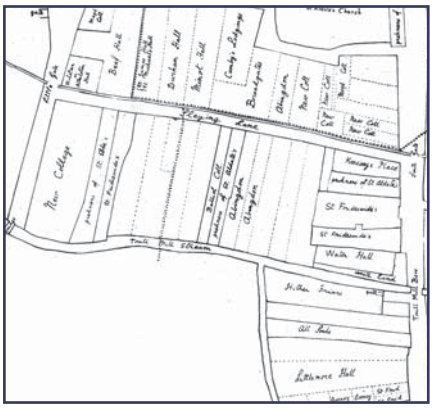
Archaeological Evaluation Report

Pembroke College
Brewer Street Development



Archaeological Evaluation Report

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Pembroke College, Brewer Street Development, Oxford

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Prepared by Robin Bashford and illustrated by Georgina Slater

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Summary

In September 2008, Oxford Archaeology (OA) carried out a field evaluation at Brewer Street, Oxford. The work was undertaken on behalf of Pembroke College, in advance of the submission of a planning application for the proposed development of the site.

The focus of the evaluation was within a 301 m^2 basement area within the proposed development; two trenches were excavated, totalling c 5% of the proposed basement area.

The evaluation revealed deeply stratified clay rich deposits which may represent fills of the pre-conquest configuration of a branch of the Thames, subsequently known as the Trill Mill Stream. Overlying and also to the north of these possible fills were a series of deposits, which may correlate to the deliberate deposition of material along the interface between the Thames floodplain and the second gravel terrace to the north, upon which is located the medieval walled town of Oxford. This process of 'land reclamation' has been identified elsewhere along the edge of the second terrace, in particular during recent archaeological work at the Westgate car park to the west of Brewer Street, where the reclamation deposits were dated to the 12th-13th century. The dating evidence from the deposits encountered during the evaluation at Brewer Street would suggest that these date to the 13th-14th century. Consequently, if the interpretation of these deposits is valid, then the process appears to be later at Brewer Street, possibly suggesting that the reclamation of land was by no means synchronous between all the sites where it has been identified.

A possible pit and a north-south aligned linear feature truncated these deposits in the south of the investigation area. The function of the pit was unclear, although it may relate to a tenement plot fronting on to Brewer Street. The function of the linear feature was also unclear but it is possible that it formed a drainage channel running from the town to the Trill Mill Stream. Overlying the fills of these two features were a series of imported garden soils, which are possibly contemporary with the construction of the existing buildings fronting on to Brewer Street in the 17th century.

In the north of the investigation area the land reclamation deposits were truncated by a north-south aligned limestone wall, a similarly aligned ceramic drainage pipe, and a 20th-century brick built inspection pit; associated with the use of the current building as a garage. The date of the limestone wall was uncertain, as it had been truncated to the west by the trench for the ceramic pipe, and to the east by what appeared to be a 19th-century pit. However, to the north of the wall, a potentially contemporary compacted gravel surface, produced 14th-15th century roof tile. The wall also appeared to have been modified, possibly in the 19th century, by the addition of a chute, the function of which was unclear. Despite the uncertainties with regard to the date of this structure, it seems likely that the wall relates to the cellar of a building which formerly fronted onto Brewer Street.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 Oxford Archaeology (OA) carried out an archaeological evaluation at land adjacent to Brewer Street, Oxford in advance of a proposed development, which comprises new build student accommodation for Pembroke College, while retaining Numbers 7 and 8 Brewer Street, which are Listed Buildings.

1.1.2 The site lies on the southern side of the historic city of Oxford just outside the medieval city wall, and occupies an area of land measuring approximately 0.25 ha. This is bounded by Brewer Street and the city wall to the north, Campion Hall to the east, Rose Place to the south and Littlegate Street to the west; the site is centred on NGR 451250 205925. The proposed development comprises mixed buildings and open space. There are two listed buildings within the site, Numbers 7 and 8 Brewer Street, known jointly as the Bannister Building. The site lies to the west of St Aldates, and to the north of the present course of the River Thames. The confluence of the River Thames and Cherwell lies *c* 1.2 km to the south-east of the site.

1.1.3 A watching brief was recently carried out during a geotechnical investigation. The work involved the excavation of seven test pits to investigate the foundations of existing structures, which are to be retained during the proposed development. In addition to the test pits, seven boreholes will inform on site ground conditions with regard to the design of the substructure of the proposed construction works (Price & Myers, forthcoming).

1.2 Geology and topography

1.2.1 The site lies on the floodplain gravel terrace, immediately south of the second terrace which rises north from Brewer Street. The underlying geology is Oxford Clay.

1.2.2 The site is situated on flat land at *c* 57 m OD. The land falls away to the south towards the River Thames at Folly Bridge.

1.2.3 The area adjacent to the southern edge of the site historically comprised a complex pattern of watercourses, which have altered considerably since the prehistoric period. There are many natural islands in the Thames creating several different channels, some of which were already silted up by the 11th century. Many of the smaller streams which existed have disappeared and others now run through artificial culverts. These streams were exploited for mills during the medieval and early post medieval periods.

1.2.4 The topography of this area originally rose steeply onto the second gravel terrace, marked by the approximate line of the City Wall on Brewer Street. Since the early medieval period a considerable amount of riverine deposition and deliberate land reclamation has raised the ground level in the southern portion of St Aldate's, making this slope less pronounced.

1.3 Archaeological and historical background

1.3.1 Following advice from Brian Durham, the Oxford City Council (OCC) Archaeologist, OA was commissioned to undertake a Desk Based Assessment in May 2006 (OA 2006). The following Section is largely reproduced from that document, but also summarises the results from an archaeological evaluation at the Westgate centre, to the west of the proposed development site.

Past archaeological investigations

1.3.2 The greatest influence on the archaeological potential of the area of proposed development arises from its situation on the edge of the second gravel terrace on the north bank of the River Thames. The current courses of the river and tributary streams are the product of deliberate 19th-century re-working, but the channels had developed and altered continuously from the beginning of the Holocene.

1.3.3 Much of the surrounding area has undergone major redevelopment since the middle of the 20th century and a large amount of archaeological investigation has been carried out as a result. Much of this has been on properties adjacent to St Aldate's. These sites include:

- 33 St Aldate's where a possible building of 11th to 12th century date was identified along with parts of the Norman Grandpont. Land reclamation may have begun on the site by the mid Saxon period.
- 56 - 60 St Aldate's. Excavations on this site, adjacent and to the south of the proposed development demonstrated the possibility of late Saxon river bank strengthening. Above this were substantial reclamation deposits on which building had begun by the late 13th century.
- 65 St Aldates. Excavations identified a possible late Saxon paved ford overlain by flood and reclamation deposits. Again mid to late Saxon bank strengthening was identified. Building appeared to begin on the site in the late 13th century.
- 79 - 81 St Aldate's. Excavations on this site identified a clay bank that may potentially represent a causeway in use by 800 AD. This was overlain by alluvial deposits with evidence for land consolidation. Building on the site appears to have begun in the 10th century. The possible causeway was also identified on the east side of St Aldate's at the site of former Linacre College.
- 89 - 91 St Aldate's. Excavations on this site identified the development history of the Trill Mill Stream from the Holocene to present day. Land reclamation and bank strengthening had begun on the site by the mid Saxon period and the earliest occupations dated to the 10th century. Permanent occupation of the site is recorded from the 13th century.
- Sites at the Police station and land adjacent to the Police Station. Excavations on these sites demonstrated the presence of river bank consolidation by the 10th century with buildings present on reclaimed ground by the 13th century.
- St Aldate's Telecom Tunnel. Recording of deposits during the placement of Telecom cabling beneath Thames Street and St Aldate's identified post Holocene channel deposits, including a possible pre Bronze Age ford. This was overlain by flood deposits in which elements of a mid Saxon Bridge were recognised. Elements of the Norman Grandpont were also recognised. Settlement evidence was present from the 12th century onwards.

The Westgate evaluation

1.3.4 An archaeological evaluation was recently undertaken at the Westgate car park to the west of the proposed development site (OA 2008a). The following briefly summarises the results of the evaluation pertaining to the development of the Trill Mill Stream at the base of the second gravel terrace.

1.3.5 The evaluation largely confirmed the results of an earlier phase of trenching, although the additional data recovered allowed the site specific model for the hydrological and

sedimentary development of the floodplain to be refined. This model correlates broadly with the sequence postulated from previous excavations to the south of the medieval walled town, and elsewhere on the floodplain of the Upper Thames.

1.3.6 The evaluation provided confirmation of the Trill Mill Stream crossing the centre of the site. Further evidence for the origin, development and orientation of the channel from a Devensian channel to a managed water course in the medieval period was recovered.

1.3.7 There was also some evidence for managed water courses between the Trill Mill Stream and the Thames, which may have been contemporary with the Greyfriars' ownership of this area of the site, referred to in documentary sources as Boteham Island.

1.3.8 Additional evidence for 13th- to 14th-century land reclamation, extending southwards from the second terrace, was also revealed.

Albion Place

1.3.9 Additionally, recent investigations at Albion Place identified evidence for land reclamation and recent stone footings.

Significance of previous archaeological work

1.3.10 This archaeological work has led to a great deal of understanding about the formation of the watercourses associated with the River Thames to the south of Oxford since the Holocene. The work has also shed light on the development of a crossing point of the Thames on line with St Aldate's. The full sequences are not fully understood, but a hypothetical history has been produced by Mark Robinson based on the palaeoenvironmental evidence (Dodd 2003). This has added to the picture of human activity as well as showing the river's changes.

The early prehistoric period

1.3.11 There are no known archaeological sites or finds from this period within or close to the area of proposed development.

1.3.12 In the early prehistoric period Robinson's hypothetical model (Dodd 2003) suggests that the channel of the proto Trill Mill Stream ran east to west between Brewer Street and Rose Place, although its exact location is uncertain.

1.3.13 According to the model, the development area may have lain on the northern edge of a permanent flowing channel until the Late Bronze Age, when the build up of alluvium associated with increasing farming practices within the watershed created a wider shallower channel with reed swamp that had spread to the line of the 2nd terrace.

1.3.14 Relatively few early prehistoric finds have been recovered from Oxford although there is evidence for human activity from the Palaeolithic period onwards. A two-edged flint flake-knife, with fine scaly unifacial retouch at both edges was found during excavations in the gardens of the South-west lodging of Christ Church college in 1954-5, and is appropriate to a Neolithic industry (Case in Sturdy, 1961). Additionally, 21 pieces of utilised flint were recovered from excavations in the Cathedral Garden in 1961, which ranged in date from the Mesolithic to the early Bronze Age (Case in Sturdy, 1961). North of the site, in the University Parks, University Science Area and on Port Meadow, barrows have been found dating from the Bronze Age and about 1 km to the west there are signs of a Beaker period settlement (Hassall 1986).

1.3.15 A Neolithic pit has been identified on Littlegate Street during excavations in 1971.

The Iron Age

1.3.16 The area of proposed development contains no known archaeological remains from this period and none have been identified within 150 m of the site.

1.3.17 Robinson argues that during the late Bronze Age and Iron Age the water table rose and a wide swathe of land extending to the higher ground of the 2nd terrace became covered by shallow water in which reed swamps developed (Dodd 2003). Increased agricultural activity upstream is thought to have increased the level of sediment carried by the river which led to alluviation and the formation of multiple channels separated by seasonally flooded islands to the south of the site. Throughout this period the site would have stood on the northern edge of the flooded area.

The Roman period

1.3.18 The nature of Roman settlement within the central Oxford area is not clearly understood, although North Oxford has produced some evidence for Roman settlement.

1.3.19 The area of proposed development contains no known Roman archaeology and no sites or finds have been discovered within 150 m of it. If the hypothetical model already described above is accurate, the site lay on the northern edge of the floodplain in this period. Some 2 km to the east of the site was the site of an important pottery industry (Hassall 1986).

The Anglo-Saxon period

1.3.20 The town of Oxford is believed to have its origins in the early 8th century, about the time that St Frideswide's Priory was founded on the site of Christ Church. The city was certainly developed as a fortified Burh in the Reign of King Alfred or his son Edward the Elder. By the 10th century a network of streets had been established and a defensive circuit constructed. Although the exact line of this defensive circuit along the southern side of Oxford is uncertain, it is likely that it is preserved in the line of the later medieval wall that survives on the north side of Brewer Street. Wherever the early medieval rampart has been observed it has been on or close to the line of the later medieval wall (Dodd 2003), although the rampart is not always present and has only been certainly identified along the northern and eastern sides of the town. Observations along the southern circuit are less certain, a possible section of turf rampart has been observed in the grounds of Pembroke college immediately to the north of the later medieval town wall, and interpreted as forming part of the early medieval defences (CBA 1974). However, excavations to the west of the site in Littlegate Street demonstrated that the later medieval defences were built on an area of domestic occupation with no trace of an earlier defensive system. This may indicate that the southern rampart was intermittent in the Saxon period. The late Saxon rampart was seen to be over 15 m wide at Oxford Castle (Norton and Poore forthcoming) but a defensive ditch was not identified; the water courses may have been considered sufficient defence. At the Littlegate excavations, the rampart may have followed the north bank of the Trill Mill stream and was simply not observed during excavations (Hassall et al 1989).

1.3.21 Robinson's model suggests that the site remained on the edge of the floodplain for the majority of the Saxon period. It appears that by the time of the Norman Conquest (1066) the channels had begun to silt up with the floodplain retreating south (Dodd 2003).

1.3.22 The archaeological evidence from the area of proposed development shows that Saxon settlement was not confined to the area within the town wall. Evidence has been found

either side of St Aldate's, about 150 m southeast of the development area at 79 - 80 St Aldate's and the former site of Linacre college. Activity seems to have been centred around the river channels. Excavations at 89 St Aldate's along the course of the Trill Mill stream recorded deposits up to 4 m in depth. These deposits are indicative of domestic and industrial waterside activity along the edge of the mill stream, of the sort known at Fishergate in York (pers. comm. Brian Durham). This suggests that similar activity may be present within the site along the course of the Trill Mill stream.

The medieval period

1.3.23 A section of the medieval city wall runs along the north side of Brewer Street adjacent to the site. The medieval wall is conventionally dated to 1226 with the first murage grant (Hassel, Halpin and Mellor 1984). The nature of the later medieval defences to the north and east of the town are relatively well understood, both from the evidence of upstanding remains and early maps such as Agas which shows a bastioned circuit. There is less evidence for the defences to the south and west of the town, where only slight and much altered upstanding remains survive. The section of wall along the north side of Brewer Street is built of roughly coursed rubble, and in places supports the south range of Pembroke College. The eastern end has been mostly rebuilt, with only the lower courses surviving to approximately 1.8 m, to the west it is incorporated into the garden wall of Pembroke college and is pierced by two modern doorways (RCHME 1939). The area of wall supporting the college chapel was completely rebuilt in 1732, although the section to the west of the chapel terminating at Littlegate Street survives to *c* 5.2 m (RCHME 1939).

1.3.24 Salter's Survey of Oxford (Salter 1969) based upon the medieval records shows that tenements were present on the site by 1279 (recorded in the Hundred roll survey of that year) when a number of properties are recorded. The property on the site of Number 1 Littlegate Street is recorded as paying rent to Eynsham Abbey from at least 1250 (Brian Durham in MacCormac, Jamieson and Prichard 2005: Appendix G), although it is highly likely that these properties were established before this date, possibly as early as the Conquest period (pers. comm. Julian Munby).

The post medieval and modern periods

1.3.25 The earliest map showing the development site is the Agas Map of 1587, which shows typical narrow medieval tenements fronting Brewer Street with garden plots behind. The rear boundary of the tenements is formed by Trill Mill Stream. There is at least one building set back from the street frontage within the site.

1.3.26 Hollar's map of 1643 doesn't show any real change to the tenements and boundaries. Loggan's map of 1673 suggests that further buildings have been constructed along the length of the tenement plot, with some fronting Littlegate Street. This is seen more clearly in Taylor's map of 1750 which shows obvious development behind the street frontage with access into the plots behind. Taylor's map clearly shows buildings running the length of Littlegate Street (South Street on Taylor's map) between Brewer Street and Trill Mill Stream. This picture of development is reiterated on Faden's map of 1789.

1.3.27 The Listed Buildings at 7 and 8 Brewer Street are probably of 17th century origin, but re-faced in the 18th century. It is likely that they are representative of other contemporary buildings along Brewer Street now lost, and Number 3 Littlegate Street which was demolished in 1972.

1.3.28 By 1876 when the 1st edition 6" Ordnance Survey Map was published, housing had been constructed in the whole area between the city wall and the south of Brewer

Street. Trill Mill Stream had been infilled or culverted by this date and is not shown on the map, although its course has been preserved in the street layout and can be traced along Albion Plane and Rose Place. The OS 1st editions shows a malthouse within the site where the printworks now stand, and a Public House in the area of the present car park. The OS mapping clearly shows the boundary plots for the properties along Brewer Street and Littlegate Street. The Ordnance Survey 2nd edition 6" of 1898 shows no change within the site.

1.3.29 The Ordnance Survey 3rd edition 6" of 1921 only shows change in the north eastern corner plot (1 Brewer Street) within the site where the building shown on the 2nd edition OS has been replaced by a considerably smaller building.

1.3.30 The Ordnance Survey 1:10,000 edition of 1956 shows considerable change from 1921, and reflects the site as it is today. The primary change is the construction of the printing works and warehousing in the eastern half of the Site which have replaced the earlier malthouse.

1.3.31 A 17th-century building is known to have stood at 3 Littlegate Street. This house was demolished in 1972, since when the land has been utilised as a car park.

2 Evaluation Aims and Methodology

2.1 Aims of the investigation

General

2.1.1 The general aims were to preserve by redesign or record any significant archaeological remains within the proposal area, and to make available the results of the investigation.

Specific

2.1.2 Site specific aims were to:

- in at least one trench location, investigate deposits associated with Trill Mill Stream and the potential for deposits associated with earlier versions of the channel, as identified at the Westgate car park. However, the preliminary bore hole data indicated that the stream deposits may lie to the south of the proposed basement.
- use borehole data to reconstruct the profile of the top of the gravel for comparison with the profile from St Aldates to the east and the Westgate Centre to the west.
- investigate the potential for early medieval domestic and/or industrial activity on the northern bank of the Trill Mill Stream, as identified at 89 St Aldates.
- investigate the presence or otherwise of the 13th-century land reclamation deposits identified at the Westgate car park and Albion Place.
- investigate the potential for the survival of deposits, features and structures associated with the medieval tenements known to have existed on the site from at least 1279.
- investigate the potential for the survival of deposits, features and structures associated with post-medieval activity on the site, in particular the site of 3 Littlegate Street that stood on the site of the existing car park.

2.2 Methodology

Trenching strategy

2.2.1 The focus of the evaluation was within a 301 m^2 basement area in the preliminary designs for the proposed development. Two trenches (Fig. 2) were excavated, totalling *c* 5% of the proposed basement area.

2.2.2 Trench 1 measured 4 m x 2 m and was located within the garden to the rear of 7 Brewer Street. As the garden was inaccessible by a mechanical excavator, the trench was excavated by hand.

2.2.3 Trench 2 also measured 4 m x 2 m. The trench was located within the Brewer Street Studio, as shown on Figure 2. As machine access to this location was not possible, this trench was also excavated by hand.

2.2.4 The preliminary borehole data indicated that 2 m of deposits overlie the natural geology. Where deeply stratified deposits were encountered, there was a contingency to excavate to a depth of 3 m. If the sequence exceeded 3 m in depth and could not be exposed to the surface of the gravels or Oxford Clay, contingency hand augering was

carried out to record the remaining sediment sequence and recover samples, where appropriate.

3 RESULTS

3.1 Presentation of results

3.1.1 Detailed context descriptions are presented in the context inventory (Appendix A), and within the descriptive text in Section 3.3 where they are integral to the interpretation of the context in question.

3.1.2 Finds reports are presented in Appendix B. A discussion and interpretation of this evidence can be found in Section 4.

3.2 Soils and ground conditions

3.2.1 The sequence of deposits overlying a possible natural gravel deposit within Trench 1 was approximately 6 m thick. Consequently hand excavation of the full stratigraphic sequence was not possible. The entire trench was excavated to 1.5 m below ground level (56.57 m OD), at which point a 2 m^2 sondage was excavated at the southern end of the trench to a depth of *c* 2.9 m below ground level (55.37 m OD). The lower part of the sequence was investigated by means of a hand augered borehole (Borehole A, Figure 3).

3.2.2 Structures and unstable demolition rubble deposits encountered within Trench 2 made excavation of the full stratigraphic sequence problematic. It was not possible to install a trench support system without dismantling the structures and further de-stabilising the trench edges. Consequently, the full sequence was sampled by means of 2 hand excavated sondages, augmented by 3 hand augered boreholes (Boreholes 2A, 2B and 2C, Figure 4).

3.3 Distribution of archaeological deposits

Trench 1 (Fig. 3)

3.3.1 A sand rich deposit (118) was encountered within the hand augered borehole at *c* 52.17 m OD and may represent the top of the natural gravel, or the interface between the overlying deposits (112-117) and the natural geology.

3.3.2 The remaining deposits encountered within the borehole comprised a *c* 2.05 m thick series of clay rich alluvial deposits with organic inclusions (115-117), which was overlain by a *c* 1.15 m thick series of deposits which were similar in composition, but appeared to contain more charcoal and limestone fragment inclusions (112-114). It is possible that these represent fills of the pre-conquest configuration of what subsequently became the Trill Mill Stream – identified at the Westgate Phase 2 evaluation as the Proto-Trill Mill Stream.

3.3.3 The deposits encountered within the borehole were overlain by a *c* 0.6 m thick deposit of fairly homogeneous clayey silt (111). The artefactual material from this deposit was predominantly 13th-15th century, and it is feasible that this deposit correlates to the land reclamation identified elsewhere along the interface between the second gravel terrace and the floodplain.

3.3.4 The fills (107 and 109) of a possible pit (108) in the south west corner of the sondage in the southern end of the trench were initially thought to be a variation in this deposit. However, the eastern edge and base of the feature were clearly visible in section (Figure 3, Section 101), but had been truncated in plan by a north south aligned linear

feature (106), the rubble rich fills (105 and 110) of which suggested a deliberate phase of backfilling in the 17th century, prior to the deposition of the overlying deposits.

3.3.5 The fills of these two features were overlain by a *c* 1.4 m thick deposit of relatively homogeneous sandy silt (101/104) with localised concentrations of limestone rubble (102) and lenses/concentrations of sand (103). These soils were in turn overlain by 0.2 m of topsoil and turf (100).

Trench 2 (Figs 4 and 5)

3.3.6 Oxford Clay (230) was encountered within three hand-augered boreholes at *c* 55.6 m OD (Boreholes 2A and 2B) and 55.51 m OD (Borehole 2C). The clay was overlain by a clay rich alluvial material (235/232), a maximum of 0.5 m thick (identified by Carl Champness OA). If the interpretation of the clay rich deposits encountered within the Trench 1 borehole is correct (i.e. that they are fills of an east-west aligned channel), then it is possible that this deposit represents the northern extent of the sequence of alluvial channel fills in Trench 1, given the similarity in composition between the deposits. A roughly north-south aligned 'timber' (216) was apparent at the top of the clay rich deposits. This did not appear to have been worked and may have been a root, although no further characterisation of the wood was possible given the constraints of the sondage, and the influx of groundwater at this depth. It is also possible that this 'timber' was associated with the overlying gravel rich deposit (234) – see below.

3.3.7 The possible channel fill 232/235 was overlain by a series of deposits (233/220, 221, 223, 224, 225 and 226), which the dating evidence would suggest are 13th-15th century in origin, and may equate to the possible land reclamation deposits encountered in Trench 1. The similarity in the OD levels at the top of the potential land reclamation deposits in Trenches 1 and 2 (56.47 and 56.61 m OD respectively) may also suggest a correlation between them. However, if this is the case, there is considerably more variation in the composition of the reclamation deposit(s) at this point.

3.3.8 The potential land reclamation deposits and underlying alluvial clay were truncated by a north-south aligned limestone wall (222/202), which appeared to terminate *c* 1.2 m from the northern limit of Trench 2. The *c* 0.4 m deep foundation (222) of the eastern face of the structure comprised two courses of roughly hewn limestone blocks, at least 0.2 m x 0.3 m in dimension, which stepped east approximately 0.1 m from the eastern face of the overlying footing (202 - Figure 5, Section 201). Where observed at the base of the face of the northern terminus of structure 202, the foundation 222 comprised much smaller limestone fragments, on average 0.08 m x 0.1 m x 0.1 m in dimension, and set back (south) *c* 0.1 m from the northern face of 202. The nature of the foundation on the western face was not discernible within the confines of the trench, although the rubble observed below the northern face of structure 202 did appear to continue west of the western face observed in section (Figure 5, Section 200). It is possible that the smaller limestone fragments represent the rubble core of a trench-built foundation faced by larger limestone blocks to the east – whether corresponding larger blocks are present along the western face is unclear.

3.3.9 The wall (202) was trench built and comprised approximately nine courses of roughly hewn limestone blocks in a sandy gravel lime mortar, with a reasonably vertical eastern face with some evidence for a lime based render – although this was far from certain. The western face had been truncated by a later service trench (211), but the lower four courses were visible in section, and also appeared to be reasonably well faced (Figure 5, Section 200). The lower courses of the face of the northern terminus, whilst being

relatively vertical, were quite roughly constructed, with mortar adhering to the exposed northern face, and a number of voids between the limestone blocks.

3.3.10 Overlying the possible reclamation deposits to the north and west of wall 202, was a compacted gravel surface (227 – Fig. 5, Section 200), overlain by a lens of possible occupation material (228), which was in turn overlain by a possible 're-surfacing' deposit (229). The artefactual material retrieved from the surface would suggest that it is 14th-15th century in origin and it is is possible that it is associated with either the construction or use of wall 222/202.

3.3.11 Overlying the surface to the north of structure 202 were a series of deposits with varying concentrations of limestone rubble and mortar (204, 214, 217, 218 and 219). It was not possible to establish a relationship between these deposits and structure 202 as this relationship had been truncated by service trench 211. If the surface is associated with the use of the structure of which 202 is a part, then it is reasonable to assume that the deposits overlying it represent the abandonment/demolition of that structure, and that this is potentially the origin of the rubble and mortar concentrations in the overlying deposits.

3.3.12 However, to the south of the trench, a brick and stone built 'chute' (203) appeared to have been inserted into the wall. The construction cut for this insertion (237) appeared to truncate the fills (212) of the service trench, which would suggest that there has been some modification of structure 202 after the installation of service trench 211, despite the fact that the service trench truncates the upper courses of the western face of the wall. This would imply that the structure was still in use following the deposition of the materials overlying the surface to the north, which are cut by the service trench.

3.3.13 The tentative interpretation of the relationship between these various structures and deposits is further complicated by the deposits to the east of wall 222/202. These comprised a *c* 0.4 m thick layer of fairly sterile re-deposited gravel (234) overlain by a homogeneous layer of dark grey clay silt (200), approximately 0.65 m thick. These appeared to fill a possible 19th-century pit (236) excavated up against the wall.

3.3.14 Also to the east of the wall, and overlying deposit 200, was a *c* 0.5 m thick layer of demolition rubble (201), predominantly comprising brick rubble with concentrations of a cement based mortar and large limestone fragments. The interface between these deposits (200 and 201), coincided approximately with the base of the chute (203) inserted into wall 202.

3.3.15 The relationship between the deposits to the east of the wall, and those to the north and west, had been truncated by the construction trench (209) for a brick built structure (207), which probably represents an inspection pit associated with the use of the building as a garage in the mid-late 20th century – the base of this structure was not encountered within the trench and is therefore in excess of 2 m (55.81 m OD) below existing ground level. The structure had been backfilled with sand prior to the deposition of a 0.1 - 0.2 m thick layer of made ground for the existing *c* 0.2 m thick concrete surface.

Geotechnical Investigation (Fig. 2 and 6)

3.3.16 Geotechnical and Environmental Associates (GEA) excavated a series of geotechnical pits (TPs 1 -7) and boreholes across the site. The geotechnical pits were all excavated against existing wall foundations, and only construction cut backfills were encountered.

3.3.17 The borehole data has been analysed and used to compile a profile of the site (Fig. 6). Full details of the sequence will be published by GEA in due course. The following observations were of note:

3.3.18 BH1, to the north of the city wall, revealed 4.4 m of made ground directly overlying Oxford clay, a result of more than one phase of deposition. There was a significant percentage of limestone inclusions in the upper 1 m of deposits, which may be construction debris associated with the nearby chapel. There were brick fragments within the sequence, which indicate a post-medieval date for the made ground. There was no evidence of the Saxon town defences.

3.3.19 BH6, in the west of the site, revealed gravel at 53.76 m OD. The presence of natural gravel at this point indicates that there is a gravel island in the centre of the site, and that the Devensian channel is much narrower within the site than it was within the Westgate excavations. However, it is possible that gravel is re-deposited slumped material within a wider channel.

3.3.20 BH8, in the south of the site, revealed soft black clay silt. This material is likely to be the fill of the post-medieval Trill Mill Stream.

3.3.21 The information from the borehole investigation was supplemented the results of a borehole investigation at Albion House in the 1970s, the results of which are in the Oxford Urban Archaeological Database. These boreholes indicated the presence of a channel at the southern end of the site.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The depth of the deposits in Trench 1 was such that the base of the stratigraphic sequence could only be sampled by the means of a hand augered borehole. As such, any interpretation of these deposits is necessarily tentative.

4.1.2 The truncation caused by the structures and service trench in Trench 2 made interpretation of the potentially more significant earlier part of the stratigraphic sequence problematic, particularly as sampling of the lower part of the sequence was also only possible by auger. The relationships between deposits encountered within the trench were difficult to establish given the degree of later truncation. Artificial lighting also hampered characterisation of a number of the deposits and their interrelationships.

4.2 Interpretation

Trill Mill Stream deposits and reconstructed profile

4.2.1 Figure 6 shows the conjectured topography of the top of the gravel and underlying Oxford Clay, based on the borehole data, the results from Trenches 1 and 2 of the evaluation and additional borehole data from Albion House. Whilst the deposits encountered fit broadly with the model proposed following the Westgate evaluations (OA 2008), it should be stressed that the following interpretation is necessarily tentative, given the limited amount of data available.

4.2.2 As with the excavations at the Littlegate site in 1971, the area to the north of the site appeared to be devoid of gravel, the natural geology comprising Oxford Clay. The conclusion for this during the Littlegate excavation was that the gravel had been truncated in the post-medieval period (Durham in Hassall 1989). However, the lack of gravel to the north of the projected line of the channel is consistent with evidence from St Aldates to the east and the Westgate to the west, which suggested a band of Oxford Clay on the interface between the second terrace and the floodplain. This model sees the deposition of the second terrace gravel over the Oxford Clay, with a later erosion of the second terrace preceding the deposition of the floodplain terrace gravels (Brian Durham pers. comm.) However, the variance of the OD level at the top of the Oxford Clay in Boreholes 2, 3 and 7, which are on roughly the same east-west alignment, does indicate a degree of localised truncation.

4.2.3 The supposition that the preliminary borehole data indicated that the deposits associated with the Trill Mill Stream may have lain to the south of the proposed basement, was based on the initial identification of clay rich deposits at *c* 3.4 m below ground level (54.67 m OD) in Borehole 5. However, further scrutiny of the borehole logs would suggest that the clay rich deposits within that particular borehole may be fills of the pre-conquest version of the Trill Mill Stream, given the sand and gravel inclusions noted within the clay at the base of the borehole.

4.2.4 The deposits encountered within Trench 1 would also appear to support this supposition, particularly those encountered within the hand augered borehole (Borehole A, Figure 3). It is possible that the sandy deposit encountered at the base of the Borehole A represents a sandy fluvial fill of the Devensian Stream at the base of the second terrace, and that the overlying clay rich deposits are associated with the pre-conquest configuration of the channel, identified in the Westgate evaluation as the 'Proto' Trill Mill Stream. A comparison of the OD levels at the base of the Proto channel

at the Westgate (52.30 m OD), and the top of the sandy deposit in Trench 1 (52.17 m OD) would also indicate a correlation between the clay rich deposits encountered in Trench 1 and the fills of the Proto channel identified at the Westgate. However, the width of the channel (a maximum of *c* 30 m at the Westgate and a projected 15 m at Brewer Street) is markedly different. It may be that the channel narrowed at Brewer Street, although it is possible that the gravel identified in the southern part of the site (BH 6) is filling a larger channel. The Albion House boreholes indicate that a second channel lies to the south of the site, this is likely to represent the re-establishment of the Trill Mill Stream following the reclamation of the northern part of the site.

Early Medieval activity

4.2.5 No evidence for domestic or industrial activity pre-dating the land reclamation between the 12th-15th centuries (see below) was revealed within the trenches. However, the deposits below the potential reclamation deposits in Trench 1 appear to be exclusively within the channel, whereas those within Trench 2 had been subject to heavy truncation, and subsequently the area of potentially early medieval archaeological deposits and/or features sampled was limited.

4.2.6 The fact that possible channel fills were encountered as far north as Trench 1 may be significant in itself, particularly regarding the nature of the late-Saxon defensive circuit to the south of the town. The following quotations are taken from the report into the 1971 excavations at the site of the Littlegate (Durham 1989)

> *The S.W. corner of the Survey Area was investigated in 1971 to trace the line of the medieval town wall and any antecendents. The stone wall was found, but it was built across a site which shows all the signs of having previously been a domestic tenement. The predicted sequence of late Saxon earth rampart giving way in the 13th century to* [a] *free-standing stone wall therefore does not apply here; this makes the site exceptional for Oxford, and poses the question of how this corner of the town was defended before the stone wall was built.*
>
> *No defensive ditch was found, although the clay dropped away into ditch DII F60 at the extreme S. end, assumed at the time to be the bank of the Trill Mill Stream but more likely a roadside ditch along the main access road within the priory.*

4.2.7 However, if the interpretation of the deposits in Trench 1 is correct, the northern limit of the 'ditch' encountered in 1971 *would* align with the projected northern bank of the mill stream shown on Figures 2 and 6. If this is the case, then it would suggest that the northern bank of the pre-conquest configuration of the Trill Mill Stream was considerably further north than was previously supposed and it may indeed be that identified during the 1971 excavation. This may go some way to explaining the lack of a rampart or defensive ditch along this part of the late-Saxon defensive circuit - particularly if the projected 15 m width of the stream is correct - as the channel itself would have presumably been sufficiently substantial to fulfill the role of ditch, and the rampart would have lain further to the north.

Land Reclamation deposits

4.2.8 It seems likely that the material overlying the clay rich deposits in Trench 1, and the top of the Oxford Clay in Trench 2, corresponds to the land reclamation observed elsewhere along the edge of the second terrace. Whilst the date range of the

artefactual material recovered from these deposits extends from 1075 to 1450, the fact that the documentary evidence suggests the existence of tenements here from as early as 1279 (Salter, 1969), would imply an early-mid 13th century date for the deposition of this material.

Evidence for medieval tenements

4.2.9 The function of the features cutting these deposits in Trench 1 is unclear, although it is feasible that they relate to a tenement fronting Brewer Street to the north. However, the apparent linear configuration of Feature 106 could potentially imply a drainage channel running from the north and into a later version of the Trill Mill Stream to the south. Indeed, the tops of a number of arches in the city wall to the north of Brewer Street may indicate bleeding points in the wall, designed to facilitate the drainage of water from the city side of the defensive circuit (David Radford pers. comm.), although none of these appear to be aligned with the possible channel in Trench 1.

4.2.10 Whilst there is some doubt as to the date of the limestone wall footing in Trench 2, the compacted gravel surface which was possibly associated with it may suggest a 14th-15th century origin. Given that the surface also directly overlay the possibly mid 13th-century land reclamation, it is possible that the structure relates to the earliest known tenements fronting onto Brewer Street. However - with the exception of the possible trample/occupation deposit 228, and the possible re-surfacing deposit 229 - there was little or no lamination in the overlying deposits that would suggest any longevity to the use of the surface, which must be implied if the surface and structure are contemporary, and that the structure has been modified in the 19th century.

4.2.11 It is possible that the surface represents a construction horizon for the structure and that the overlying deposit 219 is construction debris from same. The majority of the dating evidence from deposit 219 was 12th-15th century which would support this hypothesis. It was also unclear for what reason the structure terminated in the north of the trench.

Post-medieval features and deposits

4.2.12 The origin of the soils overlying the surface in the northern end of Trench 2 is also uncertain. The artefactual evidence would suggest a gradual build up of material from the 17th-18th centuries (deposit 217) and into the 19th century (deposit 214). However, the proximity to the street frontage would seem to make it unlikely that these represent garden soils.

4.2.13 The dating evidence would suggest that the soils overlying the fills of the features cutting the land reclamation in Trench 1 were deposited in the 17th century. It seems likely that they represent imported garden soils contemporary with the construction of Numbers 7 and 8 Brewer Street. Indeed, it is possible that the concentrations of limestone and sand are construction debris which has been incorporated into the garden soil during its deposition.

4.2.14 The deposits to the east of the wall in Trench 2 produced 19th-century artefactual material and were initially thought to represent backfill of a cellar, of which structure 202 was the western wall. This supposition was further enhanced by the west-east slope of the inserted 19th-century chute. However, there are a number of anomalies which seem to contradict this interpretation and it is equally possible that wall 202 formed the eastern wall of a cellar, or possibly a garderobe, to the west.

4.3 Conclusions

4.3.1 In conclusion, the central part of the proposed basement area is likely to comprise the fills of the pre-conquest Trill Mill Stream. The Trill Mill Stream may have served as a defensive ditch for the late Saxon burgh, and it is possible that evidence for Saxon waterside activity may survive in the northern part of the site; a berm between the town wall and Trill Mill Stream.

4.3.2 The southern part of the basement area may comprise a gravel island and the overlying 'black clayey silt with shells' (Fig 6) may represent the fills of a reed swamp. However, if the gravel revealed in BHs 4 and 6 is redeposited, the southern two-thirds of the basement area are more likely to comprise fills of the Devensian channel below reclamation deposits.

4.3.3 The site was 'reclaimed' in the 13th century, and imported soils dumped over the infilled Trill Mill Stream. The stone wall in Trench 2 may represent part of a late medieval cellar or garderobe, and it is feasible that other sunken structures may survive in the northern part of the site. There was a notable absence of medieval cut features within Trench 2, but this may be a localised anomaly. However, the depth of imported post-medieval garden soils implies that the yard areas of the medieval tenements remained boggy following the 13th-century land reclamation, and may have been unsuitable for widespread pitting. The Albion House boreholes indicate that there is a second (or third) channel in the southern part of the site. This is most likely the 13th century, or later, recutting of the Trill Mill Stream.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					**Orientation**	N-S
Probable fills of pre-conquest Trill Mill Stream overlain by ? 13th century land reclamation, cut by ?14th-16th century features, overlain by post 17th century garden soils.					**Max exc depth (m)**	2.90
					Width (m)	2.00
					Length (m)	4.00
Contexts						
context no	**type**	**width (m)**	**depth (m)**	**comment**	**soil description**	**date**
100	deposit		0.18	topsoil		
101	deposit		0.92	garden soil	friable, mid grey brown sandy silt	19th C
102	deposit		0.35	variation within garden soil 101	friable, mid brownish grey sandy silt	
103	deposit		0.08	variation within garden soil 104	loose, light brownish yellow sand	
104	deposit		0.22	garden soil	friable, mid brown sandy silt	17th C
105	fill		0.10	fill of n-s linear feature 106	compact, mid orangey brown clay loam	15th-16th C
106	cut	1.70	0.90	n-s aligned linear feature		
107	fill		0.60	fill of possible pit	tenacious, mid-dark greenish grey silty clay with 5% charcoal and 5% stone	12th-15th C
108	cut	0.90+	0.60	possible pit		
109	fill		0.30	fill of possible pit	compact, mid grey clayey silt with *c* 5% charcoal	
110	fill	1.80	0.50	fill of n-s linear feature 106		
111	deposit		0.60	?13thC land reclamation	compact, dark orangey brown clayey silt	12th-15thC
112	deposit		0.10	channel fill	tenacious dark blue grey silty clay	
113	deposit		0.30	channel fill	sticky dark greyish blue loamy clay with *c* 5% charcoal	
114	deposit		0.45	channel fill	sticky dark greyish blue silty clay with *c* 5% organic	
115	deposit		0.05	channel fill	greeny blue silty clay	
116	deposit		0.35	channel fill	very dark grey blue silty clay	
117	deposit		1.45	channel fill	sticky light greeny blue clay	
118	deposit		0.20+	channel fill	sand with concentrations of dark greeny blue clay	

Trench 2						
General description					**Orientation**	N-S
Oxford Clay overlain by northern extent of possible fills of Trill Mill Stream overlain by ?13th century land reclamation, overlain by ?14th-15th century surface. Possible associated wall of uncertain function modified in the 19th century. Significant truncation made interpretation problematic.					**Max exc depth (m)**	2.00
					Width (m)	2.00
					Length (m)	4.00
Contexts						
context no	**type**	**width (m)**	**depth (m)**	**comment**	**soil description**	**date**
200	fill		0.65	possibly upper fill of pit 236	mid-dark brownish grey clayey silt with *c* 10% gravel fragments	late 19th C
201	deposit		0.80	demolition rubble to east of wall 202	demolition rubble	19th-20th C
202	structure	0.64	1.00	n-s aligned wall		
203	structure			chute in wall 202		
204	fill			probably rubble fill in top of construction cut 209 - potentially originating from wall 202	limestone rubble in mid brownish grey silty clay matrix	
205	fill			same as 212	same as 212	
206	VOID				VOID	
207	structure			brick inspection pit		20th C
208	fill			fill of inspection pit	sand	
209	cut			construction cut for inspection pit		
210	fill			fill of construction cut for inspection pit	mixed	
211	cut	0.30	0.70	service trench for ceramic drain		
212	fill	0.30	0.70	fill of service trench	predominantly mid brownish grey clay silt with 2% brick, 5% limestone, 10% gravel fragments, with lenses of concentrations of gravel throughout	
213	VOID				VOID	
214	deposit		0.45	post med soil	mid brownish grey clay silt with *c* 5% gravel fragments and 2% charcoal	16th-18th C
215	VOID				VOID	
216	deposit				Possible timber	

context no	type	width (m)	depth (m)	comment	soil description	date
217	deposit		0.18	post med soil	mid brownish grey silty clay with 10% gravel fragments and 5% limestone	16th-18th C
218	deposit		0.14	variation in deposit 214	mid-pale grey sandy silt	17th-18th C
219	deposit		0.18	possible construction/ demolition debris	mixed mortar, limestone and gravel with concentrations of mid brownish grey clay silt	12-E16th C
220	deposit		0.30	?land reclamation	mid-dark grey clay silt with 5-10% gravel fragments and occasional charcoal flecks	13th C
221	deposit		0.10+	?land reclamation	re-deposited ?Oxford clay	11th-13th C
222	structure		0.40	foundation of 202	limestone rubble with large stones along eastern face	
223	deposit		0.16	?land reclamation	mid grey clay silt with 5-10% gravel fragments and concentrations (c10%) of limestone rubble	
224	deposit		0.08	?land reclamation	mid reddish brown gravelly silt with concentrations of limestone rubble in a roughly linear configuration (n-s), but does not appear to be structural	14th-15th C
225	deposit		0.04	?land reclamation	lens of mid brownish grey clay silt	
226	deposit		0.10	?levelling deposit for surface 227	predominantly mortar mixed with concentrations of mid yellowish brown sand and mid brownish grey clay silt	
227	surface		0.08	surface	compacted gravel with occasional limestone fragments	12th-15th C
228	deposit		0.04	occupation/ trample	mid-dark grey clay silt with c10% charcoal and 2% gravel fragments	
229	deposit		0.06	possible re-surfacing??	mid yellowish brown sand	
230	layer			oxford clay	oxford clay	
231	deposit		0.16	possible fill of proto TMS or land reclamation	soft mid-dark bluish grey silty clay	
232	deposit		0.40	possible fill of proto TMS	soft mid-dark bluish grey silty clay with concentrations (*c* 5%) of mid brownish grey silty clay	
233	deposit		0.10+	?land reclamation: same as 220?	mid-dark brownish grey silty clay with *c* 5% gravel	

context no	type	width (m)	depth (m)	comment	soil description	date
234	fill		0.45	fill of 236	re-deposited gravel	19th C
235	deposit		0.40	possible fill of TMS	soft mid-dark bluish grey silty clay	
236	cut			possible pit		
237	cut			construction cut for 203		

APPENDIX B. FINDS REPORTS

B.1 Pottery

by John Cotter

Introduction and methodology

B.1.1 A total of 114 sherds of pottery weighing 3290g were recovered. This is all of medieval and post-medieval date. All the pottery was examined and spot-dated and for each context the total pottery sherd count and weight were recorded on an Excel spreadsheet, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg. decoration etc.). Fabric codes referred to are those of the Oxfordshire type series (Mellor 1994).

Date and nature of the assemblage

B.1.2 Although the pottery assemblage is in a fragmentary condition, some sherds - particularly the post-medieval and Victorian ones - are large and quite fresh. One or two Victorian vessel profiles exist. A few of the earlier medieval (11th-12th century) sherds are also quite large and fresh but many of the high and late medieval sherds (mainly Brill ware) are fairly worn and coated with dirty brown cessy-type residues. Ordinary domestic pottery types are represented.

B.1.3 The composition of the assemblage is typical of this part of Oxford (St Aldates area) with a range of wares from the late Saxon or early medieval through to the early 20th century. The earliest pieces are a few sherds of late Saxon to early medieval Oxford ware (OXAC, c 1050-1250) but these may be residual in their contexts. One unusual OXAC rim sherd, though residual, is from a rare narrow-necked form such as a jug or a spouted pitcher (context 101). This should be illustrated and published at some stage. Medieval Oxford ware (OXY, c 1075-1250) is also present and includes fresh pieces of cooking pot rims and sherds from glazed tripod pitchers including a fresh handle fragment with a characteristic decorative twisted clay strip inset into the handle (land reclamation context 220). The OXY sherds from two, probably related, (land reclamation contexts 220 and 221) are large and fresh enough to suggest occupation or significant activity on the site from perhaps the 12th or early 13th century (associated in 220 with 13th-century Brill ware).

B.1.4 High medieval pottery (13th-14th century), mostly in the form of glazed jugs in Brill/Boarstall ware (OXAM) from central Buckinghamshire, is well represented, though mostly very fragmentary. The full date range of this ware is *c* 1225-1600 but closer dating depends on the presence of diagnostic features, such as decoration and distinctive vessel forms and the quantity of sherds present. Some of the context assemblages of Brill ware from this site lack sufficient diagnostic features and so the dating to the earlier or later part of this range is sometimes subjective and occasionally impossible. However, distinctive decorated Brill ware jug types from the 13th-14th century are definitely present and plainer types from the late 14th and 15th century appear to be present too. Other than jugs a possible pipkin (saucepan; context 224) and a possible dripping pan (for spit-roasts; land reclamation context 111) have been identified and indicate cooking and food preparation in the area. A reasonable quantity

of very late Brill types (16th to early 17th century), recognisable by their thicker, heavier forms and thicker glazes, have also been identified from post-medieval contexts.

B.1.5 Post-medieval wares are fairly common, though mostly unremarkable. These include assemblages from two contexts dated to *c* 1640-1700 (garden soil 104 and drain fill 105) which could feasibly contain material from the Civil War period. Post-medieval Brill redware including flowerpots and dishes have been recognised. A range of common later 19th- and early 20th-century pottery types, including flowerpots, stoneware ginger beer bottles with Oxford proprietors' marks, and a ceramic electric light fitting are also present.

B.1.6 Table 1: Pottery

Context	Spot-date	Sherds	Weight	Comments
101	c1900+	10	246	Staffs-type modern white earthenware (WHEW) electrical domestic light switch fitting with internal threading. 1 other bs 19C WHEW, Residual 18C Brill marbled slipware dish base & Brill 18C redware flowerpot rim with ext white slip band on rim. Resid 18C trailed slipware & tin-glazed earthenware etc. Unusual upright rim in OXAC Early med Oxford calcareous gravel-tempered ware c1050-1250 from narrow-necked form (Diam 90mm, 17%) poss from a jug or spouted pitcher? Thickened flat-topped/sub-squared rim on a vertical neck. ILLUS?
104	c1640-1700	15	440	Group date partly based on SF6 below. 16-E17C Brill wares. Yellow Borderware dish rim & deep dish flat base. Bss Frechen stoneware. 1 early post-med redware unglz ? jug/jar base - if local prob c1640+ (earlier if non-local). Fairly fresh/large
104	c1640-1700	1	10	SF6 Neck sherd Frechen stoneware bellarmine bottle with lower part of late-style grimmacing bartmann mask c1640-1700
105	c1640-1700	31	339	1 definite post-med redware (PMRE/REW) small jar/jug base with int glaze, post-1640. 2x bss yellow Borderware. Quite a few 16C-E17C late Brill ware vessels (?JOINS with 104). Also 13-14C Brill (OXAM) jug sherds incl prob L13C highly dec & large piece rod handle - all fairly worn and cess-encrusted. 2x resid 10-13C OXAC. 1x scrap thumbed cookpot rim OXY 11-13C
111	c1225-1450?	15	146	Mostly OXAM Brill jug sherds incl dec and plain pieces -nothing ness later than c1450? 1 base sherd poss from OXAM drip pan? 3x OXY incl cookpot rim, 1x OXAC. Mostly fairly worn/cessy sherds
200	c1875-1900+	4	1270	Base & bs from 2 separate Bristol-glazed mod English stoneware (cream) ginger beer bottles with black transfer-printed owners' marks (fragmentary), both poss by same Oxford brewer 'N---LEY & Co. PURE HOME GING[er beer] OXF[ord]'. Both prob c1875-1900 or 1900+. Profile large oval WHEW carving dish (short diam 330mm) c66% complete, watery blue transfer printed dec showing 'Asiatic Pheasant'design (popular c 1840-80) & maker's printed mark underside 'Asiatic Pheasants. YC & Co'. Maker not identified. 1x mod redware flowerpot base
201	c1880-1940	4	167	2x mod Eng stoneware ginger beer bottle incl brown-topped type with int threaded rim & trace of v large printed letter 'B----' ext. Profile Eng bone china saucer
214	L17-18C	2	67	PMRE glazed dish rim with incised wavy line dec on flange. 1x resid late med Brill
217	17-18C	1	70	Pad base from black-glazed PMRE 'tyg'-style conical cup/drinking vess. Fresh
218	17-18C	1	31	Bs from PMRE jar w int clear glz

Context	Spot-date	Sherds	Weight	Comments
219	13-E16C	1	48	Fresh bs jug/jar Surrey whiteware - type uncertain - poss more likely Coarse Border ware c1340-1500? Unglazed except for dribble greenish glz. 1x resid OXY cookpot base
220	c1225-1300?	9	196	Mostly fresh. 2x Brill OXAM jug bss, 1 clear glazed, other unglz with very defined throwing marks - prob from tall baluster jug form? Mostly fresh OXY incl tripod pitcher handle with braided strip set into handle - v fresh condition. Other OXY incl cookpot rim. 1x fresh OXAC
221	c1075-1250	8	117	Fresh OXY, prob 2-3 vess incl thumbed cookpot rim
224	14-15C?	7	100	Fresh. Min 4 vess incl prob late-ish OXAM Brill jug rim with slashed handle. 3 joining sherds from OXAM small bowl-like form with int bevelled rim, unglz except for green splash on rim, sooted ext - poss pipkin? Plain glz OXAM jug w ext rilling. Base OXY?
234	19C	2	29	WHEW dish footring. Rim brown stoneware blacking bottle
TOTAL		114	3290	

B.1 Clay tobacco pipes

by Andrew Norton

Introduction

B.1.1 The excavation produced a total of 13 fragments of clay tobacco pipes. The assemblage was recovered from dumped garden soils and fills.

Methodology

B.1.2 All fragments were examined for evidence of markings, decoration and name stamps. Unmarked bowls have been dated by reference to Oswald's general typology (Oswald 1975) and by reference to the assemblage from St Ebbe's, Oxford (Oswald 1984). Plain stems have been counted, but due to small size of the assemblage no attempt has been made at stem bore analysis.

Results

B.1.3 The results are tabulated below by context (Table 2).

B.1.4 Of the total 13 fragments of clay tobacco pipes ten are stem fragments, and no decoration, makers marks or stamps were observed. The three bowl fragments are whole, and all can be closely dated. One bowl (104) dated from the mid-17th century, and is comparable to London type 17G (dating from 1640-70). The other bowls were comparable to Type C from St Ebbe's dating from1690-1720 (Oswald 1985, 252-3; fig.51), and bowl 26a dating from 1852-1863 (Ibid, 258-9; fig. 55). The bowl comparable to 26a displayed the initials 'G/N' (George Norwood) on its spur.

Discussion

B.1.5 The clay pipes assist in the dating of the garden soils, but add little to aid our understanding of the site.

Table 2: Clay Pipe

Context	Stem	Bowl	Heel/Spur	Comments
101	4	1	heel	St Ebbes Type C, 1690-1720; 1 x stem shows heavy burning
104		1	spur	Type 17G 1640-70
105	1			heavy burning
200	2			
234	3	1	spur	St Ebbes 26a 1852-1863, Spur stamped with G/N = George Norwood. Mould line on spur

B.2 Metalwork

by Ian Scott

B.2.1 The metalwork from Pembroke College comprises 30 pieces (44 fragments), including 22 copper alloy, or non ferrous, objects, 15 iron and 1 lead object.

B.2.2 The metalwork comes from 6 contexts (Table 1). Garden soil 101 produced 2 coins – (a farthing and a halfpenny both of George VI) – a lead Insurance plate for the Sun Insurance company (No. 238269), a foot from a cast copper alloy cauldron or vessel, an iron nail or pin, and small fragment of copper alloy plate. A farthing of James I and a 16th-century jetton were recovered from garden soil 104, together with a piece of plate, and possible cast fragment both of copper alloy. There were also two small heavily encrusted pieces of iron bar or nail stem and an iron plate fragment that might be part of a hinge. Two elongated heavily encrusted fragments of iron were the only metal finds from drain fill 105.

B.2.3 Pit fill 200 produced 13 non-ferrous dress pins with rolled wire heads (14 fragments), 2 pieces of barrel hoop, and 4 parts of bucket hoops. The latter were narrower than the barrel hoops and slighter in section. The final find from context 200 was a length of bar of rectangular section, which might have served as a small window bar. The inspection pit backfill (210) produced a possible handle formed from oval or sub-rectangular section bar with a pierced fixing plate or loop at one end, and a copper object of uncertain function. It appears to be quite recent in date, and may well have been a window catch. Pit fill 234 produced a heavily encrusted curved iron bar or nail fragment.

B.2.4 Table 3: Metalwork

Identification	Context						Totals
	101	104	105	200	201	234	
coins	2	2					4
insurance plate	1						
				13			13
vessel foot	1						1
barrel hoops				2			2
bucket hoops				4			4
handle?					1		1
catch?					1		1
window bar?				1			1
curved object						1	1
nail or pin	1						1
bar fragts		2					2
plate	1	2					3
unid fragts		1	2				3
Totals	6	7	2	20	2	1	38

B.3 Glass

by Ian Scott

B.3.1 The glassware comprises mainly vessel glass and mostly bottles. There are 40 fragments from 26 objects or vessels. The material derives from 7 contexts (Table 2). More than half of the material derives from pit fill 200, and includes 3 wine bottles ranging in date from the late 18th century to the early 19th century, but also includes two sherds from a modern wine bottle. There are also 12 sherds probably from one mid 19th-century dip-moulded case bottle in dark olive green glass; it probably held gin. One of the larger sherds from the shoulder of the bottle has part of moulded seal reading '.]D & Co' and 'ROTTERDAM'. The context also produced 2 sherds from machine moulded soda water bottles, one body sherd from a Codd bottle embossed 'OXF[ORD], the other a base sherd with an embossed 'N'. These must date to the late or early 20th century. The other bottles are less closely dateable.

B.3.2 Garden soil 101 produced the body of mid 18th-century broad cylindrical wine bottle, but also a complete bottle, with metal screw cap, embossed 'Brylcreem'. The bottle has Art Deco style embossed decoration suggesting a date in the 1930s. Brylcreem was first made in Birmingham in 1928, which gives a very secure terminus post quem!

B.3.3 Part of the base of an 18th-century wine bottle, and also two small thin weathered sherds of window glass came from garden soil 104. One of these looks like modern float glass. Drain fill 105 produced an undiagnostic bottle sherd and a small piece of thin window glass with evidence from putty or leading along one edge.

B.3.4 Demolition deposit 201 produced part of probable Codd bottle, with no extant embossed lettering, and two large body sherds in colourless glass with a red glass coating on both surfaces. The two coated sherds were from different vessels and finished with slightly different shades of red. One sherd was from a straight sided jar, the other sherd was thinner and from a jar or deep bowl with everted rim. The glass was all 19th-century or later in date.

B.3.5 The remaining sherds of glass comprise a modern float glass from garden soil 217 and a sherd from a wine bottle, probably modern, from pit fill 234.

B.4 Ceramic Building Material

by Cynthia Poole

Introduction

B.4.1 A total of 48 fragments (2567 g) of ceramic building material and 2 fragments (29g) of plaster was recovered from the evaluation. The assemblage had a mean fragment weight of 54 g, a relatively small size reflected in the absence of any complete tiles or bricks. The only complete dimension surviving was thickness. The assemblage had suffered variable levels of abrasion and much of the mineral had mineral concretions adhering.

B.4.2 The assemblage is composed primarily of roof tile of medieval date, together with a few pieces of post-medieval - early modern material comprising bricks, pipe and wall tile. A breakdown of types and quantities recovered is shown in Table 4 and a more detailed record by context in Table 5.

Methodology

B.4.3 The assemblage has been recorded onto an Excel spreadsheet, which forms part of the archive. Fabrics have been characterised on the basis of visible macroscopic characteristics and with the use of a x10 hand lens and where relevant equated with fabrics in the Oxford type series for medieval tile held at OA (south).

Fabrics

B.4.4 The dominant fabric group was OxIII, a coarse sandy red firing clay sometimes laminate with ferruginous clay pellets. Rarer were examples pale pink and greenish white calcareous fabrics OxVIIa and B. Bricks occurred in a sandy fabric with frequent ferruginous clay pellets that appears to be closely related in character to the OxIII fabric group. Post medieval - modern fabrics included stoneware and fine cream tin-glazed earthenware.

Description of the Forms

Roofing

B.4.5 Roof tile formed three quarters of the assemblage and was all medieval in character. Though much of it was flat, some peg tile and ridge tile could be positively identified. Some pieces were quite crudely made with rougher finishes and ranging in thickness from 14-18 mm made in fabrics III and VIIa.. These are likely to be earlier (12th-14th century) than those with a more regular even finish and on average thinner (11-16 mm) (13th-16th century). Peg holes were all circular, cylindrical in profile measuring 12-13 mm diameter and positioned between 24 mm and 35 mm from the top edge and 40-67 mm from the side edge. Several fragments of glazed tile was noted, mainly with green, brown or greenish brown glaze as either splatters or more extensive areas. On many pieces the glaze became patchy towards the edges and corner, a characteristic typical of glazed ridge tile. Splatters of glaze on the peg tile suggest these may have been partly glazed, normally across the lower exposed half only.

B.4.6 Based on general characteristics it is likely that much of the glazed fragments derived from ridge tiles, though the surviving profile on only a small number indicated this more positively. No evidence of decorative crests survived though these were normally

present on glazed ridge tile. This category normally dates from the 13th - 14th centuries.

Brick

B.4.7 Only a few small fragments were found, most in fabric B and probably ranging from medieval to early modern in date from the general surface character. One in a very coarse sandy-gritty fabric G measured 55 mm thick (2"¼) and is possibly of Tudor or early post-medieval date (16th-17th).

Wall tile

B.4.8 One 18th-century wall tile was found. This was a tin glazed earthenware decorated 'Delft' tile measuring 129 mm wide by 8 mm thick with chamfered edges. It was decorated with a rural scene in blue of which sky, birds and the top of vegetation survived on a white ground enclosed in an arched frame of two thin lines.

Pipe

B.4.9 A fragment of stoneware pipe had a plain exterior surface and green glazed interior surface. It measured 16 mm thick and had a diameter of *c* 170 mm (6" 3/4). It is of 19th - early 20th century date.

Wall plaster

B.4.10 This was composed of a buff mortar containing a high density of rounded coarse quartz sand and grits up to 5 mm laid in two distinct layers - a primary coat 5-6 mm thick and final render 10-12 mm thick. The surface is coated with a thin white lime plaster render 1 mm thick, which has remnants of a pale blue/grey wash. This cannot be dated more closely than post-medieval.

Discussion

B.4.11 Much of the building material was recovered from the layers interpreted as dumped deposits or relating to land reclamation along the Thames floodplain in the medieval period, and from later imported garden soils. In this respect much of the assemblage is probably unrelated to buildings on the site though it does provide some additional dating evidence for these events. The roof tile from layer 111 associated with the land reclamation is most closely dated to the 13th-14th centuries. The later imported garden soils contain medieval roof tile (104) and an 18th-century Delft wall tile (101).

B.4.12 Demolition rubble that may be associated with one of the walls (202) contained medieval (13th-14th century) ridge tile (219) and brick fragments, which are very tentatively dated to the 16th-18th centuries (217) and possibly 19th century (214). These pieces may indicate materials used in the construction or alteration of a building on the site over some period of time.

B.4.13 Table 4: Ceramic Building Material occurance by fabric type

Form	Nos	Wt (g)	Fabrics
Roof: peg	9	382	Ox: III & VII
Roof: ridge	10	838	Ox: III
Roof: flat	22	732	Ox: III & IV
Brick	5	153	B (~Ox: III) & G
Wall tile	1	97	Tin-glazed earthen ware
Pipe	1	365	stoneware
Plaster	2	29	
Total	50	2596	

Table 5: Ceramic Building Material

Context	Nos	Wt (g)	Form	OA:Ox Fab Series	Description	Markings / Decoration	Obj date
101	1	97	Wall tile	tin glazed earthenware	Decorated Delft wall tile, approximately 1/3 surviving from top half. Flat even back and even chamfered edges (? made in mould). Small patch of pink gloss paint on top edge.	Decoration: blue painted scene on white ground. Scene set within arched polygonal frame of 2 lines, corners infilled with linear & dot geometric pattern. Within the frame are visible are the tops of plants/vegetation below a sky with birds and sun-rays projecting through cloud on RH side.	PM 18C
104	1	101	Roof: flat	VIIa	Fairly crude, surfaces fairly even - undulating, rough flat edge with sharp arrises.	Glaze: patchy & splattered thin light green glaze.	Med 12-14C
104	1	65	Roof: peg	III	Smooth undulating top, rough irregular base with thickened halo encircling base of peg hole. Roughly flattened thickened edges with fairly sharp arrises. Circular peg hole 13-11 mm diam. with widened hollow c. 25 mm diam. around top. Set 35 & 40 mm from top/side edges	~	Med 12-14C
105	2	49	Brick	III	Two rough flat surfaces with sharp	~	Med

Context	Nos	Wt (g)	Form	OA:Ox Fab Series	Description	Markings / Decoration	Obj date
					arris. Quite heavily fired or burnt.		
105	12	510	Roof: flat	IIIb	Generally smooth or fairly even surfaces, but some rougher bases. Edges quite rough & crude with rounded arrises. Two joining. A lot of concretion on several pieces.	Glaze: on 4 fragments - a few brown splatters on corner fragment; one heavily fired maroon surface with thin patchy brown glaze; dark greenish brown thinning to edge; green glaze with brown mottles.	Med 13-14C
107	3	24	Roof: flat	IIIe	Flat even surfaces; rough flat edge. base sparsely coated in medium quartz moulding sand.	One fragment has splatters of greenish brown glaze (this may be a ridge tile).	Med 13-14C
107	1	49	Roof: flat	IIIb	Flat even surfaces; base slightly undulating & coated in med-coarse quartz moulding sand	~	Med 13-15C
107	1	28	Roof: flat	IVa	Surfaces coated in concretions, but seem fairly even. But thickness suggest this is earlier cruder form.	~	Med 12-15C
111	2	22	Roof: flat	IIId	joining fragments. Flat surfaces, heavily abraded.	unglazed	Med 12-14C
111	3	129	Roof: flat	VIIb	Fairly even surfaces; unglazed more undulating. Edges irregular with arrises folded over. The glazed pieces are more likely to be ridge than peg tile.	Glaze: olive green evenly applied to 2 fragments	Med 12-14C
201	1	365	Pipe	stoneware	Plain unglazed exterior surface.	Streaky yellowish green glaze with brown lines.	EMod: 19-20C
214	1	19	Brick	III	Two very flat surfaces with very sharp angular arris.	~	Emod: 19C

Context	Nos	Wt (g)	Form	OA:Ox Fab Series	Description	Markings / Decoration	Obj date
					Brown mortar on one surface.		
217	1	48	Brick	III	Flat even surfaces; sharp angular arris.	~	PM: 17-18C
217	1	37	Brick	~	Even flat sanded side and small area of ?top with patch of mortar extending to side. There is a very even chamfered side surface that is not the originally fired surface but may have been deliberately shaped or has worn to this shape. Possibly Tudor brick.	~	EPM: 16-17C
219	5	302	Roof: ridge?	IIIb	Smooth wiped top surface; rougher sanded base.	Glaze: a few splatters of reddish brown glaze on one fragment	Med 12-15C
219	3	436	Roof: ridge?	IIId	Two joining. Fairly flat even surfaces; edges fairly rough with rounded corners. Thicken to edges.	Glaze: olive green with browner mottles with patchy splatters towards corner & lower edge	Med 13-14C
227	4	60	Roof: flat	IIIc	Plain even surfaces, Thickened rounded rim.	~	Med 12-15C
227	2	65	Roof: peg	IIIc	joining fragments. Fairly even cambered top surface, rough creased base with medium-coarse clear quartz moulding sand . Edges flat with sharp upper arris and rounded lower; slightly rounded corner. Top edge heavily fired. Conical peg hole 12 - 9 mm centred 24/67 mm from top/	Glaze: a few splatters of brown glaze around and in the peg hole.	Med 12-15C

Context	Nos	Wt (g)	Form	OA:Ox Fab Series	Description	Markings / Decoration	Obj date
					side edges.		
227	2	100	Roof: ridge	IIIc	Even surfaces, but very weathered on glazed fragment with much of surface flaked off.. Unglazed fragment has curved thickened end rim flattened with rounded arrises.	Glaze: green with brown mottles on one.	Med 13-14C
234	1	61	Roof: flat	IIIa	Flat even surfaces; underside densely coated in clear/rose medium quartz moulding sand	~	Med 13-15C
200	2	29	Wall render	Mortar	Buff sandy & gritty mortar. In two distinct layers - a primary coat 5-6 mm th and final render 10-12 mm th..	The surface is coated with a thin lime plaster render 1 mm th which has remnants of a pale blue/grey wash	Pmed
Total	50	2596					

B.5 Worked Stone

by Ruth Shaffrey

B.5.1 Seven pieces of stone were retained. Five of these are unworked and the sixth is a whetstone rod of schist or possible phyllite (there is no fresh surface). The rod (SF8, garden soil 101) is probably unshaped but is very well used and now has a sub-square profile. It is likely to be 11th century or later in date. The seventh piece of stone is a large piece of chalk which has been shaped and painted. It is a fragment of a circular item with one concave painted face and the with the flat circumference also painted. It is presumably a moulding from a building.

Table 6: Worked Stone

Ctx	Description	Lithology
101 (SF 8)	Whetstone rod, well used. Burnt	?Phyllite
201	Shaped stone, fragment of circle painted on one concave face and on the circumference	Chalk

APPENDIX C. BIBLIOGRAPHY AND REFERENCES

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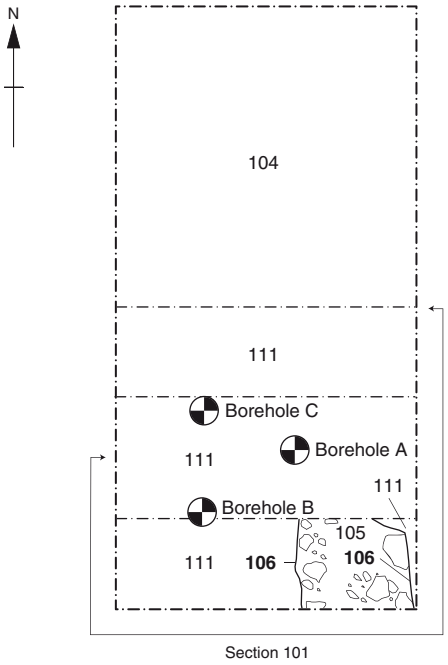
Figure 1: Site location

Figure 2: Trench locations

Trench 1
Plan



Trench 1
Section 101

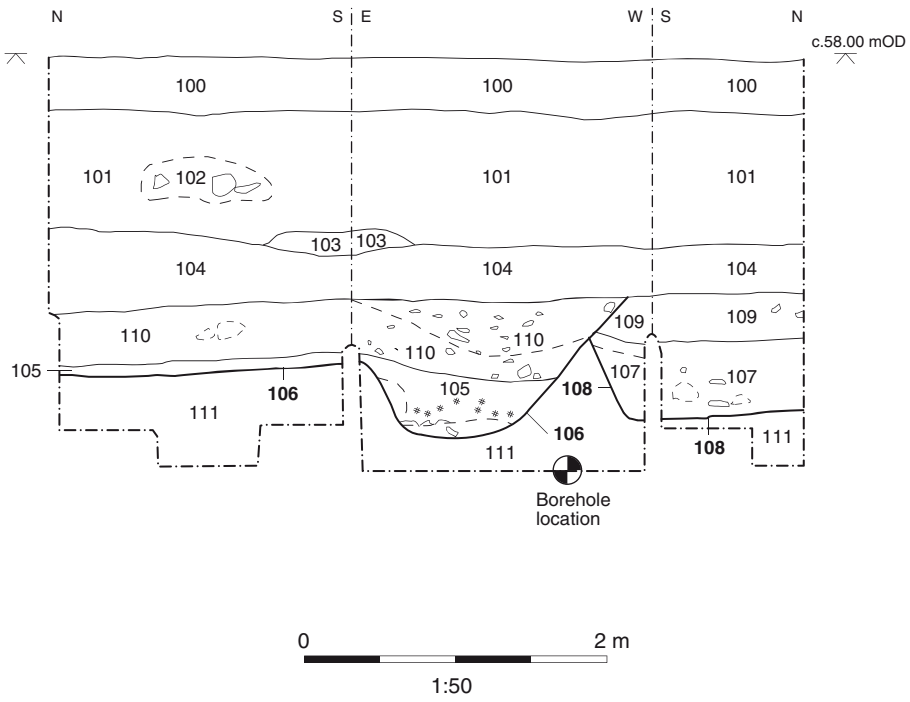
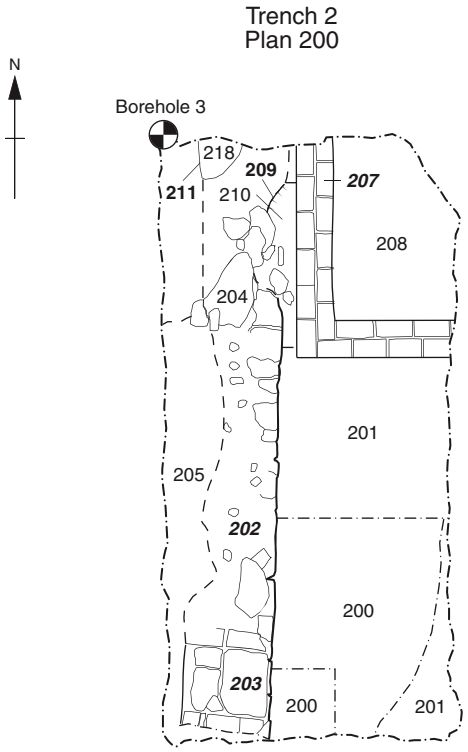


Figure 3: Trench 1, plan and section



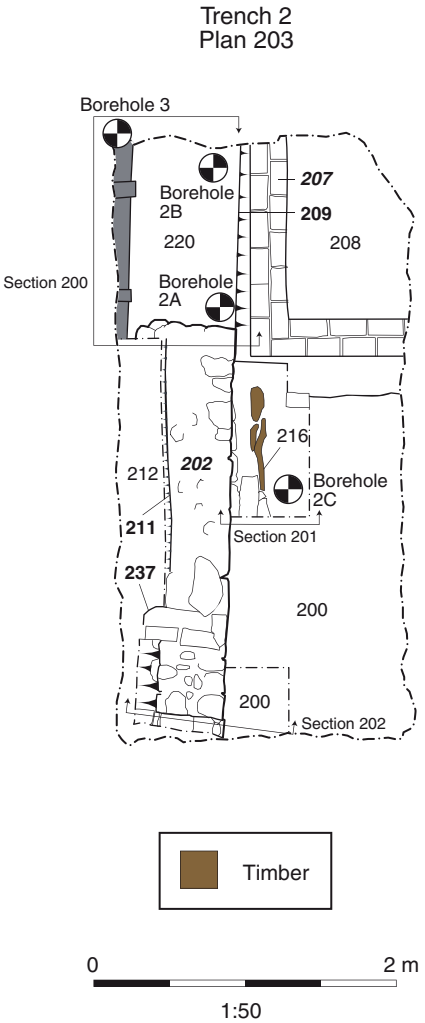


Figure 4: Trench 2, plans

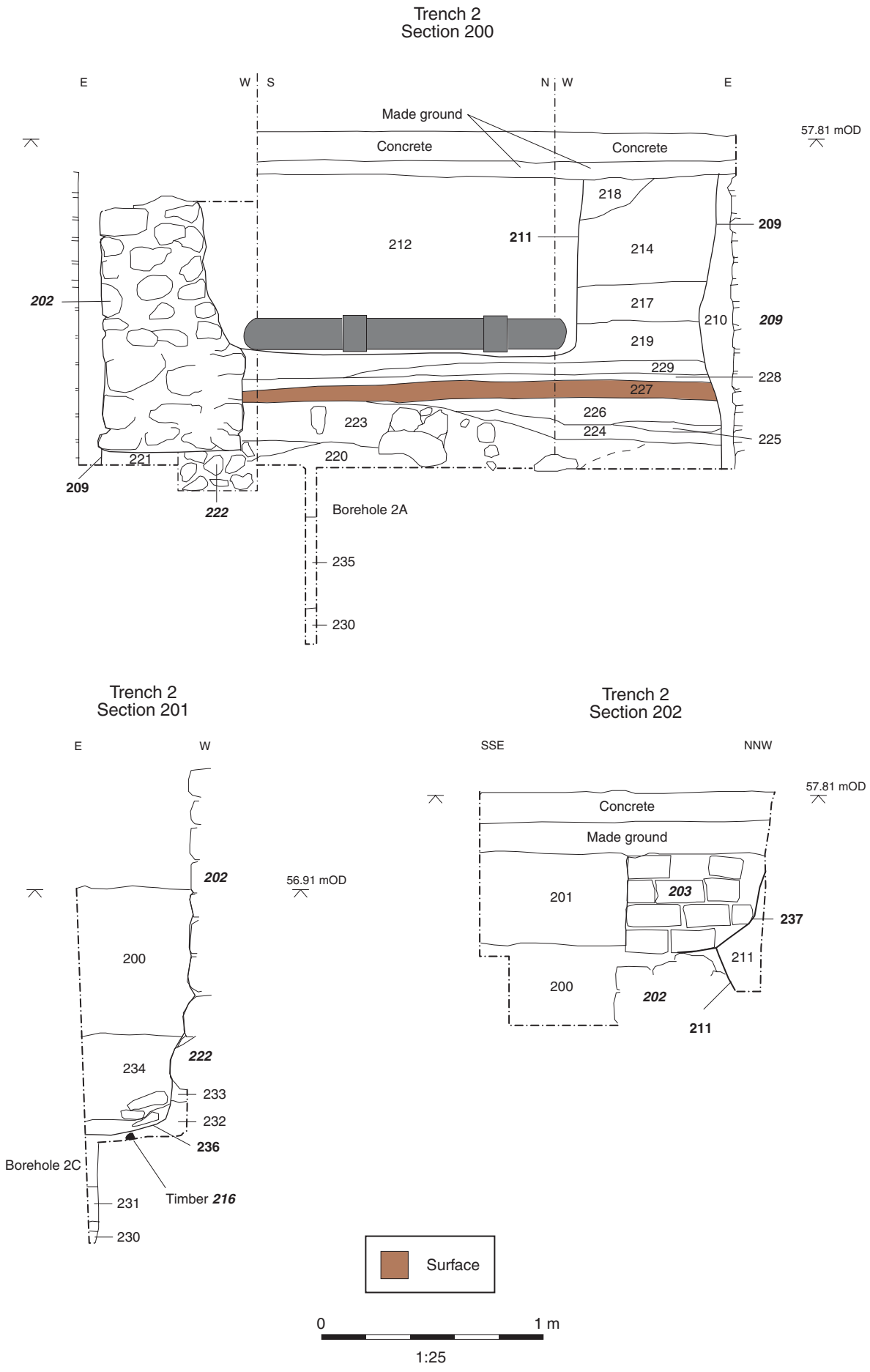


Figure 5: Trench 2, sections

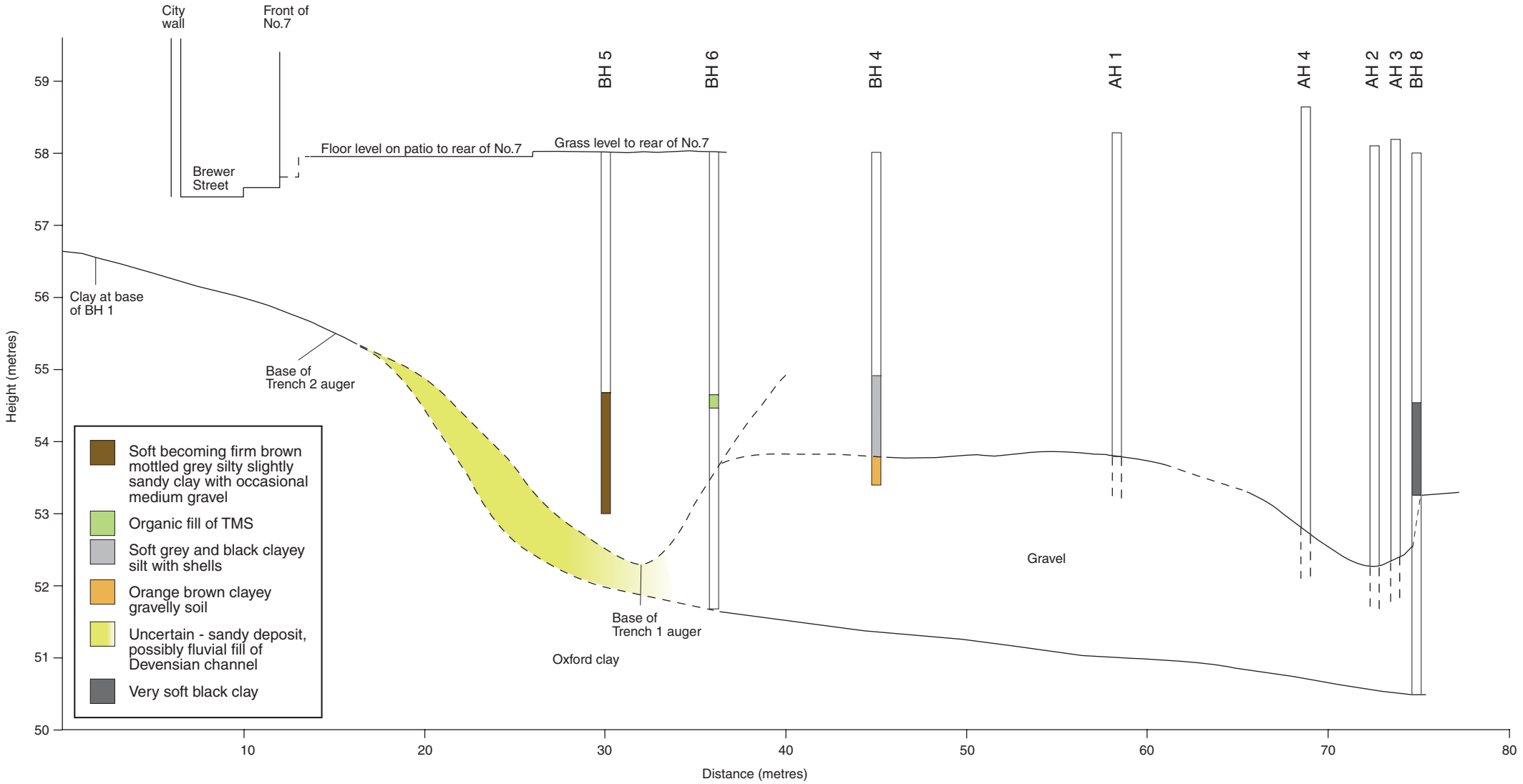


Figure 6: Reconstructed profile

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