An Archaeological Evaluation at Rawalpindi House, Hermit Road, Newham, London E16 4PZ

Site Code:	**HER14**
Central NGR:	**TQ 3968 8204**
Local Planning Authority:	**London Borough of Newham**
Planning Reference:	**12/02024/FUL**
Other reference if any:	**LAG 25/508**
Commissioning Client:	**Hill Partnerships**
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1 ABSTRACT

1.1 This report details the results of an archaeological evaluation undertaken by Pre-Construct Archaeology Ltd on behalf of Hill Partnerships at Rawalpindi House, Hermit Road, London Borough of Newham E16 4PZ (Figure 1). The archaeological investigation was conducted between 10th and 14th February 2014 in accordance with the standards specified by the Institute of Archaeologists and following the guidelines issued by English Heritage.

1.2 The archaeological evaluation has provided evidence for the palaeotopography of the study site. The archaeological evaluation demonstrated that organic Holocene peat deposits survived under the alluvial clay deposits and made ground.

1.3 Evidence of possible prehistoric activity was recorded in Trench 4 where a number of well preserved small branches of brushwood mixed with a number of other smaller branches and straw like material were unearthed. Of particular interest was a larger log of wood which shows evident tools mark were it was cut. The exposed brushwood was aligned approximately east-west orientated and it is very likely to be the result of anthropogenic deposition. As a result this deposit was interpreted as part of a possible ephemeral trackway or part of a temporary campsite or hunting site probably dating to the prehistoric period. Similar trackways have been excavated in east London in the former marshland leading down to the River Thames.

1.4 More evidence for human activity was observed in Trench 5 where a cut feature sealed by alluvium was recorded in the south-west facing section of the sondage located in the southern half of this trench. It is possible that this cut extends to the south under the alluvial clay and as a result this cut was interpreted as a possible drainage ditch.

1.5 No evidence of Roman and medieval activity was recorded during the evaluation. It seems that during the Roman and medieval period the site would have lain within the large tract of marshland which dominated the area. The formation of the alluvium which sealed the organic peat relates to both the River Lea and the River Thames as the site is located near the confluence of the two. This alluvial deposit underlay the modern consolidation/levelling deposits and represents a period of inundation leading to the development of an intertidal wetland system.

1.6 The archaeological evaluation showed that post-medieval and modern activity did not affect earlier prehistoric deposits. All trenches revealed alluvial clay sealing peat deposits except to the southeast half of Trench 3 where at least the upper part of the peat layer was truncated by a large modern intrusion which extends beyond the south-east limit of excavation. Moreover, the alluvial clay acted as a protective buffer preserving the integrity and moisture of the peat deposit together with wood structures such as the prehistoric trackway.

2 INTRODUCTION

2.1 An archaeological investigation commissioned by Hill Partnerships was undertaken on land at Rawalpindi House, Hermit Road, Newham E16 4HR in the London Borough of Newham, between 10th and 14th February 2014. The site comprised a rectangular area of land, c. 4,600m² in extent, centred at TQ 3968 8204.

2.2 The Written Scheme of Investigation (Hawkins 2014) detailed the methodology by which the archaeological investigation was undertaken. The WSI followed the English Heritage guidelines (GLAAS 2009) and those of the Institute for Archaeologists (IFA, 1993).The watching brief and evaluation was supervised by Ireneo Grosso, project managed by Helen Hawkins for Pre-Construct Archaeology Ltd and monitored by Adam Single of English Heritage on behalf of the London Borough of Newham.

2.3 The site of the proposed development is bordered to the north and west by houses fronting Clifford Road and Tyas Road respectively. The site is bordered by the Hub building to the south and by Hermit Road to the east. The site is currently occupied by Rawalpindi House, an X shaped single storey former care home.

2.4 The site was given the Museum of London site code HER14. The complete archive comprising written, drawn and photographic records will be deposited within the London Archaeological Archive and Research Centre (LAARC).

3 PLANNING BACKGROUND

3.1 Planning Policy

3.2 The proposed development of the site is subject to planning guidance and policies contained within the National Planning Policy Framework (NPPF), The London Plan and policies of the London Borough of Newham which fully recognise the importance of the buried heritage for which they are the custodians.

3.3 Local Policy

3.3.1 The study aims to satisfy the objectives of the London Borough of Newham, which fully recognises the importance of the buried heritage for which they are the custodians. These objectives are summarised in the Borough's draft "Unitary Development Plan", 2001 (http://apps.newham.gov.uk/environment/udp/Chapters%20PDF/%203%20Environment%20Quality.pdf), which states:

Archaeology: Investigation, Excavation and Protection

Para. 3.114

"Archaeological remains often provide the only evidence of the Borough's past. These are a finite and fragile resource very vulnerable to modern development and land use. The archaeology of the Borough is a community asset which should be preserved and the needs of the development balanced and assessed against this. Early considerations of and consultation on archaeological issues will maximise preservation in accordance with 'PPG 16 Archaeology and Planning'. The destruction of such remains should be avoided if possible and either left in situ if the remains are of national, or particular local interest, or excavated and recorded prior to development where remains are of lesser importance. Site layouts designed to retain archaeological features intact will be considered favourably by the Council."

Para. 3.115

"The Greater London Archaeological Advisory Service (GLAAS-part of English Heritage) provides impartial advice to Newham Council. Sites of potential archaeological importance, to which this policy relates, can be defined as any site within and Archaeological Priority Area (APA). APAs are defined by GLAAS as areas having particular interest or value (please refer to Map EQ6), or as sites where it can be reasonably shown from existing sources of information (most notably the Greater London Sites and Monuments Record) that some remains of archaeological importance may survive. For further information please refer to the SPG Note No. 19 'Archaeological Code of Practice'. An archaeological assessment (either a desktop or a primary field investigation) will normally be required for any development involving a site more than 0.4 acres within an APA. The Counci l"The Greater London Archaeological Advisory Service (GLAAS-part of English Heritage) provides impartial advice to Newham Council. Sites of potential archaeological importance, to which this policy relates, can be defined as any site within an Archaeological Priority Area (APA). APAs are defined by GLAAS as areas having particular interest or value (please refer to Map EQ6), or as sites where it can be reasonably shown from existing sources of information (most notably the Greater London Sites and Monuments Record) that some remains of archaeological importance may survive. For further information please refer to the SPG Note No. 19 'Archaeological Code of Practice'. An archaeological assessment (either a desktop or a primary field investigation) will normally be required for any development involving a site more than 0.4 acres within an APA. The Council will also require such an assessment for smaller sites within the APAs, and sites outside the APAs, where this is clearly justified by the archaeological sensitivity of the site. Developers should undertake early consultation with the Council, and recognised archaeological organisations, to avoid uncertainty and later delays."

POLICY EQ43:

THE COUNCIL WILL PROMOTE THE CONSERVATION, PROTECTION AND ENHANCEMENT OF THE ARCHAEOLOGICAL HERITAGE OF THE BOROUGH. DEVELOPERS OF SITES OF POTENTIAL ARCHAEOLOGICAL IMPORTANCE WILL BE REQUIRED TO PRODUCE A WRITTEN REPORT, AS PART OF THE APPLICATION FOR PLANNING PERMISSION, ON THE RESULTS OF AN ARCHAEOLOGICAL ASSESSMENT OR FIELD EVALUATION CARRIED OUT BY A SUITABLY QUALIFIED ARCHAEOLOGICAL CONTRACTOR; AND WHEN REMAINS OF IMPORTANCE ARE IDENTIFIED, THE COUNCIL WILL SEEK PRESERVATION OF THE REMAINS IN SITU. ON OTHER IMPORTANT SITES, WHERE THE BALANCE OF OTHER FACTORS IS IN FAVOUR OF GRANTING PLANNING PERMISSION BY MEANS OF THE IMPOSITION OF CONDITIONS ON THE GRANT OF PLANNING PERMISSION, AND POSSIBLY BY LEGAL AGREEMENTS, THE COUNCIL WILL ENSURE THAT ADEQUATE PROVISION IS MADE FOR THE PROTECTION, EXCAVATION AND RECORDING OF REMAINS, AND THE SUBSEQUENT PUBLICATION OF THE RECORDS OF EXCAVATION, PROVIDING A WRITTEN ACCOUNT OF THE ARCHAEOLOGICAL EXPLORATION, INCLUDING RECORDS OF FINDS.

Para. 3.116

The council will promote co-operation between land owners, developers and archaeological organisations in accordance with the British Archaeologists' and Developers' Liaison Group Code.

3.3.2 The site is located within an 'Archaeological Priority Area' as defined by the London Borough of Newham. There are no Scheduled Ancient Monuments within the development area.

4 GEOLOGY AND TOPOGRAPHY

4.1 Introduction

4.1.1 Unless referenced otherwise, the geological and topographical background cited below was obtained from the WSI prepared by Pre-Construct Archaeology (Hawkins, 2014).

4.2 Geological and Topographical Background

4.2.1 The British Geological Society map for the area states that the site lies on Alluvium over London Clay. The results of the evaluation show that there is a sequence of peat overlain by alluvium which is overlain by made ground. The base of the peat was not reached during the evaluation.

4.2.2 There are no watercourses in close proximity of the site. The site lies to the east of the River Lea and to the north of the River Thames.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Introduction

5.1.1 Unless referenced otherwise, the archaeological and historical background cited below was obtained from a desk based assessment for a site near to the Hermit Road site with a similar topographical background (CgMs, 2006), and from internet resources.

5.2 Prehistoric

5.2.1 The remains of a fossil forest, with associated floral and faunal remains including an elephant's tooth, were found at East India Dock to the southwest. Palaeolithic implements were also found on the east bank of the River Lea in the Plaistow area.

5.2.2 No Mesolithic or Neolithic remains have been unearthed in the vicinity.

5.2.3 The terrace gravels and the overlying silts, clays and peats of the Rivers Thames and Lea represent a series of palaeoenvironments that possessed considerable biodiversity, capable of providing rich resources to past populations. Characterised by relatively dry gravel eyots interspersed with channels and marshes, this environment provided areas of dry land suitable for settlement in close proximity to the bountiful plant and animal life that could be found in the adjacent wet areas. The archaeological record suggests that environments of this nature were often exploited by man throughout prehistory and it is therefore not surprising that evidence of Bronze and Iron Age activity has been found near the site. Notable structures include several timber trackways, which were presumably constructed across the marshes for ease of access, perhaps to fishing and hunting grounds.

5.2.4 No finds of Mesolithic or Neolithic date are recorded from the immediate vicinity of the site. Environmental deposits, comprising peat and underlying organic rich sands, dated to the Late Neolithic/Early Bronze Age, were identified at Canning Town station, south of the study site.

5.2.5 Bronze Age finds from the study area include a 'broadward' spearhead found in the Plaistow Marshes area before 1865.

5.2.6 Bronze Age peat deposits containing wood, burnt flint, and a fragment of pottery, were found at Butchers Row, southeast of the site. Undated worked prehistoric flint, together with alluvial clays, peat and a watercourse, was discovered at the Elizabeth Fry School, north of the site.

5.2.7 In general, archaeological remains dating to the Bronze Age are likely to occur as findspots and discrete features, or relate to exploitation of the marshes, rather than as extensive settlement sites in this area, as it was too marshy for settlement or farming.

5.2.8 Traditionally the Iron Age is not well evidenced elsewhere on the northern Thames floodplain, which is thought to be the result of environmental conditions, with much of the Iron Age corresponding with a period of prolonged marine transgression.

5.3 Roman

5.3.1 Residual Roman pottery was found in a nineteenth century deposit at Prince Regent Lane, north of the site. Two drainage/boundary ditches were identified at the Cumberland School, Alexandra Street, north of the site, containing pottery and ceramic building material.

5.4 Medieval

5.4.1 Throughout the medieval period the area would have lain within the large tracts of marshland which dominated the area at this time.

5.5 Post-Medieval and Modern

5.5.1 Prior to the 19th century, the district was largely marshland, and accessible only by boat, or a toll bridge. In 1809, an Act of Parliament was passed for the construction of the Barking Road between the East India Docks and Barking. A five span iron bridge was constructed in 1810 to carry the road across the River Lea at Bow Creek.

5.5.2 The area is thought to be named for the first Viceroy of India, Charles John Canning, who suppressed the Indian Mutiny about the time the district expanded. The population increased rapidly after the North London Line was built from Stratford to North Woolwich, in 1846. This was built to carry coal and goods from the docks; and when the passenger station was first built it was known as Barking Road. Speculative builders constructed houses for the workers attracted by the new chemical industries established in the lower reaches of the River Lea, and for the nearby Thames Ironworks and Shipbuilding Company and Tate & Lyle refinery.

5.5.3 The opening of the Royal Victoria Dock in 1855 accelerated the development of the area creating employment and a need to house dock workers and their families. New settlements around the dock developed, starting with Hallsville, Canning Town and Woolwich, and later the areas now known as Custom House, Silvertown and West Silvertown. The new settlements lacked water supply and had no sewage system, leading to the spread of cholera and smallpox. The casual nature of employment at the docks meant poverty and squalid living conditions for many residents.

5.5.4 Both the Rocque map of 1746 and the Chapman and Andre map of 1777 show the site lay in open marshland. The Ordnance Survey map of 1870 shows that the site is occupied by a field, possibly with a ditch running through it. By 1894 Tyers Road and Hermit Road had been constructed and both were lined with terraced housing. Tyers Road at this point extended through the site to Hermit Road. This layout is also shown on the Ordnance Survey maps of 1916, 1950, 1960 and 1975. However, by 1982, Rawalpindi House had been constructed on the site, and the remaining part of Tyers Road had been redeveloped with a number of housing blocks and light industrial buildings. Rawalpindi House may have been named after the HMS Rawalpindi which was moored in Canning Town prior to being sunk by the Germans in 1939 near Iceland.

5.5.5 The map information suggests that the site was not affected by bombing during World War II.

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The purpose of the archaeological investigation was to determine the presence or absence of surviving features at the site and, if present, to assist in formulating an appropriate archaeological mitigation strategy. All works were undertaken in accordance with the guidelines set out by English Heritage and the Institute of Field Archaeology.

6.2 The research design set out in the Written Scheme of Investigation (Hawkins 2014) aimed to address the following objectives:

- To determine the natural topography of the site, and the height at which it survives.
- To confirm the presence/absence of palaeoenvironmental deposits at the site.
- To establish the presence or absence of prehistoric activity, its nature and (if possible) date.
- To establish the presence or absence of Roman and medieval activity. Can suspicions be confirmed that the site was unused during these periods?
- To establish the presence or absence of post-medieval activity at the site.
- To establish the nature, date and survival of activity relating to any archaeological periods at the site.
- To establish the extent of all past post-depositional impacts on the archaeological resource.

6.3 Five trenches were excavated (Trenches 1 to 5, Figure 2). They were excavated to a maximum depth of 1.2m below ground level. Due to site access constraints, a small 3 ton mechanical excavator was used to carry out the work, and therefore extensive depths through the deposits could not be reached. Small sondages were excavated within every evaluation trench in order to expose the top of the peat. The table below details all trench and sondage dimensions including orientation:

Evaluation Trench	Dimension of Trench	Dimension of sondage	Maximum Trench depth (OD level)	Trench orientation
1	3.04m by 2.42m	2.07m by 0.72m	-1.36m OD	NE-SW
2	4.30m by 1.80m	2.12m by 0.68m	-1.39m OD	NE-SW
3	10.30m by 2.24m	1.85m by 0.61m	-1.13m OD	NW-SE
4	5.13m by 2.09m	2.49m by 1.38m	-1.25m OD	N-S
5	7.26m by 2.02m	2.42m by 0.66m	-1.39m OD	NW-SE

6.4 The excavation of all trenches was undertaken using a small 3 ton mechanical excavator. The mechanical excavator used a toothless ditching bucket to remove modern overburden under the constant supervision of an archaeologist. Spoil was mounded a safe distance from the edges of the trench.

6.5 Machine excavation continued in spits of 100mm at a time until either significant archaeological strata were found or natural ground exposed.

6.6 Following machine excavation, relevant faces of the trench that required examination or recording were cleaned using appropriate hand tools. The majority of the investigation of archaeological levels was carried out by hand, with cleaning, examination and recording both in plan and in section.

6.7 The strategy for sampling archaeological and environmental deposits and structures was developed by PCA as necessary, in consultation with our in-house. The English Heritage Regional Archaeological Science Advisor Sylvia Warman also visited the site and advised on the collection of column and bulk samples.

6.8 All archaeological features (stratigraphical layers, cuts, fills, structures) were evaluated by hand tools and recorded in plan at 1:20 or in section at 1:10 using standard single context recording methods. Features will be evaluated so as to characterise their form, function and date. Fabric samples were taken from brickwork structures and environmental samples were taken from the sequence of alluvium observed in the north part of the site.

6.9 The recording systems adopted during the investigations were fully compatible with those widely used elsewhere in London that is those developed out of the Department of Urban Archaeology Site Manual, now published by the Museum of London Archaeological Service (MoLAS 1994) and with PCA Site Manual (Taylor and Brown, 2009). The site archive was organised to be compatible with the archaeological archives produced in the Local Authority area.

6.10 A full photographic record was made during the archaeological investigation consisting of a digital photographic archive that was maintained during the course of the archaeological investigation.

6.11 The complete archive produced during the evaluation and watching brief, comprising written, drawn and photographic records, will be deposited with the Museum of London site code HER14.

6.12 Three temporary benchmarks (TBM1 to 3) were established with a GPS with a height of 0.61m OD, 0.56m OD and 0.50m OD respectively. TBM1, 2 and 3 were located on the east side of the site, in the north part of the site and in the south-west corner of the site respectively.

7 ARCHAEOLOGICAL SEQUENCE

7.1 Introduction

7.1.1 The following text is an overview of the archaeological sequence recorded during the evaluation. Full individual context description and Ordnance Datum levels are detailed in Appendix 1 and stratigraphic relationships are shown in Appendix 2. Figure 1 shows the site locations, Figure 2 shows the locations of evaluation Trenches 1 to 5, Figure 3 shows evaluation Trench 4 plan, and Figure 4 shows sections 1 to 5.

7.2 Phase 1: Undated Prehistoric Peat Deposits (Fig. 3 and 4, Plate 1)

7.2.1 The earliest deposit encountered on site during the archaeological investigation was soft spongy mid blackish-brown peat with moderate to frequent decayed fragment of wood inclusions, exposed at the base of all evaluation trenches. All contexts detailed below have been interpreted as peat:

Evaluation Trench	Context	Dimension	Highest level	Lowest level
1	9	0.50m NE-SW x 0.70m NW-SE x 0.13m thick (NFE)	-1.23m OD	-1.36m OD
2	4	2.14m NE-SW x 0.60m NW-SE x 0.25m thick (NFE)	-1.02m OD	-1.12m OD
3	6	0.70m NE-SW x 1.86m SE-NE x 0.30m thick (NFE)	-0.76m OD	-0.78m OD
4	17	1.30m N-S x 1.40m E-W x 0.20m thick (NFE)	-1.00m OD	-1.01m OD
5	14	2.40m NW-SE x 0.70m NE-SW x 0.80m thick (NFE)	-0.67m OD	-0.68m OD

7.2.2 The level of the peat deposits varied across the site from a maximum depth of -1.36m OD in Trench 1 located approximately in the north-east corner of the site and -0.67m OD in Trench 5 (see Plate 1) located in the south part of the site. The peat deposit was interpreted as part of the prehistoric or early Roman landscape. The base of the peat was not reached in any of the trenches.

Plate 1: North-east facing section of Trench 3 showing peat layer [6] sealed by alluvial clay [5].

7.3 Phase 2: Undated Possible Prehistoric/Early Roman (Fig. 3, Plates 2, 3, 4)

7.3.1 In the central area of Trench 4 peat layer [17] was overlaid by a number of well preserved small branches of brushwood mixed with a number of other smaller branches and straw like substance recorded as context [18] (see Plate 2). The largest branches were recorded as [18]a, [18]b and [18]c, found between -0.96m OD and -1.08m OD and were collected for further analysis. The overall area of exposed brushwood measured 1.30 north-south by 1.40m east-west with the largest branch of brushwood, recorded as [18]a, measuring 1.40m long by 0.12m diameter. The western end of [18]a presented clear tool marks resulting from its cutting (see Plate 3) with the eastern end of the timber extending beyond the eastern limit of excavation. Context [18] was interpreted as a part of a possible brushwood trackway or part of a temporary campsite or hunting site.

Plate 2: Brushwood in Trench 4. Looking north.

Plate 3: Close up of tool marks on branch [18]a in Trench 4.

Plate 4: Wood sampling in Trench 4.

7.3.2 In Trench 5, peat layer [14] was truncated at -0.67m OD by cut feature [13] which measured 1.33m width and 0.57m depth. Cut [13], recorded in section only, was filled with 0.33m thick mid bluish-grey clay [12] at the base which was in turn sealed by dark grey-brown clay [11]. Cut feature [13] was interpreted as part of a possible north-south orientated drainage ditch.

7.4 Phase 3: Undated Possible Post-Roman to Late Medieval Alluvial Clay Deposit

7.4.1 The peat layers observed in Trenches 1 to 3 and the upper fill [12] with context [18] in trenches 4 and 5 respectively were all sealed by plastic and moderately organic clay overlaid by more firm and less organic clay. All contexts associated with this phase did not contain finds and were interpreted as Alluvium (see Plate 5). All contexts are detailed below:

Evaluation Trench	Context	Description	Highest level	Lowest level
1	2	Firm clay layer	0.03m OD	-0.29m OD
2	3	Organic clay layer	-1.02m OD	-1.39m OD
3	5	Organic clay layer	0.12m OD	-0.27m OD
2	7	Silty clay layer	-0.49m OD	-0.63m OD
1	8	Organic clay layer	-0.62m OD	-1.27m OD
5	10	Firm clay layer	-0.29m OD	-0.52m OD
4	15	Silty clay layer	-0.42m OD	-0.42m OD
4	16	Firm clay layer	-0.39m OD	-0.58m OD

7.4.2 The alluvium recorded on site relates to both the River Lea and the River Thames as the site is located near the confluence of the two rivers.

Plate 5: South-east facing section of Trench 1 showing alluvial clay [2] and [8] sealing peat layer [9].

7.5 Phase 4: Modern Deposits

7.5.1 The alluvial deposits in all evaluation trenches were sealed by a sequence of modern consolidation/levelling deposits, in turn sealed by top soil except for Trench 4 where the modern deposits were sealed by the concrete and tarmac for the existing car park located in the south-west corner of the site. The thickness of the modern deposits varied from a maximum thickness of 0.97m recorded in Trench 3 to a minimum thickness of 0.50m as recorded in Trench 1.

8 INTERPRETATION AND CONCLUSIONS

8.1 Interpretation

8.1.1 The Written Scheme of Investigation for an archaeological evaluation (Hawkins 2014) prepared before archaeological work commenced at Rawalpindi House highlighted specific primary objectives to be addressed by the archaeological investigation.

8.2 What is the natural topography of the site, and at what height does it survive?

8.2.1 All evaluation trenches were excavated to a maximum level where the upper horizon of organic peat layers was exposed. This organic layer survived in all trenches except for the south-east half of Trench 3 where a large modern intrusion was observed. In Trench 4 the peat layer was partially truncated to the south by a modern intrusion. Geotechnical boreholes and test pits excavated along the A13 (Stafford et all, 2012, p. 22-3) in the section crossing the Canning Town area, located approximately 250m south of the site, revealed pre-Holocene sediments consisting of fluvial gravel overlaid by Holocene sediments consisting of freshwater sand clay and silts in turn sealed between -2m OD and –1m OD by sediments consisting of freshwater peat and organic silts dated 4650±70 BP. The archaeological evaluation encountered organic peat between -0.67m OD and 1.23m OD in Trenches 5 and 1 respectively suggesting that the peat observed during the archaeological evaluation is probably consistent with the results of the A13 geoarchaeological investigation.

8.3 Were palaeoenvironmental deposits observed at the site?

8.3.1 The archaeological evaluation unearthed organic peat in all trenches which is probably consistent with the peat deposit recorded during the geoarchaeological investigation carried out during the improvement of the A13 section across the junction in Canning Town (see above). The peat is extremely well preserved and includes grass and reed remains in near perfect condition (pers. com. Dr Rob Batchelor, QUEST).

8.4 Was prehistoric activity recorded at the site? What was its nature and (if possible) date?

8.4.1 Evidence of possible prehistoric activity was recorded in Trench 4 where a number of well preserved small branches of brushwood mixed with a number of other smaller branches and straw like material were unearthed. Of particular interest was a larger log of wood which shows evident tools mark were it was cut (see Plates 2 and 3). The exposed brushwood was approximately east-west orientated and it is very likely to be the result of anthropogenic deposition. As a result this deposit was interpreted as part of a possible trackway or part of a temporary campsite or hunting site probably dating to the prehistoric period. Similar trackways have been excavated in east London in the former marshland leading down to the River Thames (see Current Archaeology 143; Meddens and Beasley, 1990; Meddens, 1996)

8.4.2 More evidence for human activity was observed during the evaluation in Trench 5. A cut feature sealed by alluvium was recorded in the south-west facing section of the sondage located in the southern half of this trench. It is possible that this cut extends to the south under the alluvial clay and as a result this cut can be interpreted as a drainage ditch. No finds were recovered from the fills.

8.5 Was Roman and medieval activity recorded at the site? Can suspicions be confirmed that the site was unused during these periods?

8.5.1 No evidence of Roman and medieval activity was recorded during the evaluation. It seems that during the Roman and medieval period the site would have been lain within the large tracts of marshland which dominated the area. The formation of the alluvium which sealed the organic peat relates to both the River Lea and the River Thames as the site is located near the confluence of the two. This alluvial deposit underlay the modern consolidation/levelling deposits and represents a period of inundation leading to the development of an intertidal wetland system (Stafford et al, 2012, p. 24).

8.6 Was post-medieval activity observed at the site?

8.6.1 No evidence of post-medieval activity was recorded during the evaluation. The construction of Rawalpindi House during the early 1980s seems to have truncated the terraced housing constructed during the late 19th century.

8.7 What were the nature, date and survival of activity relating to any archaeological periods at the site?

8.7.1 The trackway is likely to date to the later prehistoric period, given its location at the top of the peat. The possible drainage ditch is also of similar date. No finds were identified on the site in the peat or alluvium to allow closer dating at this stage.

8.8 What was the extent of all past post-depositional impacts on the archaeological resource?

8.8.1 The archaeological evaluation showed that post-medieval and modern activity has not affected the earlier periods. All trenches revealed alluvial clay sealing peat deposits except to the southeast half of Trench 3 where at least the upper part of the peat layer was truncated by a large modern intrusion which extends beyond the southeast limit of excavation of the trench. Moreover, the alluvial clay acted as a protective buffer preserving the integrity and moisture of the peat deposit together with the organic structure of the trackway.

9 ACKNOWLEDGMENTS

9.1 Pre-Construct Archaeology ltd would like to thank Darren Mulhare of Hill Partnerships for commissioning the archaeological work. Thanks also to Gill King of English Heritage, who monitored the site and to Sylvia Warman Scientific Adviser at English Heritage for her site visit and her advice on the strategy over environmental sampling.

9.2 Furthermore the author would also like to thank: Helen Hawkins for project managing and editing this report; Hayley Baxter for the illustrations; John Joyce and Maria Buczak for their work on site; Rich Archer for the surveying; Chris Cooper for the logistics and finally to David Joyce of O'Connell for opening the trenches by machine.

10 BIBLIOGRAPHY

CGMS 2006. Area 3, Canning Town, Newham; an Archaeological Desk Based Assessment unpublished client report

Current Archaeology 12, 1995. Bronze Age Trackways in East London: 413-17

Hawkins, H 2014. Rawalpindi House, Hermit Road, Newham,E16 4PZ: WSI for an Archaeological Evaluation, Pre-Construct Archaeology Limited

Meddens, F, 1996. Sites from the Thames estuary wetlands, England, and their Bronze Age use, *Antiquity* 70: 325-34.

Meddens, F and Beasley, M, 1990. Wetland use in Rainham, Essex*, London Archaeology* 6: 242-48

Stafford, E et al, 2012. Landscape and Prehistory of the East London Wetlands, Oxford Archaeology Monograph No. 17: 21-24

Taylor, J with Brown, G 2009. Fieldwork Induction Manual: Operations Manual 1, Pre-Construct Archaeology Limited

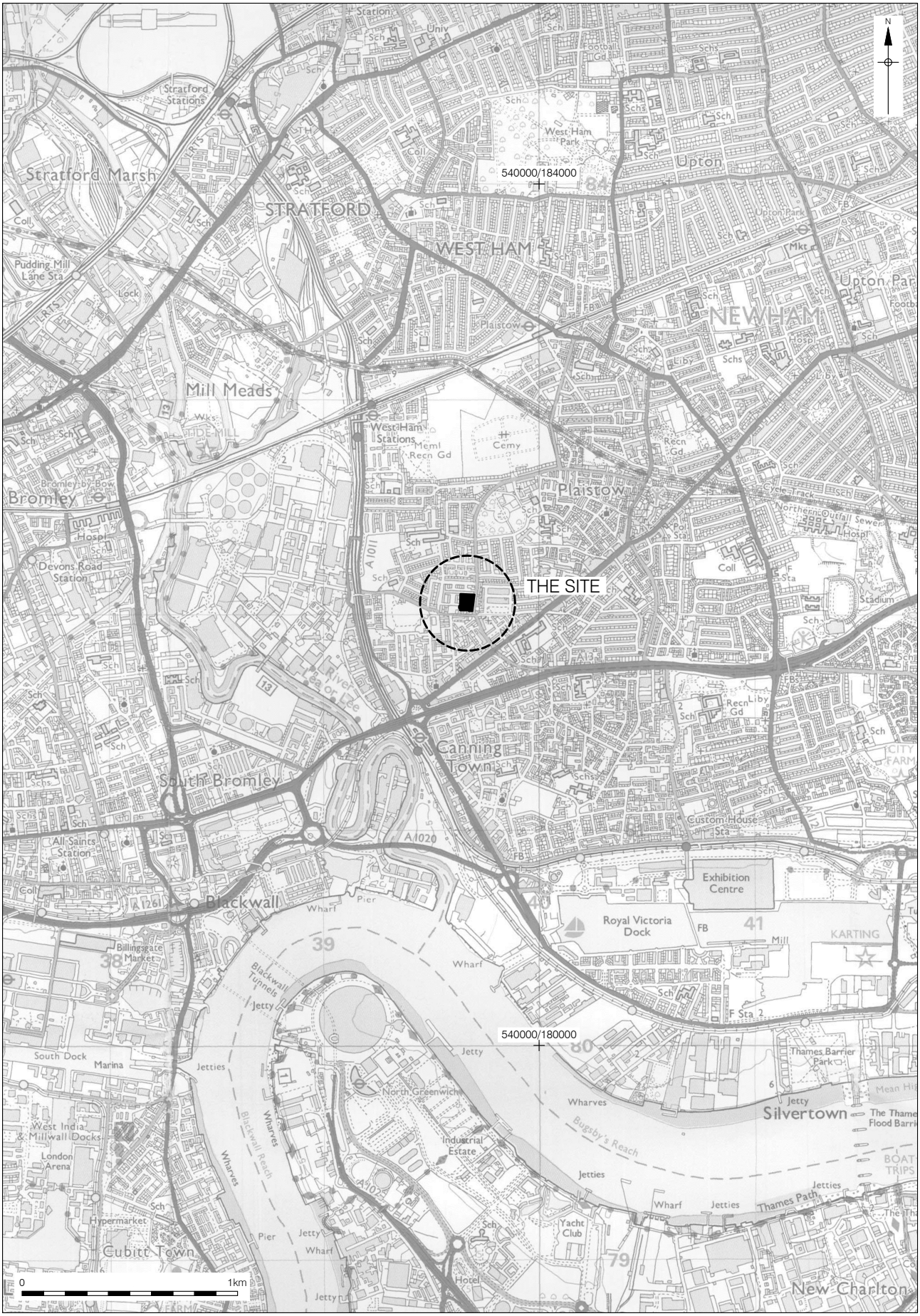

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Figure 1
Site Location
1:25,000 at A4

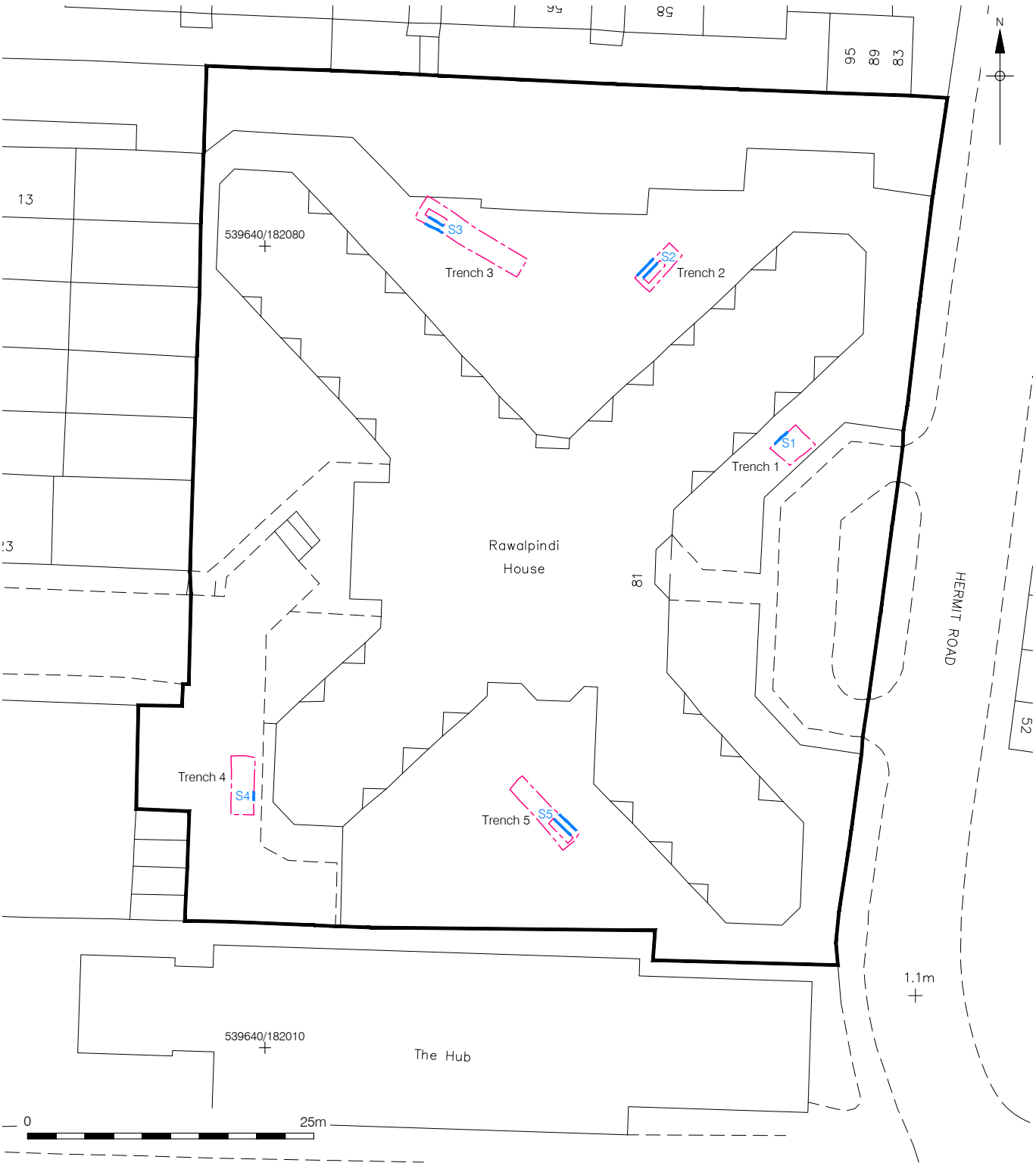

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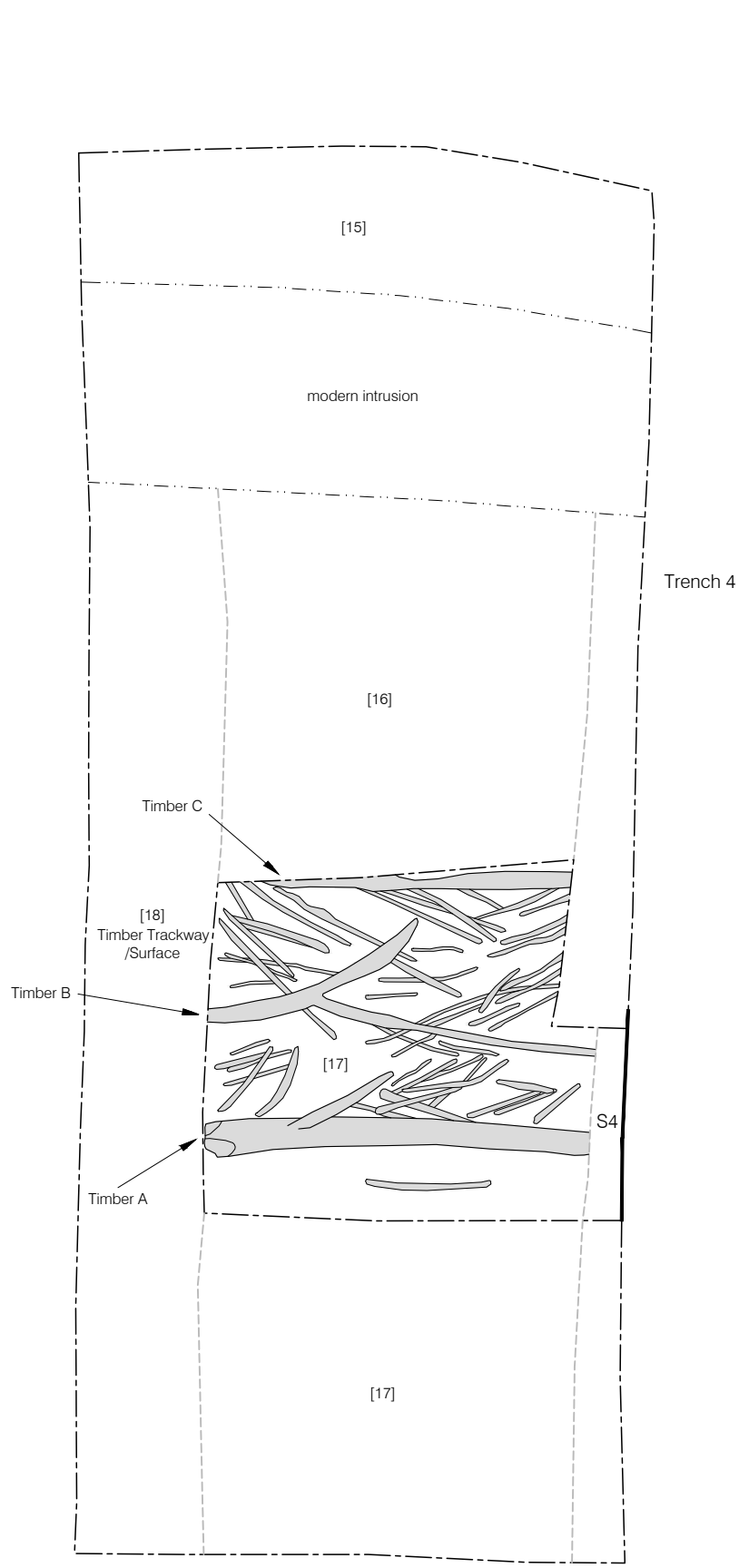
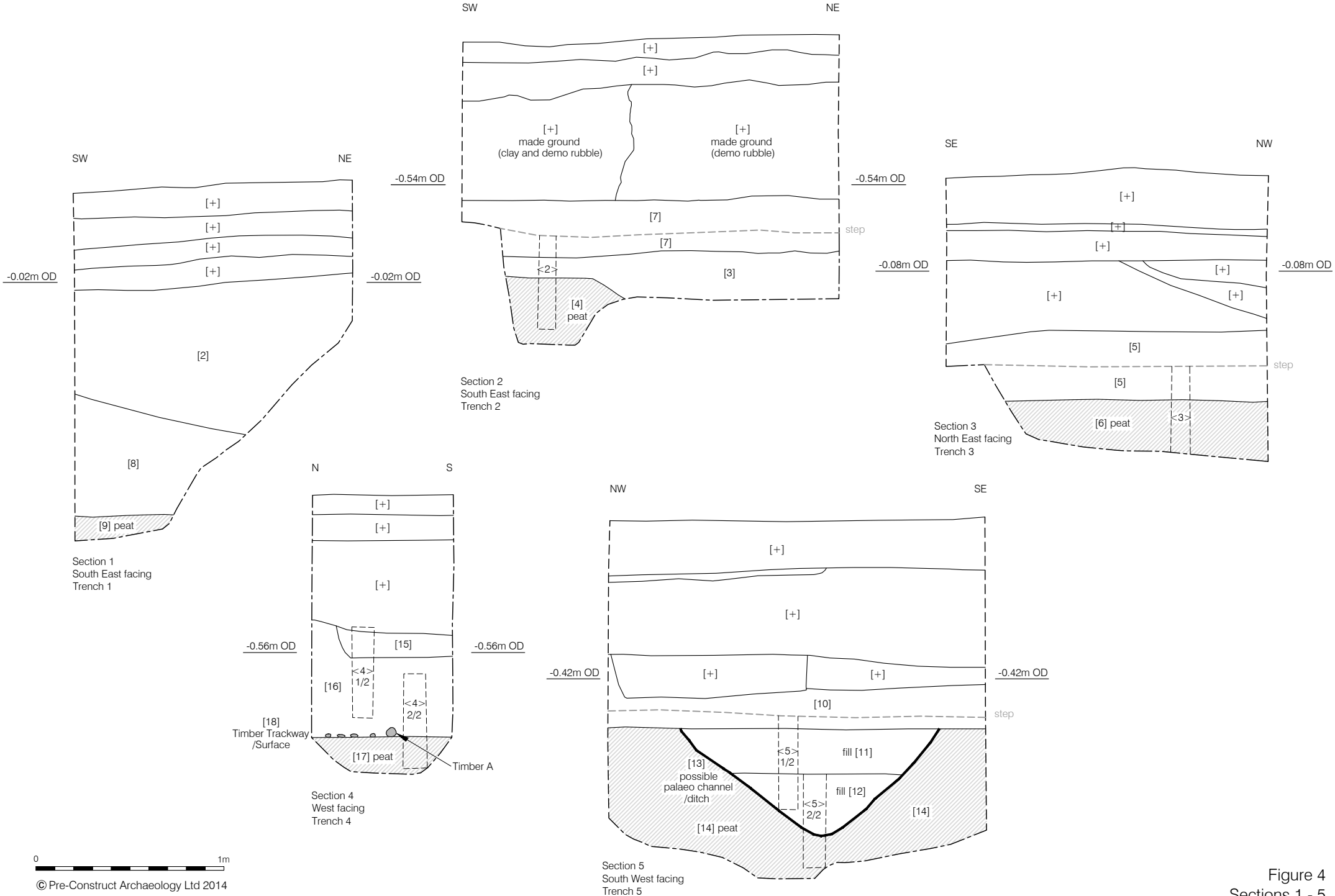
Figure 2
Trench Location
1:500 at A4



0 1m

20/02/14 HB

Figure 3
Detailed Plan of Trench 4
1:25 at A4



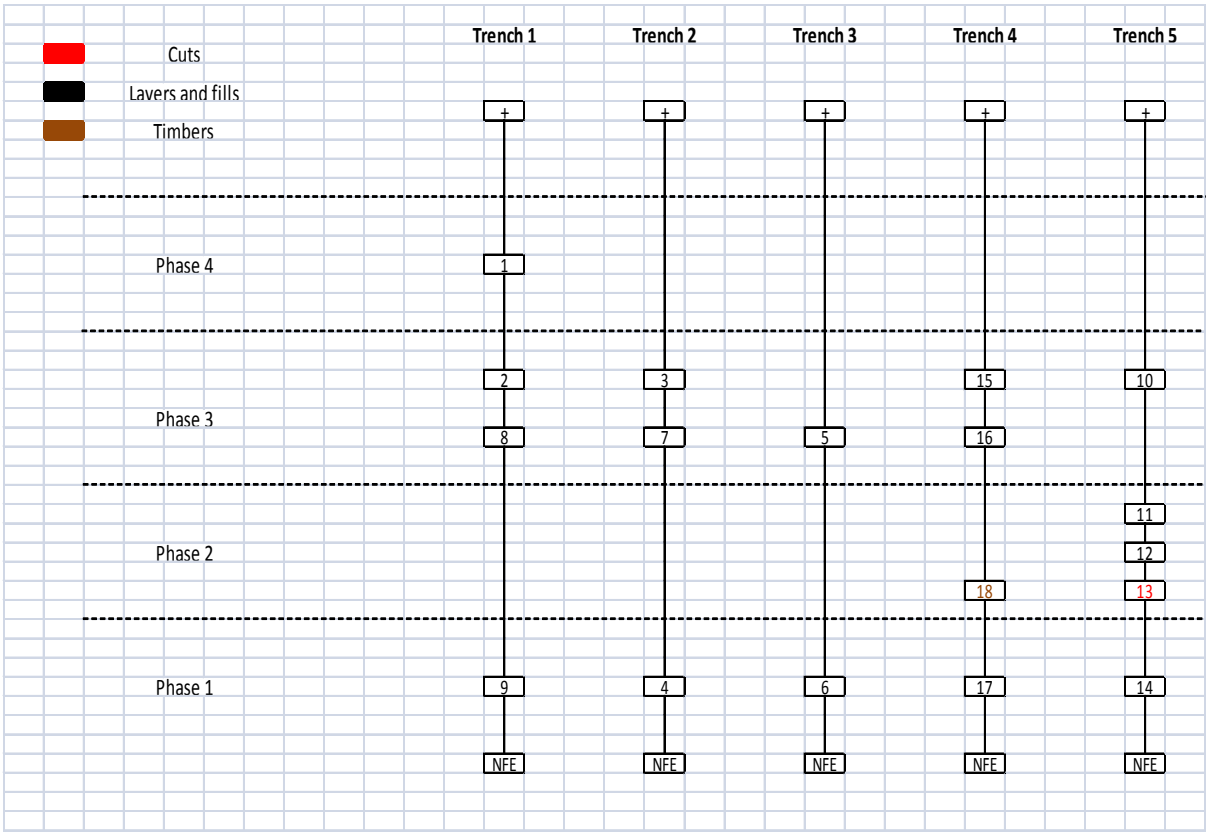
20/02/14 HB

Figure 4
Sections 1 - 5
1:25 at A4

APPENDIX 1: CONTEXT INDEX

Context No.	Trench No.	Phase	Plan	Section	Type	Description	Highest Level	Lowest Level	Bulk samples	Column samples No.	Timber samples
1	1	4		1	Layer	Re-worked clay layer	0.13m OD	-0.07m OD			
2	1	3	Tr. 1	1	Layer	Firm clay layer	0.03m OD	-0.29m OD			
3	2	3	Tr. 2	2	Layer	Peaty clay layer	-1.02m OD	-1.39m OD		2	
4	2	1	Tr. 2	2	Layer	Peat layer	-1.02m OD	-1.12m OD	8 (30 L.)	2	
5	3	3	Tr. 3	3	Layer	Peaty clay layer	0.12m OD	-0.27m OD		3	
6	3	1	Tr. 3	3	Layer	Peat layer	-0.76m OD	-0.78m OD	1 (30 L.)	3	
7	2	3	Tr. 2	2	Layer	Silty clay layer	-0.49m OD	-0.63m OD		2	
8	1	3	Tr. 1	1	Layer	Organic clay layer	-0.62m OD	-1.27m OD			
9	1	1	Tr. 1	1	Layer	Peat layer	-1.23m OD	-1.36m OD			
10	5	3	Tr. 5	5	Layer	Firm clay layer	-0.29m OD	-0.52m OD		5 (2 of 2)	
11	5	2		5	Fill	Upper fill of cut [13]	-0.67m OD	-0.68m OD		5 (2 of 2)	
12	5	2		5	Fill	Lower fill of cut [13]	-0.91m OD	-0.92m OD		5 (2 of 2), 5	
13	5	2		5	Cut	Possible palaeo channel/ditch cut	-0.67m OD	-1.25m OD			
14	5	1	Tr. 5	5	Layer	Clayey peat layer	-0.67m OD	-0.68m OD	6 (20 L.)	5 (1 ogf 2)	
15	4	3	Tr. 4	4	Layer	Silty clay layer	-0.42m OD	-0.42m OD		4 (1 of 2)	
16	4	3	Tr. 4	4	Layer	firm clay layer	-0.39m OD	-0.58m OD		4 (1 of 2), 4	
17	4	1	Tr. 4	4	Layer	Peat layer	-1.00m OD	-1.01m OD	7 (30 L.)	4 (2 of 2)	
18	4	2	Tr. 4	4	Timber	Timber trackway or surface	-0.96m OD	-1.08m OD		4 (2 of 2)	[18] a, [18] b, [18] c

APPENDIX 2: SITE MATRIX



APPENDIX 3: OASIS FORM

OASIS ID: preconst1-172315

Project details

Project name	An Archaeological Evaluation at Rawalpindi House, Hermit Road, Newham, London E16 4PZ
Short description of the project	An archaeological evaluation was undertaken at Rawalpindi House, Hermit Road, London Borough of Newham E16 4PZ. The archaeological evaluation demonstrated that organic Holocene peat deposits survived under the alluvial clay deposits and made ground. Evidence of possible prehistoric activity was recorded in Trench 4 where a number of well preserved small branches of brushwood mixed with a number of other smaller branches and straw like material were unearthed. This deposit was interpreted as part of a possible ephemeral trackway or part of a temporary campsite or hunting site probably dating to the prehistoric period. More evidence for human activity was observed in Trench 5 where a cut feature sealed by alluvium was recorded in the south-west facing section. This cut was interpreted as a possible drainage ditch. The archaeological evaluation showed that post-medieval and modern activity did not affect earlier prehistoric deposits. All trenches revealed alluvial clay sealing peat deposits except to the southeast half of Trench 3 where at least the upper part of the peat layer was truncated by a large modern intrusion which extends beyond the south-east limit of excavation. Moreover, the alluvial clay acted as a protective buffer preserving the integrity and moisture of the peat deposit together with wood structures such as the prehistoric trackway.
Project dates	Start: 10-02-2014 End: 14-02-2014
Previous/future work	No / Yes
Any associated project reference codes	HER14 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Residential 2 - Institutional and communal accommodation
Monument type	TRACKWAY Late Prehistoric
Monument type	DITCH Late Prehistoric
Significant Finds	WOOD Late Prehistoric
Methods &	"Targeted Trenches"

techniques	
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 NEWHAM CANNING TOWN Rawalpindi House, Hermit Road, Newham
Postcode	E16 4PZ
Study area	0.48 Hectares
Site coordinates	TQ 3968 8204 51.5194839971 0.0134571847304 51 31 10 N 000 00 48 E Point
Height OD / Depth	Min: 0m Max: 0m

Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Greater London Archaeological Advisory Service
Project design originator	Helen Hawkins
Project director/manager	Helen Hawkins
Project supervisor	Ireneo Grosso
Type of sponsor/funding body	House builder
Name of sponsor/funding body	Hill Partnerships

Project archives

Physical Archive recipient	LAARC

Physical Archive ID	HER14
Physical Contents	"Wood"
Digital Archive recipient	LAARC
Digital Archive ID	HER14
Digital Contents	"Wood"
Digital Media available	"Database","Spreadsheets","Survey","Text"
Paper Archive recipient	LAARC
Paper Archive ID	HER14
Paper Contents	"Wood"
Paper Media available	"Context sheet","Drawing","Map","Matrices","Photograph","Plan","Report","Section","Survey","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Evaluation at Rawalpindi House, Hermit Road, Newham, London E16 4PZ
Author(s)/Editor(s)	Grosso, I.
Date	2014
Issuer or publisher	PCA
Place of issue or publication	London

APPENDIX 4: LITHOSTRATIGRAPHIC DESCRIPTIONS

11.1 Column samples were taken from four of the evaluation trenches (see Figure 4 Sections). These were subsequently described by QUEST (see below).

Table 1: Lithostratigraphic description of column sample <2>

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.09	(7)	7.5YR 4/1; Ag2 As2 Sh+; dark grey silt and clay with a trace of organic matter. Some Mollusca fragments. Diffuse contact in to:
	0.09 to 0.23	(7)	7.5YR 5/1; As3 Ag1 Gg+; grey silty clay with occasional gravel clasts. Some Mollusca fragments. Sharp contact in to:
	0.23 to 0.35	(3)	7.5YR 2.5/1; Sh3 As1; humo. 3/4; black well humified clayey peat with some modern roots. Diffuse contact in to:
	0.35 to 0.50	(4)	2.5YR 2.5/1; Sh3 Ag1 Tl+ Th+; humo. 3; reddish black well humified silty peat with traces of woody and herbaceous material.

Table 2: Lithostratigraphic description of column sample <3> 1/1

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.25	(5)	2.5YR 2.5/1; Sh3 Tl21 Th+ Ag+; humo. 2; reddish black moderately humified wood peat with a trace of silt and herbaceous material. Visible seed remains. Diffuse contact in to:
	0.25 to 0.50	(6)	2.5YR 2.5/1; Sh4 Ag+ Th+ Tl+; humo. 3/4; reddish black well humified peat with traces of silt, herbaceous and woody material.

Table 3: Lithostratigraphic description of column sample <4> 1/2 (upper)

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.17	(15)	7.5YR 4/1; Ag3 As1; dark grey clayey silt. Sharp contact in to:
	0.17 to 0.50	(16)	Gley 1 4/10Y; Ag2 As2; dark greenish grey silt and clay with occasional Mollusca fragments.

Table 4: Lithostratigraphic description of column sample <4> 2/2 (lower)

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.27	(16)	Gley 1 4/10Y; Ag2 As2 Dh+; dark greenish grey silt and clay with a trace of detrital herbaceous material and occasional Mollusca fragments. Sharp contact in to:
	0.27 to 0.50	(17)	2.5YR 2.5/1; Sh2 Th22; humo. 2; reddish black moderately humified herbaceous peat. Well preserved cf. *Phragmites* remains throughout.

Table 5: Lithostratigraphic description of column sample <5> 2/2 (upper)

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.30	(11)	10YR 4/2; As3 Ag1; dark greyish brown silty clay with rare Mollusca fragments. Diffuse contact in to:
	0.30 to 0.50	(12)	7.5YR 4/1; Ag3 As1 Dh+; dark grey clayey silt with a trace detrital herbaceous material.

Table 6: Lithostratigraphic description of column sample <5> 1/2 (lower)

Depth (m OD)	Depth (m from top of column)	Context number	Composition
	0.00 to 0.22	(12)	7.5YR 4/1; Ag3 As1 Dh+; dark grey clayey silt with a trace detrital herbaceous material. Very diffuse contact in to:
	0.22 to 0.50	(10)	2.5YR 2.5/1; Sh3 Ag1 Tl+; humo. 3; well humified silty peat with a trace of wood material.

11.2 Comments (Dr Rob Batchelor, QUEST)

11.2.1 The initial findings from describing the sequence at Hermit Road are:

Firstly, the peat underlying the structure is extremely well preserved and includes grass and reed remains in near perfect condition; in most other places in the vicinity of the site, the preservation is less good and more woody. Thus there is some suggestion that the environmental conditions prior to construction were different to that recorded nearby at Golfer's Driving Range / Bellot Street.

Secondly, unlike many of the other structures found in London which are located towards the top of the peat and dated to the Bronze Age, this one is clearly built on top of the peat which could be argued is more supportive of construction in response to changing environmental conditions.