

**AN ARCHAEOLOGICAL
WATCHING BRIEF ON
GEOTECHNICAL
INVESTIGATIONS AT 117-
121 BISHOPSGATE**

CITY OF LONDON

REPORT NO: R11622

JANUARY 2014



**AN ARCHAEOLOGICAL WATCHING BRIEF ON GEOTECHNICAL
INVESTIGATIONS AT 117-121 BISHOPSGATE, CITY OF LONDON**

Local Planning Authority: City Of London

Planning Ref: Pre-Planning

Site Code: BIH14

Central National Grid Reference: TQ 33192 81506

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January 2014**

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CONTENTS

1	Abstract.....	2
2	Introduction	3
3	Geology and Topography	6
4	Archaeological and Historical Background	7
5	Planning Background.....	9
6	Archaeological Methodology.....	14
7	Watching Brief Observations and Interpretation of Sequences.....	16
8	Phased Archaeological Sequence.....	22
9	Discussion and Conclusions.....	24
10	Acknowledgements.....	26
11	Bibliography	27

APPENDICES

APPENDIX 1: PLATES.....	28
APPENDIX 2: CONTEXT INDEX	31
APPENDIX 3: POST-ROMAN POTTERY	32
APPENDIX 4: CERAMIC BUILDING MATERIALS	33
APPENDIX 5: OASIS FORM.....	34

ILLUSTRATIONS

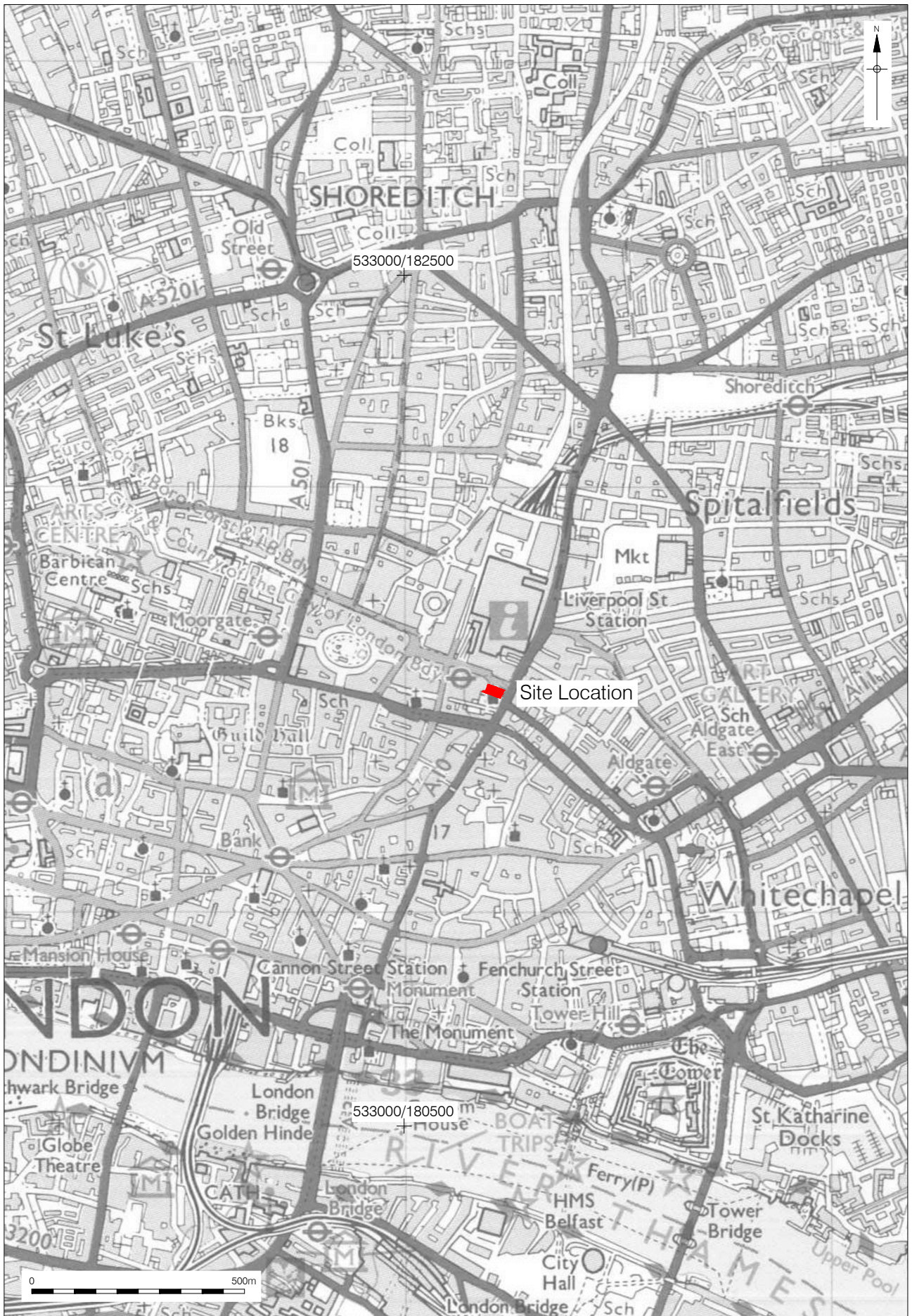
Figure 1: Site Location.....	4
Figure 2: Detailed Site, Trial Pit and Borehole Locations.....	5
Figure 3: Comparative Borehole Sequences	20

1 Abstract

- 1.1 Pre-Construct Archaeology Ltd. conducted an archaeological watching brief during borehole and trial pit excavations at 117-121 Bishopsgate, City of London between 13th and 28th January 2014. The watching brief monitored the removal of modern surface hardstanding and the subsequent coring of underlying deposits to natural layers in three locations (BH1-3), along with the hand excavation of two trial pits (TP1 & TP3) and subsequent limited coring to confirm a test pit sequence (TP3a). The work was conducted in external pavement and parking areas and within an internal basement. It was carried out prior to proposed redevelopment of the site.
- 1.2 Excavation of the trial pits was of limited value as only modern materials and natural Terrace Gravels were revealed; infill associated with late 20th-century development at surface level and an extensive basement slab also associated with late 20th-century development, directly overlying natural deposits.
- 1.3 The borehole excavations were far more informative and revealed a number of phases of development from the formation of natural geology to features associated with modern structures on the site. The earliest material recorded was London Clay, which was penetrated in all three boreholes. This was sealed by extensive Pleistocene Terrace Gravel deposits, which were capped by brickearth up to 1.8m thick towards the south of the site but truncated towards the north and west, probably by quarrying.
- 1.4 The earliest finds recovered from the boreholes were fragments of Roman tile, which were present in three contexts. However all of this material appears to have been residual within later deposits, though clearly derived from Roman activity in the area, albeit not a definite phase of occupation on the site. The earliest activity on the site was probably during the medieval period and most likely involved brickearth quarrying, quarry backfill deposits being tentatively identified in two of the sequences and truncation of brickearth most extensively apparent in BH3 towards the east of the site.
- 1.5 Activity continued into the early post-medieval period as evidenced by a possible wall footing recorded in BH2 at the south of the site and most likely associated with early development along the north side of Alderman's Walk. There was possibly also ground-raising at this time, though lower and upper made ground in BH3 could not be distinguished. Nineteenth-century activity on the site was represented by apparent rebuilding and re-use of the footing recorded in BH2 and further ground-raising identified from deposits in the other boreholes. Rubble deposits, probably associated with 20th-century demolition and redevelopment of the site, were observed in all cores and each sequence was capped by modern surface materials associated with the most recent site development.

2 Introduction

- 2.1 Between the 13th and 28th January 2014 Pre-Construct Archaeology Ltd. (PCA) carried out an archaeological watching brief at 117-121 Bishopsgate, City of London (Figures 1 & 2).
- 2.2 It is proposed to redevelop the site for commercial and residential purposes, the intention being to submit a planning application for redevelopment to The City of London in the near future. It is likely that if planning permission is approved, there will be archaeological conditions attached. The watching brief was carried out as an initial phase of archaeological work in order to inform any likely further work and will be submitted as a supporting document along with the planning application.
- 2.3 The work was commissioned by Mills Whipp Projects on behalf of Amsprop Bishopsgate Ltd. and comprised the archaeological monitoring of the excavation of two trial pits and three boreholes. The trial pits were located at external surface and internal basement levels towards the west side of the site, whilst the boreholes were excavated from ground level in external areas towards the western and eastern sides of the site (Figure 2).
- 2.4 The site is located at National Grid Reference (NGR) TQ 33192 81506 and the project was allocated the site code BIH14.

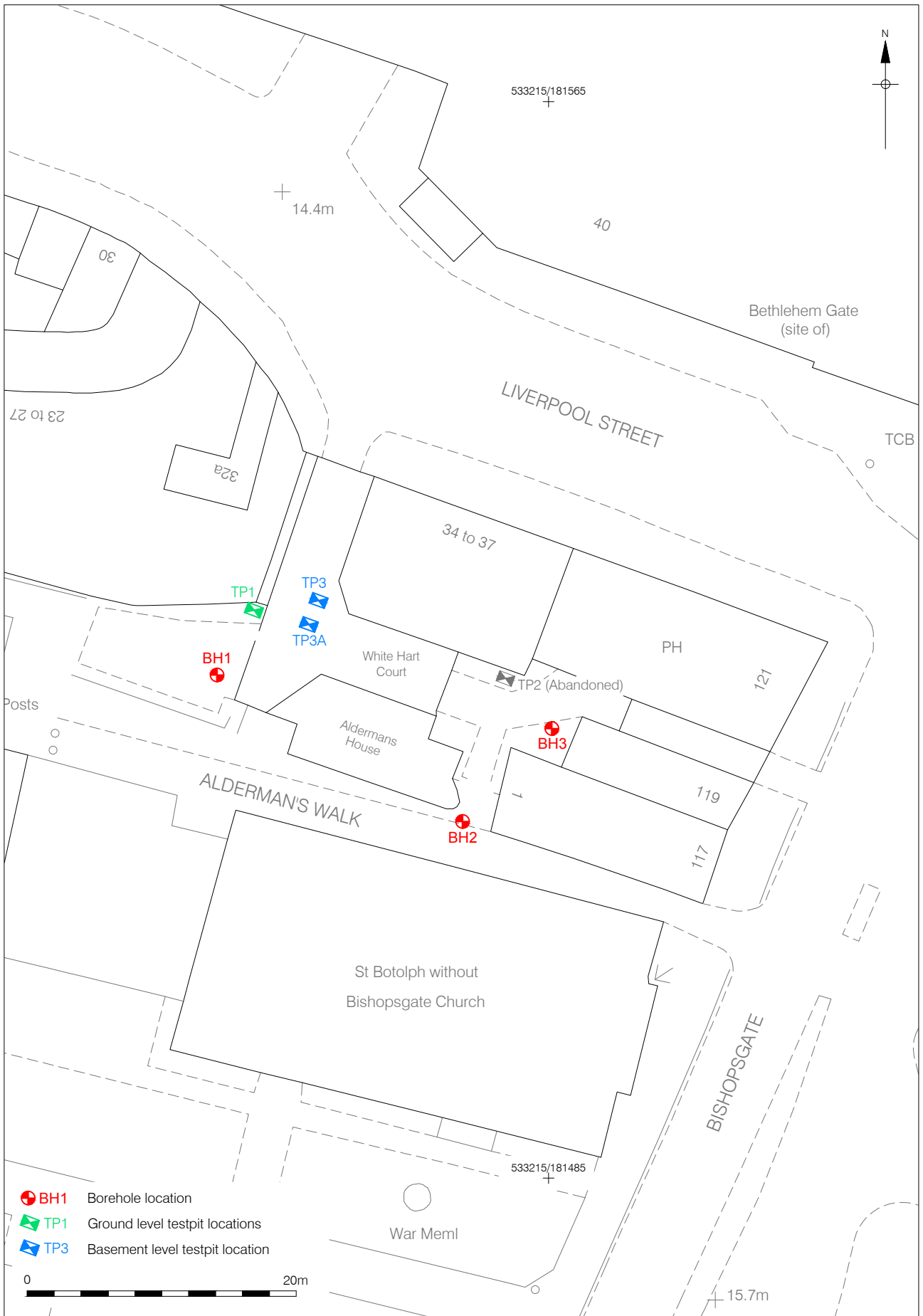


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Figure 1
 Site Location
 1:12,500 at A4



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Figure 2
 Locations of geotechnical investigations
 1:400 at A4

3 Geology and Topography

- 3.1 The site lies within the City of London, a short distance south of Liverpool Street station and immediately west of Bishopsgate. The site lies at a surface elevation of c. 15m AOD on ground that is generally flat with some minor undulations, but has been significantly modified by previous development of the area. South of the site, the current land surface slopes downwards towards the River Thames.
- 3.2 According to the British Geological Survey (Sheet 256; North London) the underlying geology of the site comprises sand, silt and clay of the Palaeogene (Eocene) London Clay formation, deposited between c. 34 and 55 million years ago. This is overlain by Quaternary Taplow Terrace Gravel, the surface of which lies at approximately 10.50m AOD, but slopes downwards to the south and west of the site towards the River Thames and Historic Walbrook valley respectively. The gravel is capped by clay and silt brickearth, which has been variably truncated in the area by historic quarrying activity. An archaeological watching brief during development of part of the site in 1981 recorded the surface of the brickearth at approximately 12.20m AOD (Miller 2007, 8).
- 3.3 Historically the site occupied numbers 117, 119 and 125 Bishopsgate though the current address is recorded as numbers 117, 119 and 121 Bishopsgate, with the building at the north occupying 34-37 Liverpool Street. The site is accessed from Liverpool Street to the north and Bishopsgate to the east via White Hart Court, which bisects the northern and southern parts of the site. There is also pedestrian access from Alderman's Walk to the south.
- 3.4 The site is bounded to the north by Liverpool Street, to the east by Bishopsgate, to the south by Alderman's Walk and to the west by open pedestrian areas and properties within Liverpool Street Arcade. It is located a little less than 1km north of the tidal River Thames on the eastern side of the upper reaches of the historic Walbrook valley, in an area that may have been crossed in the past by tributary streams of the River Walbrook, itself a tributary of the Thames.

4 Archaeological and Historical Background

- 4.1 Research into the archaeological and historical background of the site has already been carried out as part of a desk-based assessment of the site (Miller 2007) and it is not necessary to repeat the detail here, though the main points should be highlighted:
- 4.2 Archaeological evidence for prehistoric activity in the vicinity of the site is limited and for earlier periods (Palaeolithic to Bronze Age) is virtually non-existent, though residual Late Iron Age pottery has been found on sites to the west in the Moorgate/Finsbury area, which has been interpreted as possible evidence for pre-Roman settlement of the city. It is possible that the lack of prehistoric evidence may in part be due to intensive exploitation and truncation in the Roman and later periods, rather than the area being uninhabited during prehistory; there is certainly extensive evidence for later prehistoric exploitation of the Terraces immediately north of the Thames both upstream and downstream of the city.
- 4.3 *Londinium* was established in the early years following the Roman Conquest, with the city wall constructed around AD 200. The site lies approximately 55m north of the wall and its extensive outer, 'V-shaped' ditch which has been exposed c. 100m to the south-west at 90-94 Old Broad Street/63-64 New Broad Street. Although the site lies beyond the Roman city walls, Ermine Street, which ran northwards from the city, followed approximately the same alignment as the present Bishopsgate and therefore passed a short distance east of the site. The road was flanked by an extensive cemetery to the north of the city, which extended at least as far as the modern Spitalfields area. Roman burials, both inhumations and cremations, have been found at a number of locations within the vicinity of the site, the most significant of which, was a 3rd-century interment recorded within the site boundary during an archaeological watching brief on development work in 1981. This burial was east-west aligned and located in the area of the present 34-37 Liverpool Street at a basal level of c. 12.00m AOD.
- 4.4 In addition to lying in the vicinity of an extensive Roman cemetery, the site also lies in an area where there was extensive brickearth quarrying during the Roman period. Quarry pits were recorded during the 1981 watching brief on the western part of the site and further extraction pits have been identified within 100m to the north at 154-170 Bishopsgate and 16 New Street.
- 4.5 The site lies towards the eastern edge of the Upper Walbrook valley, the river flowing approximately along the line of the present Blomfield Street, west of the site, in the early Roman period. Subsequent development of the area involved ground-raising and reclamation along with canalisation of the river. However, construction of the city wall in the late 2nd century effectively blocked the flow of the river, which resulted in severe drainage problems in the area north of the wall and west of the site,

- culminating in abandonment of much of the area by the 4th century. The Moorfields area west of the site had thus become a marshland by the late Roman period and remained as such into the post-Roman era.
- 4.6 There is no evidence of a continuity of occupation of the city after the Roman withdrawal in the 5th century, Early and Middle Saxon activity becoming focussed in The Strand/Covent Garden area to the west. The walled city was re-occupied during the Late Saxon period but the evidence for activity in the vicinity of the site at this time is very limited.
- 4.7 The city wall was largely repaired and rebuilt and the ditch widened in the medieval period. Bishopsgate, which runs adjacent to the site on the alignment of the former Roman road was named after the Bishops Gate, which stood opposite Camomile Street to the south of the site and probably had medieval origins. The original church of St Botolph without Bishopsgate, immediately south of the site is first recorded in 1212, whilst the Priory and Hospital of St Mary Bethlehem (later 'Bedlam') was founded to the west in 1247. Two pits of medieval date were recorded on the site during the 1981 watching brief indicating that there was also activity here at this time.
- 4.8 During the early post-medieval period there was gradual urbanisation of the area north of the city walls, though the site probably remained within an area of largely semi-rural suburbs. The Bishopsgate frontage of the site had however, been built upon by the middle of the 16th century, as demonstrated on Agas' map of c. 1562, whilst Faithorne and Newcourt's map of 1658 shows the southern frontage, north of St Botolph's church also developed. Ogilby and Morgan's map of 1676 shows a narrow lane separating the site and church, whilst the site is occupied by a number of small buildings surrounding a yard (shown later as White Hart Yard) accessed from Bishopsgate. The layout of the site appears to have changed little during the 18th century, though the White Hart Inn on the north-east corner apparently has 18th-century origins, whilst other surviving buildings probably date to the early 19th century.
- 4.9 The 1st edition Ordnance Survey map of 1873 shows the site located some 120m to the south of Broad Street Station, which had opened in 1866. The map shows the public house at the north-east corner of the site with further buildings to the west, fronting Liverpool Street, and shops to the south, fronting Bishopsgate. A large, single building is located within the site, to the rear of the shops and all buildings surround White Hart Court. By 1893 the large, single building had been divided into three single properties, though the layout of buildings remained largely unchanged throughout much of the 20th century.
- 4.10 The buildings on the western part of the site were demolished in the early 1980s and replaced with the structures that currently comprise 34-37 Liverpool Street and Alderman's House. The site layout has remained largely static since the 1980s development.

5 Planning Background

- 5.1 The development of the site is subject to planning guidance and policies contained within the National Planning Policy Framework (NPPF), The London Plan and policies of The City of London, which fully recognises the importance of the buried heritage for which it is the custodian.
- 5.2 In March 2012, the government published the National Planning Policy Framework (NPPF), which replaced existing national policy relating to heritage and archaeology (Planning Policy Statement 5: Planning for the Historic Environment (PPS5)). In summary, current national policy provides a framework which protects nationally important designated Heritage Assets and their settings, in appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions regarding the historic environment and provides for the investigation by intrusive or non-intrusive means of sites not significant enough to merit *in-situ* preservation. Relevant paragraphs within the NPPF include the following:

128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

139. *Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.*

141. *Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.*

5.3 The Glossary contained within the NPPF includes the following definitions:

Heritage asset: A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Archaeological interest: There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Historic environment: All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Historic environment record: Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.

5.4 The London Plan, published July 2011, includes the following policy regarding the historic environment in central London, which should be implemented through the Local Development Framework (LDF) being compiled at the Borough level:

POLICY 7.8 HERITAGE ASSETS AND ARCHAEOLOGY

Strategic

- A London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.
- B Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.

Planning decisions

- C Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.
- D Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.

- E New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

LDF preparation

- F Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London's environmental quality, cultural identity and economy as part of managing London's ability to accommodate change and regeneration.

5.5 The local planning authority responsible for the study site is the City of London, which is currently developing its Local Plan in line with policies outlined in the NPPF. The Local Plan is due to be adopted in 2014, meanwhile planning policies saved from the City's Unitary Development Plan (UDP) adopted in April 2002 and the Core Strategy adopted in September 2011 remain current until adoption of the Local plan. Saved UDP Policies include the following relating to the historic environment:

POLICY ARC 1

To require planning applications which involve excavation or groundworks on sites of archaeological potential to be accompanied by an archaeological assessment and evaluation of the site including the impact of the proposed development.

All of the City is considered to have archaeological potential unless it can be demonstrated that archaeological remains have been lost, due to basement construction or other groundworks. The Corporation will indicate the potential of a site, its relative importance, and the likely impact to a developer at an early stage so that the appropriate assessment and design development can be undertaken. Map 11.2 indicates areas of archaeological potential and this information will be updated periodically.

On sites of archaeological potential, which may be affected by development schemes or groundworks, an archaeological assessment will be required to be submitted with the application. This will set out the archaeological potential of the site and impact of the proposals. Where appropriate, this should be supplemented by evaluation, carrying out trial work in specific areas of the site to provide more information and inform consideration of the development proposals by the Corporation, prior to a decision on that application.

POLICY ARC 2

To require development proposals to preserve in situ, protect and safeguard important ancient monuments and important archaeological remains and their settings, and where appropriate, to require the permanent public display and/or interpretation of the monument or remains.

POLICY ARC 3

To ensure the proper investigation, recording of sites, and publication of the results, by an approved organisation as an integral part of a development programme where a development incorporates archaeological remains or where it is considered that preservation in situ is not appropriate.

On sites where important monuments or archaeological remains exist, development proposals should take this fully into account and be designed to enhance physical preservation and avoid disturbance or loss. This can be done by the sympathetic design of basements, raising ground levels, site coverage, and the location of foundations to avoid or minimise archaeological loss and securing their preservation for the future, although they remain inaccessible for the time being.

The interpretation and presentation of a visible or buried monument to the public and enhancement of its setting, should form part of the development proposals. Agreement will be sought to achieve reasonable public access. The Corporation will consider refusing schemes which do not provide an adequate assessment of a site or make no provision for the incorporation, safeguarding or preservation in situ of nationally or locally important monuments or remains, or which would adversely affect those monuments or remains.

In some cases, a development may reveal a monument or archaeological remains which will be displayed on the site, or reburied. Investigation and recording of those features will be required as part of a programme of archaeological work to be submitted to and approved by the Corporation. Where the significance of the remains is considered, by the Corporation, not sufficient to justify their physical preservation in situ and they will be affected by development, archaeological recording should be carried out. A programme of archaeological work for investigation, excavation and recording, and publication of the results, to a predetermined research framework, by an approved organisation, should be submitted to and approved by the Corporation, prior to development. This will be controlled through the use of conditions and will ensure the preservation of those remains by record.

5.6 The Core Strategy contains the following Policy relating to the historic environment:

POLICY CS12: HISTORIC ENVIRONMENT

To conserve or enhance the significance of the City's heritage assets and their settings, and provide an attractive environment for the City's communities and visitors, by:

- 1. Safeguarding the City's listed buildings and their settings, while allowing appropriate adaptation and new uses.**
- 2. Preserving and enhancing the distinctive character and appearance of the City's conservation areas, while allowing sympathetic development within them.**
- 3. Protecting and promoting the evaluation and assessment of the City's ancient monuments and archaeological remains and their settings, including the interpretation and publication of results of archaeological investigations.**
- 4. Safeguarding the character and setting of the City's gardens of special historic interest.**
- 5. Preserving and, where appropriate, seeking to enhance the Outstanding Universal Value, architectural and historic significance, authenticity and integrity of the Tower of London World Heritage Site and its local setting.**

3.12.1 The City's unique townscape of historic buildings, streets and open spaces juxtaposed with contemporary modern buildings creates a varied, attractive and lively environment which attracts companies and visitors who support the services which contribute to its cultural vibrancy. The City contains a large number of heritage assets which include almost 600 listed buildings, 26 conservation areas, 48 scheduled ancient monuments and 4 historic parks and gardens. There are many protected trees in conservation areas and with Tree Preservation Orders. Historic buildings characteristic of the City include notable buildings such as Mansion House, Guildhall and St Paul's Cathedral, livery company halls and a large number of churches. In addition, the Tower of London, which lies just outside the City boundary, is inscribed by UNESCO as a World Heritage Site of universal significance and its protection includes a buffer area which is partly within the City.

3.12.2 The City is the historic core from which the rest of London developed. Its townscape is derived from its historical development and role as a centre of commerce and trade. The street pattern comprises medieval lanes and alleyways, overlain by later, wider streets. The dense nature of development is ameliorated by the many green spaces, including a high number of small open spaces such as former churchyards, as well as larger gardens.

3.12.3 The City is characterised by many historically important buildings and collections of buildings. Its varied townscape includes areas of formal layout, those with a more domestic and small scale character, as well as larger building complexes such as Smithfield and Leadenhall Markets. There is a close proximity of very different historic areas with a common purpose and business function, which contributes to the special character of the townscape. The City can claim to have one of the greatest concentrations of church buildings of outstanding architectural quality in the country, with 42 places of worship, all but one of which are listed. The City also possesses a modern architectural heritage including, for example, the listed Barbican and Golden Lane Estates.

3.12.4 The City is one of the most important areas in the country in terms of archaeology. Its unique archaeological heritage dates back to the Roman settlement and has evolved through Saxon, medieval and later periods. Many Roman, Saxon and medieval remains still survive in the City today, including buried as well as visible remains, such as the Roman amphitheatre below Guildhall, the Roman and medieval London wall and the reconstructed Temple of Mithras in Queen Victoria Street. Archaeological investigation is an important aspect of development proposals.

- 5.7 There are no Scheduled Ancient Monuments or Statutorily Listed Buildings within the development site but the entirety of the City of London is considered to have archaeological potential and the site lies within the Bishopsgate Conservation Area as defined by The City of London.
- 5.8 It is now proposed to redevelop the site for commercial and residential purposes, including a three-storey below ground car park, the intention of the developer being to submit a planning application to the City of London shortly. This report on the archaeological monitoring of trial pit and borehole excavations has been produced in order to further inform the archaeological potential of the site and to support the application.

6 Archaeological Methodology

- 6.1 The fieldwork comprised the archaeological monitoring of the excavation of three boreholes and two trial pits. The sequence in one of the pits was also confirmed by limited coring through a basement slab adjacent to the pit location. All aspects of the work followed national (IFA 2008) and local (GLAAS 2009) guidelines, and complied with PCA's own fieldwork manual (Taylor and Brown 2009). The fieldwork was carried out according to a method statement prepared by PCA (Bradley 2013) and approved by Kathryn Stubbs on behalf of the City of London. The geotechnical investigations were also carried out according to a method statement (Tyler 2013) approved by the client and the City of London.
- 6.2 It had originally been intended to excavate three trial pits, two at the surface and one at lower basement level, but the methodology was changed to include just two pits, TP1 at the surface and TP3 in the basement, the location of the former also being changed slightly from the original methodology (Figure 2).
- 6.3 TP1 was located towards the west of the site, adjacent to a wall that partly supported Alderman's House. Surface paving slabs were carefully removed to avoid breakage and thereafter underlying deposits were excavated by hand under archaeological supervision. It had originally been intended to excavate the pit to 1.5m below ground level (bgl) but *in situ* concrete was encountered a short distance from the surface (Plate 1). It was therefore only practical to excavate to a depth of 0.71m in the narrow gap between the concrete and the wall. The trial pit was extended to the south, initially in the paved area and subsequently into the motorcycle parking area south of the wall, but the concrete was found to continue into the areas and excavation ceased.
- 6.4 TP3 was located against the northern wall of the north-western room in the lower basement of Alderman's House. Following removal of a plastic floor covering the basement slab was broken out using an electrically-powered jackhammer. The slab was found to be substantial and reinforced with rebars (Plate 2); subsequent drilling indicating a thickness of at least 1.7m. Consequently the trial pit was abandoned but a small borehole (TP3a) was excavated further to the south using an electrically-powered, 150mm diameter hollow drill, which penetrated the less-substantial floor slab at this location, into underlying natural deposits.
- 6.5 The three boreholes (BH1 – BH3) were all excavated from the current surface ground level. BH1 was located in the motorcycle parking area at the west of the site (Plate 3), BH2 was located adjacent to Alderman's Walk at the south of the site (Plate 4) and BH3 was located adjacent to White Hart Court (Plate 5) and to the north of BH2 (Figure 2). At each location surface hard-standing materials were removed using hand-held power-tools, whilst underlying deposits were removed by hand under

archaeological supervision to a depth of 1.2m bgl. Thereafter coring through underlying deposits was carried out using a mechanically operated, cable-percussion coring rig with 150mm diameter coring heads. Material was removed in spits up to 0.5m in thickness and its composition recorded both archaeologically and geologically as the coring progressed, though archaeological recording ceased once natural London Clay was penetrated.

7 Watching Brief Observations and Interpretation of Sequences

7.1 This section records the stratigraphic sequences in each of the trial pits and boreholes and offers some interpretation of the sequences revealed. Elevations for the tops of sequences are extrapolated from topographic plans supplied by the client. However, no spot heights for the actual pit or core locations are shown on these plans so upper levels are estimated from nearest spot heights. For this reason recorded deposits in boreholes and trial pits are shown as depth measurements rather than absolute elevations. Depths given in core logs are below ground level (bgl), which for BH1 is the surface of the motorcycle parking area, for BH2 is the surface of the pavement north of Alderman's Walk and for BH3 is the surface of the pavement south of White hart Court. The comparative sequences from the three boreholes are illustrated in Figure 3. The sequences exposed in the two trial pits were of limited archaeological value but are briefly discussed at the end of this section

7.2 BH1 (upper level c. 15.01m AOD)

- 0 – 0.44m: Modern asphalt and concrete bedding [8] (asphalt 80mm, concrete 0.36m)
- 0.44 – 0.85m: Loose, mid greyish brown sandy silt made ground with modern ceramic building material (CBM) fragments [10]
- 0.85 – 0.90m: Soft, light yellowish brown sand [11]
- 0.90 – 1.50m: Loose, dark greyish brown, silty sand [12] with recent metal and CBM fragments
- 1.50 – 2.80m: Hard deposit comprising alternating layers of brick and concrete rubble [30]
- 2.80 – 2.90m: Ceramic sewer pipe [31]
- 2.90 – 3.80m: Friable, dark greyish brown, sandy silt with some CBM, chalk and gravel [32]
- 3.80 – 4.40m: Firm, mid yellowish brown, clayey silt (brickearth) [33]
- 4.40 – 9.70m: Coarse, sandy gravel (Natural Terrace Gravel) [34]
- 9.70 – 9.85m: Stiff, mid yellowish brown, clay (Terrace Gravel/London Clay interface deposit) [35]
- 9.85m+: Very Stiff, dark brownish grey, clay (London Clay) [36]

7.2.1 The basal deposit recorded archaeologically in this borehole was the natural London Clay [36], which was encountered at an upper elevation (c. 5.16m AOD) that would be expected in this part of London. It was overlain by 0.15m of lighter-coloured clay [35], which also included occasional, small, sub-rounded pebbles and appears to have been a transitional layer between the London Clay below and Terrace Gravel above. Overlying the transitional deposit was a 5.3m thick layer of natural Terrace Gravel [34], the surface of which was recorded at c. 10.61m AOD. This was capped by a 0.60m thick deposit of clayey silt brickearth [33], which survived to a maximum

elevation of c. 11.21m. This had probably originally been much thicker but its upper level had been reduced by truncation, probably quarrying.

7.2.2 Lying above the brickearth was a 0.90m thick deposit of friable, dark greyish brown, sandy silt [32] that contained occasional oyster shell and tile fragments. Analysis of the latter showed that they were Roman, though the material they were contained within is more likely to have been deposited during the medieval period (see context [13], BH3, below), possibly as backfill of a quarry pit. The deposit was recorded at an upper level of c. 12.11m AOD and appeared to be overlain by a ceramic sewer pipe [31], though this is likely to have been within a trench, cut into the quarry fill. The sewer pipe was sealed by a series of hard and compacted layers up to 1.30m thick, mostly comprising brick and concrete fragments [30], the surface of which lay at c. 13.51m AOD. Although not possible to detect in the core, the surface of this may have been a floor associated with earlier activity on the site. A brick fragment recovered from this deposit is of late 19th-century date.

7.2.3 Overlying the possible floor was a 0.60m thick deposit of loose, dark greyish brown, silty sand [12] that contained a high rubble element, including metal fittings and brick fragments, all of which appeared to be of relatively recent date. This material appears to have been laid down as a deliberate ground-raising deposit during a recent development phase on the site. The surface of the deposit was capped by a thin (50mm) layer of soft sand [11], which in turn was overlain by 0.41m of loose, mid greyish brown, sandy silt [10] that included recent brick rubble fragments. The surface of this was recorded at c. 14.57m AOD and it appears to have been a further made ground deposit. The sequence in this borehole was completed by a 0.44m thick concrete slab that was capped with 80mm of asphalt [8], which provided the current motorcycle park surface.

7.3 **BH2** (upper level c. 15.67m AOD)

0 – 0.15m: Modern paving slab and bedding [19] (paving slab 50mm, sand bedding 100mm)

0.15 – 1.50m: Friable, dark greyish brown, silty sand with some recent demolition rubble [20]

1.50 – 1.80m: Friable, dark greyish brown, sandy silt with some CBM fragments [23]

1.80 – 3.00m: Open void

3.00 – 3.20m: Friable, dark greyish brown, sandy silt with some CBM fragments [24]

3.20 – 3.60m: Brick and stone foundation [25]

3.60 – 5.40m: Firm, mid yellowish brown, clayey silt (brickearth) [26]

5.40 – 10.70m: Coarse, sandy gravel (Natural Terrace Gravel) [27]

10.70 – 11.00m: Stiff, mid yellowish brown, clay (Terrace Gravel/London Clay interface deposit [28])

11.00m+: Very Stiff, dark brownish grey, clay (London Clay) [29]

- 7.3.1 The basal deposit recorded archaeologically in this core was natural London Clay [29], the surface of which was recorded at c. 4.67m AOD; a similar level to that which would be expected in this area. The London Clay was overlain by a 0.3m thick deposit of lighter-coloured clay [28], which also included occasional, small, sub-rounded pebbles and appears to have been a transitional layer between the London Clay below and Terrace gravel above. The clay was overlain by a substantial Pleistocene Terrace Gravel deposit [27], which was 5.3m thick and recorded at a surface elevation of c. 10.27m AOD, which compares well with the recorded surface level of the deposit in exposures nearby (see para. 3.2). The gravel was overlain by a 1.8m thick deposit of brickearth [26], which was also recorded at a surface elevation (c. 12.07m AOD) comparable with other sequences in the area, including the 1981 watching brief on the site.
- 7.3.2 Directly overlying the brickearth was a brick and stone foundation [25], at least 0.4m thick and recorded at an upper elevation of c. 12.47m AOD. However, it is likely that this was the lower, stepped out level of a brick foundation [22] recorded at a much higher level (c. 14.17m AOD), immediately north of the borehole (Plate 6). This foundation was aligned east to west and clearly continued the southern alignment of standing buildings located east of the borehole. It therefore represented the below-ground remains of a building that fronted the north side of Alderman's Walk prior to redevelopment of the site in the early 1980s. The bricks in foundation [22] appeared to be of 19th-century date but this may have sat on an earlier foundation; historic cartographic evidence (Miller 2007, Fig. 5) clearly shows a building occupying this location since at least 1676, if not before. The lower foundation [25] may therefore have early post-medieval origins (a fragment of worked stone recovered from the foundation has been identified as Kentish Ragstone and most likely pre-dates 1800).
- 7.3.3 Overlying lower foundation [25] was a 0.2m thick deposit of friable, dark greyish brown, sandy silt [24], which included some CBM fragments (dated to the early post-medieval period) and was recorded at an upper elevation of c. 12.67m AOD. This may have been a dumped demolition deposit or possibly the backfill of a construction cut for the foundation. Above deposit [24] was a 1.2m deep void, which was sealed by a 0.3m thick deposit of friable, dark greyish brown, sandy silt [23], recorded at an upper elevation of c. 14.17m AOD. This appeared to be further dumped demolition material, though contained a residual fragment of Roman tile, and was overlain by a more extensive, 1.35m thick deposit of friable, dark greyish brown, silty sand [20]. This included a great deal of building rubble and was probably deposited following demolition of the previous building in the 1980s. It lay against the south side of the surviving foundation [22] of that building, up to a maximum elevation of c. 15.52m AOD. The sequence was completed by a modern paving slab located within sand bedding [19] which directly overlay the upper foundation and demolition rubble.

- 7.4 **BH3** (upper level c. 15.26m AOD)
- 0 – 0.10m: Modern paving slab and bedding [5] (paving slab 80mm, sand bedding 20mm)
 - 0.10 – 2.90m: Friable, dark greyish brown, sandy silt with occasional CBM fragments, pottery and oyster shell [6]
 - 2.90 – 2.95m: Firm, mid yellowish brown, sandy clay [9]
 - 2.95 – 4.30m: Friable, dark greyish brown, sandy silt with moderate charcoal and occasional CBM and pottery [13]
 - 4.30 – 4.70m: Firm, mid reddish brown, silty clay with occasional charcoal flecks, small pebbles and oyster shell [14]
 - 4.70 – 5.00m: Slightly friable, mid reddish brown, sandy silt (brickearth) [15]
 - 5.00 – 10.20m: Very firm, mid yellowish brown, sandy gravel (natural Terrace Gravel) [16]
 - 10.20 – 10.30m: Stiff, mid yellowish brown, clay (London Clay/Terrace Gravel interface deposit) [17]
 - 10.30m +: Very stiff, dark brownish grey, clay (London Clay) [18]
- 7.4.1 The basal deposit recorded archaeologically in this borehole was the natural London Clay [18], which was encountered at a depth (c. 4.96m AOD) that would be expected in this part of London. It was overlain by a stiff, mid yellowish brown, clay [17], similar to that recorded in the other boreholes but only 100mm thick. This in turn was overlain by a 5.2m thick deposit of Terrace Gravel [16], the surface of which, was recorded at an almost identical level (c. 10.26m AOD) to that in BH2. The gravel was overlain by a deposit of brickearth [15] but unlike the extensive deposit in BH2, this was just 0.30m thick, being recorded at an upper elevation of c. 10.56m AOD. Overlying the *in situ* brickearth was a further 0.40m of what appeared to be disturbed and redeposited brickearth [14] that also included charcoal flecks and oyster shell fragments.
- 7.4.2 It appeared that the brickearth in this part of the site had been significantly truncated and that the disturbed clay layer represented the lower fill of an excavated feature. It was overlain by a 1.35m thick deposit of friable, dark greyish brown, sandy silt [13] that included CBM and pottery along with charcoal fragments. Although Roman tile was present, a sherd of medieval pottery was also recovered and the deposit has been dated to the later medieval period, possibly suggesting a medieval quarry pit at this location. Such features have also been identified on other sites in the vicinity and the deposit in this borehole may be contemporary with context [32] in BH1, possibly within the same feature. This 'fill' was overlain by a 50mm thick deposit of firm, mid yellowish brown, sandy clay [9] that also had a moderate charcoal content. This in turn was sealed by a 2.8m thick deposit of friable, dark greyish brown, sandy silt [6], recorded at an upper elevation of c. 15.16m AOD and interpreted as a recent made ground deposit, though a residual sherd of late medieval pottery was recovered and it

is possible that this extensive deposit included elements laid down over an extended time period. The sequence in this borehole was completed by an 80mm thick modern paving slab, sitting within 20mm of sand bedding [5].

7.5 **TP1** (upper level c. 15.27m AOD)

0 – 0.10m: Modern paving slab and bedding [1] (paving slab 80mm, sand bedding 20mm)

0.10 – 0.38m: Loose, dark brown, silty sand [2] (modern made ground)

0.38 – 0.71m+: Loose, mid reddish brown, silty sand [3] (modern rubble infill)

0.38 – 0.71m+: Modern concrete [4]

7.5.1 Only modern materials were observed in this test pit. The concrete may have encased a service so was not excavated and rubble infill [3] was located in the narrow gap between the concrete and the wall to the east, so could only be excavated as deep as was practicable. These deposits were overlain by made ground [2] and the sequence capped by a modern paving slab overlying a sand bedding [1]. The pit was subsequently extended to the south but the same sequence was revealed and it was ultimately abandoned.

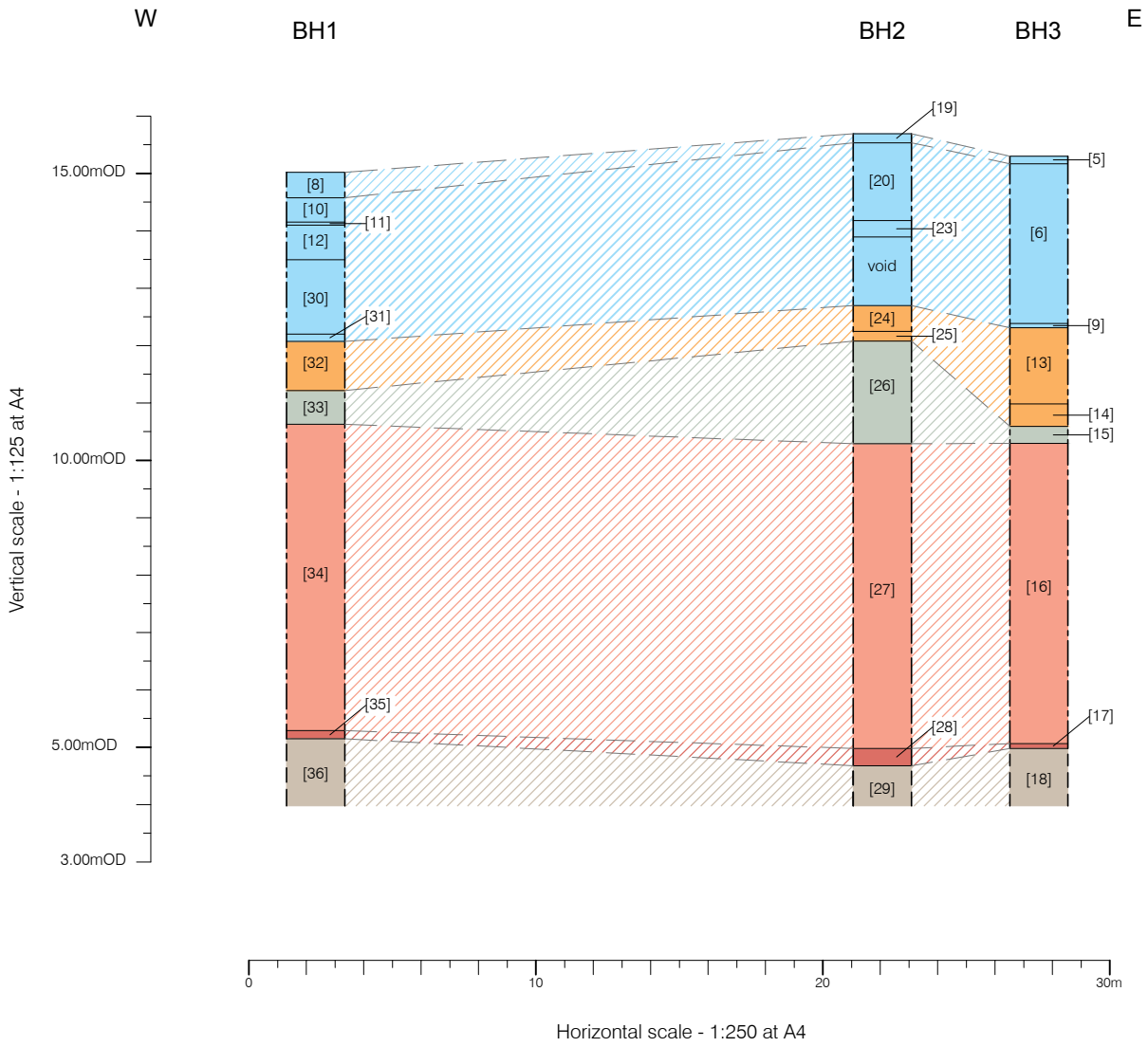
7.6 **TP3/TP3a** (upper level c. 10.45m AOD)

0 – 1.7m+ (TP3): Modern concrete slab [7]

0 – 0.40m (TP3a): Modern concrete slab [7]

0.40 – 0.20m+ (TP3a): Natural Terrace Gravel [21]

7.6.1 TP3 was found to be located over an extensive concrete slab, which drilling revealed to be at least 1.7m thick. It was thus abandoned and a core (TP3a) drilled further to the south in the same room. The earliest deposit in this was natural Terrace Gravel [21], recorded at an upper elevation of c. 10.05m AOD and therefore only c. 0.2m below the surface of this deposit recorded in BH2 and BH3, and c. 0.6m below that in BH1, indicating that the basement had possibly only partly truncated the upper levels of the gravel. The gravel was overlain by the modern concrete floor [7], which at this location was only 0.4m thick.



- Modern
- Potential Archaeology
- Brickearth
- Terrace Gravel
- Intermediate Clay
- London Clay

Figure 3
Borehole sections
(scales as indicated on drawing)

8 Phased Archaeological Sequence

8.1 Phase 1: Palaeogene Deposits

8.1.1 Natural Palaeogene (Eocene) London Clay was recorded in all three boreholes, the surface being encountered at levels approximating to those that would be expected in this part of the City of London, though the surface elevation varied by almost 0.5m between cores.

8.2 Phase 2: Quaternary Deposits

8.2.1 In all three borehole sequences the London Clay was overlain by a lighter-coloured clay that also included small pebble inclusions and varied in thickness between 100mm and 0.3m. This appears to have been a basal Pleistocene deposit and in all sequences was overlain by extensive sand and gravel deposits of the Taplow Terrace formation. The thickness of the deposit was very consistent across all sequences (5.2m to 5.3m), though the upper elevation was slightly higher within BH1 to the west of the site, compared with BH2 and BH3 to the east. The gravel had not been impacted upon by human activity in any of the borehole sequences, though it had clearly been truncated to some extent where it was recorded in TP3a in the basement.

8.2.2 The gravel was capped in all three borehole sequences by brickearth deposits, which in BH2 at the south of the site did not appear to have been impacted upon by human activity, the surface elevation comparing well with the upper level of brickearth recorded during the 1981 watching brief on the site (Miller 2007, 8). In the other two sequences however, the surface of the brickearth was significantly reduced, particularly in BH3 towards the east of the site. This has been interpreted as evidence of brickearth quarrying, which has also been recorded elsewhere in the vicinity, as well as in the watching brief on the site itself. Such quarrying took place during the Roman, medieval and later periods, though the activity evidenced in BH1 and BH3 here, most likely dated to the medieval period:

8.3 Phase 3: Medieval

8.3.1 Although Roman artefactual evidence was recovered from deposits in all three boreholes, this is likely to have been residual material in each case and it appears that the earliest clear phase of activity in the areas cored was during the medieval period. Given the evidence from elsewhere and on the site itself, it is likely that this activity was associated with brickearth quarrying and subsequent backfilling of quarry pits, and although only Roman material was recovered from backfilling deposit [32] in BH1, medieval pottery was also recovered from the comparable layer [13] in BH3. The difference in upper elevation between the brickearth in BH2 and BH3 was approximately 1.5m, suggesting that quarrying extended at least this far into the

brickearth, though given that the brickearth in BH3 was not fully penetrated, it is likely that quarrying extended to a greater depth. Backfilling deposits recorded in BH1 and BH3 were therefore probably located towards the southern edge of a large quarry pit or pits, rather than towards the centre.

8.4 Phase 4: Earlier Post-Medieval

8.4.1 It is known from cartographic evidence that there were buildings along the southern edge of the site from at least the 16th century, with a similar alignment followed from at least the mid 17th century until demolition in the early 1980s. It is likely that the apparently *in situ* masonry encountered at c. 12.47m AOD in BH2 was part of the foundation of one of the earlier post-medieval buildings. Elsewhere, there was possibly also some ground-raising during the earlier post-medieval period, as evidenced by the lower levels of deposit [6] in BH3, though it was not possible to visually distinguish these from the clearly later upper deposits.

8.5 Phase 5: 19th Century

8.5.1 Evidence of 19th-century construction was recorded in BH1 and BH2. In the latter this was represented by the east-west aligned wall foundation [22], which was possibly constructed over the earlier foundation [25], whilst in the former a ceramic sewer pipe and apparently overlying floor deposits may have been associated with the 19th-century phase of building development. They were certainly no earlier. It is also possible that part of deposit [6] in BH3 was of 19th-century date.

8.6 Phase 6: Recent Development

8.6.1 Deposits associated with more recent site development generally comprised demolition rubble and general dumped material such as deposits [10], [11] and 12 in BH1, deposits [20] and [23] in BH2 and the upper part of deposit [6] in BH3. Some of these deposits probably relate to the demolition of earlier structures on the site in the early 1980s, but some material appears to have predated this and may have been associated with an earlier 20th-century phase of site redevelopment, or at least one that post-dated late 19th-century development.

8.7 Phase 7: Modern

8.7.1 Deposits associated with modern site development comprised the paving and bedding deposits recorded in TP1, BH2 and BH3, asphalt and bedding deposits recorded in BH1, and the concrete basement slab recorded in TP3 and TP3a.

9 Discussion and Conclusions

- 9.1 Although the coring and trial pitting exposed a very limited spatial range of deposits and the trial pitting was also stratigraphically-restricted, the watching brief as a whole revealed a number of phases of deposition and activity on the site which started with the accumulation of natural deposits and ended with modern demolition and construction activities.
- 9.2 Natural London Clay was recorded in all three borehole sequences and was capped by more than 5m of Quaternary deposits at each location. The bulk of Quaternary material was Pleistocene Taplow Terrace Gravel but in each sequence this was capped by brickearth, though the full thickness of this only appears to have remained intact at the southern edge of the site, truncation having significantly reduced the level of the material further north.
- 9.3 Truncation of the brickearth in more northerly areas was most likely caused by extraction of the material for brick production, which on the basis of the finds recovered, probably occurred in the medieval period. This may have been contemporary with other medieval activity on the site, evidenced during the 1981 watching brief.
- 9.4 Historic cartographic documents indicate that the southern part of the site had been built upon by the mid 16th century and a footing revealed at depth at the southern edge of the site probably dated to the earlier post-medieval period. This footing, or at least its alignment, appears to have been utilised until at least the later 19th century when there was further building or rebuilding along the southern edge of the site, as evidenced by the brick foundation exposed in the edge of BH2. Contemporary structural remains also survived to the north-west, where a ceramic sewer pipe remained intact below an apparent floor.
- 9.5 There were further phases of development in the 20th century, culminating in the demolition of a number of the buildings along the southern edge of the site and construction of the current Alderman's House and 34-37 Liverpool Street in the early 1980s, both of which included deep basements that are likely to have removed any archaeological deposits within their footprints.
- 9.6 The archaeological method statement produced prior to commencement of the watching brief outlined a number of objectives that the work should address (Bradley 2013, 4):
- To record the nature, extent, date, character, quality, significance and state of preservation of any archaeological remains revealed by the investigation
 - To assess where appropriate the ecofactual and palaeo-environmental potential of archaeological deposits and features from within the site.

- To report on the results of the watching brief

- 9.7 The watching brief has addressed all of the objectives: Deposits recorded comprised natural materials of Palaeogene and Quaternary age, medieval quarry fills and post-medieval structural and ground-raising materials. The small areas within which the materials were recorded has meant that the character and quality of the remains has been difficult to assess but significant remains of medieval and post-medieval date, along with residual Roman material were present. The preservation of the limited deposits recorded appears to be good and whilst it is difficult to assess the ecofactual and palaeo-environmental potential, carbonised remains and molluscan fragments were certainly present, whilst more deeply buried, fine-grained deposits may also have the potential for the preservation of biological material by waterlogging. Finally, this report provides a record of the results of the watching brief.
- 9.8 Archaeological deposits ranging in date from the medieval to later post-medieval periods were identified at the three borehole locations and a small quantity of residual Roman material was also recovered. The investigation has demonstrated the survival of some level of archaeological deposits in areas outside the footprints of the 1980s development and this can be related in part to the findings of the 1981 watching brief on the 34-37 Liverpool Street part of the site. Given that there are clearly areas of the site that have not been significantly truncated by recent development, there is a potential for the survival of further remains of archaeological interest. In addition to the medieval and post-medieval activity already demonstrated, the likelihood of intact Roman deposits should also be considered, particularly in light of the burial recorded at 34-37 Liverpool Street, the recovery of residual Roman material during the current watching brief, and the location of the site, adjacent to a former Roman road.

10 Acknowledgements

- 10.1 Pre-Construct Archaeology Ltd. would like to thank Pete Mills of Mills Whipp Projects for commissioning the work on behalf of Amsprop Bishopsgate Ltd.; the staff of RSK Environment, particularly Andy Tyler and Roseanna Bloxham, who managed and supervised the project; and Kathryn Stubbs who monitored the project on behalf of the City of London.
- 10.2 The author wishes to thank Tim Bradley for project management and editing this report, Kevin Haywood and Chris Jarrett for commenting on the finds and Mark Roughley for preparing the illustrations.

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12 APPENDIX 1: PLATES



Plate 1: Surface of concrete [4] in TP1, Looking north



Plate 2: Rebars in basement slab [7], TP3, Looking North



Plate 3: Coring BH1, Looking east



Plate 4: Coring BH2, Looking east



Plate 5: Coring BH3, Looking east



Plate 6: Wall footing [22] exposed in north of BH2, Looking west

13 APPENDIX 2: CONTEXT INDEX

Site Code	Context	Type	Core/TP	Description	Date	Phase
BIH14	1	Layer	TP1	Modern slab and bedding	Modern	7
BIH14	2	Layer	TP1	Made ground	Recent	6
BIH14	3	Layer	TP1	Demolition rubble	Recent	6
BIH14	4	Layer	TP1	Concrete	Recent	6
BIH14	5	Layer	BH3	Modern slab and bedding	Modern	6
BIH14	6	Layer	BH3	Made ground	Recent	6
BIH14	7	Layer	TP3	Concrete	Modern	7
BIH14	8	Layer	BH1	Asphalt and concrete	Modern	7
BIH14	9	Layer	BH3	Sandy clay layer	19 th C	5
BIH14	10	Layer	BH1	Made ground	Recent	6
BIH14	11	Layer	BH1	Soft sand	Recent	6
BIH14	12	Layer	BH1	Made ground	Recent	6
BIH14	13	Layer	BH3	Quarry pit infill	Medieval	3
BIH14	14	Layer	BH3	Quarry pit infill	Medieval	3
BIH14	15	Layer	BH3	Brickearth	Pleistocene	2
BIH14	16	Layer	BH3	Terrace Gravel	Pleistocene	2
BIH14	17	Layer	BH3	Transitional clay	Pleistocene	2
BIH14	18	Layer	BH3	London Clay	Palaeogene	1
BIH14	19	Layer	BH2	Modern slab and bedding	Modern	7
BIH14	20	Layer	BH2	Made ground	Recent	6
BIH14	21	Layer	TP3a	Terrace Gravel	Pleistocene	2
BIH14	22	Masonry	BH2	E-W foundation	19 th C	5
BIH14	23	Layer	BH2	Made ground?	Recent	6
BIH14	24	Layer	BH2	Construction cut fill?	Early P-M	4
BIH14	25	Masonry	BH2	E-W foundation?	Early P-M	4
BIH14	26	Layer	BH2	Brickearth	Pleistocene	2
BIH14	27	Layer	BH2	Terrace Gravel	Pleistocene	2
BIH14	28	Layer	BH2	Transitional clay	Pleistocene	2
BIH14	29	Layer	BH2	London Clay	Palaeogene	1
BIH14	30	Layer	BH1	Possible floor make-up	19 th C	5
BIH14	31	Masonry	BH1	Sewer pipe	19 th C	5
BIH14	32	Layer	BH1	Quarry pit infill	Medieval	3
BIH14	33	Layer	BH1	Brickearth	Pleistocene	2
BIH14	34	Layer	BH1	Terrace Gravel	Pleistocene	2
BIH14	35	Layer	BH1	Intermediate clay	Pleistocene	2
BIH14	36	Layer	BH1	London Clay	Palaeogene	1

APPENDIX 3: POST-ROMAN POTTERY

Post-Roman pottery spot dating index (BIH14)

Chris Jarrett

Introduction

A small assemblage of pottery was recovered from the excavation (five sherds/5 estimated number of vessels (ENV)/46g). The pottery is in a good condition although present as sherd material and the forms represented are difficult to interpret. The pottery dates from the medieval to post-medieval periods and was recovered from two contexts.

Context [6], spot date: 19th century

Coarse Surrey-Hampshire border ware (CBW), 1270-1500, one sherd/1 ENV/24g, form: unidentified.

English porcelain with under-glaze blue transfer-printed decoration (ENPO UTR), 1760-1900, one sherd/1 ENV/6g, form: possible bowl

Miscellaneous unsourced post-medieval pottery (MISC), as a glazed, coarse red earthenware, 1480-1900, one sherd/1 ENV/7g, form: unidentified.

Transfer-printed refined whiteware (TPW), 1780-1900, one sherd/1 ENV/1g, form: unidentified.

Context [13], spot date: 1240-1400

Kingston-type ware (KING), 1240-1400, one sherd/1 ENV/8g, form: probable cooking pot.

Significance, potential and recommendations for further work

The pottery has little significance at a local level and consists of pottery types frequently found in the London area. The only potential of the pottery is to date the contexts it was recovered from. There are no recommendations for further work.

APPENDIX 4: CERAMIC BUILDING MATERIALS

Ceramic Building Materials spot dating (BIH14)

Kevin Hayward

Context	Fabric	Form	Size	Date range of material		Latest dated material		Spot date	Spot date with mortar
13	2457; 2459a	Fragmentary and abraded Roman tile and possible tegula	2	50	300	140	300	140-300+	No mortar
23	2815	Vitrified Roman sandy tile	1	50	160	50	160	50-160+	No mortar
24	3033	Early post medieval brick sunken margin	1	1450	1700	1450	1700	1450-1700+	No mortar
25	3105	Kentish ragstone rubble	1	50	1800	50	1800	50-1800	No mortar
30	3032nr3035; 3101	Nineteenth century post great fire brick and hard dark concrete mortar	2	1664	1900	1664	1900	1750-1900	1850-1900
32	2815	Roman Tile Fragments	2	50	160	50	160	50-160	No mortar

Review

The assemblage (8 fragments 1.1kg) consists of small pieces of fragmentary Roman ceramic building material from [13] [23] [32] made from the common late first to second century sandy group 2815 (AD50-160), with few pieces of having a diagnostic form or unusual fabric the exception being a flanged roofing material fragment and a late Roman abraded shelly cream fabric 2457 (AD140-300), both from [13].

Early post medieval development from this site is represented by a fragment of early post medieval red brick (fabric 3033) [24] whilst Victorian activity is shown by a post great fire brick bonded with a hard concrete mortar [30] typical of the latter half of the 19th century. A part worked fragment of Kent ragstone from [25] is not so easy to date as this stone was used in Roman, medieval and post medieval London as a building material.

Recommendations

The recovery of abraded fragments of standard early and later Roman roofing material from a site on the fringes of the Roman city of London from [13] [23] and [32] should not be seen as at all surprising. Large dumps of Roman building material are a feature of Roman and early medieval London. In the main, they are common standard fabrics for London and their main use here is to date some of the layers of the borehole to the Roman period. Other than that there is limited potential from the rest of the assemblage which consists of common early post medieval ceramic construction materials.

APPENDIX 5: OASIS FORM

OASIS ID: preconst1-170024

Project details

Project name 117-121 Bishopsgate

An archaeological watching brief was carried out during the excavation of boreholes and trial pits at 117-121 Bishopsgate. The work was conducted in advance of proposed redevelopment of the site, in external pavement and parking areas and within an internal basement. Excavation of the trial pits was of limited value as only modern materials and natural Terrace Gravels were revealed. The borehole excavations were far more informative with the earliest material recorded being London Clay. This was sealed by extensive Pleistocene Terrace Gravel deposits, which were capped by brickearth up to 1.8m thick towards the south of the site but truncated towards the north and west, probably by quarrying. The earliest finds recovered were fragments of Roman tile, but this material appears to have been residual within later deposits.

Short description of the project The earliest activity on the site was probably during the medieval period and most likely involved brickearth quarrying, quarry backfill deposits being tentatively identified in two of the sequences and truncation of brickearth most extensively apparent towards the east of the site. Activity continued into the early post-medieval period as evidenced by a possible wall footing recorded at the south of the site and most likely associated with early development along the north side of Alderman's Walk. There was probably also ground raising at this time. Nineteenth-century activity on the site was represented by apparent rebuilding and re-use of the wall footing and further ground-raising. Rubble deposits probably associated with 20th-century demolition and redevelopment of the site were observed in all cores and each sequence was capped by modern surface materials associated with the most recent site development.

Project dates Start: 13-01-2014 End: 28-01-2014

Previous/future work Yes / Yes

Any associated project reference codes BIH14 - Sitecode

Type of project Recording project

Site status None

Current Land use Industry and Commerce 2 - Offices

Monument type QUARRY PIT Medieval

Monument type WALL Post Medieval

Significant Finds TILE Roman

Significant Finds POTTERY Medieval

Significant Finds POTTERY Post Medieval

Significant Finds BRICK Post Medieval

Investigation type "Watching Brief"

Prompt National Planning Policy Framework - NPPF

Project location	
Country	England
Site location	GREATER LONDON CITY OF LONDON CITY OF LONDON 117-121 Bishopsgate
Postcode	EC2
Study area	900.00 Square metres
Site coordinates	TQ 33192 81506 51.5162555635 -0.0802099929595 51 30 58 N 000 04 48 W Point
Height OD / Depth	Min: 10.05m Max: 12.07m
Project creators	
Name of Organisation	Mills Whipp
Project brief originator	Mills Whipp
Project design originator	Tim Bradley
Project director/manager	Tim Bradley
Project supervisor	Peter Boyer
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Amsprop Bishopsgate Ltd.
Project archives	
Physical Archive recipient	LAARC
Physical Contents	"Ceramics"
Digital Archive recipient	LAARC
Digital Contents	"Ceramics"
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	LAARC
Paper Media available	"Context sheet", "Drawing"
Project bibliography	
1	
Publication type	Grey literature (unpublished document/manuscript)
Title	AN ARCHAEOLOGICAL WATCHING BRIEF ON GEOTECHNICAL INVESTIGATIONS AT 117-121 BISHOPSGATE, CITY OF LONDON
Author(s)/Editor(s)	Boyer, P.

Date 2014
Issuer or publisher Pre-Construct Archaeology Ltd.
Place of issue or publication London
Description MAP2/MoRPHE Report
Entered by Peter Boyer (pboyer@pre-construct.com)
Entered on 29 January 2014

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