

# School 21

(Old Rokeby School)  
Pitchford Street  
Stratford  
Newham  
London



## Archaeological Evaluation Report



**Client: Leadbitter Group Ltd**

Issue No: 1  
OA Job No: 5509  
NGR: TQ 538891 184055





Client Name: Leadbitter Group Ltd  
Client Ref No:  
Document Title: School 21 (Old Rokeby School), Pitchford Street, Stratford, Newham. London  
Document Type: Evaluation Report  
Issue/Version Number: 1  
Grid Reference: NGR TQ 538891 184055  
Planning Reference: 12/01381/FUL  
OA Job Number: 5509  
Site Code: ORS 12  
Invoice Code: STP10RWB  
Receiving Museum: Museum of London  
Museum Accession No: TBC  
Event No:

Issue	Prepared by	Checked by	Approved by	Signature
1	Vix Hughes Project Officer	Tim Allen Senior Project Manager	Edward Biddulph Senior Project Manager Post- Excavation	

Document File Location X:\Stratford School 21\002Reports  
Graphics File Location  
Illustrated by Hannah Kennedy and Julia Collins

**Disclaimer:**

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

© Oxford Archaeological Unit Ltd 2013

Janus House  
Osney Mead

Oxford OX2 0ES

t: +44 (0) 1865 263800

e: oasouth@thehumanjourney.net

f: +44 (0) 1865 793496

w: oasouth.thehumanjourney.net

Oxford Archaeological Unit Limited is a Registered Charity No: 285627





## School 21 (old Rokeby School),

### Pitchford Street, Newham, London E15 4AZ

#### *Archaeological Evaluation and Watching Brief Mitigation Report*

*Written by Vix Hughes*

*with contributions from Al Zochowski, Ed Biddulph, John Cotter, Ian Scott, Geraldine Crann and illustrated by Conan Parsons and Georgina Slater*

### Table of Contents

<b>Summary</b> .....	<b>6</b>
<b>1 Introduction</b> .....	<b>8</b>
1.1 Project Details.....	8
1.2 Location, Geology and Topography.....	8
1.3 Archaeological and Historical Background.....	8
1.4 Geotechnical Ground Investigations.....	11
1.5 Project Personnel .....	11
<b>2 Evaluation Aims and Methodology</b> .....	<b>12</b>
2.1 General Aims.....	12
2.2 Site Specific Aims and Objectives.....	12
2.3 Scope of Works .....	13
2.4 Methodology .....	14
2.5 Site Specific Methodology.....	16
<b>3 Results</b> .....	<b>18</b>
3.1 Introduction and Presentation of Results.....	18
3.2 General Soils and Ground Conditions.....	18
3.3 General Distribution of Archaeological Deposits.....	18
3.4 Overall Stratigraphic Description .....	18
3.5 Natural .....	19
3.6 Roman Period.....	19
3.7 Post-medieval Period.....	20
3.8 Finds summary.....	22



3.9 Environmental Summary .....	22
<b>4 Discussion.....</b>	<b>24</b>
4.1 Reliability of Field Investigation.....	24
4.2 General Evaluation Objectives and Results.....	24
4.3 Site Specific Aims and Objectives.....	25
4.4 Overall Interpretation.....	27
4.5 Significance.....	28
<b>Appendix A. Trench Descriptions and Context Inventory.....</b>	<b>29</b>
<b>Appendix B. Stratigraphic Data.....</b>	<b>44</b>
B.1 Trench 1.....	44
B.2 Trench 2.....	45
B.3 Trench 3.....	46
B.4 Trench 4.....	47
B.5 Trench 5.....	48
B.6 Trench 6.....	49
B.7 Trench 7.....	50
B.8 Trench 8.....	51
B.9 Trench 9.....	52
B.10 Trench 10.....	53
<b>Appendix C. Finds Reports.....</b>	<b>54</b>
C.1 Roman Pottery.....	54
C.2 Post-Roman Pottery.....	55
C.3 Clay Pipe.....	57
C.4 CBM (Ceramic Building Material).....	58
C.5 Metal.....	60
C.6 Animal Bone.....	60
C.7 Miscellaneous Finds .....	61
<b>Appendix D. Environmental Reports.....</b>	<b>63</b>
D.1 Environmental samples.....	63
<b>Appendix E. Bibliography and References.....</b>	<b>65</b>



**Appendix F. Summary of Site Details.....66**



## List of Figures

- Fig. 1 Site location map
- Fig. 2 Investigation Locations
- Fig. 3 Trench Locations
- Fig. 4 Phased plan of all the features
- Fig. 5 Plan of Trench 1
- Fig. 6 Plan of Trench 2
- Fig. 7 School of Exploration plan of the trenches and features
- Fig. 8 School of Possibility plan of the trenches and features
- Fig. 9 Harkness Courtyard plan of the trenches and features
- Fig. 10 Plan of the trenches and features superimposed on the 1744 Roque's mapping
- Fig. 11 Plan of the trenches and features superimposed on the 1916 OS mapping
- Fig. 12 Trench 1 Section
- Fig. 13 Trench 2 Section
- Fig. 14 Trench 3 Section
- Fig. 15 Trench 5 Section
- Fig. 16 Trench 7 Section
- Fig. 17 Trench 8 Section
- Fig. 18 Trench 10 Section

## List of Plates

- Plate 1 General View of the work areas around the existing structures, subject to watching brief mitigation
- Plate 2 General View of the work area for the New Sports Hall, subject to evaluation trench mitigation, looking west
- Plate 3 Trench 1, plan view, looking north
- Plate 4 Trench 2, plan view, looking north
- Plate 5 Trench 3, plan view, looking north
- Plate 6 Trench 4, plan view, looking north-east
- Plate 7 Trench 5, plan view, looking west
- Plate 8 Trench 6, plan view, looking north
- Plate 9 Trench 7, plan view, looking north-west
- Plate 10 Trench 8, plan view, looking north
- Plate 11 Trench 9, plan view, looking west
- Plate 12 Trench 10, plan view, looking east





Plate 13	Trench 1, ditch 114, looking west
Plate 14	Trench 3, section view, with chalk culvert to south, looking west
Plate 15	Trench 4, section view, looking south
Plate 16	Trench 5, section view, looking north-east
Plate 17	Trench 5, plan view of ditch 510, looking north-east
Plate 18	Trench 5, plan view pit 516, wall 511 in background, looking east
Plate 19	Trench 8, section view of ditch 804, looking west
Plate 20	Trench 2, section view of chalk culvert 206=209, looking east
Plate 21	Trench 2, section view of chalk culvert 206=209 and fills, looking east
Plate 22	Trench 10, section view of chalk culvert 1009, looking west
Plate 23	Trench 5, plan view of wall 501, looking south
Plate 24	Tobacco signs
Plate 25	School of Exploration representative section, southern part of area
Plate 26	School of Exploration representative section, western part of area
Plate 27	School of Possibility representative section
Plate 28	Harkness Courtyard representative section
Plate 29	Trench 11, working shot, looking east



## Summary

*Between the 10<sup>th</sup> December 2012 and 23<sup>rd</sup> April 2013 Oxford Archaeology (OA) undertook a combination of evaluation trenches and watching briefs to mitigate the below ground impact of the redesign and modification of School 21 (formerly Rokeby School), Pitchford Street, Stratford, London E15 4AZ (NGR TQ 538891 184055). The works were part of a programme of archaeological works required as Condition 6 of planning consent 12/01381/FUL.*

*For the areas of new build in the western part of the site, namely the Sports Hall and the School of Potential, mitigation was in two stages. In December 2012, five evaluation trenches were excavated (Trenches 1-5). The discovery of archaeological features resulted in further archaeological mitigation in the area of the Sports Hall. This comprised another five trenches (Trenches 6-10) targeted on the impact areas of the new foundations, which were excavated in January 2013. Subsequently an Archaeological Watching Brief was carried out on foundations in courtyards within the existing school that were being roofed over, and upon the deepest service runs close to the Roman features found in evaluation (Trench 11).*

*The site lies towards the edge of the floodplain of the Channelsea River, the underlying natural rising to the north-east. The results from the current investigations add to the findings of previous archaeological works at the nearby Stratford Market Depot Jubilee Line Extension (Hiller and Wilkinson 2005), and at New Mount Street.*

*Evidence was found for activity of the Roman and post-medieval periods. No evidence for any prehistoric archaeological remains was found.*

*The Roman activity consisted largely of ditches of 1<sup>st</sup> - 2<sup>nd</sup> century AD date forming boundaries and drainage features. The ditches contained a small but significant assemblage of pottery, including much of a necked jar and fragments of South Gaulish Samian ware. These features suggest a continuation of the Roman occupation seen at Stratford Market Depot, but as all the Roman features found lay on the west edge of the site, this may represent the limits of this activity. There was no evidence of the 3<sup>rd</sup> and 4<sup>th</sup> century Roman activity seen at the other two sites.*

*There followed a period of alluviation with no clear evidence of occupation, during which the area may have been inundated and remained waterlogged for long periods. It is possible that a shift in the river channel or a change in water levels caused the area to be flooded more regularly.*

*The area was re-occupied in the post-medieval period. Historic maps suggest that the area was used for agricultural production up until the later 18<sup>th</sup> century.*

*Chalk-built culverts suggest organised drainage, aligned from north-east to south-west, ie downslope towards the Channelsea River. There were also two small ditches on the same alignment, and these ran approximately parallel to the property boundaries shown on the 18<sup>th</sup> century historic maps. Ditches of this period on the same alignment had been seen previously to the south-west at the Stratford Market Depot, Jubilee Line Extension site (Hiller and Wilkinson 2005).*

*By the mid 19<sup>th</sup> century the area was intensively occupied by domestic houses, occasional shops and the railway. This was evident in the archaeological remains*



*from truncated brick walls seen in several trenches. The walls were at roughly right angles or parallel with the surrounding streets and are likely to be the remains of cellars or basement levels associated with the Victorian terraced houses that occupied the site prior to its clearance after WWII bomb damage.*

*Rokeby School and the earlier Victorian constructions have truncated the natural underlying geology across much of the site. In the area of the existing school small pockets of alluvium and brickearth overlying the gravel were recorded in several places, but these deposits were otherwise obliterated by more recent construction. Only the deepest of any earlier archaeological remains, if present, would therefore have been preserved. No residual finds were discovered that could suggest the possible presence of earlier remains, however, and it seems likely that the absence of earlier archaeological remains to the north and east is an accurate reflection of the past history of the site.*



## 1 INTRODUCTION

### 1.1 Project Details

- 1.1.1 Oxford Archaeology (OA), was commissioned by Leadbitter Group Ltd to undertake an archaeological Watching Brief at School 21 (formerly Rokeby School), Pitchford Street, Stratford, London E15 4AZ (the site), as part of a programme of archaeological works required as Condition 6 of planning consent 12/01381/FUL.
- 1.1.2 The work took place between 10<sup>th</sup> – 21<sup>st</sup> December 2012, resumed between 14<sup>th</sup> January – 13<sup>th</sup> February 2013 and was completed between 2<sup>nd</sup> - 23<sup>rd</sup> April 2013.
- 1.1.3 Archaeological curators Kim Stabler and Adam Single of GLAAS indicated the scope of evaluation and watching brief, and this document outlines how OA implemented these works.
- 1.1.4 All work was undertaken in accordance with local and national planning policies.

### 1.2 Location, Geology and Topography

- 1.2.1 The site is centred on National Grid Reference 538891 184055. The land is broadly level, and lies at c. 3.5m above Ordnance Datum.
- 1.2.2 The site is currently occupied by the buildings and playgrounds of the former Rokeby School, which cover an area of c 3.2ha (Fig 1). The site lies within a block of land bounded on the west by Bridge Road, on the north by Kay Street just south of Stratford High Street/Broadway, on the east by Pitchford Street and on the south by Paul Street.
- 1.2.3 The site lies 200m east of the Channelsea River, the easternmost branch of the River Lea, whose floodplain extends eastwards into the site.
- 1.2.4 The geology of the area is London Clay overlain by Kempton Park Gravel Formation (earlier Devensian date) and Taplow Gravels (later Wolstonian date), (BGS sheet 256 and <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer>).
- 1.2.5 Excavations at the adjacent Stratford Market Depot indicated that the gravel was overlain by 0.4-0.6m of orange-red clay or 'brickearth', into which archaeological features were cut, and that these were overlaid by between 0.5m and 1m of more recent alluvial deposits.

### 1.3 Archaeological and Historical Background

- 1.3.1 The site is located within the Archaeological Priority Area as defined in the Borough of Newham U.D.P. It lies only 100m north of the excavations at the Stratford Market Depot, where remains of Mesolithic, Neolithic, Bronze Age, Iron Age and Roman date were found (Hiller and Wilkinson 2005).
- 1.3.2 An archaeological desk-based assessment of the site was prepared by Pre-Construct Archaeology for the Borough of Newham in 2003. The information contained in that report is reproduced, with some additions, here.

#### ***Prehistoric Period***

- 1.3.3 A Palaeolithic handaxe and core was found 170m north of the site on Stratford High Street/Broadway (SMR 060583).
- 1.3.4 Small numbers of Mesolithic struck flints were found during the evaluation and limited excavations at the Stratford Market Depot site (Fig. 2). There were no contemporary features, the material being residual in later deposits, and this was concentrated on the west side of the site near to the Channelsea River (SMR 062044; Hiller and Wilkinson 2005).



- 1.3.5 A similar spread of redeposited struck flint of Neolithic date was also recovered at the Stratford Market Depot, again concentrated towards the west side of the site (SMR 061993; Hiller and Wilkinson 2005).
- 1.3.6 Prehistoric flints of unspecified date were also found 300m to the north (SMR 062513).
- 1.3.7 A later Bronze Age socketed axe was found on Bridge Street immediately adjacent to the western boundary of the site (SMR 061743). Small numbers of probably later Bronze Age struck flints were also found at the Stratford Market Depot, as was a small quantity of pottery of late Bronze Age or earliest Iron Age date (SMR 0620454; Bradley in Hiller and Wilkinson 2005; Barclay in Hiller and Wilkinson 2005).
- 1.3.8 A buried prehistoric soil, together with activity and finds of possibly Bronze Age date, were also found some 300m north-west of the site just north of Kennard Road (SMR 062923).
- 1.3.9 An early Iron Age infant burial, together with a variety of other features, some containing pottery of probable early Iron Age date, also came from the Stratford Market Depot excavations (Hiller and Wilkinson 2005; Fig. 2).
- 1.3.10 Other features, including probable roundhouse gullies, were of middle Iron Age and late Iron Age date (Hiller and Wilkinson 2005).

#### ***Roman Period***

- 1.3.11 Stratford High Street is believed to overlie a Roman road, which has been observed in two locations, one just 150m north of the site (SMR 061633), the other some 150m further to the north-east.
- 1.3.12 Roman settlement and burials, the latter comprising 2 adult inhumations, 2 near-complete horses and a dog, were found at Stratford Market Depot south of the site (SMR 061935; Hiller and Wilkinson 2005; Fig. 2), while a possible Roman cultivation soil was found just north of the Stratford Market Depot, and only 150m west of the current site (SMR 061936).
- 1.3.13 Some 350m north-west of the site, a fragment of Roman tegula roof tile was recovered west of Stratton Street (SMR 062237).

#### ***Post-Roman to Medieval Period***

- 1.3.14 Saxon activity of a variety of types is known in the vicinity. An inhumation was found north of the High Street nearly 300m west of the site, and a wooden waterpipe found close by was also believed to be Saxon (SMR 062062; SMR 061773).
- 1.3.15 Late Saxon pottery was recovered due west of the site just north of the Stratford Depot site (SMR 061937).
- 1.3.16 A Saxon revetment is recorded just west of Stratton Street, in the same location as the Roman tegula (SMR 062238), and possible Saxon dumped deposits some 300m north of the site on the Stratford High Street/Broadway (SMR 062238; SMR 062381).

#### ***Medieval Period***

- 1.3.17 West Ham and East Ham are both parishes mentioned in Domesday Book. West Ham manor, like those of neighbouring parishes, lay on the gravel terrace above the floodplain. The village of West Ham, whose church was already in existence by the 12th century, lay approximately 1 km east of the Channelsea River, with Stratford, or Stratford Langthorne, on the edge of the gravel terrace to the north-west.
- 1.3.18 Stratford Langthorne Abbey was established in the late 12th century c 300m south of the site, and continued for several hundred metres south of that. A large variety of discoveries have been made in connection with this, but it appears that the precinct boundary lay well south of the site.



### ***Post-medieval Period***

- 1.3.19 By the early 17th century the parish had been divided into wards - Church Street (including West Ham village), Stratford, Plaistow, and Upton. In 1670 there were 179 houses in Stratford, 103 in Church Street, 108 in Plaistow, and 25 in Upton (Powell 1986, 11).
- 1.3.20 Circa 1700 there was spurt of growth at Stratford. Defoe reported in 1722 that Stratford had doubled in size. The growth of Stratford in the early 18th century is perhaps a reflection of its position at the gateway to London (Sadarangani 2003).
- 1.3.21 In the 17th century, Stratford had literally been a gateway - a turnpike gate at the Stratford end of Bow Bridge was seized by the Royalists in 1648. In 1681, at another time of national unrest, quarter sessions set up a turnpike in Stratford High Street, and another at the Abbey Mill, to prevent the escape of criminals.
- 1.3.22 The earliest maps of the area are those of John Rocque of 1744-6 and Chapman and Andre of 1777. Rocque's map indicates that most of the site was cultivated strips in the mid-18th century, and Chapman and Andre's map also indicates that the area was still open in the late 18th century.
- 1.3.23 From the 16th to the early 19th century West Ham was increasingly favoured as a place of residence or holiday resort by wealthy merchants and professional men (Sadarangani 2003).
- 1.3.24 By the early 19th century West Ham was a populous parish, and with coming of the railways it grew rapidly. In 1839 Stratford became a junction on the Eastern Counties Railway. Work on the railways and the construction of Victoria Dock gave rise to the new township of Canning Town, which comprised 60 houses by 1851 (Powell 1986, 51).
- 1.3.25 By 1867, the site and much of the surrounding area had been developed - roads had been laid out and Victorian terraced housing occupied the area. The layout had changed very little by 1916.

### ***Previous Archaeological Work***

- 1.3.26 Oxford Archaeology undertook an evaluation and excavation at the site of Stratford Market Depot, West Ham, between 1991 and 1993 (Hiller and Wilkinson 2005). The work was carried out ahead of the redevelopment of the area by London Underground Ltd as part of the Jubilee Line Extension Project (Fig. 2). The investigations uncovered a multi-period site.
- 1.3.27 Flint tools and debitage of the Mesolithic (8000-400BC), Neolithic (4000-2500BC) and Early Bronze Age (2500-1700BC) periods were found. Activity resumed in the late Bronze Age and continued throughout the Iron Age and Roman periods. Thereafter occupation ceased until post-medieval times.
- 1.3.28 Among the more important finds was the skeleton of a newborn of early Iron Age date, recovered from a pit near to the site of a probable roundhouse building. More formal, but no less intriguing, were two crouched adult inhumations, both dated to the early Roman period. Other striking discoveries included two near-complete horse burials and a complete dog skeleton, all of which were of Roman date. These may have been ordinary mortalities, but a ritual motive for their burial remains a distinct possibility.
- 1.3.29 In 1994 trial excavations in advance of redevelopment of Stratford Station, to the west, identified deposits associated with an early course of the nearby River Channelsea. These included a 19th century timber-lined drain and a possible late Saxon timber waterfront structure (LAARC online catalogue).
- 1.3.30 More recent work undertaken by MoLAS (MoLas 2001: London Archaeologist Round-up 2001) on the site to the immediate north of School 21, found fewer archaeological



remains. Natural gravels in the north of the site were cut by a ditch and sealed by what appear to have been reclamation deposits of mid-16<sup>th</sup>-mid 17<sup>th</sup> century date. Elsewhere natural brickearth was cut by a number of ditches, one of which is dated to the mid-late 4<sup>th</sup> century AD, and the others to the 17<sup>th</sup> century. A pit, possibly structural, was also revealed and this is broadly dated to the late 16<sup>th</sup>-late 19<sup>th</sup> century. Victorian foundations and features - including a brick soakaway, rubbish pit and drains - truncated much of the site, which was covered by modern made-ground.

## **1.4 Geotechnical Ground Investigations**

- 1.4.1 Trial test-pits and boreholes prior to the redevelopment of the site established that Made Ground was shallowest (0.6m) in the north corner of the site, increasing to more than 1m over most of the site, and was deepest at the north-west corner and t the south end of the school, close to the adjacent JFK school (WSI, OA 2012). South-west of the school Made Ground was recorded as 1.1m and 1.2m deep, increasing to 1.8m on the west edge of the site.
- 1.4.2 Alluvium survived below Made Ground over most of the site, but was completely truncated in the north-west and south-east corners. The boreholes suggested that it only survived 0.2m deep on the west edge of the site due to truncation, but elsewhere was between 0.5 and 1.2m deep, except at the north-east corner, where it reached a depth of 1.6m.
- 1.4.3 Where Kempton or Taplow Gravel was overlain by alluvium, it was generally reached in the boreholes between 1.6m and 2.2m down. The depth was greater in the north-west and south-east corners, but here the alluvium had all been removed, and the gravel was also probably truncated.

## **1.5 Project Personnel**

- 1.5.1 Vix Hughes oversaw the first phase of evaluation, Graeme Clark the second phase, assisted by Al Zochowski, Jim Harriss, James Coles and Rob Wiseman. The Watching Brief was mainly conducted by Al Zochowski, with subsequent work by Lee Sparks and Kevin Moon. The drawings were produced by Conan Parsons and Georgins Slater. Finds were managed by Leigh Allen and Geraldine Crann, and the project was archived by Nicola Scott and Susan Rawlings. The project was managed for OA by Tim Allen.
- 1.5.2 We are grateful to Bruce Knapp and Charles Rodgers of Leadbitter for their assistance on site, and to Adam Single of English Heritage, who monitored the project for GLAAS.



## 2 EVALUATION AIMS AND METHODOLOGY

### 2.1 General Aims

#### 2.1.1 The aims were:

- (i) To determine the presence or absence of any archaeological remains which may survive.
- (ii) To determine or confirm the approximate extent of any surviving remains
- (iii) To determine the date range of any surviving remains by artefactual or other means.
- (iv) To determine the condition and state of preservation of any remains.
- (v) To determine the degree of complexity of any surviving horizontal or vertical stratigraphy.
- (vi) To assess the associations and implications of any remains encountered with reference to the historic landscape.
- (vii) To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive.
- (viii) To determine the implications of any remains with reference to economy, status, utility and social activity.
- (ix) To determine or confirm the likely range, quality and quantity of the artefactual evidence present.

### 2.2 Site Specific Aims and Objectives

#### 2.2.1 The specific aims and objectives of the Mitigation works were:

- (x) To establish whether the Mesolithic and Neolithic activity found at Stratford Market Depot is accompanied by evidence of further activity to the north-east, and whether features of these dates survive on the edge of the gravel terrace within the site
- (xi) To determine whether the Bronze Age socketed axe found immediately west of the site was an isolated find, or is associated with further evidence of Bronze Age activity within the site
- (xii) To establish whether the Iron Age and Roman settlements found at Stratford Market Depot continue north-eastwards as far as the site
- (xiii) To determine whether there are further prehistoric or Roman burials in this area
- (xiv) To establish the eastern limits of the Roman occupation identified in Trench 1, and to confirm that Trench 2 lies beyond this limit
- (xv) To investigate further the character and date range of this Roman occupation, and (as far as is possible within the limited areas that will be subject to impact within the development) to determine whether it is similar to that found further to the south-west within the Stratford Market Depot site. In particular, to clarify whether any of the linear features found at the Stratford Market Depot site could continue within the current site.
- (xvi) To further clarify the alignment and direction of fall of the chalk-built conduit
- (xvii) To establish (as far as is possible within the limited impacts associated with the current redevelopment) whether any trace remains of the buildings shown on Historic Maps alongside Chapel Street, and to determine whether the chalk-built conduit relates to any of these.

#### 2.2.2 A comparison between the aims and objectives and the results is given in Section 4. below.





## 2.3 Scope of Works

- 2.3.1 The construction programme had two main elements; the extension of the existing school and the roofing of the courtyards to provide further covered activity areas, and the construction of a new sports hall and associated facilities on the west side of the site (see Fig. 3).
- 2.3.2 **Sports Hall:** Construction of the new sports hall in the SW part of the site was to be carried out using a steel frame construction on solid concrete pads, all to be founded on the Kempton gravel. In addition foundation trenches 0.75m wide and deep were required around the perimeter of the building, and internal sleeper wall foundation trenches 0.6m wide and deep.
- 2.3.3 Additional drainage was to be provided (see Fig. 3) for the Sports Hall and for the School of Potential and an Infiltration Tank (originally to be 15m long and 10m wide and later amended to 5m by 5m in plan) to be dug south of the Sports Hall.
- 2.3.4 The archaeological evaluation comprised trenches aligned to coincide with some of the largest pier bases around the edge of the Sports Hall, ie the areas of greatest potential impact.
- 2.3.5 **School of Potential:** The School of Potential at the south-west corner of the school involved the extension of school westwards, and involved the excavation of 24 pilecaps with wall trenches in between. The evaluation was also extended to cover some of the largest pilecaps within this area, and to examine the line of services running between this and the new Sports Hall.
- 2.3.6 **Roofing of the courtyards in the existing school.** This required additional piles around the perimeters, with additional internal piles and transverse ground beams for added support.

## 2.4 Methodology

- 2.4.1 As agreed with Kim Stabler and Adam Single of the GLAAS, the archaeological mitigation varied in different parts of the site. Trench and context numbers were issued to reflect the different spatial areas and methodological strategies (see Site Specific Methodology below).
- Archaeological Watching Brief**
- 2.4.2 This was used to cover the areas of the development within the existing school, where the results of the boreholes and the geotechnical test pits, combined with the depth of the proposed pile caps and ground beams, had suggested that the potential for preservation was low.
- 2.4.3 The agreed strategy was that Watching Brief for each area should aim to establish within the first day or two whether the pilecaps were having an impact on either alluvium or the early Holocene soil. If so, then Watching Brief would cover the whole of this area. If not, then a decision would be taken by the archaeological curator as to whether Watching Brief should continue or not.
- 2.4.4 The first half-dozen pilecaps in each area were monitored to check that the depth of impact lay within the Made Ground, and to confirm that this Made Ground was indeed of Victorian or more recent date. Where earlier deposits, whether the underlying alluvium, the brickearth or archaeological remains of medieval or earlier date, were discovered within the depth of impact of the pile cap excavations, the archaeological curator from GLAAS was informed, and the remainder of the pile caps in that area were subject to archaeological Watching Brief.
- 2.4.5 In the event, the alluvium was found in most of the areas observed, but brickearth appeared only intermittently. The method of excavation of the trenches for the pile caps



involved the excavation of the ground beams between pile caps as work progressed, and moved from south to north within each area, so that all the trenches were also monitored.

2.4.6 Watching Brief was also extended to parts of the works associated with the construction of the new Sports Hall. Where evaluation trenches had been proposed over new foundation trenches that coincided with the location of the previous building foundations, excavation quickly demonstrated that these were concrete beams 3m deep. In the areas of these previous foundations, therefore, archaeological work was altered to a watching brief during the removal of the foundations. The affected trenches comprised:

- Trench 6 – entire length
- Trench 7 – western part
- Trench 8 – northern part

### ***Mitigation Evaluation Trenching***

2.4.7 For the areas of new build in the western part of the site, namely the Sports Hall and the School of Potential, mitigation was in two stages (Figs 3 and 4; Plate 2). In December 2012, five evaluation trenches were excavated (Trenches 1-5). Archaeological features of Roman and post-medieval 18th century date were found, so a further phase of archaeological mitigation of specific impacts was required for the excavation of foundations of the new Sports Hall building.

2.4.8 The further archaeological mitigation comprised five further trenches (Figs 3 and 4, Trenches 6-10). All of these trenches were dug to the level at which archaeological features appeared, or failing that, to at least 1.8m deep.

### ***Stage 1 Excavation***

2.4.9 Five evaluation trenches (1-5) were excavated as follows:

2.4.10 Trench 1 was supposed to straddle the locations of three pier bases at the north-west corner of the Sports Hall, but this coincided with the line of the deep concrete foundations of the previous Sports Hall. With the consent of the archaeological curator the trench was therefore moved westwards to avoid this. This trench was 15.6m long and 2m wide at the base (Figs 4 and 5; Plate 3)

2.4.11 Trench 2 straddled the proposed locations of two pier bases at the north-east corner of the Sports Hall, and was 8.5m long and 3m wide at the base (Figs 4 and 6; Plate 4).

2.4.12 Trench 3 straddled the proposed locations of three pilecaps in the centre of the School of Potential, and was 12m long and 2m wide at the base (Fig. 4; Plate 5).

2.4.13 Trench 4 was positioned along the line of the proposed surface water drain just east of the Sports Hall, and was 10m long and 2m wide at the base. The trench was moved slightly north-westwards to avoid an existing sewer / foul drain (Fig. 4; Plate 6).

2.4.14 Trench 5 was sited within the proposed Infiltration Tank south of the Sports Hall, and was 10m long and 2m wide at the base (Fig. 4; Plate 7).

2.4.15 In total the evaluation trenches covered an area of 120m<sup>2</sup> at the base, or 5% of the area of impact.

### ***Stage 2 Excavation***

2.4.16 Five further trenches (6-10) were excavated as follows:



- 2.4.17 Trench 6 was excavated immediately east of Trench 1, and where Trench 1 had originally been positioned to straddle the proposed locations of three pier bases at the north-west corner of the Sports Hall. At base it was 15.6m long and 3m wide at the north, narrowing to 2m wide at the south. The concrete foundations of the previous Sports Hall were however so deep (3m) that the work was commuted to a watching brief (Fig. 4; Plate 8).
- 2.4.18 Trench 7 was aligned south-west to north-east along the north side of the Sports Hall, and straddled the proposed locations of five pier bases. It was 2m wide and between 17m and 24m long at the base. The eastern part of the trench lay outside the area of the previous Sports Hall, and was excavated as planned (Fig.4; Plate 9). The western part coincided with the deep concrete foundations of the previous building, and only a Watching Brief was undertaken here.
- 2.4.19 Trench 8 lay at the south-west corner of the Sports Hall, and was orientated north-north-west. It straddled the proposed locations of two pier bases, and was 7.5m long and 3m wide at the base. The southern part of the trench lay outside the previous building, and was excavated as planned; the northern part coincided with the deep concrete foundations of the previous building, and the work was commuted to a watching brief (Fig. 4; Plate 10).
- 2.4.20 Trench 9 was aligned south-west to north-east along the south side of the Sports Hall, and straddled two pier bases. It was 8m long and 2m wide at the base (Fig. 4; Plate 11).
- 2.4.21 Trench 10 was aligned south-west to north-east within the Sports Hall, and straddled two pier bases. It was 8m long and 2m wide at the base (Fig. 4; Plate 12).
- 2.4.22 In total the trenches covered an area between 117.5m<sup>2</sup> and 131.5m<sup>2</sup> at the base.

#### ***Mitigation for Watching Brief***

- 2.4.23 Three areas of the site were subject to watching brief. These were the School of Exploration, the School of Possibility and the Harkness Courtyard. (Fig. 3)
- 2.4.24 These areas were observed between the 21<sup>st</sup> of January and the 13<sup>th</sup> of February.
- 2.4.25 The School of Exploration (Area 1) was 14m wide and roughly 21.5m long (Figs 3 and 7). It was excavated to an average depth of 3.178m aOD.
- 2.4.26 The School of Possibility (Area 3) was roughly 13m wide and roughly 15m long (Figs 3 and 8). The excavation in this area varied from 3.128m aOD to 2.678m aOD. The greater excavation depth occurred in the northern portion of the area.
- 2.4.27 The Harkness Courtyard (Area 4) was roughly 17.5m wide and 25.5m long (Figs 3 and 8). It was excavated to an average depth of 3.178m aOD.
- 2.4.28 The watching brief areas were excavated using a 5tonne machine and followed a pre-existing trench / pile lay out plan. This was sprayed onto the concrete surface by the on-site engineer (Modebest or Leadbitter) and then excavated accordingly.

## **2.5 Site Specific Methodology**

- 2.5.1 The trenches and other ground works were all set out by the client's contracted surveyors. The evaluation trench co-ordinates were provided to the surveyors from OA based upon the pile and foundation plan supplied by the developer. Some minor modifications were made for practical reasons of programme and to avoid obstructions, and these were agreed with the archaeological curator in advance.
- 2.5.2 Below the concrete or hard-standing the excavation trenches were dug using a 5 tonne machine with a toothless bucket. Machine excavation was carried out stratigraphically, or in the case of thick deposits, in spits no more than 0.2m deep.



- 2.5.3 Mechanical excavation was carried out under the supervision of a competent archaeologist and ceased at either to the top of natural or the top of any significant archaeological level, whichever was the higher. Care was taken not to damage archaeological deposits through excessive use of mechanical excavation.
- 2.5.4 Spoil was scanned during excavation, and a metal detector used to scan the relevant excavated soil for finds.
- 2.5.5 Upon the exposure of archaeologically significant deposits or features machining ceased and the surface of the exposed archaeological horizon was cleaned where necessary to clarify the extent and character of any archaeological remains. The archaeological curator at GLAAS was informed and a site inspection took place.
- 2.5.6 Any archaeological features were hand-sampled in order to characterise and date them. Details regarding the level of excavation and sampling were agreed with the GLAAS curator on site.
- 2.5.7 All excavation, recording, analysis and archiving was compatible with the GENERAL STANDARDS FOR THE PREPARATION OF ARCHAEOLOGICAL ARCHIVES DEPOSITED WITH THE MUSEUM OF LONDON.
- 2.5.8 The two evaluation stages of work utilised Trench numbers 1-10. The context numbers were designated as 100-199 for Trench 1, 200-299 for Trench 2 and so on. This included Trenches 6 and 7. For the Watching Brief areas in the existing school the context numbers were designated in blocks, one for each area. In order to maintain some spatial control over finds from extensive layers, the various pile cap pits or ground beam trenches were issued trench numbers. These began at Trench 100. Trenches containing deposits of interest are indicated on Figures 7-9.
- 2.5.9 The School of Exploration foundations for the roof-level AHU platform were not monitored as it was clear that all of the impacts would lie within Made Ground.

<b>Investigation</b>	<b>Trench Numbers</b>	<b>Context Number Blocks</b>
New Sports Hall	1 -10	100 - 1099
School of Exploration	100 - 123	10000 - 10021
School of Possibility	300 - 310	30000 - 30010
Harkness Courtyard	400 - 418	40000 - 40011
Infiltration Tank	11	1101-1104



## 3 RESULTS

### 3.1 Introduction and Presentation of Results

3.1.1 The results of the investigations are summarised in Section 3.3 and the subsequent description is in the form of an amalgamated stratigraphic narrative, encompassing all the investigation works. Trench plans are shown in Figures 4-9 with the corresponding sections shown in Figures 12 to 18. A full context inventory and trench description is presented in the tables in Appendix A.

### 3.2 General Soils and Ground Conditions

3.2.1 Tarmac, paving slabs and topsoil were present at the top of all the trenches and varied in depth up to 0.25m. These deposits overlay modern make-up levelling deposits derived from demolition rubble, Victorian debris layers, and below these, post-Roman disturbed alluvium and intact alluvial layers.

3.2.2 The underlying geology was seen in all the trenches to some degree. In general there was a layer of mid orange clay brickearth overlying greyish orange Taplow gravels. In some areas, such as Trench 3, there were additional layers within the sequence.

3.2.3 Ground conditions were generally dry and the compaction of most deposits produced stable trench sides. There were a number of modern intrusive features which could not be removed, so that machining and hand-excavation continued around them. The work was carried out in cold conditions with low winter light levels.

3.2.4 In the watching brief areas concrete slabs varying in thickness up to 0.25m overlay modern bedding deposits and make up levelling deposits. These overlay Victorian debris layers and alluvial layers.

3.2.5 Underlying the alluvial layers was the layer of mid orange clay brickearth previously seen in the evaluation trenches. This however was only encountered in the School of Exploration and the south-western corner of the Harkness Courtyard.

### 3.3 General Distribution of Archaeological Deposits

#### *Evaluation / Mitigation*

3.3.1 All the trenches revealed archaeological remains, however in most instances these were of post-medieval date. Trench 1 uncovered four features of Roman date (Figs 5 and 12).

3.3.2 A small number of post-Roman, and probably post-medieval, features were seen in Trenches 2, 5 and 8 (Figs 4, 6, 13, 15, and 17). These all truncated the grey alluvial layers.

3.3.3 The remains of two pairs of parallel chalk block walls forming probable culverts were seen (Fig. 4). One culvert ran east-north-east to west-south-west from Trench 1, through Trench 7 and Trench 2 and into Trench 3 (Figs 5, 6, 12, 13 and 14). The other culvert ran south-south-east at right angles to this in Trench 10 (Figs 4 and 18). Both features had been truncated by later activity.

3.3.4 The remains of brick walls and foundations, of probable Victorian date, were seen in Trenches 1, 2, 3, 5 and 9 (Figs 4, 5, 12, 13 and 14).

#### *Watching Brief*

3.3.5 All the areas monitored revealed archaeological remains. None of these was earlier than the Victorian period, (Plates 25-29).

3.3.6 In the School of Exploration, an undefined linear feature of probable Victorian date was observed in trench 100, and a highly truncated pit was found in Trench 105 (Fig. 7). A



tree throw or possible pit possibly of Victorian date was seen in Trench 115 and continued into trench 117.

- 3.3.7 Probable 20th-century foundations were also observed in Trenches 105 and 114.
- 3.3.8 In the School of Possibility the remains of brick walls and foundations were seen in Trenches 301, 309 and 310 (Fig. 8).
- 3.3.9 Probable Victorian garden soil layers were also seen in Trenches 308, 309 and 310.
- 3.3.10 In the Harkness Courtyard area, a brick and concrete foundation of Victorian or later date was seen in Trench 404 (Fig. 9). A large Victorian demolition layer was observed running the majority of the length of Trench 409.

### 3.4 Overall Stratigraphic Description

3.4.1 The evaluation trenches and watching brief investigations demonstrated the preservation of archaeological remains from a number of different periods. These periods are defined below:

- Roman
- Post-medieval *Phase 1 – 16th and 17th-century*
- Post-medieval *Phase 2 - 18<sup>th</sup> – mid 19th-century*
- Post-medieval *Phase 3 – Victorian and Modern*

### 3.5 Natural

- 3.5.1 At the base of several evaluation trenches and in parts of the watching briefs, areas of the greyish-orange Taplow gravels were visible. In most instances the gravels were at depths exceeding 2m bgl (below ground level). This deposit was numbered variously 117, 230, 313, 408, 507, 604, 1014 and 1104.
- 3.5.2 In Trench 3 there was evidence of a lower grey alluvial deposit, 312, 0.2m thick that overlay the Taplow gravels and was beneath the brickearth deposit.
- 3.5.3 In all the evaluation trenches and within the School of Exploration and the south western corner of the Harkness courtyard a layer of mid-orange clay brickearth overlay the gravels. This layer varied between 0.9m and 1.1m deep. It was numbered 106, 219, 305, 407, 506, 603, 705, 808, 905, 1013, 1103, 10003 and 40007. The brickearth is of Holocene date.
- 3.5.4 In the School of Exploration the level of the brickearth varied from south to north (Fig. 7). At the south it was visible at roughly 3m aOD, but towards the northern end appeared at roughly 2.8m aOD.
- 3.5.5 Within the Harkness Courtyard, which lies to the west of the School of Exploration, the level of the brickearth was 3.078m aOD and was only seen in the south-west corner, thus indicating its undulating nature across the site (Fig. 9; Plate 28). The remaining area of the Harkness Courtyard was shown to consist of Victorian deposits overlain by concrete.
- 3.5.6 In the School of Possibility the brickearth deposit was not observed (Plate 27). This may be due either to truncation or to it being below the depth of impact; excavation within the School of Possibility only went down to a depth of 2.654m aOD.
- 3.5.7 Although the brickearth had been truncated by later intrusive activity, it was clear that it survived intact across most of the site. The boundary with the overlying deposits of grey alluvium was essentially diffuse and there were no obvious hiatuses in the sequence.



### 3.6 Roman Period

- 3.6.1 In Trench 1 the brickearth was cut by four features, all of which were dated to the Roman period by artefacts retrieved from their fills (Figs 5 and 12). There were two ditches, the more northerly numbered 114 and the more southerly 116, running on different alignments, but not intersecting within the trench. There were also two probable pits 109 and 111. These features were first seen at 1.85m-2.2m aOD, ie between 1.8m and 2.3m below modern ground level.
- 3.6.2 Ditch 114 ran west-south-west across the trench (Plate 13). It was 0.8m wide and 0.2m deep, and had two fills, 113 and 112. The lower fill, which was probably eroded material from the sides of the ditch, contained sherds of South Gaulish Samian pottery, dated to the 1st century AD. Above this layer 112 was a grey silty clay, perhaps a waterlain sediment, containing a significant proportion of a necked jar, dated to the late 1st or more likely to the 2nd century AD. An environmental sample was taken of the upper fill, and the sieved residue produced fragments of calcinated bone, ceramic building material, glass, iron, a single small piece of leather, three small fish bones, one amphibian humerus and a small rodent tooth. Identified charred material included seeds of cleavers, stinking chamomile, knotweed and sedge, as well as charred oats, wheat and barley grains. The ditch may have been both a boundary and a drainage ditch, and was clearly not far from a settlement.
- 3.6.3 Ditch 116 ran on a south-west alignment, and was larger, 1.2m wide and 0.4m deep. The single fill 115 was another grey silty clay consistent with a waterlain deposit, so this too may have been a boundary and drainage ditch. It contained the base of a Central Gaulish Samian bowl manufactured in the mid-late 2nd century AD. An environmental sample of the fill was taken, and produced a small number of charred wheat and oat grains and chaff.
- 3.6.4 At the northern end of Trench 1 were two rounded features, 109 and 111. These both continued beyond the limits of the trench to the west. They were of similar depth, which may have been a factor of preservation, and they both had single grey silty clay fills. There was pottery from both 108 (the fill of 109) and 110 (the fill of 111). The pottery from 108 was of probable first century date (?AD 40-100), that from 110 was of Roman date, but was not sufficiently diagnostic for a more specific date.
- 3.6.5 A grey alluvium, 105=118, sealed all of these features in Trench 1.

### 3.7 Post-medieval Period

#### ***Phase 1:***

- 3.7.1 The grey alluvial deposit contained very little artefactual material to provide an independent date. The upper parts of the alluvial deposits demonstrated disturbance, both by truncation and by possible trample activity. This could be discerned as a browner hue with a greater mixed nature to the texture of the clay. It did not appear consistent with an *in situ* buried ploughsoil as seen in the Stratford Market Depot works (OA 2005). The alluvium or disturbed parts of it were seen in all trenches except Trench 10 (see Figs 12 and 14-17).
- 3.7.2 From the borehole data it was possible to determine that alluvium survived below Made Ground over most of the site, but was completely truncated in the north-west and south-east corners of the site. It was between 0.25m and 0.45m on the west edge of the site, but elsewhere was between 0.5 and 1.2m deep, and at the north-east corner it reached a depth of 1.6m.
- 3.7.3 In Trench 1 the top of the alluvium (layers 118 and 105) was seen at approximately 2.8m aOD (Fig. 12). An environmental sample from layer 118 contained a small piece of



sheep/goat phalanx bone, a small Fe fragment, charred knotweed seeds and wheat grains. In Trench 2 the alluvium was not distinct but there was a grey deposit of mixed potentially re-deposited alluvium, 208, visible at 2.7m aOD (Fig. 13). In Trench 3 the disturbed alluvial material, 304 and 314, was seen at approximately 2.75m aOD (Fig. 14; Plate 14). Alluvium, again somewhat mixed and potentially re-deposited as 406, was seen in Trench 4 at 3.14m aOD, (Plate 15). In Trench 5 a layer of disturbed alluvium 505, overlay the *in situ* alluvium, 508 (Fig. 15). The top of the *in-situ* alluvium lay at 2.72m aOD, and the disturbed alluvium 505 seen further east was at the same level (Plate 16). It was not possible to establish the height of the alluvium in Trench 6, due to health and safety concerns about access. In Trench 7 the disturbed alluvium 712 was seen at 2.87m aOD. In Trench 8 (806 and 807) it was at 2.85m aOD. In Trench 9 the surface of the alluvium, 904, was 2.89m aOD. It was not observed in Trench 10.

- 3.7.4 Where the upper part of the alluvium showed a very diffuse gradation to a browner hue (most noticeable within the watching brief areas to the north-east eg. 10002), this may reflect a transition from waterlain sedimentation to more soil-like conditions.
- 3.7.5 Four sherds of pottery were recovered from the alluvium where it was numbered 406, 508 and 807, and all were of earlier Roman date. These are however likely to be residual, as alluvial layers 208 and 806 contained finds manufactured between the late 17<sup>th</sup> century and the early 19<sup>th</sup> century.
- 3.7.6 There is some confirmation of the date of the bringing back of the area into agricultural use in the small clay pipe assemblage, the earliest examples of which are of 17<sup>th</sup> or early 18<sup>th</sup> century date. These mostly occur in isolation and some are fairly worn (contexts 208, 214, 223, 406, 505, 509, 806). Seven other pipe stems of approximately the same date were found in other features, confirming activity in the area about this time, though some of these are residual within later contexts.

**Phase 2:**

- 3.7.7 There were three features of similar character that truncated the alluvial deposits and were stratigraphically sealed by the later Victorian activity. These features were seen in Trenches 5 and 8, and were confined to the southern part of the site. Although there were slight variations there was a general similarity in the fills, as they were all mid grey silty clay deposits, suggesting either a continuation of waterlain deposits or the re-deposition of the alluvial material.
- 3.7.8 In Trench 5 there was a rounded pit at the eastern end, 516 and a linear WSW-ENE ditch 510. The ditch, 510, ran along the southern edge of the trench and was 0.62m wide and 0.25m deep (Fig. 4; Plate 17). It had a rounded U-shaped profile and the single grey clay fill 509 contained pottery and clay pipe dated to the late 17<sup>th</sup> through to early 19<sup>th</sup> century.
- 3.7.9 The pit, 516, in Trench 5, was approximately 1m in diameter and 0.7m in depth (Fig. 15). This pit also had a grey clay fill but there were no finds (Plate 18).
- 3.7.10 A second ditch, on the same alignment as that in Trench 5, was seen in Trench 8 (Figs 4 and 17). The ditch, 804, was 0.5m wide, 0.3m deep and the single fill, 803, was a mid grey clay with charcoal flecks and CBM, bone and metal finds, (Plate 19). Where these could be dated they were of probable 17-19<sup>th</sup> century date. A careful examination of Trench 9 showed that the feature did not continue that far to the east.
- 3.7.11 Two chalk built structures were seen on the site. The remains consisted of paired chalk block walls, aligned WSW-ENE forming probable culverts. The interpretation of culverts would seem to be the most appropriate, with the chalk bonded with clay, effectively providing a water-tight seal. The features have probably been truncated vertically and could have been deeper. They appear to have provided drainage from the north-east





downslope to the south-west, towards the Channelsea River. They may also have acted as water irrigation features during drier periods and could potentially have acted as boundary features.

- 3.7.12 The northern culvert was seen to extend from Trench 1, through Trench 7, Trench 2 and into Trench 3 (Fig. 4). A portion of the culvert was also seen in the area beneath the previous building, visible in the sections revealed during the removal of the foundations. The southern culvert was seen in Trench 10. Both features had been truncated by later activity.
- 3.7.13 In Trenches 1, 3 and 7 only one side of the culvert was seen (Figs 5, 12 and 14). In Trench 1 the southern side had been truncated away. In Trenches 3 and 7 the limits of the trenches meant that again only the northern side was observed.
- 3.7.14 In Trench 2, a full cross section of the northern culvert demonstrated that it was 3.5m wide and 0.8m deep, (Figs 6 and 13; Plates 20 and 21). The two walls, 206 and 209, were constructed of chalk blocks which were built to random courses and the blocks varied in size but on average were 0.23m by 0.14 by 0.07m. The blocks were deliberately shaped and were laid in a slightly tapered manner, producing inner sloped faces. The walls were bonded with brownish grey clay, this material also constituted the backfill, 224 of the construction cut, 218.
- 3.7.15 The culvert construction cut on the north side (218) was cut by a shallow gully 222, whose lower fill 223 contained pipe stem fragments of 17th/early 18th century character. Overlying both sides of the culvert and the fills of gully 222 was layer 208, similar to the alluvium found in the other trenches overlying the natural, but here probably redeposited from the excavation of the culvert.
- 3.7.16 The culvert had a lower dark blackish brown silty clay, 214, up to 0.55m thick. This fill was probably the result of the use of the culvert. The small assemblage of finds, including pottery, glass, CBM and clay pipe, dated this fill to the late 18<sup>th</sup> - 19<sup>th</sup> century. Overlying this was a later fill 215, which was a mid yellowish brown well sorted sandy gravel. The material was thought to be an imported deposit, rather than re-deposited gravels from the site. It contained pottery, CBM and clay pipe, which date this fill to the early 19<sup>th</sup> century.
- 3.7.17 In Trench 10, a full cross section of the southern culvert demonstrated that it was 3.2m wide and 0.6m deep (Figs 4 and 18; Plate 22). The two walls, 1009, were constructed of chalk blocks which were built to random courses and the blocks varied in size but on average were 0.3m by 0.1 by 0.06m. The blocks were deliberately shaped and were laid in a slightly tapered manner, producing inner sloped faces. The walls were bonded with brownish grey clay, this material also constituted the backfill, 1011 of the construction cut, 1010. The base of this culvert demonstrated that there was no lower lining such as a stone base to the feature. It was cut down into the underlying brickearth.
- 3.7.18 The culvert had a lower dark blackish brown silty clay, 1017, up to 0.55m thick. This fill was probably the result of the use of the culvert. Overlying this was a later fill 1020, which was a mid yellowish brown well sorted sandy gravel. The material was thought to be an imported deposit, rather than re-deposited gravels from the site. Above this was a tipped layer of dark debris material 1016, which was below an upper mid yellowish brown well sorted sandy gravel, 1006.
- 3.7.19 The structures, building materials, techniques and stratigraphical sequence were the same for the partial remains seen in trenches 1, 3 and 7.
- 3.7.20 Also cutting the alluvium 406 in trench 4 was a larger pit 409. This was not bottomed, but was at least 1m deep, with three exposed fills: 410, 411, and 412. The last of these



contained chamber pots and a fragment of a water-closet or wash-basin, all of mid-19th century date. These may represent losses in a latrine or cess-pit in one of the backyards. This feature is of Victorian date, but is stratigraphically earlier than most of the walls described below.

**Phase 3:**

- 3.7.21 This phase represents the main Victorian era and was reflected in the number of brick walls and foundations that were present. The walls were seen as 102, 201, 303, 501 (Plate 23), 511, 907 30005 and 30007 (see (Figs 4, 5, 7, 12, 13, 14 and 15). They were generally of red frogged bricks, in English bond, cemented with a hard grey mortar. The walls were all of similar dimensions, being essentially 0.5m wide, but may not all be contemporary.
- 3.7.22 In several of the trenches there was a layer of dark silty clay numbered variously 205, 404, 504, 801 (upper part was disturbed) and 1012. This was difficult to categorise but probably represents garden soils altered by the addition of elements such as soot and general debris and waste. These possible garden soils were also observed at the northern end of the School of Possibility (Plate 27).
- 3.7.23 In all cases these remains were truncated and there was evidence of the deliberate demolition of the brick structures on site, seen as the layers of brick rubble. These were identified as layers 101 and 104, 202, 301, 302, 401, 402, 503, 902, 1001-1005.
- 3.7.24 From the disturbed upper part of 801 were three large metal / enamel signs for tobacco brands sold by Lambert and Butler, (Plate 24). The dating of the signs was difficult since the products were sold and advertised from the later 19th up until the latter part of the 20th-century. Indeed Lambert & Butler as brand name still exists. The style and colouring of the signs suggest that they might date from between the First and Second World Wars. The close association of the signs may indicate that they originated from one establishment, perhaps a corner shop.
- 3.7.25 Associated with the demolition and make-up layers were numerous services excavated across the area. Most were related to the school infrastructure but there was some evidence of earlier drainage services probably related to the Victorian housing.
- 3.7.26 The uppermost layer formed the make-up and current surfaces of the school. These included tarmac surfaces and topsoil grassed areas.

### **3.8 Finds summary**

- 3.8.1 A total of 28 sherds of Roman pottery weighing 363g was recovered from the site. Overall, the condition of the Roman pottery was mixed. Most sherds were small and potentially subject to re-deposition, but the necked jar and Samian South Gaulish ware dish were represented by relatively large fragments, suggesting that they may have been discarded where they were found.
- 3.8.2 A total of 136 sherds of post-medieval pottery weighing 2.896kg was recovered. This mainly dates to the later 18th and 19th centuries. The character of the material is entirely domestic. In general the pottery is in a fragmentary but fairly fresh condition with many large fresh sherds present. A few contexts contain groups of sherds that can be reconstructed to form complete, or near-complete vessel profiles. In general the range of pottery from the site is typical of late post-medieval domestic assemblages from London.
- 3.8.3 The CBM assemblage comprises 38 pieces weighing 5.120kg. from 20 contexts. Nearly all this material (like the pottery above) dates to the late post-medieval period and mostly, perhaps, to the 19th century. There is a single piece of Roman tile in a later context. The assemblage is consistent with a domestic urban environment.



- 3.8.4 The excavation produced a total of 38 pieces of clay pipe weighing 184g. In total there are ten pieces of pipe bowl, one mouth piece and 26 stem pieces. The assemblage can be divided roughly into two groups. The first group comprises the earliest pieces, datable to the late 17th or early 18th centuries. These mostly occur in isolation and some are fairly worn. The second group comprises several complete mid 19th-century pipe bowls or decorated stems, some with the marks of local pipe-makers. These occur in larger assemblages of between four and twenty fragments and are much less likely to be residual than the earlier pipes.
- 3.8.5 The small number of metal finds include fragments of cu alloy and fe wire, fe nails and three large enamelled advertising signs, the last probably from a shop front.
- 3.8.1 A small assemblage of 23 pieces of animal bone weighing 307g was recovered from 14 contexts. This included fragments from larger stock animals and from smaller animals that are common in urban domestic conditions.
- 3.8.2 There are also miscellaneous fragments of flint, charcoal, coal, leather, stone, shell and wood.

### **3.9 Environmental Summary**

- 3.9.1 Sample <1> was taken from fill 112, within a Roman ditch 114. Sample <2> was taken from fill 115, within Roman ditch 116. Sample <3> was taken from the layer 118, overlying these features.
- 3.9.2 While samples <2> and <3> were poor in charred plant remains, sample <1> was rich in charcoal and other charred plant remains. The preservation of the charcoal was very good in this sample, with many of the fragments potentially identifiable to taxon, indicating that the potential for survival of charred plant remains is good on this site. All samples taken were quite small and this will have affected recovery. The seeds identified are mostly inhabitants of waste/rough ground and are frequently found near to habitation and/or cultivated ground. The animal bone preservation appears poor, however all pieces recovered from samples were small and may have been residual in nature. Despite the presence of leather in sample <1> no other evidence of waterlogging was found in the sample.



## 4 DISCUSSION

### 4.1 Reliability of Field Investigation

- 4.1.1 The results of the evaluation and watching brief are considered to be a reliable indicator of the archaeological deposits that survive within the School 21 site. Conditions were generally good, and although periodic heavy rain and snow was encountered during the works and the light levels were low due to the winter conditions, visibility during machine excavation was deemed to be good.

### 4.2 General Evaluation Objectives and Results

- 4.2.1 The aims and objectives, as set out in section 2, which are relevant to, and can be addressed by, the archaeological investigation are outlined below.
- 4.2.2 *Aim i: To determine the presence or absence of any archaeological remains which may survive.*
- 4.2.3 The results demonstrated that archaeological remains from the Roman and post-medieval periods were present within the site.
- 4.2.4 *Aim ii: To determine or confirm the approximate extent of any surviving remains.*
- 4.2.5 The remains from the earlier Roman period were only seen towards the south-western edge of the site, and sufficient investigation was carried out to suggest that this distribution may be a genuine reflection of the original extent of Roman features. The later post-medieval activity was widespread across the entire site, although Phase 2 features were confined to the same south-western area.
- 4.2.6 *Aim iii: To determine the date range of any surviving remains by artefactual or other means.*
- 4.2.7 The Roman features were dated by pottery from secure contexts to the 2<sup>nd</sup> century AD. The post-medieval remains were attributed to three phases and these were provisionally dated to: Phase 1 -pre-18<sup>th</sup> century; Phase 2 -18<sup>th</sup> to early 19<sup>th</sup> century; and Phase 3 – Victorian to modern, 1837 onwards.
- 4.2.8 *Aim iv: To determine the condition and state of preservation of any remains.*
- 4.2.9 The Roman remains had been truncated by later features, but both artefacts and environmental remains were preserved within them. The post-medieval remains of Phase 1 were fairly well-preserved, but those of Phases 2 and 3 were less-well preserved. Phase 2 deposits were reasonably preserved and fairly extensive, but the cut features of the period were poorly preserved and less frequent. The Phase 3 brick structures had all been heavily truncated and deliberately demolished.
- 4.2.10 *Aim v: To determine the degree of complexity of any surviving horizontal or vertical stratigraphy.*
- 4.2.11 There were no preserved layers of prehistoric or Roman date, and the Roman features did not demonstrate significant intercutting or chronological development. The post-medieval remains were slightly more complex, but the broad stratigraphic units were easily established across the site. The sparse cut features of this period did not have complex stratigraphic relationships, although there were features linking deposits across the site, notably the chalk culverts.
- 4.2.12 *Aim vi: To assess the associations and implications of any remains encountered with reference to the historic landscape.*
- 4.2.13 The Roman remains would appear to be related to the activity seen at the Stratford Market Depot excavations. The dating relates it to their Period 4 early Roman remains



(1<sup>st</sup> - 2<sup>nd</sup> centuries AD), which identified a number of enclosures defined by ditches and associated burials, but relatively few structural features (Hiller and Wilkinson 2005, 17-23). The School 21 remains are consistent with the division of the landscape by ditches seen at the Stratford Market and the New Mount Street investigations.

- 4.2.14 The post-medieval remains provide some physical evidence of the reclamation and land division of this area depicted on the historic maps of the area, notably Rocque's map of 1741 and the early OS maps (Figs 10 and 11). The brick walls and artefacts bear out the domestic urban character of the area in the Victorian period, and of the subsequent demolition and later use of the area.
- 4.2.15 *Aim vii: To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive.*
- 4.2.16 The environmental evidence shows that Roman period charred and waterlogged remains are present and of reasonable preservation within features. Therefore there is potential for information but the very small quantities that are present restricts the potential.
- 4.2.17 *Aim viii: To determine the implications of any remains with reference to economy, status, utility and social activity.*
- 4.2.18 The Roman pottery included much of a stamped Samian bowl, showing that the local inhabitants of the area had access to good quality table wares in the 2nd century AD. The post-medieval finds did not suggest that any particular agricultural, craft or industrial activities were being carried on at the site. There were no finds suggesting high status activity in this period, although the quantities of material from the site are too small to make definitive statements about this.
- 4.2.19 *Aim ix: To determine or confirm the likely range, quality and quantity of the artefactual evidence present.*
- 4.2.20 The Roman finds were restricted to pottery and animal bone. The pottery included large well-preserved sherds; the preservation of animal bone was poor. In the alluvial layers the sherds of pottery were more abraded and of a mixed date range, as might be expected from the depositional environment of these late or post-Roman sediments. Post-medieval finds included a wider range of materials, indicating that a reasonable assemblage would survive from deposits and features in the vicinity.

### 4.3 Site Specific Aims and Objectives

- 4.3.1 The specific aims and objectives of the Mitigation works were:
- 4.3.2 *Aim x: To establish whether the Mesolithic and Neolithic activity found at Stratford Market Depot is accompanied by evidence of further activity to the north-east, and whether features of these dates survive on the edge of the gravel terrace within the site.*
- 4.3.3 Archaeological work at School 21 did not produce any flint artefacts, either re-deposited or *in situ*. This may partly be due to the relatively small areas investigated, but the complete absence probably indicates a genuine lack, or at least a very low level, of activity in this area.
- 4.3.4 *Aim xi: To determine whether the Bronze Age socketed axe found immediately west of the site was an isolated find, or is associated with further evidence of Bronze Age activity within the site.*
- 4.3.5 The School 21 did not produce any similar artefacts, nor any features or other finds of this date. As for the Mesolithic and Neolithic periods, this probably indicates a very low level of activity in this area.



- 4.3.6 *Aim xii: To establish whether the Iron Age and Roman settlements found at Stratford Market Depot continue north-eastwards as far as the site.*
- 4.3.7 There were no Iron Age features or finds found on the School 21 site. The Roman features were of 2<sup>nd</sup> century date, and were probably associated with the activity found at the Stratford Market site, 325m to the SW, and at New Mount Street.
- 4.3.8 *Aim xiii: To determine whether there are further prehistoric or Roman burials in this area.*
- 4.3.9 No evidence of any burials was found within the site, nor to the north at New Mount Street.
- 4.3.10 *Aim xiv: To establish the eastern limits of the Roman occupation identified in Trench 1, and to confirm that Trench 2 lies beyond this limit.*
- 4.3.11 To the immediate east of Trench 1, in the location of Trench 6, the area had been truncated to the natural gravels by the previous building foundations, as it had east of Trench 6 along the line leading to Trench 7. Beyond this, however, no trace of any Roman remains was recovered from trenches 7, 8, 9 or 10.
- 4.3.12 *Aim xv: To investigate further the character and date range of this Roman occupation, and (as far as is possible within the limited areas that will be subject to impact within the development) to determine whether it is similar to that found further to the south-west within the Stratford Market Depot site. In particular, to clarify whether any of the linear features found at the Stratford Market Depot site could continue within the current site.*
- 4.3.13 The Roman features were of 2<sup>nd</sup> century date and the remains were consistent with boundary and drainage features, rather than settlement structures. The findings were consistent with some aspects of the early Roman activity on the Stratford Market Depot site (OA 2005, 17; Period 4).
- 4.3.14 The site was too far from the previous excavations, and the remains too few and their exposures too limited, to extrapolate between them. Ditch 116 was however on a similar alignment to those seen at Stratford Market Depot, and this was at odds to the predominantly SW-NE alignment of the 18<sup>th</sup> century features.
- 4.3.15 *Aim xvi: To further clarify the alignment and direction of fall of the chalk-built conduit.*
- 4.3.16 Two culverts were found within the investigations. Both were aligned broadly NE-SW, approximately 18m apart. The cross sections demonstrated that they were of the same dimensions (3.2-3.5m wide by 0.6-0.8m surviving depth). The levels taken at the base showed that they were draining towards the south-west. The levels at the top were relatively consistent and may indicate the horizon of truncation of the later Victorian activity.

Trench Number	Level at the Culvert top (m aOD)	Level at the Culvert base (m aOD)
<b>Northern Culvert</b>		
1	2.54	1.74 (not the base)
2	2.4	1.5
3	2.46	1.96
7	2.33	Base not reached
<b>Southern Culvert</b>		
10	2.41	1.9



- 4.3.17 *Aim xvii: To establish (as far as is possible within the limited impacts associated with the current redevelopment) whether any trace remains of the buildings shown on Historic Maps alongside Chapel Street, and to determine whether the chalk-built conduit relates to any of these.*
- 4.3.18 There were no surviving remains detected during the investigations that could be related directly to the buildings depicted along Chapel Street on the earlier 18<sup>th</sup> century mapping. The chalk culverts however appear to predate the establishment and expansion of Victorian terrace housing, on the basis both of their construction material, and of the finds at their base. In addition the alignment of the features follows the general alignment of the fields on Roque's 1744-46 map and are perpendicular to the properties along, and alignment of, Chapel Street.

#### **4.4 Overall Interpretation**

- 4.4.1 The results from the current investigations reiterated some aspects of the findings of the previous archaeological works at the nearby Stratford Market Depot Jubilee Line Extension and at New Mount Street.
- 4.4.2 Evidence was found for activity of the Roman and post-medieval periods. The evaluation and watching brief did not recover any evidence for archaeological remains surviving at School 21 earlier than the 1<sup>st</sup> - 2<sup>nd</sup> century AD Roman period.
- 4.4.3 The Roman activity consisted of ditches which served to act as boundaries and drainage features. These features occurred on low-lying ground not far from the Channelsea River, and suggests that the Roman activity seen to the south-west at Stratford Market Depot continued, but at an apparently lower density, this far north. There was no evidence at School 21 of the later 3<sup>rd</sup> - 4<sup>th</sup> century activity seen at the other two sites. The ditches on site contained a small but significant assemblage of pottery including a significant proportion of a necked jar and fragments of South Gaulish Samian ware.
- 4.4.4 There followed a period with no clear evidence of occupation, during which the area may have been inundated and remained waterlogged for long periods. There may have been a shift in the river channel or a change in water levels that caused the area to be more regularly flooded.
- 4.4.5 The area was re-occupied in the later post-medieval period. Historic maps show that the site was used for agricultural production into the later 18<sup>th</sup> century (Fig. 10).
- 4.4.6 The chalk culverts provide evidence of organised drainage, and probably of land division. These ran approximately parallel to the property boundaries shown on the 18<sup>th</sup> century mapping. A culvert built of chalk blocks with fills dated to the 19<sup>th</sup> century were found at New Hibernia Wharf in 1973 (SAEC 1973-12; London Archaeologist Round-up 1973). Although the culvert was of a different form the use of the same building material demonstrates that this may have been a more regular pattern.
- 4.4.7 By the mid 19<sup>th</sup> century the area was intensively occupied by domestic houses, occasional shops and the railway (Fig 11). This was evident in the archaeological remains from the brick walls seen in a truncated state in several trenches. The walls were at roughly right angles or parallel with the surrounding streets and are likely to be the remains of cellars or basements belonging to the Victorian terraced houses that occupied the site prior to its clearance after WWII bomb damage.
- 4.4.8 Rokeby School and the earlier Victorian construction have truncated the natural underlying geology across the site. Small pockets of alluvium and brickearth overlying the gravel were recorded in several trenches, but these deposits were also truncated by previous construction. This construction is likely to have completely truncated away the



horizon where all but the deepest of earlier archaeological remains, if present, would have been preserved. No isolated finds were discovered that could suggest the possible presence of earlier remains and it seems likely that the absence of earlier archaeological remains within the trenches is an accurate reflection of the site as a whole.

#### **4.5 Significance**

- 4.5.1 The Roman remains predominantly consisting of negative cut features beneath alluvium, are of local historical interest and are significant in demonstrating the continuation of the wider Roman landscape. The remains link the areas of the Stratford Market Depot excavation site to the south and the New Mount Street evaluation to the north.
- 4.5.2 The Victorian remains, predominantly consisting of remnant walls associated with cellars and/or basements of the terraced housing that once occupied the site, are of local historical interest.





## APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					Orientation	N-S
The trench contained two possible pits, two probable Roman ditches, a pair of walls constructed of chalk and serving as a culvert and later domestic brick walls.					Avg. depth (m)	2.8
					Width at base (m)	2
					Length at base (m)	15.6
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
100	Layer	2	0.12	Topsoil / overburden: dark blackish brown clayey silt		
101	Layer	2	0.38	Demolition layer: dark brownish black, rubble rich		
102	Structure	0.4	0.3	Brick wall: red bricks, English bond, E-W aligned		
103	Layer	0.5	0.35	Footing / bedding for wall: pale yellowish grey sandy gravel		
104	Layer	2	0.2	Demolition / debris layer: dark blackish brown silty clay	Pottery, CBM	C1870-1900+ c1910-1940?
105	Layer	2	0.45	Alluvium: mid greyish brown silty clay		
106	Layer	2	0.1+	Natural: mid orange silty clay brickearth		
107	Structure	1.8	0.6+	Chalk-brick culvert wall: chalk block built E-W aligned wall, clay bonded		
108	Fill	0.4	0.3	Pit fill, fill of 109: mid grey silty clay	Pottery, CBM, bone	?AD 40-100 Roman
109	Cut	0.4	0.3	Pit: rounded feature, extended to west		
110	Fill	0.9	0.35	Pit fill, fill of 111: mid orangey grey silty clay	pottery	Roman
111	Cut	0.9	0.35	Pit: rounded feature, extended to the north and west		
112	Fill	0.6	0.08	Ditch fill, fill of 114: mid grey silty clay	Pottery, CBM bone, leather, metal	AD 50-150
113	Fill	0.8	0.12	Ditch fill, fill of 114: mid greyish orange clay	pottery	AD 50-100
114	Cut	0.8	0.2	Ditch: E-W aligned, with rounded profile		
115	Fill	0.75	0.4	Ditch fill, fill of 116: mid greyish brown silty clay	Pottery, bone	AD 160-200



116	Cut	0.75	0.4	Ditch: NE-SW aligned with rounded profile		
117	Layer	2	0.1+	Natural: mid greyish orange gravel (Taplow Gravels)		
118	Layer	2	0.2	Alluvium: mid orangey grey silt clay, same as 105	Bone, metal	
119	Fill	1.4	0.32	Culvert fill, within 107: pale brown sandy silt	CBM frags (not retained)	
120	Fill	0.6	0.2	Culvert fill, within 107: mid orange-grey brown clayey silt	CBM frags (not retained)	
121	Fill	0.5	0.3	Culvert construction backfill: construction backfill, pale grey clayey silt		
122	Cut	1.45	0.6	Culvert construction cut: E-W aligned, truncated on southern side, rounded profile		
123	Cut	0.85	0.45	Construction cut: E-W aligned, squared profile, truncates chalk culvert		
124	Wall	0.85	0.45	Brick Wall: E-W aligned, red brick,		

Trench 2						
General description				Orientation	N-S	
The trench contained a continuation of the chalk culvert walls, two post-medieval pits, an undated ditch at the northern end and a later brick wall. There was disturbance from a modern feature at the southern end of the trench and a gas pipe service trench ran E-W across the trench.				Avg. depth (m)	1.8	
				Width at base (m)	3	
				Length at base (m)	8.5	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
200	Layer	2	0.12	Tarmac: external surface of playground	-	-
201	Structure	0.5+	0.35	Brick wall: yellow bricks, pale grey cement, NW-SE aligned		
202	Layer	3	0.2	Rubble: mid red-yellow grey silty sand, 75% whole and half bricks	CBM frags (not retained)	
203	Fill	1.5	0.1	Foundation: pale yellowish brown sandy gravel bedding for wall 201		
204	Cut	1.5	0.35	Construction cut for wall 201: NW-SE aligned, squared profile		
205	Layer	2	0.65	Uncertain: friable black clayey silt mix of soil and debris	pottery	c1830-1870
206	Structure	0.75	0.5	Culvert wall - north: chalk squared blocks, E-W aligned,		



				slightly curved inner face south side		
207	Layer	3	0.1	Demolition: mid grey silty sand, chalk, CBM, mortar inclusions	Pottery, CBM	C1830-1870 L18-19th
208	Layer	0.75	0.2	Disturbed alluvium: mid greyish brown silt clay,	Pottery, CBM, clay pipe	C1780-1840 L18-19 <sup>th</sup> L17-E18C
209	Structure	0.75	0.5	Culvert wall - south: chalk squared blocks, E-W aligned, slightly curved inner face north side		
210	Cut	0.45	0.25	Pit: sub-squared pit, vertical sides, flat base		
211	Fill	0.45	0.25	Pit fill, fill of 210: loose, dark reddish brown silty clay	Pottery, bone	c1830-1900
212	Cut	1	1.08	Pit: squared pit, vertical sides, flat base		
213	Fill	1	1.08	Pit fill, fill of 212: loose, dark orange brown silty clay	Pottery, clay pipe	C1830-1900 L18-19 <sup>th</sup>
214	Fill	1.2	0.55	Culvert fill: mid black brown silty clay, within the area of the walls 206 and 209	Pottery, CBM, glass, clay pipe, shale, metal	C1780-1830 L18-19th
215	Fill	1.2	0.8	Culvert fill: mid yellowish brown sandy gravel, shell inclusions, within the area of the walls 206 and 209	Pottery, CBM, clay pipe, coal	C1810-1840 L18-19th c1805-1840
216	Fill	0.26	0.1	Service – drain, fill of 217: dark brownish black silty loam	pottery	
217	Cut	0.26	0.1	Service – drain: N-S aligned, vertical sides, flat base, truncates 206 and 209		
218	Cut	3.5	0.8	Culvert construction cut: E-W aligned, rounded profile		
219	Layer	2	0.4	Natural: firm mid orange clay, brickearth	-	
220	Structure	1.6	1	Modern metal structure: square feature, sheet metal,	Crisp packets etc (not retained)	1980s
221	Layer	2	0.3	Natural: firm orange with grey mottling silty sand	-	
222	Cut	0.8	0.36	Ditch: possible E-W ditch or a channel interface		
223	Fill	0.8	0.1	Ditch fill, fill of 222: mid greyish brown silty clay	CBM, clay pipe	L18-19 <sup>th</sup> L17-E18 <sup>th</sup>
224	Layer	1	0.44	Culvert construction backfill: construction backfill, mid grey clay		



225	Cut	0.3	0.5	Service cut: gas pipe insertion, squared trench dug, E-W aligned		
226	Fill	0.3	0.5	Service fill, fill of 225: soft brownish black silty clay		
227	Cut	0.8	0.6	Service cut - drain: drainage insertion, E side of trench		
228	Fill	0.8	0.6	Service fill, fill of 227: firm mottled black and brown clay and rubble		
229	Layer	1	0.2	Concrete: slab, east side of trench		
230	Layer	2	0.3	Natural: mid orange sandy gravel (Taplow gravels)	-	
231	Fill	0.7	0.28	Ditch fill, fill of 222: orange brown silty clay		

Trench 3						
<b>General description</b>				<b>Orientation</b>	N-S	
The trench contained a series of Victorian to early C 20 <sup>th</sup> brick walls; the northern extent of the earlier chalk culvert was seen at the southern end; and the sequence of underlying natural layers was visible in a sondage at the northern end of the trench.				<b>Avg. depth (m)</b>	2.5	
				<b>Width at base (m)</b>	2	
				<b>Length at base (m)</b>	12	
<b>Contexts</b>						
context no	type	Width (m)	Depth (m)	comment	finds	date
300	Layer	2	0.13	Tarmac: external surface of playground	-	-
301	Layer	2	0.23	Rubble: mid red-yellow grey silty sand, 75% whole and half bricks	CBM frags (not retained)	
302	Layer	2	0.4	Demolition / debris: mid greyish brown clay and rubble	Pottery, CBM, clay pipe bone,	C1830-1900 c1850-1925 c19th
303	Structure	0.24	0.33	Brick walls: 6 walls E-W aligned, red brick with grey cement bonding,	CBM (not retained)	
304	Layer	2	0.8	Natural: firm mid brownish orange silty clay, brickearth	-	
305	Layer	2	1.5	Natural: firm mid orangey brown clay	-	
306	Cut	1.5+	0.4+	Culvert construction cut: E-W aligned, rounded profile		
307	Structure	1	0.4	Culvert wall - south: chalk squared blocks, E-W aligned, slightly curved inner face north side	Bone	c1750-1900?
308	Fill	1.2	0.9	Culvert fill: mid yellowish brown sandy gravel,		



				shell inclusions,		
309	Fill	0.12	0.4	Culvert construction backfill: construction backfill, dark orangey brown silty clay	Pottery, metal	c1760-1830
310	Fill	1.3	0.3	Culvert construction backfill: construction backfill, mid greyish orange clay, rare charcoal inclusions	CBM	L18-19th
311	Layer	2	0.4	Natural: mid orange brown silty clay, brickearth / oxidised alluvium	-	
312	Layer	5	0.2	Natural: mid blue grey clay, alluvium	-	
313	Layer	5	0.1+	Natural: mid greyish orange gravel (Taplow gravels)	-	
314	Layer	1.5+	0.1+	Natural: mid orange brown silty clay, brickearth / oxidised alluvium	-	

Trench 4						
<b>General description</b>				<b>Orientation</b>	NE-SW	
The trench contained a number of modern services and Victorian pits all dug to a substantial depth into the disturbed alluvium that overlay natural brickearth and gravels.				<b>Avg. depth (m)</b>	2.4	
				<b>Width at base (m)</b>	1.9	
				<b>Length at base (m)</b>	10	
<b>Contexts</b>						
context no	type	Width (m)	Depth (m)	comment	finds	date
400	Layer	1.9	0.05	Tarmac: external surface of playground	-	-
401	Layer	1.9	0.08	Bedding: loose black gravel, bedding for tarmac		
402	Layer	1.9	0.3	Rubble: mid red-yellow grey silty sand, whole and half bricks		
403	Layer	2.5	0.1	Concrete: reinforced concrete base / foundation / surface at NE end of trench		
404	Layer	1.9	0.6	Demolition / debris / occupation layer: dark brown black silty clay	Pottery, CBM bone, shell	C1870-1900 C19th
405	Structure	0.5	0.4	Brick wall: N-S aligned, frogged red bricks with pale grey cement		
406	Layer	1.9	0.22	Disturbed alluvium: mid brownish grey silty clay	Pottery, CBM, clay pipe, bone, unworked	c1820-1900, (Roman - residual) L18-19 <sup>th</sup> c1660-1710



					flint	
407	Layer	1.9	0.65	Natural: mid orange brown silty sand, chalk flecks		
408	Layer	1.9	0.45+	Natural: mid orange brown silty sand		
409	Cut	0.6	1	Pit: sub-circular, vertical sides, filled by 410-412		
410	Fill	0.6	0.4	Pit fill, fill of 409: dark greyish brown silty sand, chalk and gravel inclusions		
411	Fill	0.6	0.3	Pit fill, fill of 409: mid greyish brown silty clay		
412	Fill	0.6	0.3	Pit fill, fill of 409: mottled pale yellowish grey and dark brownish grey	Pottery, bone, metal, wood	c1840-1870
413	Layer	1.4	0.6	Disturbed alluvium: mid grey silty clay, similar to 406		
414	Cut	0.8	1.1	Service cut: cast iron pipe insertion, W end of trench, N-S aligned, filled by 415-417		
415	Fill	0.75	0.38	Service fill, fill of 414: mid greyish brown sandy clay, chalk and stone inclusions		
416	Fill	0.8	0.6	Service fill, fill of 414: mid greyish orange sandy clay, chalk and stone inclusions		
417	Fill	0.8	0.6	Service fill, fill of 414: black silty sand, chalk, coal, pebble and stone inclusions		
418	Cut	0.5	0.5	Service cut: NE-SW aligned		
419	Fill	0.5	0.5	Service fill, fill of 418: concrete encased pipe		
420	Cut	0.5	0.9	Service cut: NE-SW aligned		
421	Fill	0.5	0.9	Service fill, fill of 420: mottled orange grey silty clay containing iron pipe		

### Trench 5

General description	Orientation	E-W
The trench contained a brick structure that extended beyond the southern limit of excavation. Below this was a post-medieval linear ditch E-W aligned, and a series of three probable post-medieval pits which were seen to truncate the thick grey alluvium layer that overlay the brickearth and Taplow gravels within.	<b>Avg. depth (m)</b>	1.9
	<b>Width at base (m)</b>	2.5
	<b>Length at base (m)</b>	10
<b>Contexts</b>		



context no	type	Width (m)	Depth (m)	comment	finds	date
500	Layer	2.5	0.3	Topsoil: soft dark brownish black silty loam	-	-
501	Structure	0.24	0.3	Brick wall: a 3-sided brick structure, extended to south beyond the trench		
502	Layer	2.5	0.44	Demolition: mixed black and brown silty loam, stone, CBM, concrete fragment inclusions		
503	Layer	2.5	0.6	Demolition / debris: dark brown silty loam, stone, CBM, concrete fragment inclusions		
504	Layer	2.5	0.3	Garden soil: dark brown silty loam		
505	Layer	2.5	0.3	Disturbed alluvium: mid grey silty clay,	CBM, clay pipe Shell	L18-19 <sup>th</sup> L17-E18th
506	Layer	2.5	0.5	Natural: mid orange silty clay brickearth		
507	Layer	2.5	0.1+	Natural: mid greyish orange gravel (Taplow gravels)		
508	Layer	2.5	0.6	Alluvium: mid grey silty clay,	pottery	AD 40-50
509	Fill	0.62	0.25	Ditch fill, fill of 510: mid greyish brown silty clay	Pottery, CBM, clay pipe, metal	C1760-1830 L18-19th L17-E18th
510	Cut	0.62	0.25	Ditch: E-W aligned, with rounded profile		
511	Structure	0.5	0.4	Brick wall: N-S aligned red, frogged bricks, bonded with hard grey cement	CBM	Early to mid 19th
512	Cut	0.7	0.68	Pit: squared pit in the northern half of the trench, vertical sides, flat base		
513	Fill	0.7	0.68	Pit fill, fill of 512: loose, mid grey silty clay		
514	Cut	0.6	0.55	Pit: squared pit in the northern half of the trench, vertical sides, flat base		
515	Fill	0.6	0.55	Pit fill, fill of 514: loose, mid grey silty clay		
516	Cut	1	0.7	Pit: rounded pit in the northern half of the trench, rounded profile		
517	Fill	1	0.7	Pit fill, fill of 516: mid grey silty clay, orange mottling		

## Trench 6



<b>General description</b>					<b>Orientation</b>	N-S
The trench was monitored under watching brief conditions as it was discovered that the location of this trench coincided with the previous building foundations. These were seen to be 3m deep concrete foundations.					<b>Avg. depth (m)</b>	2.8
					<b>Width at base (m)</b>	2.5
					<b>Length at base (m)</b>	15.6
<b>Contexts</b>						
<b>context no</b>	<b>type</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>comment</b>	<b>finds</b>	<b>date</b>
600	Layer	-	0.28	Topsoil	-	-
601	Layer	2.5	2.5-3	Foundations, fill of 605: continuous poured / formed concrete block, inverted T-shape in profile		
602	Layer	-	0.6	Alluvium: mid grey silt clay		
603	Layer	-	0.8	Natural: mid orange silty clay brickearth		
604	Layer	2.5	0.1+	Natural: mid greyish orange gravel (Taplow gravels)		
605	Cut	2.5	2.5-3	Cut for foundations: construction cut for previous building footings, N-S aligned		
606	Layer	2.5	0.5	Demolition / debris /occupation layer: dark greyish brown silty clay, CBM frags, charcoal, slate inclusions		

<b>Trench 7</b>						
<b>General description</b>					<b>Orientation</b>	E-W
The trench was partly monitored under watching brief conditions as it was discovered that the location of this trench coincided with the previous building foundations. These were seen to be 3m deep concrete foundations. The eastern part lay outside the previous foundation impact area and was excavated as a trench.					<b>Avg. depth (m)</b>	1.55
					<b>Width at base (m)</b>	2 (excavated)
					<b>Length at base (m)</b>	7.5 (excavated)
<b>Contexts</b>						
<b>context no</b>	<b>type</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>comment</b>	<b>finds</b>	<b>date</b>
700	Layer	2	0.1	Tarmac: external surface of playground	-	-
701	Layer	2	0.25	Levelling: mid yellow orange sand		
702	Layer	2	0.6	Demolition / debris: mottled greyish brown silty clay, stone, CBM, concrete fragment inclusions		
703	Layer	2	0.3	Levelling: mid yellowish grey gravel		
704	Layer	2	0.3	Demolition / debris /occupation layer:		





				dark greyish brown silty clay, CBM frags, charcoal, slate inclusions		
705	Layer	2	0.4+	Natural: mid orange silty clay brickearth		
706	Structure	0.85+	0.1+	Culvert wall - north: chalk squared blocks, E-W aligned,		
707	Fill	0.85	0.1+	Culvert fill: mid yellowish brown sandy gravel, shell inclusions		
708	Fill	1	0.1+	Culvert construction backfill: construction backfill, mid grey clay		
709	Cut	1	0.1+	Culvert construction cut: E-W aligned, rounded profile		
710	Layer	1	0.6	Alluvium: mid grey silty clay,		
711	Layer	2	0.1	Makeup deposit: mid grey sandy gravel, CBM inclusions		
712	Layer	2	0.3	Disturbed alluvium: mid greyish brown silty clay,		
713	Fill	1	0.2+	Uncertain feature, fill of 714: loose mid orange gravelly sand		
714	Cut	1	0.2+	Uncertain feature: squared in appearance, seen at west end of trench		

<b>Trench 8</b>						
<b>General description</b>					<b>Orientation</b>	N-S
<p>The trench was partly monitored under watching brief conditions as it was discovered that the location of this trench coincided with the previous building foundations. These were seen to be 3m deep concrete foundations.</p> <p>The southern part lay outside the previous foundation impact area and was excavated as a trench.</p> <p>The trench contained a large feature that disturbed most of the southern end and later upper layers that sealed a small E-W aligned ditch. The ditch truncated the alluvial sequence which overlay the natural brickearth. The ditch was of probable post-Roman date.</p>					<b>Avg. depth (m)</b>	1.55
					<b>Width at base (m)</b>	3
					<b>Length at base (m)</b>	3.5
<b>Contexts</b>						
<b>context no</b>	<b>type</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>comment</b>	<b>finds</b>	<b>date</b>
800	Layer	3	0.2	Topsoil: dark grey silty clay, CBM, stone, iron inclusions	-	-
801	Layer	3	0.4-0.8	Demolition / debris / occupation layer: dark black clayey silt, CBM frags, grit, stone inclusions	Metal	
802	Layer	0.75	0.25	Disturbed redeposited alluvium: mid greyish brown silty clay,		



803	Fill	0.5	0.3	Ditch fill, fill of 804: mid grey silty clay, stone and charcoal fleck inclusions	CBM Bone, metal, charcoal, wood	17-19th?
804	Cut	0.5	0.3	Ditch: SW-NE aligned, broad upper part stepped to a narrow vertical side, flat based feature		
805	Layer	0.2	0.15	Redeposited / oxidised natural: mid orange silty clay,		
806	Layer	2	0.4	Alluvium: mid orangey grey silty clay,	Clay pipe	L17-E18th
807	Layer	2	0.16	Alluvium: mid orangey grey silty clay,	pottery	AD 50-100
808	Layer	3	0.1+	Natural: mid orange silty clay brickearth		
809	Fill	3	1.4+	Pit / Disturbance fill of 810: loose dark blackish brown, orange-grey mottling, silty clay with grit inclusions		
810	Cut	3	1.4+	Pit / Disturbance: large feature of unknown origin seen at south end of trench		
811	Cut	0.8	0.35	Uncertain feature: steeply angled sides and a flat base, on east side of trench		
812	Fill	0.8	0.35	Uncertain feature, fill of 811: loose dark brownish black clayey silt		

### Trench 9

<b>General description</b>				<b>Orientation</b>	SW-NE	
The trench contained a large feature that disturbed the western end of the trench and the remains of a brick wall and concrete surface. There were later layers of demolition and debris that overlay the grey alluvial clay which sealed the natural brickearth.				<b>Avg. depth (m)</b>	1.8	
				<b>Width at base (m)</b>	2	
				<b>Length at base (m)</b>	10	
<b>Contexts</b>						
<b>context no</b>	<b>type</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>comment</b>	<b>finds</b>	<b>date</b>
900	Layer	2	0.1	Tarmac: external surface of playground	-	-
901	Layer	2	0.2	Rubble: mid red-yellow grey silty sand, 75% whole and half bricks		
902	Layer	2	0.6	Demolition / debris: reddish grey sand, grit and clay, CBM, stone and mortar inclusions		
903	Layer	2	0.18	Makeup deposit: sterile loose, mid grey sandy gravel		
904	Layer	2	1.1	Alluvium: mid grey clay, rare charcoal flecks		



905	Layer	2	0.36+	Natural: mid orange silty clay brickearth		
906	Layer	2	0.16	Surface: poured pale grey concrete layer		
907	Structure	0.6	0.6	Foundation: poured concrete block		
908	Layer	2	0.05	Surface: paving slabs, external surface, abuts 900		
909	Layer	2	0.16	Bedding: mid brownish yellow coarse sand, for 908		
910	Layer	2	0.54	Topsoil: dark brown clayey silt, west end of the trench only		
911	Layer	2	0.2	Garden soil: mid brown clayey silt, buried garden soil, 4m at the western end of the trench	Pottery, bone	c1835-1900
912	Cut	0.5	0.7	Pit: origin uncertain, vertical sides, flat base		
913	Fill	0.5	0.7	Pit fill, fill of 912: mid grey silty clay, chalk and charcoal inclusions	CBM	L18-19th
914	Fill	2.5	0.8	Uncertain feature: steeply angled side, base not reached, on west side of trench		
915	Cut	2.5	0.8	Uncertain feature, fill of 914: mid orangey brown coarse sand		

<b>Trench 10</b>						
<b>General description</b>				<b>Orientation</b>	E-W	
<p>The trench was extended at the eastern end in order to obtain the full width of the chalk culvert feature which was visible at this end.</p> <p>The majority of the trench was disturbed by a large post-medieval to modern feature along the southern side, with only a small area along the northern and eastern edges intact. The feature contained a significant amount of redeposited natural brickearth.</p> <p>The in situ brickearth was visible at the base of the trench on the northern side. This was overlain by the grey alluvium, which had also been disturbed.</p>				<b>Avg. depth (m)</b>	2.1	
				<b>Width at base (m)</b>	2.10-3.1	
				<b>Length at base (m)</b>	10	
<b>Contexts</b>						
<b>context no</b>	<b>type</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>comment</b>	<b>finds</b>	<b>date</b>
1000	Layer	2.1	0.1	Tarmac: external surface of playground	-	-
1001	Layer	2.1	0.3	Rubble / Demolition: mid red sandy matrix with 90% bricks and brick fragments		



1002	Layer	2.1	0.06	Makeup deposit: loose pale grey gravel		
1003	Layer	2.1	0.08	Makeup deposit: mid yellowish brown silty sand, rare pebbles		
1004	Layer	1	0.16	Makeup deposit: dark greyish black gritty sand		
1005	Layer	1	0.12	Makeup deposit: pale pinkish orange gritty sand		
1006	Layer	1	0.6	Culvert fill: mid brown silty sand, occasional gravel, within the area of walls 1009		
1007	Fill	2.1	1.48	Uncertain feature, fill of 1008: mid brown clayey silt, garden soil, and soot mix with CBM inclusions	pottery	c1890-1925
1008	Cut	2.1	1.5	Uncertain feature: squared large feature, extended across all except the north 0.5m of the trench		
1009	Structure	3	0.5	Culvert walls: chalk squared blocks, E-W aligned, slightly curved inner faces, seen in east end of trench only		
1010	Cut	3.2	0.6	Culvert construction cut: E-W aligned, rounded profile		
1011	Fill	1.4	0.76	Culvert construction backfill: construction backfill, mid grey clay		
1012	Layer	2.1	1.4	Disturbed redeposited alluvium: mid greyish brown silty clay, CBM, stone and charcoal inclusions	pottery	c1830-1850
1013	Layer	2.1	0.9	Natural: mid orange silty clay brickearth		
1014	Layer	1	0.1+	Natural: mid greyish orange gravel (Taplow gravels)		
1015	Fill	2.1	1.5	Uncertain feature, fill of 1008: mixed brownish orange silty clay, CBM inclusions		
1016	Fill	1.2	0.2	Culvert fill, fill of 1010: dark brownish black silty clay, within the area of walls 1009		
1017	Fill	1.14	0.32	Culvert fill, fill of 1010: dark brown clay, occasional chalk flecks, within the area of walls 1009		
1018	Fill	0.4	0.55	Service cut - drain: drainage insertion, E side of trench		
1019	Cut	0.4	0.55	Service fill, fill of 1018: firm mottled black and brown clay and rubble		
1020	Fill	1	0.09	Culvert fill: mid brown silty sand, occasional gravel, within the area of walls 1009		



Trenches 100 – 123 Watching Brief: School of Exploration						
General description						
The area had numerous trenches excavated within it, the contexts were the same throughout. The trenches varied in dimensions and orientation.					<b>Avg. depth (m)</b>	0.9 – 1.3
					<b>Width at base (m)</b>	Min 0.8
					<b>Length at base (m)</b>	Min 1.9
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
10000	Layer	14 x 21.5	0.2	Modern concrete slab		
10001	Layer	14 x 21.5	0.33 – 0.72	In situ material. Demolition debris, garden deposits,	Pottery, CBM, clay pipe	C1840-1870 c19th c1856-1869
10002	Layer	14 x 21.5	0.19 – 0.24	Alluvial layer: Mid grey brown silty clay, possibly implying waterlain	CBM	L18-19th
10003	Layer		0.1	Natural Brickearth: Mid orange silty clay		
10004	Fill	1	0.25	Uncertain Linear Feature: Fill of a 10005, linear feature. Firm dark brownish black silty grit	Pottery, CBM	C1840-1870 L18-19th
10005	Cut	1	0.25	Uncertain Linear Feature N/S aligned, pos foundation cut.		
10006	Fill			Fill of uncertain feature. Firm black Gritty silt.	Pottery,	C1780-1830
10007	Deposit			Concrete foundation: 20th-century?		
10008	Cut			Foundation: cut for concrete footing or foundation, filled by 10007		
10009	Layer	10 x 10	0.2	Bedding layer: for concrete slabs		
10010	Layer	10 x 10	0.1	Modern Concrete slab		
10011	Deposit		0.8 max	Mid brown silty sand deposit, pos 20th-century in date as it associated with existing concrete foundations		
10012	Structure			Drain: Brick and concrete constructed drain. Modern in date		
10013	Layer	2.25	0.2	Demolition layer: consisting of brick rubble. 20th-century in date		
10014	Deposit	3	0.2	Concrete slab, underlying 10000		
10015	Deposit		0.4	Bedding deposit for 10014		
10016	Layer	1.5 x 2	0.2	Concrete pad		
10017	Deposit		0.3 – 0.6	Brown with grey patches silty clay layer, possibly the same as 10002.		



10018	Layer		0.2-0.4	Demolition layer, underlying 10015, possibly a bedding deposit		
10019	Layer	2	0.1	Bedding layer: Layer of gravel, probable bedding layer		
10020	Cut	0.4	?	Unexcavated probable tree throw		
10021	Fill	?	?	Blue grey firm clay fill of 10020		

### Trenches 300 – 310 Watching Brief: School of Possibility

<b>General description</b>			
The School of Possibility again was excavated in a similar way to the School of Probability. So the trenches were individually numbered but the same contexts used		<b>Avg. depth (m)</b>	1.05 – 1.5
		<b>Width at base (m)</b>	0.8 - 2
		<b>Length at base (m)</b>	1.3 – 3.7

#### Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
30000	Layer		0.2	Concrete		
30001	Layer		0.25	Bedding Deposit		
30002	Layer		0.6 max	Made-ground		
30003	Layer		0.1min	Victorian deposits		
30004	Structure	0.7	?	Concrete Beam, runs entire length of site 13m		
30005	Structure	0.3	0.1	Brick wall / foundation runs for a length of 1.1m		
30006	Layer		0.2min	Mid brown silty clay layer		
30007	Structure	0.4	0.6	Brick wall		
30008	Layer	1min	0.2	Mixed back fill		
30009	Layer	1min	0.2	Sand layer		
30010	Layer	1min	0.2-0.25	Garden soil		

### Trenches 400 – 418 Watching Brief: Harkness Courtyard

<b>General description</b>			
The trenches were monitored under watching brief conditions. Again they varied in dimensions.		<b>Avg. depth (m)</b>	0.9 – 1.2
		<b>Width at base (m)</b>	0.7 – 2.5
		<b>Length at base (m)</b>	2.3 - 17.6

#### Contexts

context no	type	Width (m)	Depth (m)	comment	finds	date
------------	------	-----------	-----------	---------	-------	------



40000	Layer	25 x 17.6	0.1 - 0.15	Concrete slab		
40001	Layer	25 x 17.6	0.1 - 0.15	Bedding deposit		
40002	Layer		0.5min	Victorian deposits		
40003	Layer		0.2min	Grey brown alluvial layer		
40004	Layer		0.3 max	Demolition layer		
40005	Structure	0.5	0.25	Brick/concrete foundation		
40006	Cut	0.5	0.25	Construction cut for foundation		
40007	Layer		?	Brickearth natural		
40008	Structure	1.6	0.9min	Modern day manhole shaft		
40009	Layer	6 x 3	0.35-0.4	Foundation / demolition layer		
40010	Layer		0.6	Soft mid brown silty sand adjacent to concrete stanchion		
40011	Structure	0.2	0.2	Modern steel drain.		

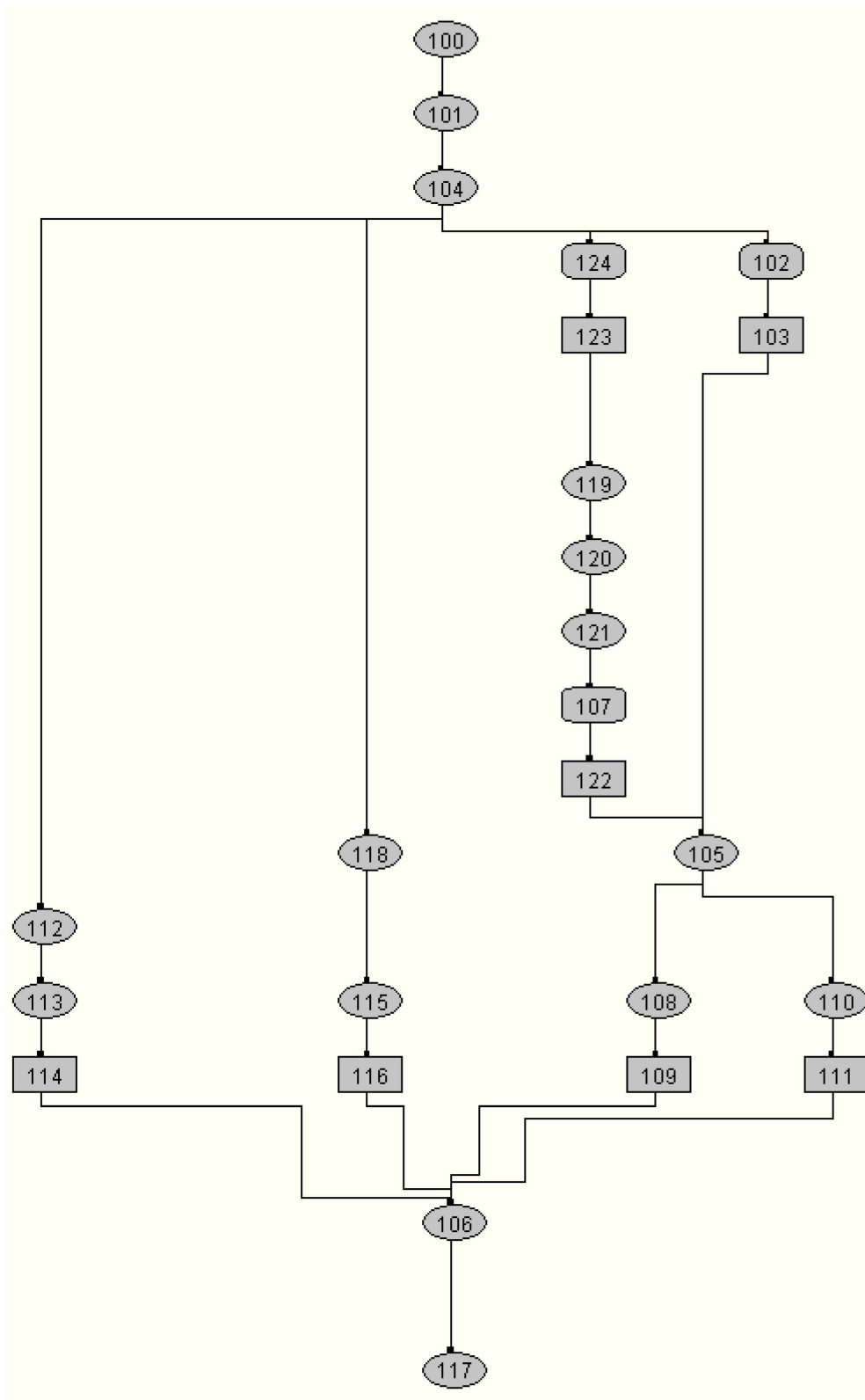
### Trench 11 Watching Brief: Infiltration Tank

General description						
The trenches was monitored under watching brief conditions and was excavated for the insertion of an infiltration tank in the SW part of the site.					<b>Avg. depth (m)</b>	2
					<b>Width at base (m)</b>	5
					<b>Length at base (m)</b>	5
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1100	Layer	5	0.3	Made Ground: firm dark greyish brown, modern crushed material	-	-
1101	Layer	5	0.6	Uncertain: Victorian? friable black clayey silt mix of soil and debris	-	-
1102	Layer	5	0.4	Alluvium: dark grey clayey silt	-	-
1103	Layer	5	0.4	Natural: mid orange silty clay brickearth	-	-
1104	Layer	5	>0.1	Natural: mid greyish orange gravel (Taplow gravels)	-	-



## APPENDIX B. STRATIGRAPHIC DATA

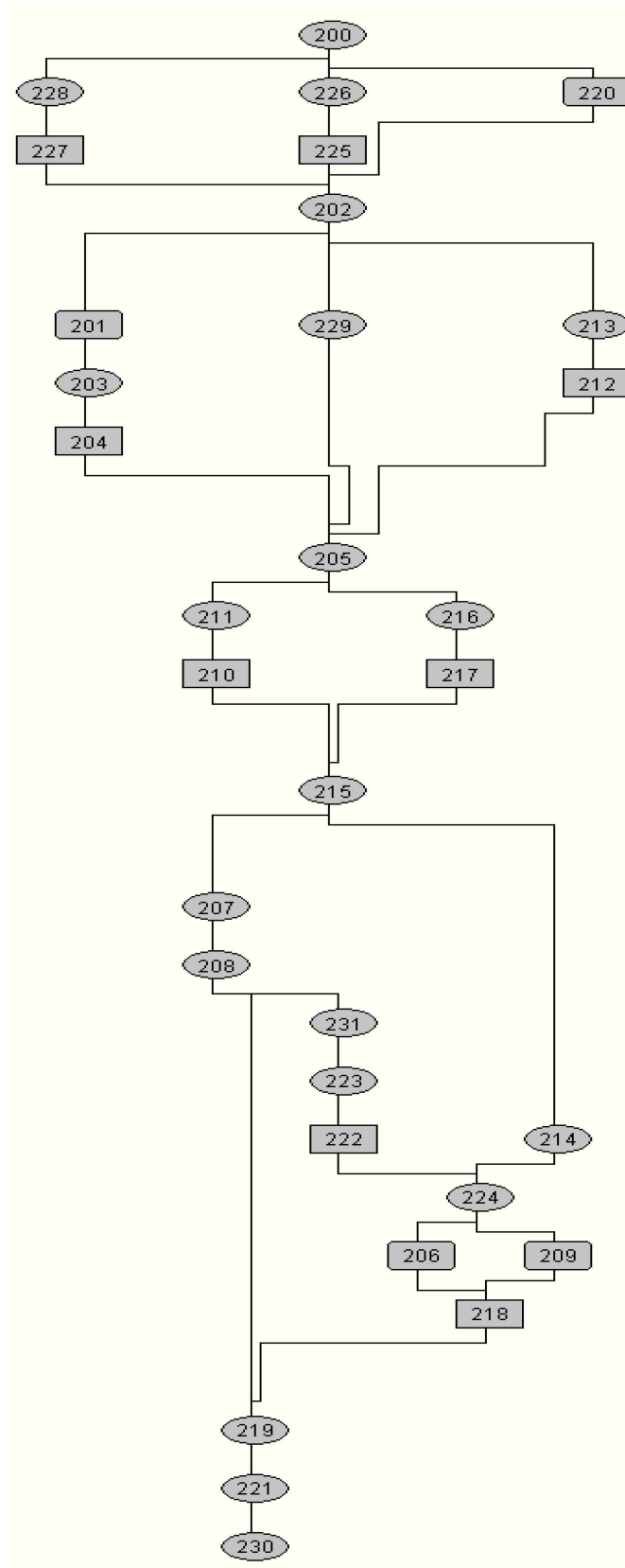
### B.1 Trench 1





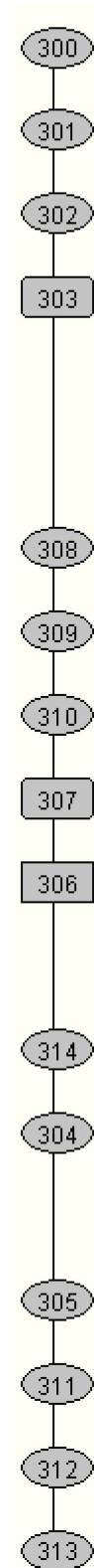


## B.2 Trench 2



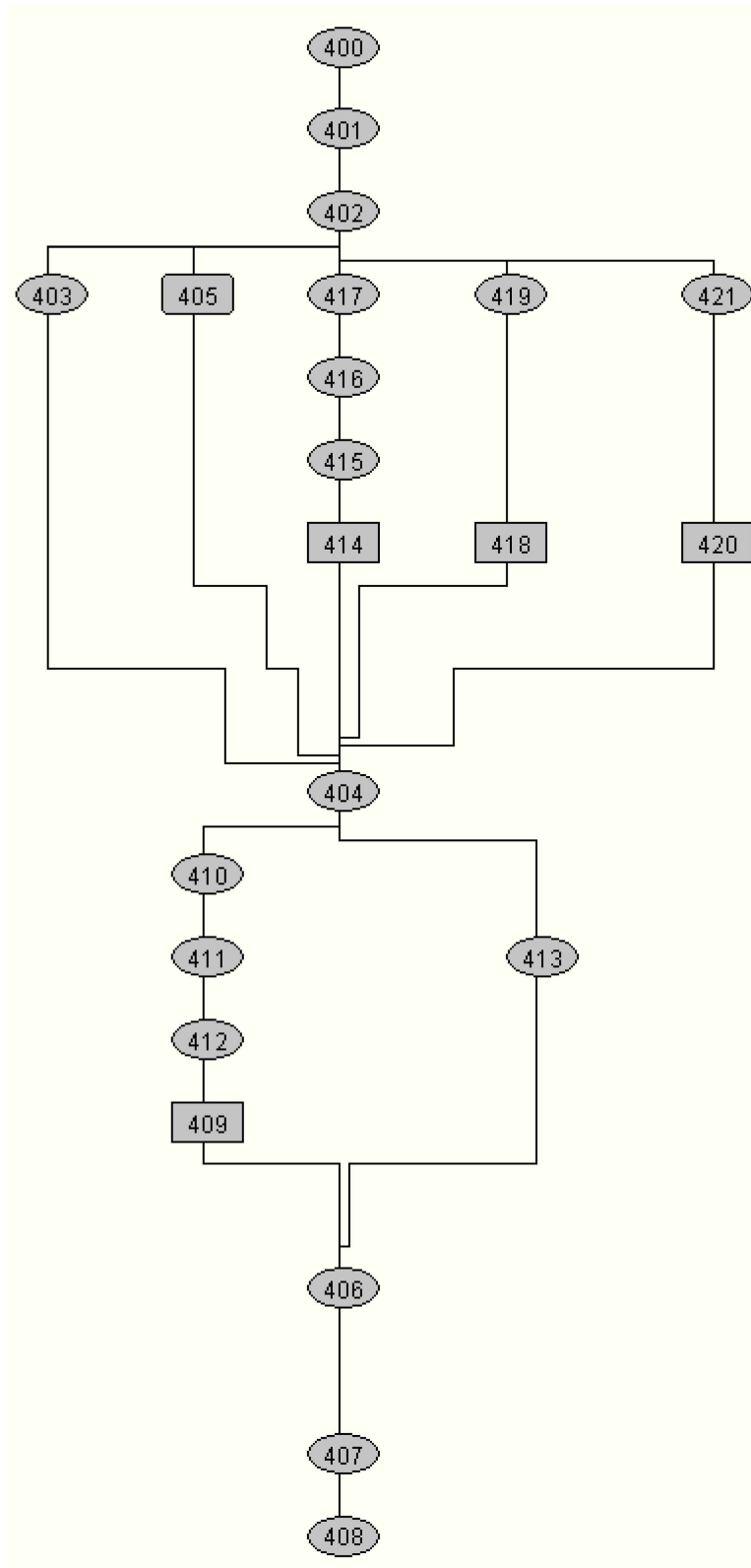


### B.3 Trench 3



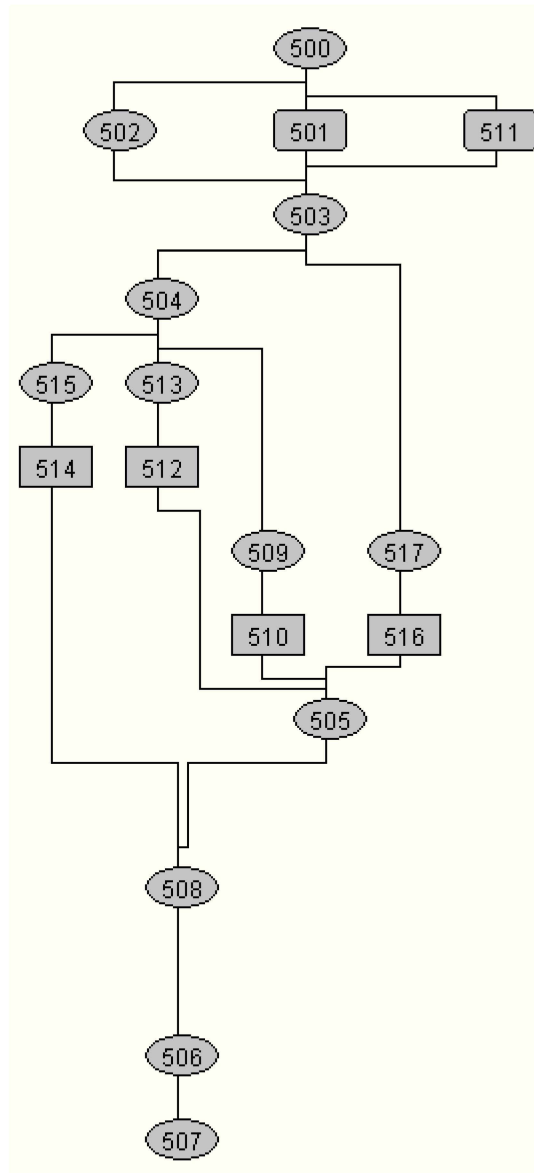


## B.4 Trench 4



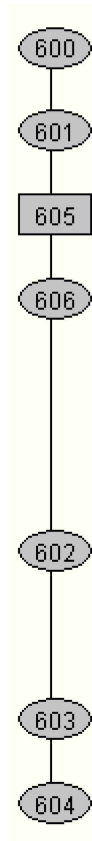


## B.5 Trench 5



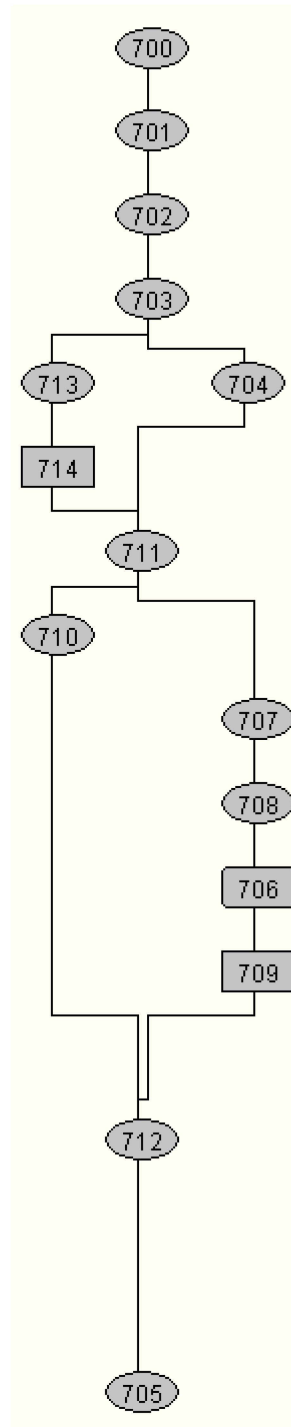


## B.6 Trench 6



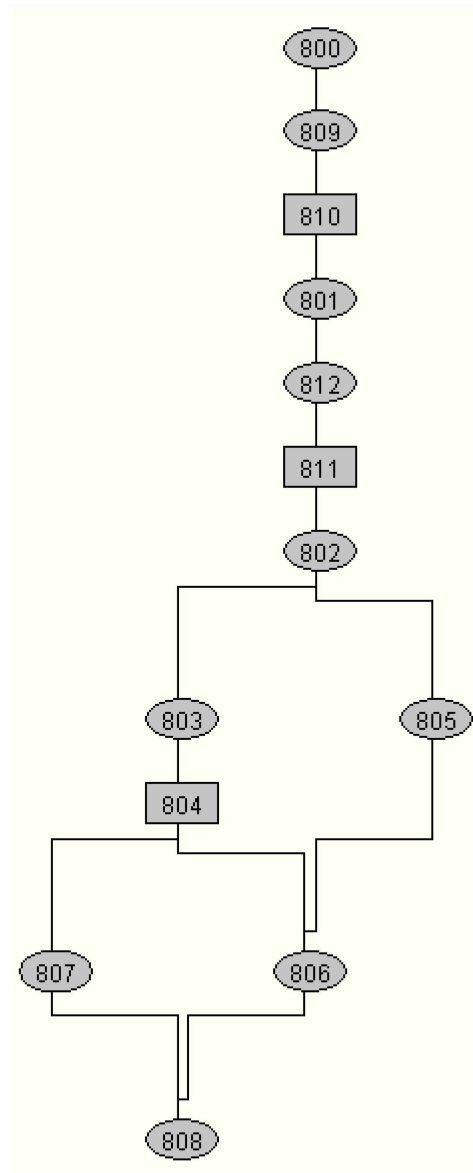


## B.7 Trench 7



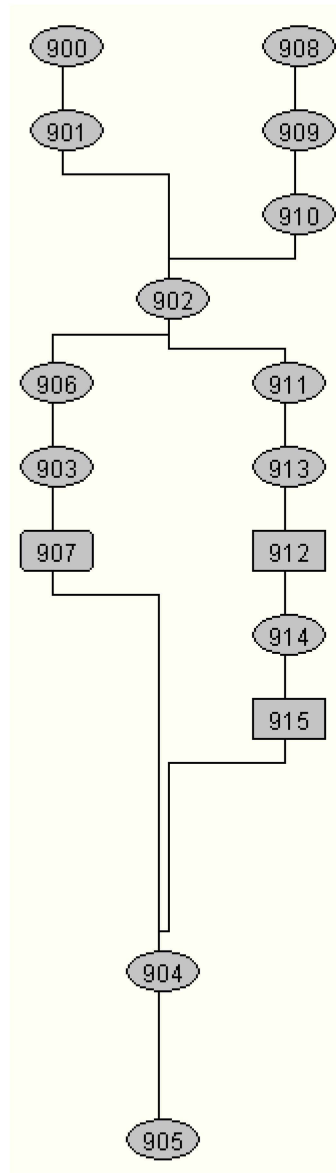


## B.8 Trench 8





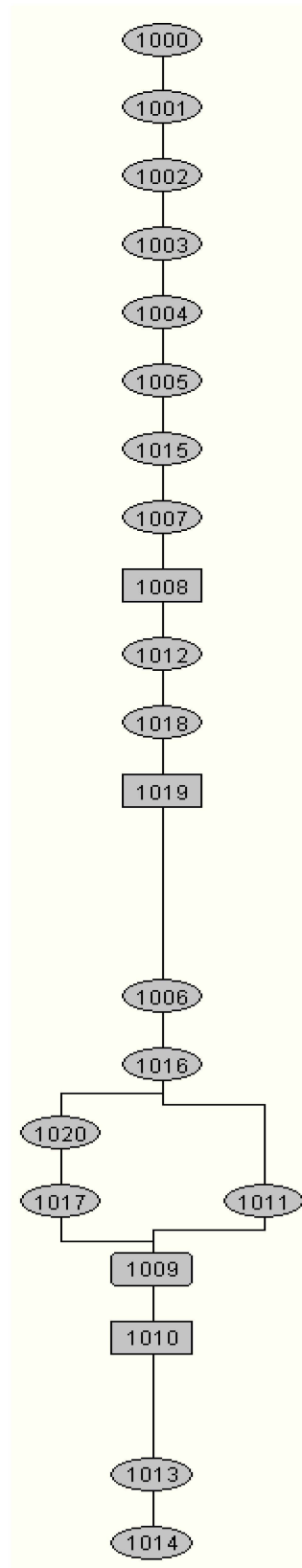
## B.9 Trench 9







## B.10 Trench 10





## APPENDIX C. FINDS REPORTS

### C.1 Roman Pottery

*By Edward Biddulph*

#### **Introduction and methodology**

- C.1.1 A total of 28 sherds of Roman pottery, weighing 363g, was recovered from the site. The pottery was sorted into context groups, which were quantified by weight (in grammes) and sherd count. Fabrics were assigned standard Museum of London fabric codes.
- C.1.2 The pottery spanned the 1st and 2nd centuries AD. The earliest pottery was recovered from context 508. Sherds of grog-tempered ware and glauconite-tempered ware suggest deposition in the mid 1st century AD. South Gaulish samian ware from contexts 113 and 807 also point to deposition in the later 1st century, and a later 1st century date has been tentatively assigned to grey ware and oxidised ware sherds from context 108. Context 112 contained the remains of the rim, shoulder, body and base of a grey ware jar. The vessel, a necked jar with shoulder rilling (equivalent to Going 1987, type 21), can be given a 1st or 2nd century date, though the type is more typical of the 2nd century; the type was made, for example, at Dagenham during the second quarter of the 2nd century (Biddulph 2010, fig. 9, no. 21). The latest pottery was recovered from context 115. The group included the base of a Drag. 31 dish in Central Gaulish samian ware, which dates to the mid-late 2nd century. Pottery of broad Roman date was collected from context 110, and a sherd from an oxidised ware flagon was found as a residual occurrence in 19th-century context, 406.
- C.1.3 Overall, the condition of the pottery was mixed. Most sherds were small and potentially could have been redeposited, but the necked jar and samian ware dish base were represented by relatively large fragments, suggesting that the area of use and original discard was reasonably close to the place of final deposition.
- C.1.4

Context	Spot-date	No. of Fragments	Weight (g)	Comments
108	?AD 40-100	2	7	1x body sherd sandy oxidised ware (OXID); 1x body sherd ?early Roman sandy fabric (ERS)
110	Roman	3	17	1x body sherd sandy grey ware (SAND); 2x sandy oxidised ware (OXID)
112	AD 50-150	1	242	15x sherds from necked jar in fine sandy fabric (grey exterior, orange-brown interior) with shoulder rilling; 2x coarse shell-tempered storage jar sherds
113	AD 50-100	1	7	1x dish rim (Drag. 18) South Gaulish samian ware (SAMLG)
115	AD 160-200	1	55	1x base sherd from Drag. 31 dish, Central Gaulish samian ware (SAMCG), with name stamp (illegible) on interior surface of base
406	Roman (residual)	1	12	1x handle fragment from sandy oxidised ware (OXID) flagon (12g) - Roman
508	AD 40-50	2	20	1x body sherd grog-tempered ware (GROG), 1x body sherd glauconite-tempered fabric (GLAUC)
807	AD 50-100	1	3	1x body sherd South Gaulish samian ware



Context	Spot-date	No. of Fragments	Weight (g)	Comments
				(SAMLG)
<b>Total</b>		<b>28</b>	<b>363</b>	

## C.2 Post-Roman Pottery

*By John Cotter*

### **Introduction and methodology**

C.2.1 A total of 136 sherds of pottery weighing 2.896kg. was recovered. All of this is of post-medieval date, and mainly dates to the later 18th and 19th centuries. The character of the material is entirely domestic. In general the pottery is in a fragmentary but fairly fresh condition with many large fresh sherds present. A few contexts contain groups of sherds that can be reconstructed to obtain complete or near-complete vessel profiles. The small assemblage of Roman pottery from the site is reported on separately (see Biddulph above).

C.2.2 All the pottery was examined and spot-dated. For each context the total pottery sherd count and weight were recorded on an Excel spreadsheet, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg. decoration etc.). Pottery fabrics were recorded in the comments field using the codes of the Museum of London (LAARC 2007) and sometimes by common name also. These are described in some detail in the spot-dates spreadsheet and are therefore only summarised below.

### **C.2.3 Summary**

C.2.4 All the pottery is of post-medieval date. The types present - all common in the London area - are listed below in roughly chronological order:

PMR: Post-medieval red earthenwares, c 1550-1900. Mainly local.

PMBL: Post-medieval Essex black-glazed redware, c 1580-1700.

ENGS: English brown salt-glazed stoneware, c 1670-1900. London, Staffordshire, Bristol etc.

ENPO: English porcelain, c 1745-1925+.

BONE: Bone china, c 1794-1900+.

CREA DEV: Later Creamware, c 1760-1830. Staffordshire, Leeds, etc.

PEAR: Pearlware, c 1780-1840. Staffordshire etc.

PEAR TR: Transfer-printed Pearlware, c 1780-1840. Staffordshire etc.

REFW: Plain refined white earthenware, c 1805-1900+. Staffordshire etc.

TPW: Transfer-printed refined whitewares, c 1780-1900+. Staffordshire etc.

YELL: Yellow ware, 1800-1900+. Staffordshire, Midlands etc.

ENGS BRST: English stoneware with Bristol glaze, c 1835-1900+

C.2.5 Taken in combination with the clay pipe evidence, the earliest post-Roman pottery from the site probably dates from the late 17th or early 18th-century. This comprises a single smallish sherd from a black-glazed redware cup or mug - although this is residual in a 19th-century context (911). The few sherds in post-medieval red earthenware (PMR) appear to be from later 18th- or 19th-century vessels forms including unglazed terracotta flowerpots. There are sufficient examples of refined Staffordshire-type tablewares of this date, including Creamware (CREA DEV) and early transfer-printed whitewares (PEAR TR), to confirm occupation by c 1800 if not slightly before. The



period best represented is the 19th century and Staffordshire-type tablewares and sanitary wares of this date are particularly abundant along with ink bottles and soft drinks bottles in modern English stoneware (ENGS, ENGS BRST). Some of the latter have the impressed marks of well-known drinks manufacturers or local proprietors of the late 19th or early 20th centuries. Some fairly large and well-preserved groups of mid 19th-century pottery were noted including a probable latrine or cess-pit backfill (412) which produced two chamberpots and a sherd from a water closet or wash-basin. Other sherds of vitreous white porcelain noted also seem to come from late 19th- or early 20th-century sanitary ware forms - again probably water closets or wash-basins. In general the range of pottery from the site is typical of late post-medieval domestic assemblages from London area. No further work is recommended.

Context	Spot-date	No. of Fragments	Weight (g)	Comments
<i>Evaluation Trenches</i>				
104	c1870-1900+	8	146	4x vess. Mainly 1 water closer or wash basin in v dense late-looking vitreous white porcelain with traces of blue printed maker's mark. REFW. BONE. 1x bo brown salt-glazed stoneware drainpipe
205	c1830-1870	6	42	4x vess. 1x TPW dish rim - classical dec. 2x REFW sponged ware vess incl bowl rim. 4x bos PMR flowerpot
207	c1830-1870	2	70	2 vess. BONE teacup base & ENPO plate footring with traces gilding
208	c1780-1840	4	91	3x vess. PEAR TR chinese dec plate. CREA DEV bowl or chamberpot. REFW or PEAR bowl footring base
211	c1830-1900	1	9	Flat base sherd ?dish etc in Yellow ware (YELL) with traces of rare maker's stamp on underside in rectangular frame. Too fragmentary & faint to read
213	c1830-1900	4	9	4 vess. Small sherds. Bo TPW, REFW, blue cobalt-glazed majolica (19C). BONE saucer rim
214	c1780-1830	6	142	Min 5 vess. Rim & bo from PEAR PNTD ?saucer with blue & green floral dec. PMR incl profile small dish (plant tray) with int glaze. Bead rim jar or deep bowl with int glaze. Jar bo. Unglazed PMR FLP or poss pantile edge?
215	c1810-1840	5	38	5 vess. Incl PEAR TR plate rim. 2x PEAR PNTD saucer bos. 2x CREA DEV incl plate rim & ?jug handle
302	c1830-1900	4	45	4x vess. REFW, YELL, PEAR TR
307	c1750-1900?	1	23	Bo PMR jar/bowl with late-looking decayed brownish-yellow glaze both sides. Worn
309	c1760-1830	1	3	Small bo CREA DEV
404	c1870-	14	231	Around 12 vess. Incl 3x modern stoneware



Context	Spot-date	No. of Fragments	Weight (g)	Comments
	1900			(ENGS) cylindrical soft drinks or ink bottles incl brown salt-glazed base with large fragmentary square stamp 'H & F--- / [address] 2- WALTER S[TREET]/ BETHNAL G[REEN]' . TPW. BONE. YELL (incl water closet?). REFW (incl blue slipped polish bottle L19C?). PMR (flowerpot). All fairly scrappy
406	c1820-1900	1	4	Saucer rim BONE with lilac sprigged dec. 1x Roman sherd (12g) extracted
412	c1840-1870	21	930	Min 6 vess. Mostly 1x YELL chamberpot profile with broad white slip band on shoulder/girth with unusual blue mocha decoration which has been 'feathered' into a design of scrolling leaves. 1x bo YELL near-stoneware with allover int white slip - poss from a water closet or wash basin? 4x TPW rims/vessels incl chamberpot rim & saucers - 1 with 'flow blue' dec (c1830+). 1x rectang tureen lid. Typical garderobe/latrine fill?
509	c1760-1830	2	6	1 vess. Joining sherds from scalloped plate rim
911	c1835-1900	4	83	3 vess. Incl ENGS BRST small flagon handle. YELL bowl footring base. Residual black-glazed PMBL tyg (cup) bo 17-18C
1007	c1890-1925	7	440	Min 6 vess. Base modern stoneware (ENGS) ginger beer or lemonade bottle with large 'R. WHITE/LONDON/REGd' stamp near base & smaller late square 'DOULTON LAMBETH' stamp, int Bristol-type glaze, ext salt glz. 2x vess BONE. 3x TPW
1012	c1830-1850	2	13	1 vess. Joining sherds from lower wall of small green transfer-printed mug - souvenir/commemorative type with couple holding hands - male figure poss a soldier, female in petticoats, basket of flowers on ground, church in background, fragmentary inscription - prob poem or song - 3 lower lines remaining '-----[hear]ts sing,/----- of spring,/----- look green' . Prob overglaze transfer - stippled
				<b>Watching Brief</b>
10001	c1840-1870	37	504	About 15 vess. TPW plates, REFW (incl sponged), ENPO (pink lustre) PMR (Flowerpot), YELL, CREA DEV. REFW incl base of Staffordshire figurine
10004	c1840-1870	3	16	3 vess. BONE saucer rim with lilac sprigged dec. Rim Rockingham ware moulded ?vase. Bo ENGS small ink bottle 19C
10006	c1780-1830	3	51	3 vess, incl 2x bos PEAR TR plates. 1x bo large PMR storage jar (?) with trace of arched lug handle



Context	Spot-date	No. of Fragments	Weight (g)	Comments
<b>Total</b>		<b>136</b>	<b>2896</b>	

### C.3 Clay Pipe

*By John Cotter*

#### **Introduction and methodology**

C.3.1 The excavation produced a total of 38 pieces of clay pipe weighing 184g. These have been spot-dated and a given a basic catalogue. The catalogue records, per context, the quantity of stem, bowl and mouth fragments, the overall sherd count, weight, and comments on condition and any makers' marks or decoration present. The comments field has been expanded in this instance to include additional information on parallels and any other observations worthy of note. Most of the pipe bowls can be reasonably closely paralleled with those published in Oswald's simplified national typology (Oswald 1975, fig. 3G-4G) and with other assemblages from London (Atkinson and Oswald 1969).

#### **C.3.2 Summary of the assemblage**

C.3.3 In total there are ten pieces of pipe bowl, two mouthpieces and 26 stem pieces. The pipes are in a mixed condition. The earlier pieces are more fragmentary and slightly worn; the 19th-century pieces are mainly fresh, including complete bowls, although some are fragmentary.

C.3.4 The assemblage can be divided roughly into two groups. The first group comprises the earliest pieces - mostly individual stem fragments and one bowl fragment all datable to the late 17th or early 18th centuries. These mostly occur in isolation and some are fairly worn (Ctxs 208, 214, 223, 406, 505, 509, 806). The pipe bowl fragment is from the base of a bowl with a small oval heel and is recognisable as one or other of two common London bowl types datable to either c 1660-1680 or c 1680-1710, although it is associated with 19th-century pottery and must therefore be residual in its context (Ctx 406). Seven other pipe stems are of approximately the same date confirming activity in the area about this time.

C.3.5 The second group comprises several complete mid 19th-century pipe bowls or decorated stems - some with the marks of local pipemakers from the Mile End Road and Dockhead (eg. Ctxs 214, 215 and 10001: see catalogue for full details). These occur in larger assemblages of between four and twenty fragments and are much less likely to be residual than the earlier pipes. The marked and decorated 19th-century pipes have the potential to extend the known typology of clay pipes in this part of London and may contribute to more detailed studies of this kind in the future. Otherwise the assemblage is fairly typical of London pipe assemblages and no further work is recommended.

Context	Spot-date	No. of Fragments	Weight (g)	Comments
<i>Evaluation Trenches</i>				
208	Late 17 – early 18 <sup>th</sup>	1	8	Slightly worn thick early stem. SB c3mm



Context	Spot-date	No. of Fragments	Weight (g)	Comments
	century			
213	Late 17 – 19 <sup>th</sup> century	1	1	Stem bore c 2mm. Narrow stem
214	c1805-1840	5	28	2x fresh complete pipe bowls incl 1 with 115mm length stem attached with 'TB' mark on spur & incuse shield stamp on back of bowl 'BALME/MILE/END' for Thomas Balme of Mile End Road, Whitechapel c1805-40 (Atkinson & Oswald 1969, 217). Other bowl with broken spur with trace of rosette on spur, bowl with rusty staining. 1x L17/18C stem
215	c1832-1840	4	9	19C fresh stems incl 2 highly decorated small frags (same pipe?) 1 from near bowl end with finely moulded ?fish scale dec on neck of bowl, maker's mark (partial) in cartouche on both sides 'T. SH-----/-----HEAD' (?) prob for Thos Shipway, John Street, Dockhead (A&O 1969, 224). Other dec stem with delicate leaf & berry dec
223	Late 17 – early 18 <sup>th</sup> century	1	4	Fairly fresh thick early stem. SB c3mm
302	19 <sup>th</sup> century	1	1	Fresh late narrow stem
406	c1660-1710	1	10	Fresh but damaged bowl base & stem (SB c2.5mm) - bowl with smallish oval heel - probably a 1660-1680 or a 1680-1710 type
505	Late 17 – early 18 <sup>th</sup> century	1	10	Slightly worn/weathered early stem. SB c2.7mm
509	Late 17 – early 18 <sup>th</sup> century	2	9	1x fresh stem SB c2.5mm. 1 worn with SB c2.7mm
806	Late 17 – early 18 <sup>th</sup> century	1	5	Fresh stem. SB c2.5mm
<b>Watching Brief</b>				
10001	c1856-1869	20	99	Fresh incl 5 complete bowls, 2 broken & long stem frags to 125mm. Used. Spurred 19C bowls most with v faint marks poss ?'OC' or 'CC' or 'GC'. 1 with mark 'WY' on spur - prob for William Young of Artichoke Row, Mile End 1856-69 (A&O 1969, 225). Bowls plain except 1 with oakleaf & acorn moulded seams. 1x briar-type mouthpiece - mid 19C+
<b>Totals</b>		<b>38</b>	<b>184</b>	



## C.4 CBM (Ceramic Building Material)

By John Cotter

### Introduction and methodology

- C.4.1 The CBM assemblage comprises 38 pieces weighing 5.120kg from 20 contexts. This was examined and spot-dated during the present assessment stage following standard Oxford Archaeology procedures and the data recorded on an Excel spreadsheet. As usual, the dating of broken fragments of ceramic building materials is an imprecise art and spot-dates derived from them are necessarily broad and should therefore be regarded with caution.
- C.4.2 Nearly all this material (like the pottery above) dates to the late post-medieval period and mostly, perhaps, to the 19th century. The assemblage is of a mixed nature and varies in condition from a complete 19th-century house brick (Ctx 511) to small worn scraps of cindery brick and grey mortar. The earliest piece is a small worn piece of flat pale orange-brown tile which appears to be Roman in date, though possibly residual (Ctx 108). There are several large fresh fragments of late 18th- or 19th-century unglazed brick-red quarry (floor) tiles. A couple of these may show evidence of being scorched in a fire (Ctxs 214, 215). Fragments of flat red roofing tile of a similar appearance and date also occur. There are also some large fresh fragments of glazed 'kitchen' or 'bathroom' type wall tiles, which probably date the first half of the 20th century. A probable piece of chimney pot was also noted. Further details are recorded in the spot-dates spreadsheet. No further work is recommended.

Context	Spot-date	No. of Fragments	Weight (g)	Comments
<i>Evaluation Trenches</i>				
104	c1910-1940?	3	85	2x fresh frags 'modern' glazed wall tiles: 1 with grey- brown marbled or agate glaze on cream/yellow fabric (typical 1920s-30s fireplaces etc) & with traces moulded keying & lettering on back. 1 scrap purple-glazed tile (REFW). 1x small frag v coarse 'industrial floor tile red unglazed
108	Roman	1	18	Small worn piece flat tile (9mm thick) in pale orange-brown fairly sand-free fabric with thin blue-grey core. Sanded underneath. Probably Roman (Ed Biddulph). Looks very different to post-med tile from this site
112	18-19 <sup>th</sup> century	3	11	Scraps of cindery Victorian-looking brick
207	Late 18-19 <sup>th</sup> century	2	328	Edge frag thick late post-med quarry (floor) tile 43mm thick, in brick red fabric. Fresh late roof tile corner - red
208	Late 18-19 <sup>th</sup> century	1	82	Flake from late red quarry tile as above
214	Late 18-19 <sup>th</sup> century	1	695	Fresh side/corner frag quarry tile in hard light orange brick-like fabric. 29mm thick. V neatly made with sharp edges - prob 19C? Possibly scorched on broken edge?
215	Late 18-	2	635	Fresh side/corner frag quarry tile in hard light





Context	Spot-date	No. of Fragments	Weight (g)	Comments
	19 <sup>th</sup> century			orange brick-like fabric. 29mm thick. V neatly made with sharp edges - prob 19C? Possibly scorched on broken edge?
223	Late 18-19 <sup>th</sup> century	1	28	Fresh edge frag late red flat roof tile
302	c1850-1925	4	35	Fresh frags of at least 2 plain white glazed kitchen/bathroom-type wall tiles (REFW). Moulded keying on backs. Prob later 19C/E20C
310	Late 18-19 <sup>th</sup> century	1	53	Worn frag late red flat roof tile
404	19 <sup>th</sup> century	3	90	Frag moulded hollow off-cream brick as in (10001). 2x late red roof tile frags
406	Late 18-19 <sup>th</sup> century	1	11	Worn edge/corner frag orange mortar or underfired brick?
505	Late 18-19 <sup>th</sup> century	1	57	Edge frag late red flat roof tile
509	Late 18-19 <sup>th</sup> century	4	34	Scrap late-looking brick or quarry tile corner, overfired with ash glaze. Scraps red brick, roof tile & grey mortar
511	Ealy to mid 19 <sup>th</sup> century	1	2440	Complete orange-red house brick with early-looking shallow rectangular frog possibly with 3 illegible letters or symbols impressed - either from mould or fingers? Thick pale grey mortar on underside
803	17-19 <sup>th</sup> century?	1	6	Scrap soft red brick
913	Late 18-19 <sup>th</sup> century	2	109	Fairly fresh frags. Late-looking red roof tile
<b>Watching Brief</b>				
10001	19 <sup>th</sup> century	4	272	Joining frags (fresh breaks). Parts of neatly moulded hollow rectangular brick - poss an air brick or a just a light hollow brick for ceilings and vaults etc. Refined cream/yellow fabric (like chimney pots). Traces hard grey mortar
10002	Late 18-19 <sup>th</sup> century	1	116	Fresh late-looking red roof tile corner
10004	Late 18-19 <sup>th</sup> century	1	15	Damaged frag poss from rim of red terracotta chimney pot? Sooted int



Context	Spot-date	No. of Fragments	Weight (g)	Comments
<b>Total</b>		<b>38</b>	<b>5120</b>	

## C.5 Metal

*By Ian R Scott*

### **Introduction and methodology**

- C.5.1 The metal finds include 9 small fragments of cu alloy wire (context 309), 1 nail (context 509), and 2 nail stem fragments (contexts 214 and 803). Additionally from soil samples there are 3 small fragments of iron wire, 2 fragments from context 112 (sample 1) and 1 from context 118 (sample 3). There are also some fine iron particles from context 112 (sample 1).
- C.5.2 There are in addition to the smaller finds, three large enamelled advertising sign, probably from a shop front. All three signs are from context 8001:
- C.5.3 1) Enamelled sign, 605mm x 304mm, green ground with white lettering with black shadowing: 'BRITISH OAK | SHAG | SOLD HERE'.
- C.5.4 2) Enamelled sign, 1066mm x 304mm, white ground with black lettering bordered in green: '“WAVERLEY” | CIGARETTES'
- C.5.5 3) Enamelled sign, 1010mm x 304mm, white ground with black lettering bordered in green: '“WAVERLEY” | MIXTURE'
- C.5.6 All three signs are for brands sold by Lambert and Butler. The dating of the signs is more difficult since the products were sold and advertised from the later 19th up until the latter part of the 20th-century. Indeed Lambert & Butler as brand name still exists. The style and colouring of the signs suggest that they might date from between the First and Second World War.
- C.5.7 The metalwork assemblage is very small and none of the metalwork datable.

## C.6 Animal Bone

*By Lena Strid*

### **Description and recommendations**

- C.6.1 A small assemblage of 23 pieces of animal bone weighing 307g was recovered from 14 contexts. The majority of the assemblage was acquired by manual retrieval during excavation of layers and features. The smaller fraction of animal bones was obtained from the bulk samples taken from features in Trench 1. The assemblage is generally of low potential and requires no further work.
- C.6.2

Context Number	Description	Weight (g)
<b>Evaluation Trenches</b>		
108	1 unidentifiable fragment,	8
112	1 medium mammal long bone fragment,	3
112	Sieved from sample <1> 2 bags burnt unidentifiable fragments,	4
112	Sieved from sample <1> 1 micro-fauna tibia, 3 fish bones, 1 small rodent tooth, 1 frog humerus,	2



Context Number	Description	Weight (g)
115	Sieved from sample <2> 2 unidentifiable fragments,	4
118	Sieved from sample <3> Medium mammal phalanx fragment,	3
211	1 dog humerus with old fracture/extra muscle attachment; 1 dog occipital condyle; dog atlas/axis and cervical vertebra,	77
302	1 small mammal humerus fragment,	2
307	5 cattle pelvis fragments,	90
404	1 medium mammal rib fragment, 1 cat metacarpal,	4
406	1 medium mammal long bone fragment,	12
412	1 sheep tooth,	2
412	1 unfused cat femur, 1 fused cat tibia and 1 fused cat humerus,	13
803	1 unidentifiable burnt fragment,	3
911	3 fragments of sheep skull with horn core chopped off,	50
<b>Watching Brief</b>		
10001	1 medium mammal rib fragment, 1 sheep tibia fragment,	30
<b>Totals</b>		<b>307</b>

## C.7 Miscellaneous Finds

*By Geraldine Crann*

### C.7.1 The Flint

C.7.1 The single unworked flint from 406 is residual in the disturbed alluvium layer within Trench 4. The assemblage is of low potential and requires no further work

Context Number	Description	Weight (g)
406	1 piece burnt unworked flint,	28

### C.7.1 The Charcoal

C.7.2 The single fragment came from the fill of the ditch seen in Trench 8. It was too fragile to separate from the soil to which it was attached, and had already broken up. No identification to species was therefore possible. The assemblage is of low potential and requires no further work.

Context Number	Description	Weight (g)
803	1 fragment charcoal,	1



### C.7.1 The Coal

C.7.2 The piece of coal from Trench 2 came from the deliberate sandy backfill in the upper sequence of the culvert fill. The coal from the Watching Brief area came from the Victorian layer. The assemblage is of low potential and requires no further work.

Context Number	Description	Weight (g)
215	1 piece coal	10
10001	4 pieces coal	4

### C.7.1 The Leather

C.7.2 The single, small piece of leather came from a sample taken from ditch 114 in Trench 1. The assemblage is of low potential and requires no further work.

Context Number	Description	Weight (g)
112	Sieved from sample <1> 1 small piece dried leather,	2

### C.7.1 The Stone

C.7.2 The piece of shale from Trench 2 came from the lower, accumulated fill in the sequence of the culvert fills. In addition a slate pencil from Trench 10 was recovered and is of probable late 19th- or early 20th-century date. The assemblage is of low potential and requires no further work.

Context Number	Description	Weight (g)
214	1 fragment ?shale,	7
1001	slate pencil (L: 69mm; D: 5mm)	-

### C.7.1 The Shell

C.7.1 Six oyster valves were recovered. It is more likely that they represent food waste rather than building material.

Context Number	Description	Weight (g)
404	2 oyster shells,	32
505	1 oyster shell,	22
10001	3 oyster shells,	89

### C.7.1 The Wood

C.7.2 The single fragment came from the fill of the ditch seen in Trench 8. The assemblage is of low potential and requires no further work.



<b>Context Number</b>	<b>Description</b>	<b>Weight (g)</b>
803	1 piece dried wood,	2



## APPENDIX D. ENVIRONMENTAL REPORTS

### D.1 Environmental samples

By Sharon Cook

#### **Introduction**

D.1.1 This report describes three samples taken from the evaluation at 21 Pitchford Street, Stratford, London, in January 2013.

D.1.2 Sample <1> (112) was taken from a secondary fill within a Roman ditch [114], sample <2> (115) was taken from a secondary fill within Roman ditch [116], while sample <3> (118) was taken from a layer overlying these features.

#### **Aims**

D.1.3 Sampling was undertaken to:

D.1.4 Determine whether ecofacts and environmental evidence (such as plant remains, animal bone, human bone and molluscs) are present.

D.1.5 Determine the quality, range, state and method of preservation of any ecofactual evidence.

D.1.6 Recover and identify any small artefacts.

D.1.7 Make further recommendations about sampling for future excavations at the site.

#### **Methodology**

D.1.8 Three samples were processed for the recovery of charred plant remains (CPR) by water flotation using a modified Siraf style flotation machine. The flot was collected on a 250µm mesh and the heavy residue sieved to 500µm; both were dried in a heated room, after which the residue was sorted by eye for artefacts and ecofactual remains.

D.1.9 The flot was scanned for charred plant remains using a binocular microscope at approximately x10 magnification. Nomenclature for the plant remains follows Stace (2010).

#### **Results**

D.1.10 **Sample <1>** (112) was a brownish yellow sandy clay. 10L was processed for the recovery of CPR and artefacts. Fragments of calcinated bone, ceramic building material, glass and iron were present within the residue as well as a single small piece of leather. Three small fish bones, one amphibian humerus and a small rodent tooth were also present. The sample yielded approximately 100g of flot material.

D.1.11 The flot for this sample was rich in charcoal, with a significant proportion of fragments being greater than 2mm and therefore potentially identifiable. Modern roots were plentiful and a small number of modern weed seeds were also present. A number of charred seeds were present in this flot: one *Galium aparine* L. (cleavers), and one *Anthemis cotula* L. (stinking chamomile) could be clearly identified, but most of the seeds were unidentifiable, however. Two *Persicaria* sp. (Mill) (knotweed), could be identified to genus although not to species. In addition two seeds could only be identified as *Cyperaceae* (sedge), two as small grass seeds (*Poaceae*), and two as *Polygonaceae* (knotweed family).

D.1.12 A small quantity of charred grain was observed within this sample. The majority was identified as *Triticum* sp. (wheat) while three grains were identified as *Avena sativa* L. (oats) and another as *Hordeum vulgare* L. (barley); one oat grain and the barley had begun to sprout. A single wheat glume base was also noted. One small fragment of legume was also observed.



- D.1.13 **Sample <2>** (115) was a pale brown silty clay with occasional flint pebbles. 10L was processed for the recovery of CPR and artefacts. Two badly degraded fragments of mammal bone were present in the residue, it was impossible to identify these to element or species. No other finds were noted. The sample yielded approximately 10g of flot material.
- D.1.14 The flot for this sample was poor in charcoal, with most pieces being too small for identification although their preservation was good. There were very few other plant remains present within the flot, Three weed seeds were too degraded to be identified to species as was a single fragment of legume. Modern roots were plentiful.
- D.1.15 A small quantity of charred grain was observed within this sample. Six fragments of grain were identified as *Triticum sp.* (wheat) together with 2 fragments of glume wheat chaff and a small piece of *Avena sativa* (oat) was also present.
- D.1.16 **Sample <3>** (118) was an olive yellow sandy clay with occasional flint pebbles. 8L was processed for the recovery of CPR and artefacts. One small fragment of bone which was identified as the phalanx of a sheep sized mammal, and a small Fe fragment were recovered from the residue. The sample yielded approximately 10g of flot material.
- D.1.17 The flot for this sample was poor in charcoal, with most pieces being too small for identification although their preservation was good. There were very few other plant remains present within the flot, one small grass seed was unidentifiable to species while a weed seed was identified as *Persicaria sp.* (Mill) (knotweed). Modern roots were plentiful.
- D.1.18 A small quantity of charred grain was observed within this sample. These were identified as *Triticum sp.* (wheat).

#### **Discussion**

- D.1.19 While samples <2> and <3> were poor in charred plant remains, sample <1> was rich in charcoal and other charred plant remains. The preservation of the charcoal was very good in this sample, with many of the fragments potentially identifiable to taxon, indicating that the potential for survival of charred plant remains is good on this site. All samples taken were quite small and this will have affected recovery. The seeds identified are mostly inhabitants of waste/rough ground and are frequently found near to habitation and/or cultivated ground. The animal bone preservation appears poor, however all pieces recovered from samples were small and may have been residual in nature. Despite the presence of leather in sample <1> no other evidence of waterlogging was found in the sample.

#### **Conclusions and Recommendations**

- D.1.20 If further excavations are carried out, standard 40L bulk samples should be taken from a range of potentially datable features across the site and should be in accordance with the most recent sampling guidelines (e.g. Oxford Archaeology, 2005 and English Heritage, 2011).
- D.1.21 The finds from the sample have been passed to the Finds department and will form part of the finds compendium for the site.



## APPENDIX E. BIBLIOGRAPHY AND REFERENCES

Atkinson, D. and Oswald, A. 1969 'London clay tobacco pipes', *Journal of the British Archaeological Association* XXXII, 171-227

English Heritage, 1991, *Management of Archaeological Projects*

London Borough of Newham, 2001 Unitary Development Plan

MoLAS, 1999 General Standards for the Preparation of Archaeological Archives Deposited with the Museum of London

GLAAS Greater London Archaeology Advisory Service, 2009, Standards for Archaeological Work, London Region, English Heritage External Consultation Draft, July 2009

Oswald, A., 1975 *Clay Pipes for the Archaeologist*, BAR 14

Oxford Archaeology, 2005, *Archaeology of the Jubilee Line Extension: Prehistoric and Roman Activity at Stratford Market Depot, West Ham, London, 1991-93*, MoLAS

Oxford Archaeology, 2005, OA Environmental Sampling Guidelines and Instruction, Manual

Oxford Archaeology, 1992, Fieldwork Manual, (Ed. D Wilkinson, first edition, August 1992)

Powell, W., 1986 West Ham 1886-1986, *Victoria County History, Essex*, Vol VI

Southwark Archaeological Excavations Committee, 1973-12 Excavations at New Hibernia Wharf, *London Archaeologist* Vol 2 Issue 5

Sadarangani, F., 2003 Archaeological Desktop Assessment of land at Rokeby School, Rokeby Street, London Borough of Newham, unpublished client report prepared by Pre-Construct Archaeology for the London Borough of Newham

Stace, C., 2010 (third edition) *New Flora of the British Isles*, Cambridge University Press

### Cartographic Sources

British Geological Survey, 1966 Sheet 256

Ordnance Survey 1799 OS Surveyor's sketch of Stratford-le-Bow, British Library

Ordnance Survey 1916 1:2500 map of Stratford, north-east London

### Websites

<http://www.museumoflondon.org.uk/laarc/catalogue/>

[http://ads.ahds.ac.uk/catalogue/adsdata/arch-457-1/dissemination/pdf/vol02/vol02\\_05/02\\_05\\_099\\_103.pdf](http://ads.ahds.ac.uk/catalogue/adsdata/arch-457-1/dissemination/pdf/vol02/vol02_05/02_05_099_103.pdf)

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer>

LAARC, 2007 Post 1992 Museum of London code expansions: Post-Roman pottery.  
[http://www.museumoflondonarchaeology.org.uk/NR/rdonlyres/F0118AAF-EF24-4228-A07A-39F89E6F092E/0/post92mol\\_post\\_roman.pdf](http://www.museumoflondonarchaeology.org.uk/NR/rdonlyres/F0118AAF-EF24-4228-A07A-39F89E6F092E/0/post92mol_post_roman.pdf)





## APPENDIX F. SUMMARY OF SITE DETAILS

**Site name:** School 21 (Old Rokeby School), Pitchford Street, Stratford, Newham, London

**Site code:** ORS12

**Grid reference:** NGR 538891, 184055

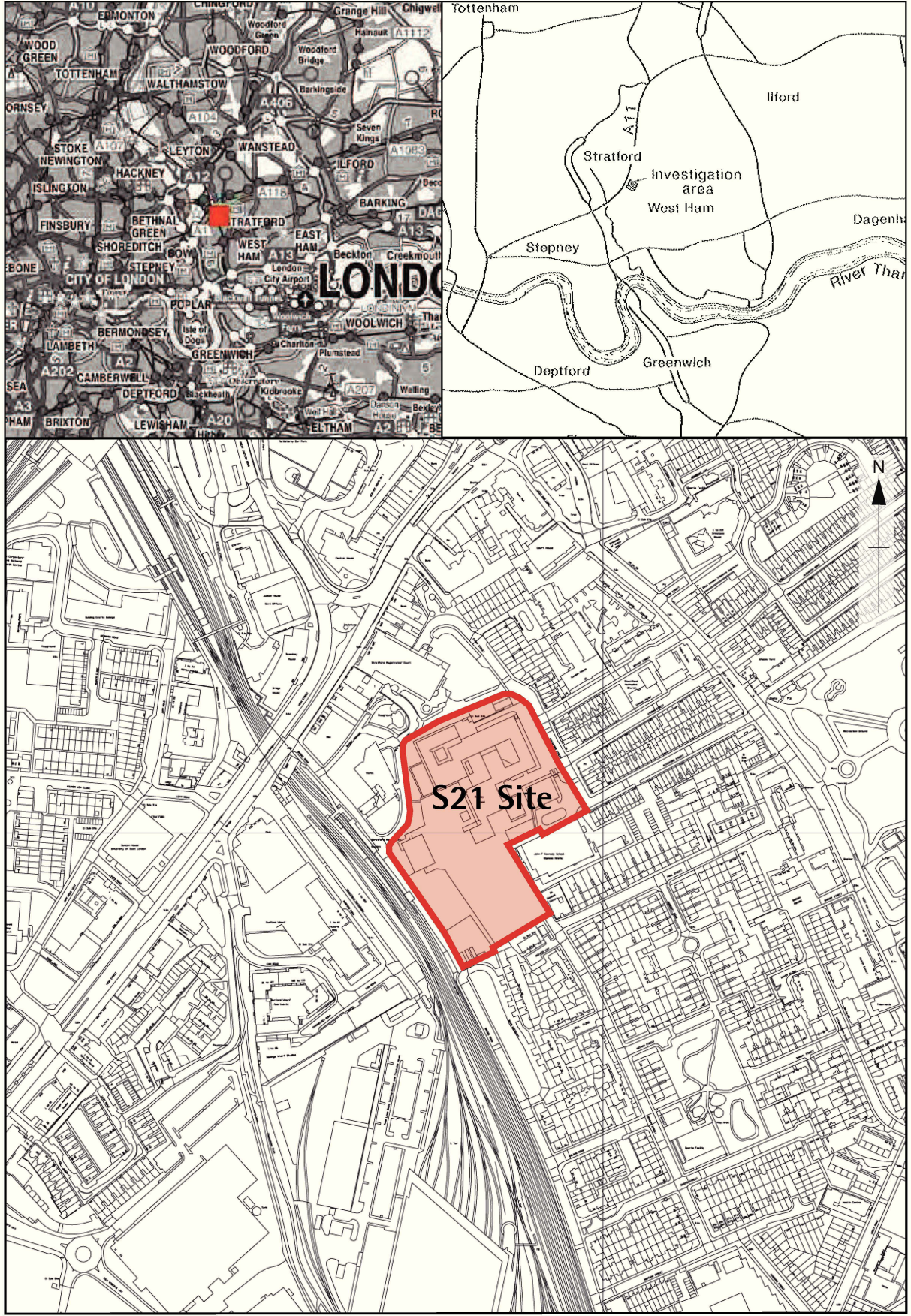
**Type:** Evaluation

**Date and duration:** 4.5 months, from 12th December 2012 to 23rd April 2013

**Area of site:** 3.2 ha.

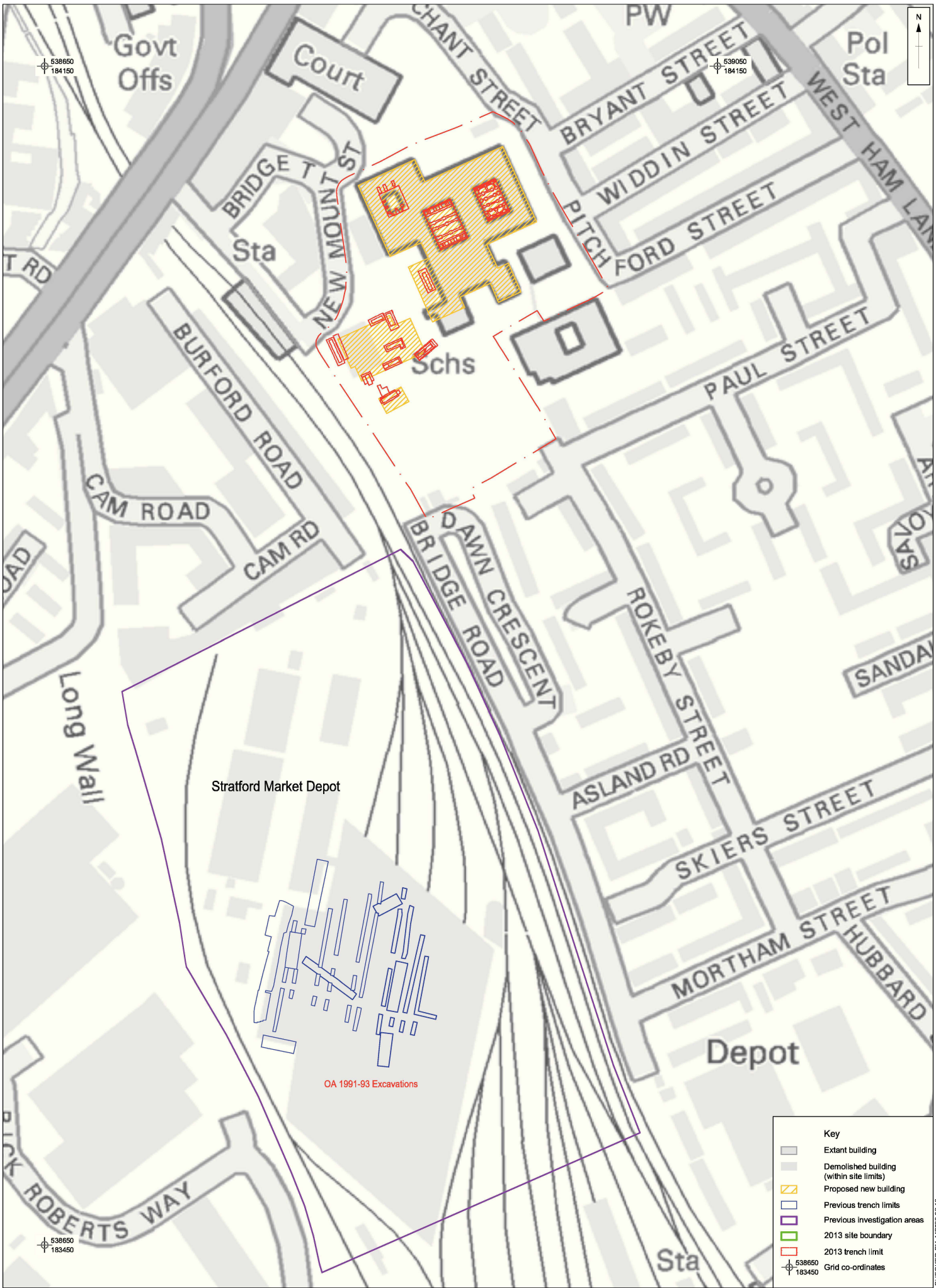
**Summary of results:** The site occupies low-lying ground formerly on the floodplain of the Channelsea River. Evaluation trenching, further mitigation trenching and Watching Brief revealed a small number of Roman features at the west edge of the site. These were overlaid by alluvium, and the site was reoccupied from the late 17th-18th centuries, when chalk-built culverts and other ditches were dug to improve drainage. Occasional pits and other features attest to limited occupation in the later 18th and early 19th centuries, before the site was developed as a Victorian housing estate, from which a latrine pit and a number of brick walls were observed.

**Location of archive:** The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Museum of London (LAARC) in due course, under the following accession number: .....



Reproduced from the Landranger 1:50,000 scale by permission of the Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office © Crown Copyright 1996. All rights reserved. Licence No. AL 10000569

Figure 1: Site location



Key	
	Extant building
	Demolished building (within site limits)
	Proposed new building
	Previous trench limits
	Previous investigation areas
	2013 site boundary
	2013 trench limit
	Grid co-ordinates

Contains Ordnance Survey Data © Crown copyright and database right 2013

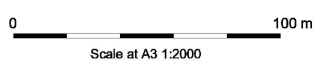
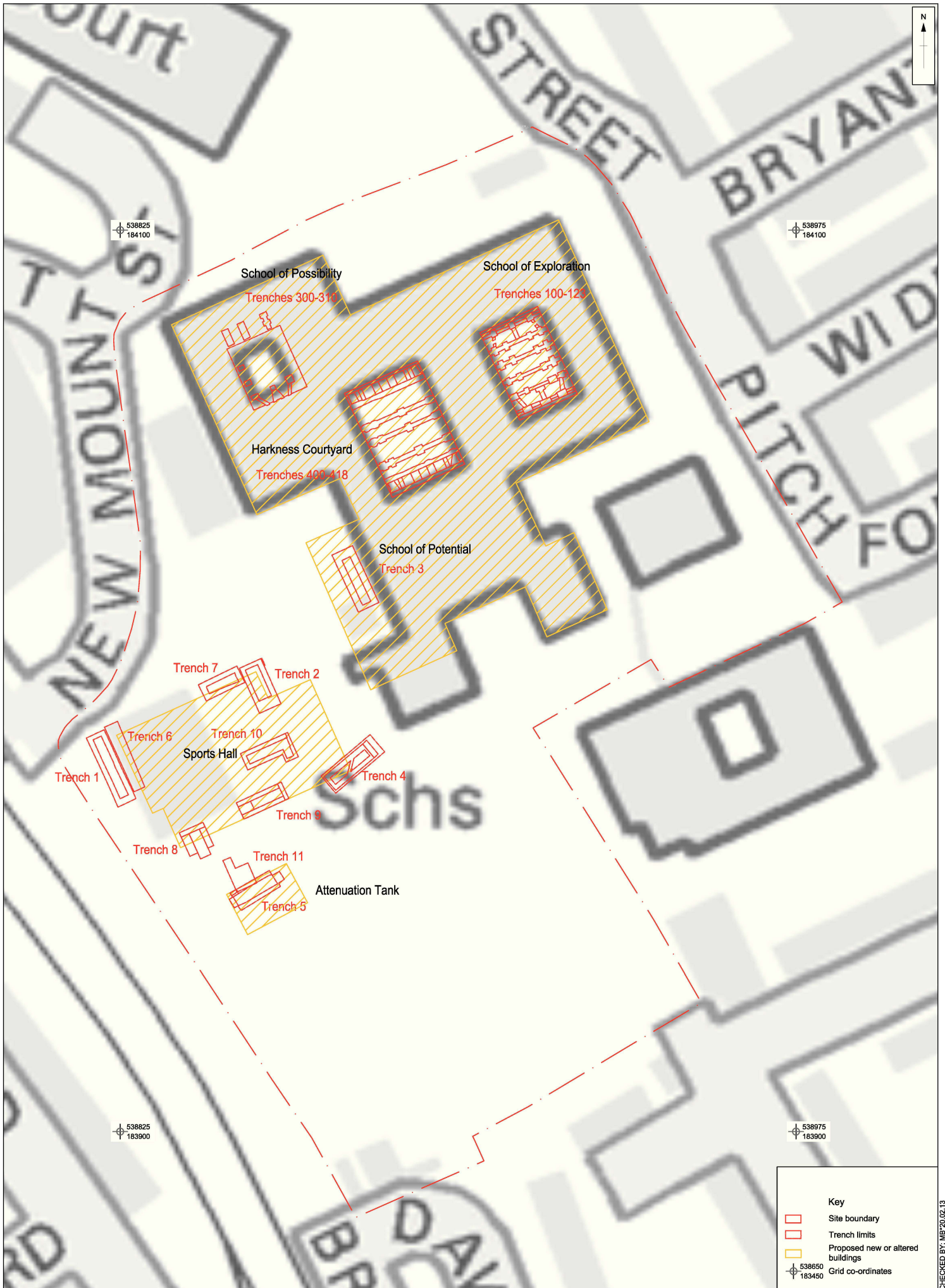


Figure 2: Investigation locations



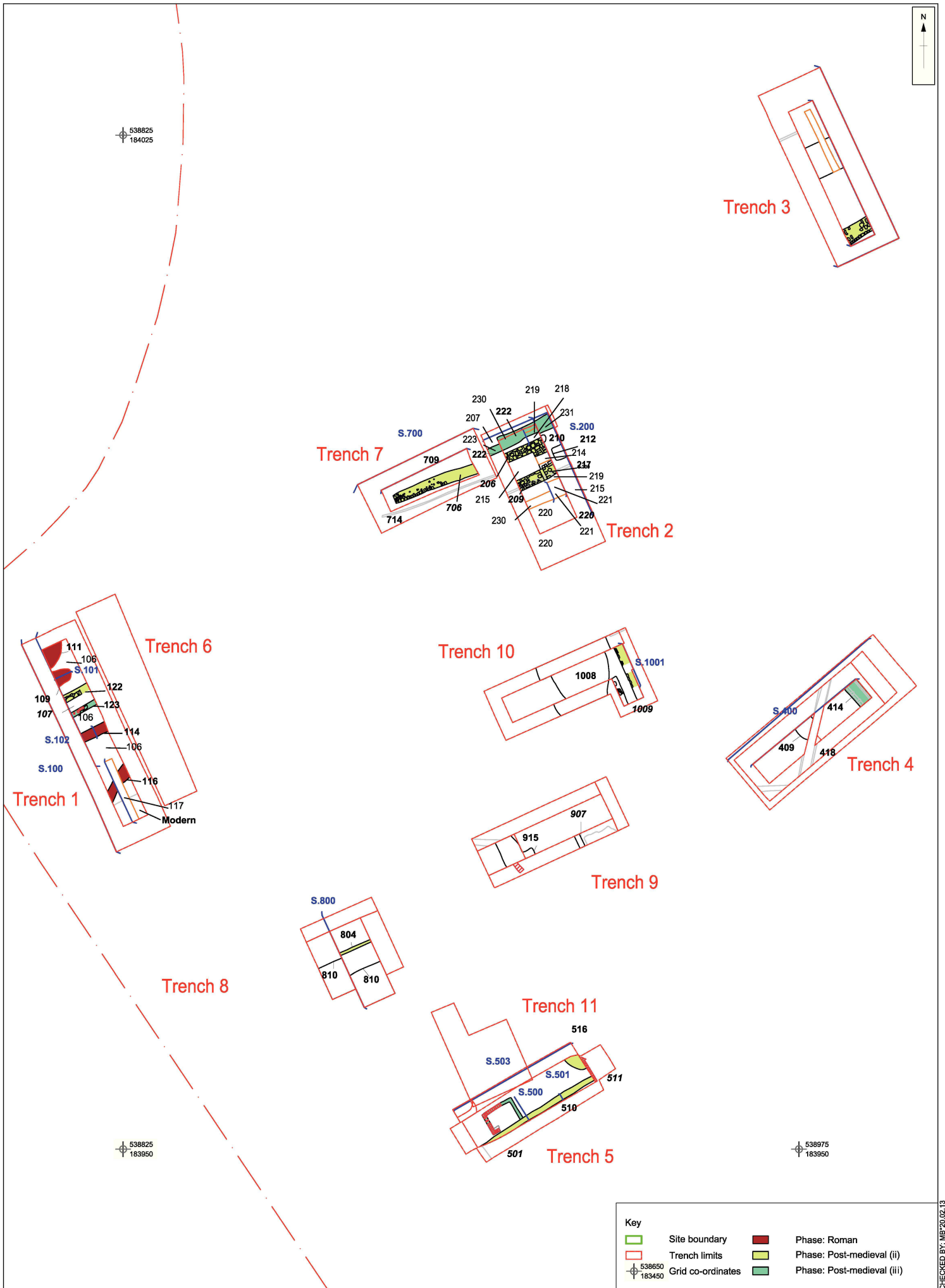
Contains Ordnance Survey data © Crown copyright and database right 2013

Survey Data supplied by :  
Conan Parsons

0 50 m  
Scale at A3 1:750

Figure 3: Trench locations

CHECKED BY: MB\20.02.13



Contains Ordnance Survey data © Crown copyright and database right 2013

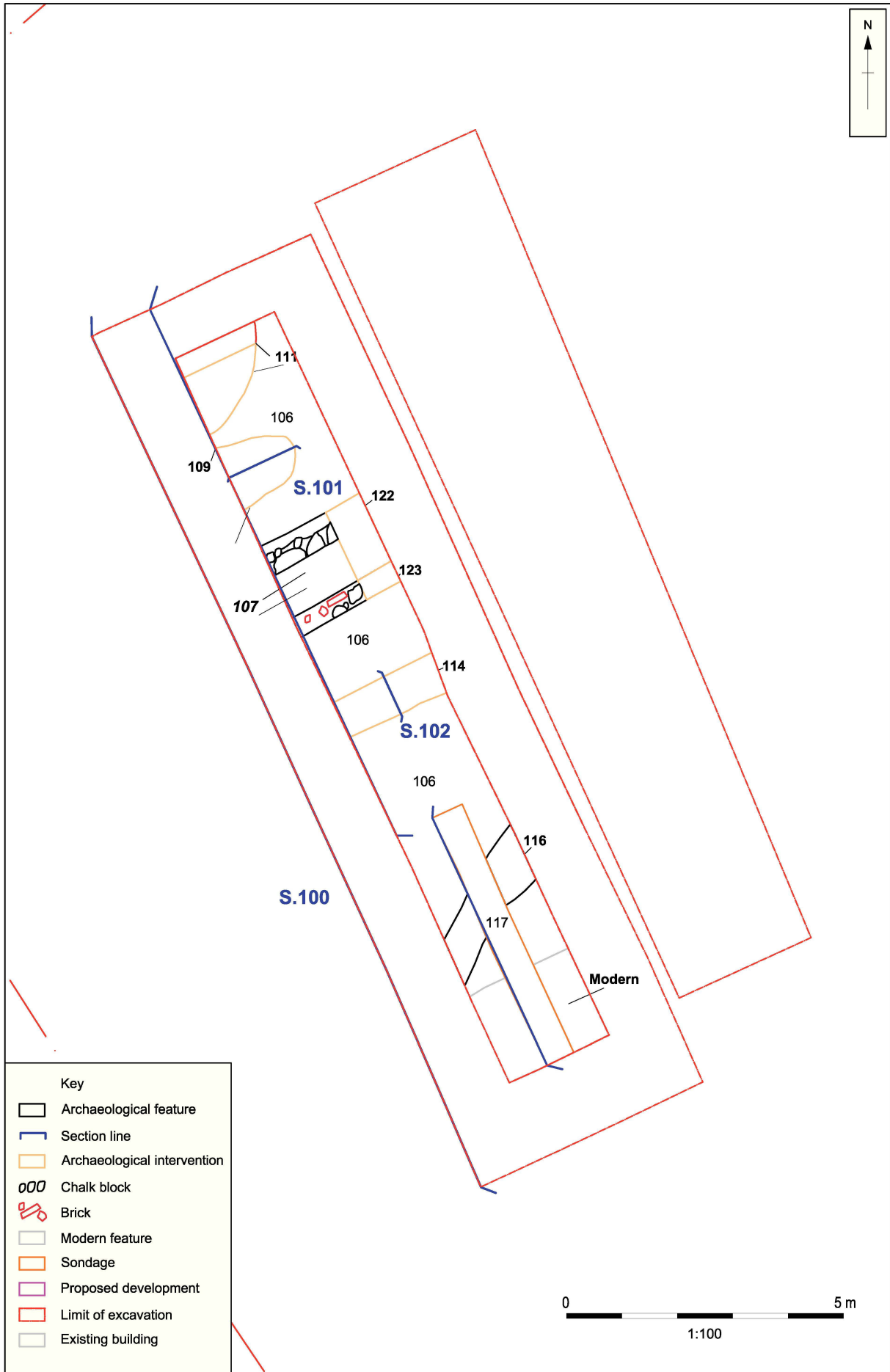
Survey Data supplied by :  
Conan Parsons

0 10 m  
Scale at A3 1:250

Figure 4: Phased plan of all the features

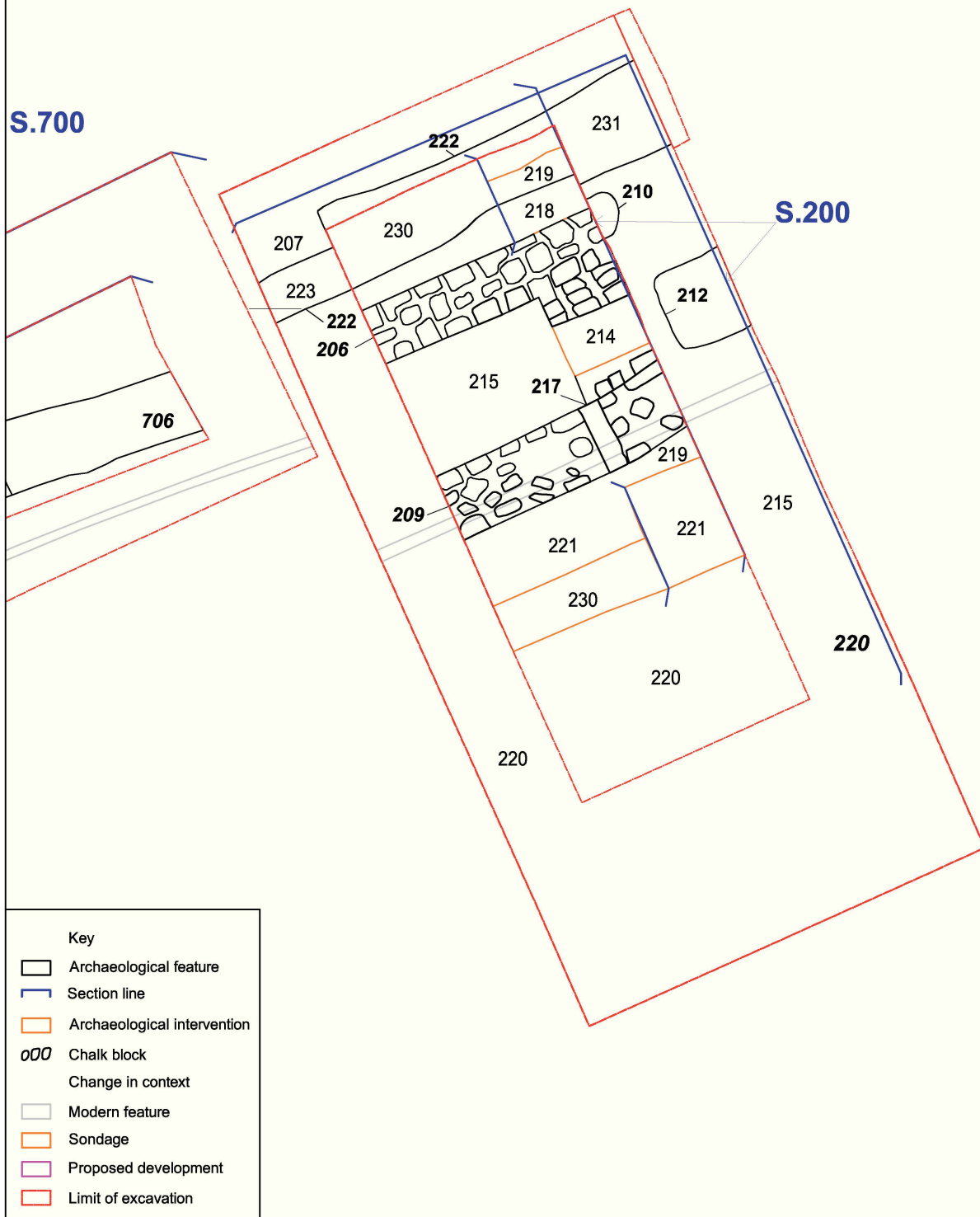
CHECKED BY: MB/20.02.13

\\Samba-1\projects\Stratford School 21\1010\Geomatics\02 CAD\001\current\STP10RWB\_Stratford School 21 2013-06-19.dwg(Fig.5)\*\*\*\*julia.collins\* 24 Jun 2013



CHECKED BY: MB\*20.02.13

Figure 5: Plan of Trench 1



X:\Stratford School 21\010\Geomatics\02 CAD\001\current\STP\0RWB\_Stratford School 21 2013-06-19.dwg(Fig.6)\*\*\*\*matt.bradley\* 28 Jun 2013

CHECKED BY: MB\*20.02.13

Survey Data supplied by :  
Conan Parsons

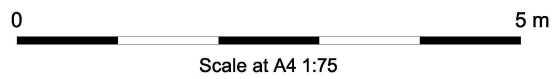
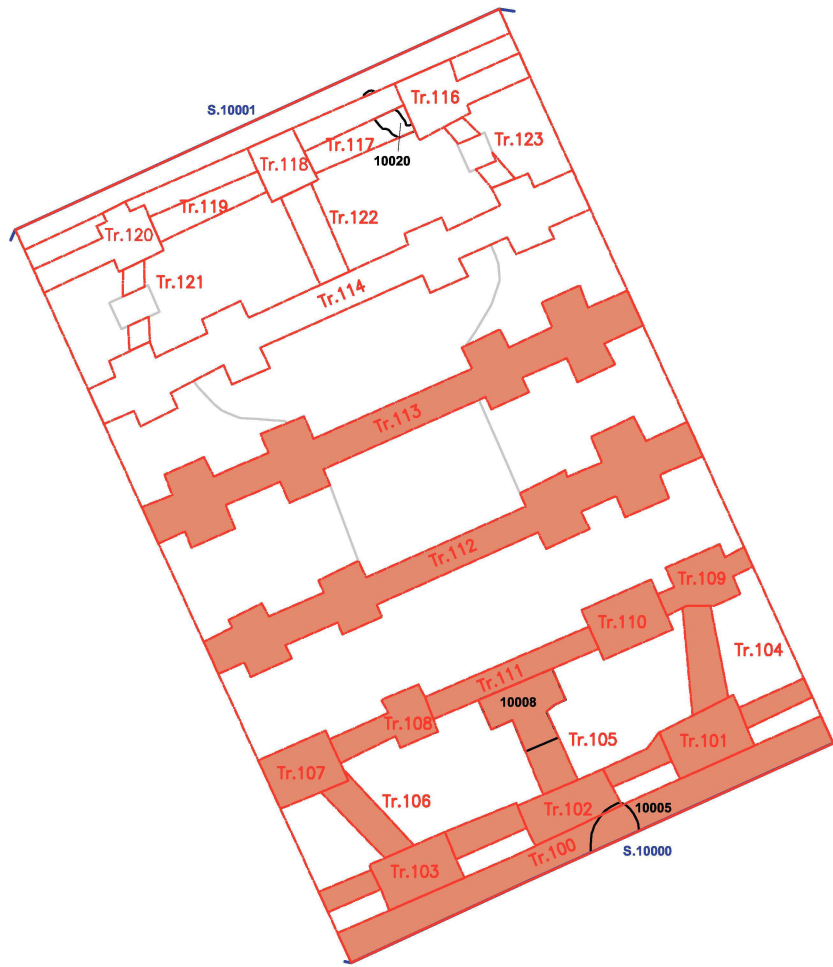
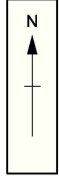


Figure 6: Plan of trench 2

X:\Stratford School 21\10\Geomatics\02 CAD\001\current\STP\0RWB\_Stratford School 21 2013-06-19.dwg (Fig. 7)\*\*\*\*.matt.bradley 28 Jun 2013



- Archaeological feature
- Section line
- Archaeological intervention
- Chalk block
- Brick
- Modern feature
- Sondage
- Proposed development
- Limit of excavation
- Existing building
- Brickearth



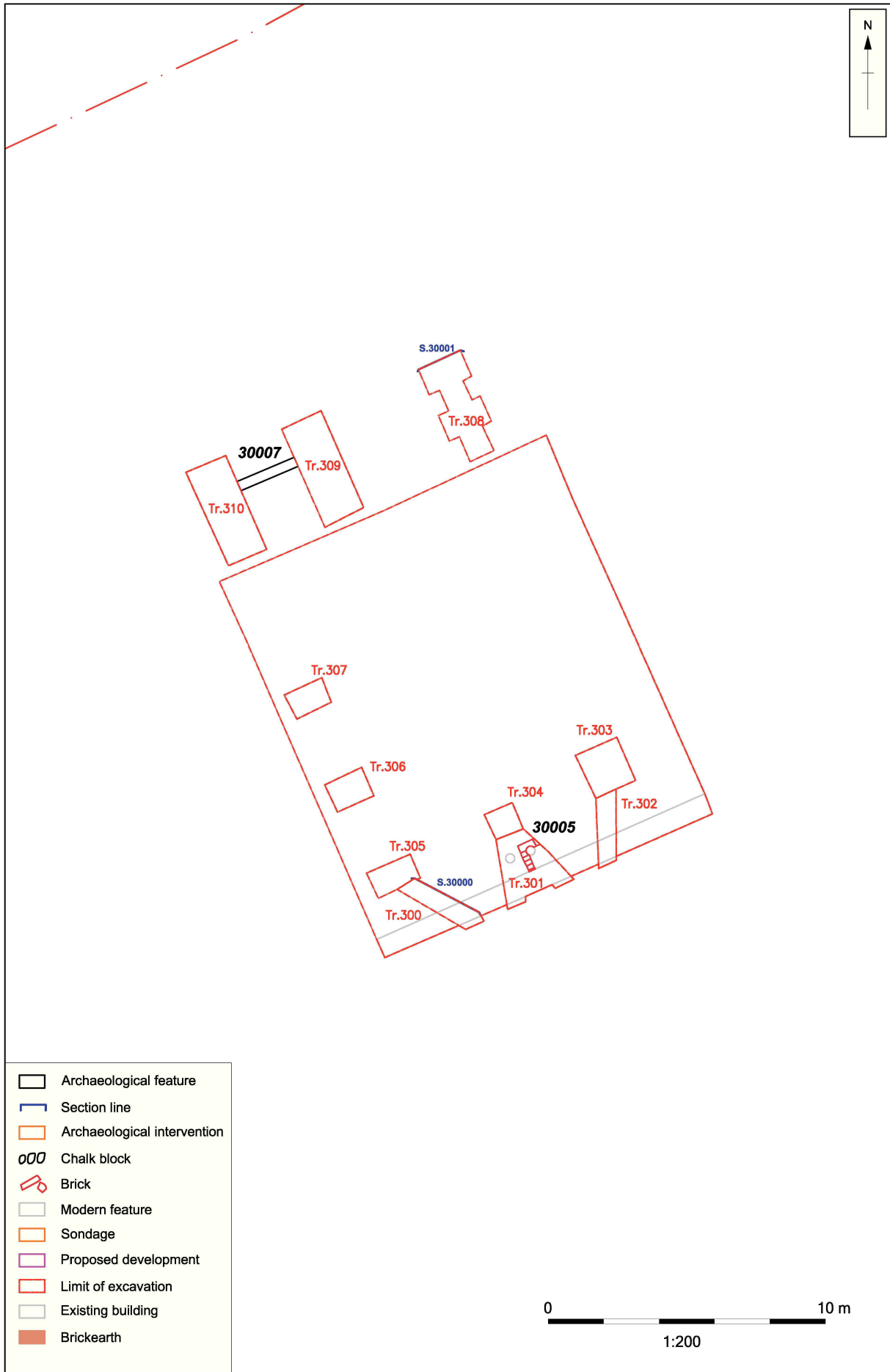
CHECKED BY: MB\*20.02.13

Figure 7: Plan of School of Exploration trenches

Survey Data supplied by :  
Conan Parsons



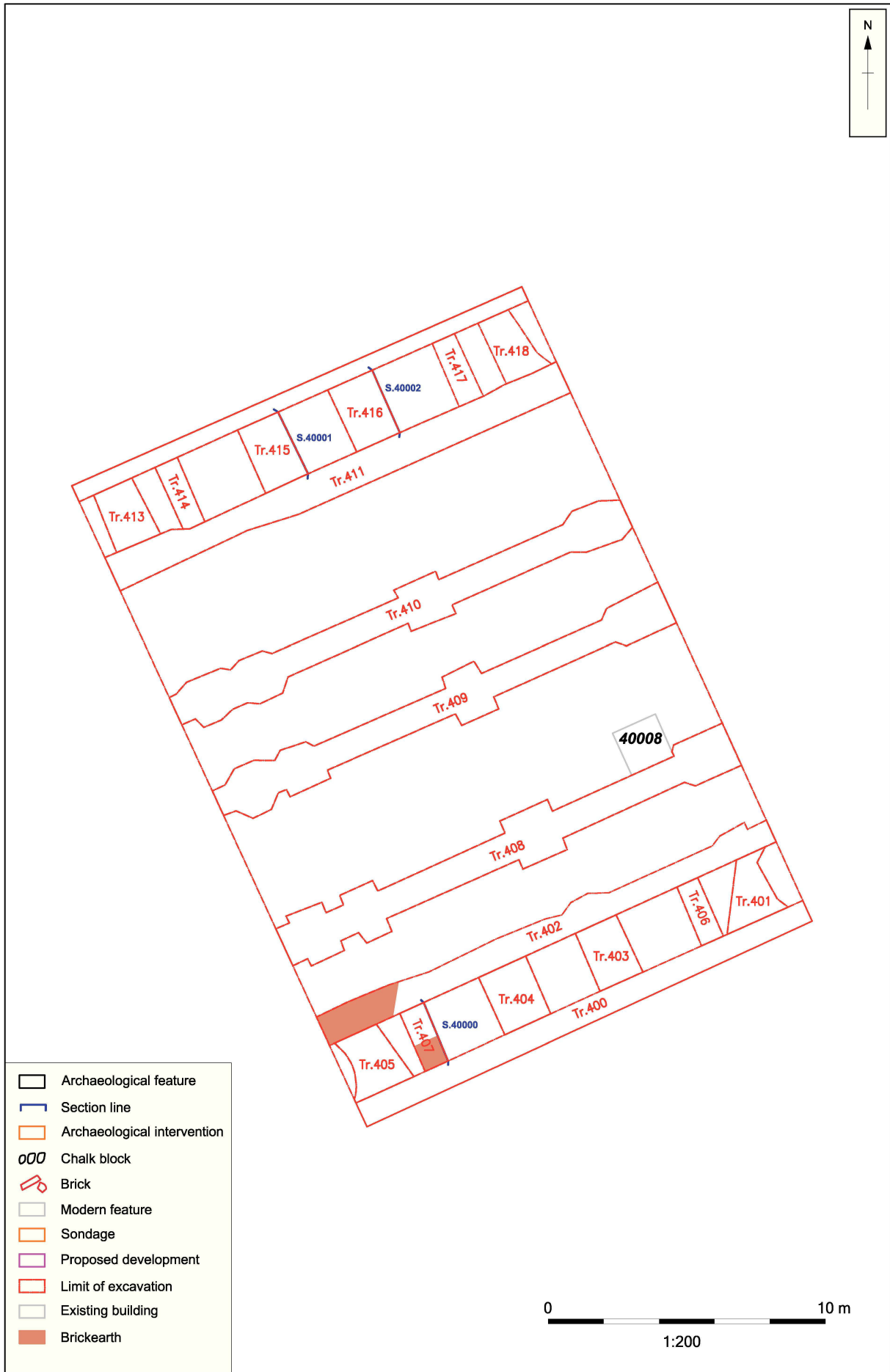
X:\Stratford School 21\10\10\Geomatics\02 CAD\001\current\STP10RWB\_Stratford School 21 2013-06-19.dwg(Fig.8)\*\*\*hannah.kennedy\* 26 Jun 2013



CHECKED BY: MB\*20.02.13

Figure 8: Plan of School of Possibility trenches

X:\Straford School 21\010\Geomatics\02 CAD\001\current\STP10RWB\_Straford School 21 2013-06-19.dwg(Fig.9)\*\*\*\*hannah.kennedy\* 26 Jun 2013



CHECKED BY: MB\*20.02.13

Figure 9: Plan of Harkness Courtyard trenches



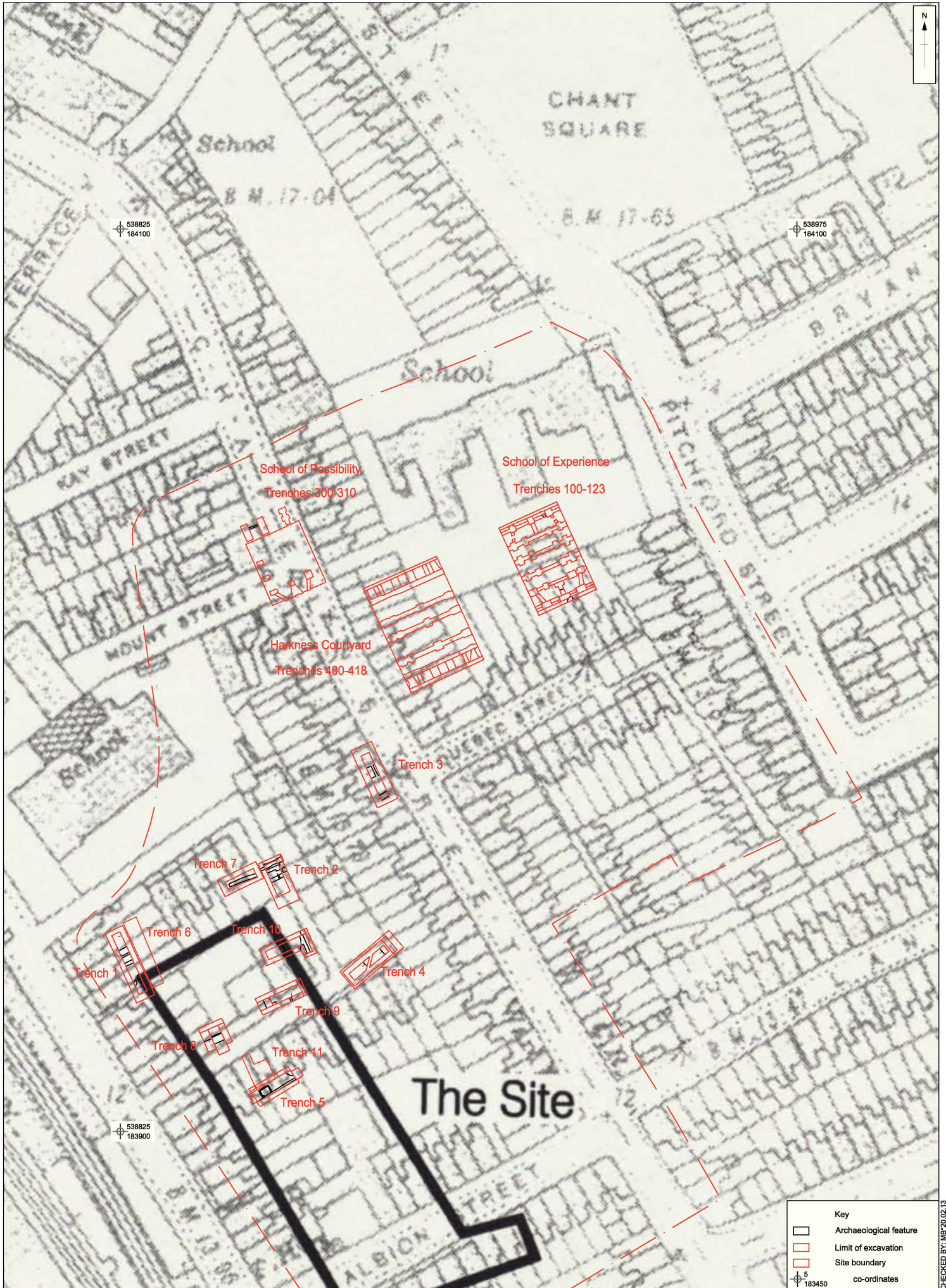
Contains Ordnance Survey data © Crown copyright and database right 2013

Survey Data supplied by :  
Conan Parsons

0 50 m  
Scale at A3 1:750

Figure 10: Trenches and features superimposed on Rocque's 1744 Map

CHECKED BY: MB\*20.02.13



Contains Ordnance Survey data © Crown copyright and database right 2013

Survey Data supplied by :  
Conan Parsons

0 50 m  
Scale at A3 1:750

Figure 11: Plan of trenches and features superimposed on the 1916 Ordnance Survey Map

CHECKED BY: MB/20.02.13

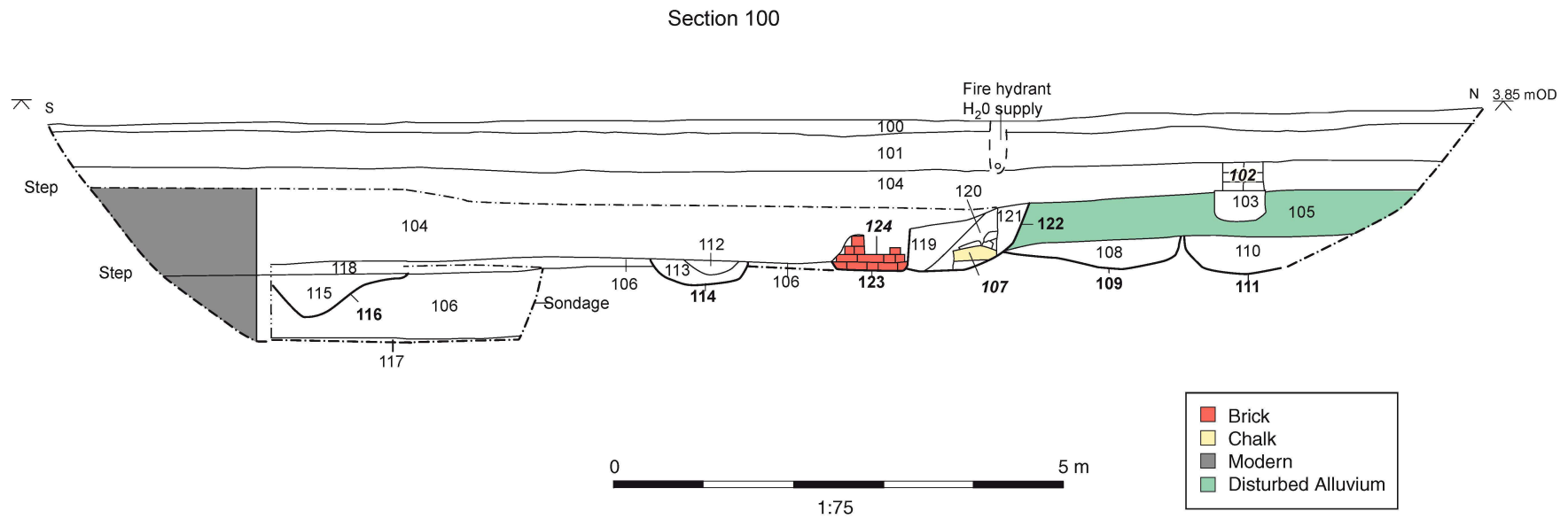


Figure 12: Trench 1, section 100

### Section 200

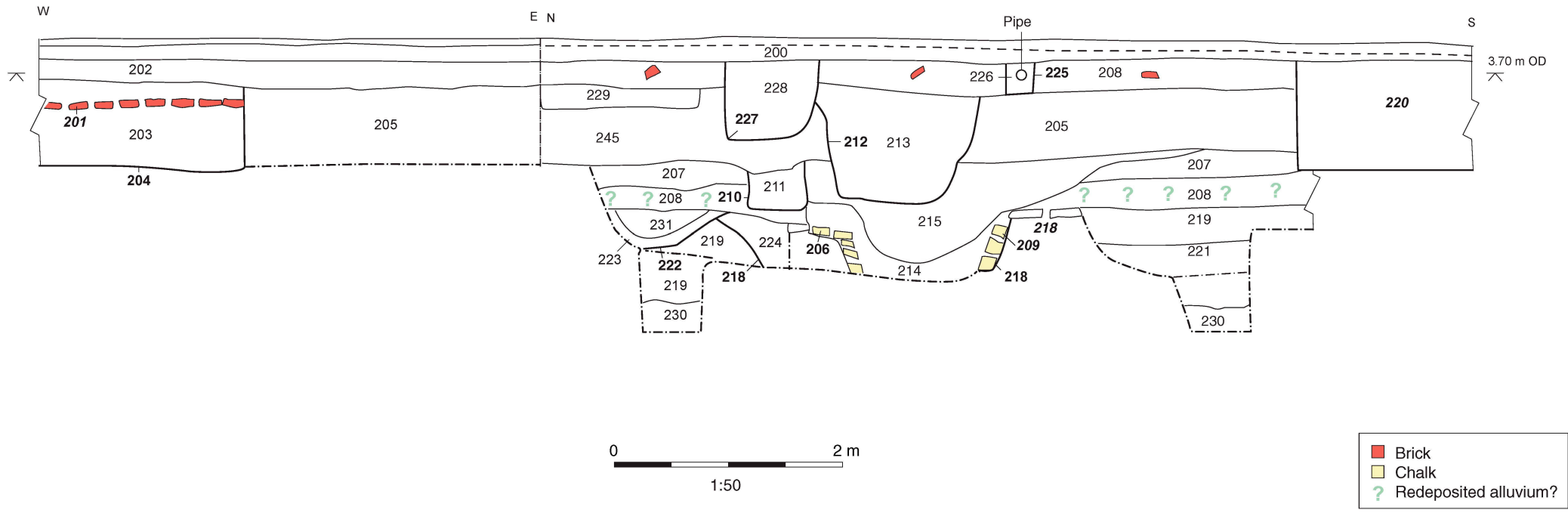


Figure 13: Trench 2, section 200

### Section 300

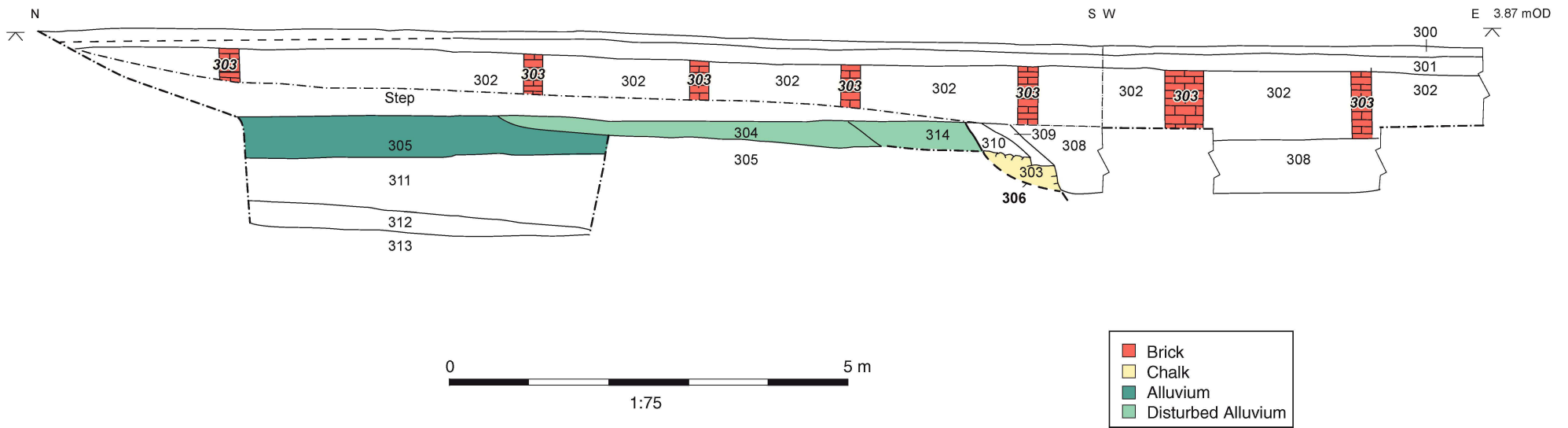


Figure 14: Trench 3, section 300

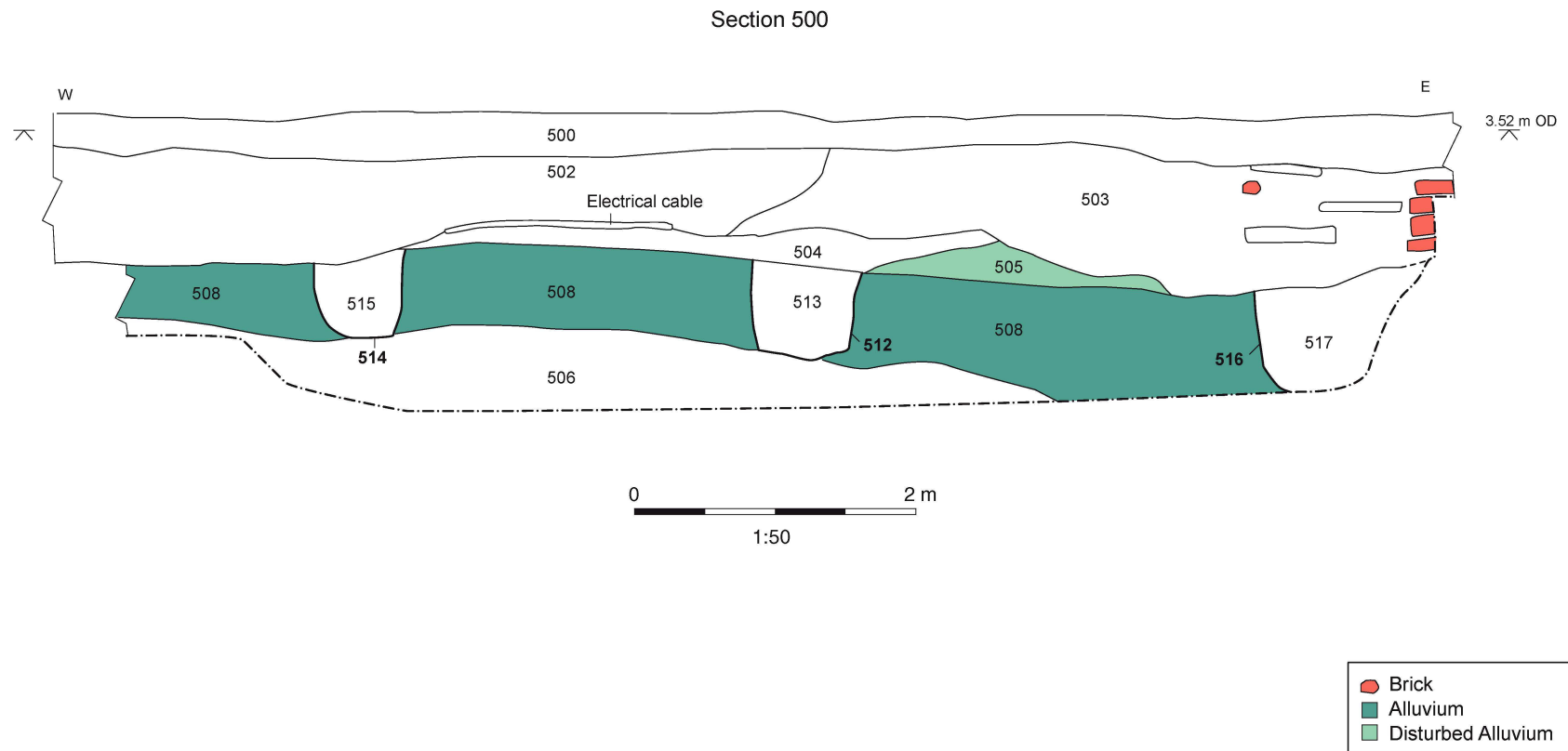


Figure 15: Trench 5, section 500



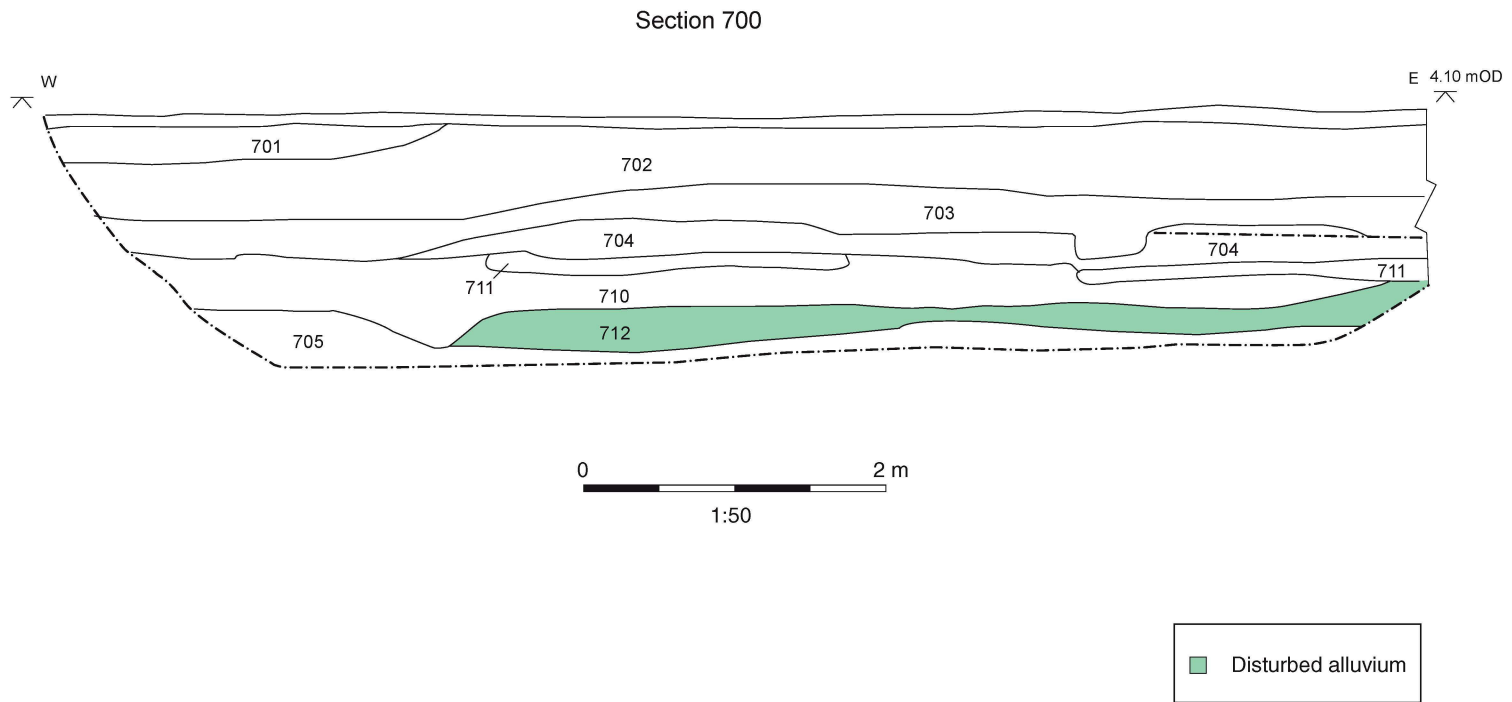


Figure 16: Trench 7, section 700

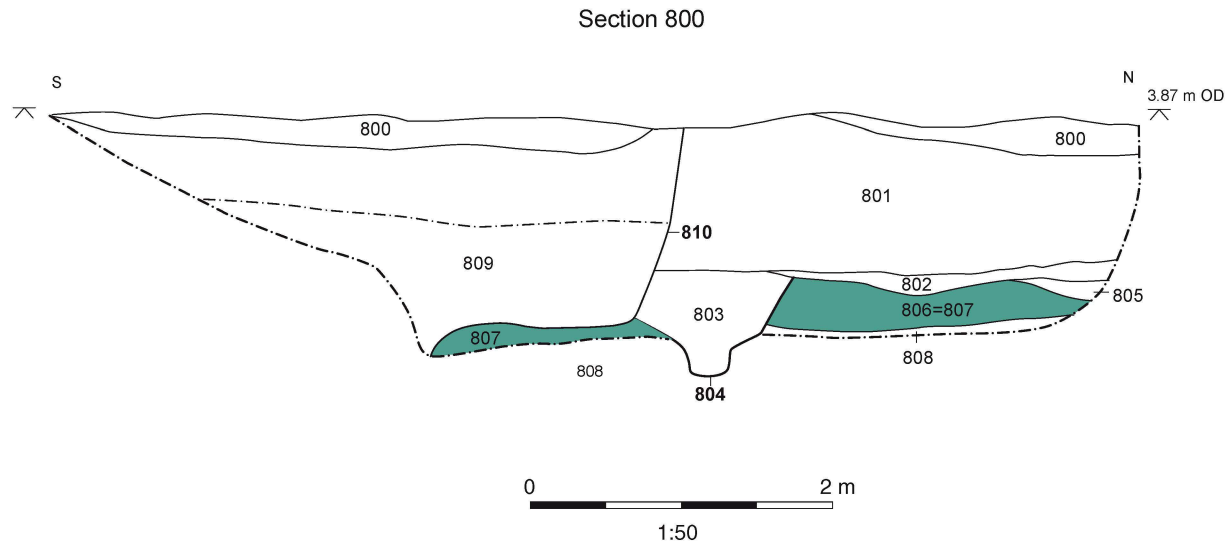


Figure 17: Trench 8, section 800

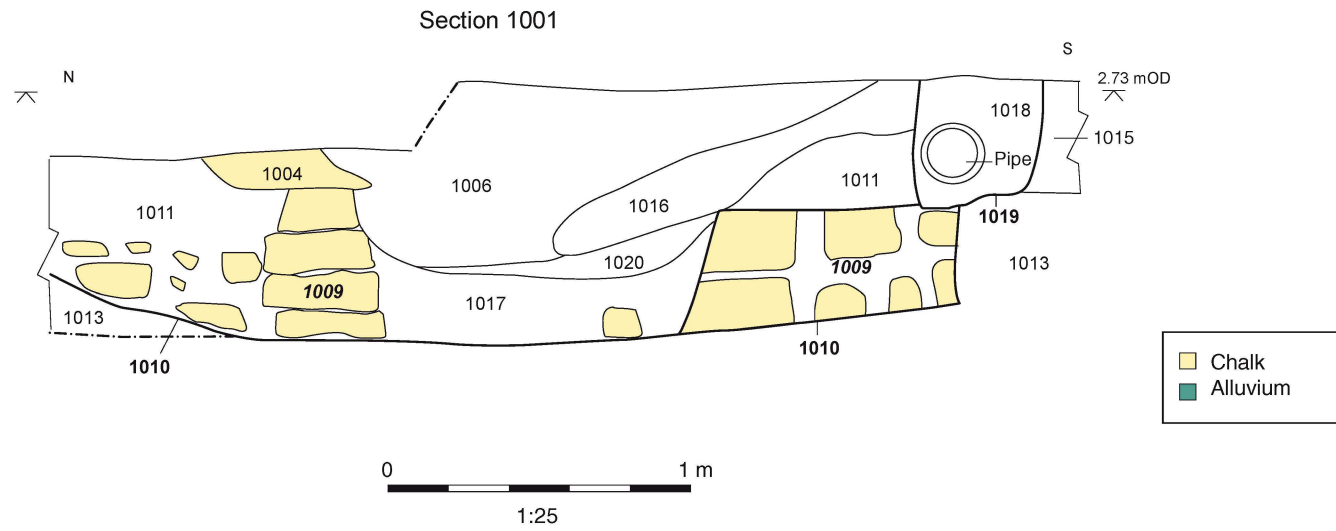


Figure 18: Trench 10, section 1001



Plate 1: General View of the work areas around the existing structures subject to watching brief mitigation



Plate 2: General View of the work area for the New Sports Hall, subject to evaluation trench mitigation looking west



Plate 3: Trench 1, plan view, looking north



Plate 4: Trench 2, plan view, looking north



Plate 5: Trench 3, plan view, looking north



Plate 6: Trench 4, plan view, looking north-east



Plate 7: Trench 5, plan view, looking west



Plate 8: Trench 6, plan view, looking north



Plate 9: Trench 7, plan view, looking north-west



Plate 10: Trench 8, plan view, looking north



Plate 11: Trench 9, plan view, looking west



Plate 12: Trench 10, plan view, looking east



Plate 13: Trench 1, ditch 114, looking west



Plate 14: Trench 3, section view, with chalk culvert to south, looking west



Plate 15: Trench 4, section view, looking south



Plate 16: Trench 5, section view, looking north-east



Plate 17: Trench 5, plan view of ditch 510, looking north-east



Plate 18: Trench 5, plan view pit 516, wall 511 in background, looking east



Plate 19: Trench 8, section view of ditch 804, looking west



Plate 20: Trench 2, section view of chalk culvert 206=209, looking east



Plate 21: Trench 2, section view of chalk culvert 206=209 and fills, looking east



Plate 22: Trench 10, section view of chalk culvert 1009, looking west



Plate 23: Trench 5, plan view of wall 501, looking south



Plate 24: Tobacco signs





Plate 25: School of Exploration representative section, southern part of area



Plate 26: School of Exploration representative section, western part of area



Plate 27: School of Possibility representative section



Plate 28: Harkness Courtyard representative section



Plate 29: Trench 11, working shot, looking east





### **Head Office/Registered Office/ OA South**

Janus House  
Osney Mead  
Oxford OX2 0ES

t: +44 (0) 1865 263 800  
f: +44 (0) 1865 793 496  
e: [info@oxfordarchaeology.com](mailto:info@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

### **OA North**

Mill 3  
Moor Lane  
Lancaster LA1 1GF

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

### **OA East**

15 Trafalgar Way  
Bar Hill  
Cambridgeshire  
CB23 8SQ

t: +44 (0) 1223 850500  
e: [oaeast@oxfordarchaeology.com](mailto: oaeast@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>



**Director:** Gill Hey, BA PhD FSA MIFA  
*Oxford Archaeology Ltd is a  
Private Limited Company, N<sup>o</sup>: 1618597  
and a Registered Charity, N<sup>o</sup>: 285627*