

Deepham's Sewage Works Edmonton Greater London



Archaeological Watching Brief Report



May 2011

Client: Thames Water Ltd

Issue No: 2
OA Job No: 4730
NGR: TQ 3580 9450



Deepham's Sewage Works, Edmonton, Greater London

NGR TQ 3580 9450

Archaeological Watching Brief Report (Phase 2)

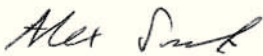
Written by Carl Champness

with contributions from John Cotter, Leigh Allen and Ian Scott

illustrated by Georgina Slater



Client Name: Thames Water Ltd
Client Ref No: -
Document Title: Deepham's Sewage Works, Edmonton, Greater London
Document Type: Watching Brief Report (Phase 2)
Issue/Version Number: 1
Grid Reference: TQ 3580 9450
Planning Reference: -
OA Job Number: 4730
Site Code: DSW10
Invoice Code: DSWWB2
Receiving Museum: Museum of London
Museum Accession No: DSW10
Event No:

| Issue | Prepared by | Checked by | Approved by | Signature |
|-------|------------------------------------|--|---|---|
| 1 | Carl Champness Geoarchaeologist | Andrew Norton Senior Project Manager | Alex Smith Senior Project Manager |  |

Document File Location Server 3/Geoarchaeological Services/Greater London/ Deephams
Graphics File Location San-access\invoice codes a thru h\D_invoice codes\DSWWB2
Illustrated by Georgina Slater

Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

© Oxford Archaeology Ltd 2011

Janus House

Osney Mead

Oxford OX2 0ES

t: +44 (0) 1865 263800

e: oasouth@thehumanjourney.net

f: +44 (0) 1865 793496

w: oasouth.thehumanjourney.net

Oxford Archaeology Limited is a Registered Charity No: 285627



Table of Contents

| | |
|---|-----------|
| Summary..... | 3 |
| 1 Introduction..... | 4 |
| 1.1 Scope of work..... | 4 |
| 1.2 Geology and topography..... | 4 |
| 1.3 Archaeological and historical background..... | 4 |
| 1.4 Acknowledgements..... | 6 |
| 2 Aims | 7 |
| 2.1 Aims..... | 7 |
| 3 Methodology..... | 7 |
| 3.1 General..... | 7 |
| 3.2 Methodology..... | 7 |
| 4 Results..... | 8 |
| 4.1 Introduction | 8 |
| 4.2 General soils and ground conditions..... | 8 |
| 4.3 Results of the watching brief..... | 8 |
| 4.4 Finds..... | 9 |
| 4.5 Environmental assessment..... | 11 |
| 5 Discussion | 12 |
| 5.1 Reliability of field investigation..... | 12 |
| 5.2 Significance and potential..... | 12 |
| 5.3 Bibliography..... | 12 |
| Appendix A. Plates..... | 14 |
| Appendix B. Summary of Site Details..... | 15 |

List of Figures

| | |
|--------|----------------------|
| Fig. 1 | Site location |
| Fig. 2 | Development location |
| Fig. 3 | Excavation Areas 1-3 |



- Fig. 4 Sections and plans of archaeology within Areas 1 and 2
Fig. 5 Section and plan of archaeology within Area 3

List of Tables

- Table 1 Table of pottery spot dates
Table 2 Table of CBM spot dates

List of Plates

- Plate 1 Photo of site conditions
Plate 2 South facing section of Ditch 1015
Plate 3 South facing section of Ditch 1023
Plate 4 Finds recovered from rubbish deposit 1034
Plate 5 Bottle recovered from made-ground deposit 1001
Plate 6 Bone toothbrush recovered from made-ground deposit 1001



Summary

In May 2010 Oxford Archaeology South (OAS) were commissioned by Thames Water Utilities Ltd, to maintain an archaeological watching brief during the upgrade of the sewage treatment facility at Deepham's Sewage Works, Edmonton, Greater London. The purpose of the field investigation was to mitigate the impacts of the development.

This work forms part of a wider archaeological investigation strategy within the area of the site, aimed at assessing the archaeological preservation and potential of the sewage works. Previous investigations have included floodplain modelling and desk-based assessment, which indicated that the area has a high archaeological potential. However, subsequent targeted field evaluations to the south of the site have failed to identify any signs of archaeology, and have revealed significant ground disturbance.

The most recent phases of work in the sewage works have identified preserved floodplain deposits, including peat and alluvial deposits sealed under thick made-ground deposits. An updated deposit model has also indicated areas of preserved floodplain deposits to the east and south, with signs of modern truncation on the gravel terrace to the west, where the current site is located.

The results of the watching brief have helped to confirm the high level of ground disturbance and truncation identified in the west, with only a few shallow archaeological features surviving here. The most significant of these were medieval field boundaries and a possible fenced enclosure associated with the pre-sewage works, Deepham's Manor Farm. The work also identified well preserved late 19th-century bottle dumps associated with the earliest phases of the sewage works and its construction.



Deepham's Sewage Works, Edmonton, Greater London

Archaeological Watching Brief Report

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 In May 2010 Oxford Archaeology South (OAS) was commissioned by Thames Water Utilities Ltd, to maintain an archaeological watching brief during the upgrade of the sewage treatment facility at Deepham's Sewage Works, Edmonton, Greater London. Kim Stabler, Archaeological Officer for Greater London Archaeological Advisory Service (GLAAS) and Thames Water, requested that a watching brief be maintained during the construction works to check for signs of archaeological preservation.
- 1.1.2 The watching brief was undertaken as part of a wider phase of work on the site that has included desk-based assessment, trench evaluation, watching briefs and deposit modelling. The watching brief was designed to investigate the level of ground truncation identified in the deposit model and mitigate the impacts of the new development.
- 1.1.3 This report outlines the results of the watching brief and describes the archaeological features encountered.

1.2 Geology and topography

- 1.2.1 The site is located in the Deepham's Sewage Treatment Works, Pickett's Lock Lane, Edmonton, London Borough of Enfield (NGR: TQ 3580 9450). The area is occupied by slurry lagoons surrounded by earthwork bunds. The rest of the site comprises works buildings, with areas of hard standing and storage tanks (Figure 1).
- 1.2.2 The site lies on the western edge of the River Lea, a tributary of the River Thames, and extends across the former floodplain that was reclaimed during the post-medieval period. The site lies between +15 m and +10 m OD, sloping down towards the river.
- 1.2.3 The drift geology of the area is mapped as alluvium to the east and Kempton Gravel to the north-west, overlain by Langley Silts (BGS sheet 256 1:50,000). Previous geotechnical and archaeological investigations at the site have identified a sequence of alluvium, marls, brickearth and peat deposits underlying thick deposits of made-ground.
- 1.2.4 The Quaternary history of the Lea Valley has been previously summarised in Gibbard (1994, 109-112). The floodplain gravel is known as the 'Lea Valley Gravel', a member which includes the gravel and sand units that underlie the modern floodplain, and the 'Lower Terrace', 1-2 m above the floodplain on the western bank (Warren 1916). Contained within these gravels are organic rich deposits dating from the last glaciation known as the Lea Valley Arctic Beds (Gibbard 1994, 109).

1.3 Archaeological and historical background

- 1.3.1 The archaeological potential of the site has been previously outlined in the desk-based assessment (Lewis 1995), which is summarised in the following sections.

***Prehistoric (500,000BC – AD43)***

- 1.3.2 The prehistoric period is represented in the area by relatively few findspots. The earliest remains include Palaeolithic and Mesolithic flint artefacts, mostly recovered from the floodplain or riverine locations.
- 1.3.3 By the Bronze Age there is evidence to suggest that large areas of London were being organised into co-axial field systems serviced by droveways and waterholes. On the floodplain of the Thames and its tributaries such as the Rivers Lea and Colne, there is evidence for rising water-levels and correspondingly the construction of wooden trackways and platforms.
- 1.3.4 Bronze Age finds from the area are more frequent and tend to be found in these water-lain or peat contexts. Some are clearly utilitarian tools lost by accident, while others including a rapier, spearhead and shield, may reflect ceremonial or ritually placed deposits. Excavations to the north of the site at Rammey Marsh have also revealed a complex sequence of occupation and land division of Bronze Age date (Wessex Archaeology 1997).
- 1.3.5 Finds of prestigious metalwork from alluvial contexts during the Iron Age may represent a continuation of ritual offerings within water bodies. Pottery, coins and metalwork within the wider area would also suggest some settlement within the surrounding river terraces.
- 1.3.6 Low-lying floodplain locations were clearly preferred and utilised in Mesolithic and Neolithic times (Clarke 1976). During later prehistory when flooding and ground water became more of an issue (Lambrick and Robinson 1984), Bronze Age and Iron Age occupation appears to have retreated to the terrace edges and islands of the floodplain. Evidence of 'gravel islands' and terrace edges within the site area have been previously mapped by Lewis (1995).

Roman (AD43 – AD450)

- 1.3.7 In the Roman period, Londinium (London) was established and developed into an urban centre, and later the provincial capital of Roman Britain (Perring and Bridgman 2000). A network of roads was constructed that connected London to the regional centres, such as Lindium Colonia (Lincoln). The Roman road to Lincoln runs just to the west of the site.
- 1.3.8 Roman remains are well represented within the area surrounding the site with the emphasis of activity along the corridor of the Roman road. Finds of pottery, coins and metalwork would suggest a largely settled landscape at this time.

Medieval (450AD – 1539AD)

- 1.3.9 After the collapse of the Roman administration in London, the city fell into decline. There is little documentary evidence for Saxon Lundenwic, and even less for the outlying areas. Evidence of Saxon activity in the area of the site is not well represented, but settlement activity has been identified at Edmonton and Lower Hall Lane.
- 1.3.10 In contrast, later medieval activity from the area is well-represented by a large number of known sites and findspots. Deepham's Manor House lies just to the north of the site beneath the retained area of the sewage works.



Post-medieval to modern (1539 onwards)

- 1.3.11 During the post-medieval period the area was predominantly used for mixed agriculture associated with the Deepham's Manor Farm. In 1852 the Manor is recorded as owning 25 bullocks, oxen, horses, pigs, geese and chickens.
- 1.3.12 It was not until the 1870s that the sewage works were constructed on the former Deepham's Farm, which were extended in 1927 to cover 200 acres. The construction of the works will have had a major impact on the archaeological survival at the site. However, the previous borehole records do reveal areas of intact alluvial deposits towards the south. No work has previously been undertaken to the north, in the area of the current site, where the level of survival is unknown.
- 1.3.13 Quarrying of brickearth and gravel is widely known to have occurred in the area, in particular to the north of the Deepham's site at Pickett's Lock. These works continued to be exploited until 1951.

Previous archaeological Investigations

- 1.3.14 The archaeological potential of the site has been previously highlighted in the desk-based assessment (Lewis 1995). This study identified significant archaeological deposits in the area and suggested that similar deposits could extend to the site. The study also identified, through the examination of geotechnical boreholes, the presence of buried peat deposits, sealed beneath alluvium and found in association with gravel islands. It concluded that the area has high potential to preserve early prehistoric remains associated with buried land surfaces sealed underneath the alluvium.
- 1.3.15 Two phases of field evaluation were undertaken in 2001 in order to investigate the archaeological potential towards the south of the site. The first phase (Pine 2001) was targeted on the deposits and topographic features identified in the desk-based assessment. No archaeological features or deposits were identified during the evaluation. Deposits of made ground up to 1 m in thickness were recorded sealing a sequence of alluvium and laterally extensive peat.
- 1.3.16 A watching brief was also maintained between January and December 2001 on all intrusive works. Again no archaeological deposits were identified and some areas revealed evidence of severe ground disturbance (Hull and Ford 2001).
- 1.3.17 The most recent phases of work have included monitoring of geotechnical boreholes at the site (OA 2010a). This work identified a sequence of preserved alluvial and peat deposits within the existing sewage works. An updated deposit model (OA 2010b) was also developed for the site, based on Lewis's (1995) original deposit model and new data now available since the original work was completed. The model was able to identify areas of potential within the floodplain towards the east and south of the site, but the gravel terrace to the west may have been significantly disturbed.

1.4 Acknowledgements

- 1.4.1 OA would like to thank Claire Hallybone of Thames Water Utilities Ltd who facilitated the works and provided advice during the project. The fieldwork and reporting was undertaken by Christof Heistermann and Carl Champness. The project was managed by Elizabeth Stafford.



2 AIMS

2.1 Aims

2.1.1 The main aims of the watching brief were to search for signs of archaeological preservation within the site and to mitigate the impacts of the new development. The following is a summary of the specific aims of the investigation, developed in conjunction with Thames Water and GLAAS:

2.1.2 The main aims of the watching brief were to;

- Identify the location and extent of any waterlogged organic deposits, and address the potential and likely locations for the preservation of archaeological and palaeoenvironmental remains;
- To signal, before the destruction of the material in question, the discovery of a significant archaeological area and any finds for which the resources allocated are not sufficient to support and may require further mitigation;
- To make available the results of the investigation;

3 METHODOLOGY

3.1 General

3.1.1 Intrusive excavations were planned in association with a new area of sewage tanks and services (Figure 2). These excavations required the removal of sediments up to a depth of 6 m in places across the site. A continuous watching brief was maintained during all intrusive work associated with this proposed new development.

3.1.2 The fieldwork was carried out according to the relevant GLAAS Archaeological Guidance Papers (GLAAS 2009) and IFA guidelines (IFA 2001). Prior to the commencement of fieldwork a unique number site code was obtained from the Museum of London.

3.2 Methodology

3.2.1 A continuous watching brief was maintained during ground works which included the monitoring of surface stripping, cut and fill operations, and deeper trenching.

3.2.2 A daily record of the nature, extent and depth of groundworks was maintained throughout the duration of the project. Digital and black-and-white negative photograph records were taken of all sections, excavations and archaeological features.

3.2.3 Excavation of any archaeological features was undertaken to fulfil the basic objective of retrieval of archaeological data affected by the works. All features and deposits were issued with unique context numbers, and context recording as in accordance with the established OA Field Manual (Wilkinson 1992).

3.2.4 All contexts and small finds were allocated unique numbers. Bulk finds were collected by context. Site plans were drawn at an appropriate scale (normally 1:50 or 1:100) with larger scale plans of features as necessary. Section drawings of features and trenches were drawn at a scale of 1:20.



4 RESULTS

4.1 Introduction

4.1.1 The area designated for the construction of new sewage treatment tanks and associated services was stripped with a mechanical excavator using a toothed bucket (Plate 1). Made-ground deposits were reduced to the level of the natural gravel. In places this surface had been truncated by disturbance associated with the sewage works. Only a few archaeological features were identified during the watching brief, and these were of low archaeological significance. Their shallow depth would also suggest that they had been significantly truncated.

4.2 General soils and ground conditions

4.2.1 The site was overlain by made-ground deposits that were used to level the area during the construction of the sewage works. The deposits were observed to be between 0.5 m and 2 m in thickness across the site. In places the Langley Silts were observed overlying natural gravels, and in other areas these deposits had been either disturbed or stripped away. Only very rarely were undisturbed pre-sewage work surfaces or soils encountered, and most of the made-ground was found to directly overlie the gravel surface.

4.3 Results of the watching brief

4.3.1 The watching brief identified a small number of archaeological features and deposits that were concentrated towards the middle of the excavation area. These features were mapped and then hand excavated in order to identify the character and date of the deposits. The archaeology is discussed in terms of discreet archaeological areas (Figure 3: Areas 1-3) that were identified during the watching brief.

4.3.2 A north-south linear ditch (1015) was identified during the initial machine strip around the edges of the development area (Figure 4: Area 1). The ditch was 0.19 m in depth and 1.04 m wide, with a shallow concave base (see Plate 2). The shallow nature of the ditch may suggest that it had been truncated before being overlain by made-ground deposits (1001). It was revealed to a length of 6 m within Area 1 before disappearing into an unstripped area. The fill was a single stony olive grey sandy silt (1016) with 20% pebble and rare charcoal inclusions, and contained seven pieces of pottery and occasional ceramic building material (CBM). The ditch also cut deposit (1005), which was a thin semi-gleyed organic deposit that possibly represented a natural wet-hollow or tree throw. It had also been disturbed by later ploughing or subsoiling (1002).

4.3.3 A second ditch (1023) was identified to the south of Area 1 on a slightly different NE-SW linear alignment (Figure 4: Area 2). The ditch also had similar gently sloping sides and a concave base (see Plate 3). It was filled with a grey sandy silt (1024) with rare charcoal and burnt clay inclusions. The ditch was undated but did produce rare fragments of bone and CBM.

4.3.4 An east-west post alignment (1017, 1019 and 1025) was identified next to ditch (1023) within Area 2. All three of the postholes were square in plan and filled with similar greyish brown sandy silt deposits (1018, 1020 and 1026). All the fills were sterile and produced no archaeological material. An offset rounded posthole (1021) was also identified just to the north of the main alignment. It was filled with a similar brown sandy silt (1022), but produced not dating evidence.



- 4.3.5 A second group of three closely spaced rounded postholes (1027, 1029 and 1031) on a north-south alignment were identified within Area 3 (Figure 5). These features were filled with humic sandy silt deposits (1028, 1030 and 1032) and rubbish rich deposits from when the posts were probably removed (1035/1036, 1037 and 1038). These were found in association with a large spread of rubbish deposits (1034) that produced numerous complete bottles and jars, mostly dating to the late 19th century (see Plate 4).
- 4.3.6 An isolated modern rectangular pit (1014) was also identified during the watching brief. This was 0.86 m wide, 0.90 m in length and 0.40 m depth, with straight vertical sides and a flat base. It contained two wooden stakes (1012 and 1013) around its edges. It was filled with a dark greenish grey silt (1011) that contained brick, corroded metal and gravel inclusions. It also contained a layer of fine black organic material within the base of the pit. Its function is currently unknown, but may have been used as a tank to hold water. It was partly in-filled with late post-medieval brick and rubbish deposits.
- 4.3.7 A number of test pits were also monitored during the works that revealed a sequence through the Kempton Park Gravels. A sequence of stratified gravel and sandy gravel deposits were recorded. However, no evidence for any organic or lower energy deposits were identified that may relate to the 'Arctic beds'. These deposits were mapped previously in this area in the deposit model (OA 2010b).

4.4 Finds

General distribution

- 4.4.1 Only a limited number of finds were recovered during the watching brief and these were either from the rubbish dumps or from the few recorded archaeological features. The largest amount of material came from the rubbish/bottle dumps (1034) dating from the late 19th century. A smaller assemblage of medieval pottery was recovered from ditch (1015), which ran across the site.

Pottery and CBM by John Cotter (Plate 4)

- 4.4.2 A total of 24 sherds of pottery weighing 317g were recovered from four contexts during the watching brief. Three of the four contexts comprise common pottery types of the later 19th century and possibly the early 20th century. These have the character of material from typical 'Victorian' bottle dumps. However, context (1016), from ditch 1015, produced only medieval wares (seven sherds), including fresh body sherds from an unglazed vessel probably Mill Green ware (c. 1270-1350), from central Essex. It also produced a possible sherd of medieval ?Surrey whiteware and a residual base sherd from a 12th/13th century London area shelly-sandy ware cooking pot.



4.4.3 The spot dates are listed in Table 1.

| Context | Spot-date | Sherds | Weight | Comments |
|--------------|---------------|--------|--------|--|
| 1001 | c. 1875-1910+ | 9 | 216 | REFW TPW Refined whitewares incl transfer-printed incl red. Incl stamp 'WEDGWOOD & Co. [Asiatic] PHEASANT' design mark c 1850/60. ENGS BRST grey Bristol glazed cylindrical jam jar. Top of candlestick (with stub of candle still inside) white Central European porcelain L19C. Scrap green 19C majolica |
| 1016 | c. 1275-1350 | 7 | 25 | 5x bss (body sherds) from a single vess -fresh, prob unglazed Mill Green ware (or London type ware?), hard ringing WT fabric. 1x 12/13C sandy-shelly ware sagging base from cooking pot. 1x v worn bs med ?Surrey whiteware poss with glz speck? |
| 1034 | c. 1875-1910+ | 6 | 70 | 1x PMR FLP flowerpot. 5x Mod Eng stoneware (1 vess) brown salt-glz ginger beer bottle with circular mark showing seated Britannia & inscrip '--Y'S GINGER BEER'. 1x REFW |
| 1035 | c. 1850-1900 | 2 | 6 | REFW TPW Refined whitewares |
| TOTAL | | 24 | 317 | |

Table 1: Table of pottery spot dates

4.4.4 An assemblage of CBM was also recovered during the watching brief and this is listed in Table 2.

| Context | Spot-date | Sherds | Weight | Comments |
|--------------|--------------------------|--------|--------|---|
| 1001 | 19 th Century | 5 | 412 | Corner frag red housebrick. Frag yellow stock brick. Scrap red roof tile. Scrap curved tile. 1x worn flat fine pink-buff sherd prob Roman tile? |
| 1011 | 19 th Century | 9 | 174 | Scraps red brick (1 burnt) and red roof tile |
| 1016 | 1170-1550? | 5 | 102 | 1x large fresh edge frag of coarse red roof tile with much flint. Rest are v worn scraps of tile (1 tile) in finer fabric - poss med? |
| 1024 | Undatable | 7 | 2 | Tiny scraps ?fired clay/daub etc |
| 1034 | 19 th Century | 3 | 194 | Worn scrap red house brick. Frag prob from red terracotta chimney pot - sooted int. Worn scrap roof tile |
| 1040 | 1170-1900 | 2 | 11 | Scraps fine pink roof tile - med/post-med? |
| TOTAL | | 31 | 895 | |

Table 2: Table of CBM spot dates

Metalwork by Ian Scott

4.4.5 There were 11 fragments of iron, all heavily encrusted with corrosion products. They included two fragments from a probable horseshoe, five strip or plate fragments, and two small nail or bar fragments from ditch 1015 (context 1016). A small handmade nail was recovered from the rubbish deposit (1034). Context (1011) produced a heavily encrusted length of incomplete nail or peg with a knobbed head.



- 4.4.6 None of the material can be closely dated. The hand made nail could date from the Roman period onwards, but is most probably 19th-century in date.

Glass finds by Ian Scott

- 4.4.7 Two pieces of glass were recovered from the made-ground deposits (1001). One is a complete medicine or tonic bottle in very pale green glass, with corked closure, and embossed on the sides 'ARGONAUT REGD' (see Plate 5). The bottle was made on a three-piece mould, with a moulded but hand finished rim. It dates to the latter third of the 19th century. The second piece of glass is a piece of melted green glass.

Worked bone by Leigh Allen

- 4.4.8 A bone handle from a post-medieval toothbrush was recovered from the made-ground deposit (1001). The handle, measuring 0.098 m in length, is straight sided and has a rounded butt; the long edges of the handle are also smooth and rounded (see Plate 6). The object is incomplete it has been split longitudinally and the head is missing. The head would have been perforated with rows of small holes, fine wire would have been passed through each of the holes in turn to form a series of loops through which the bristle were passed. When the wire was pulled tight the bristles would be doubled up and drawn through the holes: grooves in the back of the head would have accommodated the wires. Long handled brushes of this type are common finds on post-medieval sites.

4.5 Environmental assessment.

- 4.5.1 Due to the character and scope of the archaeology uncovered during the watching brief no environmental samples were taken.



5 DISCUSSION

5.1 Reliability of field investigation

5.1.1 Visibility of the gravel surface and Langley Silts during the watching brief was hindered by the use of a toothed bucket and the patchy nature of the stripping. However, in general, areas of archaeological features and deposits could be identified. The absence of significant archaeological remains at the site can be seen as a true reflection of the archaeological potential, especially in light of modern disturbance that was identified during the work, which was caused by the construction of the sewage works.

5.2 Significance and potential

5.2.1 The watching brief was able to achieve the aims and objectives outlined within the project specification. Overall, the work was able to identify a high degree of modern truncation present on the gravel terrace, to the west of the sewage works, with only shallow archaeological remains surviving in parts of the site. This helped to support the observations made in the deposit model (OA 2010b) about the level of truncation present on the gravel terrace.

5.2.2 The work identified a small number of archaeological features, the most significant of which was an early medieval ditch that most likely represented an early field boundary. The seven sherds of medieval pottery may suggest that it was not too far from a possible structure or farm. This is consistent with our understanding of the site as part of an agricultural landscape possibly associated with the Deephams Manor Farm during the medieval period.

5.2.3 The undated post alignment within Area 2 most likely represents either a wooden fence demarcating an enclosed field or animal pen. Although undated, it is likely to be medieval or later in date. Again these types of features are consistent with our understanding of the use of the site at this time.

5.2.4 The finds from the Victorian bottle dumps suggest that either prior to, or as part of, the construction of the sewage works, large areas were infilled with rubbish deposits from London and surrounding area. The good preservation and the high number of complete bottles and jars may suggest that this rubbish derived from material recovered from the sewer system.

5.3 Bibliography

BGS Sheet 256 (1:50,000 scale), British Geological Society.

Clarke, D, L, 1976 'Mesolithic Europe, the economic basis' in G de G Sieveking, I. H Longworth and K. E. Wilson (eds), *Problems in Economic and Social Archaeology*, London, 449-81

GLAAS, 2009 Standards for Archaeological Work, London Region, English Heritage, External Consultation Draft, July 2009

Gibbard P, L, 1994 *The Pleistocene History of the Lower Thames Valley*. Cambridge CUP

Hull, G, and Ford, S, 2001 Deephams Sewage Works, Ardra Road Edmonton, London Borough of Enfield: an archaeological evaluation (Phase 2), Thames Valley Archaeological



Services Report 00/43b, Reading

IFA, 2001 *Institute of Field Archaeologists 2001 Standard and Guidance for archaeological watching brief*

Lambrick, G, and Robinson, M, 1984 *Holocene alluviation and hydrology in the upper Thames Basin*, *Nature* **308**, 809-14

Lewis, J, 1995 Deepham's Sewage Treatment Works, Pickets Lock, Edmonton N9, London Borough of Enfield; an archaeological assessment, Museum of London Archaeological Service, London

Oxford Archaeology, 2010a Deepham's Sewage Treatment Works, Edmonton, London. Geoarchaeological Watching Brief Report. Unpublished Client Report

Oxford Archaeology, 2010b Deepham's Sewage Treatment Works, Edmonton, London. Updated Geoarchaeological Deposit Model Report. Unpublished Client Report

Pine, J, 2001 Deepham's Sewage Treatments Works, Ardra Road, Edmonton, London Borough of Enfield: an archaeological evaluation (Phase 2), Thames Valley Archaeological Services Report 00/43a, Reading

Perring, D, & Brigham, T, 2000 'Londinium and its Hinterland: The Roman Period' in MoLAS 2000 *The archaeology of Greater London: An assessment of archaeological evidence for human presence in the area now covered by Greater London* Museum of London 119-170

Warren, S, H, 1916 Further observations on the Late Glacial or Ponder's End Stage of the Lea Valley

Wessex Archaeology, 1997 'Rammey Marsh Sewage Treatment Works, Enfield', an archaeological desk-based assessment, Wessex Archaeological Report 43404, Salisbury, 2nd Draft

Wilkinson D. 1992 Oxford Archaeology *Fieldwork Manual*



APPENDIX A. PLATES



Plate 1: Photo of site conditions



Plate 2: South facing section of Ditch 1015



Plate 3: South facing section of Ditch 1023



Plate 4: Finds recovered from rubbish deposits 1034



Plate 5: Bottle recovered from made-ground deposits 1001

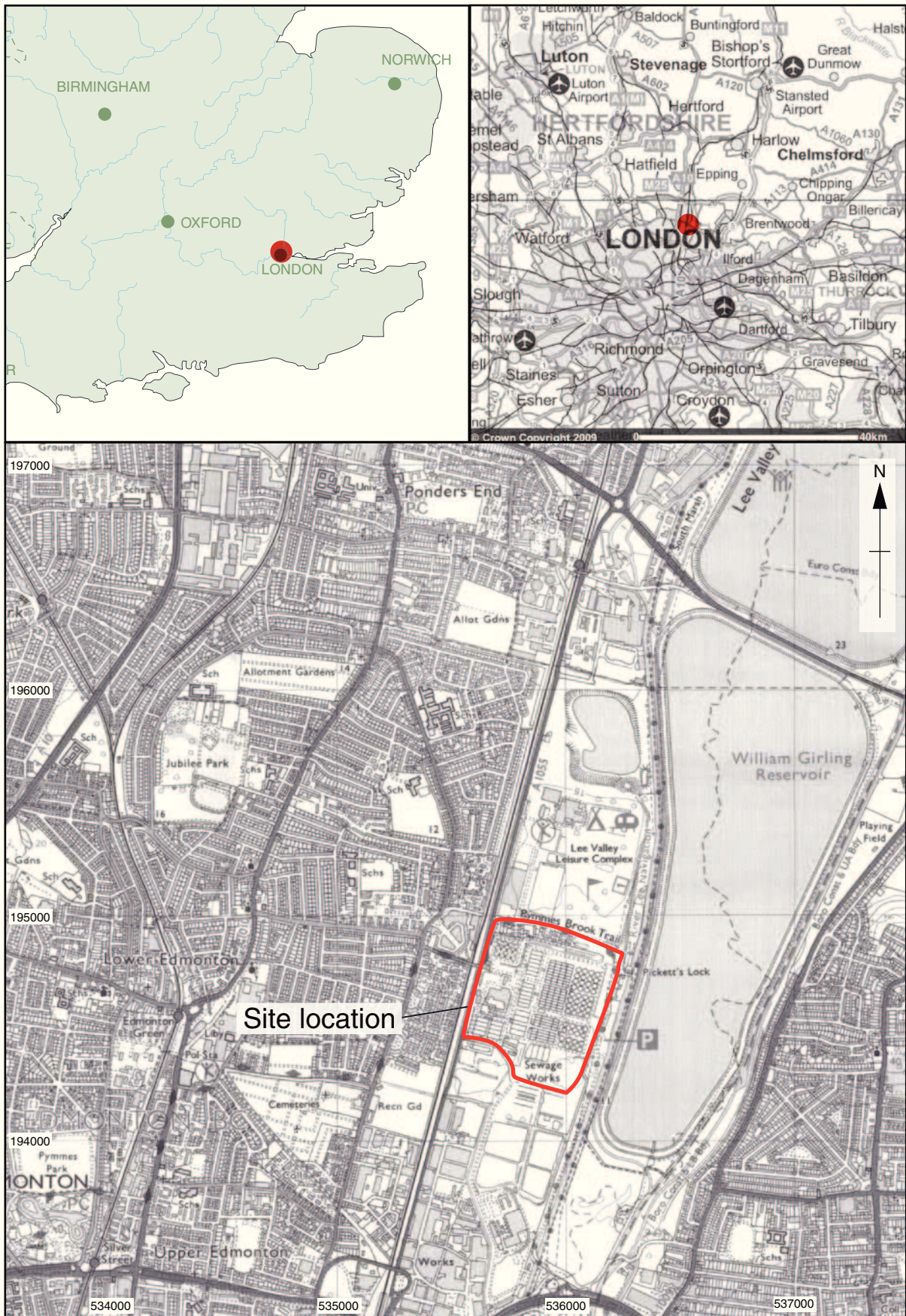


Plate 6: Bone toothbrush recovered from made-ground deposits 1001



APPENDIX B. SUMMARY OF SITE DETAILS

| | |
|-----------------------------|--|
| Site name: | Deepham's Sewage Works, Edmonton, Greater London |
| Site code: | DSW10 |
| Grid reference: | TQ 3580 9450 |
| Type: | Watching Brief (Phase 2) |
| Date and duration: | 10th-18th May 2010 |
| Area of site: | 0.06 Ha |
| Summary of results: | Watching brief on construction works associated with the upgrade of the sewage treatment facility at Deepham's Sewage Works. Despite evidence of significant truncation of the upper gravel surface, a limited number of shallow archaeological features were identified. The most significant of these were a medieval field boundary and a fenced enclosure. |
| Location of archive: | The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Museum of London in due course, under the following accession number: DSW10 |



Reproduced from the Explorer 1:25,000 scale by permission of the Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office © Crown Copyright 2005. All rights reserved. Licence No. AL 100005569

Figure 1: Site location

Deephams STW, Picketts Lock Lane, Edmonton N9 0BA

Grid Ref of area being developed (outlined in black): 535634, 193435

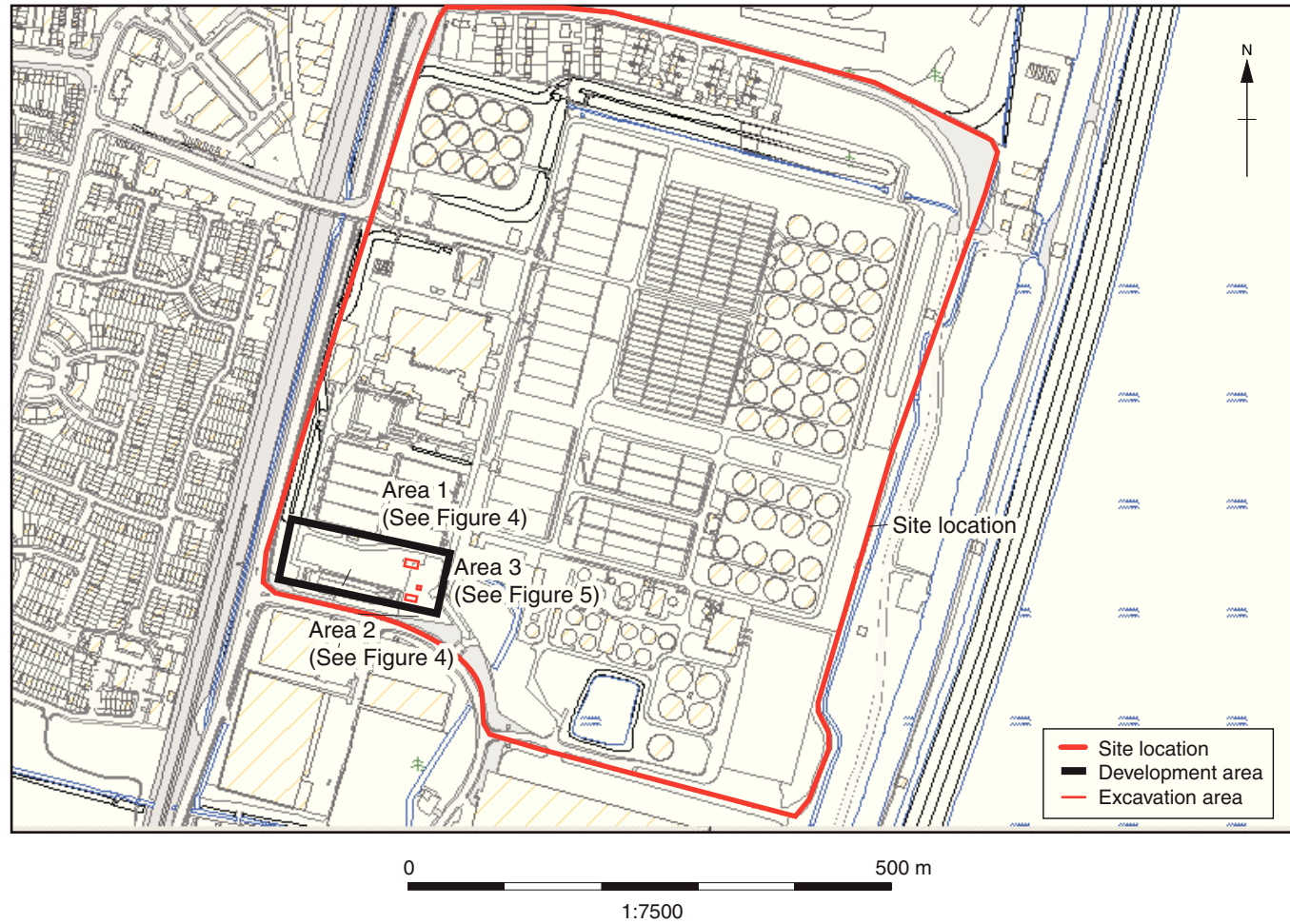


Figure 2: Development area

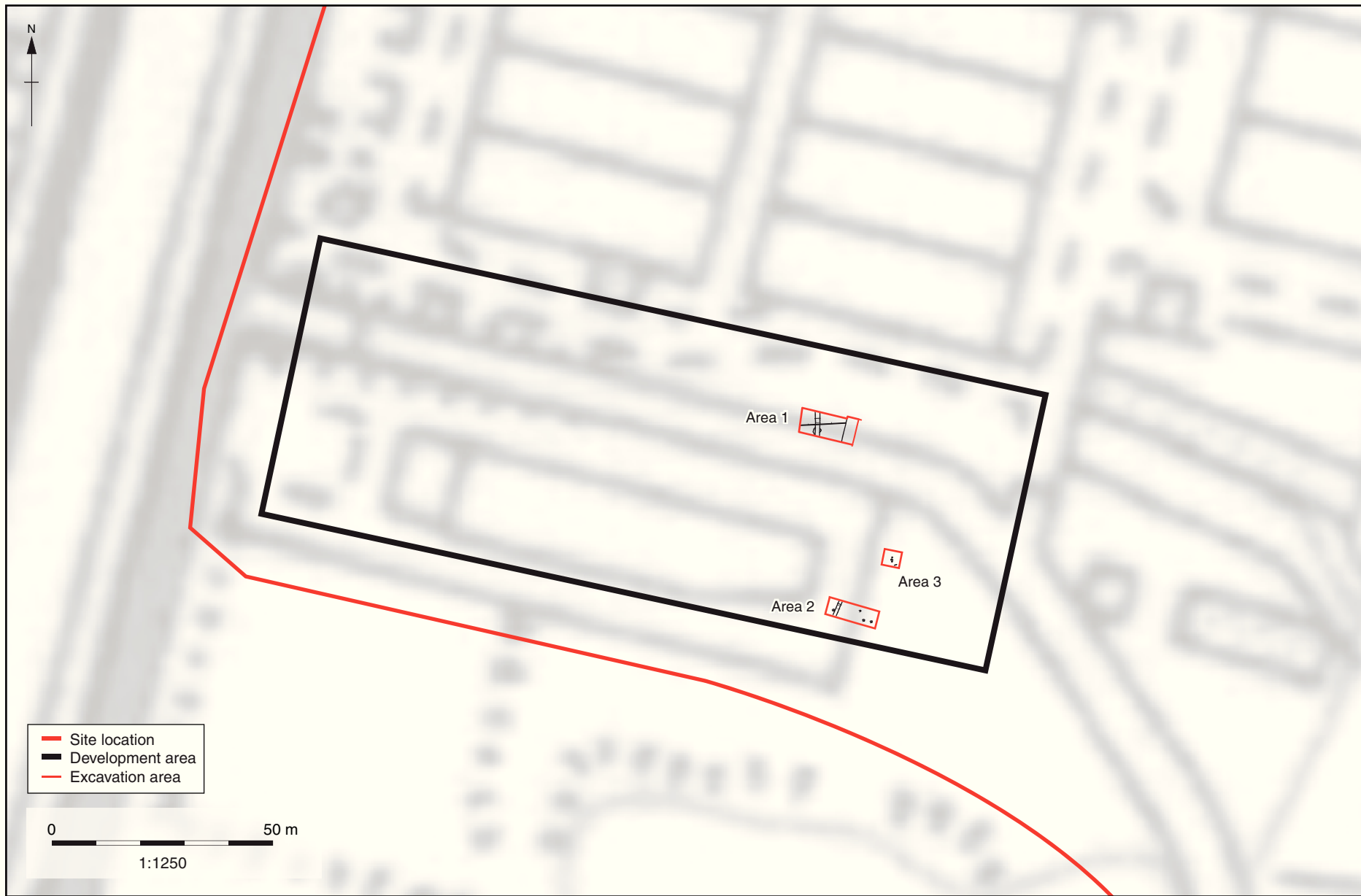
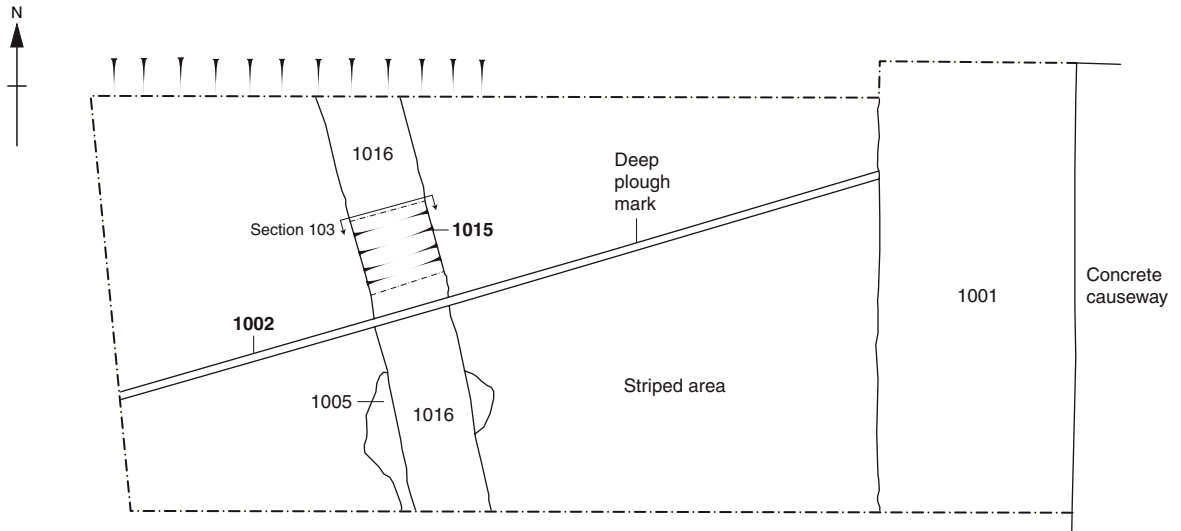


Figure 3: Excavation Areas 1 to 3



Area 1 Plan



Area 2 Plan

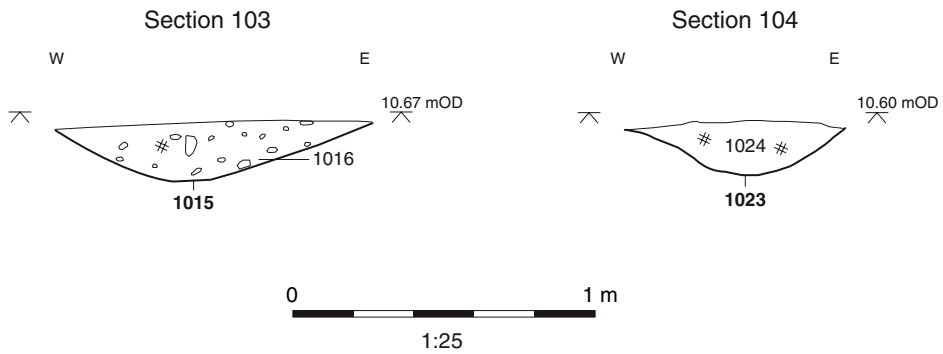
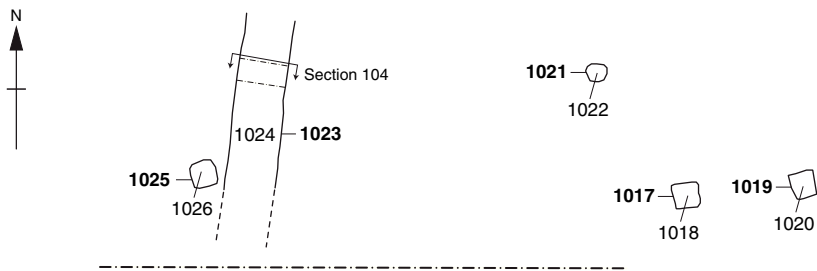


Figure 4: Sections and plans of archaeology within Areas 1 and 2

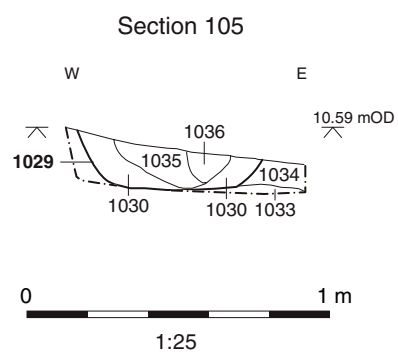
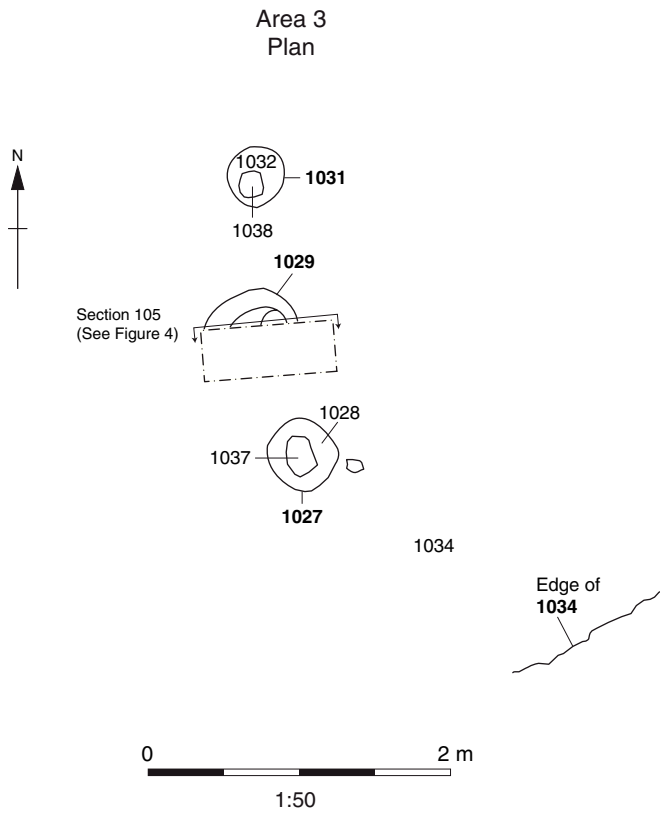


Figure 5: Section and plan of archaeology within Area 3



Head Office/Registered Office/ OA South

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarch.co.uk
w: <http://thehumanjourney.net>

OA North

Mill 3
Moor Lane
Lancaster LA1 1GF

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: [oanorth@thehumanjourney.net](mailto: oanorth@thehumanjourney.net)
w: <http://thehumanjourney.net>

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
f: +44 (0) 1223 850599
e: [oaeast@thehumanjourney.net](mailto: oaeast@thehumanjourney.net)
w: <http://thehumanjourney.net>

OA Méditerranée

115 Rue Merlot
ZAC La Louvade
34 130 Mauguio
France

t: +33 (0) 4.67.57.86.92
f: +33 (0) 4.67.42.65.93
e: [oamed@thehumanjourney.net](mailto: oamed@thehumanjourney.net)
w: <http://oamed.fr/>

OA Grand Ouest

7 Rue des Monderaines
ZI - Ouest
14650 Carpiquet
France

t: +33 (0) 249 88 01 01
f: +33 (0) 249 88 01 02
e: [info@oago.fr](mailto: info@oago.fr)
w: <http://oago.fr>



Director: David Jennings, BA MIFA FSA

*Oxford Archaeology Ltd is a
Private Limited Company, N^o: 1618597
and a Registered Charity, N^o: 285627*