* (n=1), Maloideae (n=1) and *Quercus* (n=3). Fragment size and condition, and the low quantity of fragments available, mean that little useful information is likely to be gained by further study.

8656. *Quercus* (n=4) and *Corylus* (n=1) twigwood were the only taxa identified. Based on gross fragment characteristics, the remaining 25 fragments are believed to be *Quercus*. Thermal degradation was severe in some *Quercus* fragments. Little useful information is likely to be retrieved by further study.

8760. Mineral deposits were not extensive and preservation was generally good. Five taxa: *Corylus* (n=1), *Ilex* (n=1), *Prunus* (n=1), fast grown *Quercus* (n=6) lacking tyloses, and Maloideae (n=2) were identified. It is thought that this material represents fire debris, possibly from a hearth, and that further study will identify any other fuel woods present.

8771. Preservation was generally good. *Fraxinus* (n=1), Maloideae (n=2), *Acer* (n=1), *Corylus* (n=1) and *Quercus* (n=5) were identified. Most fragments, including those of *Quercus*, appear to derive from relatively young round-wood. This material is thought to represent fire debris, possibly from a hearth. Further study is recommended to identify any other fuel woods present.

8791. Only 11 fragments were recovered from this context of which 2 were identified as *Corylus* and 3 as *Quercus*. The remaining unexamined fragments were identified as *Quercus* on the basis of fragment characteristics. An unidentified bone fragment was also present. It is thought that this material represents redeposited fire debris.

8811. Only 2 fragments, identified as *Acer*, were recovered from this deposit.

Other

8991. No context description or other information was available for this context. *Acer* (n=1), Maloideae (n=1), *Corylus* (n=1) and *Quercus* (n=7) were the taxa identified.

Summary

Fragment preservation was often poor. Crematory material was generally better preserved than non crematory samples. Severe thermal degradation, and some vitrification, was most pronounced in cremation samples while mineral deposition was more common in other context types. The majority of charcoal is believed to derive from use as fuel, for domestic/industrial purposes and the ritual of cremation. While a fairly broad range of taxa were represented in non-crematory contexts, *Quercus* clearly dominates cremation samples and was no doubt chosen specifically for this purpose.

The majority of material studied falls within the period AD 550-850 and the range of taxa employed over this period appears to be fairly consistent. Some woods, *e.g. Salix/Populus* example, may have been sourced from the area around the settlement. The presence of twig-wood may support this suggestion. However, it is thought that much wood was imported from greater distances. It is unlikely, for example, that either *Fagus* or *Acer* could have thrived on the clays and gravels prevalent in the area. Assemblage composition is indicative of various types of deciduous woodland, almost certainly including stands of *Fagus* woodland and *Quercus* woodland, and plant associations favouring riverine habitats, as suggested by the presence of *Salix/Populus*, *Ulmus*, and *Fraxinus*. Scrubland and more open vegetation is suggested by the presence of *Corylus*, *Prunus* and *Maloideae.*

Wood consumption for domestic fuel, construction and cremations would have been high and it is likely that some form of resource management would have been necessary to ensure continued supplies. In this respect it seems significant that the most common taxa identified in this assessment, *Quercus*, *Corylus* and *Acer*, along with *Fraxinus* and *Fagus*, are taxa that respond well to silvicultural techniques, and are known to have been subject to coppicing and pollarding in antiquity. Many of the *Quercus* fragments examined derived from fast grown wood which is perhaps suggestive of wood subject to such management for the production of timbers. Detailed study of the anatomical characteristics of individual fragments may provide more plausible evidence of resource management and the condition of woods when charred.

Given the paucity of information about wood and wood use in *Lundenwic* further study of the material assessed here is highly desirable. Further study will undoubtedly help establish the full range of taxa utilised over the centuries that the settlement was occupied and allow some measure of taxon abundance. A clearer account of the probable source(s) of the wood is also likely to emerge along with any temporal variation in the woods represented.

Further Work

Following assessment the samples listed below (table 1.) were identified as suitable for further work. Full analysis of the samples will entail examination of 100 fragments from each context (including fragments identified during assessment). This is the minimumum number of fragments necessary to recover the full range of taxa present. In addition to determining fragment identity, where possible, detailed study of wood anatomical features should provide additional information concerning the properties of the wood used. It should also be possible to assess the relevant abundance of the woods represented. The material selected for further study will enable meaningful comparisons to be made within and between context types and will provide a direct account of the woods actually used at the site, along with information concerning wood use, and environmental data.

The results of the detailed analysis will be presented and fully interpreted in a comprehensive written report. Where possible, the results of this investigation will be compared to charcoals from sites/contexts of similar age and type.

Table 1.

Task	**Context type**	**Context No.** (Qty of samps)	**No. days**
Charcoal ID/Analysis (100 fragments per context)	'Layers'	8167 (1)y	2.5
		8760 (3)y	
		8771 (3)y	
		= 3 contexts (5)	
Charcoal ID /Analysis (100 fragments per context)	Pit & Well deposits	8613 (2)y	2
		8292 (1)y	
		= 2 contexts (3)	
Charcoal ID/Analysis (100 fragments per context)	Cremation deposits	8829 (6)y	1.5
		8840 (5)y	
		8868 (4)	
		= 3 contexts (15)	

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Appendix T

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Appendix U

OASIS Form

OASIS DATA COLLECTION FORM: England

List of Projects | **Search Projects** | **New project** | **Change your details** | **HER coverage** | **Change country** | **Log out**

Printable version

OASIS ID: aocarcha1-25631

Project details

Project name	London's Transport Museum, Covent Garden, City of Westminster: A Post-Excavation Assessment
Short description of the project	Between June and October 2005 a programme of archaeological work was undertaken by AOC Archaeology Group at London's Transport Museum on behalf of Wates Group. The work was carried out ahead of the scheme to extend the museum basement and comprised an initial watching brief on seven pile holes, followed by a full excavation of the area affected by the development. The earliest archaeological features were dated to the Early Saxon period (mid 6th to early 7th centuries) and consisted of two inhumation and nine cremation burials cut into the natural deposits, concentrated in the southwest part of the site. Several grave goods were retrieved from one inhumation burial including approximately 19 amber beads from a necklace and an oval loop and cello-shaped shield buckle. By the early to mid 7th century the area of the site was abandoned as a burial ground, probably as a result of the settlement of Lundenwic expanding in a northerly direction. Between the early to mid 8th century occupation of the site occurred and was represented by a series of large waste pits, wells and stake and postholes. Dumped deposits of burnt debris were also prevalent towards the mid 8th century. A series of gravel layers dating to the mid to late 8th centuries probably represented yard or alley surfaces. From the late 8th to the mid 9th century a series of dumped deposits and waste pits were the latest evidence for Saxon activity on the site. Truncating the Saxon deposits were substantial postmedieval drains, pits and walls. These were the remnants of the late 17th and 18th century basements and their associated features.
Project dates	Start: 21-03-2005 End: 07-10-2005
Previous/future work	Yes / No
Any associated project reference codes	LTM03 - Sitecode
Type of project	Recording project

Site status	Conservation Area
Site status (other)	Area of Archaeological Priority
Current Land use	Other 2 - In use as a building
Significant Finds	POTTERY Early Medieval
Significant Finds	ANIMAL BONE Early Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	ANIMAL BONE Post Medieval
Investigation type	'Full excavation','Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON CITY OF WESTMINSTER CITY OF WESTMINSTER London's Transport Museum, Covent Garden, City of Westminster
Postcode	WC2E 7BB
Study area	430.00 Square metres
Site coordinates	TQ 3042 8085 51.5110078744 -0.120384175022 51 30 39 N 000 07 13 W Point
Height OD	Min: 16.55m Max: 16.90m

Project creators

Name of Organisation	AOC Archaeology Group
Project brief	Contractor (design and execute)

originator	
Project design originator	AOC Archaeology Group
Project director/manager	Ron Humphrey
Project supervisor	Andy Leonard
Type of sponsor/funding body	Developer
Name of sponsor/funding body	London's Transport Museum

Project archives

Physical Archive recipient	Museum of London
Physical Archive ID	LTM03
Physical Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Metal','Worked bone'
Physical Archive notes	Archive to be stored at AOC Archaeology until completion of project
Digital Archive recipient	Museum of London
Digital Archive ID	LTM03
Digital Contents	'Stratigraphic','Survey'
Digital Media available	'Images raster / digital photography','Images vector','Spreadsheets','Text'

Digital Archive notes	Archive to be stored at AOC Archaeology until completion of project
Paper Archive recipient	Museum of London
Paper Archive ID	LTM03
Paper Contents	'Stratigraphic','Survey'
Paper Media available	'Context sheet','Manuscript','Map','Matrices','Microfilm','Photograph','Plan','Report','Section','Survey','Unpublished Text'
Paper Archive notes	Archive to be stored at AOC Archaeology until completion of project

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Evaluation at London Transport Museum, Covent Garden WC2.
Author(s)/Editor(s)	Stevens, T.
Date	2001
Issuer or publisher	AOC Archaeology Group
Place of issue or publication	AOC Archaeology Group
Description	A4 bound document

Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)

Title	An Archaeological Watching Brief at London Transport Museum, Covent Garden, London WC2E 7BB
Author(s)/Editor(s)	Fitz, P.
Date	2003
Issuer or publisher	AOC Archaeology
Place of issue or publication	AOC Archaeology
Description	A4 bound document

Project bibliography 3

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Impact Assessment of London Transport Museum, Covent Garden, City of Westminster
Author(s)/Editor(s)	Hemley, S.
Date	2003
Issuer or publisher	AOC Archaeology
Place of issue or publication	AOC Archaeology
Description	A4 bound document

Project bibliography 4

Publication type	Grey literature (unpublished document/manuscript)
Title	London's Transport Museum, Covent Garden, City of Westminster: Archaeological

	Excavation - Project Design
Author(s)/Editor(s)	Humphrey, R.
Author(s)/Editor(s)	Beasley, M.
Date	2004
Issuer or publisher	AOC Archaeology
Place of issue or publication	AOC Archaeology
Description	A4 bound document

Project bibliography 5

Publication type	Grey literature (unpublished document/manuscript)
Title	London's Transport Museum, Covent Garden, City of Westminster - A Post-Excavation Assessment Report
Author(s)/Editor(s)	Leonard, A.
Date	2007
Issuer or publisher	AOC Archaeology Group
Place of issue or publication	AOC Archaeology Group
Description	A4 bound document

Entered by	Andy Leonard (andyleonard@aocarchaeology.co.uk)
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