Full Review of the London Plan: Archaeology Topic Paper

Delivering Better, Faster & Focused Public Benefits

March 2017

Executive summary

Managing the archaeology of the 'Greatest City on Earth' needs a workable planning policy and implementation framework because archaeology is a finite irreplaceable resource and most heritage assets of archaeological interest are not protected by other legal means.

The National Planning Policy Framework (NPPF) makes it a core principle that heritage assets should be conserved in a manner appropriate to their significance and that conservation and enhancement of the historic environment is a Local Plan strategic priority which should be supported by a clear strategy.

In The London Plan 2016, archaeology is covered under policy 7.8 on Heritage Assets and archaeology.

A new London Plan is now in preparation which will have to address the immense pressures for development in the city providing the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years.

The purpose of this topic paper is to provide evidence of the importance of London's archaeology and how policy in the London Plan and local authority local plans is central to securing public benefit. The paper considers what policy framework and related delivery mechanisms need to be maintained and how they could be improved to provide more efficient processes and better outcomes for London and Londoners. It places these recommendations within their national and international legal context, including the potential implications of new or future changes to national planning law and policy which could place archaeology at risk.

Londoners are involved in archaeology both as amateurs and professionals. This is reflected in the large number of archaeological societies and public participation in related activities. The paper shows how archaeology engages local people and is relevant to other plan

policies and related strategies such as those covering culture, green infrastructure, local character and woodlands.

Specifically, the paper recommends that the new London Plan should:

1. Maintain existing policy for managing heritage assets of archaeological interest, including securing public benefits.
2. Properly recognize the role of the Greater London Historic Environment Record as a key information source and the desirability of making it more accessible, comprehensive in its coverage and better used.
3. Include explicit reference to identifying archaeological potential using Archaeological Priority Areas or equivalent approaches in plan-making and decision-taking, including recognizing that some non-designated heritage assets are of national importance.
4. Provide appropriate safeguards in relation to the allocation of sites for 'permission in principle' where there is a significant risk to archaeological interest.
5. Better recognize the archaeological and historical interest relevant in policies for open spaces, geology, trees and woodlands and water bodies.
6. Recognize that archaeological investigations should be undertaken by suitably qualified individuals or organisations in order to advance understanding and better reveal significance. Explain that this includes analysis, publication and archiving of results to inform future work and that in some cases better results can be obtained by a common brief or working arrangement across several sites.
7. Support a consistent London-wide approach to strategic characterisation drawing upon established best practice by enhancing the Greater London Historic Environment Record.
8. Recognize the importance of maintaining and enhancing the Museum of London Archaeological Archive as part of the city's critical cultural infrastructure necessary for sustainable development.

The public value of archaeology to local residents, visitors and tourists should also be recognized in the related Culture and Environment strategies.

This Topic Paper has been prepared by the London Committee of the Association of Local Government Archaeological Officers: England and Historic England's Greater London Archaeological Advisory Service as an archaeological sector contribution to the Mayor and Greater London Authority's review of the London Plan and its associated strategies. It has the support of the City of London Corporation, the London Borough of Southwark, the Council for British Archaeology (London Branch), the Chartered Institute for Archaeologists and the London and Middlesex Archaeological Society. The paper complements and provides a specifically archaeological dimension to Historic England's recommendations expressed in 'Keep it London: Putting heritage at the heart of London's future.' Images are Historic England copyright unless credited otherwise. It provides advice on the interpretation of the NPPF and specific recommendations for incorporating archaeological considerations into the London Plan, its associated strategies, and into Local Plans and Neighbourhood Plans across London.

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1. An International Perspective

London is a leading world city and the River Thames has been a focal point of human occupation for almost half a million years.   The modern City of London has been occupied almost continually for nearly two thousand years and England's leading urban centre from the medieval period.   In the 18th century London became the largest metropolis in the world, the hub of a world-wide trade network and empire. The dynamism, diversity and internationalism of modern London therefore has deep roots which are reflected in and supported by its physical fabric. As a consequence, London has one of the greatest urban time-depths of the world's leading modern cities; its internationally significant archaeological resource reflects that legacy.

Urban time-depth of leading world cities *

Urban development: years before present
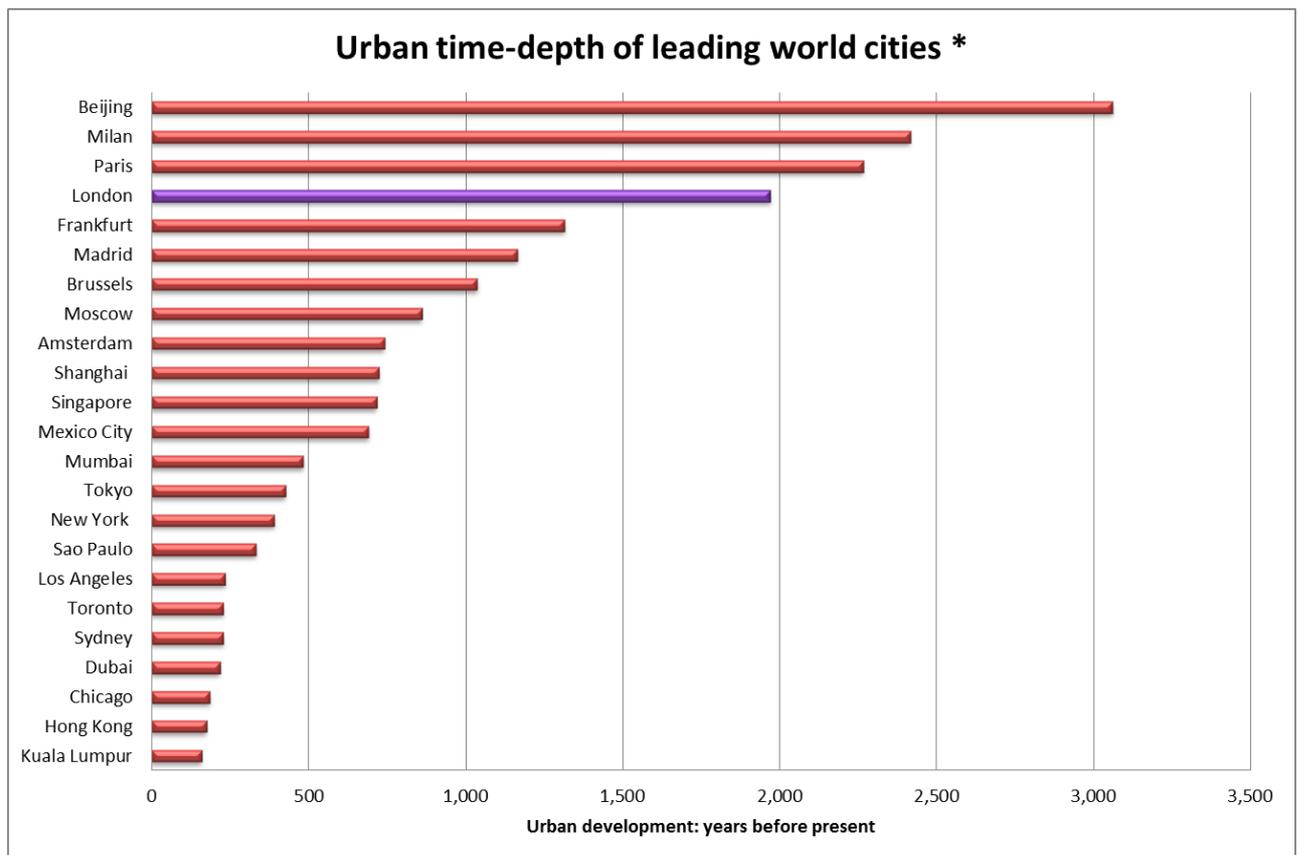
* World cities rated alpha, alpha + and alpha ++ by the Globalization and World Cities (GaWC) Research Network (2012) http://www.lboro.ac.uk/gawc/index.html

This combination of modern dynamic growth and great time-depth presents a combination of opportunity and challenge for managing change in the urban environment.

The United Kingdom is a signatory to the Council of Europe's **European Convention on the Protection of the Archaeological Heritage** (Valletta, 1992)[1]. The Valletta Convention defines archaeological heritage as including structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other kinds as well as their context,

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[1] The Valletta Convention is unrelated to the EU and so unaffected by Brexit.

whether situated on land or under water. Parties are (inter-alia) required to institute a legal system to protect archaeological heritage, maintain an inventory, make provision for conservation (preferably in-situ) and provide appropriate storage places where remains have to be moved. To achieve these aims States are expected to reconcile and combine the respective requirements of archaeology and development plans by ensuring that archaeologists participate in planning policies designed to ensure well-balanced strategies.

Allied to the Valletta Convention is the **'European code of good practice: Archaeology and the Urban Project'** which recognizes that towns must continue to change and develop meaning that a balance must be struck between conserving the past and renewing for the future. Archaeology can contribute to both agendas. Archaeology can tell the city's story of continuity and change: how the urban area developed and influenced its surroundings throughout its history. It can help us understand how the city's 'big systems' – the natural environment, transport, settlements and institutions responded to growth and what this meant for the city's population. Research, conservation and presentation can also be a valuable social and economic activity helping to build sustainable integrated communities and encouraging tourism.

The European code emphasises that archaeological heritage includes upstanding structures and buildings as well as historical topography. It notes that as archaeological heritage is irreplaceable development plans should allow for preservation in-situ and be modified to minimize adverse impacts (e.g. by using sympathetic foundation design and avoiding basements) unless exceptionally there are strong and clear research grounds and full funding for excavation and publication. Archaeological archives (movable objects and records) should be deposited with an appropriate institution. Public education, interpretation and the display of structural remains are encouraged. To achieve these aims adequate archaeological information and advice is essential, including early evaluation of potential redevelopment sites.

2. Putting Principles into Practice

How does archaeology deliver public benefit through the planning system?

The National Planning Policy Framework, the London Plan and Local Plans have a key role in putting internationally accepted principles into effect for the benefit of London.

Most archaeological investigations in London are carried out in response to development proposals and funded by the developer. Local authority archaeological advisers and planning authorities work with developers and their consultants to ensure that commercially funded archaeological investigations focus on delivering positive outcomes, working to relevant research agendas.

Effective planning mechanisms are needed to ensure that remains are recognized and either preserved in-situ or not destroyed without investigation as has happened in the past. Planning controls ensure that projects are conducted in a scientific manner by properly qualified, experienced and competent archaeologists operating with sufficient resources and time to provide positive outcomes relevant to the specific purpose of the project, and proportionate to the significance of the archaeological interest. The Chartered Institute for Archaeologists publishes standards for archaeological work and accredits both individuals and organisations.

There are several ways in which an archaeological project can deliver positive outcomes:

- ❖ **Discovery**: Surveys inform decision-making by identifying the heritage assets present on a site, their significance and the potential impact of development on that significance.
- ❖ **Place-shaping**: Informing development design by identifying how heritage assets can be enhanced, how harm can be minimised, and opportunities taken to enhance sense of place and local distinctiveness
- ❖ **Advancing Understanding**: Investigating and recording heritage assets that may be affected by development, archiving and publishing the results to advance understanding
- ❖ **Education and Enjoyment**: engaging local communities and visitors through public education, outreach and active participation.

Engaging with the Principles of the NPPF

The National Planning Policy Framework (NPPF) makes it a core principle that heritage assets should be conserved in a manner appropriate to their significance and that conservation and enhancement of the historic environment is a Local Plan strategic priority which should be supported by a clear strategy.

Local planning authorities are expected to have access to a historic environment record and use its evidence to assess the significance of heritage assets, and the potential for new

archaeological discoveries.   Plans are also expected to identify land where development would be inappropriate, for instance because of its historical significance. Historic landscape character assessments should inform consideration of major expansion options.

Historic England maintains Greater London's Historic Environment Record as part of its Greater London Archaeological Advisory Service.

A heritage asset has archaeological interest if it holds (or potentially may hold) evidence of human activity worthy of expert investigation at some point. Archaeological interest can be found in relation to any type of heritage asset (i.e. buildings, monuments, sites, places, areas or landscapes) of any period.   Across large parts of London archaeological remains survive as below ground buried assets. However, some buildings, structures and features of archaeological interest exist above ground and are visible in the townscape and open spaces. Recognition that archaeological interest can exist both above and below ground may avoid inadequate assessment or possible misunderstandings.

Archaeological sites of national importance may be legally protected as scheduled monuments but this is discretionary.   Most heritage assets of archaeological interest are not designated, and this includes sites of national importance <u>which are accorded the same weight in the NPPF as designated assets</u>.

There are 166 scheduled monuments in Greater London covering just less than 350 hectares compared to about 45,750 hectares of Archaeological Priority Areas identified through Local Plans. It is estimated that about 2% of Greater London (c 3000 hectares) has clearly identifiable potential for archaeological remains of national importance including the Roman and medieval core of the City of London, much of north Southwark, and a band stretching west from the City to Westminster.   There are comparably important sites dotted across Outer London and undoubtedly others still to be discovered. Examples range from prehistoric earthworks and pagan Saxon burial grounds to the remains of medieval abbeys, Tudor palaces and elaborate designed landscapes.

Where archaeological interest or potential is identified prospective developers are expected to provide a desk-based assessment and if necessary field evaluation to support their planning application. If significant archaeological heritage is present then the development design may need to be modified to avoid or minimise harm to those remains.   In some cases remains of such importance are discovered that they are later legally protected by scheduling. Where harm is accepted then appropriate and proportionate investigation should be required to offset that loss by increasing knowledge and understanding.

In 2014/15 Greater London authorities received about 15% of the 409,800 planning applications submitted in England but had only 3.4% of the local government archaeologists[2]. Archaeology was a consideration in about 2% of planning applications in Greater London, that is a bit less than the national average of 3% although because archaeological interest and development

[2] A seventh report on Local Authority Staff Resources. Produced by Historic England, the Association of Local Government Archaeological Officers and the Institute of Historic Building Conservation. July 2015

pressures are not evenly distributed there is considerable variation between London's local authorities.

Identifying archaeological interest in Local Plans

All London local authorities have access to and should make use of specialist archaeological advice in formulating development plans and decision-making on planning applications. The City of London and Southwark each have their own in-house Adviser whilst the other local authorities obtain advice from Historic England's Greater London Archaeological Advisory Service (GLAAS).   GLAAS also maintains the Greater London Historic Environment Record (GLHER).

Across Greater London Local Plans identify areas of archaeological interest. The City of London identifies its entire area as having archaeological potential except where there is evidence that remains have been lost. GLAAS's London Archaeological Priority Area (APA) Review Programme has published new guidance for using the GLHER to redefine APAs and update the areas using consistent criteria and descriptions. They are organized in tiers:

- Tier 1 is a defined area which is known, or strongly suspected, to contain a heritage asset of national significance (a scheduled monument or equivalent); or is otherwise of very high archaeological sensitivity.

- Tier 2 is a local area within which the GLHER holds specific evidence indicating the presence or likely presence of heritage assets of archaeological interest.

- Tier 3 is a landscape scale zone within which the GLHER holds evidence indicating the potential for heritage assets of archaeological interest.

- Tier 4 (outside APA) is any location that does not, on present evidence, merit inclusion within an Archaeological Priority Area.

Scaling up from five boroughs reviewed in the last three years suggests that about 40 to 45% of Greater London will be ascribed to an Archaeological Priority Area (Tier 1 to 3) and that about 2% will be in Tier 1, the highest level of sensitivity.

The new Archaeological Priority Areas will help local authorities and developers better understand the nature and degree of archaeological significance and potential in a particular location from the very earliest stage of site allocation or acquisition. GLAAS provides advice on consultation criteria and risk modelling to help quickly identify which developments do and do not raise archaeological issues.

3. The infrastructure needed to manage London's archaeological heritage

The **Greater London Historic Environment Record (**GLHER) is a comprehensive and dynamic resource for the historic environment of Greater London which has been maintained since 1991 by Historic England on behalf of the Greater London Authority and London Local Authorities. The computerised record is maintained to nationally defined standards, contains over 196,000 entries providing data on archaeological sites and investigations, historic buildings, historic parks and landscapes, finds and heritage features, and supporting sources of information.

The high development pressure in the capital has made the GLHER the busiest historic environment record in England but also one of the most challenging to maintain requiring constant updating in order to function effectively owing to the number of customers and inflow of new information. Currently it uses a bespoke commercially licensed database which severely limits its external accessibility and interoperability with other heritage, planning and development information systems. Historic England is working with the Getty Conservation Institute to build a new system to improve accessibility and streamline information flows. The GLHER is being enhanced by special projects, most notably the London Urban Archaeological Database, which is improving archaeological information for the historic urban core. There is also a need to broaden the scope of the information held, particularly improving coverage of built heritage and to build stronger partnerships with conservation officers, the academic and voluntary sectors.

The Museum of London Archaeological Archive performs a vital function in enabling sustainable development. It holds summary information on over 7500 sites or projects that have taken place in Greater London over the past 100 years, and the archives for more than 3000 of these sites/projects.

The high development pressure and number of archaeological investigations in the capital has made the London Archaeological Archive the largest single archaeological archive in England and one of the largest in the world. This is an invaluable resource of material accessible to all for education, research, study and understanding of archaeology, past lives and environments. It includes drawn and written records, images, finds and other evidence recovered as part of archaeological excavations and has a primary function of informing future assessment and understanding development proposals. Without the Archive archaeological material would be lost thus compromising the principle of sustainable development. However, capacity is not unlimited and could be exceeded by further large-scale archaeological investigations. Some local museums provide similar functions but their future can be uncertain due to financial pressures.

In recent years the use and storage of digital data has become as important as the physical archive, widening opportunities for research and study. The long term preservation of digital material presents new challenges which need to be addressed.

The **London Historic Environment Research Framework** provides a structure for identifying how future investigations and research into archives held in museums could advance knowledge and understanding. Its strategy needs further development to engage with the realities of cultural, developmental and technological change in 21st century London.

London has many **archaeological organisations** which work in the commercial sector providing employment through services to developers which enable them to identify the archaeological issues of a planning application and, where permission is issued, carry out all stages of archaeological investigation through to publication and archiving. This helps to deliver the public benefits secured through the planning process.   It is important to ensure that organisations and individuals providing archaeological planning advice or undertaking investigations are appropriately experienced and qualified. The Chartered Institute for Archaeologists accredits organisations and individuals and requires its members to meet defined levels of competence.

The Council for British Archaeology's London Group provides an umbrella organization for **archaeology and history societies** which form a valuable network that engages communities with their local heritage and provide opportunities for both desk-based research and fieldwork.   Examples of local community-based archaeological projects are numerous including for example Eastcote House (Hillingdon), Scadbury Manor (Bromley) and Upminster wind and steam mill (Havering).   Some of these projects are supported by the Heritage Lottery Fund or Historic England and involve groups working with professional archaeologists to build skills and capacity. Maintaining and strengthening local participation in heritage projects would be a desirable objective to promote through the GLA's cultural strategy.

4. Specific Recommendations for the London Plan

Only 1% of London's areas of known archaeological interest are legally protected by scheduling. The remainder depend upon the planning system and would be at risk of destruction without record if it were not for its safeguards.

To continue to protect and benefit from London's archaeological heritage there is a need for clear, strong and practical policies in the London Plan which explain how the principles of the NPPF are put into practice in the capital. The existing Policy 7.8 is sound on the principles of its treatment of archaeology so it is essential that this approach is retained. Specifically any new policy should retain the objectives of identifying, protecting, investigating and presenting London's archaeology, including archiving and publication.

There is some scope for improvement in the wording of Policy 7.8 and its explanatory text; for example giving better recognition of the Greater London Historic Environment Record. In particular, given the degree of development pressure on London's archaeological heritage, there is a need to ensure a robust policy framework for managing that pressure and delivering positive outcomes.

A current concern is the provision for 'permission in principle' under the Planning & Housing Act which could result in permissions being granted through allocation in Local Plans or identification in brownfield registers without adequate (or perhaps any) consideration of archaeological issues and risk. It is therefore recommended that greater emphasis is placed on the local authorities' Archaeological Priority Area (or equivalent) systems to ensure that those involved find it easier to assess and effectively manage archaeological risk especially when allocating or identifying sites for development.

Archaeology in London is sometimes thought of simply as buried remains but related heritage assets include above ground structures and buildings as defined in the NPPF and described in the Valetta Convention (see above). There is scope for making links to other policies more explicit: notably 2.18 Green Infrastructure, 7.4 Local Character, 7.5 Public Realm, 7.17 Metropolitan Open Land, 7.20 Geological Conservation, 7.21 Trees and Woodlands, 7.25 & 7.26 Blue Ribbon, 7.30 Canals and Rivers.

The public value of archaeology to local residents, visitors and tourists should also be recognized in the related Culture and Environment strategies.

|	Key issues/policy objectives for Policy 7.8	London Plan Recommendation
1	More clearly recognise the Greater London Historic Environment Record (GLHER) as a critical information source for planning and development in London to comply with NPPF 128 & 169.	Revise the explanatory text in 7.29 to accurately reflect and explain the nature and role of the GLHER maintained by Historic England.
2	Endorse recognition of areas of archaeological significance such as Archaeological Priority Areas in Local Plans to help identify sites of archaeological interest, recognize potential national importance, manage risk to archaeological significance and focus engagement to explain how London applies NPPF 128, 139 & 169	Revise policy 7.8 and new explanatory text to make reference to Archaeological Priority Areas (or equivalent areas of archaeological significance) and say that they should be up to date and endorsed in local plans. Explain that undesignated archaeology can sometimes be identified as of national importance and so subject to the policies for designated assets. Revise Policy 7.8 to state that local plan development allocation should be informed by the Archaeological Priority Areas, and should not identify sites as suitable for 'permission in principle' if there is a risk of significant harm to archaeological resources.
3	Recognise that the setting of heritage assets of archaeological interest can be enhanced by good design of buildings and the public realm including provision of interpretation, marking out the location of buried remains and digital media.	New explanatory text to policy 7.8
4	Make reference to London's Historic Environment Research Framework to ensure investigations advance understanding and where possible, encourage greater co-ordination of projects across multiple sites addressing similar themes showing how London applies NPPF 141	New explanatory text to policy 7.8
5	Recognise the role of the Museum of London Archaeological Archive as essential cultural infrastructure and as the principal location for physical archaeological archives from Greater London showing how London applies NPPF 141	New policy reference and explanatory text to policy 7.8

Other London Plan policies		
	Key issues/policy objectives	London Plan Recommendation
6	Green Infrastructure (Policy 2.18) reference to historic landscapes is supported but without an Historic Landscape Characterisation (HLC) study, the scope and significance of these landscapes may not always be appreciated	Retain existing references and seek support for a London greenbelt and green spaces HLC study.
7	Local Character (Policy 7.4) and Public Realm (7.5). References to heritage and historic environment are supported and could include an archaeological dimension.	Retain existing references.
8	Green Belt and Metropolitan Open Land (Policies 7.16 and 7.17) include and protect archaeological sites and extensive areas of historic rural landscape (commons, woodlands, historic field etc). Across the rest of England this historic landscape character has been mapped but around London it has not yet.	New explanatory text to recognize the importance of conserving the historic character of these open spaces and the aspiration to complete an Historic Landscape Characterisation survey of the Outer London Green Belt and Metropolitan Open Land.
9	Geological Conservation (Policy 7.20) overlaps with archaeology because where quarries or mines provide exposures they can be heritage assets, whilst the submerged forests may contain the remains of early human occupation. Across London there is a strong correlation between archaeology and study of London's geology and topography with for example both human artefacts and wild animal remains being found in Ice Age gravels	Amend the supporting text to make a connection to archaeology.
10	Trees and Woodlands (Policy 7.21) can be or form part of heritage assets. This is particularly true of designed landscapes and ancient woodlands which often contain archaeological and historical interest both in the trees themselves and features within the wood.	Amend policy 7.21 and supporting text to recognize and protect the historic and archaeological interest of trees and woodlands.
11	Blue Ribbon Network: The historic interest of canals and other artificial water bodies is not recognized in the policies 7.24 to 7.28 and 7.30	Revise the policies to note that most canals and historic artificial water channels, ponds, lakes and reservoirs and their associated structures are heritage assets, whether designated or not. Many of them formed a valuable part of London's industrial

		infrastructure.
		Where rivers have been buried or man-made water features infilled it will sometimes be desirable to restore them or mark their former presence as part of new place-making but such plans should reflect their historic character (policy 7.28) linking to policy 7.9 on heritage-led regeneration.
12	River Thames Policy 7.29: All of the Thames will be included within Archaeological Priority Areas to reflect its importance from prehistoric to modern times and the sometimes exceptional preservation of remains along it.	We support continued reference to archaeological interest in the supporting text for this policy.

5. Case Studies Illustrating the Public Value of London's Archaeology

The purpose of this section is to illustrate with some thematic case studies what is particularly special and significant about London's archaeology and how it enriches London's culture and sense of place.   First and foremost, the contribution of archaeology to London is to help us appreciate and understand the rich and deep history of this complicated place.

Case study 1 (Archaeology & Geology): The Thames Valley contains one of the best preserved and understood geological sequences in Western Europe covering the Ice Ages of the last half million years when the area was intermittently occupied at the northern edge of the pre-modern human range and archaeology overlaps with earth sciences.   Flint tools and animal bones, such as the Hippopotami found under Trafalgar Square, chart this changing environment and mankind's place within it.
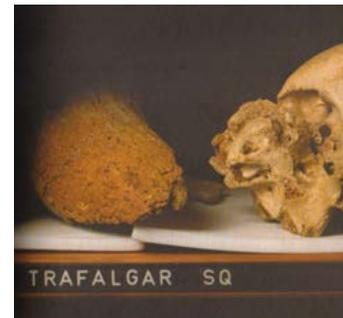
Credit: Natural History Museum

These discoveries show that policy should recognize that there is an overlap between archaeology and geology.

Case study 2 (River Thames): The Thames shaped London's landscape, provided both a boundary and a transport corridor, acted as a focus for settlement and, judged by the sumptuous objects and human remains deposited into it, was probably regarded as a sacred river reminiscent of the Ganges – today some Hindus use the Thames for their worship. Some of the most outstanding discoveries such as the Iron Age Battersea Shield are on display in the Museum of London and British Museum and many sites have been recorded on the foreshore.

Credit: British Museum

The Thames Discovery Programme, hosted by MOLA, is one of the UK's most successful community archaeology projects. The project provides access to archaeology and leads efforts to record the largest archaeological site in the UK; the Thames foreshore. The Thames Discovery Programme has won three awards and reached hundreds of thousands of people through events, the project website and via social media. Amongst its many achievements, the project has resulted in the discovery of the oldest structure in central London at Vauxhall and the
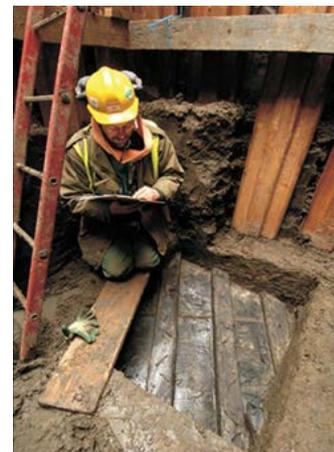
remains of the HMS Duke of Wellington in Charlton, the largest warship in the world when launched.

Another remarkable Roman discovery is the Guys House Roman Boat, found in 1958 and buried approximately 5m below ground level underneath Guys Hospital. Recently the Guys Hospital Cancer Centre has been designed to allow the boat to be left intact and not crushed beneath a fourteen storey building.

This case study show that policy should recognize the close relationship between archaeology and water bodies (both natural and artificial) which provide excellent conditions for preserving archaeology, and so there is the need to manage change to them and properly protect archaeological assets of the highest significance. It also illustrates how modern communities can engage with places in ways which reflect their deep history.

Case study 3 (Roman London): The modern City of London has been settled since the early Roman period.   It is one of the richest archaeological areas in the country, reflecting its importance as Britannia's main administrative cent**re. Remains of the Roman city wall and amphitheatre can still be seen whilst excavations in the City of London and north Southwark have revealed exceptional survival of major Roman buildings and water fronts.**

The development for Bloomberg LP new European headquarters is at the centre of the Roman city, and the site includes the listed Temple of Mithras and a new entrance to Bank Station. The planning permission included conditions to cover archaeological recording including excavation and preservation. The Temple of Mithras discovered in 1954, then dismantled and rebuilt on a different part of the site, has been reconstructed close to its original site and will, many of the archaeological discoveries, be publically accessible in a new display space. Archaeological remains survive on the site to a depth of seven metres and 3,500 tonnes of soil were removed during the excavation revealing some 10,000 finds
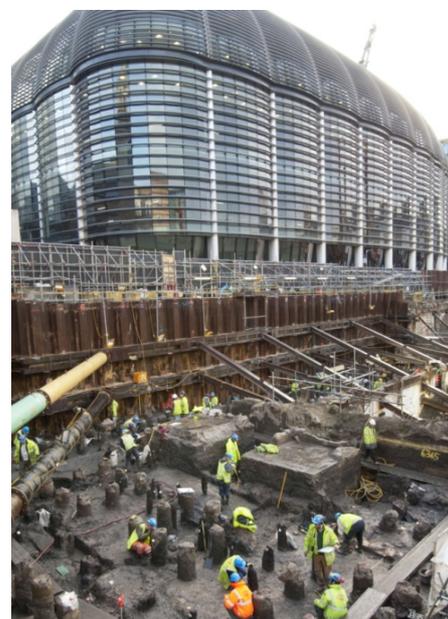
Credit: Museum of London Archaeology

The wet ground conditions of the site have led to exceptional preservation of archaeological remains including timber walls, floors and drains, decorated wall plaster, waxed wooden writing tablets, leather, metal objects, cloth, bone and coins, leading

archaeologists to dub it 'the Pompeii of the north'. An internationally significant collection of Roman waxed wooden writing tablets have been found including the earliest known reference to London.

The redevelopment site included site hoardings with images and links to a website bringing the archaeological discoveries to the public's attention.

Londinium was the most important Roman town in Britain and its archaeology is of international significance. Current planning policies need to be maintained to provide a robust framework for managing this resource in one of the most intense development areas in England.

Major urban archaeological excavations like Bloomberg generate large archives of irreplaceable cultural material which needs to be studied and stored in the Museum of London Archaeological Archive. For this reason, policy should recognize that the archive forms part of London's critical cultural infrastructure.

Case Study 4 (London's World Heritage): following the demise of the Roman city, Londinium was abandoned. The Anglo-Saxon town and international trading port of Lundenwic was situated between the modern City and Westminster. In the 9th century, for protection from Viking raids the walled city of London was resettled. It was connected by the Strand to a new political and religious centre at Westminster. The Norman Conquest led to the imposition of the Tower of London as a symbol of royal power.

Both the Tower and Westminster are now World Heritage Sites and major tourist attractions. Their archaeological interest

Credit: Museum of London Archaeology

extends to the above-ground structures, as in the case of Westminster Abbey where investigation of the triforium above the chancel has revealed a unique collection of objects lost through the floor over hundreds of years. These discoveries will help enhance the visitors' experience to the newly opened gallery. Across the road at the Palace of Westminster a massive medieval stone river wall was discovered in small excavation for a new electricity sub-station.

This case study illustrates how London developed. It shows how archaeological interest of international significance can be found beyond the City of London itself and how even small

excavations or minor alterations to built fabric can reveal unique insights. Policy should encourage the integration of archaeology and built heritage conservation from the very earliest stage, and recognize that although some of these areas are not scheduled monuments they often contain archaeological interest of equivalent significance.

Case study 5 (Shakespeare & Tudor London): Henry VIII dissolved the monasteries and instead he and his court invested in palaces and great houses: Hampton Court survives and its privy garden has been reconstructed using archaeological evidence, others such as Brandon House (Southwark) can produce remarkable buried remains.

But London's unique Tudor legacy is the purpose-built playhouses of Southwark and Shoreditch and where the plays of William Shakespeare were first performed: the unexpected discovery of the Rose Theatre was one of the most dramatic archaeological acts of the twentieth century. The site was very nearly destroyed by development but the campaign to save it set the stage for the full integration of archaeology into planning policy and practice. Today the Rose is a scheduled monument and Shakespearean heritage is a key element in London's cultural scene and tourist experience.

The experience of excavating the site of the Curtain, another Shakespearean playhouse, in 2016 could not be more different from the traumatic discovery of the Rose. The system that we have today allows developers, local authorities and archaeologists a chance to celebrate the cultural and historical importance the site. Very early in the process, MOLA carried out a desk-based assessment, which included research of the site to determine its archaeological significance, as well as initial targeted trial excavations, which allowed them to test the level, nature, and extent of archaeological remains. The archaeology has since been incorporated within the new scheme and is central, both physically and conceptually, to the new development. The Curtain playhouse remains will be housed in a purpose-built visitor centre at the heart of The Stage development, accessible for future generations to enjoy.

This case study shows why adequate assessment and field evaluation is needed to inform decision-making and the cultural and tourism benefits that can flow from policies which support imaginative integration of archaeology into new development or restorations.

Case study 6 (Industrial Heritage): The Industrial Revolution left a rich heritage across London. Investment in the navy and international mercantile shipping stimulated the progressive development of dockyards downriver from the City.

Investigations conducted at Deptford Dockyard (Lewisham) are the largest ever undertaken in a Royal Dockyard which operated from the Tudor period to the 19th century. Its results are helping to inform the design of a major new development to create a unique local character reflecting the site's maritime history.

A more modest example of industrial heritage is an early porcelain factory at Isleworth (Hounslow) identified by archaeological assessment for a planning application. It was one of only five making porcelain in London during the 18th Century, and crucial to understanding of the history and development of early porcelain manufacture in Britain.   The English Ceramic Circle was involved in the research, the remains have been preserved in-situ under new development and have recently been scheduled.

Credit: Pre-Construct Archaeology

Many historic industrial structures survive above ground and need to be managed and studied in an integrated manner, as at Kings Cross where the railway yard has been subject to comprehensive redevelopment whilst retaining many historic structures and features.

This case study illustrates why adequate assessment and field evaluation is needed to inform decision-making and development design, and that policies are needed to ensure that the public are engaged and important new discoveries protected.

Case study 7 (Burial Grounds): During the Medieval period London was the largest and most economically important city in England but its overcrowded and insanitary conditions made it vulnerable to plagues and famines, illustrated by disaster cemeteries found at Charterhouse (Islington) and East Smithfield/ Royal Mint Court (Tower Hamlets).   Scientific study of preserved DNA from sites investigated by Crossrail has found traces of the plague bacillus which caused the Black Death. Between 1714 and 1840, London's population swelled from around 630,000 to nearly 2 million, making it the largest and most powerful city in the world and

resulting in large numbers of new cemeteries being established some of which have since been built over (often for schools) or converted to open space. It is preferable to leave human remains undisturbed (and illegal to disturb them without a licence) but where this is not possible archaeological investigation contributes to the study of health and the effects of poor housing, diet and sanitation in the overcrowded conditions of early modern London. Developers who do not commission sufficiently robust assessments can be unpleasantly surprised by unforeseen cost and delays. To help manage this risk, the GLHER is investing in a programme of updating records of known and possible historic burial grounds.

This case study illustrates the importance of adequate assessment and field evaluation necessary to inform plan and decision-making and development design, and the importance of investing in and using the Greater London Historic Environment Record and seeking advice from local authority archaeological advisors. Care should be taken about the allocation of burial grounds for development and they are unlikely to be suitable for 'permission in principle'.

Case study 8 (Historic Character): The historic character and evolution of London has been mapped in a number of ways, including a rapid Historic Landscape Characterisation mapping project by English Heritage and an animation created by The Bartlett Centre for Advanced Spatial Analysis (UCL): https://www.youtube.com/watch?v=NB5Oz9b84jM

Outside the Roman city was a rural landscape crossed by the main Roman roads which formed a framework that has survived into medieval and modern times. Later on the main roads leading from the medieval city many important religious houses were established, notably at Barking and Merton. Market towns, such as High Barnet, Brentford, Kingston and Uxbridge, were established along the roads and rivers: despite much modern change it is still possible to discern traces of their origins in the modern townscape. Across the rest of the rural landscape a pattern of villages and hamlets grew up which often still provide recognizable local historical foci within the modern city. The 18th - 20th centuries saw the massive expansion of London over its rural hinterland but also the preservation of many historic green spaces such as Wimbledon Common and Epping Forest.
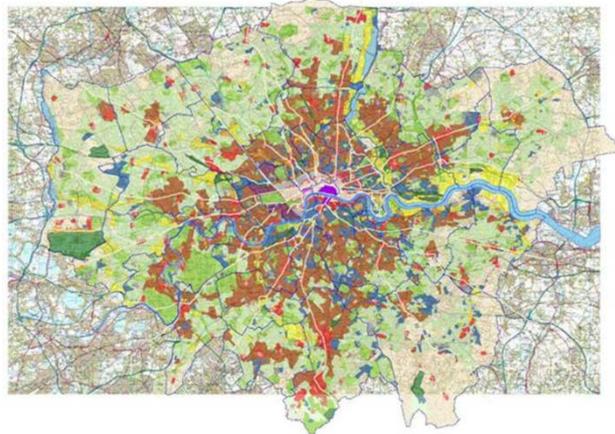
Historic England has stated in 'Keep it London' that it believes local authorities should embed a character-based approach to planning for new development. Understanding character is not simply about existing buildings but requires consideration of the urban (and pre-urban) structure of town and country and its patterns of continuity and change. To plan effectively for character at a strategic scale requires a consistent strategic evidence base which is lacking at present. Drawing on experience outside London the Greater London Historic Environment Record could play a more prominent role in this respect.

Case Study 9 (Wartime Archaeology): The second world war caused widespread destruction but also left many evocative monuments, such as the Battle of Britain Bunker (Hillingdon), the scheduled fighter pens at Kenley airfield (Croydon) and the prisoner of war intelligence facility at Trent Park (Enfield) which provide foci for cultural projects. More humble remains such as air raid shelters and pillboxes are rediscovered at regular intervals.

As the World Wars fade from living memory their material remains provide a means for Londoners (especially the young) to engage directly with the experiences of citizens and soldiers, their resilience and patriotism and the internationalism of the effort to defeat Nazism.

Case Study 10 (Woodland Archaeology): Woodlands cover about 4.5% of Greater London, and of these about 40% are ancient woodland. Historically woodlands were a valued resource supplying firewood, timber for construction and ship-building, grazing land and hunting chases and deer parks. They have their own archaeology including prehistoric earthworks, historic boundary banks, quarries, saw pits and the like. Veteran trees, coppices and pollards are managed vegetation which provides much of the woodland's character. More recent woodlands have been planted within or developed over designed landscapes such as at Wanstead Park where there are extensive remains of a 17th to 19th century country house and park.

Ancient managed woodlands can be regarded as heritage assets in their own right and preserve much of what is left of London's visible archaeological earthworks. Policy and practice for trees and woodland should recognise this interest and follow guidelines in 'Woodland Archaeology in London' published by English Heritage and the Forestry Commission.

If you require an alternative accessible version of this document (for instance in audio, Braille or large print) please contact our Customer Services Department:
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