

WESTMINSTER KINGSWAY COLLEGE The Victoria Centre Vincent Square London SWIP

London Borough of Westminster

Archaeological desk-based assessment

August 2008



MUSEUM OF LONDON

Archaeology Service

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Note: site outlines may appear differently on some figures owing to distortions in historic maps. North is approximate on early maps.

Executive Summary

Turner & Townsend Project Management on behalf of the Westminster Kingsway College has commissioned the Museum of London Archaeology Service to carry out an archaeological desk-based assessment of proposed development at Westminster Kingsway College, Vincent Square, London. The development proposal would comprise the demolition of the north-east block and alterations and structural development behind the retained south-west façade of the existing Grade II* Listed Westminster Kingsway College, which was built between 1905 and 1950. The existing basement would be retained and a new basement added in the north-eastern corner of the site.

The College currently has a basement that covers approximately two-thirds of the site. Archaeological remains within its footprint will probably have already been removed. The eastern third of the site lies outside the basement footprint and archaeological remains, primarily dating to the prehistoric and Roman periods, might potentially have survived below the ground floor slab. Although there is limited evidence of activity dated to these periods in the vicinity, the location of the site on a higher sandy island within a broad alluvial floodplain would have made it suitable for early settlement.

Construction of the proposed basement would entirely remove any archaeological remains from within the basement footprint. The basement would be constructed in the area of greatest archaeological survival potential. The method of the construction of the basement, which lies beneath the retained building, is not currently known.

In the light of the uncertain archaeological potential of the site, in particular for the prehistoric and Roman periods, it is recommended an archaeological trenching evaluation is carried out to assess and define the presence or nature of any archaeological remains within the proposed basement footprint. A preliminary investigation could also include the geoarchaeological monitoring of any geotechnical pits dug for engineering purposes. The results of the evaluation would enable the local planning authority to make an informed decision in respect of an appropriate mitigation strategy for any significant archaeological remains on the site.

1 Introduction

1.1 Origin and scope of the report

- 1.1.1 Turner & Townsend Project Management on behalf of the Westminster Kingsway College has commissioned the Museum of London Archaeology Service (MoLAS) to carry out an archaeological desk-based assessment of proposed development at Westminster Kingsway College, Vincent Square, London SW1 (National Grid Reference 529541 178965: Fig 1). The development proposal comprises alterations to the existing building ranging from minor alterations to major structural development behind the retained façade, including the demolition of the north-east block and the construction of new wing. The existing basement would be enlarged, extending into the north-eastern corner of the site.
- 1.1.2 This desk-based assessment forms an initial stage of investigation of the area of proposed development (hereafter also referred to as the 'site') and may be required at a future date in relation to the planning process in order that the local authority can formulate appropriate responses in the light of any identified archaeological resources. A built heritage assessment is not included in this report.
- 1.1.3 The desk-based assessment has been carried out in accordance with the standards specified by the Institute of Field Archaeologists (IFA 2001) and the Association of Local Government Archaeological Officers. Under the 'Copyright, Designs and Patents Act' 1988 MoLAS retains the copyright to this document.
- 1.1.4 Note: within the limitations imposed by dealing with historical material and maps, the information in this document is, to the best knowledge of the author and MoLAS, correct at the time of writing. Further archaeological investigation, more information about the nature of the present buildings, and/or more detailed proposals for redevelopment may require changes to all or parts of the document.

1.2 Site status

1.2.1 There are no Scheduled Monuments (nationally protected archaeological sites) within the site or its vicinity. The existing building on site, Westminster Kingsway College, is Grade II* Listed. The site does not lie within an Area of Special Archaeological Priority as defined by the local authority. The site is situated within the Westminster conservation area, designated by the City of Westminster Borough Council and English Heritage as being an area of 'special architectural or historic interest' whose character or appearance is worth protecting or enhancing.

1.3 Aims and objectives

- 1.3.1 The aim of the assessment is to:
 - Describe the survival and extent of known or potential archaeological features and structures of historical interest that may be affected by the proposals;
 - Assess the likely impacts arising from the proposals;
 - Provide recommendations to further quantify the nature of the archaeological and built heritage resources along with mitigation aimed at reducing or removing completely any adverse impacts.

2 Methodology and sources consulted

- 2.1.1 For the purposes of this report the documentary and cartographic sources, including results from any archaeological investigations in the close proximity to the area of proposed development and a study area around it were examined in order to determine the likely nature, extent, preservation and significance of any archaeological remains that may be present within the site.
- 2.1.2 In order to set the site into its full archaeological and historical context, information was collected on the known archaeology within a 1000m-radius study area around the area of proposed development, as held by the primary repositories of archaeological information within Greater London. These comprise the Greater London Sites and Monuments Record (GLSMR) and the London Archaeological Archive and Resource Centre (LAARC). The SMR is managed by English Heritage and includes information from past investigations, local knowledge, find spots, and documentary and cartographic sources. LAARC includes a public archive of past investigations and is managed by the Museum of London.
- 2.1.3 In addition, the following sources were consulted:
 - MoLAS Geographical Information System for Greater London, the MoLAS deposit survival archive, published historic maps and archaeological publications
 - National Monuments Record (NMR) information on statutory designations including Scheduled Monuments and Listed Buildings
 - The London Society Library published histories and journals
 - British National Copyright Library Ordnance Survey maps
 - British Geological Survey (BGS) geology map
 - Turner & Townsend architectural drawings, topographical survey, existing buildings structural review (July 2008)
 - Internet web-published material including Local Plan
- 2.1.4 Mike Morley, MoLAS Senior Geoarchaeologist was consulted regarding the geological history and landscape of the area of Westminster.
- 2.1.5 The assessment included a site visit by a MoLAS Buildings Archaeologist carried out on the 8th of July 2008, in order to examine the existing building as well as the topography of the site and to provide further information on possible past ground disturbance and general archaeological potential. Observations made on the site visit have been incorporated into this report.
- 2.1.6 The degree to which archaeological deposits actually survive on the site will depend on previous land use, so an assessment is made of the destructive effect of the previous and present activity and/or buildings, from the study of available plan information, ground investigation reports, or similar.
- 2.1.7 Fig 2 shows the location of known archaeological sites and finds within the study area. These have been allocated a unique assessment reference number (**DBA 1, 2**, etc), which is listed in a gazetteer at the back of this report and is referred to in the text. Section 9 contains a glossary of technical terms. A full bibliography and list of sources consulted may be found in section 10.

3 Planning framework

3.1 National planning policy guidance

3.1.1 Planning Policy Guidance Note 16: Archaeology and Planning (PPG16) sets out the Secretary of State's policy on archaeological remains, and provides recommendations subsequently integrated into local development plans. The key points in PPG16 can be summarised as follows:

Archaeological remains should be seen as a finite and non-renewable resource, and in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed. They can contain irreplaceable information about our past and the potential for an increase in future knowledge. They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism.

Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by a proposed development there should be a presumption in favour of their physical preservation.

If physical preservation in situ is not feasible, an archaeological excavation for the purposes of 'preservation by record' may be an acceptable alternative. From an archaeological point of view, this should be regarded as a second-best option. Agreements should also provide for the subsequent publication of the results of any excavation programme.

The key to informed and reasonable planning decisions is for consideration to be given early, before formal planning applications are made, to the question of whether archaeological remains are known to exist on a site where development is planned and the implications for the development proposal.

Planning authorities, when they propose to allow development which is damaging to archaeological remains, must ensure that the developer has satisfactorily provided for excavation and recording, either through voluntary agreement with the archaeologists or, in the absence of agreement, by imposing an appropriate condition on the planning permission.

Built heritage

3.1.2 In 1994, the Department of the Environment published its *Planning Policy Guidance Note 15: planning and the historic environment* (PPG15). This sets out the Secretary of State's policy on the visible remains of historic buildings, spaces and structures, and provides recommendations many of which have been integrated into local development plans. The key points in PPG15 can be summarised as follows:

It is fundamental to the Government's policies for environmental stewardship that there should be effective protection for all aspects of the historic environment. The physical survivals of our past are to be valued and protected for their own sake, as a central part of our cultural heritage and our sense of national identity. They are an irreplaceable record which contributes, through formal education and in many other ways, to our understanding of both the present and the past.

The Secretary of State attaches particular importance to early consultation with the local planning authority on development proposals which would affect historic sites and structures, whether listed buildings, conservation areas, parks and gardens, battlefields or the wider historic landscape. There is likely to be much more scope for refinement and revision of proposals if consultation takes place before intentions become firm and timescales inflexible.

Local planning authorities should also consider, in all cases of alteration or demolition, whether it would be appropriate to make it a condition of consent that applicants arrange suitable programmes of recording of features that would be destroyed in the course of the works for which consent is being sought.

3.2 Regional guidance: The London Plan

3.2.1 The over-arching strategies and policies for the whole of the Greater London area are contained within the GLA's London Plan (Feb 2008) also include statements relating to archaeology:

Policy 4B.15 Archaeology

The Mayor, in partnership with English Heritage, the Museum of London and boroughs, will support the identification, protection, interpretation and presentation of London's archaeological resources. Boroughs in consultation with English Heritage and other relevant statutory organisations should include appropriate policies in their DPDs for protecting scheduled ancient monuments and archaeological assets within their area.

3.3 Local Planning Policy

- 3.3.1 Following the Planning and Compulsory Purchase Act 2004, the City of Westminster Unitary Development Plan (UDP) which was adopted on the 24th of January 2007, will eventually be replaced with a Local Development Framework (LDF). Policies within the UDP will be "saved" and will remain in effect until at least 2010.
- 3.3.2 The document determines the position of archaeology as a material consideration in the planning process and incorporates Planning Policy Guidance Note 16 (PPG 16):

POLICY DES 11 – SCHEDULED ANCIENT MONUMENTS AND SITES OF ARCHAEOLOGICAL PRIORITY AND POTENTIAL

AIM (Para 10.147) To identify archaeological remains of national and local importance, conserve them in their settings, and provide public access to them. Where new development is proposed on sites of archaeological potential, to ensure adequate archaeological impact assessment, followed by appropriate provision for preservation or investigation, recording, and publication.

(A) Scheduled Ancient Monuments

Permission for proposals affecting the following Scheduled Ancient Monuments, or their settings, will be granted providing that their archaeological value and interest is preserved:

- 1. The Chapter House and Pyx Chamber in the Cloisters, Westminster Abbey; 2. The Jewel Tower.
- (B) Areas of Special Archaeological Priority and Potential

Permission will be granted for developments where, in order of priority:

- 1. all archaeological remains of national importance are preserved in situ;
- 2. remains of local archaeological value are properly recorded, evaluated and, where practicable, preserved in situ;
- 3. if the preservation of archaeological remains in situ is inappropriate, provision is made for full investigation, recording and an appropriate level of publication by a reputable investigating body.

Para 10.148 There are three categories of archaeological remains. In order of importance they are:

1. Scheduled Ancient Monuments:

Nationally important remains which are Scheduled under the Ancient Monuments and Archaeological Areas Act 1979

2. Areas of Special Archaeological Priority:

Areas rich in archaeological remains, where ground works are likely to reveal archaeological remains

3. Sites of Archaeological Significance and Potential: Areas where archaeological remains are known or thought likely to exist.

Para 10.149 These locations are listed in the Sites and Monuments Record maintained by English Heritage. The Areas of Special Archaeological Priority are Lundenwic and Thorney Island; Paddington and Lillestone Villages; Marylebone Village; Tyburn

Settlement and Ebury Village. The archaeological data produced by the Museum of London and English Heritage provide more detailed information, including further sites and areas of archaeological significance and potential within Westminster. Areas of Special Archaeological Priority are illustrated on maps 10.3-10.7. Information on these and other sites of archaeological priority and potential are available from the Greater London sites and monuments record maintained by English Heritage.

Para 10.150 In considering applications for development of land with archaeological potential, the City Council will require an archaeological assessment detailing the potential impact of development upon surviving archaeological remains. Should archaeological evaluation and investigations be required, it must be undertaken in accordance with a written scheme of investigation approved by the City Council. The Greater London Archaeology Advisory Service provides guidance papers detailing these procedures. With respect to policy DES 11 B (3), investigation may include a watching brief and, or, a full excavation.

Para 10.151 The City Council will seek professional archaeological advice as appropriate and will encourage applicants proposing development to do the same. Where development may affect land of archaeological priority or potential, the City Council will expect applicants to have properly assessed and planned for the archaeological implications of their proposals. In this way the Council and the applicant will have sufficient information upon which an informed planning decision, incorporating appropriate archaeological safeguards, may be based. Such safeguards normally consist of design measures to ensure the permanent preservation of archaeological remains in situ or, where that is not appropriate, archaeological rescue investigations in advance of development. The results and finds from archaeological investigations also need to be analysed, interpreted, presented to the public and curated for future use. Attention is drawn to the advice contained within the Code of Practice prepared by the British Archaeologists' and Developers Liaison Group.

Para 10.152 Archaeological remains are important evidence of the City's past and are a valuable historical, educational and tourist resource. They are finite and fragile; once lost, they cannot be recovered. The City Council considers that the archaeology of Westminster is a national as well as a local asset and that its preservation is a legitimate objective, against which the needs of development must be carefully balanced and assessed. The destruction of such remains should be avoided wherever possible and should never take place without prior archaeological excavation and record.

Para 10.153 The most important archaeological remains are scheduled and are protected under the Ancient Monuments and Archaeological Areas Act 1979. Where works to such sites and their setting are proposed, including repair, Scheduled Ancient Monument Consent is required.

Para 10.154 The London Plan states at Policy 4.C.10 that boroughs "should give careful consideration to the relationship between new development and the historic environment including archaeological areas, including tidal foreshores...". National planning guidance is set out in PPG16: Archaeology and Planning, issued in November 1990.

Para 10.155 The preservation of Westminster's archaeological heritage is a material planning consideration and applicants will need to show that proposed development is compatible with the objectives of the City Council's archaeological policy. The Council will wish to implement that policy under relevant legislation and statutory guidance and by means of legal agreements and planning conditions.

3.3.3 As stated, within the City of Westminster UDP are five Areas of Special Archaeological Priority. The site does not fall within any of these areas.

4 Archaeological and historical background

4.1 Site location, topography and geology

The site is located at the Westminster Kingsway College at Vincent Square in Westminster in London (NGR 529541 178965: Fig 1). It is situated on the north-east side of Vincent Square. The existing building on site, the Westminster Kingsway College, is on a north-west by south-east alignment and its frontage faces Vincent Square. The site is bounded by Rochester Row to the north-west and the Royal Horticultural Society Old Hall to the south-east. Behind it and to the north are the Church of St Stephen with St John and the Burdett-Coults and Townsend Foundation School. The site falls within the parish of St Margaret and St John's and lay within the county of Middlesex prior to being absorbed into the administration of the City of Westminster.

- 4.1.1 The Thames Valley forms a wide basin cut into the Cretaceous chalk, which outcrops as the Chilterns to the north of London and the North Downs to the south. The basin is filled with Eocene marine and estuarine sands and clays. These include the Reading-Woolwich beds and the London Clay that overlies them. Above these deposits lies a substantial thickness of Quaternary sediment. This includes fluvial gravel aggradations, deposited in former (and higher) floodplains of the Thames during cold (glacial) stages in the Pleistocene. The regime of the River Thames, which led to the deposition of this material, was greatly influenced by the climatic fluctuations of the Ice Ages, from about 2 million years ago. Former floodplains of the Thames were incised as the river downcut, owing to the low sea levels of warm (interglacial) stages, to form a series of terraces. In places these terraces are capped by brickearth. In the present floodplain, alluvial silt, clay and peat deposits laid down over the past 10,000 years (the Holocene) lie above late Devensian gravel that probably accumulated in a cold-climate braided river environment from about 18,000 to 11,500 years ago.
- 4.1.2 The level of the Thames at the end of the Ice Age was considerably lower than in more recent times and as a consequence, lower lying areas adjacent to the river were not immediately flooded, but became progressively more waterlogged as river levels rose. This process was the result of the unlocking of large quantities of water from the ice cap and the shifting and warping of the landmasses as the weight of ice was released. Some sites were not inundated until as late as the Bronze Age (c 2,200BC-800BC). However, changes in the relative rates of the controlling factors produced periods at which the sea level fell relative to the land. Phases of relative sea level rise are named transgressions and periods of sea level fall are named regressions. From pollen and diatom analysis it has been inferred that the Thames was probably tidal as far upstream as Bermondsey in the Neolithic. By the Late Bronze Age the tidal head had probably reached Westminster. Thus it is likely that the lower-lying areas adjacent to the rivers became increasingly waterlogged during the prehistoric period, as water levels rose. During this period peat is likely to have developed in boggy areas as marshland spread across the valley floor. Eventually, perhaps during the Iron Age, it appears that these areas and even the sandy eyots had become tidal mudflats prone to flooding (Corcoran 2006).
- 4.1.3 Following the establishment of the present course of the Thames at the end of the last Ice Age, the study area would have been progressively flooded and marshy with occasional higher, drier, islands or eyots. In the Westminster area the landscape would have been characterised by the rivers Tachbrook and Tyburn, two of the

c 4.30m OD at the western side sloping to c 4.12m OD towards east.

4.2 Overview of past archaeological investigations

4.2.1 A Standing Building Report of the existing Grade II* Listed Westminster Kingsway College was carried out in November 2007 by Alan Baxter & Associates LPP (Alan Baxter & Associates LPP draft report 2007). No archaeological investigations have been carried out on the site, but a considerable number have been carried out within the study area in the past (DBA 1 to DBA 24). Most of these investigations were either in the form of watching briefs or only very limited, localised excavations which mostly have revealed evidence of post-medieval activity. In 1995, a MoLAS excavation at 17 Elverton Street c 100m east of the site, revealed horse inhumations (DBA 1). These are likely to be contemporary with a large number of animal bones found during an excavation in 1994 at 1 Elverton Street c 150m east of the site, where 28 horses and 2 dogs had been revealed from pits, all dating to the later medieval period (DBA 2). Investigations carried out by MoLAS at Vincent Square in 1999 and 2003 (**DBA** 7 and **DBA** 8), c 250m south-east of the site, revealed evidence of the historic landscape of the area, consisting of channels, and evidence for reclamation of the marshes. The results of these investigations, along with other known sites and finds within the study area, are discussed by period, below.

4.3 Chronological summary

Prehistoric period (c 700,000 BC-AD 43)

- 4.3.1 The Lower and Middle Palaeolithic saw alternating warm and cold phases and intermittent perhaps seasonal occupation. During the Upper Palaeolithic (c 40,000–10,000 BC), after the last glacial maximum, and in particular after around 13,000 BC, further climate warming took place and the environment changed from being a treeless steppe-tundra to one of birch and pine woodland. It is probably at this time that this part of England saw continuous occupation. Subsequent erosion has removed many of the land-surfaces on which Palaeolithic people lived and hunted and consequently most Palaeolithic finds are typically residual (located outside the context in which it was originally deposited). No finds dating from this period have been found in the study area.
- 4.3.2 The Mesolithic hunter-gather communities of the postglacial period (c 10,000–4,000 BC) inhabited a still largely wooded environment. The Thames and Tyburn river valleys would have been especially favoured in providing a predictable source of food (from hunting and fishing) and water, as well as a means of transport and communication. In 2004, an archaeological evaluation at Caxton Hall (DBA 8), c 400m to the north of the site, revealed a sand bar sloping southwards to a watercourse and is thought to have been formed in broadly Mesolithic times. The sand bar had been truncated by a series of terraces, removing most early remains.
- 4.3.3 The Neolithic (c 4000–2000 BC) is traditionally seen as the time when hunter gathering gave way to farming and settled communities, and forest clearance occurred for the cultivation of crops and the construction of communal monuments. On the Thames floodplain, the gravel bars formed high areas as the pattern of river flow evolved into its present single channelled meandering form. Areas of higher ground, such as the site, would have been suitable for settlement while the lowerlying intertidal areas were probably exploited for a broad range of resources in this and later periods, for example reeds for basketry, clay for pottery production, salt from evaporation, hunting, fishing and fowling.

- fighting, and bull- and bear-baiting. Baiting did occur earlier than the 17th century, usually on the south bank of the Thames in Southwark (VCH *Old and New London* iv, 14–26). Tothill Fields were also used as a burial ground for plague and Civil War victims (VCH *Old and New London* iv, 14–26). The exact location of any of these burials is not known.
- 4.3.21 The people used to visit a "Maze" in these same Tothill Fields, which, according to an old writer, was "much frequented in the summer-time, in fair afternoons," the fields being described as "of great use, pleasure, and recreation," to the King's Scholars and neighbours. And Sir Richard Steele, writing in "The Tatler," in 1709, says, "Here was a military garden, a bridewell, and ... a racecourse" (VCH Old and New London iv, 14–26).
- 4.3.22 Faithorne and Newcourt's map of 1658 (Fig 4) shows the site on the periphery of the settlement of Westminster located upon Tothill Fields which are annotated as 'Tutle Fields'. There are no buildings within the site or in its vicinity. The map shows that the settlement has grown around Westminster Palace, north-east of the site, stretching westwards along Petty France. The map also shows canalised steams of the Tyburn running to the south and flowing down towards the Thames, some along Market Street (now Horseferry Road) however the exact course of the river towards St James Park is currently unknown.
- 4.3.23 By the 18th century, areas on the south side of Horseferry Road, c 200m east of the site, had begun to be developed but this did not spread out as far as the site. Rocque's map of 1746 (Fig 5), shows no change within the site. The area is now annotated as 'Tothill Fields' and the land is shown as pasture. To the north-west of the site lies Rochester Row where an Almshouse and Orphanage had been built during this period. The map shows a mound beside the "road to the horse ferry" (Horseferry Road) c 150m to the east of the site. The mound was referred to in 1617 in relation to a windmill (Westlake 1919, 90–1). A group of large ponds indicating former quarries within Tothill Fields (but none in or near the site), possibly show lower lying areas, prone to flooding (approximately representing the extent of the Tothill plateau).
- 4.3.24 A famous bear-garden is said to have existed, kept by one William Wells, within the Tothill Fields in the early 18th century (VCH *Old and New London* iv, 14–26). The exact location of this is not known.
- 4.3.25 Horwood's map of 1799 (Fig 6) shows continued encroachment onto Tothill Fields and is the first map to show development within the bounds of the site. There are four new small buildings within the site, facing Vincent Square, a newly built road bounding the enclosed Tothill Fields which are now annotated as 'Play Ground for Westminster Scholars'. All properties have back gardens or yards attached to the rear. The western part of the site falls within an open space of grass or lawn. Some of the back garden of the properties to the north falls within the northern part of the site.
- 4.3.26 In the following years the area continued to develop. The Ordnance Survey (OS) 1st edition 25" map of 1869 (Fig 7) shows further development within the bounds of the site as well as the surrounding area. The small houses shown on Horwood's map (see above) have been replaced with a rectangular building, the Vicarage. The remainder of the site is occupied by the Parsonage, with four separate houses shown fronting Vincent Square. Large formal gardens lay to the rear of the houses. Two additional buildings in an L-shaped alignment now lie within the western part of the site, used as schools, the southern one annoated 'Infants', the eastern one 'Boys and Girls'. A very small part of the site, along the northern boundary, falls within the school play ground. The whole area in the vicinity of the site underwent major development and had been completely built over with residential housing and parks further to the

north.

- 4.3.27 St Stephens Church, to the immediate north-west of the site (**DBA 38**) was built by Baroness Angela Burdett-Coutts, of the Coutts banking family, as a memorial to her father. She also built the school in Rochester Row (1849), and contributed to the Almshouses opposite the church. The church is Grade A Listed.
- 4.3.28 In 1893, the Technical Institute was built on the site. The OS 2nd edition 25" map of 1894 (Fig 8) shows the initial Institute building by Thomas Blashill as a large square building set back some distance from Vincent Square up against the south-western boundary of the school. Some of the buildings of the Parsonage to the south seem to have been retained, if altered.
- 4.3.29 The Westminster Kingsway College began in 1893 as a development initiated by the wealthy philanthropist Baroness Burdett-Coutts, on an open area of ground south of her other gifts to the people of Westminster, namely St Stephen's Church, a vicarage and a school (Pevsner 2005, 682–692).
- 4.3.30 The OS 3rd edition 25" map of 1916 (Fig 9) still shows the school and vicarage in the western half of the site and the Technical Institute in the eastern half. A large area in the centre of the southern part of the site has remained open yard.
- 4.3.31 A plan of the site from the London County Council Architects record of 1932 (Fig 10) shows the initial Institute building by Thomas Blashill as a large square building set back some distance from Vincent Square up against the south-western boundary of the school, with the Vicarage to the west. The entrance to this building was from Vincent Square, up a wide set of steps and through a lobby to the main building. To the right of the Institute at this time were two private houses labelled as numbers 75 and 76 Vincent Square, owned by a Mr Manchester (Mr S. Lavan, pers comm). There also appears a smaller building behind number 75 that appears to have been associated with the Institute. No obvious traces of the original Institute buildings or numbers 75 and 76 survive within the visible fabric of the present buildings.
- 4.3.32 By 1905, the Burdett-Coutts Trust had acquired both remaining residential houses in the south-western part of the site, numbers 75 and 76. These houses were demolished and a four-storeyed building fronting Vincent Square was built that stretched back to the boundary of the school behind. The original 1893 institute building remained and was incorporated into the new building.
- 4.3.33 The OS 1:1250 scale map of 1950 (Fig 11) shows the new layout of the site after the construction of the new building. The new Institute now covered two thirds of the site. The remaining western third was an open yard. Between 1950 and 1957 the Vicarage was demolished and a new building was constructed on the open yard in the north-west of the site.
- 4.3.34 The building on site, the Westminster Kingsway Technical College building, was statutorily Listed Grade II* in 1998 and the listing description is as follows;

"Extension to former Westminster Technical College. A steel frame begun 1937, incorporated in building of 1950-55 to revised and enlarged designs by H S Goodhart-Rendel. Yellow brick with some red brick. Tiled mansard roof to 5 southern bays; copper roof to projecting stair tower. Other roofs not visible. 5 southern bays form 3-storey facade with dormered mansard. Adjoining to the left a 5-storey, 4-bay range, with 2-bay Soanesque entrance projecting to ground floor. Projecting semi-circular staircase turret to the left and further to the left is a four-bay block of four main storeys with taller storey heights, which contains the library at ground level, with a mezzanine. Return of four-bays to Rochester Row. Southern block with square-headed windows, those to ground-floor lighting dining room, with varnished timber glazing bars having 'neo-Gothick' details; centre window canted out in shallow bow. White-painted casements above. Centre block and north block with square-headed windows, predominantly horizontal above ground floor and separated by flat brick pilasters. Projecting brick and polychrome brick patterning to

spandrels under windows above ground floor. Ground floor windows vertical in emphasis with large, delicate metal-framed, diamond pane single glazing; metal framed windows with narrow vertical lights above. Staircase tower with delicate vertical metal-framed windows having large diamond panes. Petum to Rochester Row matches Vincent Square elevation of northern block, but is blind to ground floor. Projecting 2-bay entrance to centre block in green stone with moulded pilasters and two pairs of doors which have large diamond glazing in delicate glazing bars. Sundial on wall over entrance in Portland stone by J Ledger.

INTERIOR: Entrance hall within is designed in a simplified classical idiom with floor of black with red and white mosaic in bold geometrical patterns. Escoffier room with coftered ceiling, panelling, columns and original light fittings also in main restaurant. A fine example of Goodhart-Rendel's secular work, showing his adoption of an almost style-less but decorative manner, which is notable for its decorative details."

5 Archaeological potential

5.1 Factors affecting archaeological survival

Natural geology

5.1.1 The site is situated c 700m west of the current course of the River Thames on a broad alluvial delta formed by two tributary rivers, the Tyburn to the north and the Tachbrook to the south. The site was located on a higher lying sandy island or eyot that rose above the low-lying floodplain, which would have been marshland until probably the later medieval period. The underlying geology is made up from alluvial/fluvial deposits overlying the Kempton Park Gravel Terrace. The natural gravel surface is thought to lie at c 1.80 to 1.90m OD. The modern ground level on the site lies at c 4.30m OD at the western side sloping to c 4.12m OD towards east. The level of the top of alluvium is not currently known.

Past impacts

- 5.1.2 The main impact on site would have been the construction of the existing Westminster Kingsway College, which covers almost the whole site footprint. It includes a basement which covers two-thirds of the site. The south-eastern part of the site lies outside the basement footprint (Fig 12 and 13). The top of the basement floor slab lies at c 2.5m bgl. The estimated formation level thus lies at c 2.9m bgl (c 1.22 to 1.4m OD). The construction of the basement is likely to have completely removed all archaeological remains within its footprint.
- 5.1.3 The Technical Institute, which was built in the centre of site in 1893, is not thought to have included any basements or cellaring. Given the date of the building it is likely that shallow strip foundations would have been used. These are unlikely to have extended below c 1.5m bgl. Historic map evidence indicates that a number of small residential houses existed on site in the late 18th century, all fronting Vincent Square. It is unlikely that these buildings had basements or cellaring. These earlier buildings will have truncated archaeological remains although the bases of deep cut features potentially survival intact. Any archaeological remains at the base of the alluvium and cut into the underlying gravels also potentially survive intact.
- 5.1.4 Archaeological survival potential is better in the eastern part of the site, outside the current basement footprint, and in those small areas of the site that lie outside the footprint of the existing building. Features cut into contemporary ground surface such as medieval or post-medieval cellars, wall foundations, drains and pits may survive, if truncated, beneath the current ground floor slab.

Likely depth/thickness of archaeological remains

5.1.5 Finds of the Upper Palaeolithic/Early Mesolithic (if present) would be located beneath the alluvium, at the alluvium/gravel interface and cut into the underlying gravel. Later Mesolithic and Roman deposits, if present, would be located throughout the alluvial deposits (progressively higher up according to date). Medieval and post-medieval deposits would typically be cut into the very top of the alluvium and on the surface of the floodplain, beneath and potentially within any made ground. The current basement, in general, will have truncated any archaeological remains to the depth of between c 2.5m bgl across almost the entire site. At 17 Elverton Street, c 100m east of the site (DBA 2), the stratigraphic sequence comprised c 1.5m of recent and late post-medieval deposits, overlying c 0.5m of ploughsoil and earlier

post-medieval to late medieval deposits. Below this, fluvial/alluvial sand deposits were recorded at an average level of c 1.50m to 1.90m OD. At 1 Elverton Street (**DBA 3**) c 150m to the east of the site, a layer of lower alluvial deposits was recorded below the sand, at c 2.2m to 5m below ground level (c 0.00m to -2.5m OD). The modern ground level on the site lies at c 4.30m OD at the western side sloping to c 4.12m OD towards east.

5.2 Archaeological potential

- 5.2.1 The nature of possible archaeological survival in the area of the proposed development is summarised here, taking into account the levels of natural geology and the level and nature of later disturbance and truncation discussed above.
- The site has an uncertain, possibly moderate, potential to contain archaeological remains dated to the prehistoric period. Predicted levels of the ancient ground surface suggest that the site is located on a now-buried gravel island, and as such the dry and fertile soils would have been suitable for settlement and other activity. The study area was wet and marshy as a result of fluvial transgressions and regressions. The transgression phases laid down clays and silts while the regressive phases laid down organic peats. It is likely that palaeoenvironmental remains surviving on the site will be found within deposits accumulated by natural processes. These have archaeo-environmental significance, as they might contribute to a reconstruction of the evolving landscape and environment of the site, in which human activity took place.
- 5.2.3 The site has an uncertain, possibly low potential to contain archaeological remains dated to the Roman period. The site was located some distance from the settlement of Londinium and only a few chance finds are known from the study area. There is however evidence of Roman activity from other gravel islands, such as the site, in the vicinity and the area would have been suitable for settlement and other activity.
- 5.2.4 The site has a low potential to contain archaeological remains dated to the early and later medieval period. The site was located some distance from the medieval settlement of Lundenwic in the area of Strand and Covent Garden and the settlement around Westminster Abbey and Palace. The site would have been located on the Tothill Fields shown on later maps, which already existed during this period. Although there has been some activity in the vicinity of the site throughout the medieval period, there is no evidence that the settlement stretched out as far southwest as the site. Historic documents indicate that the site was used pasture as well as for tournaments and baiting and a beacon is said to have existed in the area.
- 5.2.5 The site has a high potential to contain archaeological remains dated to the post-medieval period. The cartographic evidence attests that there has been no evidence for buildings on the site until the late 18th century when a couple of smaller residential houses appear on site along Vincent Square. Prior to this the site was located in open land within Tothill Fields. Historic documents indicate that Tothill Fields was used as a burial ground for Civil War as well as plague victims. The location of any of these burials is not known. Larger scale development started in 1893 with the construction of the Technical Institute on the site. The current building, the Westminster Kingsway College, was built and further extended in the years between 1905 and 1957. It is Grade II* Listed. The building is discussed in the following section.

6 Impact of proposals

6.1 Proposals

- 6.1.1 A detailed design proposal has yet to be finalised but it is currently anticipated that the existing Westminster Kingsway College would undergo minor alterations as well as major structural development behind the retaining south-west facade. The north-east corner of the building (1905/7 section) would be demolished. Works would include cladding/re-cladding, insertion of new columns and/or beams, repairing defective or substandard structural elements (eg eradication of timber decay, wall-tie repairs and renewal, underpinning foundations), installing steel work protection (SKM Anthony Hunts Structural review Report, September 2007).
- 6.1.2 The existing basement would be retained and an additional new basement would be added in the north-east corner (Bond Bryan Architects drwg no SK 143 dated 02.07.08; Fig 15). The new basement extension will be 4.5m bgl (pers. comm. Alek Georgiou of Bond Bryan Architects).

6.2 Archaeological implications

- 6.2.1 The main impact on site would arise from the excavation of the new basement in the north-eastern corner of the site. The existing basement does not extend as far as this and the excavations would completely remove any previously undisturbed archaeological remains within its footprint down to a minimum level of 4.5m bgl. This is likely to penetrate the predicted level of natural sand and potential lower alluvial deposits and consequently remove all medieval and post-medieval remains potentially present in the higher lying deposits as well as prehistoric remains within the fluvial/alluvial sequence.
- 6.2.2 There will be an additional impact to any surviving archaeological remains from temporary works and ground clearance around the existing building (eg typically at 1.0–1.5m depth) beyond the footprint of the proposed new buildings. This would include excavations for drains and other services as well as tower crane bases. These would remove any archaeological remains to the maximum depth of each construction.

7 Conclusions and recommendations

- 7.1.1 The Site contains one Grade II* Listed Building, the Westminster Kingsway College and is situated in the Vincent Square Conservation Area. It does not lie within an Area of Special Archaeological Priority as defined by local authority.
- 7.1.2 The site has an uncertain, possibly moderate potential for prehistoric remains. Predicted levels of the ancient ground surface suggest that the site is located on a now-buried gravel island, and as such the dry and fertile soils would have been suitable for settlement. There is also potential for sampling of palaeoenvironmental remains which might contribute to a reconstruction of the evolving landscape and environment of the site in which human activity took place. The site has an uncertain, possibly low for Roman remains. The site was located some distance from the settlement of Londinium but evidence of occupation of the area is known from other gravel islands such as the one the site is located on. The site has a low potential for early and later medieval remains. The site was located some distance from the medieval settlement of Lundenwic and the settlement around Westminster Abbey and Palace. The site would have been located on the Tothill Fields, and there is no evidence that the settlement stretched out as far south-west as the site. The site has a high potential to contain post-medieval remains in the form of buildings foundations from the late 18th century and subsequent large scale development from 1893 with the construction of the Technical Institute on the site. There are references to plague pits and burial pits from the Civil War in the general area, although the location of such pits is not known.
- 7.1.3 Construction of the proposed basement would entirely remove any archaeological remains from within the basement footprint. The basement would be constructed in the area of greatest archaeological survival potential. The method of the construction of the basement, which lies beneath the retained building, is not currently known.
- 7.1.4 In the light of the uncertain archaeological potential of the site, in particular for the prehistoric and Roman periods, it is possible that the local authority would request further investigation, in order to clarify the likely impacts of the development on the archaeological resource. This would ensure that significant archaeological remains are not removed without record.
- 7.1.5 Although the precise details would need to be agreed with the local authority's archaeological advisor, it is suggested that the most appropriate further investigation strategy is likely to entail an archaeological trenching evaluation. This would be designed to assess and define the presence or nature of any archaeological remains within the proposed basement footprint. A preliminary investigation could also include the geoarchaeological monitoring of any geotechnical pits (using geoarchaeological not geotechnical criteria) dug for engineering purposes. This would be with the aim of a first-hand examination of the deposits and the collection of small grab samples of suitable deposits for radiocarbon dating. This enables the interpretation of the site sequence to be assessed and placed within a chronological framework. The results of the evaluation would enable the local planning authority to make an informed decision in respect of an appropriate mitigation strategy for any significant archaeological remains on the site.

8 Gazetteer of known archaeological sites and finds

8.1.1 The table below represents a gazetteer of known archaeological sites and finds within the 600m-radius study area around the site. The gazetteer should be read in conjunction with Fig 2.

Abbreviations

DGLA - Museum of London's Department of Greater London Archaeology

ILAU – Inner London Archaeology Unit

CGMS- Chadwick, Goodwin, Mortimer and Stockdale Planning Consultants

ASL- Archaeological Solutions Ltd

PCA- Pre-Construct Archaeology

LB_UID-Listed Buildings Unique Identifier

DBA No.	Description	Site code/ SMR No.
1	Westminster Kingsway College. Grade II* listed building.	LB_UID469221
2	17 Elverton Street. MoLAS evaluation and excavation 1995. Cut into the natural sand were pits, a few of which contained the dismembered remains of possibly two adult horses. Although only one 13th-century potsherd was recovered from the pits, it is likely that they are contemporary with those found at 1 Elverton Street and dated to the medieval period (DBA 3).	EVT95
3	1 Elverton Street. MOLAS evaluation and excavation 1994. The natural sand and subsoil was overlain by post-medieval ploughsoil and dumps. Medieval and early post-medieval were also recorded. Five 12th-13th century horse burials as well as approximately 23 individual horses and two dogs dating to the 14th-15th century (totalling 30 animals) were excavated from twelve burial pits.	ELV94
4	71-79 Rochester Row. PCA watching brief 2004. Modern deposits were recorded. The natural stratum was not observed in any of the trenches.	RHW04
5	Rochester Row Police Station. PCA watching brief 2001. Construction of the 19th-century foundations of the existing police station buildings has truncated the site down to the natural sand. A probable 19th-century cellar was recorded. A single residual fragment of medieval tile was recovered.	RRP01
6	Tachbrook Triangle (land at) Vauxhall Bridge Road. CGMS watching brief 2005. No deposits recorded.	TBT05
7	Westminster Under School Vincent Square. MoLAS watching brief 1999. Above the natural sand alluvial and reclamation deposits were recorded. A borehole survey indicated changing levels in the natural sand and gravel, varying between -0.92m OD and -1.72m OD. This discrepancy over such a short distance indicates the presence of earlier river channels. A natural channel containing a sequence of deposits up to the 19th century was also revealed: it was probably the Tachbrook, one of the lost rivers of London. Residual prehistoric and Roman ceramics were recovered, as well as 17th - 18th century material.	VNS99
8	21 Vincent Square. MoLAS geoarchaeological monitoring 2003. Holocene deposits consisted of sands overlying gravel. The sands seem likely to represent the deltaic environment between the Rivers Tyburn and Tachbrook and the Thames. The sand from this area is known to have been quarried in historic times and documentary evidence indicates the area of the site to have been infilled with dumped soil during the 18th century.	VSQ03

DBA No.	Description	Site code/ SMR No.
9	60 Vauxhall Bridge Road. MoLAS evaluation 2000. Natural sand was overlaid by alluvium, representing an area subject to episodic flooding, probably from a former course of the Tachbrook stream. The higher part of what would have been an eyot and had been used for cultivation in the 17th-18th century. Above the alluvium were dumped post-medieval deposits.	VXL00
10	Vincent Street (land at), Pimlico. PCA watching brief 2000. Natural peaty silt and alluvium was recorded above gravels. Post-medieval and foundations of late 19th and 20th-century gasometers and buildings were present.	
11	2 Marsham Street. MoLAS evaluation 2002. Alluvial deposits, marked by silts and peat, were divided by a sequence of channel deposits. It is possible that a peat layer corresponds to Bronze Age and Early Iron Age deposits found nearby. A revetted channel was truncated the natural sequence. Post-medieval pottery was recovered.	MRM02
12	Salvation Army Hostel (former), 18 Great Peter Street. MoLAS evaluation 1994. Natural gravels were sealed by alluvium, overlain by clay silts and a peat deposit which is dated to the Late Bronze Age - Iron Age. A cut feature in the peat may indicate human occupation in the area during the Iron Age. It was filled and overlain by more alluvium before dumps of material raised the ground level. Within this were cut features, including rubbish pits and one brick-lined cesspit, many of which contained large quantities of pottery dated to 1550–1770. In two test pits the structural footings and drains of 17th-c buildings were noted.	SAL94
13	46-50 Tufton Street, 25-37 Marsham Street, Bennett's Yard. MoLAS evaluation 1998. Basement walls of the Georgian properties were revealed.	TUF98
14	Park House, Great Smith Street. DGLA evaluation 1987. No further details	GSM87
15	21-29 Victoria Street. MoLAS evaluation 1994. A sequence of waterlaid clays and sands were recorded above the natural gravels, associated with floods caused by relative rises in the sea/river level in the lower Thames Valley in the past. A distinct band of peat, associated with a relative drop in sea level and a marshland environment, was found and there was some evidence for a buried shoreline in the western part of the site. There was no evidence for human occupation before the 17th century when the marshland was reclaimed by the large scale dumping of soil over the area and tenement housing was constructed.	VSW94
16	Perkin's Rents, Great Peter Street (corner). MoLAS evaluation 1997. Above natural gravels and a layer of sand were the remains of a post-medieval building. Overlying deposits were mostly truncated by Victorian foundations.	PKN97
17	Artillery Mansions, 75 Victoria Street. MoLAS evaluation 1998. Natural sand was found at high levels. The site is located on the former Artillery Ground that occupied the area from the late 16th century to the mid-18th century. Features revealed include a 17th-century ditch, in the bottom of which was a decayed wooden water conduit, the bases of several post-medieval pits, several postholes and undated features that may be the remains of treeholes and possibly the robbed out brick footings from the 19th-century Artillery Brewery.	VCT98
18	77-95 Victoria Street. MoLAS evaluation 2002. Natural sand, indicating an area of higher dry land in the River Tyburn, was truncated by the basement of the present building. The earliest deposits were of Victorian date but contained residual pottery dated to mid-16th to mid-18th century.	VIS02
19	HV Cable Replacement, New Scotland Yard, Broadway to Regency Street. MoLAS watching Brief 2004. Cable trench from Moreton Street to Broadway. The depth of the excavation varied between c 2.40m OD in the south and c	MBY04

DBA No.	Description	Site code/ SMR No.
	3.44m OD in the north. Only 19th–20th-century services and levelling dumps were present at these depths. Natural ground was not observed.	
20	Caxton Hall. MoLAS evaluation 2004. The site was situated on a sand bar truncated by a series of terraces, removing most early remains. Late medieval pottery from several pits was recorded as well as a series of quarries, a drain, cesspits, wells and walls. These indicate the creation of a post-medieval suburb of Westminster. Finds are mostly domestic and include high status building material and imported glass vessels.	
21	Wellington Barracks, Birdcage Walk. ILAU watching brief 1978. Remains of brick buildings of probable 16th-17th-century date were revealed.	WEL78
22	Abford House Vauxhall Bridge Road. MOLAS watching brief 2006. No further information.	VAU06
23	119-128 Wilton Road, 8-36 Gillingham Street, Gillingham Mews, Victoria. MoLAS evaluation 2000. The earliest recorded deposit was a waterlaid silt which may represent flooding associated either with the Chelsea Waterworks Canal, dating to the first half of the 18th century, or with the use of the site for osier beds, which appear to have been present on the site until the mid-19th century.	WLD00
24	Petty France. The site of a medieval settlement is recorded at this location on the SMR.	SMR081377
25	Petty France. The SMR records the medieval chapel of St Armils and the chapel of St Mary Magdalene at this location.	SMR081431 SMR081375
26	Victoria Street. Site of the medieval almshouses and the medieval chapel of St Anne's in the Almonry.	SMR081426 SMR081408
27	Westminster. The medieval Abbey Orchard recorded on the SMR.	SMR081425
28	Westminster School, Broad Sanctuary. The medieval school dormitory of Westminster School is recorded on the SMR at this location.	SMR20383902
29	Buckingham Gate. The chance find of a Roman Coin is noted on the SMR.	SMR081171
30	Francis Street (Junction with). A Neolithic Axe is recorded as a chance find on the SMR.	SMR081135
31	Rochester Row. Two Bronze Age Swords, a dagger, sickle, knife and coin, a Roman coin and key and Neolithic flake are noted as chance finds on the SMR.	SMR081310-11 SMR087313 SMR081200 SMR081151 SMR081268
32	Regency Place. The chance find of a Saxon beacon is noted on the SMR	083556
33	Horseferry Road. A chance find of a Bronze Age axe is noted on the SMR	SMR081309
34	Vincent Square. The SMR records the medieval site of Tothill Fields at this location. Tothill Fields is first mentioned in an charter of Westminster Abbey in AD 1083.	SMR081405
35	Warwick way. Site of a Saxon bridge (Abbotsbridge) noted on the SMR.	SMR08120602
36	Millbank. A Roman Vessel is noted as a chance find on the SMR.	SMR081204

DBA No.	Description	Site code/ SMR No.
37	Rochester Row Police Station/Magistrates Court (former) Vincent Square, 2003 ASL standing structure recording. A police complex was first built on the site in 1845 and expanded in 1867-8. A new police station, magistrates' court and accommodation block were built between 1901 and 1906, designed by John Dixon Butler.	PRW03
38	Church of St. Stephen. Grade II listed. Built in 1847-49 by Benjamin Ferrey. Early example of scholarly decorated Gothic Revival by this pupil of Pugin. Of the original decoration described in the Ecclesiologist of June 1850 very little survives apart from elements of painted decoration above the chancel arch by Hudson; one original window of 1850 by Wailes survives in the south aisle where there is also a Morris & Co. window of 1890, designed by Burne Jones.	LB_UID425881
39	United Westminster Almshouses Grade II Listed. Built in 1880-2 by R R Arnteg. The building has two storeys and an attic centre, three storey are flanking the slightly projecting wings.	LB_UID425879
40	Royal Horticultural Society Old Hall. Grade II Listed. Built in 1904 by E.J. Stebbs. Free Style mixing Norman Shaw and arts and crafts features with Renaissance details.	LB_UID207434
41	Royal Horticultural Society New Hall. Grade II* Listed. Built in 1923-28 by Murray Easton and Howard Robertson. The interior exposes the structural reinforced concrete frame of tall parabolic arches which begin as square piers; This form of construction was the first of its kind in Britain, derived from Scandinavian timber construction of the early 1920s.	LB_UID209946

9 Glossary

Alluvium	Sediment laid down by a river. Can range from sands and gravels deposited by fast flowing water and clays that settle out of suspension during overbank flooding. Other deposits found on a valley floor are usually included in the term alluvium (eg peat).
Archaeological Priority Area / Archaeological Priority Zone / Area of Archaeological Interest	Areas of archaeological priority, significance, potential or other titles, designated by local authority. Some LAs chose not to designate such zones, but treat all planning applications on their individual merits.
Brickearth	A fine-grained silt believed to have accumulated by a mixture of processes (eg wind, slope and freeze-thaw) mostly since the Last Glacial Maximum around 17,000BP (Before Present). Although it may once have covered the gravel terrace, much has been removed by quarrying and modern development.
B.P.,	Before Present, conventionally taken to be 1950
Bronze Age	2,000–600 BC
Building recording	Recording of historic buildings (by a competent archaeological organisation) is undertaken 'to document buildings, or parts of buildings, which may be lost as a result of demolition, alteration or neglect', amongst other reasons. Levels of recording are defined by Royal Commission on the Historical Monuments of England (RCHME) and English Heritage.
Built heritage	Upstanding structure of historic interest.
Colluvium	A natural deposit accumulated through the action of rainwash or gravity at the base of a slope.
Conservation Area	An area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance. Local authorities designate conservation areas within boroughs. Designation brings with it a number of controls including; additional controls over the demolition of buildings; strengthened controls over minor development; and special provision for the protection of trees. The objective of these measures is to provide for the preservation and enhancement of the special interest of the place.
Cropmarks	Marks visible from the air in growing crops, caused by moisture variation due to subsurface features of possible archaeological origin (i.e. ditches or buried walls).
Cut-and-cover [trench]	Method of construction in which a trench is excavated down from existing ground level and which is subsequently covered over and/or backfilled. Typically used for laying services.
Cut feature	Archaeological feature such as a pit, ditch or well, which has been cut into the then-existing ground surface.
Desk-based assessment (archaeological)	A written document whose purpose is to determine, as far as is reasonably possible from existing records, the nature of the archaeological resource within a specified area.
Devensian	The most recent cold stage (glacial) of the Pleistocene. Spanning the period from c 70,000 years ago until the start of the Holocene (10,000 years ago). Climate fluctuated within the Devensian, as it did in other glacials and interglacials. It is associated with the demise of the Neanderthals and the expansion of modern humans.
Early medieval	AD 410 – 1066. Also referred to as the Saxon period.
Evaluation (archaeological)	A field evaluation is 'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area'
Excavation (archaeological)	An archaeological excavation is 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified areaThe records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design'
Findspot	Chance find/antiquarian discovery of artefact. The artefact has no known context, is either residual or indicates an area of archaeological activity.
Geotechnical	Ground investigation, typically in the form of boreholes and/or trial/test pits, carried out for engineering purposes to determine the nature of the subsurface deposits.
Head	Weathered/soliflucted periglacial deposit (ie moved downslope through natural processes).
Historic Environment Record (HER)	Archaeological and built heritage database held and maintained by the County authority. In some counties this is named the SMR (see below).
Holocene	The most recent epoch (part) of the Quaternary, covering the past 10,000 years during which time a warm interglacial climate has existed. Also referred to as the 'Postglacial' and (in Britain) as the 'Flandrian'.

Iron Age	600 BC – AD 43
Later medieval	AD 1066 – 1500
Last Glacial Maximum	Characterised by the expansion of the last ice sheet to affect the British Isles (around 18,000 years ago), which at its maximum extent covered over two-thirds of the present land area of the country.
Locally Listed Building	A structure of local architectural and/or historical interest. These are structures that are not included in the Secretary of State's Listing but are considered by the local authority to have architectural and/or historical merit
Listed Building	A structure of architectural and/or historical interest. These are included on the Secretary of State's list, which affords statutory protection. These are subdivided into Grades I, II* and II (in descending importance).
Made Ground	Artificial deposit. An archaeologist would differentiate between modern made ground, containing identifiably modern inclusion such as concrete (but not brick or tile), and undated made ground, which may potentially contain deposits of archaeological interest.
Mesolithic	12,000 – 4,000 BC
National Monuments Record (NMR)	National database of archaeological sites, finds and events as maintained by English Heritage in Swindon. Generally not as comprehensive as the country SMR/HER.
Neolithic	4,000 – 2,000 BC
Ordnance Datum (OD)	A vertical datum used by Ordnance Survey as the basis for deriving altitudes on maps.
Palaeoenvironmental	Related to past environments, i.e. during the prehistoric and later periods. Such remains can be of archaeological interest, and often consist of organic remains such as pollen and plant macro fossils which can be used to reconstruct the past environment.
Palaeolithic	700,000–12,000 BC
Palaeochannel	A former/ancient watercourse
Peat	A build up of organic material in waterlogged areas, producing marshes, fens, mires, blanket and raised bogs. Accumulation occurs due to inhibited decay in anaerobic conditions.
Pleistocene	Geological period pre-dating the Holocene.
Post-medieval	AD 1500 – present
Preservation by record	Archaeological mitigation strategy where archaeological remains are fully excavated and recorded archaeologically and the results published. For remains of lesser significance, preservation by record might comprise an archaeological watching brief.
Preservation in situ	Archaeological mitigation strategy where nationally important (whether Scheduled or not) archaeological remains are preserved <i>in situ</i> for future generations, typically through modifications to design proposals to avoid damage or destruction of such remains.
Registered Historic Parks and Gardens	A site may lie within or contain a registered historic park or garden. The register of these in England is compiled and maintained by EH.
Residual	When used to describe archaeological artefacts, this means not in situ, ie Found outside the context in which it was originally deposited.
Roman	AD 43 – 410
Scheduled Monument	An ancient monument or archaeological deposits designated by the Secretary of State as a 'Scheduled Ancient Monument' and therefore protected under the Ancient Monuments Act.
Site	The area of proposed development
Site codes	Unique identifying codes allocated to archaeological fieldwork sites, eg evaluation, excavation, or watching brief sites.
Sites and Monuments Record (SMR)	Archaeological database held and maintained by the County authority. In some counties this is named the HER (Historic Environment Record), where the built heritage data has been incorporated.
Study area	Defined area surrounding the proposed development in which archaeological data is collected and analysed in order to set the site into its full archaeological and historical context.
Solifluction, Soliflucted	Creeping of soil down a slope during periods of freeze and thaw in periglacial environments. Such material can seal and protect earlier landsurfaces and archaeological deposits which might otherwise not survive later erosion.
Stratigraphy	A term used to define a sequence of visually distinct horizontal layers (strata), one above another, which form the material remains of past cultures.
Truncate	Partially or wholly remove. In archaeological terms remains may have been truncated by previous construction activity.
Watching brief (archaeological)	An archaeological watching brief is 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons.'

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11 Bibliography

11.1 Published and documentary sources

- ACAO, 1993 Association of County Archaeological Officers, Model briefs and specifications for archaeological assessments and field evaluations, Bedford
- AGL, 2000 MoLAS, The archaeology of Greater London: an assessment of archaeological evidence for human presence in the area covered by modern Greater London, London
- BADLG, 1986 British Archaeologists and Developers Liaison Group, Code of practice, London
- Barber, B, 1997 Broadway Buildings, 0-64 Broadway, London SW1 City of Westminster An Archaeological Assessment, MoLAS unpub. report
- Barton, N, 1962 The Lost Rivers of London (revised edition 1992), London, Historical Publications, 34-42
- Corcoran J, 2006 Abford House, 333 Vauxhall Bridge Road, SW1 Method statement for a Geoarchaeological evaluation, MoLAS unpublished report
- Cowan, C, 2002 77-79 Victoria Street, London SW1, An archaeological evaluation MoLAS unpub rep
- Devoy RJ, 1980 Post-glacial Environmental Change and Man in the Thames Estuary: a Synopsis, in Thompson F (ed) Archaeology and Coastal Change. Society of Antiquities London, Occasional Paper
- DoE, 1990 Department of the Environment, Archaeology and planning: a consultative document, Planning Policy Guidance Note 16, London
- English Heritage Greater London Archaeology Advisory Service, 1998 Archaeological guidance papers 1-5, London
- English Heritage Greater London Archaeology Advisory Service, 1999 Archaeological guidance papers 6, London
- Gibbard, P.L., 1994 The Pleistocene history of the lower Thames valley, Cambridge
- Grainger, I, 1994 21–29 Victoria Street, London SW1: An Archaeological Evaluation, MoLAS unpub rep
- Gray, R, 1978 A history of London, London
- Greater London Authority, Feb 2008 The London Plan Spatial Development Strategy for Greater London Consolidated with Alterations since 2004
- IFA, 2001 Institute of Field Archaeologists, By-laws, standards and policy statements of the Institute of Field Archaeologists, standard and guidance: desk-based assessment, rev, Reading
- Miller, P, 1994 1 Elverton Street. An archaeological excavation, MoLAS unbup. report
- Miller, P, 2002 Caxton Hall, Caxton Street, London, SW1 City of Westminster An Archaeological Impact Assessment, MoLAS unpub report
- MoLAS Museum of London, 2003a A research framework for London archaeology 2002, London
- MoLAS Museum of London, 2003b London's Archaeological Secrets. London
- Pevsner Architectural Guides, 2005 London vi, Westminster. London
- Rosser, G, 1989 Medieval Westminster
- Schofield, J, 1995 Sanctuary House, Tothill Street, SW1: Archaeological Assessment, MoLAS unpub rep
- Sidell, J, Wilkinson, K, Scaife, R, and Cameron, N, 2000 The Holocene Evolution of the Thames, MoLAS Monograph 5
- Stow, J, 1603 A survey of London (ed C L Kingsford), 2 vols, 1908 repr 1971, Oxford

Strype, J, 1720 A survey of the Cities of London and Westminster... corrected .. and brought down from... 1633... to the present, London

Telfer A, 2000 Westminster Underschool Vincent Square. A Report on the Watching Brief. MoLAS unpub rep

Thomas, C, 1993 An archaeological watching brief in the Palace of Westminster, MoLAS unpub rep

Thomas, C, 1994 An archaeological watching brief at St Stephen's Chapel in the Palace of Westminster, MoLAS unpub rep

Thomas, C, 2000 The archaeology of Thorney Island in Sidell et al 2000, 21-25

Thompson, A, Westman A, and Dyson, T (eds), 1998 Archaeology in Greater London 1965–90: a guide to records of excavations by the Museum of London, MoL Archaeol Gazetteer Ser 2, London

Tyler K, 2003 21 Vincent Square, City of Westminster. Archaeological impact assessment. MoLAS unpub rep

VCH Victoria County History, 1878 Old and New London Vol III, V

Weinreb, B, and Hibbert, C (eds), 1995 The London encyclopaedia. Macmillan. London

Westminster City Council, 2007 Unitary Development Plan

11.2 Other Sources

British National Copyright Library, London
Internet – web-published sources
London Archaeological Archive and Resource Centre
MoLAS Deposit Survival Archive
Greater London Sites and Monuments Record

11.3 Cartographic sources

Faithorne, W, and Newcourt, R, 1658 'An Exact Delineation of the Cities of London and Westminster and the suburbs thereof together with the Borough of Southwark', reproduced in Margary, H, 1981 A collection of early maps of London, Margary in assoc Guildhall Library, Kent

Greenwood, C, and Greenwood, J, 1827 'Map of London from an Actual Survey', reproduced in Margary 1982, 'Map of London from an Actual Survey' by C and J Greenwood, 1827, Margary in assoc Guildhall Library, Kent

Margary, H, 1981 A collection of early maps of London 1553-1667, Margary in assoc Guildhall Library, Kent

Morgan, W, 1682 'London &c Actually Surveyed', reproduced in Margary, H, 1977 'London &c Actually Surveyed' by William Morgan, 1682, Margary in assoc Guildhall Library, Kent

Rocque, J, 1746 'Exact Survey of the City of London Westminster and Southwark and the Country 10 Miles Round', reproduced in Margary, H, 1971 'Exact Survey of the City of London Westminster and Southwark and the Country 10 Miles Round' by John Rocque, 1746, Margary in assoc Guildhall Library, Kent

Stanford, E, 1862 'Stanford's Library Map of London', reproduced in Margary, H, 1980, 'Stanford's Library Map of London' 1862, Margary in assoc Guildhall Library, Kent

Ordnance Survey maps

Ordnance Survey 1st edition 25" map 1867

Ordnance Survey 2nd edition 25" map 1894

Ordnance Survey 3rd edition 25" map 1916

Ordnance Survey 1:1250 scale map (1950) (1960) (1970)

Geology map

British Geological Survey map sheet 270

Engineering/Architects drawings

Bond Bryan Architects

Existing site plan dwg no. SK008 revision D0 dated 16.07.08

Option F: Ground Floor Plan drwg SK 138 dated 02.07.08

Basement Floor Plan: drwg. No SK 143 dated 02.07.08

Topographical Survey, undated

SKM Anthony Hunts

Westminster Kingsway College, report on the Existing Structure, report no SE14124/Rep/01 Rev A dated 7 July 2008-07-22

WK Westminster Kingsway College

Existing Ground Floor Plan (drwg VC-EP-04 dated January 2007)

Existing Basement Floor Plan (drwg VC-EP-03 dated January 2007)

Alan Baxter & Associates LPP

Victoria Centre, Westminster Kingsway College. Assessment of Significance (Draft version November 2007)