27 KINGS MEWS London WC1N 2JB

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF

Date 07/03/2017

Project Manager: Derek Seeley













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Written scheme of investigation for an archaeological watching brief

Planning application 2016/3843/P

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1 Introduction

1.1 Project background

- 1.1.1 This Written Scheme of Investigation (or WSI) for an archaeological watching brief on the site of 27 Kings Mews, London, WC1N 2JB, has been commissioned from MOLA by Nico Warr Architects on behalf of the client.
- 1.1.2 The site is located towards the southern end of Kings Mews in the London Borough of Camden. It is bounded by 26 Kings Mews to the north, 28 Kings Mews to the south, 34-49 Gray's Inn Road to the east and Kings Mews to the west. The centre of the site lies at National Grid reference 530940 181948 (Fig 1). The site is currently occupied by part of a mid-20th-century two storey light industrial building divided into separate mews like building with an integrated façade, No. 27 is not basemented. Modern pavement level near to the site lies at *c* 21m OD.
- 1.1.3 The site is being developed to create a three to four storey plus basement office building with second and third floor terraces following the demolition of existing office/warehouse. The current proposals are shown on Fig 2.
- 1.1.4 A previous residential scheme was granted planning permission in 2013 however this granted permission expired. New applications were submitted for the site in 2015 and 2016. The current 2016 application (P2016/3843/P) is for an office building rather than residential use. Previous provisional planning advice by Historic England in 2016 recommended that :- 'Appraisal of this application using the Greater London Historic Environment Record and information submitted with the application indicates that the development is likely to cause some harm to archaeological interest but not sufficient to justify refusal of planning permission provided that a condition is applied to require an investigation to be undertaken to advance understanding. The archaeological interest should be conserved by attaching a condition as follows:

Condition: No demolition or development shall take place until a written scheme of investigation (WSI) has been submitted to and approved by the local planning authority in writing. For land that is included within the WSI, no demolition or development shall take place other than in accordance with the agreed WSI, which shall include the statement of significance and research objectives, and

- A. The programme and methodology of site investigation and recording and the nomination of a competent person(s) or organisation to undertake the agreed works
- B. The programme for post-investigation assessment and subsequent analysis, publication & dissemination and deposition of resulting material. this part of the condition shall not be discharged until these elements have been fulfilled in accordance with the programme set out in the WSI

Informative: The written scheme of investigation will need to be prepared and implemented by a suitably qualified professionally accredited archaeological practice in accordance with Historic England's Guidelines for

- Archaeological Projects in Greater London. This condition is exempt from deemed discharge under schedule 6 of The Town and Country Planning (Development Management Procedure) (England) Order 2015.
- 1.1.5 Details of the application are available at:-http://camdocs.camden.gov.uk/HPRMWebDrawer/PlanRec?q=recContainer:2016/3843/P
- 1.1.6 Recent archaeological in January 2017 evaluation directly to the south of the site at 28 Kings Mews (site code KNM17) recorded later post-medieval features (18th/19th century) post-dating earlier undated agricultural activity and quarrying. The results of this investigation have informed on the potential mitigation for 27 Kings Mews and it is currently proposed that the ground works are archaeologically monitored in the form of a watching brief.
- 1.1.7 The works requiring a watching brief are ground works to stabilise the building prior to ground reduction for the proposed basement. This will comprise the underpinning of all four walls of the site perimeter. The monitoring will be undertaken on the site and MOLA will liaise with Historic England as it proceeds and if significant archaeological remains are recorded during the underpinning some or all of the ground reduction for the new basement may also require archaeological monitoring.
- 1.1.8 The site is located within the London Suburbs Archaeological Priority Area, as defined by Camden Borough Council. Map evidence indicates that the site was in open ground until at least the late-17th century and most probably developed in the early 18th century. Evaluation directly to the north of the site recorded later post-medieval features post-dating earlier undated agricultural activity and quarrying. Archaeological investigation adjacent to the site to the east recorded pitting from the 13th/14th century and post-medieval features including wells and cess/rubbish pits. Additionally Roman funerary evidence in the form of two cremations has been recorded close to the site and remains dating from the Roman period may be present on the site. The site is not basemented and there may be archaeological survival in the underlying made ground.
- 1.1.9 An archaeological watching brief as defined by the Chartered Institute for Archaeologists is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons (see below Section 2.1)
- 1.1.10 If during the course of the watching brief an area or group of features is identified which warrants 'controlled excavation', as determined on site by the local authority and/or their advisor, this will be dealt with under methodologies applicable to 'controlled excavation' as outlined in 2.2.4 below.
- 1.1.11 The results of the watching brief will be set out in a report to be issued within six weeks of completing the fieldwork. The site archive will be deposited with the Museum of London Archaeological Archive LAA within twelve months of issuing the report.
- 1.1.12 This document sets out the methodologies (including Health & Safety) which will be followed during the watching brief and reporting stages. These will follow the Standards and Code of Practice laid down by the Chartered Institute for Archaeologists (CIFA 2014), London region archaeological guidance from Historic England (GLAAS 2015), and Historic England Centre for Archaeology Guidelines where appropriate.
- 1.1.13 Other relevant documents include:

- A Historic environment assessment in relation to the previous proposals for the site. (MOLA 2014). This presented the initial assessment of archaeological potential on the site.
- Site investigation report for 43 and 45 Gray's Inn Road and 22 to 30 Kings Mews, London WC1 (Ground Engineering 2007) which described the results of two boreholes and nineteen trial pits opened on and around the whole site addresses.

1.2 Planning and legislative framework

The London Plan

- 1.2.1 The Planning and legislative background to the site was covered in the previous Historic environment assessment (MOLA 2014, section 9) and the national and local planning and legislative background remains the same.
- 1.2.1 However since 2014 the London Plan has been amended and the overarching strategies and policies for the whole of the Greater London area are contained within the most recent London Plan of the Greater London Authority (GLA March 2016). Policy 7.8 relates to Heritage Assets and Archaeology:
 - A. London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.
 - B. Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.
 - C. Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.
 - D. Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.
 - E. New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.
 - F. Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London's environmental quality, cultural identity and economy as part of managing London's ability to accommodate change and regeneration.
 - G. Boroughs, in consultation with English Heritage [now named Historic England], Natural England and other relevant statutory organisations, should include appropriate policies in their LDFs for identifying, protecting, enhancing and improving access to the historic environment and heritage assets and their settings where appropriate, and to archaeological assets, memorials and historic and natural landscape character within their area.
- 1.2.2 Para. 7.31A supporting Policy 7.8 notes that 'Substantial harm to or loss of a designated heritage asset should be exceptional, with substantial harm to or loss of those assets designated of the highest significance being wholly

exceptional. Where a development proposal will lead to less than substantial harm to the significance of a designated asset, this harm should be weighed against the public benefits of the proposal, including securing its optimal viable use. Enabling development that would otherwise not comply with planning policies, but which would secure the future conservation of a heritage asset should be assessed to see of the benefits of departing from those policies outweigh the disbenefits.'

- 1.2.3 It further adds (para. 7.31B) 'Where there is evidence of deliberate neglect of and/or damage to a heritage asset the deteriorated state of that asset should not be taken into account when making a decision on a development proposal'.
- 1.2.4 Para. 7.32 recognises the value of London's heritage: '...where new development uncovers an archaeological site or memorial, these should be preserved and managed on-site. Where this is not possible provision should be made for the investigation, understanding, dissemination and archiving of that asset'.

1.3 Archaeological and historical background

1.3.1 A detailed description of the geology, archaeology and history of the site was provided in the earlier Historic environment assessment (MOLA 2014). A brief resume is provided here:

Geology

- 1.3.2 The site lies on Lynch Hill Terrace gravels (British Geological Survey sheet 256), just to the south of the boundary between the Lynch Hill Gravels (to the south) and the Hackney Gravels (to the north), overlying London Clay at depth. River alluvium associated with the River Fleet forms an arc to the east of the site, starting *c* 160m to the north-east and passing *c* 480m to the east of the site. Recent archaeological evaluation directly to the south of the site at 28 King's Mews (site code KNM17) recorded sands and gravels at a maximum height of 18.81m OD or *c* 2.6m below the slab level on that site.
- 1.3.3 Previous ground investigation which included the site area in 2007 (Ground engineering 2007) recorded *c* 4m of made ground over the Lynch Hill Gravels in one of the boreholes (BH 2) sunk directly to the south of the site in 28 Kings Mews. In this borehole below the concrete slab the made ground was divided into two deposits, an upper layer (*c* 1.2m deep) comprised of a mixed deposit that included concrete fragments suggesting it was of a modern date. Below this over the natural gravel was a 2.5m deep deposit of 'black, slightly clayey, gravelly sand' that contained inclusions of clinker, ceramics, bone, ash and oyster shell'.

Archaeology

1.3.4 The site has a low potential to contain archaeological remains dated to the prehistoric period. The site is located on the well-drained Lynch Hill and Hackney gravel terrace and in the prehistoric period was close to the predictable resources of the River Fleet, which would have made the area attractive for settlement. Despite this, there is no evidence for prehistoric activity within the study area. Although the Lynch Hill gravels are noted for occasional in situ Palaeolithic artefacts within the fine-grained interglacial lenses this is very rare, and no such finds have been recorded in the study

area.

- 1.3.5 The site has a moderate potential to contain archaeological remains dated to the Roman period. In the area of the site a Roman road, possibly of pre-Roman origin, ran from Old Ford (in the east), by-passed London and then joined the Roman Silchester road to the west (VCH *Middlesex* i, 1969, 64–74). Two branches of this route have been inferred from past excavations: one followed Holborn c 350m to the south, and the other c 125m south of the site and may exhibit evidence of Roman roadside activity, such as ditches or roadside buildings. present. In addition, Roman agricultural features (such as field ditches) could be present beside the roadways as could quarry pits, to provide for the frequent repair/re-metalling of the nearby roads.
- 1.3.6 Roman law required the dead to be buried outside the city perimeter. Cemeteries were established alongside roads and were in use from the 1st to the 4th centuries AD. The Greater London Historic Environment Record (GLHER) identifies two Roman cremation burial urns found on Gray's Inn Road possibly at the Holborn end (GLHER 181781). There is potential in this area for Roman funerary evidence or other artefacts, although there is no clear evidence for an extensive cemetery alongside the section of the road that runs south the site. This may be a consequence of the destruction of burials without record during successive periods of development, but it is possible that the burials may have been more scattered, either focused on the road frontages, or set within a number of smaller cemetery enclosures.
- 1.3.7 The site has a low potential to contain archaeological remains dated to the Saxon period. During the early medieval (Saxon) period the site lay to the north-east of the area normally associated with Lundenwic and is likely to have been in marginal land outside the town and no archaeological remains from the Saxon period have been recorded in the immediate vicinity of the site.
- 1.3.8 The site has a moderate potential to contain archaeological remains dated to the later medieval period. Archaeological excavation in 2013 adjacent to the site to the east at 39-45 Gray's Inn Road (site code GRY13) recorded a pit of 13th to 14th-century date at the south of this site (Coombe P and Grew F 2015, 49). This would place the pit relatively close to the 28 Kings Mews boundary and similar features or other evidence of later medieval activity may be present on the site. The site was most probably open ground in this period, and remains of agricultural features such as ditches or evidence of pitting similar to that found at 39-45 Gray's Inn Road may be present.
- 1.3.9 The site has high potential to contain archaeological remains dated to the post-medieval period. Historic mapping suggests the site was most probably located in open ground until the early 18th century. Strype's 1720 map of St Andrew's Holborn parish shows that by this date the site was part of a row of buildings fronting onto an open area (corresponding to the location of King's Mews), with gardens or yards in the eastern part of the site. Horwood's map of 1799 shows much of the area to the west of the site built up, including King's Mews. The 1872 Ordnance Survey map shows the site as one of a row of terraced houses/mews buildings with small back yards arranged back-to-back and sharing boundary walls with the houses on Gray's Inn Road. Previous excavation adjacent to the site at 39-45 Gray's Inn Road (site code GRY13) recorded a number of 18th- to 19th-century features including wells and cess/rubbish pits associated with the earlier structures on this site and there may be similar evidence or remains associated with the previous uses of the site at 27 Kings Mews.

- 1.3.10 The London County Council Bomb Damage Maps of 1939–45 (London Topographic Society 2005, sheet 62) indicates damage beyond repair at No. 43 Gray's Inn Road. The surrounding properties would not appear to have been affected. The site is located in a building which forms part of a light industrial unit, 23–30 King's Mews, built on the site in the 1950s.
 - Results of archaeological evaluation at 28 Kings Mews (site code KNM17)
- 1.3.11 An evaluation trench excavated at 28 Kings Mews directly to the south of the site indicated that the earliest deposits recorded were provisionally interpreted as being associated with quarrying activity, although this is undated. The horizontal stratigraphy above appears to represent some initial agricultural activity of indeterminate date, followed by post-medieval external yard or garden activity in the form of dumps, with some evidence for crude surfaces or pathways and to a lesser extent, garden soil. A brick-lined soakaway presumably relates to one of the properties shown on 18th-/19th-century maps as fronting onto Kings Mews or the open space that preceded it.
- 1.3.12 The results of this evaluation suggest that the depth of archaeological deposits where they survive on the site is likely to be between 1.55m (horizontal stratigraphy), extending to 2.9m or more in the localised areas of deeper cut features. Horizontal stratigraphy is likely to represent post-medieval external activity in the yards and gardens of 18th-/19th-century properties fronting on to Kings Mews and the open space that preceded it. Cut features may include post-medieval pits, brick structures such as soakaways, wells, cess pits and cellars and features representing earlier quarrying of uncertain date. Modern disturbance appears to be relatively limited and in the form of localised demolition activity prior to construction of the existing 1950s building and construction of the foundations themselves (MOLA 2017).

1.4 MOLA team and other responsibilities

In the document below the following terms should be understood:

- 1.4.1 MOLA (Museum of London Archaeology) is a company limited by guarantee registered in England and Wales with company registration number 07751831 and charity registration number 1143574. Registered office: Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED.
- 1.4.2 *Project Manager* MOLA office based manager who is the client's principal point of contact and who has overall responsibility for the project budget and delivery.
- 1.4.3 Site Supervisor MOLA site based manager who is responsible for the direction of the field team. Site supervisors on larger sites will tend to be Project Officers in grade, whilst on other sites they will be Senior Archaeologists. On some sites there may be both a Project Officer and/or one or more Senior Archaeologists.
- 1.4.4 *Archaeologists* MOLA excavation staff responsible on site for archaeological excavation.
- 1.4.5 Field Services Operations Manager MOLA office based manager responsible for allocation of staff and supply of equipment and resources.
- 1.4.6 *Health and Safety Compliance Manager* The MOLA manager with sole responsibility for site inspections, reporting and issuing of recommendations

- for the Site Supervisor and Project Manager to implement. Reports directly to MOLA CEO
- 1.4.7 *Principal Contractor* appointed directly by the Client with overall responsibility for site H&S under CDM regulations.
- 1.4.8 Attendance Contractor the contractor responsible for providing such attendances to MOLA as are deemed necessary to carry out their archaeological work (see section 4.2). These might for instance include but not be restricted to shoring, lighting, facilities, fencing, additional labour, spoil removal, etc The Attendance Contractor may be the same as the Principal Contractor, or it may be subcontracted to the Principal Contractor or it may sub-contracted to MOLA.
- 1.4.9 Sub-contractor where this term is used in this document it refers to any contractor employed directly by MOLA during the course of its work on the site.

2 Objectives of the watching brief

2.1 General considerations

- 2.1.1 The purpose of an archaeological watching brief as defined by the Chartered Institute for Archaeologists (CIFA 2014) as '...a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons....where there is the possibility that archaeological deposits may be disturbed or destroyed.'
- 2.1.2 A watching brief is not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.
- 2.1.3 Further to para 2.1.2, if during the course of the watching brief it is determined by the local authority that 'controlled excavation' is the appropriate mitigation strategy for a given area the appropriate additional objectives and methodologies will be followed, see 2.2.4
- 2.1.4 The Standard also notes that a watching brief may be the appropriate archaeological response outside the planning process (eg ecclesiastical development, coastal erosion, agriculture, forestry, and countryside management, works by public utilities and statutory undertakers).

2.2 Site specific objectives

- 2.2.1 The archaeological brief is essentially limited to establishing where, if at all, archaeological deposits survive (presence/absence), recording where necessary, and to ensuring that the proposed groundworks do not involve the destruction of any archaeological deposits of national significance.
- 2.2.2 The watching brief will involve a MOLA Site Supervisor in attendance on the Principal Contractor's (or any other contractor employed by them or the client) activities and able to make such records as may be possible without interrupting the progress of the contractors' activities.. This may typically include taking photographs, making quick sketches or written records, retrieval of finds and taking levels on observations. The primary purpose of watching briefs will normally be the identification of the limits of features size, depth, alignment.
- 2.2.3 Bulk finds will not normally be recovered in the watching brief areas, though finds of specific and unique intrinsic interest may be.
- Where an agreed area is set aside for 'controlled excavation' the terms of limitations of paras 2.2.1, 2.2.2 and 2.2.3 do not apply. Agreement must be reached on a) the research aims for 'controlled excavation'; b) the size and safe demarcation of any such agreed area; and c) appropriate time allocated by the client for the 'controlled excavation' to take place. Controlled excavation will then be carried out, finds will be recovered and samples taken in accordance and complying with the CIFA Standard and Guidance for Excavation (2014). The curator may decide that an additional WSI, or at least a supplement to the present document, is also required.
- 2.2.5 The limited nature of the proposed works and the watching brief upon them makes it unreasonable to establish many specific archaeological research

objectives. Nevertheless a few research questions can be outlined:

- 2.2.6 What is the nature and level of natural topography?
- 2.2.7 What are the earliest deposits identified?
- 2.2.8 Roman cremations have been recorded on the close to the site. Is there evidence for Roman activity on the site, particularly funerary activity?
- 2.2.9 Is there any evidence of medieval activity on the site?
- 2.2.10 The area of the site appears to be first developed by the early 18th century. What evidence is there for the post-medieval development of the site?
- 2.2.11 What are the latest deposits identified?
- 2.2.12 What is the extent of modern disturbance?

3 Watching brief methodology

3.1 Archaeological considerations

- 3.1.1 The works requiring a watching brief are ground works to stabilise the building prior to ground reduction for the proposed basement. This will comprise the underpinning of all four walls of the site perimeter. The monitoring will be undertaken on the site and MOLA will liaise with Historic England as it proceeds and if significant archaeological remains are recorded during the underpinning the ground reduction for some or all of the new basement may also require archaeological monitoring. Construction of the proposed basement level will require *c* 4m ground reduction (including formation levels). A section through the proposed development is shown on Fig 3.
- 3.1.2 A watching brief will cause minimal disruption to site works and will take place within agreed constraints. Watching briefs are not recommended in circumstances where important or complex archaeological remains are liable to be discovered, resulting in a risk of conflict between the need to record archaeological finds and the need to allow building works to proceed.
- 3.1.3 Initial breaking out and/or ground clearance by the Principal Contractor will be monitored by MOLA staff.
- 3.1.4 A MOLA Site Supervisor will monitor the work and record any archaeological remains revealed in the appropriate manner (plans, sections, field notes and/or pro-forma 'context sheets'). Any necessary photographic records will be made using digital or conventional media as deemed appropriate. All recording will be carried out in accordance with national standards (CIFA 2014).
- 3.1.5 Subject to 2.2 and 3.1.1 above, where archaeological deposits survive in any area of the proposed groundworks, the contractors will allow the MOLA archaeologist(s) reasonable time and access to record deposits as required.
- 3.1.6 In areas of archaeological interest the excavation and removal of deposits by the Contractor will, as far as possible and subject to 2.2 above, proceed according to the reasonable advice and guidance given by the attending archaeologist.
- 3.1.7 Subject to 2.2 above some areas might need to be re-scheduled in order to provide a safe environment for archaeological recording.
- 3.1.8 Provision will be made, at the earliest stage of development programming, for specified blocks of time to be made available for unrestricted archaeological access to areas of groundworks to carry out the watching brief and any 'controlled excavation' deemed necessary under para 2.2.4
- 3.1.9 Any finds of human remains will be left *in situ*, covered and protected. If removal is essential it can only take place under appropriate Faculty jurisdiction, Ministry of Justice (Coroner's Division) licence, environmental health regulations, coroner's permission, and if appropriate, in compliance with the Disused Burial Grounds (Amendment) Act 1981 or other local Act. Prior written notice will also be given to the local planning authority. It will be necessary to ensure that adequate security is provided.
- 3.1.10 Because MOLA is providing a monitoring service to an on-going construction programme, the timing of which can vary considerably, it remains the client's responsibility to ensure that their Principal Contractor

informs MOLA no later than one week in advance of the start of any proposed groundworks where a watching brief is required.

3.2 Recording systems

- 3.2.1 A unique-number site code will be agreed with the Museum of London Archaeological Archive (LAA).
- 3.2.2 The recording systems adopted during the investigations will be fully compatible with those most widely used elsewhere in London, and those required by the Archive Receiving Body, the Museum of London.

3.3 Treatment of finds and samples

- 3.3.1 Where necessary, a strategy for sampling archaeological and environmental deposits and structures (which can include soils, timbers, animal bone and human burials) will be developed in consultation between MOLA, the client and the local Planning Authority. Subsequent on-site work and analysis of the processed samples and remains will be undertaken by MOLA specialists.
- 3.3.2 All retained finds and samples will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in a proper manner and to standards agreed in advance with the Museum of London.
- 3.3.3 All finds of gold and silver, or other objects definable as 'treasure', will be removed to a safe place and reported to the local Coroner according to the procedures of the Treasure Act 1996 and the Treasure (Designation) Order 2002. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.
- 3.3.4 Advice will be sought from the LPA Archaeological Advisor and the Historic England Regional Archaeological Science Advisor throughout the project, as appropriate.

3.4 Ownership of finds

- 3.4.1 Whereas ownership of any finds on the site lies with the landowner, it is necessary that the landowner gives the necessary approvals, licences and permissions to donate the finds to the Museum of London, to enable that body to carry out its obligations to curate the finds, in perpetuity, as part of the archaeological Archive from this site.
- 3.4.2 These approvals, licences and permissions shall be *either* confirmed in the Agreement and Contract regulating the archaeological works *and/or* confirmed by the completion of the relevant Deed of Transfer form (draft appended).
- 3.4.3 The client (or their agent) will make arrangements for the signing of the Deed of Transfer Form by the client or, if the landowner is different to the client, by the landowner.
- 3.4.4 Notwithstanding the above, subsequent arrangements may be made if required between the landowner and/or the client and the Museum for the conservation, display, provision of access to or loan of selected finds in or near their original location.

3.5 Reports and archives

- 3.5.1 A Watching Brief report will be made available to the client and the Local Planning Authority within six weeks of the completion of fieldwork.
- 3.5.2 If further to paras 2.1.3 and 2.2.4 the need for further 'controlled excavation' is identified during the course of the watching brief, any additional such controlled excavation carried out by MOLA will normally lead to a post-excavation assessment report as per MAP2 (English Heritage 1991). The need for a post-excavation assessment report may also be determined by the local authority if significant finds or environmental samples have been recovered during the watching brief, even if an area of 'controlled excavation' has not been defined during the fieldwork. Any post-excavation assessment report will normally subsume the overall watching brief report.
- 3.5.3 A short summary of the results of the watching brief will be submitted to the Greater London HER and NAR (using the appropriate OASIS archaeological report form) and for publication in an appropriate academic journal.
- 3.5.4 Details of the project will be submitted to the online database maintained by the Online Access to the Index of Archaeological Investigations (OASIS) Project.
- 3.5.5 GIS data will also be made available to the GLHER.
- 3.5.6 Finds and records will be curated by the Museum of London and be available for public consultation in a site archive compatible with other archaeological archives in the Museum of London and adhering to standards set out in the following:
 - Archaeological Archive Forum, Archaeological Archives: a guide to best practice in creation, compilation transfer and curation (2011),
 - Museum of London, General Standards for the preparation of archaeological archives deposited with the Museum of London, (2009),
 - Museums and Galleries Commission's Standards in the Museum Care of Archaeological Collections (1992),
 - Society of Museum Archaeologists' draft Selection, Retention and Dispersal of Archaeological Collections (1992),
 - Society of Museum Archaeologists (1995) Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales,
 - United Kingdom Institute for Conservation Guidelines for the preparation of excavation archives for long term storage (1990)
- 3.5.7 Copyright of the written archive will be vested in the Museum.
- 3.5.8 Pursuant to these agreements the archive will be presented to the archive officer or relevant curator of the Museum within twelve months of the completion of fieldwork (unless alternative arrangements have been agreed in writing with the local planning authority).

4 Programme, staffing and attendances

4.1 Timetable and staffing

4.1.1 The timing and overall duration of the archaeological watching brief on the groundworks will be determined by the contractor's programme and the nature and extent of any surviving remains. It is envisaged that a Senior Archaeologist will monitor the groundworks, with an Archaeologists to assist with any recording work if required. Other archaeological specialists may be called in if necessary.

4.2 Attendances

- 4.2.1 For watching briefs, the attendances required by MOLA tends to be minimal as archaeologists are in fact attending the on-site works. However, some provision for welfare and working conditions will need to be anticipated. Some or all of the following attendances may be required and supplied by the client or client's agent.
- 4.2.2 If additional 'controlled excavation' is required as per para 2.2.4 there may be a need for additional or more extensive attendances. These will have to be discussed and agreed between the client and MOLA but will be as appropriate to and necessary for safe working conditions and adequate site facilities for any additional staff required.
- 4.2.3 Shoring: the need for the shoring of trenches will be determined by a competent person taking into account ground conditions, groundwater conditions, weather conditions, nature of work to be undertaken, how long the work will take, adjacent structures. The shoring will be installed and maintained in accordance with CDM 2015 and HSG 150 throughout the occupancy of the site by a competent person employed by the Principal Contractor/client or his agents. The shoring will be inspected by a competent contractor (Not MOLA) before each shift, any event which may have affected the strength of the shoring, or any un-intentional falls of material or equipment.
- 4.2.4 Where mechanical or electric hoists are to be used in shored shafts, MOLA Health and Safety policy requires staff working in shafts less than 4m x 4m to leave the shaft before hoisting of buckets takes place and not to re-enter until the bucket is lowered back into position. Time for such evacuation will not form part of excavation programme. Beyond a depth of 3m within such shafts gas monitoring equipment will be required to ensure appropriate air quality for those working there. Where mechanical or electrical hoists are in use in larger excavation trenches, the area in which the hoist is in use must be clearly demarcated and no staff will enter this area while the hoist is being raised or lowered.
- 4.2.5 Safety guard-rails and suitable access points into the site and areas of excavation, away from any site traffic and machinery.
- 4.2.6 Ladders into all areas of excavation when the excavated depth requires such access.
- 4.2.7 If ground-water is encountered in the trenches, adequate pumps will be required to remove it in order to complete the excavations.
- 4.2.8 If necessary, tungsten halogen lamps (500W minimum) with 110-volt

- transformer, adequate cabling, and power supply.
- 4.2.9 A suitable security system to operate overnight, weekends and holidays.
- 4.2.10 Labourers to assist in the removal of spoil from deeper areas of excavation.

5 Funding

5.1.1 The developer has already agreed to fund the appropriate archaeological watching brief coverage which may become necessary, and the costs will be confirmed in a separate document.

6 Bibliography

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7 Appendix: Draft Transfer of finds ownership form

DATED 20

[]

-AND-

THE BOARD OF GOVERNORS OF THE MUSEUM OF LONDON

DEED OF TRANSFER

of Finds excavated at []

Site Code []

BETWEEN: -

[] a company registered in England under Reg. No [] whose registered office is situate at [] ("the Site Owner");

AND

THE BOARD OF GOVERNORS OF THE MUSEUM OF LONDON an exempt charity established under the Museum of London Acts 1965-1986, whose principal place of business is located at 150 London Wall, London EC2Y 5HN, ("the Museum") which expression shall include any Governors appointed from time to time acting in accordance with the powers vested in them under the Museum of London Acts 1965-1986.

WHEREAS

- **A.** The Site Owner is the owner of a property at [] known by its site code [] whereupon an archaeological intervention has been carried out ("Excavation").
- **B.** The Site Owner is the owner of any items of archaeological interest found during the Excavation.
- C. The Site Owner wishes to transfer to the Museum title to the items referred to in Recital B.
- **D.** The Museum has agreed to provide facilities for the accommodation and, at its discretion, the display of the items referred to in Recital B on condition that the same are assembled as an archive in accordance with the provisions of this Deed.

NOW IT IS HEREBY AGREED as follows: -

1. PREPARATION AND DELIVERY OF THE ARCHIVE

- 1.1 The Site Owner will procure the preparation of the items of archaeological interest found during the Excavation in accordance with the requirements of the Museum's *General Standards for the Preparation of Archaeological Archives deposited with the Museum of London*, a copy of which is available to the Site Owner for inspection, and generally in accordance with best archaeological practice. The Site Owner will also procure to be prepared a full inventory of the items so prepared ("the Finds Inventory") and a list of the boxes and other containers in which those items will be transported to the Museum ("the Final Transfer Summary"). The items of archaeological interest listed in the Finds Inventory are hereinafter referred to as "the Finds".
- 1.2 The Site Owner will arrange for delivery of the Finds, Finds Inventory and the Final Transfer Summary to the Museum without cost to the Museum, after consultation with the Museum as to the method and time of delivery.
- 1.3 Title to and risk in the Finds will pass to the Museum on delivery of the Finds to the Museum in accordance with clause 1.2.

2. WARRANTIES

- 2.1 The Site Owner warrants to the Museum that:
 - 2.1.1 [to the best of its knowledge and belief **delete as appropriate**] at the date of this Deed ownership of the Finds is vested exclusively in the Site Owner;
 - 2.1.2 [to the best of its knowledge and belief delete as appropriate] at the date of this Deed the Finds are free of all charges, encumbrances and third party rights and no right has been granted in respect of them which would affect the transfer of

- title to the Finds by the Site Owner to the Museum or otherwise give rise to any conflict with the provisions of this Deed;
- 2.1.3 [to the best of its knowledge and belief delete as appropriate] at the date of this Deed the Site Owner has the unfettered right to transfer ownership and possession of the Finds to the Museum;
- 2.1.4 the Site Owner will at its own cost take all steps which are or may be necessary at any time to cure any defects in the title to the Finds; and
- 2.1.5 the Site Owner warrants that it or its contractors have complied with all of the requirements of the Treasure Act 1996 and any statutory modification or reenactment of that Act, and all other legislative requirements relating to the Excavation.
- 2.2 The Site Owner will indemnify the Museum against any and all claims, demands, proceedings, costs, expenses, loss or damage, of whatever nature which may be made or brought against or incurred by the Museum arising out of or in connection with any breach of the warranties given respectively by the Site Owner in clause 2.1.

3. INTERPRETATION; GOVERNING LAW AND JURISDICTION

3.1 This Deed will be governed by and construed in accordance with the Laws of England and Wales regardless of the place of execution or performance. The English Courts will have exclusive jurisdiction to deal with any dispute or other difference arising out of or in connection with this Deed, unless the Museum chooses to invoke, or voluntarily submits to, the jurisdiction of some other tribunal.

[] By means of these signatures:	
	Director
	Director/Secretary
The COMMON SEAL of THE BOARD OF GOVERNORS OF THE MUSEUM OF LONDON was hereunto affixed in the presence of:	
	Chairman
	Secretary

IN WITNESS of which the parties hereto have executed this document as a Deed on the date first

written above

8 Health and Safety Risk Assessment and Method Statement (RAMS)

8.1 Use of Risk Assessment and Method Statement

8.1.1 This section constitutes the MOLA Health and Safety Risk Assessment and Method Statement (RAMS) for 27 Kings Mews, London, WC1N 2JB project dated 07.03.2016. Project Manager responsible

- 8.1.2 The Project Manager is responsible for ensuring that a copy signed and approved by the Health and Safety Compliance Manager (HSCM) of the RAMS is available on site.
- 8.1.3 The MOLA Site Supervisor is responsible for ensuring that all MOLA staff study and familiarise themselves with the RAMS and that they sign the health surveillance, RAMS and induction registers to indicate that they have understood and will comply with them.
- 8.1.4 Where changes or additions to the RAMS are required these should be appended to the site master copy by the Site Supervisor and staff briefed on those changes.

Site Supervisor responsible

8.2 Site Specific Health and Safety Control Measures

Site Security and Access

8.2.1 Site security, safe access to this site, visitor control, and safe access routes from the site entrances to any site offices and welfare facilities will be the responsibility of the Client or Principal Contractor.

Client or Principal Contractor

Trench or Work Area Access and Barriers

8.2.2 The Principal Contractor will demarcate and maintain designated safe routes to and from MOLA work areas: and protect them with suitable barriers where required.

Principal Contractor Responsible

8.2.3 On this site the need for and erection of suitable edge protection for all trenches and excavation areas will be the responsibility of the Principal Contractor.

Principal Contractor responsible

8.2.4 On this site safe access to all deep trenches/excavation areas will be provided, maintained and inspected where applicable by the Principal Contractor.

Principal Contractor responsible

Shoring, Stepping-in, Battering Back of Excavations

8.2.5 The need for stepping in/battering back or shoring and its installation and inspection will be the responsibility of the Principal Contactor.

Principal Contractor responsible

Lifting Equipment (Hoists)

8.2.6 On this site it is not anticipated that any mechanical lifting equipment, (electric powered hoist or similar or machine used as a hoist) will be used however if required The installation, operation, maintenance and inspection of all mechanical lifting equipment will be the responsibility of the Principal Contractor.

Principal Contractor responsible

Underground and Overhead Utility services

8.2.7 On this site the Principal Contractor will be responsible for the locating, avoidance and making safe where applicable of all underground and overhead utility services and will notify MOLA at induction of any such utility services relevant to MOLA works.

Principal Contractor responsible

8.2.8 All underground and overhead utility services will be assumed to be live and be subject to an exclusion zone by MOLA until proved otherwise or been made safe by a competent person.

Site supervisor responsible

- 8.2.9 In the event of the accidental disruption of a live utility service by MOLA or contractors working for MOLA the Site Supervisor will inform the Project Manager and the Principal Contractor and, when appropriate, call the relevant emergency number for the utility service owner.
- 8.2.10 Where for whatever reason the making safe of any under- or overhead services relevant to MOLA works does not happen MOLA may need to remove its staff from the site or an area until it has been made safe.

Hazardous Chemicals (COSHH)

8.2.11 On this site no COSHH controlled substances will be used.

Project Manager responsible

Contaminated Land

8.2.12 MOLA is not aware of any previous documented land usage suggesting that the site is likely to contain specific potentially dangerous subsurface ground contamination although the site is located in a building that possibly had a light industrial purpose from some periods from the mid-20th century. MOLA has a copy of a ground conditions report (Ground Investigations 2007) for the site and surrounding properties which indicates some risk of ground contamination. Test pit 15 excavated at the back of 27 Kings Mews lists an elevated level of arsenic (Ground Investigations 2007, 26 and Exploratory Hole Location Plan).

Project Manager responsible

8.2.13 All staff will, at induction, be briefed on any known or suspected contaminants on site indicating nature, appearance, smell (if applicable), and the safe system of work and preventative measures required. This will be reinforced by task briefings and tool-box talks where applicable.

Site Supervisor responsible

- 8.2.14 The following minimum precautions will apply to all MOLA sites, excavation areas and trenches. Staff will:
 - Be subject to daily, simple health monitoring by their supervisor.
 - Wear all required and appropriate PPE when working in the excavation area/trench i.e as a minimum in this context gloves suitable for site work.

- Not eat drink or smoke in the excavation area/trench or outside designated zones.
- Wash hands before eating drinking or smoking
- Consider the environment and not dispose of spoil or site waste down drains or in water courses or similar.
- Report signs of any contaminants on site to their supervisor eg discarded containers, odd coloured deposits, or strange smells.
- 8.2.15 The site supervisor will inform the Project Manager or Principal contractor as appropriate if contaminants are discovered and assist in the production any necessary risk assessment and safe system of work

Asbestos

8.2.16 The principal contractor will inform MOLA staff at induction of any Asbestos within the building which may pose a risk to MOLA operations and staff .

Principal Contractor/ Client/ Project Manager responsible

- 8.2.17 All work in proximity to asbestos within a building will be risk assessed and the results of that risk assessment and the control measures to be implemented will be communicated to all relevant staff.
- 8.2.18 Where asbestos is a known ground contaminant (see previous section) or discovered below ground during the course of MOLA works, it will be a subject to an individual risk assessment and safe system of work based on its type, condition and extent.
- 8.2.19 MOLA is not a HSE licensed Asbestos contractor. MOLA will not remove, transport or store asbestos. MOLA staff will
 - Not interfere with the above ground fabric of a building and will not knowingly disturb any materials they know or suspect to be asbestos above or below ground.
 - Report all suspected finds of asbestos to their supervisor and not resume work in the affected area until a safe system of work is in place

Site Supervisor responsible

Human Remains

8.2.20 On this site it is not anticipated that human remains will be present.

Project Manager responsible

Confined Spaces

8.2.21 The Project Manager in consultation with the MOLA Health and Safety Compliance Manager will consider if an excavation area or trench or other work area requires Confined Space designation, what the level of risk is and what precautions are required to work within the space. Work areas may become Confined Spaces as work progresses.

Project Manager responsible

- 8.2.22 Where a Confined Space is designated by a Principal Contractor, MOLA will work in accordance with the designation, assessment of risk and safe systems of work implemented as a minimum standard required.
- 8.2.23 At the time of writing no areas or trenches have been defined by MOLA or the client as Confined Spaces. This will be kept under review.

Unexploded Ordnance

8.2.24 The WWII bomb damage maps produced by London County Council (London Topographic Society 2005, map 62) does not show the direct area of the site to have sustained bomb damage.

Project Manager responsible

- 8.2.25 The following minimum precautions will apply to this site irrespective of defined UXO risk. MOLA staff will:
 - Not touch suspected unexploded ordnance unless safe to do so.
 - MOLA staff will report any suspected unexploded ordnance found to their supervisor who will inform the principal contractor (if applicable) or police.
 - MOLA staff will vacate the danger area and not return until suspected ordnance has been identified and removed or made safe.

Site Supervisor responsible

Plant

8.2.26 All plant on this site will be operated by the Principal or other contractor appointed by the Client or Principal Contractor.

8.2.27 The training competence and certification of all plant operators and the inspection and maintenance in a safe state to use will be the responsibility of the contractor.

Principal Contractor or

Contractor responsible

- 8.2.28 All plant operation within MOLA work areas will be under the supervision of the MOLA site supervisor and banksman where required.
- 8.2.29 MOLA staff working near plant will ensure that operators are aware of them, not approach unless the operator has indicated that it is safe to do so and maintain a safe distance at all times. MOLA staff will not work near plant operated erratically.

Site Supervisor responsible

Power Tools

8.2.30 On this site MOLA staff will not be operating any power tools. A risk assessment and safe system of work will, where applicable, be provided for staff working near other contractors operating power tools.

Project Manager responsible

Sub-contractors

8.2.31 On this site MOLA will not be employing any sub-contractors.

Project Manager and HSCM responsible

Emergency Procedures

8.2.32 On this site the establishment and control of all emergency procedures will be the responsibility of the Principal Contractor. MOLA staff will be instructed on the emergency procedures at induction and conform to them when required.

Principal Contractor responsible

Emergency Contact Details

8.2.33 In all emergencies the MOLA site supervisor will be responsible for summoning the relevant emergency services (999) and liaising with them on site. For non-emergency injuries and other contact with the emergency services as might become necessary during the project, the following contact details are provided

Site Supervisor responsible

Service	Nearest				
The nearest Accident and	St Bartholomew's Hospital				
Emergency Unit (or Minor Injuries Unit if A&E too far) is	West Smithfield, London EC1A 7BE				
located at:	Tel: 020 7377 7000				
	Quickest route: South to Theobalds Road and into Gray's Inn road to Holborn, east down Holborn/Holborn Viaduct to Giltspur Street				
	Closest station: Barbican or Farringdon				
The nearest Police station is	Holborn Police Station				
located at	10 Lamb's Conduit St, London WC1N 3NR				
	Tel: 101				
	Quickest route: South to Theobalds Road and west to Lamb's Conduit St				
	Closest station: Russel Square				
The nearest Fire station is	Soho Fire Station				
located at:	126 Shaftesbury Ave, London W1D 5ET				
	Quickest route: South to Theobalds Road and west to Bloomsbury West, Shaftsbury Ave.				
	Tel: 999 in an emergency				
	Closest station: Leicester Square				

8.2.34 The out of hours emergency MOLA contact for the site will be:

Name	Role	Out of Hours Contact Number		
Derek Seeley	Project Manager	07860 716340		

First Aid and Injury

8.2.35 On this site first aid facilities and official site first aiders will be provided by the Principal Contractor. However, MOLA will provide:

- At least one qualified first aider
- A first aid kit suitable for the number of staff deployed.

Project Manager and HSCM responsible

8.3 Welfare

8.3.1 On this site the MOLA fieldwork/watching brief may extend, intermittently, over several weeks, the MOLA archaeologist(s) will require access to toilets with hot and cold water, office space for working on the archaeological records and for storing finds, and a lockable facility for storage of tools and equipment. These facilities will be supplied by the Client or other Contractor.

Client/ Contractor responsible

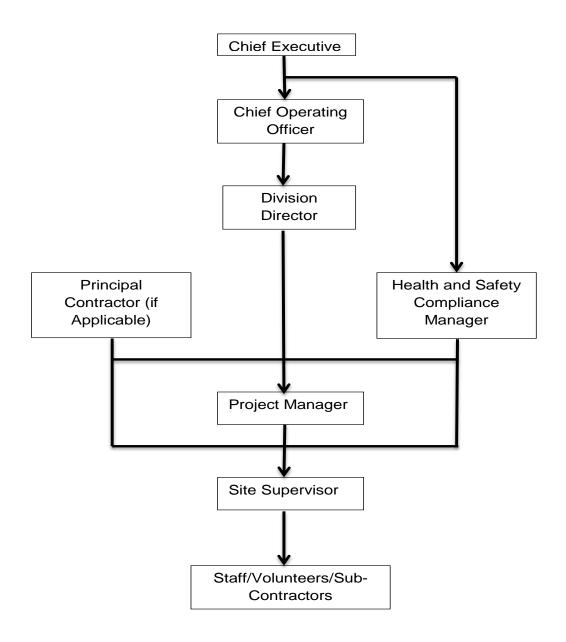
8.3.2 The MOLA site supervisor will ensure that any accommodation or and welfare facilities used by MOLA staff and MOLA sub-contractors is kept clean and tidy and in a fit state to be used.

Site supervisor responsible

8.4 Co-operation with other contractors

- 8.4.1 The appointed MOLA site supervisor will act as the principal liaison with the Principal Contractor and all other contractors where applicable.
- 8.4.2 The MOLA Site Supervisor will ensure the liaison is regular and sufficient to guarantee that:
 - all contractor works within or immediately adjacent to MOLA works have been risk assessed and the control measures in place adequately protect MOLA staff. This will apply particularly to high risk activities such as plant operations piling and demolition.
 - all MOLA works are risk assessed with regard to contractors within or adjacent to MOLA works to ensure that control measures are in place to assure their safety

Site Supervisor responsible



8.6 Non-site specific MOLA H&S information

Health and Safety Policies

- 8.6.1 MOLA staff will at all times comply with all existing national legislation regarding Health and Safety at work.
- 8.6.2 All MOLA staff will adhere to the Health and Safety procedures and rules laid down in the MOLA Health & Safety Policy and MOLA Site Safety Rules. Copies of these documents will be available for inspection on site.
- 8.6.3 In so far as they do not contradict procedures laid out in our own H&S Policy or current legislation, MOLA staff will also comply with any on-site Health and Safety procedures and instructions provided by the client or their appointed Principal Contractor.

All MOLA staff responsible

Project Inspection and Audit

8.6.4 MOLA's Health and Safety Compliance Manager (HSCM) will carry out inspections of projects as applicable. In the absence of the HSCM this task may be undertaken by a deputy. The HSCM will issue immediate instructions or recommendations to the MOLA site supervisor and/or Project Manager for any required improvements in on-site health and safety. This will normally be followed within one day by a digital report to the Project Manager and other managers as appropriate for action. This report will be made available to the client and/or Principal Contractor where requested.

HSCM responsible

MOLA H&S accreditation

8.6.5 MOLA is an accredited contractor with the Contractors' Health and Safety Scheme (CHAS) a founder member of Safety Schemes in Procurement (SSIP). MOLA is also accredited with PICS, Construction Line and the Achilles Utilities Vendor Database. These demonstrate compliance with sound H&S management practise.

HSCM responsible

8.6.6 MOLA is also registered with Constructing Better Health (CBH)

MOLA and Construction Design and Management Regulations CDM 2015

- 8.6.7 Archaeology as a stand-alone activity and profession is not considered to be part of the construction industry and is specifically exempt from the CDM regulations 2015 where undertaken alone as pre-construction work.
- 8.6.8 However, where archaeological work is undertaken as part of a construction project, that is during the construction phase, that work must conform to CDM 2015.
- 8.6.9 MOLA is generally classed as a Contractor under the regulations for a construction project, but may be considered a Designer in certain circumstances.
- 8.6.10 The HSE does not regard any archaeological contractor as competent to act as Principal Contractor for a construction project. However where the activities on site for a construction phase are predominantly archaeological in scope, MOLA will consider acting as Principal Contractor if it believes the work lies within its competence.
- 8.6.11 Any request for MOLA to act as a Principal Contractor on a project must be referred by the project manager to their Division Director and/or the Chief Operating Officer for decision acting on the advice of the HSCM.

Project Manager, Division Director, Chief Operating Officer, HSCM responsible

MOLA staff information

8.6.12 MOLA Human Resources department ensures adherence to all UK employment legislation covering the legal right to work in the UK of all staff.

HR responsible

8.6.13 In compliance with the Data Protection Act (1998) and to protect the personal and financial safety of our staff, MOLA will not provide personal data for MOLA staff to clients, Principal Contractors, or other bodies without the written permission of those staff. We will also seek to ensure that such information is being securely held and responsibly used by the organisation seeking it and not provide the information without first obtaining a written assurance to that effect.

Project Manager responsible

Construction Service Certification Scheme (CSCS)

8.6.14 Archaeological contractors are classed as Construction Related Organisations under the Construction Service Certification Scheme. All relevant MOLA staff have or are in the process of obtaining a CRO White Card for Archaeological Technician (Code 5363).

Line Managers, HR and HSCM responsible

Inductions, Task Briefings and Tool Box Talks

8.6.15 All members of MOLA staff are sufficiently fluent in both spoken and written English to understand all verbal and written safety instructions and warnings on site.

HR responsible

8.6.16 All MOLA staff and volunteers receive a full day's Induction, including Health and Safety, on commencement of their first day of work with MOLA

HSCM responsible

8.6.17 The MOLA Site Supervisor is responsible for ensuring that all MOLA staff, volunteers and sub-contractors working on site receive an H&S Induction whether given by MOLA or a Principal Contractor.

Site Supervisor responsible

- 8.6.18 Where the site is controlled by MOLA, the MOLA site supervisor will give a health and safety induction to all staff, volunteers and sub-contractors prior to commencement of work on their first day on site.
- 8.6.19 When given by a MOLA Site Supervisor the H&S Induction will always include all the following: Supervisors; Site layout (work areas, 'no-go' areas, pedestrian routes etc); Fire precautions; First Aid precautions; nearest Accident and Emergency Unit; Accident reporting; Welfare (office, washing, toilets etc); Site Security; Contractor Key Personnel; Significant Hazards.
- 8.6.20 Where a site is under the control of a Principal Contractor, MOLA staff will attend the site induction given by the Principal Contractor before attending a MOLA site RAMS specific induction given by the site supervisor
- 8.6.21 The MOLA supervisor will ensure where appropriate that all staff, volunteers and sub-contractors receive daily pre-start briefings for the tasks they are to undertake that day.
- 8.6.22 Where appropriate e.g. Projects with more than one-two staff and of more than a week's duration, regular toolbox talks will be given by the MOLA Supervisor or other suitable member of staff. As a minimum requirement these talks will occur once a week and be of 10-15 minutes duration.
- 8.6.23 A signed record of all on site inductions, task briefings and tool-box talks will be maintained by MOLA for inspection

Health and Safety Training

8.6.24 It is MOLA policy to ensure that resources are available so that all staff receive adequate and appropriate training and certification to perform their duties safely, and that this training is undertaken as promptly and regularly as is reasonably practicable.

HSCM responsible

8.6.25 MOLA provides Project relevant Health and Safety Training for its staff as follows:

Training	All Staff	'Field staff'	Supervisory staff	Management staff	HSCM responsible
Manual Handling	✓				

		•			7
Asbestos awareness	✓				
Safety in Excavations		✓			
Quarry Passport		✓			
Entry into Confined Spaces with Breathing Apparatus		✓			
UXO Awareness		✓			
IOSH Supervising Safely training or			✓		
Site Supervisors Safety Training Scheme as appropriate					
First Aid at Work training			✓		
Cable Location training			✓		
Competence in Chainsaw and Related Operations Level 2		√ (selected)			
IOSH Managing Safely training				✓	
Health and Safety management Seminars				✓	

MOLA Hours of work

8.6.26 MOLA staff will generally work Monday to Friday from 8.0/8.30am until 4.30/5.0pm on site, with suitable breaks conforming to all legal requirements. Where requested and funded by the client any overtime worked will also conform to legal requirements with regard to duration and breaks. MOLA staff contracts permit only voluntary overtime over 40hrs per week.

Project Manager responsible

MOLA staff behaviour on site

8.6.27 Mobile phones, personal CD players, I-pods and similar will not be used by MOLA staff in archaeological trenches or areas of work. Smoking and naked flames are/is not permitted in the trenches or areas of work. Alcohol is not permitted anywhere within the site.

Site Supervisor responsible

MOLA operates a zero tolerance policy towards any form of bullying or harassment (sexual, racial or other) by its staff towards anyone. (A) Any member of MOLA found responsible for such behaviour will be removed from the site immediately and may be subject to further disciplinary action. (B) MOLA further expects that the Principal Contractor will take similar measures with any of its staff, or those of any other contractors on site, who are responsible for such actions towards MOLA staff. All such instances will be formally reported through the MOLA Project Manager to the Principal Contractor. If remedial action is not promptly taken by the Principal Contractor MOLA reserves the right to withdraw its staff temporarily from site. Such withdrawal will constitute a withdrawal for the safety of its staff as per para 9.6.36 and may incur additional costs.

A - Site Supervisor responsible

B Principal Contractor responsible

Personal Protective Equipment (PPE)

- 8.6.29 On field projects all MOLA staff will wear or use the following PPE as a *minimum* unless specified as not required by the site supervisor:
 - Safety Helmet (EN397)
 - Safety footwear steel toecap and mid-sole boots or Wellingtons EN345-47
 - High-visibility vest or jacket (EN471)
- 8.6.30 Where required, MOLA staff will be supplied with and wear task specific PPE such as:
 - Safety spectacles (EN166)
 - Gloves, (nitrile, nitron, 'Grippa' or latex disposable EN374, 388, 420
 - Ear Defenders (EN 352-3)
 - Goggles (Chemical BSEN 166 Type 3)
 - Dust masks valved FFP3 (EN149 2001)
 - Half masks and filters (EN140 & A1B1E1K1P3)
 - Disposable overalls (Type 5/6 disposable EN340)
 - Fall arrest harnesses (EN361) with Lanyards (EN355) and connectors (EN362), winch and tripod.
- Escape Set and Breathing apparatus, full-face respirator (EN136) filter (A1B1E1K1P3), PVC gauntlets, chemical overalls (type 3)

Safety Documents

- 8.6.31 The MOLA site safety documents will be located with the first aid kit in the site office/mess hut/canteen. The safety documents will include:
 - Current Health and Safety at Law Poster
 - MOLA H&S policy
 - MOLA site rules
 - Where to get first aid poster
 - Accident/Near Miss/Witness statement forms.
 - MOLA Insurances summary
 - Induction prompt sheet
 - CAT procedure
 - Safety signs
 - Tool box talk registers

Accident reporting

- 8.6.32 All accidents, dangerous occurrences and near misses, including those that do not cause injury, will be reported immediately to the MOLA supervisor for recording, investigation and action to prevent re occurrence where appropriate.
- 8.6.33 Where the site is controlled by a Principal Contractor the MOLA site supervisor will ensure that all accidents, dangerous occurrences and near misses are reported to the Principal Contractor and that the Principal Contractor's reporting and investigation procedures are followed.
- 8.6.34 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) sets out requirements for the reporting of certain types of accidents and incidents. RIDDOR notifiable accidents and incidents and other serious accidents and incidents that may not be covered by RIDDOR will be reported immediately by the MOLA site supervisor to:
 - the MOLA Health and Safety Compliance Manager, who will inform the appropriate enforcing authority, normally the Health and Safety Executive and commence an investigation into the incident as outlined in Section 11 of the current Health and Safety policy document.

Site Supervisor responsible

Site Supervisor responsible

Site Supervisor responsible

- their line manager, the MOLA Project Manager, the Principal Contractor or the client's representative on site
- 8.6.35 If necessary and practicable the scene of the accident will be sealed off by MOLA and left undisturbed until the HSE's Inspector and any other interested party have carried out an investigation.

by

Stoppages

8.6.36 Where MOLA considers a work area unsafe or the safety of MOLA staff is endangered by others, MOLA will inform the client and or Principal Contractor of the unsafe conditions (which will be confirmed in writing if a claim for compensation is to be made). If reasonable steps are not taken within a reasonable timeframe to make the area safe then MOLA reserves the right to withdraw its staff and workforce from that area until it is safe, and the period of time of the withdrawal will be added to any agreed period of work. If MOLA is unable to find suitable work to redeploy such staff financial compensation may also be sought.

Project Manager responsible

8.7 Preliminary Site Risk Assessment

- 8.7.1 MOLA has undertaken a preliminary risk assessment of the hazards to employees, other contractors, and visitors, to which they may be exposed whilst they are on site.
- Project Manager responsible
- 8.7.2 This preliminary assessment is not intended to, and cannot, replace the need to review and undertake further risk assessments as required once work on site has commenced.
- 8.7.3 Risk assessments are part of the project RAMS and will be communicated at induction and where relevant thereafter via pre-start briefings to all staff, volunteers and sub-contractors working on the project.

Site Supervisor responsible

8.7.4 The Site Supervisor will be responsible during the site work for the monitoring and review of the risk assessments and the communication of all modifications and additions to the risk assessments to all relevant parties.

Risk Assessment Register

For Site: 27 Kings Mews, W	N 2JB	Type: Watc	hing	g Brief			
Persons Affected		No	Classification			No	
Employees		1-2	Experienced			1-2	
Other workers		-	Inexperienced			-	
Public	-	Disabled			_		
Tick known or suspected hazard	ds c	n site and comp	lete a risk asses	sme	ent for each one		
1 Access	Х	25 Manual Hand		х			
2 Ladders	Х	26 Fumes/Gas	3		50 Spot Dating		
3 Plant	Х	27 Dust		х	•		
3a Plant (loading and unloading)		28 Noise		Х	-		
4 Dumpers		29 Deep Excava	ations	Х			
5 Scaffolding (inc Towers)		30 Power Tools			54 SHARPS (hypodermics)		
6 Excavations	Х	31 Vibration			55 Task Lighting (laniro etc)		
7 Work at height		32 Vehicles (Dri	ving)		56 Site Walk Over		
7a Work at Height (Cherry Picker)		32a Vehicles (Site)			57 Processing: Finds washing		
8 Slips, Trips, falls	X	32b Vehicles (load/ unload)			57a Processing: Environ samples		
9 Underground services	X	33 Lifting Equipment			57b Processing: Artefact marking		
10 Overhead Power Lines		34 Plant (lifting)			57c Processing: Manual handling		
11 Electrical		35 Human Rema	ains		57d Processing: Power hose		
12 Fire (inc LPG)		36 Public Safety	,		57e COSHH: Parafin (Processing)		
13 Confined spaces		37 Violence			58 Office Work		
14 Breaking Out	X	38 Chainsaw			59 DSE (Work Stations)		
15 Hand Tools	X	39 Power Auger	(COBRA)		60 Young Person		
16 COSHH: Spray paint		39a Power Auge	er (Comp)		61 Person Specific/Pregnancy		
17 Contaminated Land	X	39b Power Auge	er (Electric)		62 Light Duties		
18 Weil's Disease		40 Hand Auger			63 Individual Stress		
19 Psittacosis		41 Foreshore/wa	ater				
20 Tetanus		42 Adverse Wea	ather				
21 UXO		43 Spoil Moundi	ing	X			
22 Asbestos (Buildings)	X	44 LPG(Butane)					
22a Asbestos (Ground Contam)		45 Waste					
23 Welfare		46 Storage					
24 Lone working		47 Animals					
24a Empty Premises		48 Non-ionising	radiation				

Project Manager in overall charge of project is: Derek Seeley Tel: 0207 410 2274

Supervisor(s) in daily charge of project is: TBC

Number, training and experience of supervisors will be sufficient for the project

All staff will comply with the: MOLA H&S policy, MOLA and/or principal contractors site rules, the project RAMS, safe systems of work and permits to work.

All staff will have sufficient training and experience for the tasks they undertake or be under close supervision

All staff will hold a CSCS card appropriate to their profession or be in the process of obtaining one where appropriate

All staff will be fit to undertake their work

All staff will be inducted on first day of work and briefed on the project RAMS.

The full site induction will be undertaken by the MOLA supervisor if no principal contractor present.

All staff will sign the induction and RAMS register to confirm that they have received, understood and will comply with both.

Tool box talks/staff briefings will be conducted on the hazards and control measures on a regular basis

Appropriate PPE to be worn for each task.

Minimum site PPE (unless otherwise stated by supervisor): Steel Toe-cap/midsole boots, Safety helmet, high visibility vest or jacket.

First Aid kit on site, First aider/appointed person on site. Nearest accident and emergency unit located and contact numbers obtained

Competent Person(s) appointed to take	All Risk Assessments seen by (initials)				
action:	PM	Archaeologists			
H&S Manager Ian Grainger	SA(s)]			
Project Manager Derek Seeley	Client				
?Project officer					
?Senior Archaeologist	Principal Contractor	1			
?Senior Geoarchaeologist/matician	Other				
?sub-contractor					

8.8 Specific Risk Assessments

APPROVAL (Name and Title)						DATE			
Drona		Pat Miller	ind ritie)		P Mill	SIGNATURE		06/03/17	
	oved by:	at willer			F IVIIII	CI		00/03/17	
RA N ^o	ACTIVITY	Hazards	RISK	Risk Class L/M/H	N° at Risk	Control Measures	Final Risk: I/	Action by	
0001	ACCESS	Fall of persons from height, Fall of objects from height, Vehicle/plant collisions, Slips Trips falls	Personal Injury, Equipment Damage	M	1-2	Obey warning signs, verbal and written PC and traffic marshal instructions. Use pedestrian access gate. Keep to designated pedestrian routes. Be aware of plant and vehicle routes and movements. Do not obstruct pedestrian routes – be tidy. Report unsafe routes.	L/M/H L	Supervisor and staff	
0002	LADDERS If required to access excavation areas	Fall of person from ladder, Fall of material from	Personal Injury, Equipment Damage	М	1-2	Use correct length and type, not painted. Daily inspection when in use, do not use if damaged. Must project at least 1.50m above stepping off point. Check/Fix securely at top and base. Check/Install at an angle of 75 degree (1:4 ratio over length). Three points of contact: make sure any load can be carried comfortably with one hand free for ladder.	L	Supervisor and staff	
0003	PLANT	Persons Struck by Machine Shovel or load dropping Hydraulic fluid spray Overturning of machine Fire/explosion	Personal Injury, Equipment Damage	М	1-2	No work with or near plant operator under influence of drugs/alcohol or behaving erratically. Operations to be under supervision of MOLA supervisor or deputy and trained banks person also where applicable. Staff working near machine to ensure that the operator has seen them and that they are at a safe distance. Staff briefed on plant operations and changes to them. High visibility clothing.	L	Supervisor and staff	
0006	EXCAVATION	Collapse of sides Fall of persons Falls of Plant, equipment, material Flooding	Personal Injury, Equipment damage	M	1-2	Inspect all excavations before each day/shift and record results. Supervisor will report unsafe excavations to principal contractor. Staff will not enter any excavation they consider unsafe until it is made safe. Staff will report unsafe excavation to supervisor. Shoring installed by contractor under direction of the principal contractor. Edge protection installed by contractor under direction of the principal contractor. Warning and information signs in MOLA excavations. Pumps if required inspected and certified.	L	Supervisor and staff	
0008	SLIPS/TRIPS/ FALLS	Falls of persons Dropping of equipment/ma terial	Personal injury, Equipment damage	М	1-2	Assess work in adverse weather and suspend if appropriate. Keep all surfaces level and dry where practicable. Keep all areas free of unnecessary obstruction and debris. Keep all areas well lit. All safe pedestrian routes to be sign posted. Staff to be physically fit for the conditions on site. No running or horseplay. Be cautious moving about site.	L	Supervisor and staff	

0009	UNDERGROUND SERVICES (UTILITIES) Electricity, Water, Sewage/foul water Gas. Fibre optic etc	Electrocution Flooding Asphyxiation Fire/explosion Bacterial infection	Personal injury, Equipment and environ- mental damage, Annoyance to public	М	1-2	Briefing on live utilities to be given to all staff Competent person will use a cable location scanner calibrated within last 12 months to scan for live electrical services: before initial breaking out; before machine clearance of first level; and each machining level thereafter. Any utilities remaining live in excavation areas will be clearly demarcated and segregated 1m either side zone. Work will stop on discovery of unidentified service and not resume until confirmed/made safe. Inform utilities company or principal contractor of discovery of any unrecorded service. Inform utilities company or principal contractor immediately of any contact with live utility.	L	Supervisor and staff
0014	BREAKING OUT Of slabs etc	Falling/flying objects Striking underground utilities Fire/explosion Collapse of structure Dust Noise	Personal Injury, Equipment damage	M	1-2	Maintain safe distance from breaking out. Wear eye protection. Wear P3 dust mask if applicable. Wear correctly rated ear protection.	L	Supervisor and staff
0015	HAND TOOLS Covers use of: Mattock, Shovel, spade, pick axe, trowel, draw hoe, garden fork, hand shovel, brush, lump hammer, sledge hammer, chisel, bolster and similar simple non mechanical tools	Manual handling Impact from tool Impact from flying debris	Personal injury, property damage	М	1-2	All hand tools to be to industry safety standard. Inspect tools on delivery. Discard tool if not fit for purpose. Assess staff fitness to use tools. Task briefing where applicable. Training and supervision for inexperienced staff. Adequate breaks/rest periods	L	Supervisor and staff
0017	CONTAMINATED LAND Test pit 15 excavated at the back of 27 Kings Mews lists an elevated level of arsenic (Ground Investigations 2007, 26 and Exploratory Hole Location Plan).	solid/liquid contaminants Gas/fumes/air borne particles Ingestion, inhalation, dermal contact Pollution of water table, drains, water supply Pollution of atmosphere	Personal injury, illness damage to the environ- ment	M	1-2	Provide disposable tyvek overalls, respirators/P3 rated dust masks, wellington boots, rubber gauntlets if necessary High standard personal hygiene: wash hands before eating drinking smoking. No eating, drinking, smoking, in contaminated areas. Wear gloves in the contaminated areas. Conduct basic health surveillance. Report all ill health. Report all suspected contaminants – strange smells, strange looking deposits. Cease work area until contaminant is identified and safe system of work in place.	L	Supervisor and staff
0022	ASBESTOS (Buildings) No asbestos information available	Inhalation of asbestos fibres	Chronic Illness, death asbestosis	M	1-2	MOLA not licensed asbestos contractor. MOLA staff will not remove or disturb known or suspected asbestos. Asbestos survey report will be obtained where applicable. Do not work in areas where asbestos removal is undertaken until Air Certificates indicate 0.1 fibres per cm2 over 4 hrs or less.	L	Supervisor and staff

	Τ	I	I			Committee and the second of		1
0025	MANUAL	Too heavy,	Personal	M	1-2	Comply with existing exclusion zones. Report suspected asbestos. Vacate area. Establish exclusion zone –barriers and warning signs. Do not return until the nature and condition of the asbestos has been determined and a safe system of work is in place. Wear Impervious hooded overalls and approved respirators where applicable. General	L	Supervisor
	HANDLING	big, awkward load, Too prolonged Dropping load	injury, Equipment damage			Remove the need for manual handling where possible. Use mechanical aids where possible. Reduce horizontal and vertical distances. Reduce size and weight of individual load. Ensure team sufficient and fit for task. Ensure that route planned well lit, obstruction free, and as dry as possible. Liaise with others to keep route safe, use lookouts. Brief and train staff. Rotate staff and/or sufficient breaks for prolonged tasks Use gloves Personal Assess weight before lifting, stay comfortably within personal lifting capacity. When picking up load: stand close with feet slightly apart, crouch do not bend at waist, keep head up and maintain natural curvature of spine, thrust/lift through hips, keep object close to body, maintain clear field of vision and do not run. Use MOLA Manual handling check lists for all significant manual handling tasks 0024a-e: Planks, ladders and boards Drums/round containers Bags and sacks Finds/irregular shaped objects on site Office work – boxes etc		and staff
0027	DUST	Breathing problems Reduced visibility Dirty office/canteen Public nuisance	Personal injury	M	1-2	Vacate area where there is excessive airborne dust. Do not return until it is safe Wear eye protection Wear P3 rated dust masks. Dampen down dust making activities. Report all unwell symptoms immediately Keep facilities dust free, close doors, regular cleaning Provide sterile eye wash	L	Supervisor and staff
0028	NOISE From breaking out of slab foundations etc	Excessive, prolonged noise levels, Nuisance to public	Personal injury – temporary or permanent damage to hearing, loss of hearing Headache/ nausea	М	1-2	Minimise exposure—rotate staff, plan work to avoid noisy times/work areas if possible. Wear appropriate ear protection. Report unwell symptoms immediately. Vacate area if headaches/nausea etc.	L	Supervisor and staff
0029	DEEP EXCAVATIONS Underpinning and new basement area to be excavated (if required)	Collapse of sides Fall of persons Falls of Plant, equipment, material Flooding Hazardous	Personal injury, Equipment damage	М	1-2	Determine the depth for the installation of shoring/ battering back as outlined in WSI. Shoring installed and maintained by competent sub-contractor. Shoring inspected by competent sub – contractor or MOLA supervisor instructed by them. Access ladders/scaffolding installed and inspected by competent contractor. Edge protection –fixed scaffolding barrier –installed around trench by a competent person	L	Supervisor and staff

0043	SPOIL MOUNDING If large amounts of spoil retained on site	Plant and materials falling into trench Dust Mudslides Slippery barrow runs Overloaded barrows	Personal injury, equipment damage	M	1	'Danger Deep Excavation' Warning signs displayed ie on site boundary/entrance, trench edge protection Where appropriate a fixed hoist to remove spoil rather than a crane or mechanical excavator. Hoist and plant operators will be briefed on MOLA works and operating procedures for deep trenches. The size and shape of the bucket or skip used for spoil disposal will be suitable for the size of trench, shoring, and other obstructions. Task specific briefing before commencement. Only staff physically fit and suitable. Basic visual health surveillance. report all unwell, symptom immediately. A mechanical pump(s) where necessary. Gas monitoring equipment where appropriate. Robust barriers around deep excavations. Mound spoil and materials at safe distance from trench, welfare facilities, occupied premises and site perimeter. Supervisor to determine safe distance. Do not block drains, sewers, manholes, water courses, with spoil. Spoil to be mounded – c 45 degree slope maximum where applicable. Keep excavation edges clear of loose rubble, spoil, materials etc. Clear and secure barrow runs, staging to be used where possible, fitted with toe boards and guard rails as appropriate. Cover or damp down in dry dusty conditions.	L	Supervisor and Staff
						Large heaps to be closed in heavy rain or snow and monitored for slippages.		

All persons affected by these hazards must be made aware of the contents of this Risk Assessment

8.9 Health Surveillance

Fitness to Work Declaration

This is to help ensure the fitness to work of MOLA Staff prior to starting on site as per MOLA Health and Safety Policy procedure (section 23.07-8).

All staff must sign at Induction

I confirm that:

I am not aware of any medical condition I have or medication that I am taking that may put me at increased risk of injury while working on this site or undertaking specific tasks (e.g. manual handling, hand digging, work at height, confined spaces)

Or

I have informed my supervisor of a medical condition or medication which may put me at increased risk of injury while working on this site or undertaking specific tasks. I understand that this will be treated confidentially but that the supervisor may need to refer this issue to a more senior manager to ensure my continued safety while working.

And

That I will Inform my supervisor promptly, before putting myself at risk of injury, of any medical condition diagnosed in the future or medication that I am subsequently required to take which may put me at increased risk of injury while working on this site or undertaking specific tasks.

Name	Signature	Date.	

RAMS BRIEFING REGISTER					
Date Name of Inductee		Signature of inductee To: confirm that you have read this Method Statement and understood its contents and you will work in accordance with the method statement.	Confirmation Signature of Supervisor/Manager		
INDUCTIO	ON REGISTER				
Date of Induction	Name of Inductee	Signature of inductee To confirm that you have attended the induction and understood its contents and that you will work in	Confirmation Signature of MOLA inductor		

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	accordance with the induction content, RAMS and resulting safe systems of work and all legal and reasonable safety requirements and instructions	
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Fig 1 Site location



