

DOCUMENT VERIFICATION

Jubilee Line New Signalling Equipment Room  
Stratford Market Depot, Stratford,  
London E15, London Borough of Newham

Watching Brief

Quality Control

Pre-Construct Archaeology Limited Project Code			K888
	Name & Title	Signature	Date
Text Prepared by:	Neil Hawkins		October 2005
Graphics Prepared by:	Hayley Baxter		October 2005
Graphics Checked by:	Josephine Brown	<i>J. Brown</i>	October 2005
Project Manager Sign-off:	Jon Butler	<i>Jon Butler</i>	October 2005

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Ltd  
Unit 54  
Brockley Cross Business Centre  
96 Endwell Road  
London  
SE4 2PD

**An Archaeological Watching Brief at the Jubilee Line New Signalling  
Equipment Room, Stratford Market Depot, Stratford, E15, London  
Borough of Newham**

**Site Code: JSM 04**

**Central National Grid Reference: TQ 3902 8344**

**Written and Researched by Neil Hawkins  
Pre-Construct Archaeology Limited, October 2005**

**Project Manager: Jon Butler**

**Commissioning Client: Tube Lines Ltd**

**Contractor:  
Pre-Construct Archaeology Limited  
Unit 54  
Brockley Cross Business Centre  
96 Endwell Road  
Brockley  
London  
SE4 2PD**

**Tel: 020 7732 3925**

**Fax: 020 7732 7896**

**Email: [jbutler@pre-construct.com](mailto:jbutler@pre-construct.com)**

**Website: [www.pre-construct.com](http://www.pre-construct.com)**

**© Pre-Construct Archaeology Limited  
October 2005**

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

## **CONTENTS**

1	ABSTRACT	3
2	INTRODUCTION	4
3	PLANNING BACKGROUND	7
4	GEOLOGY AND TOPOGRAPHY	9
5	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	10
6	METHODOLOGY	12
7	ARCHAEOLOGICAL SEQUENCE	13
8	DISCUSSION AND CONCLUSIONS	19
9	ACKNOWLEDGEMENTS	23
10	BIBLIOGRAPHY	24

## **ILLUSTRATIONS**

FIGURE 1: SITE LOCATION	5
FIGURE 2: TRENCH LOCATION	6
FIGURE 3: TRENCH PLAN	17
FIGURE 4: SECTIONS	18
FIGURE 5: PRE-MONASTIC DITCHES	23
FIGURE 6: MONASTIC ROAD & DITCHES	24

## **APPENDICES**

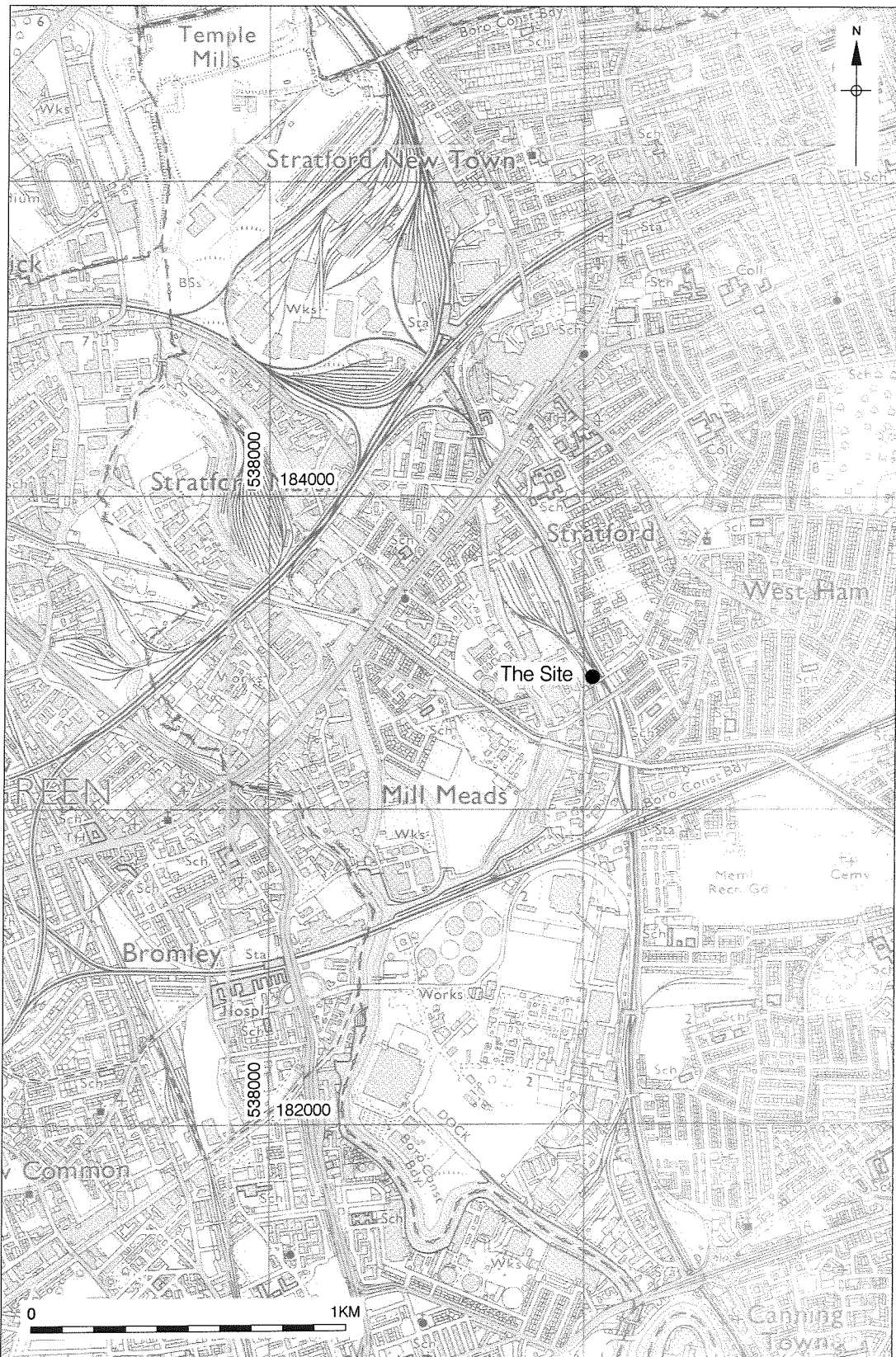
APPENDIX 1: CONTEXT DESCRIPTIONS	25
APPENDIX 2: SITE MATRIX	26
APPENDIX 3: POTTERY REPORT	27
APPENDIX 4: CLAY TOBACCO PIPE	31
APPENDIX 5: CERAMIC BUILDING MATERIAL REPORT	34
APPENDIX 6: ANIMAL BONE REPORT	38
APPENDIX 7: OASIS FORM	39

## 1 ABSTRACT

- 1.1 An archaeological watching brief was undertaken by Pre-Construct Archaeology Ltd. at the Jubilee Line New Signalling Equipment Room, Stratford Market Depot, Stratford, London E15, London Borough of Newham. The watching brief was conducted between 25th August and 27<sup>th</sup> September 2005, in advance of the redevelopment of the site. The work was commissioned by Tube Lines Ltd.
- 1.2 The watching brief consisted of monitoring of general ground reduction and then the excavation of a deeper 'raft' foundation trench around the edge of the proposed development area.
- 1.3 Natural brickearth was revealed at an average height of 2.71m OD across the site.
- 1.4 Cutting through the natural deposits were two unexcavated, and thus undated, linear features and possible ploughmarks. One of these features was on direct alignment with a pre-monastic field ditch dated to the period c.1000-1135 found to the south during the excavations on Stratford Langthorne Abbey and may be part of the same field system.
- 1.5 These cuts were sealed by a ploughsoil from which no datable artefacts were recovered.
- 1.6 Cutting through the ploughsoil across the north and south of the site were two ditches of probable a late medieval/early post-medieval date. The southern one may have originally been the drainage/roadside ditch along the northern side of the road located to the north of the abbey buildings.
- 1.7 Late post-medieval features consisted of the backfills of a ditch, two pits possibly associated with leather working and a wall, possibly dating to the 18<sup>th</sup> century, which were overlain by 19<sup>th</sup> and 20<sup>th</sup> century made ground.
- 1.8 A small residual sherd of Bronze Age/Iron Age pottery was recovered residually from a post-medieval pit.

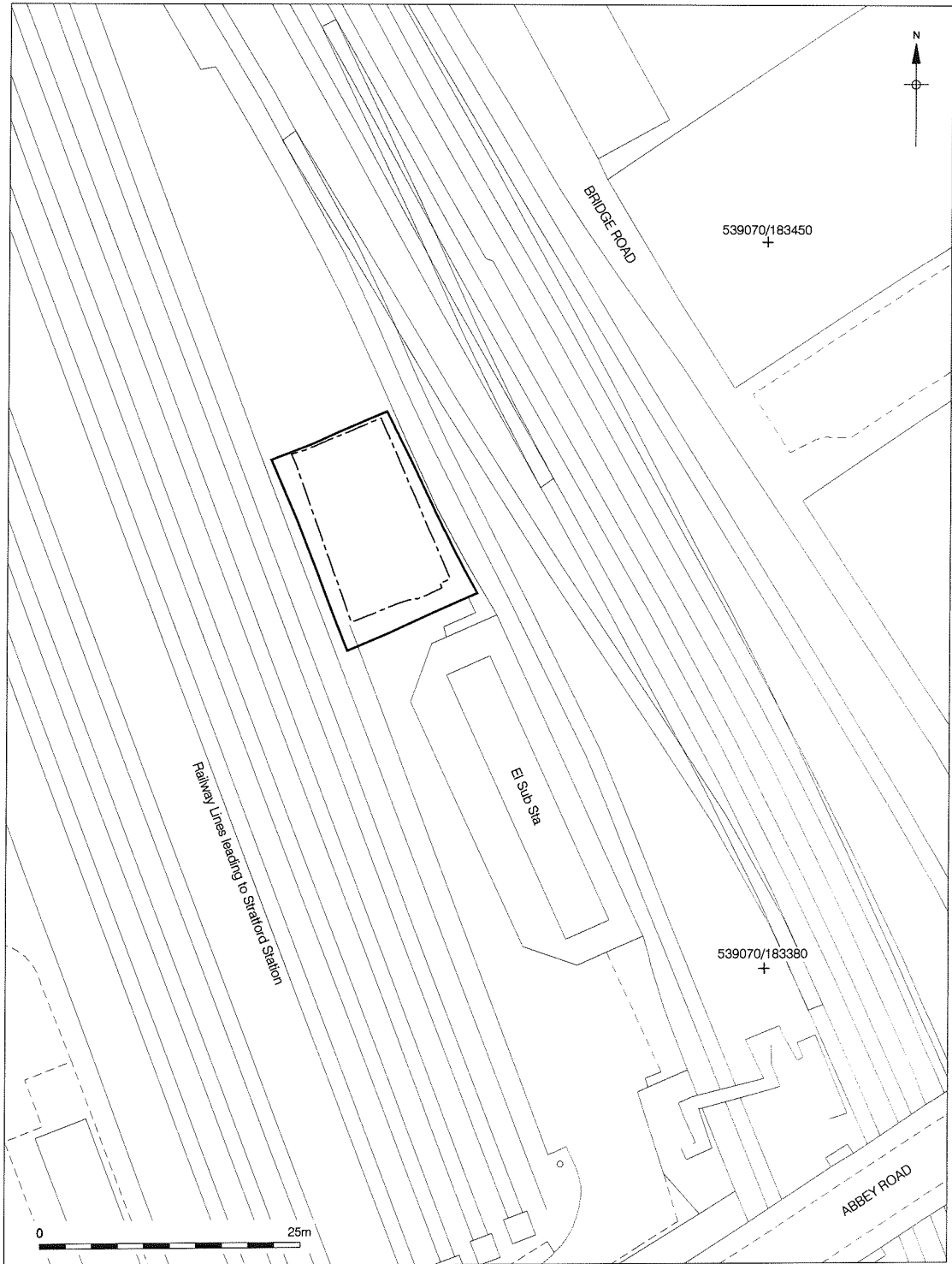
## 2 INTRODUCTION

- 2.1 This report details the results and working methods of an archaeological watching brief undertaken by Pre-Construct Archaeology Ltd at the Stratford Market Depot, Stratford, London E15, London Borough of Newham (Fig. 1). The evaluation was commissioned by Tube Lines Ltd in advance of the construction of a new Signalling Equipment Room at the site.
- 2.2 The evaluation covers an area of land centred on National Grid Reference TQ 3902 8344. The land was previously an open grassed area. The site is bounded to the east by the main Jubilee Line, to the west by railway sidings and to the south by an electricity substation. The archaeological watching brief involved the monitoring of ground reduction and a 'raft' foundation trench (Fig. 2).
- 2.3 The evaluation was conducted between 25th August and 27th September 2005 and followed a written scheme of investigation prepared by Pre-Construct Archaeology Limited. The fieldwork was supervised by the author, Neil Hawkins, under the Project Management of Jon Butler. The site was monitored by David Divers of English Heritage.
- 2.4 The completed archive comprising written, drawn and photographic records and artefacts will be deposited at the London Archaeological Archive & Resource Centre (LAARC).
- 2.5 The site retained the site code, JSM 04, which had issued for the initial watching brief on the excavation of geotechnical trial holes in 2004.



Reproduced from Ordnance Survey 1:25,000. Crown Copyright 1987.

Figure 1  
 Site Location  
 1:20,000



© Crown copyright. All rights reserved. License number PMP36110309

Figure 2  
Trench Location  
1:625

### 3 PLANNING BACKGROUND

#### 3.1 ARCHAEOLOGY IN NEWHAM AND THE UDP

3.1.1 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. The Borough's deposited draft 'Unitary Development Plan' 2001 contains policy statements in respect of protecting the buried archaeological resource.

3.1.2 The proposed development is subject to the Council's Archaeology Policy:

#### 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. 3.124** *"The Greater London Archaeological Advisory Service (GLAAS-part of English Heritage) provide 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 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. 1.125** The council will promote co-operation between land owners, developers and archaeological organisations in accordance with the British Archaeologists' and Developers' Liaison Group Code.
- 3.1.3 The Newham UDP mirrors advice contained in the Department of Environment document 'Planning Policy Guidance: Archaeology and Planning (PPG 16)'. This document identifies the need for early consultation in the planning process to determine the impact of the construction schemes upon buried archaeological strata. Once the results of the Desktop Assessment and, where necessary or otherwise for follow-up trial work is known, an informed decision on the necessity or otherwise for further archaeological strategies may be taken. These strategies may be preservation *in situ*, excavation, or watching brief. The proposed development site lies within one of the Council's Archaeological Priority Areas as defined by the Borough's UDP
- 3.1.4 The site lies within an Archaeological Priority Area, associated with the medieval Cistercian monastery of St. Mary Langthorne, as defined by the London Borough of Newham.

## 4 GEOLOGY AND TOPOGRAPHY

- 4.1 The geological map of the area indicates that drift deposits of alluvium underlie the site. The underlying solid geology is shown to be London Clay and possibly Lambeth Clay (formerly known as Woolwich and Reading Beds) in the northern part of the site. The geological map shows the northern part of the site to be at or near a geological boundary, such that the thickness of the London Clay will reduce northwards and may be absent in parts of the site<sup>1</sup>.
- 4.2 The site is a raised open flat top grass area with the sides sloping down to the east and south and has an average height of 4m OD.

---

<sup>1</sup> British Geological Survey, 1998

## **5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **5.1 PREHISTORIC**

5.1.1 Discoveries of flint tools, small flint blades and a flint boring tool of Mesolithic date were discovered during an evaluation by Oxford Archaeological Unit (OAU) at Stratford Market depot (site code HW-OP 91). Bronze Age pottery and a Bronze Age flint assemblage of twenty five worked pieces were recovered residually from features of a later date to the west of the site.

5.1.2 During the excavation, directly to the west of the site, OAU also discovered two horse burials and two crouched inhumations of Iron Age date. At least one ring ditch and several ring gullies, thought to be drip gullies from Iron Age roundhouses were also discovered during the fieldwork. These discoveries have led to the suggestion that this was an Iron Age settlement with ritual/religious elements<sup>2</sup>.

### **5.2 ROMAN**

5.2.1 Excavations to the east of the Channelsea River have revealed evidence of Roman settlement activity (SMR061935). A considerable number of postholes dating to the 2<sup>nd</sup> century were exposed and seemed to represent a large structure, possibly a building. A number of ditches, apparently following some distinct alignments were identified – the latest of which date to the 3<sup>rd</sup>/4<sup>th</sup> century, possibly functioning as property boundaries. The archaeological evaluations carried out as part of the Jubilee Line extension by OAU in 1991-92 and 1996, revealed various Roman pits, postholes and ditches. It has also been suggested that there was a large structure to the west of the site<sup>3</sup>.

### **5.3 SAXON**

5.3.1 During the aforementioned evaluation by OAU, two inhumations of Saxon/medieval date were discovered along with occasional Middle to Late Saxon pottery<sup>4</sup>.

### **5.4 MEDIEVAL**

5.4.1 The Domesday manor of West Ham, like those in neighbouring parishes to the east lay on the gravel terraces above the marshes. West Ham village lay about half a mile

---

<sup>2</sup> Hillier, J. and Wilkinson, D. R. P., 2005. *Archaeology of the Jubilee Line Extension: Prehistoric and Roman Activity at Stratford Market Depot, West Ham 1991-1993: Archaeological excavations 1991-8 for the London Underground Limited Jubilee Line Extension Project*. JLE/Oxford Archaeology Monograph.

<sup>3</sup> Ibid

east of the Channelsea, where by the 12<sup>th</sup> century the parish church had already been built. Approximately half a mile west lay Stratford, or Stratford Langthorne.

- 5.4.2 Stratford Langthorne Abbey, which lies directly south of the site, is a scheduled Ancient Monument. The Abbey precincts appear to have covered an area of about 20 acres, moated to the north, east and south. The main (eastern) entrance to the precincts was from Abbey Road through the Great Gate, which stood in Bakers Row. The gatehouse survived until about 1825. The western entrance was from Abbey Lane through the Kiln House gate. The area of the site lies within the Abbey precincts.
- 5.4.3 Previous excavations in the area, undertaken between 1983 and 1994 by the Passmore Edwards Museum and OAU, have uncovered remains of the monastic church and associated buildings. Directly to the south of the site in the area occupied by the electricity substation elements of the monastic buildings were revealed together with an associated cemetery. A gravel road was discovered in the 1983 excavations that it has been suggested marked the northern boundary of the cemetery<sup>5</sup>.

---

<sup>4</sup> Ibid

<sup>5</sup> Barber, B., Chew, S. Dyson, T. and White, B. 2004. *The Cistercian abbey of St Mary Stratford Langthorne, Essex: Archaeological excavations for the London Underground Limited Jubilee Line Extension Project*, Museum of London Archaeological Service 18.

## 6 METHODOLOGY

- 6.1 The excavation of ground works was outlined in the Method Statement prepared by Pre-Construct Archaeology Limited<sup>6</sup>. The fieldwork was designed to assess the presence or absence of significant archaeological remains, which may require further investigation.
- 6.2 All trenches were machine excavated in spits of c.100mm with a 360-degree mechanical excavator fitted with a flat-bladed ditching bucket, under the supervision of an archaeologist. Once archaeologically sensitive deposits or features were encountered, machining was stopped to allow archaeologists to clean with hand tools as necessary and record the remains.
- 6.3 Recording was undertaken using the single context planning method. All features and deposits observed were planned and recorded onto *pro forma* context record sheets. Contexts were numbered sequentially and are shown in this report within square brackets. Plans and sections were drawn at a scale of 1:10 or 1:20 as appropriate. A general photographic survey of the site and working conditions was taken.
- 6.4 A temporary benchmark, 3.47m OD, was traversed onto the site from the Ordnance Survey Benchmark of 2.99m OD, located on the north-eastern corner of 130 Abbey Lane.

---

<sup>6</sup> Butler, 2005

## **7 ARCHAEOLOGICAL SEQUENCE**

### **7.1 Phase 1: Natural Brickearth**

7.1.1 The earliest deposit encountered throughout the site was a layer of natural brickearth [110]. This context comprised a soft deposit of sandy, silty, clay, mid reddish orange in colour. It was encountered at an average height of 2.71m OD across the site.

### **7.2 Phase 2: Undated Features**

7.2.1 Cut through the natural brickearth [110] in the western trench was what appeared to be a linear feature [114]. This feature ran parallel to the western limit of excavation measuring 5.38m northwest-southeast and at least 0.36m in width. It was truncated to the northwest by a modern pipe trench and to the south by a later ditch [108]. Encountered at a height of 2.75m OD, this feature was partially excavated to a depth of 0.18m, the formation level of the proposed development, and appeared to represent a ditch or gully. No datable material was recovered from this feature. Truncating this was another linear feature [112]. This probable ditch ran east-west through the trench, appearing to continue west past the limit of excavation and was truncated by a later ditch [108] and a modern pipe trench to the east. Measuring 2.20m east-west and 0.90m north-south, this ditch was only partially excavated to a depth of 0.18m, the formation level of the proposed development. It was encountered at a height of 2.72m OD. No datable material was recovered from this feature.

7.2.2 Cutting the natural brickearth [110] was a possible ploughmark [124]. Encountered at a height of 2.52m OD, it ran northeast-southwest measuring, 0.96m long by 0.14m wide. It was truncated to the southwest by a modern pipe trench and partially truncated from above by pit cut [128]. It was un-excavated and therefore no datable material was recovered.

7.2.3 Also cutting the natural brickearth [110] was another possible ploughmark [126]. Encountered at a height of 2.52m OD, it ran northeast-southwest measuring, 2.64m long by 0.28m wide. It was truncated to the southwest by a modern pipe trench and was partially truncated from above by pit cut [128]. It was un-excavated and therefore no datable material was recovered.

### **7.3 Phase 3: Undated Ploughsoil**

7.3.1 Sealing the undated linear features [112] and [114] was a homogenous layer of undated ploughsoil [109]. This layer was present across the whole site and was encountered at a height of 3.03m OD at the western side of the site and 2.96m OD at the eastern side. This layer had a maximum thickness of 0.35m.

#### **7.4 Phase 4: Late Medieval/Early Post-Medieval (1400-1600)**

7.4.1 Truncating the ploughsoil [109] in the northern area of the site was ditch cut [117]. Running northeast-southwest across the entire site, 10m in length by 1.30m wide, it was 0.65m deep and was encountered at a height of 3.00m OD. This ditch contained pottery, brick and peg tile from the mid 15<sup>th</sup> century to 1600, dating it to the transition between the late medieval and the early post-medieval periods (see Appendix 3). This feature was initially revealed during the first watching brief<sup>7</sup>. The ditch probably represents a field boundary and/or used for drainage purposes.

7.4.2 Truncating the ploughsoil [109] in the southern area of the site was a ditch cut [108]. Running northeast-southwest across the entire site, this ditch was encountered at 3.03m OD and measured 10m in length by 2.34m in width. The ditch would appear in section to exhibit signs of at least two recuts. The fill [107] of the original ditch consisted of dark grey sandy silt with occasional slate and greensand (Reigate stone) fragments. The secondary fill [106] consisted of light yellow brown sandy mortar and chalk fragments.

#### **7.5 Phase 5: 18<sup>th</sup>/19<sup>th</sup> Century**

7.5.1 The uppermost fills [104] and [105] of the southern ditch (see 7.4.2 above) which appeared to be within a recut were backfilled with distinct deposits of silt with chalk flecks [104] and crushed green sandstone (Reigate stone) [105], representing the deliberate backfilling and reinstatement of a probably open ditch with demolition debris. The ditch was excavated to a depth of 0.50m which represented the formation level of the new building, but was seen to continue below that depth. No artefacts which gave a precise date were recovered, the only datable material being ceramic roofing tile of apparent medieval date. The later fills of the ditch would suggest a post-medieval date comprising of demolition debris from the Abbey to the south after its Dissolution in 1538.

---

<sup>7</sup> Mulligan 2004

- 7.5.2 Truncating ditch cut [117] was a late post-medieval timber lined pit, [121]. Encountered at a height of 3.01m OD, the pit was not fully exposed and continued west into the limit of excavation. The exposed dimensions of the construction cut were 1.00m northwest-southeast by 1.00m northeast-southwest with the timber lining measuring 0.70m northwest-southeast by 0.46m northeast-southwest within it. The timbers themselves were tangentially faced planks, heavily degraded and decayed, measuring 330mm in breadth by 20mm deep, placed vertically against the edge of the pit, the length was unknown as the pit was not fully excavated. The pit was excavated to a depth of 0.17m and was still in backfill, no primary fill was encountered which would have given information to the pit's usage. The presence of a probably contemporary pit close by, [128], which contained a large quantity of horn core may imply possible tanning activities in relation to the timber lined pit (see Appendix 6).
- 7.5.3 Truncating the undated ploughmarks [126] and [124] was pit [128]. Encountered at a height of 3.00m OD, the pit was sub-circular in shape with 0.66m northwest-southeast by 1.54m northeast-southwest exposed, it continued southeast past the limit of excavation. The pit was exposed to a depth of 0.50m, but continued deeper past the proposed development foundation level and had been truncated horizontally above by modern ground reduction meaning the original size and depth has been distorted. Recovered from the pit was a residual sherd of Bronze Age/Iron Age pottery, a small amount of animal bone and a moderate amount of horn core, implying its usage was a refuse pit, possibly containing the waste product of tanning activities close by.
- 7.5.4 Cut into the ploughsoil [109] was the remains of a heavily truncated 18<sup>th</sup> century wall, [101]. Encountered at a height of 3.15m OD the remnants of the wall, running northeast-southwest, measured 1.90m in length by 0.28m wide. Only two courses of the wall remained, to the south of which lay the remnants of the wall where it had either collapsed or been knocked down. The wall appears to have been truncated in various places by 19<sup>th</sup> century, and modern activity and therefore its exact extent and nature cannot be determined.

## **7.6 Phase 6: 19<sup>th</sup>/20<sup>th</sup> Century**

- 7.6.1 Sealing the above features was a layer of 19<sup>th</sup> century made ground, [122]. This layer was encountered at a highest level of 3.73m OD and sloped downwards west to east towards the railway. It had a maximum thickness of 0.70m and probably represents groundwork related to the construction of the original railway in the 19<sup>th</sup> century. Cut through this was a late 19<sup>th</sup> century brick drain running northeast-southwest across the entire site. This was encountered at a height of 3.70m OD. Sealing this a series of



layers of 20<sup>th</sup> century made ground that sloped down from west to east towards the railway directly east of the site. These layers had a maximum thickness of 1.12m and were encountered at a height of 4.83m OD.

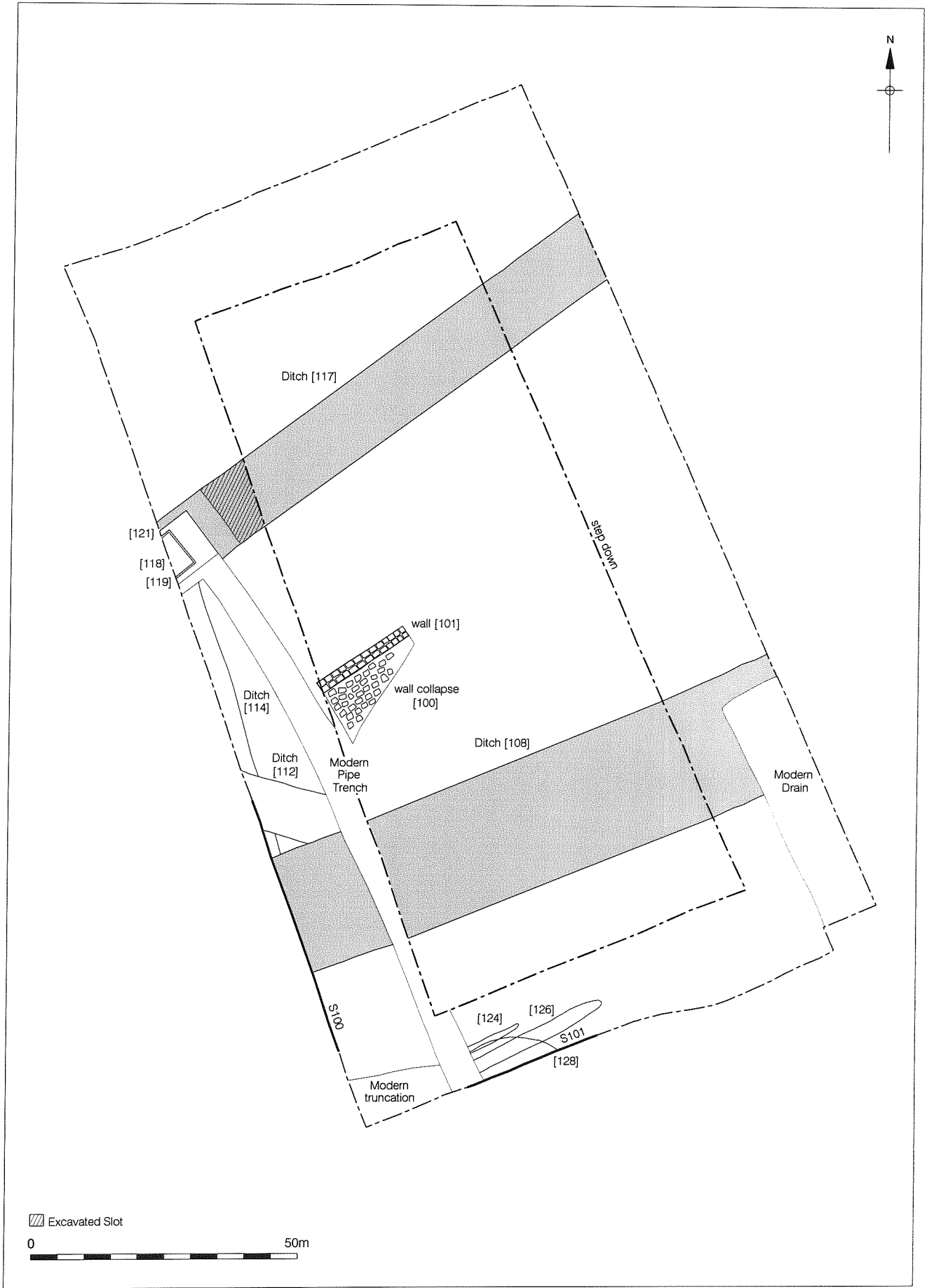


Figure 3  
Trench Plan  
1:100

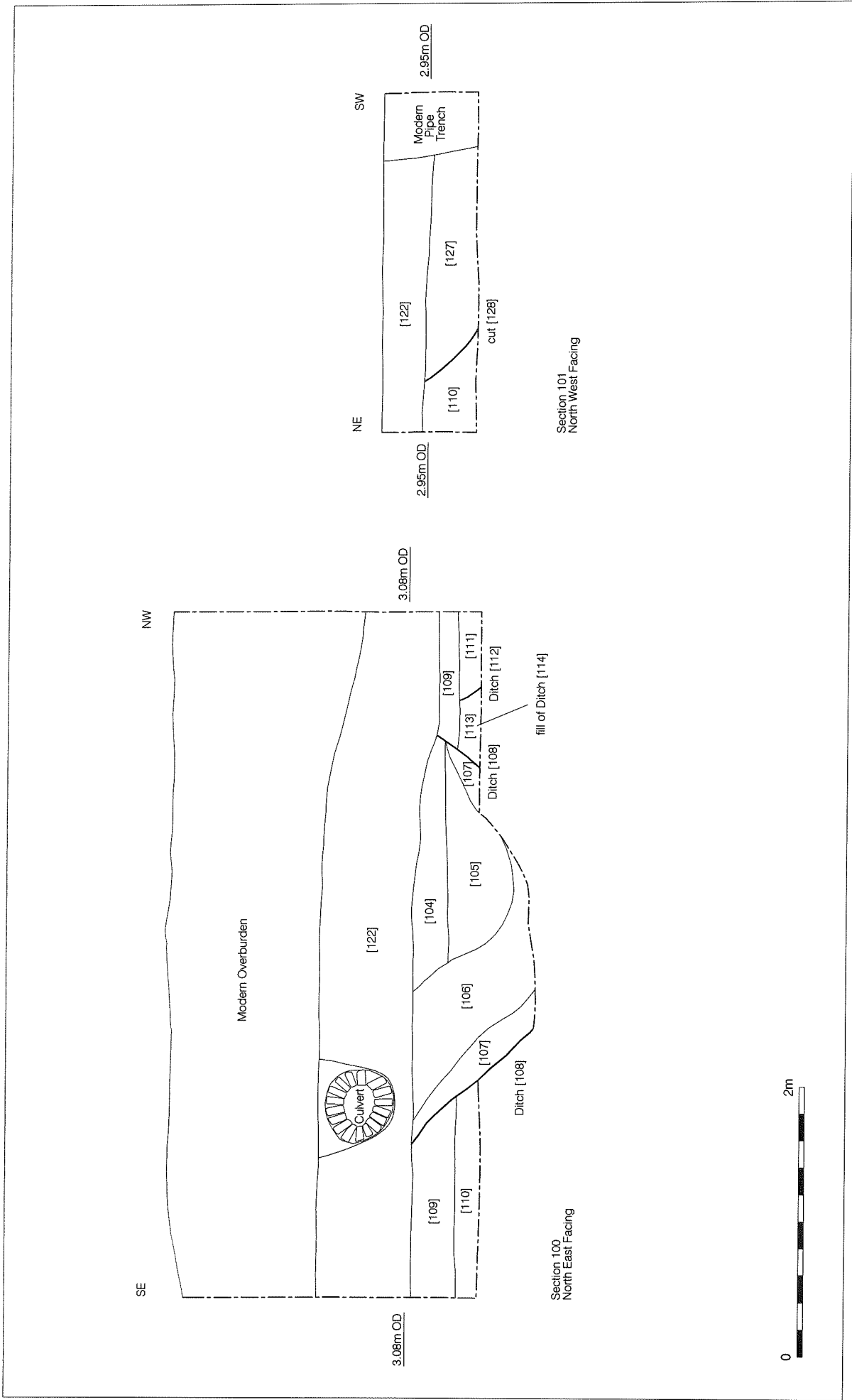


Figure 4  
Sections 100 and 101  
1:40

## 8 CONCLUSIONS

- 8.1 The watching brief revealed natural brickearth deposits across the entire area of the site, but the excavation did not penetrate deep enough to reveal the underlying natural terrace gravels encountered during the previous watching brief on the geotechnical test pits<sup>8</sup>.
- 8.2 The residual sherd of Bronze Age/Iron Age pottery is consistent with the Bronze Age and Iron Age activity, including a roundhouse and possible ritual animal burials, recorded to the north of the site within Stratford Market Depot<sup>9</sup>.
- 8.3 Two undated linear features encountered during the watching brief beneath an undated ploughsoil. No excavation of the features was undertaken as they lay beneath the formation level of the new building, thus stratigraphically the undated features can only then be said to pre-date the late medieval period. The north-south ditch is in direct alignment with a ditch revealed to the south during the excavations for the Jubilee Line Extension<sup>10</sup>. It is therefore possible that both these features pre-monastic landscape dating to the period c.1000-1135 (Fig.5).
- 8.4 No evidence for buildings or structures associated with the Abbey of St Mary Stratford Langthorne were encountered during the watching brief. No evidence for burials were also encountered on the site. This adds weight to the theory of a road, which would have lain to the south of the site, being the northern boundary to the cemetery. However, no evidence for the road itself was encountered during the watching brief. This may have been the result of the land being stripped during the construction of the original Victorian railway and subsequently the current Jubilee Line directly to the east and sidings to the west.
- 8.5 A ditch running through the site was dated between the late medieval and the early post-medieval periods, 1450-1600. This timeframe locates it to when the abbey and associated grounds still existed and through to the period of the dissolution. This ditch therefore may have represented a field boundary within the northern area of the abbey complex.

---

<sup>8</sup> Mulligan, 2004

<sup>9</sup> Hiller & Wilkinson 2005, 12-17

<sup>10</sup> Barber et al, 2004, 12-13

- 8.6 The southern east-west aligned ditch would appear to have been recut on several occasions, with the latest fills of crushed Reigate stone suggesting demolition debris from the abbey and slate suggesting a late post-medieval date. However, the ditch's location and alignment would suggest that the original ditch may have been the roadside ditch on the north side of the abbey road (Fig.6).
- 8.7 A heavily truncated wall dating to the 18<sup>th</sup> century and two undated probable post-medieval pits, one of which was timber-lined were encountered during the watching brief. The wall, although heavily truncated, may have been a simple garden wall as no other evidence for buildings in the locale was encountered. This wall and its collapse appears to represent the feature that was interpreted as a possible floor surface encountered during the previous watching brief<sup>11</sup>. The two pits encountered, one of which was a refuse pit containing various animal bones and a moderate amount of horn core, the other of which was timber lined, may represent evidence for tanning activities on the site. Leather dressing was documented in the area from the early 17<sup>th</sup> century<sup>12</sup>. These features were, however, not fully excavated and therefore a definite conclusion on this cannot be reached.
- 8.8 The watching brief has shown that extensive stripping of the site occurred during the 19<sup>th</sup> and then through to the 20<sup>th</sup> century. This was associated with the construction of the railway directly to the east of the site and the railway sidings and buildings directly to the west. Archaeological deposits do exist below this level, dating from the 18<sup>th</sup> century through to possibly the medieval period and earlier.

---

<sup>11</sup> Mulligan, 2004

<sup>12</sup> Barber et al, 2004, 124

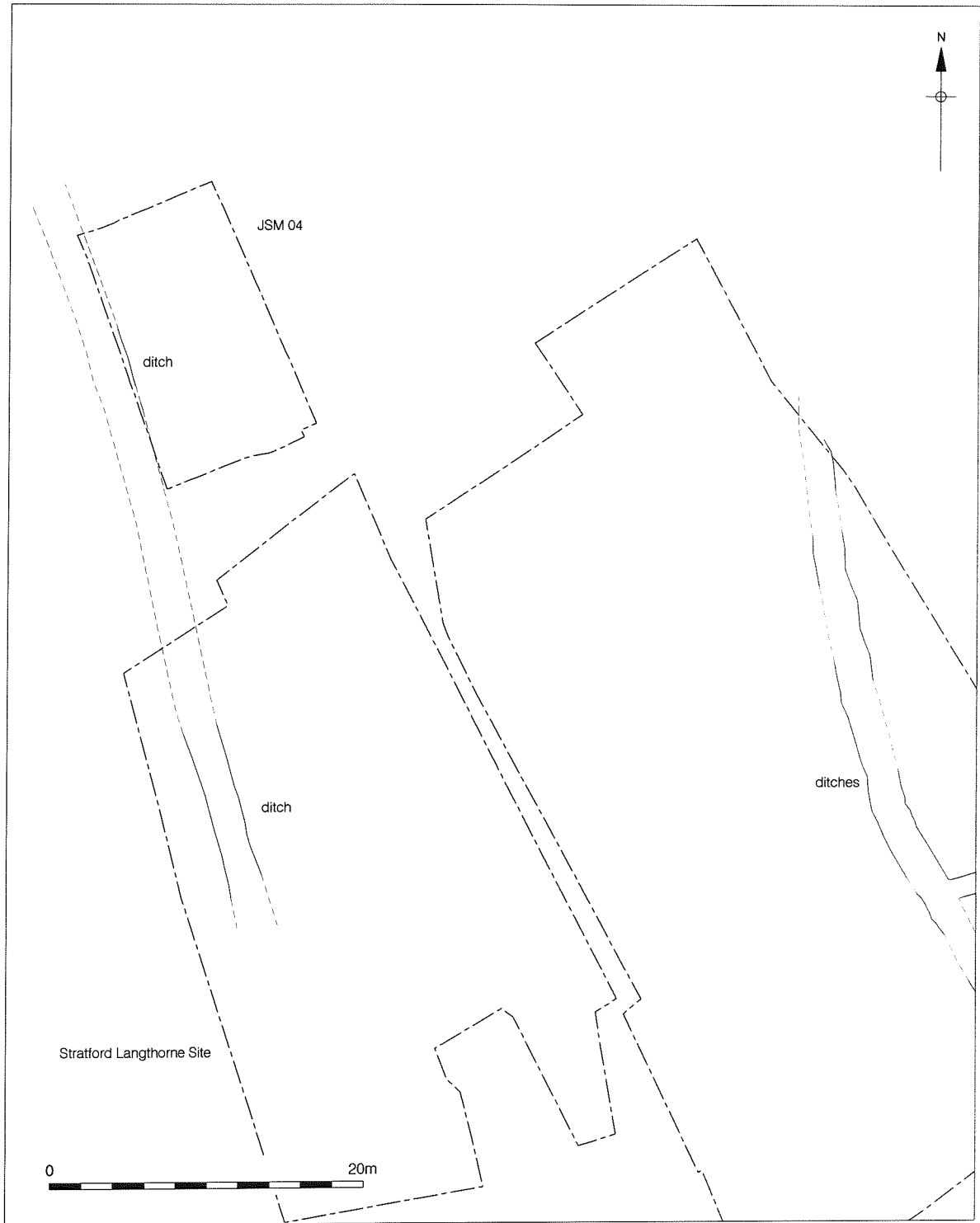


Figure 5  
Plan of ditch in relation to pre-monastic field  
system found at Stratford Langthorne  
1:400

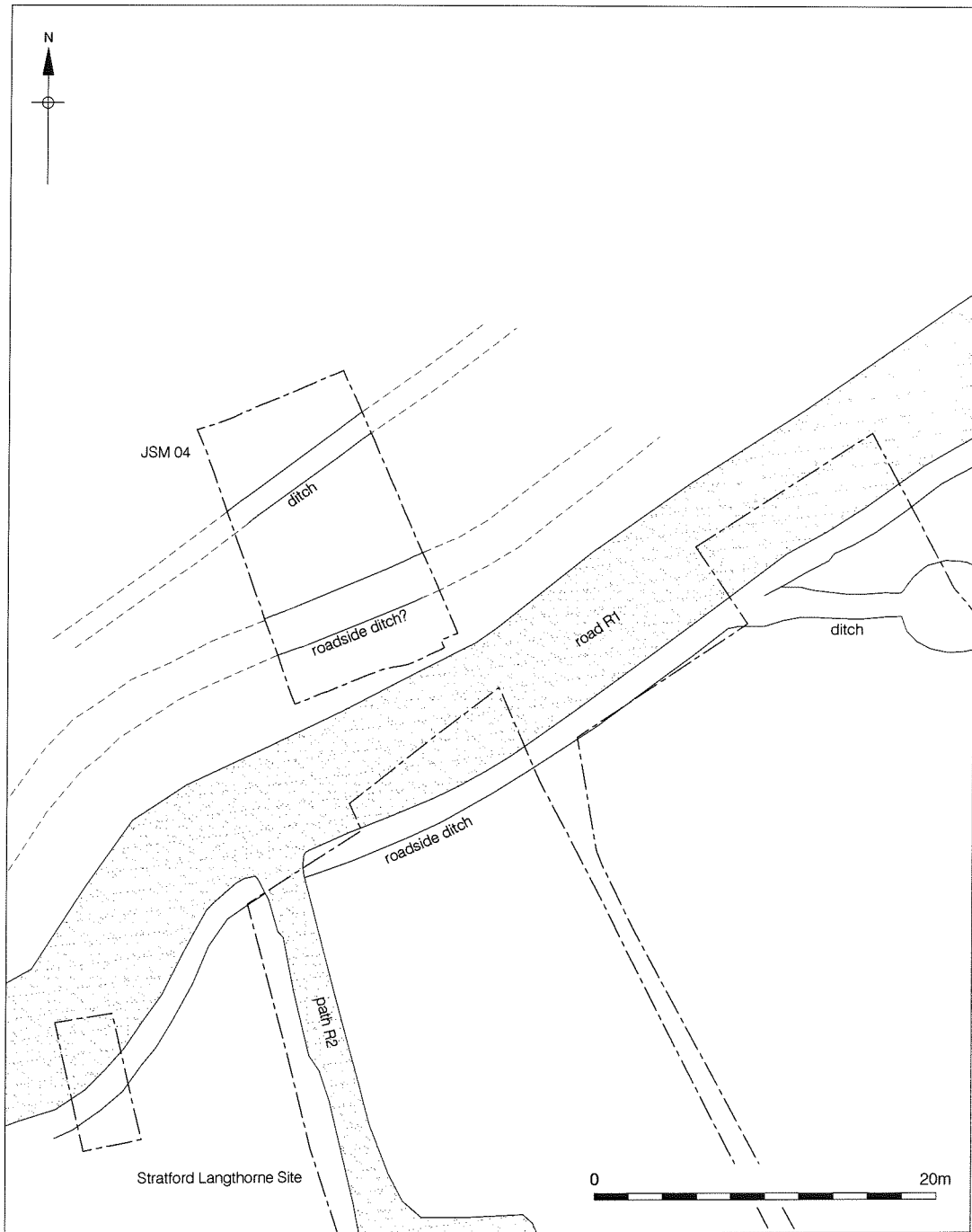


Figure 6  
Plan of ditches in relation to road  
found at Stratford Langthorne  
1:400

## **9 ACKNOWLEDGEMENTS**

- 9.1 Pre-Construct Archaeology Limited would like to thank Tube Lines Limited for commissioning and funding the project. Special thanks also to Daimon Lau and Peter Jones of Tube Lines for their assistance.
- 9.2 Pre-Construct Archaeology Limited would also like to thank David Divers of English Heritage for monitoring the work.
- 9.3 The author would also like to thank the field staff Ashley Pooley and Shane Maher, Hayley Baxter for the illustrations, Natalie Barrett for the surveying, Lisa Lonsdale for the logistical support and Jon Butler for his project management and editing.



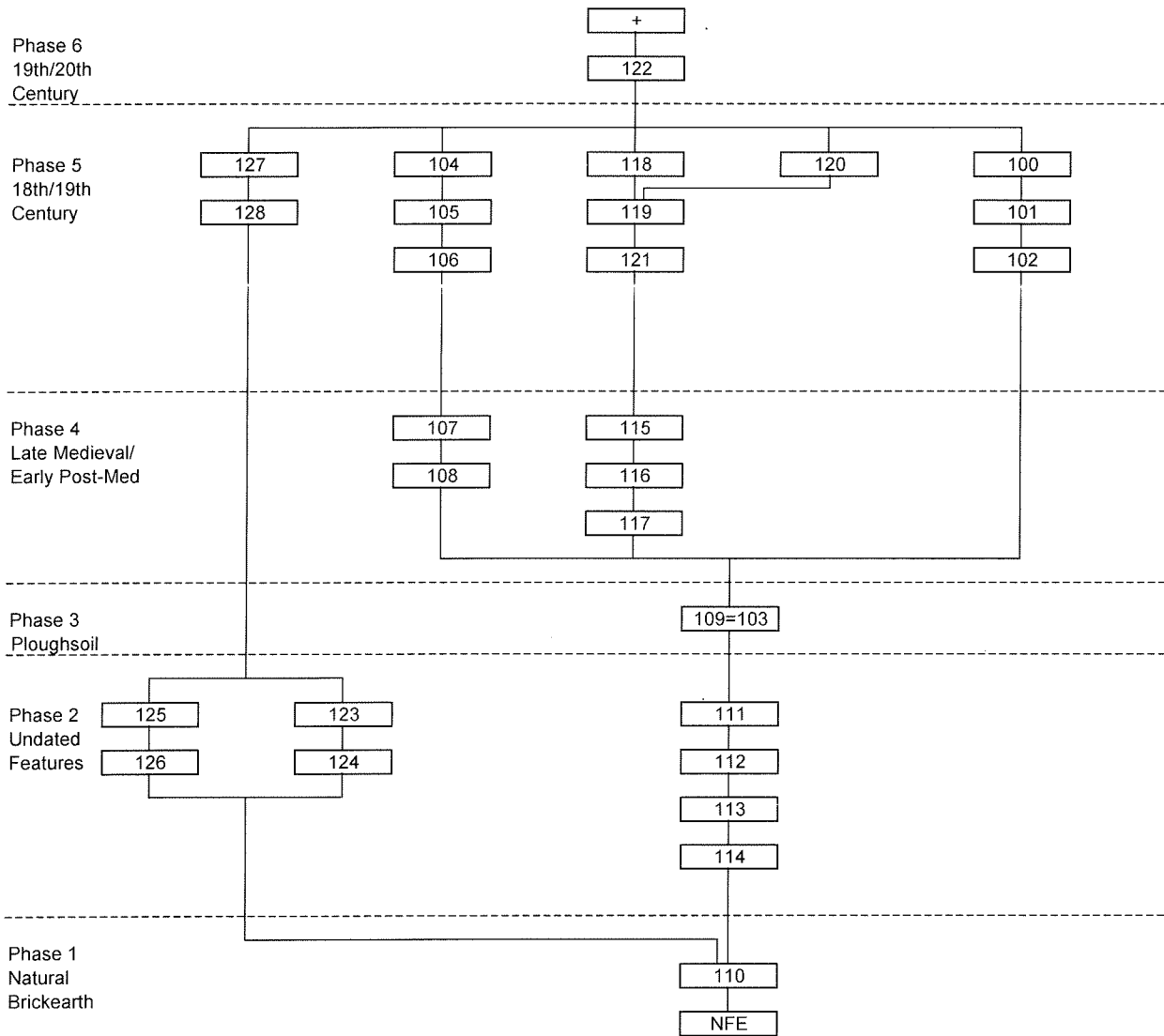
## 10 BIBLIOGRAPHY

- Barber, B., Chew, S. Dyson, T. and White, B. 2004. *The Cistercian abbey of St Mary Stratford Langthorne, Essex: Archaeological excavations for the London Underground Limited Jubilee Line Extension Project*, Museum of London Archaeological Service 18.
- British Geological Survey, 1998, 1:50 000 Series, England and Wales Sheet 257 *Romford*, Solid and Drift Geology
- Butler, J., (2005), *Method Statement for an Archaeological Watching Brief & Excavation at Stratford Market Depot, Stratford, E15, London Borough of Newham*. Pre-Construct Archaeology Limited unpublished report
- Hillier, J. and Wilkinson, D. R. P., 2005. *Archaeology of the Jubilee Line Extension: Prehistoric and Roman Activity at Stratford Market Depot, West Ham 1991-1993: Archaeological excavations 1991-8 for the London Underground Limited Jubilee Line Extension Project*. JLE/Oxford Archaeology Monograph.
- Mulligan, D. (2004), *An Archaeological Watching Brief on Geotechnical Pits at the Jubilee Line New Signalling Equipment Room, Stratford Market Depot, Stratford, London Borough of Newham, E15*. Pre-Construct Archaeology Limited unpublished report
- Weinreb, B. & Hibbert, C., (1983), *The London Encyclopaedia*. Macmillan London Limited, London

## APPENDIX 1: CONTEXT DESCRIPTIONS

Context No.	Type	Phase	Description
100	Fill	5	Backfill
101	Masonry	5	Brick Wall
102	Cut	5	Construction Cut for Brick Wall [101]
103	Layer	3	Ploughsoil
104	Fill	5	Fill of Ditch Cut [108]
105	Fill	5	Fill of Ditch Cut [108]
106	Fill	5	Fill of Ditch Cut [108]
107	Fill	5	Fill of Ditch Cut [108]
108	Cut	5	Cut of Ditch
109	Layer	3	Ploughsoil
110	Natural	1	Natural Brickearth
111	Fill	2	Fill of [112]
112	Cut	2	Cut of Ditch
113	Fill	2	Fill of [114]
114	Cut	2	Cut of possible Ditch
115	Fill	4	Fill of [117]
116	Fill	4	Fill of [117]
117	Cut	4	Cut of Ditch
118	Fill	5	Backfill
119	Timber	5	Timber Lining of Pit Cut [121]
120	Fill	5	Construction Cut Backfill
121	Cut	5	Construction Cut for Timber Lined Pit
122	Layer	6	19th Century Made Ground
123	Fill	2	Fill of [124]
124	Cut	2	Cut of ?Ploughmark
125	Fill	2	Fill of [126]
126	Cut	2	Cut of ?Ploughmark
127	Fill	5	Fill of [128]
128	Cut	5	Cut of Pit

## APPENDIX 2: SITE MATRIX



## **APPENDIX 3: POTTERY REPORT**

**By Chris Jarrett**

### **INTRODUCTION**

A previous report on pottery recovered from geotechnical test pits on the site has been prepared (Jarrett 2004) and this report considers pottery from the watching brief on the ground reduction and construction works (contexts [100] – [127]). Subsequent work on the site produced a small sized assemblage of pottery (1box). Most sherds are in a good condition, but small in size, indicating that they had not been subject to much redeposition and discarded soon after breakage. There are relatively very few vessels with complete profiles. The pottery only occurs as small groups (less than ten sherds).

All the pottery (16 sherds and two are unstratified) was examined macroscopically and microscopically using a binocular microscope (x20), and recorded in an ACCESS 2000 database, by fabric, form, decoration, sherd count and estimated number of vessels, using standard Museum of London Specialist Services (MoLSS) codes for fabric, form and decoration. Where a suitable MoLSS code is not available then a Newham Museum Service code (\*) has been supplemented. The pottery is discussed by its types and distribution.

### **POTTERY TYPES**

All the pottery is of a post-medieval date, ranging between the 16<sup>th</sup> and 18<sup>th</sup>-centuries, except for a single Prehistoric sherd.

Prehistoric

Sand; moderate, flint (calcined); moderate and shell; sparse (fabric code SFISh(h)), Bronze Age to Mid Iron Age, one sherd, form: unknown.

Post-Medieval

Local Coarse earthenwares

Late medieval earthenware (\*LME), dated c. late 15<sup>th</sup>-16<sup>th</sup> century, seven sherds, form: uncertain.

Post-medieval redware (PMR), dated 1580-1900, two sherds, form: bowl.

## Delftware

Style H (TGW H), 1690-1800, one sherd, form: bowl or dish.

## Stoneware

White dipped stoneware (SWSL), 1710-60, one sherd, form: tankard.

## Non-Local pottery

Staffordshire-type combed slipware (SWSL), 1660-1870, two sherds (unstratified), form: cup; rounded.

## Imported pottery

Frechen stoneware (FREC), 1550-1700, one sherd, form: bartman.

Westerwald stoneware (WEST), 1590-1900, one sherd, form: ?jug, rounded.

## DISTRIBUTION

The distribution of the pottery is shown in Table 1.

Context	SC	Date range of pottery types	Latest pottery type date range	Spot date
[100]	6	AD 1550-1900	AD 1710-1760	1710-1760
[115]	7	AD 1450-1600	AD 1450-1600	1450-1600
[127]	1	2500-0 BC	2500-0 BC	2500-0BC

Table 1. JSM 04. Contexts containing pottery, the number of sherds, date range of the pottery types, the latest dated pottery type and a spot date for the context.

The small Prehistoric sand, flint and shell-tempered pottery sherd was recovered from deposit [127].

Deposit [7] produced the seven sherds of Late medieval earthenware dated to the late 15<sup>th</sup> and 16<sup>th</sup> centuries (c.1450-1600). The largest amount of pottery from this phase of excavation came from deposit [100] as six sherds of pottery. The ceramics consist of two sherds of Post-medieval redware (PMR) from a bowl rim, besides a sooted base, and a tin-glazed earthenware bowl sherd. Imported pottery consists of the rim of a Frechen stoneware bartman jug and the body sherd of a Westerwald stoneware jug, decorated with applied

decoration and curvilinear combed lines. Much of the pottery in deposit [100] is contemporary with the latest pottery type; White dipped stoneware (SWSL), present as a tankard base.

### **SIGNIFICANCE OF THE COLLECTION**

The pottery is only of significance to the site. It occurs as fragmentary, small groups of pottery that do not inform to any great extent on the activities associated with the site. Prehistoric activity was founded to a greater extent on Area C and to a lesser extent Area B of the Jubilee line exactions (Barber et al 2004, 11; Hillier and Wilkinson 2005.). The post-Roman pottery types are of a ceramic profile in keeping with North East London. The adjacent site (HW-RW 94) produced larger, more informative assemblages of pottery associated with the Post-Reformation development of Stratford Langthorne Abbey, but this was omitted from the publication and not analysed (Barber *et al* 2004).

### **POTENTIAL**

The pottery has the potential only to date the stratigraphy it was recovered from. None of the pottery merits illustration.

### **RESEARCH AIMS**

No research questions are postulated for the pottery.

### **RECOMMENDATIONS FOR FURTHER WORK**

No further work is recommended on the pottery.

### **BIBLIOGRAPHY**

Barber, B., Chew, S. Dyson, T. and White, B. 2004. *The Cistercian abbey of St Mary Stratford Langthorne, Essex: Archaeological excavations for the London Underground Limited Jubilee Line Extension Project*, Museum of London Archaeological Service 18.

Hillier, J. and Wilkinson, D. R. P., 2005. *Archaeology of the Jubilee Line Extension: Prehistoric and Roman Activity at Stratford Market Depot, West Ham 1991-1993: Archaeological excavations 1991-8 for the London Underground Limited Jubilee Line Extension Project*. JLE/Oxford Archaeology Monograph.

Jarrett, C. 2004, 'Pottery Report' in Mulligan, D. An Archaeological Watching Brief on Geotechnical pits at Jubilee Line New Signalling Equipment Room, Stratford Market Depot, Stratford, London E15, London Borough of Newham'. Pre-Construct Archaeology unpublished document.

## **APPENDIX 4: CLAY TOBACCO PIPE REPORT**

**By Chris Jarrett**

### **INTRODUCTION**

The clay tobacco pipes from a previous watching brief on geotechnical test pits at the site have already been reported on (Jarrett 2004). A small sized assemblage of clay tobacco pipes was recovered from subsequent work on the site (1 box). Most fragments are in a fairly good condition, indicating that they had not been subject to much redeposition or were deposited soon after breakage. The clay tobacco pipes come from one context as a small group (five or under fragments).

All the clay tobacco pipes (seven fragments, and five are unstratified) were recorded in an ACCESS 2000 database and classified by Atkinson and Oswald's (1969) typology (AO) and 18<sup>th</sup>-century examples by Oswald's (1975) typology (OS). The pipes are further coded by decoration and quantified by fragment count. The tobacco pipes are discussed by their types and distribution.

### **THE CLAY TOBACCO PIPE TYPES**

The clay tobacco pipe assemblage from the site consists of four bowls and three stems. The clay tobacco pipe bowls range in date between 1680-1770. All the stems recovered are medium in thickness and appear to be of a late 17<sup>th</sup> or 18th-century date.

1680-1710

A single AO 22 bowl is recorded and typically for this type it is not marked with the maker's initials

1700-1770

A single fragment of a probable AO25 bowl is recorded as unstratified.

1730-1780

There are two OS 12 bowls and both are marked, the first has the initials A S and both letters have a crown above them, but no maker can be matched to these letters. The second bowl is unstratified but is initialled W M and this almost certainly represents the product the Manby



family who are documented making clay pipes in East London. There are two possible members who could have made this pipe, firstly William Manby (3), c.1719-46 and a William Manby (IV) who was possibly making pipes between c.1740-70.

## **DISTRIBUTION**

Stratified clay tobacco pipes are present only in context [100] as single examples of the AO22 bowl and A S marked OS12 bowl indicating deposition between c.1740-80.

## **SIGNIFICANCE OF THE COLLECTION**

The pipes are probably significant on a local level and give some indication of the local tobacco pipe industry or their marketing. The presence of an undocumented 18<sup>th</sup>-century pipe maker is of interest.

## **POTENTIAL**

The clay tobacco pipes do have the potential to date the deposit they were found in. The A S pipe does merit illustration and can help to identify the distribution of the maker's pipes.

## **RESEARCH AIMS**

No research aims can be proposed concerning these pipes.

## **RECOMMENDATIONS FOR FURTHER WORK**

No further analysis on the tobacco pipes is recommended. However, any publication of the site could contain an illustration of the A S marked pipe and highlight it for further research on clay tobacco pipe studies in north east London.

## **BIBLIOGRAPHY**

- Atkinson D. and Oswald. A. (1969), London clay tobacco pipes. *Journal of British Archaeology Association*, 3rd series, Vol. 32, 171-227.
- Jarrett, C. 2004, 'Clay Tobacco Pipe Report' in Mulligan, D. *An Archaeological Watching Brief on Geotechnical pits at Jubilee Line New Signalling Equipment Room, Stratford Market*

Depot, Stratford, London E15, London Borough of Newham'. Pre-Construct  
Archaeology unpublished document.

Oswald, A. (1975). *Clay pipes for the Archaeologist*, British Archaeological Reports, British  
series, No.14.

## **APPENDIX 5: CERAMIC BUILDING MATERIAL REPORT**

**By John Brown**

### **QUANTITY AND CONDITION**

Total No. Assessed boxes: 1

Total No. Assessed contexts producing Building material: 6

Total Count: 44

Total Weight kg: 6.578

Total No. Complete pieces: 0

Total No. Masonry Samples: 1

### **INTRODUCTION**

The majority of the material assessed consisted of medieval/post-medieval ceramic building materials indicating the presence of structures in both the medieval and post-medieval periods. The medieval material may relate to the nearby site of Stratford Langthorne Abbey. Fabrics that appear both in medieval and post medieval forms are described in the first instance and noted in the second. The phase discussion follows the excavator's phasing were possible.

### **METHODOLOGY**

The building materials were examined using the London system of fabric classification. Examples and descriptions of the fabrics can be found in the archives of PCA and/or the Museum of London.

Quantification of items was undertaken and the data recorded and entered onto a computer database (Microsoft Access 2000). After analysis common fabric types were discarded, with a type sample kept for archive. Unusual pieces or uncommon fabrics were also kept for archive.

### **BUILDING MATERIAL TYPES**

Fabrics and forms are tabulated below and shown in order of period and occurrence. Medieval and post-medieval forms follow the Museum of London DUA guide to identifying ceramic building material.

Period	Source	Fabric	Form	Description
MED	Local (early) London clay sources	2273	TP	Peg tile, roof
MEDPMED	Local London clay sources	2271	TP	Peg tile, roof
MEDPMED	Local London clay sources	2271	T	Roof tile (uncertain form)
MEDPMED	Local London clay sources	2586	TP	Peg tile, roof
MEDPMED	Local London clay sources	2586	T	Roof tile (uncertain form)
MEDPMED	Non-local clay sources?	?3091	T	Roof tile (uncertain form)
MEDPMED	Uncertain Source	3216	TP	Peg tile, roof
TRANS	Local 'Tudor' type red brick	3065	BU	Unfroged brick
PMED	Local post-fire brick	3032	BU	Unfroged brick
PMED	Local post-fire brick	3032	B	Brick (uncertain form)
PMED	Tin-glazed wares	3064	WT	Wall tile
MOD	Machine-made brick	3038	BW	Wirecut/machine made brick

#### *Uncommon fabrics/forms*

No fabrics or forms uncommon to the area were noted, with the exception of two fragments of possible early roof tile fabric 3091. This provenance of this fabric is currently uncertain, although it does seem to share similarities with 'Westminster' type floor tile fabrics from Stratford Langthorne (Betts 2002, 42). The tiles were too fragmented to suggest particular forms, but with average thickness around 18mm they may equate with nib tile fabrics from the Abbey excavations identified as fabrics 2537/3090 (Smith & Betts 2004, 144f).

#### **DISTRIBUTION**

##### *Phase 4*

The fill [115] of a pit [117] contained roof tile fragments in fabrics 2856 and 3216 that appeared to belong to the Transitional period. Two fragments of sandy 'Tudor' type unfroged

brick supported a date between the 15<sup>th</sup> and 17<sup>th</sup> centuries. A small abraded fragment of early medieval roof tile fabric 3091 was also present.

#### *Phase 5*

The remainder of the assemblage was considered placed in the excavator's phase 5, and included a brick sample from a wall [101]. Three bricks, of red 3032 type fabric, were thought to date to the early-late 18<sup>th</sup> century on the basis of dimensions and mortar type.

A corner fragment of a Dutch tin-glazed wall tile was recovered from [100] with 'circleband' central design and evolved 'Ox-head' corner motifs. A parallel is dated stylistically to 1720-1760 (Pluis 1998, 272).

Two contexts, the fills [105] and [106] of a ditch [108] contained fragments of medieval plain or splash-glazed peg roof tile, often with calcium carbonate inclusions in the moulding sand. The majority of the tiles were in fabric 2271. A large number of similar glazed tiles were also found at the Stratford Langthorne Abbey excavations, but by their nature are difficult to date typologically. Early roof tile was represented by a fragment of fabric 2273 and possibly 3091. Tiles in fabric 2273 were identified as being used in the period 4 (12<sup>th</sup> century) churches/claustal buildings at St Mary Stratford Langthorne (Smith & Betts 2004, 144). Another fill, [127] of [128], contained residual and abraded fragments of similar tile, with a possibly intrusive modern fletton brick fragment, but may also represent a medieval feature.

### **SIGNIFICANCE AND POTENTIAL**

The material is very limited both in terms of significance and potential due to the small size of the assemblage, however the brick sample does provide a date range for the construction of the single masonry feature discovered onsite. Additionally the presence of obviously medieval forms of roof tile may indicate the survival of medieval features in the vicinity, with the possibility that the building material may have been related to the development of Stratford Langthorne Abbey.

### **RESEARCH AIMS**

Further excavation in the area should be aware of the potential for survival of archaeological deposits and assemblages relating to Stratford Langthorne Abbey and the development of the medieval and post-medieval hinterland.

### **RECOMMENDATIONS FOR FURTHER WORK**

The roof tiles identified as ?3091 should be compared to examples from the Museum of London reference collection to confirm the fabric type. Otherwise no further work is recommended on this material other than the inclusion of the database with material from any further excavations.

## DATE RANGES

The **Fabric ED/LD** compares the earliest start date and the latest end date for CBM fabrics within the context. The **TPQ date** shows the date after which the latest fabrics in the context were produced. The **Form ED/LD** compares the latest start date and earliest end date for CBM forms in a context (note that if residual material appears in a context contradictions will be apparent in start and end dates of this field). The **DEP ED/LD** is the suggested date of deposition for the materials in the context. Also noted is the **Size** (number of sherds) and **Weight** (grams) of each context. Groups are determined as small (1-30 sherds), medium (31-100 sherds), large (over 100 sherds), very large (over 10 boxes).

*CBM by context with size/weight and date ranges*

Phase	Context	Mas	Size	Weight	Fabric ED	Fabric LD	TPQ Date	Form ED	Form LD	DEP ED	DEP LD	R	I
5	100	No	1	12	1510	1800	1510	1720	1760	1720	1760	No	No
5	101	Yes	3	3728	1666	1900	1666	1730	1780	1730	1780	No	No
5	105	No	1	74	1135	1220	1135	1180	1220	1180	1220	No	No
5	106	No	21	1238	1180	1800	1180	1180	1350	1180	1350	Yes	No
4	115	No	9	1432	1180	1800	1450	1450	1220	1450	1650	Yes	No
5	127	No	9	94	1180	1950	1850	1880	1350	1180	1350	Yes	Yes

[MAS] masonry feature [I] Contains intrusive material [R] Contains Residual material

## BIBLIOGRAPHY

Betts I., 2002, *Medieval 'Westminster' Floor Tiles*, MoLAS monograph 11, London.

Smith, T.P. & Betts, I., 2004 'Ceramic building material' in B. Barber, S. Chew, T. Dyson and B. White, B., *The Cistercian abbey of St Mary Stratford Langthorne, Essex*:

*Archaeological excavations for the London Underground Limited Jubilee Line Extension Project*, Museum of London Archaeological Service 18.

Pluis J., 1998, *The Dutch tile, Designs and Names 1570-1936*. Nederlands Tegelmuseum.

## APPENDIX 6: ANIMAL BONE REPORT

By Lisa Yeomans

The only animal bone recovered was a small quantity from an 18<sup>th</sup> century pit fill [127]. The context was dominated by cattle horncores of a shorthorn breed. Table 1 gives the number of bones identified to species level and the anatomical element. Interpretation of the pit from such a small assemblage is difficult but it may have contained the waste from tanning or hornworking.

Species/element	NISP
Cattle horncore	5
Cattle humerus	1
Horse metatarsal	1

Table 1.



## APPENDIX 7: OASIS FORM

OASIS ID: preconst1-10433

### Project details

Project name An Archaeological Watching Brief at Stratford Market Depot, Stratford, London Borough of Newham, E15

Short description of the project An Archaeological Watching Brief monitoring ground reduction and the construction of a foundation raft encountered natural brickearth which was revealed at an average height of 2.71m OD across the site. Cutting through the natural deposits were two unexcavated, and thus undated, linear features and possible ploughmarks. One of these features was on direct alignment with a pre-monastic field ditch dated to the period c.1000-1135 found to the south during the excavations on Stratford Langthorne Abbey and may be part of the same field system. These cuts were sealed by a ploughsoil from which no datable artefacts were recovered. Cutting through the ploughsoil across the north and south of the site were two ditches of probable a late medieval/early post-medieval date. The southern one may have originally been the drainage/roadside ditch along the northern side of the road located to the north of the abbey buildings. Late post-medieval features consisted of the backfills of a ditch, two pits possibly associated with leather working and a wall, possibly dating to the 18th century, which were overlain by 19th and 20th century made ground. A small residual sherd of Bronze Age/Iron Age pottery was recovered residually from a post-medieval pit.

Project dates Start: 25-08-2005 End: 27-09-2005

Previous/future work Yes / No

Any associated project reference codes JSM 04 - Sitecode

Type of project Recording project

Site status Local Authority Designated Archaeological Area

Current Land use Grassland Heathland 5 - Character undetermined

Monument type DITCHES Uncertain

Monument type PITS Post Medieval

Monument type DITCH Post Medieval

Monument type WALL Post Medieval

Investigation type 'Watching Brief'

Prompt Direction from Local Planning Authority - PPG16

#### Project location

Country England

Site location GREATER LONDON NEWHAM STRATFORD Stratford Market Depot

Postcode E15

Study area 150.00 Square metres

National grid reference TQ 3902 8344 Point

Height OD Min: 2.71m Max: 2.90m

#### Project creators

Name of Pre-Construct Archaeology Ltd

Organisation	
Project brief originator	Pre-Construct Archaeology
Project design originator	Pre-Construct Archaeology Ltd
Project director/manager	Jon Butler
Project supervisor	Neil Hawkins
Sponsor or funding body	Tube Lines Ltd
Project archives	
Physical Archive recipient	LAARC
Physical Contents	'Animal Bones', 'Ceramics'
Digital Archive recipient	LAARC
Digital Media available	'Survey', 'Text'
Paper Archive recipient	LAARC
Paper Media	'Context'

available sheet', 'Diary', 'Drawing', 'Map', 'Matrices', 'Photograph', 'Plan', 'Report', 'Section', 'Survey', 'Unpublished Text', 'Unspecified Archive'

Project

Bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title An Archaeological Watching Brief at Stratford Market Depot, Stratford, London Borough of Newham, E15

Author(s)/Editor(s) Hawkins, N.

Date 2005

Issuer or publisher Pre-Construct Archaeology Ltd

Place of issue or publication London

Description A4 Bound

Entered by jon butler (jbutler@pre-construct.com)

Entered on 19 October 2005

Please e-mail [English Heritage](#) for OASIS help and advice

© ADS 1996-2005 Created by [Jo Clarke, email](#) Last modified Thursday 10 March

**OASIS:**

2005

Cite only: <http://ads.ahds.ac.uk/oasis/print.cfm> for this page