



BERMONDSEY SPA REGENERATION
Phase 3 and 4
Sites F and U
Jamaica Road
London SE16

London Borough of Southwark

Evaluation report

September 2010

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Evaluation report

Site Code: JMR10
National Grid Reference: 534070 179420
534000 179530

| | |
|-----------------|------------------------------------|
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Summary (non-technical)

This report presents the results of an archaeological evaluation carried out by Museum of London Archaeology (MOLA) on the site of Bermondsey Spa Regeneration, Sites F and U, Jamaica Road, London. The report was commissioned from MOLA by Willmott Dixon on behalf of the client, the Hyde Group.

Following the recommendations of the Senior Archaeology Officer for the London Borough of Southwark six evaluation trenches were excavated on Site F in February 2010. Two of these were expanded in June and July 2010 to confirm the original findings, while a further two trenches, previously inaccessible, were excavated on Site U at the same time.

The results of the field evaluation have helped to refine the initial assessment of the archaeological potential of the site.

The evaluation recorded the location of the eastern stream of the Neckinger River and has provided further information regarding the extent of the higher ground that formed the Bermondsey eyot. The area was most likely marshy and uninhabitable in the Roman period and the only feature dated to this time is a substantial ditch that is thought to demarcate land affected by inundation from the higher and drier area to the east. The land remained in this state until the 18th century at which point it was suitable for horticulture. By the second half of the 18th century streets and housing had been laid out.

In the light of revised understanding of the archaeological potential of the site the report concludes the impact of the proposed redevelopment has been mitigated through the investigation of additional areas at the location of the significant archaeological features identified during the evaluation trenching.

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1 Introduction

1.1 Site background

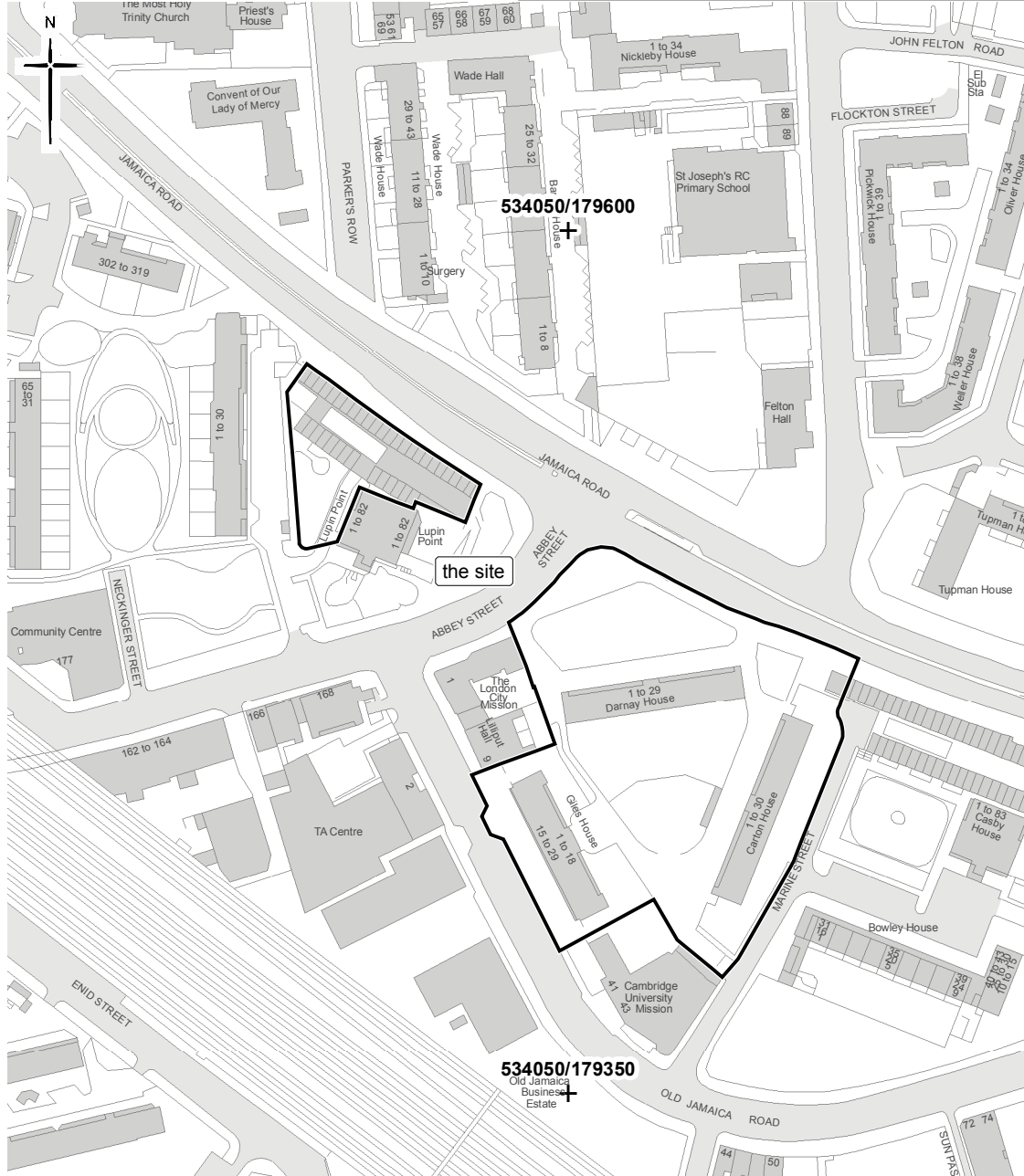
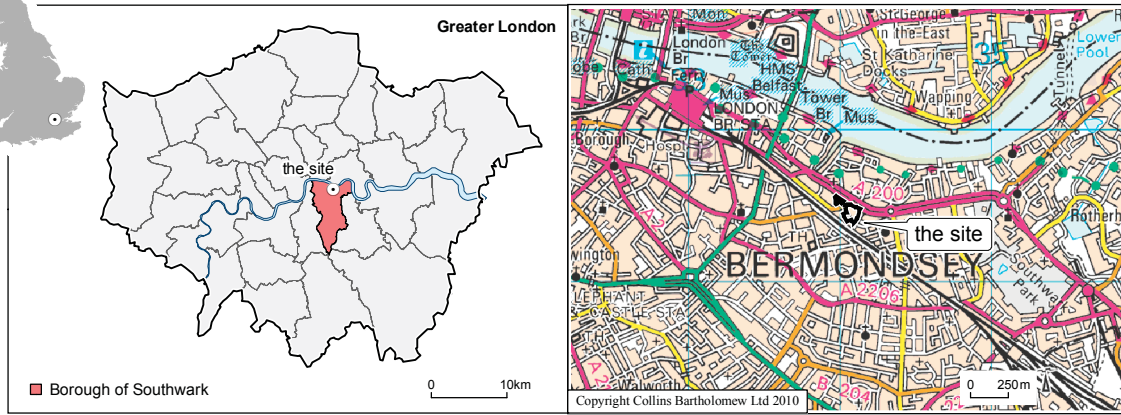
The evaluation took place at *Bermondsey Spa Regeneration, Sites F and U, Jamaica Road, London SE 16*, hereafter called 'the site' (Fig 1). The site code is JMR10.

Site F is located on the east side of Abbey Street and is bounded by Abbey Street to the west, Jamaica Road to the north, Marine Street to the east and Old Jamaica Road to the south. The centre of Site F lies at National Grid reference 534070 179420. Site U is located on the west side of Abbey Street and is bounded by the Lupin Point building and grounds to the southeast, Jamaica Road to the north and a pedestrian access way to the west. The centre of Site U lies at National Grid reference 534000 179530.

Modern ground level immediately adjacent to the site lies between c 3.0 and 3.4m OD.

The evaluation was carried out in two stages; the initial stage took place between 08/02/2010 and 18/02/2010 and involved the excavation of Trenches 3 through to 9 on site F, although Trench 7 had to be abandoned because it was located in the main access route on and off the site. The second stage took place between 16/06/2010 and 06/07/2010 and entailed the extension of Trenches 4 and 9 on site F along with the excavation of Trenches 1 and 2 on Site U (Fig 2).

A Method Statement for archaeological evaluation was previously prepared, which covers the whole area of the site (MOLA, February, 2010). This document should be referred to for information on the natural geology, archaeological and historical background of the site and the initial interpretation of its archaeological potential.



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Scale 1:2,000 @ A4

0 100m

Fig 1 Site location



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Fig 2 Trench location

1.2 Planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Method Statement* which formed the project design for the evaluation (see Section 1.2, MOLA, 2010).

1.3 Planning background

The London Borough of Southwark has granted planning permission for the proposed redevelopment (Planning Ref: TP/361-E) with archaeological conditions (Conditions 17 and 18) attached to the consent. Archaeological field evaluation by trial trenching was considered to be the appropriate response on this site.

1.4 Origin and scope of the report

This report was commissioned by Inspace Partnerships on behalf of the client, the Hyde Group, and produced by the Museum of London Archaeology (MOLA). The report has been prepared within the terms of the relevant Standard specified by the Institute for Archaeologists (IFA, 2001).

Field evaluation, and the *Evaluation report* which comments on the results of that exercise, are defined in the most recent English Heritage guidelines (English Heritage, 1998) as intended to provide information about the archaeological resource in order to contribute to the:

- formulation of a strategy for the preservation or management of those remains; and/or
- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- formulation of a proposal for further archaeological investigations within a programme of research

1.5 Aims and objectives

All research is undertaken within the priorities established in the Museum of London's *A research framework for London Archaeology, 2002*

The following research aims and objectives were established in the *Method Statement* for the evaluation (Section 2.2):

- What is the nature and level of natural topography and is there any evidence for palaeochannels or the margins of eyots on the site?
- What is the topographical and environmental profile, particularly in the early periods, of the site and how does it refine the predictive models for the area?
- What are the earliest deposits identified?
- Is there any evidence for prehistoric activity on the site?
- Is there any evidence for Roman activity on the site? If present how does this relate to Roman activity to the north-east of the site?

- Is there any evidence for medieval activity on the site?
- What is the nature of the evidence for post-medieval activity on the site?
- At what date was the site built-up during the post-medieval period? If remains of buildings are present do these represent domestic and/or industrial activity on the site?
- Does evidence of 17th century civil war defence exist on the site?
- How do post-medieval occupation remains compare with the available cartographic evidence?
- What are the latest deposits identified?

2 Topographical and historical background

The geology and topography of the Bermondsey district it is a relatively low-lying area characterised by islands (or 'eyots') of Pleistocene flood plain sand and gravel separated by mudflats, marshes and braided, tidal watercourses. The area has been particularly susceptible to the effects of environmental change as a result of the various marine transgressions and regressions which have occurred since the end of the last glaciation. Part of the site (Site U and the majority of Site F) is most probably located within a large, post-glacial channel which was oriented east-west and which separated the Bermondsey and Horselydown eyots. The southern area of site F appears to partially lie on the north-west of an area of relatively high natural ground associated with the Bermondsey eyot or island.

However the micro topography of the area is not fully understood, so it is possible that locally there may be various undiscovered infilled palaeochannels and small eyots. The geology of the area consists of Pleistocene river terrace gravels overlain by Holocene fluvial sediments. As a result of its low lying topography and the ongoing the post-Roman marine transgression that parts the site area likely to have been flooded on a regular or at least a seasonal basis from the late Roman period (AD 200-400) until the post-medieval period, when it drained and protected from flooding by river walls.

Previous geotechnical investigation of the site in March 2008 (two boreholes and twelve window sample logs provided by STATS Ltd) revealed that made ground overlay alluvium in site U and made ground overlay river terraces sands and gravels overlying London Clay in Site F. Made ground was recorded up to a depth of c 1.4m in window samples dug on site U, and between c 0.80m and 2.10m in boreholes and window samples in site F. The alluvium encountered in window sample 11 within site U and the sand and gravel river terrace deposits over London clay in the window samples in Site F suggesting some verification of the area of site U being positioned in a channel to the north-west of the Bermondsey eyot.

2.1 Prehistoric period (c 700,000 BC–AD 43)

During the prehistoric period, sea and river levels within the estuary fluctuated between shallow (regression) phases characterised by peat formation and transgressions when clays were deposited in deeper floodplain conditions. One of the regression phases (known as Tilbury IV) has been identified throughout the Upper Thames area. The peats date from c 1500–800 BC (the Middle and Late Bronze Age) and frequently contain preserved organic material: both natural palaeo-environmental evidence such as trees, pollen and floral remains; and man-made structures, eg timber trackways across the marshes. Prehistoric artefacts and evidence of occupation have discovered on various sites in Bermondsey.

2.2 Roman period (AD 43–410)

Roman features, including ditches, pits and inhumation burials have found locally within Bermondsey. The impression is that during the Roman period (AD 43-410) this area was a series of ditched fields and farmsteads. It is probable that the most low-lying areas of Bermondsey were only used as seasonal pasture.

A group of Samian pottery and coins of Claudius and Vespasian found in the vicinity of the former New Church Street by Roche-Smith in the 19th century, and is recorded in the Greater London Sites and Monuments Records (GLSMR) under Chambers Street (GLSMR 090660) to the north-east. The former course of New Church Street, however, ran south from a point a little to the south of modern Chambers Street, as far as Jamaica Road. Further Roman material has been recorded recently at St Michaels School (site code JFN08) c 172m to the north-east of the site. In the south-eastern corner of the site a rise of higher, sandy ground not silted over had been cut into by a Roman-period pit dating to the late first century AD.

To the west of the site at Old Jamaica Road, an archaeological evaluation in 2001 (site code OJD01) situated on the northern edge of Bermondsey eyot at the south recorded alluvial clay, on which were found a small number of Roman pot sherds, fragments of ceramic building material, prehistoric struck flints and animal bones.

2.3 Early and Later Medieval (AD 410 to c 1485)

The current phase of marine transgression, which began during the late Roman period, would have continued during the Saxon period and it is thought probable that the site was frequently flooded during this time. The Old English place-name Bermondsey is thought to be derived from 'Beormound's eye (island)' and it may have at one time have belonged to a Saxon lord of that name. Certainly this place-name aptly describes the topography of the area – a low gravel island surrounded by a maze of tidal creeks and marshes, which could have provided seasonal grazing. In 1082 Aylwin Child founded the nearby Cluniac Priory, better known as Bermondsey Abbey on a natural eyot to the south-west of the site. The Abbey was closed in 1537-8 and afterwards its buildings passed into secular ownership.

2.4 Post-medieval (AD 1485 to present)

The site lies close to or on the line of London's Civil War defences erected in 1642-3. The locations of the majority of the sections of the Civil War earthwork defences of London are not known precisely. The approximate circuit of the bank and ditch earthworks has been reconstructed in plans by Vertue (map of 1738), Sturdy (1975), and Smith and Kelsey (1996). However, elements thought to be the only current evidence of the Civil War ditch, excavated to the south of Whitechapel station, did not closely match the location or orientation of the reconstructions, lying some 30 to 50m from the reconstructed line. This suggests that local construction and layout were more complex than historic sources indicate. The reconstructions of the section of earthwork in the area of the site suggest that it may have run through site F (Fig 17, based on Vertue and Sturdy). Smith and Kelsey's reconstruction places it further from the site, to the south.

By the early post-medieval period, land reclamation and water management had created sufficient dry ground for settlement along the south bank of the Thames north of the site, as shown by Faithorne and Newcourt's map of 1658. The site at this time is shown as lying in open ground between the development along the river and development along Bermondsey Street terminating in the remaining reused Abbey buildings.

By the 18th century the low-lying areas of Bermondsey were being drained and protected from flooding by substantial river walls, which allowed these previously uninhabitable areas to be occupied. Large areas of Bermondsey were used for

farming or market garden to feed London's ever increasing population during the 18th century. Rocque's map of 1746 shows the site as divided into plots possibly in use as gardens or orchards. During the 19th century these areas of reclaimed farmland were built over, creating a dense mosaic of streets, small factories, workshops and terraced housing. By the close of the 19th century, areas of both site F and site U contained some areas of terraced housing particularly along Jamaica Road (now known as Old Jamaica Road) as shown on Horwood's map of 1799. The area sustained considerable damage in the Second World War, including the site, as shown on the London County Council bomb damage maps of 1939-45 (London Topographic Society 2005, map 77). This resulted in the demolition of all the houses in the extensive post-war rebuilding of the area and the creation of new roads such as Jamaica Road at the north site frontage.

3 The evaluation

3.1 Methodology

All archaeological excavation and monitoring during the evaluation was carried out in accordance with the preceding *Method Statement* (MOLA, 2010), and the *Archaeological Site Manual* (MoLAS, 1994).

Eight evaluation trenches were excavated, three of which were extended.

The ground was cleared by contractors under MOLA supervision. Trenches were excavated by machine by the contractors and monitored by a member of staff from MOLA.

The locations of the evaluation trenches were recorded by MOLA surveyors in conjunction with site engineers from the main contractor.

A written and drawn record of all archaeological deposits encountered was made in accordance with the principles set out in the MOLA site recording manual (MOLAS, 1994). Levels were calculated by reference to temporary bench marks provided by the main contractor.

The site has produced: eight trench location plans; 174 context records; five section drawings at 1:20 and 180 digital colour photographs. In addition 17 boxes of finds were recovered from the site. Ten environmental samples were taken, comprised of three monoliths and seven bulk samples.

The site finds and records can be found under the site code JMR10 in the MoL archive (LAARC).

3.2 Results of the evaluation

For trench locations see Fig 2

3.2.1 Trench 1

| <i>Evaluation Trench 1 (Fig 3)</i> | |
|---|---------------------------------|
| Location | Jamaica Street frontage; Site U |
| Dimensions | 7.5m x 2.3m x 1.5m deep |
| Modern ground level | 1.13m OD |
| Base of modern deposits | 0.63m OD |
| Depth of archaeological deposits observed | 1.30m |
| Natural observed | N/A |

A compacted deposit of fine alluvial clayey silt was observed along the length and breadth of the trench. The top of this was at 0.63m OD and is likely to have been horizontally truncated during post-medieval occupation and development of the area. This had been cut through by a relatively substantial north-south running ditch, [264], that was most likely intended for drainage as well as possibly marking out initial property divisions. A single sherd from a tin-glazed ware dish is dated 1630–1680, while fragments of clay tobacco pipe recovered indicates a more accurate date range of 1660–1680. This feature had been re-cut by another shallower ditch, [267], on the same alignment, although it had moved slightly to the west of the earlier ditch. This is likely to represent an attempt to re-establish the location of the property boundary that may have become blurred over time, possibly as a result of the area being afflicted by episodic or seasonal flooding. No dateable material was recovered from this feature.

These features and deposits were sealed by modern material associated with the pre-existing demolished buildings.

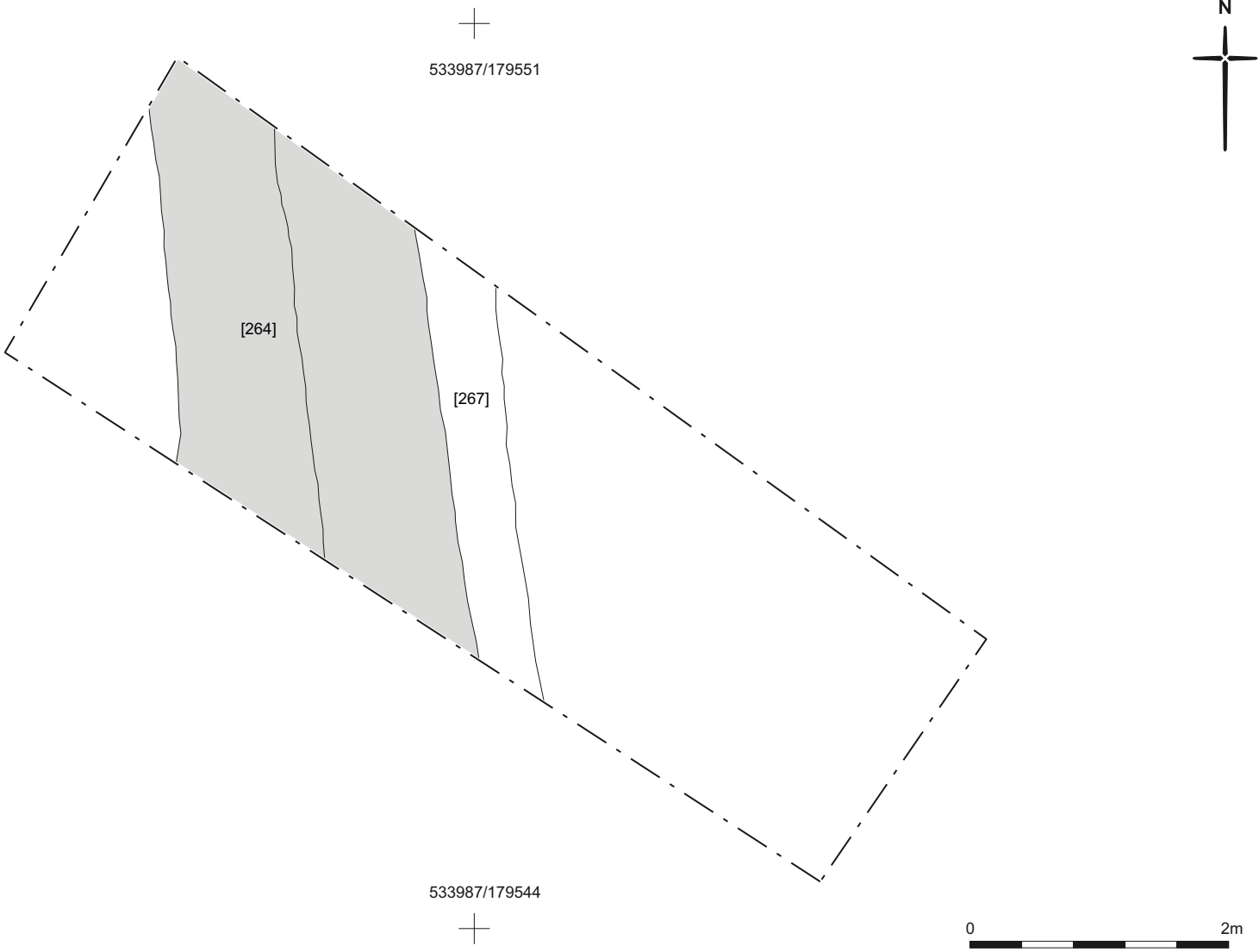


Fig 3 Trench 1

3.2.2 Trench 2

| <i>Evaluation Trench 2 (Fig 4 &)</i> | |
|---|---------------------------------|
| Location | Jamaica Street frontage; Site U |
| Dimensions of original trench | 15.3m x 2.0m x 1.3m deep |
| Dimensions of extended trench | 9.8m x 8.8m x 3.0m deep |
| Modern ground level | 1.70m OD |
| Base of modern deposits | 1.30m OD |
| Depth of archaeological deposits observed | 5.7m |
| Natural observed | -4.4m OD (gravel) |

Another trench located 20 metres to the east of Trench 1 on Site U, further along the Jamaica Road frontage, revealed a similar alluvial deposit to that seen in the latter. After excavating and recording later features within Trench 2, it was decided to extend and deepen the western end of the original trench in an attempt to record the full alluvial sequence. This involved widening the existing trench in order to create steps to allow access to the lower deposits. The base of the new stepped trench was at -1.4m OD (Fig 4). At this level the base of the trench was still within the alluvial deposits and it was decided that the best approach was to drill an auger hole (AH1) from the base of the stepped trench and record the remainder of the sequence in auger window samples using a Cobra TT pneumatic drill,. These records and samples produced by the auger hole combined with those above the base of the trench means the entire alluvial sequence was captured (Fig 5). The descriptions of the alluvial deposits below are taken from the geoarchaeological records.

The alluvial sequence

(Jane Corcoran)

Gravel [272] was reached at the base of the auger hole at -4.4m OD. This is likely to represent river bed deposits and is probably Pleistocene in date, although it may have been reworked in the Holocene period. The gravel was sealed by [273] which comprised of coarse grey sand with organic fragments over finer sand interbedded with grey clay bed and was located between -4.1m OD and -4.4m OD. These deposits could represent channel bars developed on the river bed with their surface becoming vegetated either seasonally or as water levels fell or as the river migrated. Soft pale whitish grey clay with occasional plant fragments [274] overlay the sand and was recorded between -3.7m OD and -4.1m OD and probably represents standing water.

Between -3.3m OD and -3.7m OD, a dark blackish brown and humified peat [261], sealed the clay and its presence suggests a relatively dry environment, while the interface between this peat and the underlying clay was irregular and diffuse and indicative of soil development. Variations were noted within the peat deposits which are described here, although they all come under context [261].



Fig 4 Trench 2 showing stepped extension, ge archaeological samples and auger location through alluvial sequence

Between -2.4m OD and -3.3m OD the peat was noticeably 'smoother' and contained a greater proportion of silty clay sediment, which suggests a period of increased flooding from the river. Between -2.0m OD and -2.4m OD the peat was very woody and extremely hard to penetrate with the auger. A dark brown very woody, crumbly and possibly detrital peat (although lacking sand or grit) was recorded in the top metre of the auger hole sequence between -1.4m OD and -2.4m OD. The peat [261] recorded at the base of the stepped trench formed an irregular bank-shaped feature with a surface at -1.2m OD in the east and -0.7m OD in the west. This peat appeared to be detrital and comprised of wood and twiggy plant fragments that could represent a strandline deposit of organic material washed up along the shoreline of a river channel or creek. Alternatively, the irregular surface of the peat might represent erosion of an earlier *in situ* peat deposit (which is supported by the clasts of peat within the base of the overlying clay, [245]).

Sealing [261] and lying between -1.2m OD and 0.4m OD was a blue grey silty clay, [245] approximately 1.6m thick. Deposit characteristics seen within the clay perhaps indicate a transition from intertidal or river marginal mud to a drier accretionary soil environment. These variations are noted here but are included within [245].

The lower clay was softer and contained more organic inclusions. It is likely to represent a more permanently flooded environment. This could be standing water in a creek or pool, or intertidal mud. This comprised of soft blue grey clay at the top and becoming whiter below -0.4m OD while at the base it is a soft, smooth brownish grey clay silt with manganese speckles, organic inclusions (e.g. flat leaves) and eroded clasts of peat.

The upper 0.5m probably represents a drier environment, perhaps a marshy soil episodically flooded by the river. It is comprised of manganese staining at the top, possibly associated with the overlying peaty soil [260], with a firmer consistency lower down with occasional roots and shell fragments. This also had a more 'blocky' structure possibly indicating drier conditions leading to accretionary soil build up.

Discussion of the alluvial sequence

BGS and MOLA mapping suggest that the site spans the edge of the river terrace remnant known as the Bermondsey Eyot, where dry soils, formed in Pleistocene brickearth, have existed from prehistory onwards and the floodplain, comprised of migrating river channels and wetland, have existed since the Mesolithic period.

(Fig 5 Section through the alluvial sequence in Trench 2 extension

Fig 6a and Fig 6b The site in relation to local geology and the eastern arm of the Neckinger River). The deposit sequence in Trench 2 appears to be located at the margin of the wetland area (given that high gravels overlain by brickearth were recorded in Trench 3, approximately 50m to the southeast).

The wetland is likely to extend across to the Horsleydown Eyot to the northwest and to follow the edge of the Bermondsey Eyot north eastwards. This area would have lain at the confluence of the Neckinger and the Thames, although the valley of the Neckinger, where it lay between the islands on the floodplain, is likely to have formed a channel of the Thames itself.

The earliest deposits recorded at the base of the auger core were fluvial gravels overlain by sands and interbedded sand and clay. This sequence of deposits represents the waning of an active watercourse, from fast to intermittent flow, perhaps related to pulses of meltwater in episodes of thaw in an arctic climate. The generally minerogenic nature of the sands and overlying clay suggests that they are likely to be cold climate deposits. However, organics within the uppermost sand suggest it might represent a vegetated bar within the river, indicating that the channel could have been active in this location at some time in the Holocene and that its reduction in flow related to migration away from the trench location. Plant remains from the samples taken from the sand might be identified and dated by radiocarbon (AMS).

It is not quite clear where the natural course of the Neckinger lay within the valley between the Horseleydown and Bermondsey Eyots, as the river was manipulated by the Abbey and in later times (Barton, 54-5) A date for the sands and interbedded sand and clay would be useful in clarifying when a natural stream channel flowed at this location, at the south west margin of the valley, adjacent to the Bermondsey Eyot, which would contribute to a better understanding of the evolution of the Neckinger.

The soft clay, which overlay the fluvial sands at the base of the auger hole sequence indicate that a pool of standing water developed in this area, as the trench location became isolated from the active channel (or/and as climate ameliorated in the Early Holocene). This pool could have formed a similar and contemporary feature to the Bermondsey Lake, known from the south side of the eyot. Again, confirmation of the date of the pool might be obtained from AMS dating of the organic remains preserved within the clay. If these plant fragments can be identified they could also indicate the characteristics of the surrounding environment (e.g. wooded or open). If diatoms or ostracods are preserved in the clay they might also be able to provide information about the nature of the water (deep or shallow, permanent or temporary, fresh or saline) and whether it existed in a warm or cold climate.

Flint scatters from the margins of the Bermondsey Lake (e.g. Bricklayers Arms) imply that Mesolithic activity focused on this area. A similar lake or pool in the valley of the Neckinger could have attracted similar activity. The elements of the local landscape are likely to have been significant to the prehistoric people who exploited the Bermondsey Lake. Whether the lake was an isolated feature or one of a mosaic of pools is likely to have been relevant to their use and exploitation of the area.

The dark brown humified peat directly overlying the standing water clays suggest that a hiatus exists between the pool and the (probably) forested environment represented by the basal peat. The extent of the pool would have contracted as it dried out and peat, representing a marshy environment, encroached across it. The evidence for these events has been overprinted, however, by the drier peat typical of

the humus accumulated on a forest floor, which subsequently developed across the former lake. Dating of this peat (which is likely to be Mesolithic) would enable the period of dry land surface development (at c –3.5m OD) to be placed within the wider pattern of landscape evolution.

The peat sequence in the auger hole became more woody and clay/silt-rich upwards, implying increasingly wet conditions, probably relating to rising river levels. It is likely that this central swathe of the peat deposit accumulated in a wet ‘alder carr’ woodland environment. Dating and some examination of plant remains preserved within the peat is needed to tie the peat sequence in to the pattern of environment change recorded in the local area (Thomas and Rackham 1996; Halsey in prep) and to identify the small-scale differences, which might give clues to past human use of the landscape. Two phases of trackway construction were identified at Bramcote Grove, crossing the marsh that infilled the former Bermondsey Lake from the mainland to the Bermondsey Eyot. It is possible that Bronze Age activity extended further into the floodplain, crossing the valley of the Neckinger to the Horsleydown eyot. A clearer picture is needed of the changing characteristics of this landscape (both laterally and through time) in order to understand the context in which the later prehistoric activity took place.

The peat sequence [261] recorded in the auger hole and base of the Trench 2 sondage is over 2m long, significantly longer than the peat recorded at St Michael’s School – perhaps owing to the more marginal and protected location of Jamaica Road, at the edge of the eyot. However, the irregular nature of its surface and the evidence for rip up clasts seen in section in the base of the overlying clay suggests its surface has been eroded. Erosion could have been the result of stream flow from the eyot, down the Neckinger valley or inwash from the Thames.

The soft and laminated clay silt [245] that overlies the peat contains plant remains including preserved leaves, lying flat between clay silt laminations. This is likely to represent fast accumulation in the muddy margins of a channel. The deposits resemble intertidal mud and could have accumulated in a tidal creek. It is possible that the erosion recorded at the top of the peat represents scour associated with a tidal surge, carving out deep creeks through the underlying deposits (such as have been seen in section in the Bankside Channel in Southwark) and gradually silting up with estuarine mud. The detrital nature of the uppermost peat, recorded in the auger hole and in the section, was also likely to be indicative of a strandline – light material washed up along the shoreline of the river, at the edge of the eyot. Although the clay silts contain organic remains suitable for dating, they would have to be selected carefully to ensure that less durable remains contemporary with the muds were dated and not remains eroded out of earlier peat deposits. It is also possible that the uppermost peat / lowest clay silt might contain finds, even fragments of CBM, which might give a *terminus post quem* for the date of the scour event and onset of clay silt deposition. The erosion could have led to another lengthy hiatus between the uppermost peat recorded (probably later prehistoric) and the earliest clay silt deposited (possibly historic, maybe medieval).

The characteristics of clay silt [245] change subtly up the profile recorded in the sondage and base of the trench – becoming more clayey, harder and more crumbly and with fewer organic inclusions upwards. This could indicate an increasingly dry environment less subject to regular inundation and more probably developing into a gradually accreting floodplain soil. It is likely that the post medieval peaty land surface [260] is characteristic of this wet, marshy soil environment.

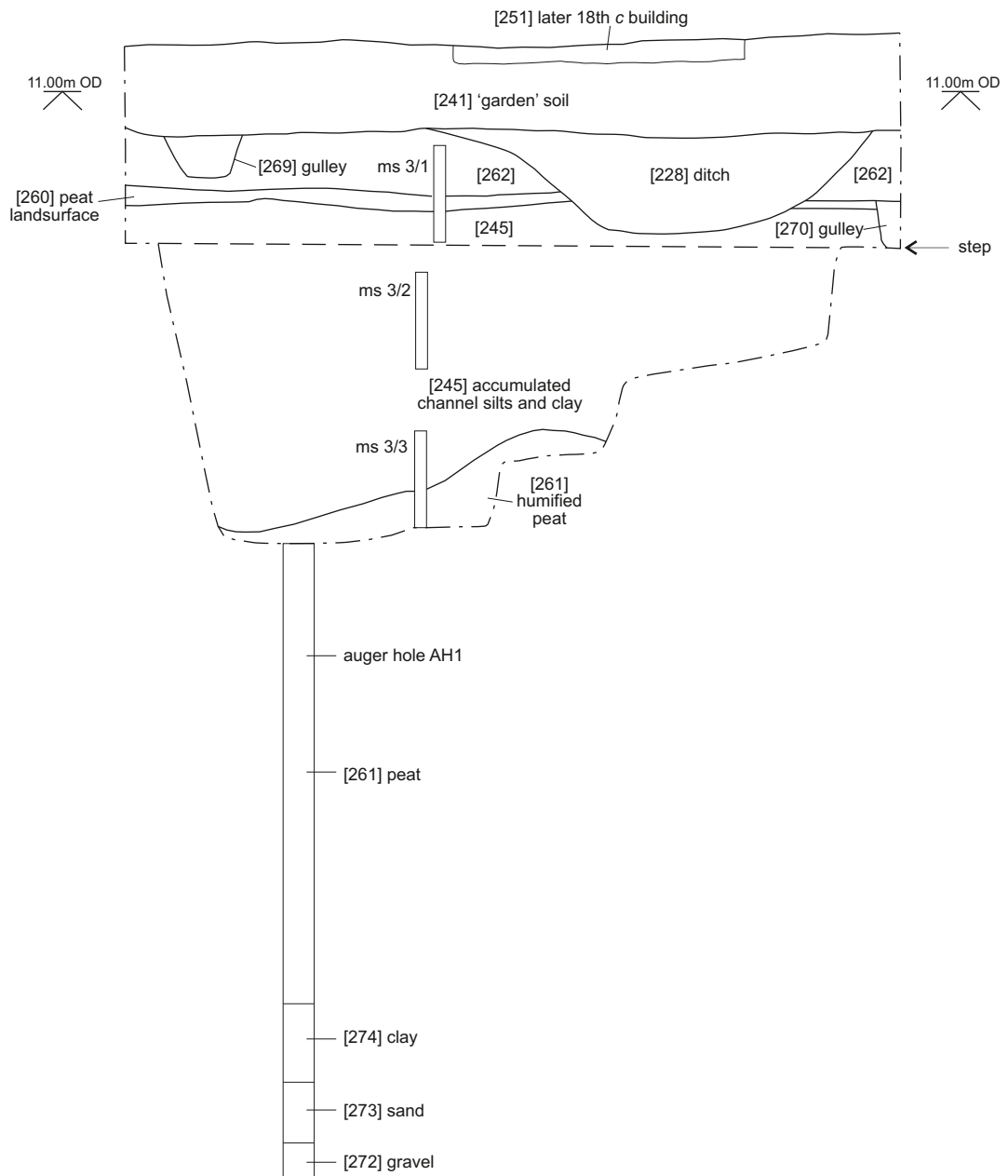


Fig 5 Section through alluvial sequence in Trench 2 extension

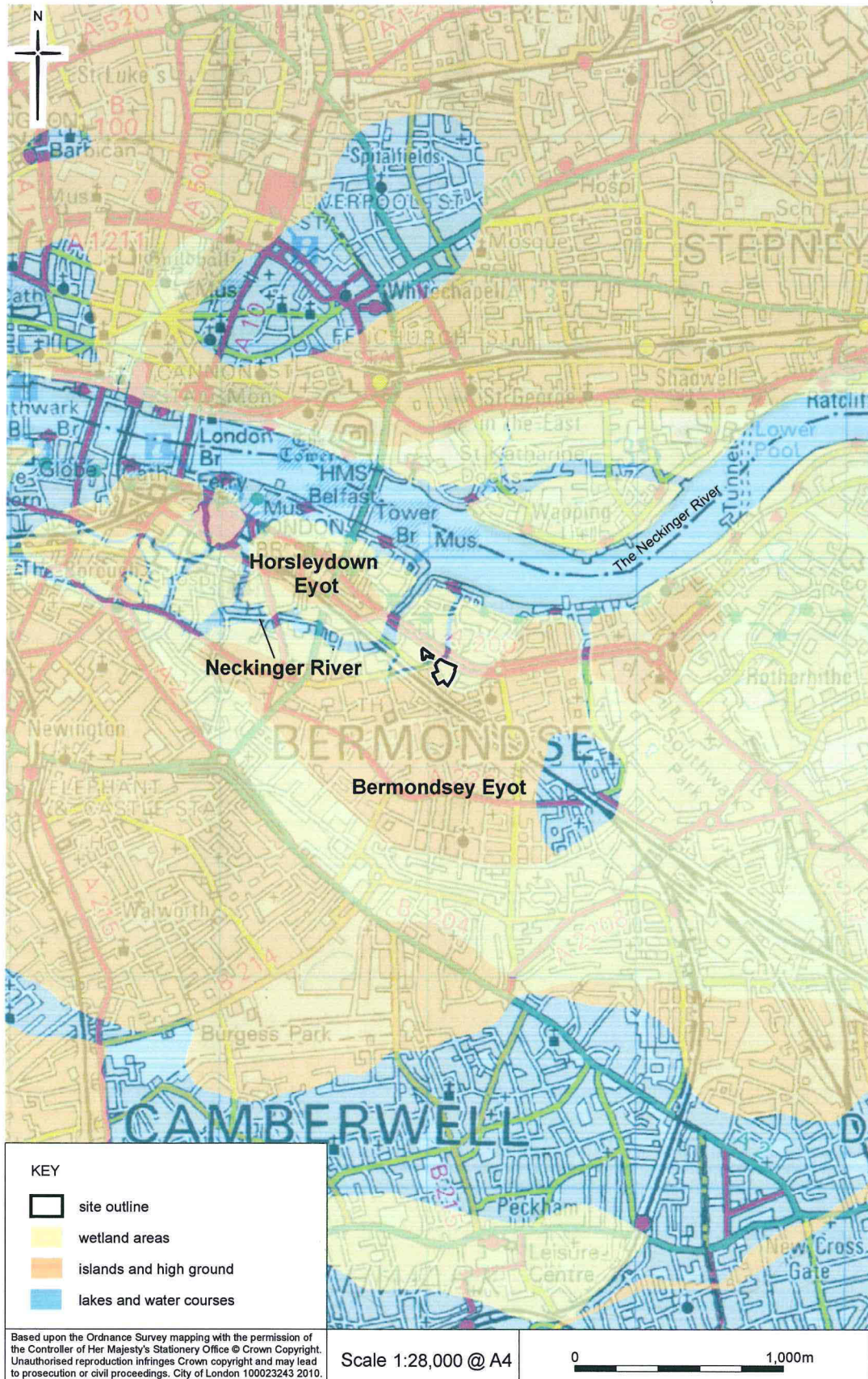


Fig 6a A general view of the site in relation to the geology of Bermondsey and the surrounding areas

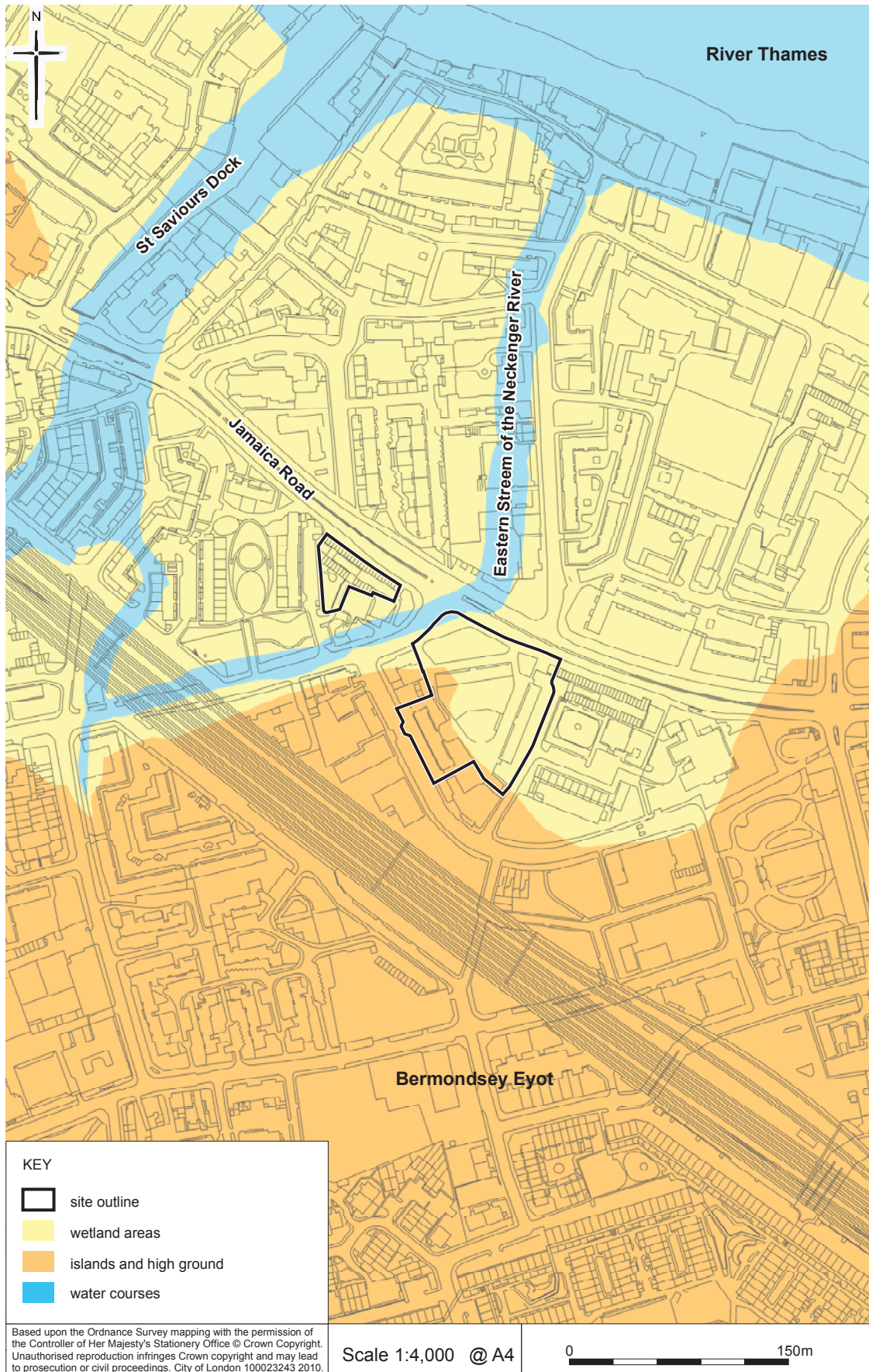


Fig 6b The site in relation to local geology and the eastern arm of the Neckinger River

Later activity

Cutting through the marshy land surface [260] were several linear features. These comprised of a drainage ditch [238], dated 1640–1670 on the presence of clay tobacco pipes, and a smaller gully [248], both of which ran north-south as well as the terminus of an east-west running linear feature [240]. The latter had vertical sides and a flat base and may possibly have held a horizontal timber baseplate as part of a larger structure. The alignment of these features seems to be very deliberate and is replicated in later features but do not reflect any of the surrounding present day streets in the vicinity, such as Old Jamaica Road or Abbey Street. On Rocque's map of 1746 Site U can be seen to occupy an area that appears to be dedicated to regulated garden plots with pathways giving access from the main roads (Fig 8). From Neckinger Road (later to become Abbey Street) leading north, one such pathway would appear to be the forerunner of what becomes Parker Row on Horwood's map of 1799 (Fig 9). It is this road that supplies the alignment for the features recorded on Site U.

These features, along with the marshy land surface [260]/[244,] were sealed and/or truncated by the deposition of [262]/[243], which resembles [245], apart from a grittier texture and more inclusions, which included a single sherd from a cauldron in London-area redware that is dated 1480–1650. It is unclear whether this was a natural or man-made event – it is possible another episode of river scour and flooding took place, with [262]/[243] gradually accreting in the same way as [245], but later being incorporated into the development of the overlying man-made soil, by digging over and the addition of ash, nightsoil and other inputs. However, it is also possible that the wet marshy soil was first brought into cultivation by groundraising – dumping alluvial deposits (perhaps derived from digging drainage ditches) on its surface, to level-up this lower lying area with the higher ground on the eyot immediately to the south and east. Its lowest part was slightly smoother and bluer than its upper part and contained eroded clasts of [260]. A diffuse interface existed with the overlying deposit [241].

Another set of linear features cutting through [262]/[243] point towards renewed activity on the site and still maintain the alignment seen in the earlier features. This includes another, more substantial north-south aligned drainage ditch [230], measuring 1.6m wide and almost a metre deep and which contained clay tobacco pipe dated to 1660–1680. Other linear features that may represent structures similar to that suggested by [240], above include [222], [224], [226], [232], [236] and [269]. Both east-west and north-south alignments are displayed and they are all steep or vertically sided with flat bases. One sherd from a mug in Westerwald stoneware (WEST), imported from the Rhineland was recovered from [222] along with other wares dated 1630–1700, although a medium-sized assemblage of clay tobacco pipe points to a slightly narrower date range of 1660–1680.

A later drainage ditch [228] cuts through [230] but is on an east-west alignment. Apart from a dress-making pin and a copper alloy button, this feature also contained fragments of clay tobacco pipe dated 1780–1800. Fragments of slag from a smithing hearth were also recovered from this feature, which may imply metal-working took place within the vicinity. Although these features appear contemporary as they are all sealed by the soil horizon [241], the difference in the date ranges provided by the pipe fragments indicate that the ditch [228] was dug approximately a century later than the other features. This is likely to be the final phase of drainage of the area prior to the land becoming sufficiently dry for more substantial occupation. The extensive soil deposit [241] represents the importing of material to raise the ground

by approximately 0.5m. This was a blackish brown gritty slightly sandy silt with finely comminuted glass, brick, pot and wood inclusions, the top of which was at 1.3m OD. This contained a medium-sized assemblage of pottery dated 1760–1800 along with clay tobacco pipe dated 1780–1820. This date range indicates that the final effort to drain the area and the raising of the ground are likely to be associated events.

The latest activity recorded in Trench 2 is the construction of a brick building, [251] through to [258] and a brick-lined well [246], both of which have cut through the garden soil [241]. Although only two courses survived of walls [250] and [251] they are 0.6m wide and are resting upon substantial timber baseplates. These are most likely to be the load-bearing walls of the building, extending beyond the limits of the excavation to the west and south towards the road frontage. Walls [252], [253], [254] and [255] represent internal room partitions with [256] and [257] being a floor and a hearth. The well was located in the back garden of the property.

The walls of the building displayed the same east-west and north-south alignments as observed in the earlier linear features. On Horwood's map this can be seen as one of a row of houses fronting onto the east side of Parker Row (possibly printed as Barker Row on the map) which formerly ran through the site. It crossed over Neckinger Road where it became Prospect Row and which is currently Old Jamaica Road.



Fig 7 Trench 2 with stepped extension showing 18th century structures and features

3.2.3 Trench 3

| <i>Evaluation Trench 3 (Fig 10)</i> | |
|---------------------------------------|-------------------------------|
| Location | Jamaica Road frontage; Site F |
| Dimensions | 13.0m x 2.1m x 1.5m deep |
| Modern ground level | 3.05m OD |
| Base of modern deposits | 2.65m OD |
| Depth of archaeological deposits seen | 1.10m |
| Natural observed | 1.57m OD (brickearth) |

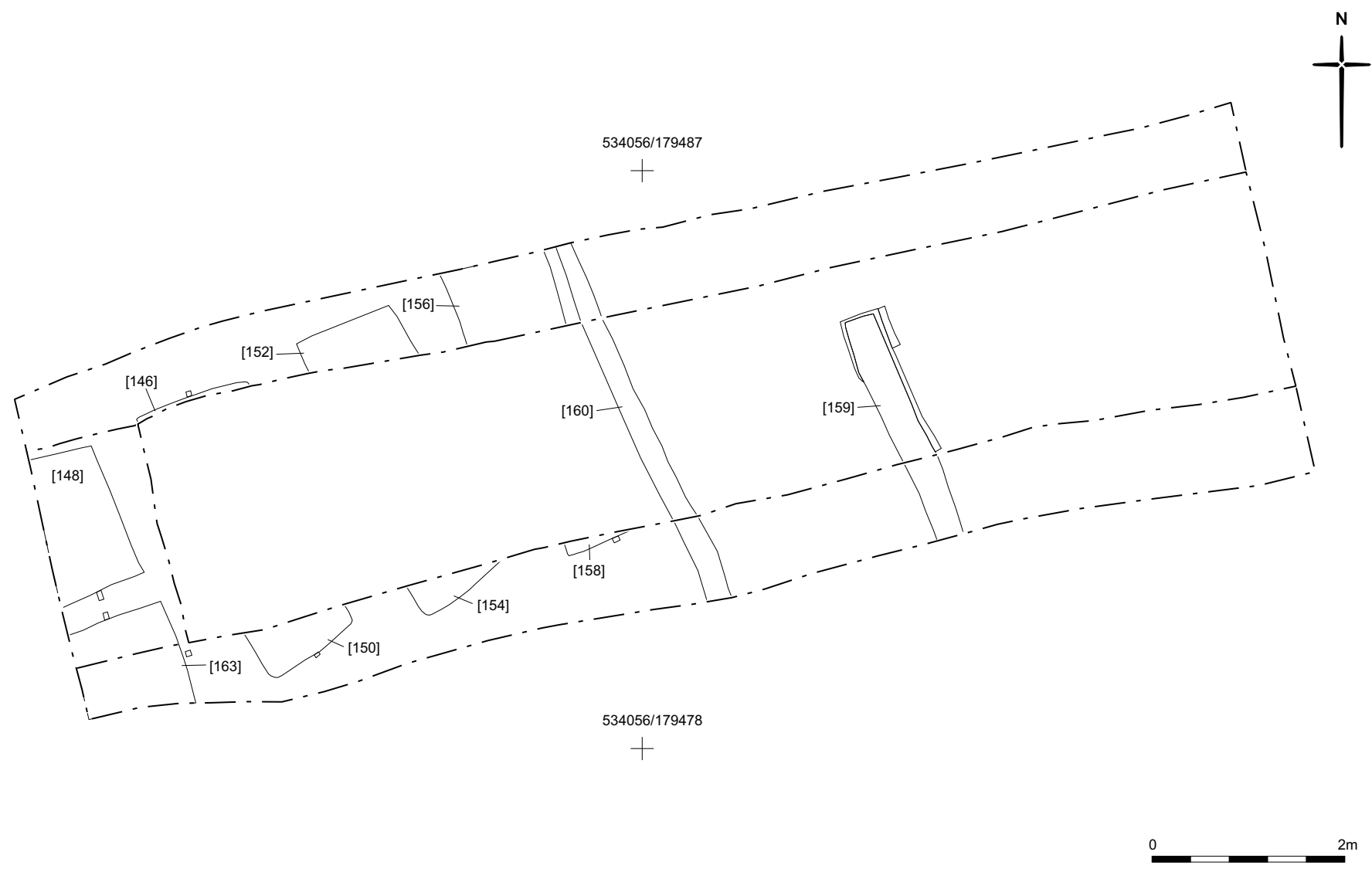
Natural clay deposits were at 1.57m OD.

Above this was a 0.50m thick soil horizon [169]. Cutting through this was a brick wall [159] running northwest-southeast. This wall did not cross the whole trench suggesting there was a doorway to the northwest. The highest survival was at 2.60m OD. A rubbly deposit [167] to the northeast suggests this was a backfilled cellar. The wall also cuts through a 0.40m thick mortar deposit [168] that was only recorded in section.

There was also a large vertical sided cut [160] that was filled with clay [156] that acted as a waterproof lining to a number of timber lined pits. A machine dug slot through several of these pits established they measured up to 1.4m wide, over 3.0m in length and up to 1.0m deep. Eight pits were recorded; [146], [148], [150], [152], [154], [156], [158], and [163] and at least two more located close to the trench limits were not investigated. Although most of the linings had rotted away sufficient remained to show the thin timber planking had been nailed onto a small vertical stake usually set in the middle of each side of the pit and did not appear to cover the bases of the pits. The pits had been backfilled with a variety of different materials, including slate, iron waste debris and concrete fragments.

The conclusion is that the pits held liquid as part of an industrial process. This area of Bermondsey is known for its leather tanning industry, particularly in the 19th century, and the 1894 OS map (Fig 11) shows an open yard area with several rectangular structures. Alternatively, a sherd of pottery recovered from one of the pits retained a purple residue that may indicate dyeing was the industry involved, although the evidence is admittedly slim. A small assemblage of pottery and clay tobacco pipe indicate they were active from the mid 19th century until the first quarter of the 20th century at which point they were backfilled as the area was redeveloped in the 1930's and the pre-existing council flats were created.

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Fig 10 Trench 3



Fig 11 The site in relation to 1894 Ordnance Survey map of 1894

3.2.4 Trench 4

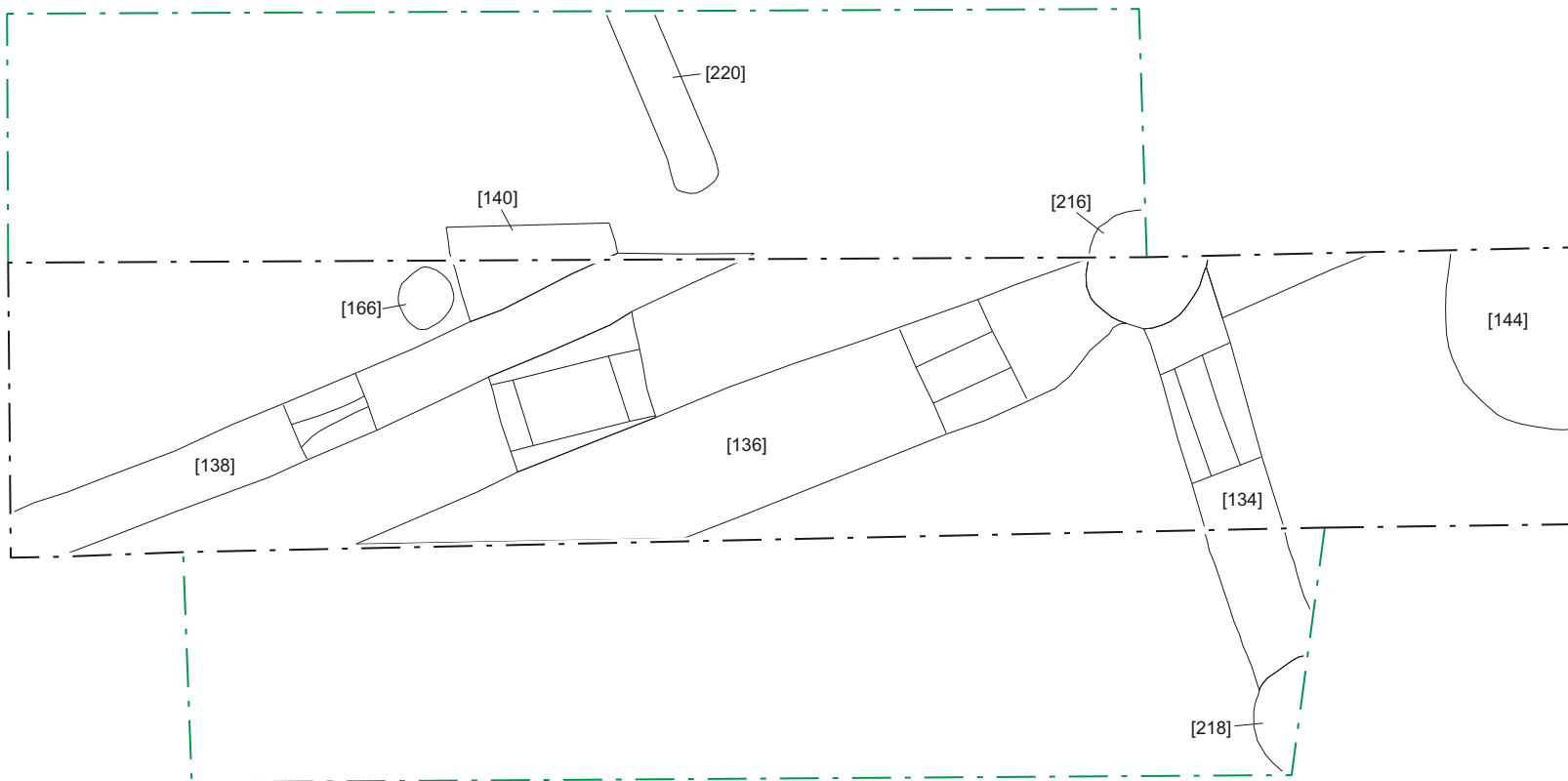
| <i>Evaluation Trench 4 (Fig 12)</i> | |
|---------------------------------------|---|
| Location | Jamaica Road frontage; Site F |
| Dimensions of original trench | 13.0m x 2.4m x 1.3m deep |
| Dimensions of extended trench | Extended 2m north for a length of 9.9m Extended 2m south for a length of 11.0m |
| Modern ground level | 3.05m OD |
| Base of modern deposits | 2.40m OD |
| Depth of archaeological deposits seen | 0.80m |
| Natural observed | 1.57m OD (brickearth) |

Natural clay was at 1.57m OD.

The earliest feature [140], thought to be the truncated remnant of a ditch, ran north-south and was 1.16m wide and 0.10m deep and contained a single sherd of Roman pottery. This was the only sherd of Roman pottery found west of Trench 9. Another ditch [134] also ran north-south, was 0.60m wide and 0.20m deep and is dated 1680–1750, although this is only based on the recovery of two sherds of tin-glaze ware bowls. Two east-west running ditches, [136] and [138], were 0.20m deep and 1.20m wide and 0.40m deep and 0.50m wide respectively. Both are post-medieval in date as are a large pit [144] and a post hole [166]. These features were sealed by a soil horizon deposit [141] that was 0.50-0.70m thick.

In the extended areas, the possible ditch [140] did not appear to be a linear feature upon further investigation but a localised depression, although as no other dateable material was recovered it could still prove to be Roman. Two post-medieval pits, [216] and [218] cut through the ditch [134] and are dated to the first half of the 18th century. The former also contained part of a thick bell jar of the type used for cloches, suggesting horticultural activity on or near the site, confirming the existence of the market gardens seen on the historical maps. The only other feature was a relatively small north-south running gully [220] that terminated within the northern extension. It contained no dateable material and continued north beyond the limits of the excavated area.

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--- extension of trench

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Fig 12 Trench 4 including extension

3.2.5 Trench 5

| <i>Evaluation Trench 5 (Fig 13)</i> | |
|---------------------------------------|--------------------------|
| Location | Centre of site; Site F |
| Dimensions | 15.0m x 3.8m x 1.6m deep |
| Modern ground level | 3.30m OD |
| Base of modern deposits | 2.4m OD |
| Depth of archaeological deposits seen | 0.40m |
| Natural observed | 1.88m OD (brickearth) |

Natural clay deposits was at 1.88m OD.

A thick soil horizon deposit [131] across the trench was cut by a shallow ditch [126] running northeast-southwest and pits [128] and [130]. The latter is dated 1780–1820 on a small assemblage of clay tobacco pipe

These features were sealed by 0.90m of rubble and topsoil.

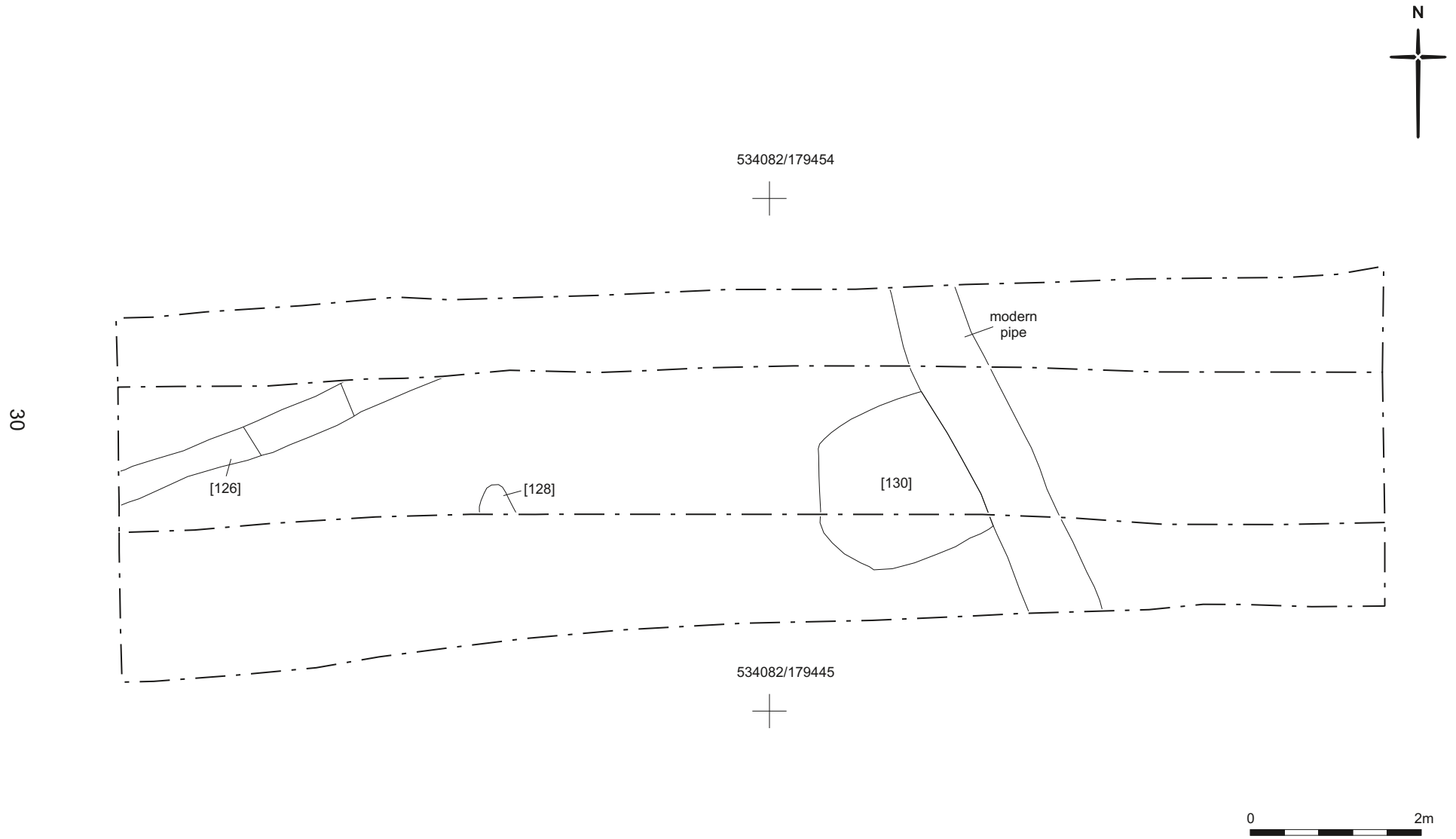


Fig 13 Trench 5

3.2.6 Trench 6

| <i>Evaluation Trench 6 (Fig 14)</i> | |
|---------------------------------------|--------------------------|
| Location | Centre of site; Site F |
| Dimensions | 12.0m x 4.0m x 1.5m deep |
| Modern ground level | 3.30m OD |
| Base of modern deposits | 2.60m OD |
| Depth of archaeological deposits seen | 0.50m |
| Natural observed | 1.96m OD (brickearth) |

Natural clay deposits were observed at 1.96m OD.

A 0.40m thick soil horizon [123] sealed the natural deposits. This was cut through by a shallow curving ditch [120] that had been replaced later by a brick drain [118]. This drain continued towards the southwest beyond the trench limits.

A brick cellar [121] measuring 4.00m long and over 2.50m wide survived to c 3.00m OD. The roof had collapsed but sufficient remained to show this was once curved. The structure is over 1.00m high, and had been in-filled with bricks. As the cellar was not fully excavated the presence of a floor could not be established. The type of bricks and mortar suggest the cellar is 20th century in date and the shallow depth probably means it was not an air raid shelter. The cellar had an external 0.25m wide clay lining presumably as a proofing measure suggesting it was to hold water and that it could be a large water tank or cistern relating to the Second World War.

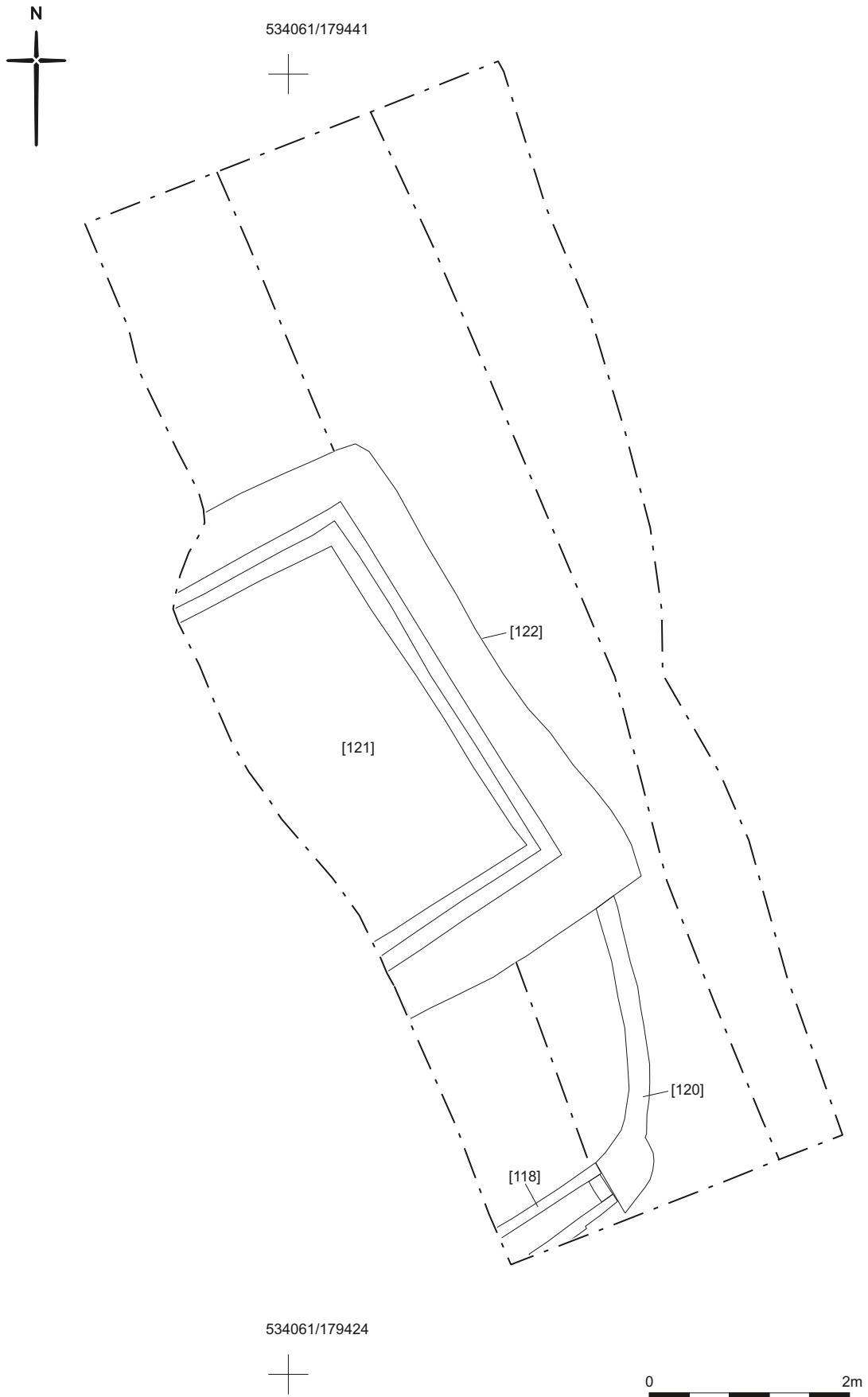


Fig 14 Trench 6

3.2.7 Trench 8

| <i>Evaluation Trench 8 (Fig 15)</i> | |
|---------------------------------------|--------------------------------|
| Location | Marine Street frontage; Site F |
| Dimensions | 14.60m x 2.00m x 1.4m deep |
| Modern ground level | 3.10m OD |
| Base of modern deposits | 2.50m OD |
| Depth of archaeological deposits seen | 0.50m |
| Natural observed | 1.77m OD |

Natural clay deposits were at 1.77m OD.

There was evidence of three parallel ditches [107], [109] and [113] running east-west, with the latter cut by another ditch [115] that was running north-south. This is the only dateable feature in the trench where clay tobacco pipe provides a date range of 1730–1760. There was also a pit [117] and a posthole [109]. All the features in this trench are probably post-medieval and were sealed by 0.60m of topsoil.

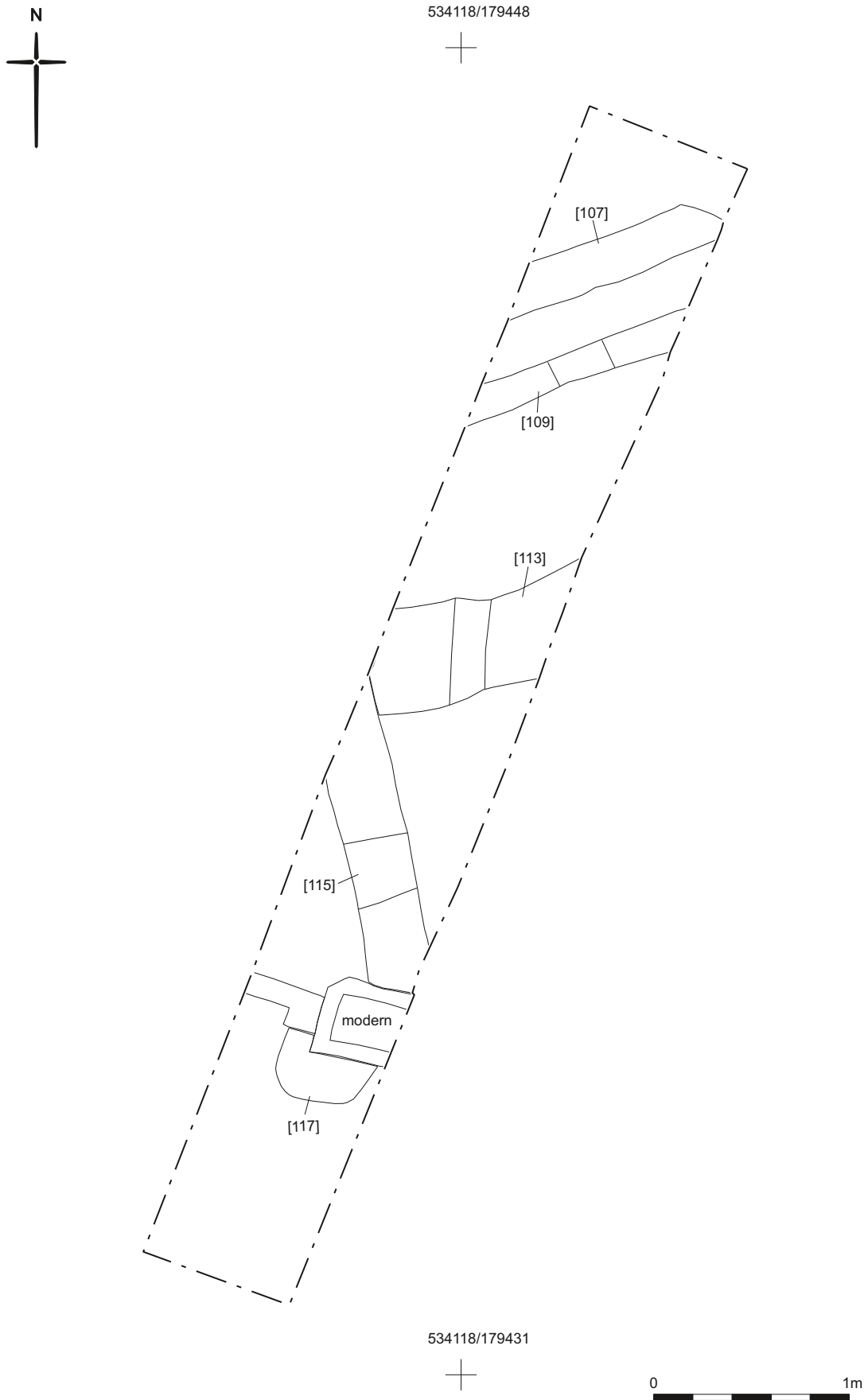


Fig 15 Trench 8

3.2.8 Trench 9

| <i>Evaluation Trench 9 (Fig 16)</i> | |
|---------------------------------------|---|
| Location | Marine Street frontage; Site F |
| Dimensions of original trench | 14.0m x 1.6m x 1.3m deep |
| Dimensions of extended trench | 9.9m x 2.5m x 1.3m deep |
| Modern ground level | 2.90m OD |
| Base of modern deposits | 2.20m OD |
| Depth of archaeological deposits seen | 0.50m |
| Natural observed | 1.66m OD (brickearth) 1.18m OD (gravel) |

Natural clay deposits were at 1.66m OD, while natural sands and gravels were observed at 1.18m OD.

A southwest by northeast running ditch [102] in the original trench only contained late Roman pottery. This was sealed by a post-medieval garden soil [100] that was 0.60m deep and dated to the mid to late 18th century on the presence of both pottery and clay tobacco pipe. A brick cellar [103] that was 1.40m deep and an isolated brick wall fragment further south [104], both surviving to c 2.70m OD, cut into this deposit.

A new area of excavation was cleared immediately adjacent to the west of the earlier trench and up against the brick and concrete foundations of pre-existing buildings.

A north-south running, relatively substantial ditch [210], contained a moderate amount of Roman pottery dated AD 270–400. This was mostly comprised of Alice Holt/Farnham ware vessels with some sherds of Oxfordshire red/brown colour-coated ware and Nene valley colour-coated ware. There was no later material and it would appear that this is the only Roman feature on the site. The full width was not accessible as the eastern edge lay beneath the cellar [103] recorded in the original trench. The excavated width was 1.3m, which indicates the full width would be in the region of two metres. It was 0.74m deep and had cut through the brickearth subsoil and into the natural gravel and sands. The fact that it penetrates these would point to its function being a drainage ditch, although this could also have acted as a field boundary or some other land division.

Animal bones recovered from the ditch were mostly those of cattle with a very small amount of sheep/goat and horse. There were no horn cores present or any other evidence indicating bone working, with the only detail observed being that of butchery associated with meat consumption. There was no recovery of foetal, neonate or infant animals indicating stock rearing was not taking place.

The continuation of ditch [102] was exposed and further excavation of this feature (recorded as [208]) revealed it to be post-medieval in date as a number of tobacco pipe fragments were recovered, dated 1700-1740, along with, it should be noted, 11 sherds of late Roman pottery.

One of the research aims for the evaluation was to ascertain the existence, or otherwise, of the bank and ditch that comprised the Civil War defences. There are currently two versions of where it is thought the line of the defence system crosses Bermondsey. David Sturdy in 1975, basing his location on Vertue's map of 1739 (Sturdy, Fig 2, 335), has the line of the bank and ditch running through the site, whereas Smith and Kelsey, proposed in 1996 that the line of the defences ran approximately 150 – 200 metres further to the south (Smith & Kelsey, Fig 3, 130-1).

Trenches 8 and 9 were positioned in case the former proved to be true (Fig 17). The evaluation, however, produced no evidence for the existence of the ditch. This could be for two reasons: that the ditch has been removed at this precise location by modern activity or that the conjectured path of the ditch, proposed by Sturdy is incorrect.

The existence today of The Fort public house near the junction of Grange Road and Spa Road, approximately 500m to the southwest of the site, is thought to mark the location of the fort and may indicate that the more southerly location for the line of the defences is more likely to be correct. A street name, commonly associated with Civil War forts and defences was that of 'prospect'. This is only found south of the Thames where the land was lower and flatter than north of the river and the forts would have afforded a good view of the surrounding area (Smith & Kelsey, p128). It should be noted that despite the lack of evidence from the evaluation, the fact that Old Jamaica Road was formerly known as Prospect Row raises the possibility that the site was not far removed from the location of the defences.



Fig 16 Trench 9 including extension

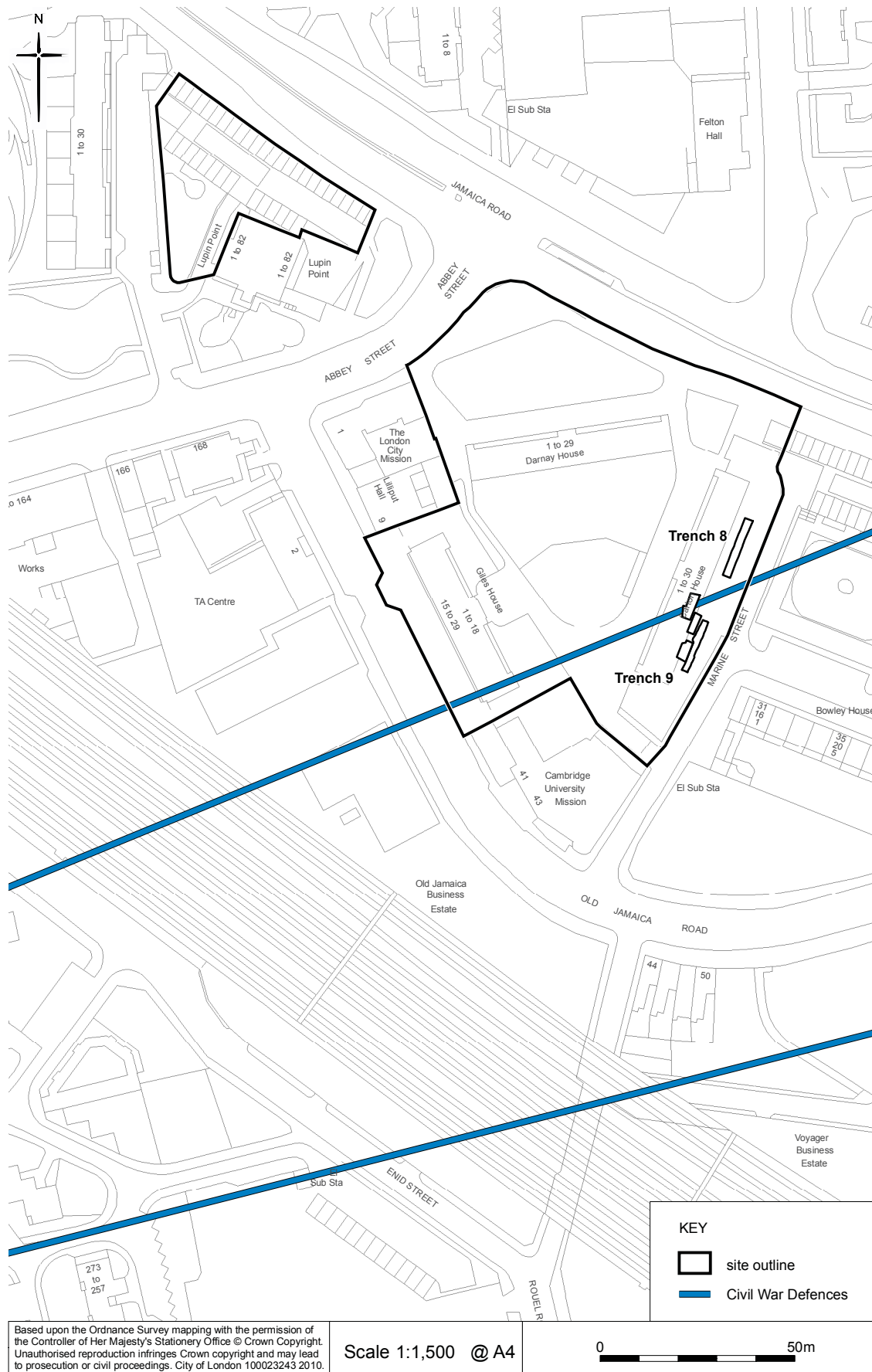


Fig 17 The site in relation to projected Civil War defences

3.3 Assessment of the evaluation

GLAAS guidelines (English Heritage, 1998) require an assessment of the success of the evaluation 'in order to illustrate what level of confidence can be placed on the information which will provide the basis of the mitigation strategy'. In the case of this site the evaluation was able to provide a reasonable assessment of the likely extent of surviving deposits and structures and led to additional trenching to further investigate archaeological features revealed during the initial trenching.

4 Archaeological potential

4.1 Realisation of original research aims

- What is the nature and level of natural topography and is there any evidence for palaeochannels or the margins of eyots on the site?

The trenches on Site F all appear to be located upon the north-western fringe of the higher ground of the Bermondsey eyot, while the two trenches on Site U lie within the flood plain of the smaller, eastern stream of the Neckinger River at the point where it is thought to turn north and empty into the Thames. The natural subsoil known as 'brickearth' was observed in all trenches on Site F and its highest level was recorded at 1.96m OD in Trench 6 towards the southern extent of the site. The natural Pleistocene gravels beneath this were only observed in Trench 9, at the southeastern extent of the site and were recorded at 1.18m OD. On Site U, however, no brickearth was observed and gravel was recorded at -4.40m OD and was sealed by a deep alluvial sequence. This gravel is likely to be river bed deposits of the Neckinger stream and is also probably Pleistocene in date.

- What is the topographical and environmental profile, particularly in the early periods, of the site and how does it refine the predictive models for the area?

It would seem that the site confirms that Abbey Street marks the western extent of the high ground that forms the large Bermondsey eyot and that this runs along the eastern side of the valley of the Neckinger River with the ground dropping sharply immediately to the west, coinciding with Site U. This low ground appears to have been continually inundated by tidal water from the Thames up to and even during the 18th century. Considering the information recovered from St Michael's Catholic School, approximately 250 metres to the northeast of the current site, together with that from the current site, it is possible that the two sites have identified the northwestern extent of the Bermondsey eyot and indicate that the current mapping for this is incomplete. This information should be incorporated into the existing data to allow for the current topographical mapping to be updated and revised for use in both research and as a predictive model for any other work in the vicinity.

- What are the earliest deposits identified?

The base of the alluvial sequence is most likely to be the earliest material on the site

- Is there any evidence for prehistoric activity on the site?

No evidence for prehistoric activity or occupation was observed

- Is there any evidence for Roman activity on the site? If present how does this relate to Roman activity to the north-east of the site?

Only a single feature has definitely been identified as Roman on the site. This is a relatively substantial north-south running ditch along the southeastern limits of the site. A small post-medieval ditch or gully south of this also contained a reasonable amount of residual Roman pottery. Apart from this area only a single sherd of Roman pot was found on the rest of the site. This would seem to suggest that Roman activity

would be east of this ditch, which may have been marking the western extent of what was deemed to be decent ground at the time. It is likely that the ground west of the ditch was too close to the Neckinger flood plain. The ditch appears to have acted as a drainage device as well as a boundary. The activity dated to the Roman period recovered at St Michael's school northeast of the current site would fit this idea.

- Is there any evidence for medieval activity on the site?

There is no evidence for medieval activity or occupation on the site

- What is the nature of the evidence for post-medieval activity on the site?

The initial features for this period are mainly associated with low-level agricultural or horticultural activity, possibly starting as early as the 16th century, but general activity seems to start after the end of the Civil War. They are mostly in the form of linear features with steep or vertical sides and flat bases that may have held timbers forming some sort of structure to aid the growth of the plants and the organisation of the gardens. Several ditches appear to be designed to alleviate drainage as the area was still afflicted by episodic flooding. This still appears to have been an issue up to the later years of the 17th century and although no alluvial deposits are recorded later than this date, drainage ditches are still being dug up to the mid 18th century after which the land had been sufficiently consolidated to accommodate housing.

- At what date was the site built-up during the post-medieval period? If remains of buildings are present do these represent domestic and/or industrial activity on the site?

The site is finally been built up during the second half of the 18th century, raising the ground by approximately 0.5 metres. The buildings reflect a mixture of industrial and domestic residential properties that existed up until the Second World War.

- Does evidence of 17th century civil war defence exist on the site?

No evidence for the civil war defences were found, assuming these would be substantial in size. Depending on localised truncation, the northern of the two projected defensive ditches that pass through Bermondsey should have been observed in either Trenches 8 or 9. The alignment, however, seems to be reflected in the small ditch or gulley recorded in Trench 9 which may, in some way, be related to Civil War activity.

- How do post-medieval occupation remains compare with the available cartographic evidence?

The alignment of the various linear features can probably be traced from the Rocque map of 1746, while the brick building is one of a terrace seen on Horwood's map of 1799, fronting onto Parker's Row; a street that has disappeared from this area, although it survives north of Jamaica Road.

- What are the latest deposits identified?

The brick building, one of a terrace on Parker Row, is the latest activity on Site U, and is dated to the second half of the 18th century. The water tank recorded in Trench 6 and the possibly industrial pits in Trench 3 represents the latest activity on Site F and are dated to the second half of the 19th to the early years of the 20th century.

4.2 General discussion of potential

The evaluation has identified that deposits and structures of archaeological interest survive across the site. Such survival is likely to be limited in certain areas because of construction associated with the pre-existing buildings. The average depth of archaeological deposits where they do survive is generally c1.3m below modern ground surface. There appears to be little potential for the presence of prehistoric, Roman or medieval features, probably as the area was prone to flooding and generally inaccessible during these periods. Better survival is found from the post-medieval period, especially the years after the Civil War, although this is largely concerned with horticultural activity. The expansion of the southern suburbs during the later years of the 18th century are better preserved on Site U than Site F as the former is deeper as a result of it overlying the Neckinger valley. Much of the 18th century development on Site F has been truncated by 20th century redevelopment with only deeper features, such as cellars and pits, surviving. The potential of site U regarding topographical and environmental information relating to the Neckinger and the Thames is discussed below.

The alluvial sequence

The samples taken from the alluvial sequence on the site have potential to preserve a variety of environmental remains (e.g. pollen, seeds, snails, diatoms, insects and ostracods) that might be able to reconstruct the characteristics of the site prior to its post medieval occupation.

A sequence of grab samples are available through the entire auger hole sequence, as well as a series of bulk samples from the uppermost peat and overlying clays, obtained from the section. These samples could provide dating and environmental reconstruction of the deposit sequence, which has potential to contribute new information to our current understanding of the changing landscape of the Bermondsey area.

In particular, together with adding the topographic data from the site to the geoarchaeological model MOLA has developed for the Bermondsey area, the samples might shed light on:

- The past characteristics and route of the Neckinger
- The Mesolithic environment of the valley between the Bermondsey and Horsleydown Eyots
- Changing characteristics of the prehistoric wetland developed in the Neckinger valley both laterally and through time
- The date and impact of tidal encroachment in this area
- The nature of post medieval land reclamation and use

Answers to any of these issues would provide a more robust past landscape context for known archaeology from the area.

4.3 Significance

Whilst the archaeological remains are undoubtedly of local significance there is nothing to suggest that they are of regional or national importance.

5 Proposed development impact and recommendations

The proposed redevelopment at Bermondsey Spa Sites F & U comprises a mixed use development with commercial and community use. The impact of this on the surviving archaeological deposits will be for the new foundations to remove archaeological deposits within the ground plan of the new buildings.

Given the limited archaeological potential identified through the evaluation, it is recommended that no further fieldwork is required in relation to this approved redevelopment scheme.

The alluvial sequence

It is recommended that the bulk samples from peat deposit [261] and grab samples (after sub-sampling for microfossils) from the auger hole are processed by flotation and wet sieving over a 0.25mm mesh respectively to collect the range of environmental indicators and any finds preserved. Plants remains collected from the top and bottom of the peat deposit should be Carbon 14 dated to identify the period the peat developed

If the date sequence identifies a period for which little environmental information is available for the Bermondsey area further assessment of sub-samples from key locations should be assessed for microfossil survival (i.e. pollen, diatoms, and ostracods). Depending on the survival of remains and the date of the deposits, it is recommended that a proposal is made to undertake further analysis of the environmental remains and records in order to address appropriate research questions, such as those identified above.

If the date of the peat deposits reflects a period that is already studied and well known in the vicinity, it is recommended that no further assessment of the samples is required.

The decision on the appropriate archaeological response to the deposits revealed rests with the Local Planning Authority and their designated archaeological advisor.

6 Acknowledgements

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8 NMR OASIS archaeological report form

8.1 OASIS ID: molas1-81255

Project details

| | |
|--|---|
| Project name | Bermondsey Spa Regeneration |
| Short description of the project | The evaluation recorded the location of the eastern stream of the Neckinger River and has provided further information regarding the extent of the higher ground that formed the Bermondsey eyot. The area was most likely marshy and uninhabitable in the Roman period and the only feature dated to this time is a substantial ditch that is thought to demarcate land affected by inundation from the higher and drier area to the east. The land remained in this state until the 18th century at which point it was suitable for horticulture. By the second half of the 18th century streets and housing had been laid out. |
| Project dates | Start: 08-02-2010 End: 06-07-2010 |
| Previous/future work | No / No |
| Any associated project reference codes | JMR10 - Sitecode |
| Type of project | Field evaluation |
| Site status | None |
| Current Land use | Residential 1 - General Residential |
| Monument type | DITCH Roman |
| Monument type | STREAM Late Prehistoric |
| Monument type | MARKET GARDEN Post Medieval |
| Monument type | BACK TO EARTH HOUSE Post Medieval |
| Significant Finds | CONTAINER Roman |

| | |
|----------------------------------|--|
| Significant Finds | TOBACCO PIPE Post Medieval |
| Significant Finds | CONTAINER Post Medieval |
| Methods & techniques | 'Augering', 'Environmental Sampling', 'Grab-sampling', 'Targeted Trenches' |
| Development type | Housing estate |
| Prompt | Planning condition |
| Position in the planning process | After full determination (eg. As a condition) |

Project location

| | |
|-------------------|---|
| Country | England |
| Site location | GREATER LONDON SOUTHWARK BERMONDSEY ROTHERHITHE AND SOUTHWARK Bermondsey Spa Regeneration |
| Postcode | SE16 |
| Study area | 10000.00 Square metres |
| Site coordinates | TQ 34044 79487 51.4979080986 -0.06870457509130 51 29 52 N 000 04 07 W Point |
| Height OD / Depth | Min: -4.40m Max: 2.65m |

Project creators

| | |
|---------------------------|-----------------------------|
| Name of Organisation | MoL Archaeology |
| Project brief originator | London Borough of Southwark |
| Project design originator | MoL Archaeology |
| Project director/manager | Derek Seeley |

| | |
|------------------------------|------------------|
| Project supervisor | Tony Mackinder |
| Project supervisor | Malcolm McKenzie |
| Type of sponsor/funding body | Developer |
| Name of sponsor/funding body | Hyde Group |

Project archives

| | |
|----------------------------|-------|
| Physical Archive recipient | LAARC |
| Physical Archive ID | JMR10 |
| Digital Archive recipient | LAARC |
| Digital Archive ID | JMR10 |
| Paper Archive recipient | LAARC |
| Paper Archive ID | JMR10 |

Project bibliography 1

| | |
|---------------------|---|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | Bermondsey Spa Regeneration |
| Author(s)/Editor(s) | Mackinder, T and McKenzie, M |
| Date | 2010 |
| Issuer or publisher | MoL Archaeology |

Place of issue or
publication London

Entered by Malcolm McKenzie (mmckenzie@molas.org.uk)

Entered on 19 August 2010