Middlesex Hospital Annex
44 Cleveland Street
London W1T 4JT

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL STANDING BUILDING SURVEY

Date 22/11/2017

Project Manager: Michael Smith

MIDDLESEX HOSPITAL ANNEXE
44 Cleveland Street
London W1T 4JT

NGR 529260 181810
Planning reference 2017/0414/P & 2017/0415/L
Condition Number 7

Written scheme of investigation for a standing building survey

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1 Introduction

1.1 Project background

1.1.1 This Method Statement (also 'Written Scheme of Investigation' or WSI) for a standing building survey on the site of the former Middlesex Hospital, 44 Cleveland Street, London, W1T 4JT has been commissioned from MOLA by the client Llewelyn Davies.

1.1.2 The site comprises the group of buildings of the former Middlesex Hospital Annexe, and is bounded by Cleveland Street to the south-west, no. 34-42 Cleveland Street (Middlesex House) to the south-east, the rear of the Sainsbury's Welcome Centre on Howland Street to the north and north-west and the rear of buildings fronting Charlotte Street to the east and north-east (*Fig 1*). The building was historically known as the Central London Sick Asylum, the Strand Union workhouse infirmary, and also the Covent Garden workhouse.

1.1.3 The centre of the site lies at National Grid reference 529260 181810. The site lies on the east (Camden) side of the boundary between the London Borough of Camden and the City of Westminster.

1.1.4 The development entails the refurbishment of and alterations to the existing former workhouse building (Grade II Listed) and North South Houses (fronting onto Cleveland Street) to provide 12x residential units (class C3); demolition of part of South House and buildings at rear of the Workhouse building and redevelopment to provide part 4, part 5, part 8 storey building comprising 4535m^2 of commercial floor space (flexible use of Class B1/D1 healthcare) and 38x residential units (class C3); and associated works including opening up of Bedford Passage, creation of public open space, landscaping works, and partial demolition of front boundary wall.

1.1.5 This document sets out the methodologies which will be followed during the standing building survey and during the post-survey reporting stages. These will follow the Standards and Code of Practice laid down by the Institute for Archaeologists, local and regional planning authority archaeology guidance, Historic England Centre for Archaeology Guidelines where appropriate and research priorities established in the Museum of London's *a research framework for London Archaeology*, 2002.

1.2 Brief summary of the building(s)

1.2.1 The central building on the west of the site, set back from Cleveland Street, was constructed between 1775 and 1778 as a workhouse for the parish of St Paul, Covent Garden. The rear of this building was modified and others were constructed both before and after the site became the Strand Union Workhouse in *c*.1836, but these early additions have since been removed. New extensions to the rear of the 18th-century building were constructed in 1874 to 1875, when the site became the Central London Sick Asylum; the north and south wings of the 18th-century building were continued to the east end of the site, enclosing a yard between them and, at the same time, two separate ranges were constructed running from Cleveland Street eastwards, backing on to the north and south sides of the site, respectively. These buildings still exist, although they have subsequently been modified

to a greater or lesser extent, notably after they were acquired in 1924 by the Middlesex Hospital (situated 100m south of this site), and used by the hospital's outpatients from 1926 until vacated in 2006.

1.2.2 There are 8 buildings on the site, as identified during a previous standing building assessment (MOLA, 2008). These have been assigned numbers as shown in *Fig 2*. The number of floors for each of these 8 buildings is as follows:

Building 1: Basement, ground, 1st, 2nd and 3rd
Building 2: Ground, 1st and 2nd
Building 3: Ground, 1st and 2nd.
Building 4: Basement, ground, 1st and 2nd.
Building 5: Ground and 1st
Building 6: Ground floor only
Building 7: Ground floor only
Building 8: Ground and 1st floor only.

1.3 Planning and legislative background

1.3.1 The Planning and legislative background to the site has been adequately summarised in the previous Archaeological Historic Environment Assessment report (MOLA 2017 section 9).

1.3.2 The frontage block which formed the former Strand Union Workhouse was Grade II Listed on 14th March 2011 (UID: 510966), while the later buildings and wings added in the 19th century (buildings to north, south and rear of frontage block), were given a certificate of immunity from Listing (Certificate of Immunity Number: 1401787).

1.3.3 Planning Consent is pending at the time of writing (Planning Reference No. 2017/0414/P), but will contain the following condition (Condition 7) relating to heritage issues was attached to the consent. The application also requires listed building consent (Reference 2017/0415/L):

Planning condition 7
No demolition shall take place until the implementation of a programme of building recording and reporting in accordance with a Written Scheme of Investigation (WSI) which has been submitted by the applicant and approved by the local authority in writing has been secured. No development shall take place other than in accordance with the approved WSI.

1.3.4 The site is within the Charlotte Street Conservation Area, which was designated in 1974 and extended in 1981, 1985 and 1999. The area is cited as an important example of development in the Georgian period as a residential suburb and the subsequent social and economic changes that have affected patterns of use and occupation of the buildings (Camden Council, 2008).

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 fieldwork.

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* – MOLA manager with sole responsibility for site inspections, reporting and issuing of recommendations for the Site Supervisor and Project Manager to implement.

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 5.3). 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. MOLA sub-contractors are specified in para **Error! Reference source not found.**

2 Objectives of the Standing Building Survey

2.1 Overall objectives

2.1.1 The undoubted significance of the building calls for recording and historic analysis which addresses the building's structure, architectural detail and archaeological evidence, prior to permanent alteration and demolition.

2.1.2 A Level 3 standing building survey forms an analytical record of a building, drawing upon the full range of available resources to present the building's significance in terms of architectural, social, regional or economic history. The final report will therefore present a detailed account of the buildings origins, development and use. The record will include evidence, upon which the analysis will be based and will include records to illustrate the buildings' past appearance and structure.

2.1.3 The proposed work will concentrate on elucidating and reconstructing on paper the successive major builds and episodes of construction evident in the fabric of the building, and also evident in available documentary sources. The demolition/alteration of the building calls for the comprehensive photographic recording of the building. For these purposes, before demolition and refurbishment the visible fabric of the building will be examined, analysed and recorded in suitable form.

2.1.4 The proposed work has the following main components:

- To undertake a comprehensive photographic record of the building, including detailed and general shots of the interior and exterior fabric of the building, where this can be safely done.
- To investigate, analyse and describe the fabric of the building before demolition, with the aim of elucidating its use and structural history, and record and analyse the resulting evidence for this history using applicable archaeological methods.
- To make a detailed record of the existing building in its present condition, by means of photography, scale drawings, with the use of existing scale drawings to be supplied by the client
- To study documentary sources for the history of the building on the site.
- To report the results in suitable form, publish a summary and register the report through the Historic England OASIS form, with the Borough of Camden Planning Department and with the Museum of London Archaeological Archive (LAA).

2.2 Specific research aims

2.2.1 In addition to the above objectives, the opportunity to attempt to answer a series of research questions will be taken during the historic building recording. These research aims will be kept under constant review and will continue to drive site strategy and methodology during the recording, investigation and analysis.

2.2.2 At present the research questions are as follows:

1. To what extent, if any, can original 18th century fabric, features and décor be identified within Building 1 (former Stand Union Workhouse)?

2. How has the original layout of this part of the building been altered since its construction in the 1770s?
3. The building accrued additions as its role changed, throughout the 19th century. In particular these include additions designed by Thomas Hardwick, the 'infectious ward' of 1802 and infirmary of 1819 (CWAC; H806,272; H807, f30). After a campaign led by the resident Dr Joseph Rogers, the site was upgraded and Hardwick's early 19th century buildings rebuilt to form the 'Cleveland Street Asylum' in 1874. Is there any surviving evidence of the earlier buildings and what changes were made to the layout of buildings on the site at this time?
4. Is there any evidence of a 'covered way', as seen on the 1894 OS map (not illustrated in this report), which led from the main central entrance to the perimeter wall on Cleveland Street.
5. What can be said about the relationship between the site, it occupants and Bedford Passage to the east. How was the passage used?
6. What alterations were made to the 'Cleveland Street Infirmary' buildings by Westminster Council in the early 1920s and by the Middlesex Hospital after 1924?

3 Standing building survey method statement

3.1 Background

3.1.1 A unique site code will be agreed with the Museum of London LAA close to the start of the project.

3.1.2 All work will be carried out in accordance with the Historic England Guidance Paper *Understanding Historic Buildings* (2016) and other applicable standards and guidance (eg CIFA Standard and guidance for archaeological investigation and recording of standing buildings or structures, 2014).

3.2 Physical investigation

3.2.1 Physical investigation of the building will be carried out on site, prior to demolition and alteration or refurbishment. This aspect of the investigation will be selective, aimed at elucidating significant details regarding fabric, function, or the methods/order of construction and development.

3.3 Written records

3.3.1 The Project Manager and Site Supervisor will be responsible for ensuring that the written record to be submitted to the archive corresponds to a Level 3 in the Historic England specifications (HE 2016). In general, and where not otherwise mentioned, long established MOLA terms and procedures will apply. In addition the written records will comply with the standard and guidance for archaeological investigation of standing buildings or structures as stated by the Chartered Institute for Archaeologists (CIFA 2014).

3.3.2 Hand written notes may be taken on site to record the findings of the on-site analysis of the building. Detailed record sheets of site notes will be completed on site in accordance with required procedures. These will be headed with the site code, site name, date. Initials of archaeologist and location details.

3.3.3 Written site records will be notes on the fabric, form, functions and evident past changes to the building. In addition hand written notes may be made during documentary archive research on the history of the building, any prominent residents, architects or past functions. All hand written notes will be included in the material to be archived.

3.4 Drawn records

3.4.1 The drawn site records, the completed CAD drawings presented in the report and the use of existing survey drawings will conform to the conventions and procedures laid out in the Historic England guidance Understanding Historic Buildings (HE 2016).

3.4.2 A measured survey was conducted by the client Llewlyn Davies in January 2017. The resulting plans and elevations have been supplied to MOLA by

the client in AutoCAD form/PDF and will be an important component of the project. These will be compiled and printed out by MOLA prior to the start of the work on site. They will then be annotated on site by the buildings archaeologists, with the addition of details of historical features as necessary and checked and redrawn if necessary, as required in order to conform to the applicable specifications for the presentation of AutoCAD images for heritage surveys (HE 2016), and so that the drawn record fully and accurately reflects and illustrates the analysis of the fabric.

3.4.3 In addition to the above, any on-site drawings made by MOLA will predominantly comprise measured and annotated sketches. Rooms and details will be measured and drawn by hand on sheets of paper and the dimensions added. These will be used to create a CAD drawing, using the relevant historic building conventions as described by Historic England. The drawn site records will be included in the archive.

3.4.4 Architectural details, such as mouldings or window frames, may also be drawn, either as a measured and annotated sketch, or if required, as a scale drawing on permatrace (at a suitable scale, usually 1:20).

3.5 Photographic records

3.5.1 The record will include photographs taken both externally and internally as required using digital cameras. The photographic record will be sufficiently thorough and detailed to illustrate all significant phases, structures, important structural relationships, and individual items of interest.

3.5.2 This primary body of photographs will be used in the off-site analysis of the building. A selection of these photographs will be reproduced in the report for illustrative purposes.

3.5.3 MOLA will provide its own appropriate lighting equipment eg a portable flash or portable, rechargeable LED lamps. For necessary attendances (eg electricity) see Attendances, Section 5.3.

3.5.4 Site photographs, will include a photographic scale of appropriate size where necessary.

3.5.5 A photographic index will be compiled, relating image number, site photograph number, area, direction of view and other relevant information.

3.5.6 At the request of the client a file of site photographs may be produced and copied digitally to DVD or similar for them.

3.5.7 All site photographs of sufficient quality will be included in the material to be archived.

3.5.8 The use of photogrammetry on site may be appropriate in order to quickly record digital information from which accurate scale drawings can be made. The methodology for this is given below (Section **Error! Reference source not found.**). If carried out, this body of photographs is not intended as a record in itself and it is likely to be extensive and repetitive. The photographs would be used to create a 3D model and mesh from which drawings can be produced. The archiving of this body of digital photographs is not anticipated, but the meta data can be supplied to the archive recipient and included if required.

3.6 Use of Photogrammetry

3.6.1 MOLA sometimes uses a 3D photo scanning technique on site to enable the production of accurate scaled drawings from photographs. In general 3D

photographic scanning is a quick and effective tool that can significantly aid archaeological recording and analysis, on both large and small scales and in particular built structures.

3.6.2 This technique may be applied where necessary on a limited area, such as an internal elevation or architectural feature. However it may not be applicable in all instances, due to limited access or adverse lighting conditions.

3.6.3 The onsite data capturing process is simple and adaptive to many situations. Photographs are taken of a structure from various directions and distances to capture the 3D location of any point in the scene. Paper survey targets can be fixed to the subject, in order to give known reference points and the distances between them. Photogrammetric processing software (Agisoft PhotoScan) then produces a 3D point cloud from each digital photographic pixel. The point cloud is then processed to build high definition 3D mesh, with texture added from the digital photographs. Orthogonal or flattened views of the subject, from every possible direction, can subsequently be produced from the 3D textured mesh.

3.6.4 These orthogonal views can be digitised in CAD to produce an accurate and annotated scale drawing. The end result is not the 3D model itself, but the drawings that can be produced from it. This technique does not replace the hand-drawn and measured scale drawing technique, but it permits accurate drawings to be produced quickly and can therefore increase the opportunity to produce drawings within a specific timeframe, potentially increasing the range of the drawn record.

3.6.5 The technique can be employed to capture elevations, trusses, architectural details, machinery and other features of interest. Its use is dependent on site conditions and the requirements of the project. The decision to whether to use the technique rests upon the archaeologists undertaking the site work.

3.7 Documentary research

3.7.1 Provision will be made for sufficient initial documentary research in order to enable the overall research aims to be realised. Further documentary research may be required during the fieldwork to address particular features or buildings.

3.7.2 Research may also include, as required, published comparative material to help identify and date the fixtures, fittings, materials, techniques and decoration in the buildings.

3.7.3 The Level 3 record necessitates the analytical description of the structures and the evidence from documentary archive research is an important part of the analytical process. An account of the development and use of the site based on evidence from documentary sources will be presented in the report and referenced throughout the analytical description. This will allow the validity of the record to be re-examined in detail in the future if required.

3.8 Salvage and conservation procedure

3.8.1 The costs associated with excavating, conserving, lifting and curation of salvaged objects or structures remain outside the agreed budget for the archaeological project.

4 Archive and reporting

4.1 The project archive

4.1.1 The Project Archive will include all materials retained (or the comprehensive record of such materials as referred to above) and all written, drawn and photographic records relating directly to the investigations undertaken. It will be quantified, ordered, indexed and internally consistent before permanent transfer to the Museum of London.

4.1.2 Records will be curated and be made 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)

4.1.3 Copyright of the written archive will be vested in the Museum of London.

4.1.4 The archive will be presented to the archive officer or relevant curator of the Museum of London within 12 months of the completion of any publication work (unless alternative arrangements have been agreed in writing with the Local Planning Authority).

4.2 Post-fieldwork reporting and dissemination

4.2.1 Following the completion of field work, the assessment of the site records will lead to a Report in accordance with 'Appendix 4: assessment report specification'. in the *Management of Archaeological Projects* (MAP2).

4.2.2 This will form an analytical record incorporating an introductory description followed by an account of the building's development and use, citing the documentary archive material used as evidence for the conclusions drawn.

4.3 Publication/dissemination

4.3.1 In all cases a short summary of the results of the work will be submitted through the Historic England OASIS archaeological data collection form, and

for publication in the 'Excavation Round-up' of the *London Archaeologist*.

4.3.2 Where the results of the building recording project are deemed by the Local Authority to be suitable for publication or wider dissemination this would be undertaken within five years (or as near as possible subject to availability of space in appropriate journal) of the completion of fieldwork on site.

4.3.3 Agreement can be sought with the client if required, to allow a contingency sum to cover the estimated cost of such a publication programme, according to standard proportions recommended by Historic England, in the event of such publication being recommended by the Local Authority.

5 Project timetables and staffing

5.1 Field programme

5.1.1 The field work is likely to start in early 2018 The programme is expected to involve a 1 to 2 week period for recording by up to 3 staff, and on site for up to 5 days.

5.1.2 Time required for any engineering or enabling works before access to the areas is available will not be taken out of the standing building survey period.

5.1.3 The time needed for the standing building survey may be dependent on the programme of the Principal Contractors. The monitoring will be undertaken by a Site Supervisor with assistance from other staff as required, and will last for the duration of such works. Attendance for such work may sometimes be intermittent at the discretion of the Site Supervisor.

5.1.4 If unforeseen engineering or health and safety problems should arise, or if extensive, significant features are found to survive in the area which cannot be satisfactorily accessed and recorded in this period, then there should be sufficient flexibility within the programme and resources to enable the features and/or structures in question to be observed and recorded to the satisfaction of the Local Planning Authority's designated representative/advisor. The exact details of time, areas and numbers of staff involved would be agreed in discussions between representatives of the developer and/or their agents, MOLA and the Local Planning Authority's designated representative/advisor.

5.2 Post-excavation programming

5.2.1 The time required to complete the off-site Report will depend critically on the volume of records generated during the fieldwork and the overall work commitments of the MOLA team of buildings specialists. It is likely to be complete within 8-10 weeks of the completion of fieldwork on current estimates.

5.3 Attendance requirements

5.3.1 This section provides a summary of likely attendance *requirements to be provided for MOLA by the site Attendance Contractor* during the standing building survey fieldwork.

5.3.2 If necessary, these will be revised in light of on-going discussions on methodology. The section is based on standard MOLA procedures, adapted to meet the particular requirements of the project.

5.3.3 The Attendance Contractor will be employed by the client to be stated here and brought to the attention of the client before start of work!

5.3.4 As part of the **site preparation** works, the building, or those parts of the building which require recording, will be made safe to access by the Attendance Contractors

5.3.5 **Enabling works**. Any design for temporary works necessary to ensure the

structural integrity of buildings will be agreed with the client and/or his representatives in advance to minimise disruption to the archaeological programme.

5.3.6 After the completion of site preparation works there may be a '**hand-over meeting'** to ensure that the on-site conditions are acceptable to the MOLA Project Manager and MOLA Health and Safety Officer.

5.3.7 **Safe access** routes will be installed prior to the fieldwork, and to be maintained throughout the period of the excavation by the Attendance Contractor. Handrails and ladders will be provided as required. Safety guard-rails and suitable access points into the site and areas of recording, away from any site traffic and machinery.

5.3.8 **Lighting**: for photography, MOLA will provide their own appropriate lighting equipment (this will be a portable flash or LED lamps); however MOLA requires the client/contractor to provide an on-site 110v or 240v power supply in order to recharge photographic lighting batteries. In addition basic task lighting is required throughout all parts of the building that MOLA needs to access to carry out the work specified.

5.3.9 A suitable **security** system to operate overnight, weekends and holidays. Normally this means adequate hoarding/Herris fencing and locks.

5.3.10 Effective channels of **communication**, including a designated supervising engineer and/or client's project manager to liaise with the Site Supervisor and Project Manager from MOLA. A designated contractor's agent will be necessary to implement agreed attendances.

6 Funding

6.1.1 Funding arrangements for the fieldwork and report have been agreed between MOLA and the client, together with agreements for attendance requirements and facilities required.

7 Bibliography

AECOM, 2016 (Cheng, J) *Phase 1 Geo-technical and Geo-Environmental Desk Study Report*, AECOM unpub report

Archaeological Archive Forum, 2011 Archaeological Archives: a guide to best practice in creation, compilation transfer and curation

BADLG, 1991 Code of Practice, British Archaeologists and Developers Liaison Group

Camden Council, 2008 *Charlotte Street Conservation Area Appraisal and Management Plan.*

Chartered Institute for Archaeologists, (CIFA), 2014 *By-Laws, Standards and Policy Statements of the Chartered Institute for Archaeologists, Standard and guidance: the excavation and recording of standing buildings*

Chartered Institute for Archaeologists, (CIFA), 2014 *By-Laws, Standards and Policy Statements of the Chartered Institute for Archaeologists, Standard and guidance: the creation, compilation deposition and transfer of archaeological archives*

DCLG [Department of Communities and Local Government], March 2012 National Planning Policy Framework.

English Heritage, 1991 Exploring our Past. Strategies for the Archaeology of England, English Heritage

English Heritage, 1991 Management of Archaeological Projects (MAP2)

English Heritage, 1997 Sustaining the historic environment: new perspectives on the future

English Heritage 1991. Management of Archaeological Projects (MAP2)

English Heritage 1998 GLAAS Archaeological Guidance Papers.

English Heritage 2005. The Presentation of Historic Building Survey in CAD

English Heritage 2010. PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide superseded by the NPPF

GLA [Greater London Authority], July 2015 *The London Plan. Spatial Development Strategy for Greater London, Consolidated with Alterations since 2011.* (

Historic England Greater London Archaeology Advisory Service, 2015 *Guidelines for Archaeological Projects in Greater London.*

Historic England, 2016. Understanding Historic Buildings: a guide to good recording practice.

MOLA 2008 (Westman, A.). *Former Middlesex Hospital Annexe (previously Central London Sick Asylum, Strand Union workhouse infirmary, Covent Garden workhouse) 44 Cleveland Street; A Standing Building Assessment*. Unpublished client report

MOLA, 2017 (Holloway, C), Historic Environment Report *for Middlesex Hospital Annexe*, MOLA unpub report

Museum of London, 2009 General *Standards for the preparation of archaeological archives deposited with the Museum of London*

Redhill Analysts 2005 (Murden, P) *MIDDX-OPD Cleveland Street Asbestos Register – Copy 1*. Redhill unpub report.

Fig 1 Site location

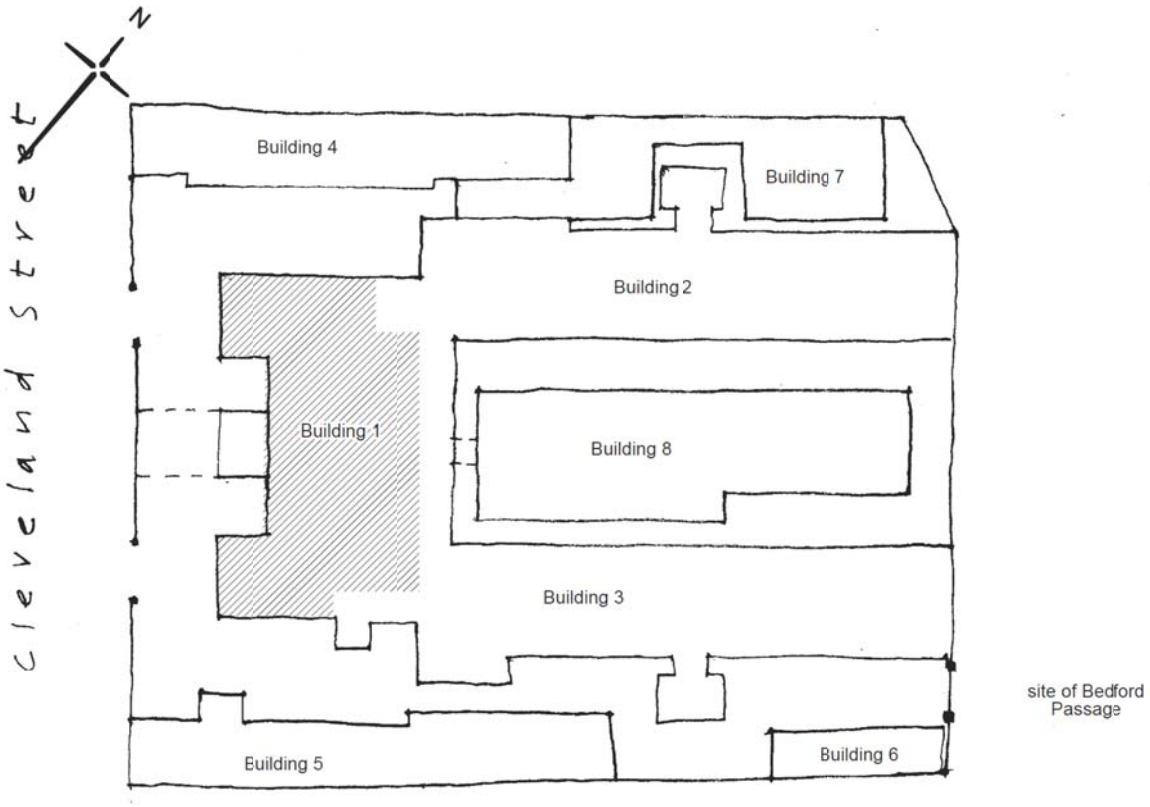


Fig 2 A site plan showing the numbered buildings on the site, 18th century fabric in tone (MOLA 2008)

8 Appendix: Management, delivery and quality control

8.1.1 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). It has its own independent Board of Trustees but works in partnership with the Museum of London via a Memorandum of Understanding.

8.1.2 MOLA is a 'Registered Organisation' with the archaeological professional body, the Chartered Institute for Archaeologists (CIfA). The C*IfA Register* is a rigorous Quality Assurance scheme for archaeologists. In order to be accepted, MOLA has passed a Board resolution to comply with the CIfA Code of Conduct and Standards, to demonstrate that compliance through bi-annual re-registration, to submit to regular CIfA inspections, and to ensure that all MOLA activities are under the overall direction of a Member grade (CMifA) 'responsible post-holder'. The Registered Organisation scheme also provides procedures for investigating and handling of external complaints.

8.1.3 MOLA is currently working with a specialist consultant towards achieving an ISO9001 Quality Management standard (proof can be provided if required).

8.1.4 MOLA subscribes to and abides by the general principles and specific terms of the *Code of Good Practice On Archaeological Heritage in Urban Development Policies* established by the Cultural Heritage Committee of the Council of Europe, and adopted at the 15th plenary session in Strasbourg on 8-10 March 2000 (CC-PAT [99] 18 rev 3). In particular to the following points: ….*archaeologists shall be aware of development costs and adhere to agreed timetables* (Para 3 'The Role of the Archaeologist'), with all work *'carried out to written statements setting out standards timetables and costs'* (para 4 ibid).

8.1.5 MOLA further subscribes to and ensures that its activities comply with and/or are guided by the following policies, procedures and guidance:

- Appropriate local and regional planning authority archaeology guidance – eg for London: English Heritage Greater London Archaeology Advisory Service, *Standards for Archaeological Work*, 2014.
- Appropriate Archaeological Research Framework for the region – eg for London: English Heritage Archaeology Division, *Research Agenda* (1997); Museum of London, *A research framework for London archaeology (*2002); and *Historic Environment Research Strategy for Greater London* (in prep. CBA/MoL/Rowsome).
- English Heritage, *Management of Archaeological Projects* (MAP2), (1991)
- English Heritage Centre for Archaeology, *Guidelines* (various)
- Museum of London*, Archaeological Site Manual (1994)*
- National archive disposition standards including Museum and Galleries Commission, *Standards in the Museum Care of Archaeological Collections* (1992) and Society of Museum Archaeologists, *Towards an Accessible Archaeological Archive: the Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales* (1995)

- Relevant local archive deposition standards, eg for London, Museum of London, *General Standards for the preparation of archaeological archives deposited with the Museum of London*, (2009).

8.1.6 MOLA governance and organisational strategy are determined by the Senior Management Group (SMG), led by the CEO and comprising the Finance Director, the Chief Operating Officer, and five other divisional Directors. The SMG reports regularly to an independent Board of Trustees, who oversee MOLA's performance and strategic direction. As a charitable company MOLA is monitored and regulated by the Charities Commission.

8.1.7 MOLA is structured to reflect its project orientation. A Director manages the Client Team of c 10 Project Managers (PMs). Individual PMs (and for larger projects SPMs) are responsible for developing new work for MOLA, and thereafter for designing, budgeting and delivering projects for clients. They remain the principal point of contact for the client for the duration of each project.

8.1.8 PMs drive projects through successive stages in accordance with client needs, forming project teams by drawing upon the skills available within MOLA Operations teams. PMs ensure that projects are completed to the highest standards within time and budget. Financial monitoring of projects against budget is undertaken by the Finance Director and PMs at monthly review meetings. Project management software is employed by MOLA Operations to plan resourcing and track and adhere to programme and budget. Project team meetings are held throughout the programme, allowing refinement of research strategies in the light of on- or off-site findings or analysis. Recording, excavation, and sampling strategies may be modified to provide optimum information retrieval in support of the research objectives. At post-excavation phase internal project management is normally devolved to a designated Post-Excavation Project Manager.

8.1.9 All archaeological field work is controlled and monitored on a day to day basis by the on-site Site Supervisor (SS), who reports to the designated Project Manager. Together with PMs and the MOLA Health and Safety Manager they also liaise as necessary with the client's agents and principal contractors regarding all enabling works and H&S..

8.1.10 All written documentation, eg initial *written scheme of investigations*, evaluation reports, post-excavation *Assessment Report*s and final publications undergo stages of internal review and sign-off prior to final issue to clients. For both field and reporting work PMs and SSs meet and liaise with the client and the Local Authority's archaeological advisor or officer to ensure delivery according to wsis and to review progress, research aims, archaeological procedures, and site strategies as appropriate.

8.1.11 At all stages, what constitutes an appropriate archaeological response will be assessed against criteria of local, regional and national significance and within frameworks of valuable archaeological research topics identified in local or regional Archaeological Research Frameworks (where these exist).

9 Appendix: General Objectives of a Standing building survey

9.1.1 A standing building survey as defined by the Chartered Institute for Archaeologists (CIfA, 2014) is …'a programme of work intended to establish the character, history, dating, form and archaeological development of a specified building, or structure, or complex and its setting.'

9.1.2 The purpose of the standing building survey is further clarified as being either/or

9.1.3 … ' [to enable] the formulation of a strategy for the conservation, alteration, demolition, repair or management of a building, or structure, or complex and its setting'.

9.1.4 …' to seek a better understanding, compile a lasting record, to analyse the findings/record and then to disseminate the results'.

9.1.5 A standing building survey should be '…commissioned in advance of submission of a planning application by the applicant or through their agent or adviser. It should be stressed that in this instance it is appropriate for any proposals for investigation and/or recording to be agreed with the planning archaeologist/conservation officer in advance of intrusive investigation… (Listed Building Consent or Scheduled Monuments Consent may be required for any investigation deemed intrusive to the fabric' (CIFA para 3.1.7).

9.1.6 The CIFA standard notes that '…sufficient and appropriate resources (staff, equipment, accommodation, etc) must be used to enable the project to achieve its aims, the desired quality and timetable, and to comply with all statutory requirements. Any contingency elements must be clearly identified and justified' (CIFA 3.3.2).

9.1.7 'Unless undertaken as part of a process of controlled demolition (a standing building survey) should not normally result in the loss of historic fabric, including surfaces, of the building, structure or complex. Where the removal of items forms part of the brief/project outline, specification or the project design, the standards and approach to fieldwork, conservation, curation, storage, reporting and ownership are those defined in the CIFA Standard and guidance for archaeological excavations (CIFA 3.3.8)'.

10 Appendix: Generic standing building survey procedures

10.1 Site Handover

10.1.1 **Site start up handover**: recording will commence once all parties are satisfied that the building is safe to access and a hand-over meeting has been agreed if necessary. Once MOLA has access to the prepared area a team will be mobilised. In general a minimum of two weeks' notice from the date of commission to the start date of fieldwork is required by MOLA.

10.2 Survey (Geomatics)

10.2.1 ***MOLA Surveying Standards**:* Standards of precision and accuracy are derived from the accepted standards of accuracy as used by chartered surveyors and defined by the Royal Institution of Chartered Surveyors. The implementation and maintenance of survey standards within MOLA is the responsibility of the Geomatics Manager and the Geomatics team. MOLA Geomatics is responsible for the capture and processing of all survey data, both on and off-site.

10.3 Variation to research priorities and/or methodologies

10.3.1 **Research questions**: the overall project methodology is primarily determined by the research questions set out in section 2 above. These will be kept under constant review as set out in the next paragraph and will continue to drive site strategy and methodology during excavation.

10.3.2 **Resources**: within this framework the project team will carry through a process of continual assessment and prioritisation of research objectives, allowing informed decisions to be made regarding the optimum level of sampling of archaeological strata. These decisions will reflect the need to balance the recovery of valid archaeological data with prudent management of available resources, avoiding inappropriate cost.

10.3.3 **Variation**: Decisions made on these bases may result in the enhancement or simplification of recording systems as dictated by the evolving research framework.

10.3.4 **Agreement:** Where alternative approaches and methodologies are thought to be appropriate within the framework of the stated research objectives these will not be employed without consultation between the Local Planning Authority's representative/advisor, MOLA and the client or their agent.

10.4 Written records

10.4.1 The Project Manager and Site Supervisor will be responsible for ensuring that the written record to be submitted to the archive corresponds to a Level in the Historic England specifications (HE 2016). In addition the written records will comply with the standard and guidance for archaeological investigation of standing buildings or structures as stated by the Chartered

Institute for Archaeologists (CIFA 2014).

10.4.2 Hand written notes may be taken on site to record the findings of the on-site analysis of the building. These will be notes on the fabric, form, functions and evident past changes to the building. In addition hand written notes may be made during documentary archive research on the history of the building, any prominent residents, architects or past functions. All hand written notes will be included in the material to be archived.

10.4.3 Computerised systems of data capture and manipulation may be used wherever appropriate.

10.5 Drawn records

10.5.1 The drawn site records, the completed CAD drawings presented in the report and the use of existing survey drawings will conform to the conventions and procedures laid out in the Historic England guidance Understanding Historic Buildings (HE 2016).

10.6 Photographic records

10.6.1 The overall site record will include **photographs** made using, as appropriate, high end digital, medium and large format cameras. The photographic record will illustrate all significant phases, structures, important stratigraphic and structural relationships, and individual items of interest.

10.6.2 All site photographs, except 'working shots', will include a photographic **scale** of appropriate size.

10.6.3 All photographs are taken using digital cameras and MOLA does not use colour or black and white film.

10.6.4 A computerised index will be compiled, relating image number, site photograph number, context numbers, excavation area, and other relevant information.

10.6.5 At the request of the client a file of site photographs may be produced and copied digitally to DVD or similar for them.

10.7 Computing and electronic support

10.7.1 MOLA makes use of the latest digital operating systems, MSOffice applications, digital survey equipment, digital cameras, and CAD packages. These are upgraded continuously. Current details can be provided on request.

10.7.2 Our database structure has been developed specifically for archaeological data captured using the single context recording system. MOLA maintains and is continuously developing its sophisticated archaeological GIS. Details can be provided on request.

10.7.3 Security Backups of the entire system are done on a daily basis. All backup media is stored off site at a secure location.

10.8 Documentary research

10.8.1 Provision will be made for sufficient initial documentary research in order to enable the overall research aims to be realised. Further documentary research may be required during the fieldwork to address particular features

or buildings.

10.8.2 Research may also include, as required, published comparative material to help identify and date the fixtures, fittings, materials, techniques and decoration in the building.

10.9 Archaeological monitoring

10.9.1 Reasonable access to the site will be granted to the representative/advisors of the Local Authority if required, who may wish to be satisfied, through site inspections, that the works are being conducted to proper professional standards and in accordance with this written scheme of investigation.

10.9.2 **Regular 'sit**e monitoring' **meetings** of the appropriate members of the project team and the Local Planning Authority's designated representative/advisor may be held if required to review research aims, archaeological procedures, and site strategies.

10.9.3 **Progress reports** will be produced by MOLA and made available to the Local Planning Authority's designated representative/advisor if requested.

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

11.1 Use of Risk Assessment and Method Statement

11.1.1 This section constitutes the MOLA Health and Safety Risk Assessment and Method Statement (RAMS) for the former Middlesex Hospital, 44 Cleveland Street, London, W1T 4JT dated November 2017.

11.1.2 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.

Project Manager responsible

11.1.3 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.

11.1.4 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

11.2 Site Specific Health and Safety Control Measures

Site Security and Access

11.2.1 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

11.2.2 All visitors will report to the site office

11.2.3 All visitors to site must sign the visitors' register and will be accompanied by an inducted operative for the duration of their visit or given an appropriate visitor induction.

Site Supervisor responsible

Work Area Access and Barriers

11.2.4 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

Underground and Overhead Utility services

11.2.5 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

11.2.6 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

11.2.7 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.

11.2.8 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)

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

Project Manager responsible

Contaminated Land

11.2.10 MOLA has obtained a copy of a geo-technical and geo-environmental desk-based report for the site (AECOM 2016). This indicates some risk of potential ground contamination due to former usage of the site, including petroleum hydrocarbons, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, heavy metals, asbestos, ash and fill, sulphate, and inorganic and organic chemicals

Project Manager responsible

11.2.11 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.

11.2.12 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.

11.2.13 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

Site Supervisor responsible

Asbestos

11.2.14 MOLA has obtained and studied the Asbestos survey Register (Redhill Analysts 2006). This indicates:

- There is asbestos within the building in proximity to MOLA in several parts of the buildings. This is marked and in good condition and/or encapsulated and will not be disturbed by MOLA works. It is therefore of low initial risk.
- There is also known asbestos at the following locations within the

Project Manager responsible

building which is in poor condition and therefore constitutes a significant risk to or obstructs the completion of MOLA works at the following locations as defined in the Redhill report: corridor OX109903, Staircase OX209905, Plant room OX209913, Reception area OX209923, Corridor OX210010, corridor OX210028, courtyard 01. Any proposed MOLA works at these locations will not take place until the asbestos is removed by a licenced contractor and clean air certificates have been issued.

11.2.15 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.

11.2.16 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.

11.2.17 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

11.2.18 On this site it is not anticipated that human remains will be present in the areas covered by the standing building survey.

Project Manager responsible

Confined Spaces

11.2.19 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.

11.2.20 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.

11.2.21 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.

Project Manager responsible

Unexploded Ordnance

11.2.22 MOLA is not aware of any documentary evidence (MOLA 2017) that suggests the site is likely to contain unexploded ordnance (UXO).

Project Manager responsible

11.2.23 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

Site Supervisor responsible

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.

Power Tools

11.2.24 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

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

Project Manager and HSCM responsible

Emergency Procedures

11.2.26 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

11.2.27 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 Emergency Unit (or Minor Injuries Unit if A&E too far) is located at:	University College Hospital Address: 235 Euston Road, London, NW1 2BU Telephone number: 020 3456 7890 / 999 Quickest Route from site Leave Cleveland Street towards New Cavendish Street Turn right on to Maple Street Turn left on to A400 / Tottenham Court Road Turn right to stay on A400 Arrive at A400 / Euston Road on the right Nearest Station Goodge Street
The nearest **Police** station is located at	Holborn Police Station Address: 10 Lambs conduit Street, London, WC1N 3NR Telephone number: 101 / 999 Quickest Route from site Take Maple St to University St Head south-west on Howland St towards Cleveland St

	Turn right at the 1st cross street onto Cleveland St Cleveland St turns right and becomes Maple St Continue onto University St Continue on A400 to Emerald St Turn right onto Gower St/A400 Continue to follow A400 Turn left onto New Oxford St/A40 Continue to follow A40 Use the left 2 lanes to turn slightly left onto Theobalds Rd/A401 Turn left onto Emerald St Nearest Station Holborn
The nearest **Fire** station is located at:	Euston Fire Station Address 172 Euston Road, London, NW1 2DH Telephone number 999

First Aid and Injury

11.2.28 On this site MOLA will provide all first aid requirements, this will include:

- A first aid kit(s), of an appropriate size for the site, located in the site office/mess hut/canteen.
- At least one qualified first aider who will normally be the site supervisor

Project Manager and HSCM responsible

11.3 Welfare

11.3.1 On this site the MOLA fieldwork may extend over several days, the MOLA archaeologist(s) will require access to toilets with hot and cold water. These facilities will be supplied by the Client or other Contractor.

Client/ Contractor responsible

11.3.2 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

11.4 Co-operation with other contractors

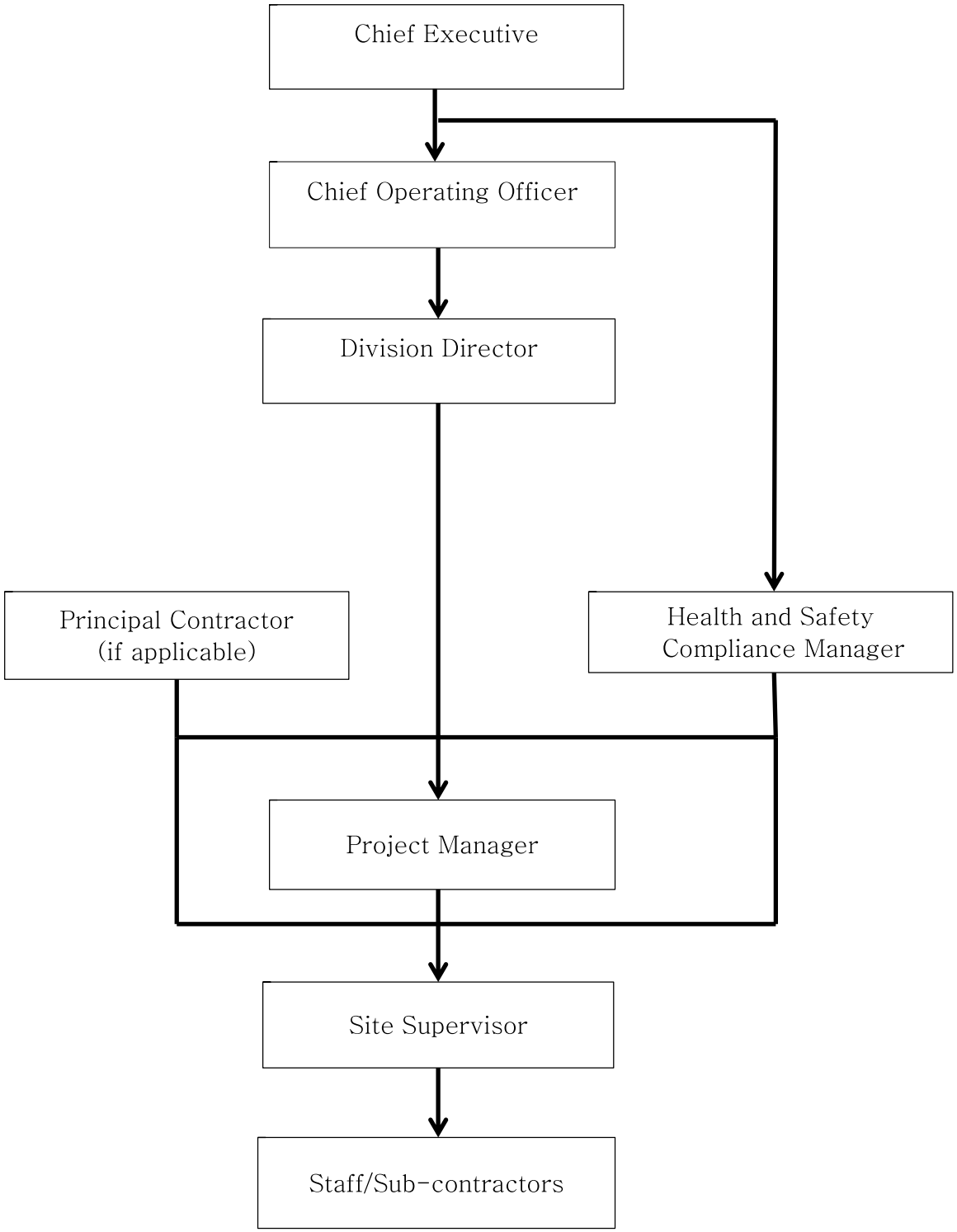
11.4.1 The appointed MOLA site supervisor will act as the principal liaison with the Principal Contractor and all other contractors where applicable.

11.4.2 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

11.5 MOLA H&S Project Responsibility Flow chart



11.6 Non-site specific MOLA H&S information

Health and Safety Policies

11.6.1 MOLA staff will at all times comply with all existing national legislation regarding Health and Safety at work.

11.6.2 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.

11.6.3 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

11.6.4 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

11.6.5 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.

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

HSCM responsible

MOLA and Construction Design and Management Regulations CDM 2015

11.6.7 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.

11.6.8 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.

11.6.9 MOLA is generally classed as a Contractor under the regulations for a construction project, but may be considered a Designer in certain circumstances.

11.6.10 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.

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

11.6.11 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.

MOLA staff information

11.6.12 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

11.6.13 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)

11.6.14 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

11.6.15 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

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

HSCM responsible

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

11.6.18 Where the site is controlled by MOLA, the MOLA site supervisor will give a health and safety induction to all staff and sub-contractors prior to commencement of work on their first day on site.

11.6.19 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.

11.6.20 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

11.6.21 The MOLA supervisor will ensure where appropriate that all staff and sub-contractors receive daily pre-start briefings for the tasks they are to

Site Supervisor responsible

undertake that day.

11.6.22 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.

11.6.23 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

11.6.24 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

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

HSCM responsible

Training	**All Staff**	**'Field staff'**	**Supervisory staff**	**Management staff**
Manual Handling	✓			
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

11.6.26 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

Project Manager responsible

breaks. MOLA staff contracts permit only voluntary overtime over 40hrs per week.

MOLA staff behaviour on site

11.6.27 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

11.6.28 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 11.6.36 and may incur additional costs.

A - Site Supervisor responsible

B Principal Contractor responsible

Personal Protective Equipment (PPE)

11.6.29 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)

Site Supervisor responsible

11.6.30 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

11.6.31 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

Site Supervisor responsible

- 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

Site Supervisor responsible

11.6.32 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.

11.6.33 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.

11.6.34 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.
- their line manager, the MOLA Project Manager, the Principal Contractor or the client's representative on site

11.6.35 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.

Stoppages

Project Manager responsible

11.6.36 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.

11.7 Preliminary Site Risk Assessment

Project Manager responsible

11.7.1 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.

11.7.2 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.

Site Supervisor responsible

11.7.3 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 and sub-contractors working on the project.

11.7.4 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

MOLA RISK ASSESSMENT REGISTER			
For Site/Task: Middlesex Hospital Annexe		Type Standing building survey	
Persons Affected	No	Classification	No
Employees	2	Experienced	2
Other workers	0	Inexperienced	0
Public	0	Disabled	0

Tick known or suspected hazards on site and complete a risk assessment for each one

1 Access	x	25 Manual Handling		49 COSHH: Petrol	
2 Ladders		26 Fumes/Gas		50 Spot Dating	
3 Plant		27 Dust		51 Glass Recording	
3a Plant (loading and unloading)		28 Noise		52 COSHH:Sthil Lubricant	
4 Dumpers		29 Deep Excavations		53 COSHH:Sthil two stroke oil	
5 Scaffolding (inc Towers)		30 Power Tools		54 SHARPS (hypodermics)	
6 Excavations		31 Vibration		55 Task Lighting (laniro etc)	
7 Work at height		32 Vehicles (Driving)		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		33 Lifting Equipment		57b Processing: Artefact marking	
10 Overhead Power Lines		34 Plant (lifting)		57c Processing: Manual handling	
11 Electrical		35 Human Remains		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		38 Chainsaw		59 DSE (Work Stations)	
15 Hand Tools		39 Power Auger (COBRA)		60 Young Person	
16 COSHH: Spray paint		39a Power Auger (Comp)		61 Person Specific/Pregnancy	
17 Contaminated Land	x	39b Power Auger (Electric)		62 Light Duties	
18 Weil's Disease	x	40 Hand Auger		63 Individual Stress	
19 Psittacosis		41 Foreshore/water			
20 Tetanus	x	42 Adverse Weather			
21 UXO		43 Spoil Mounding			
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	x	48 Non-ionising radiation			

General Controls

Project Manager in overall charge of project is: Michael Smith Tel: 07881 628288

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

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

Supervisor(s) holds SSSTS and/or IOSH Supervising Safely Cert?

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 action: H&S Manager ?Project Manager ?Project officer ?Senior Archaeologist ?Senior Geoarchaeologist/matician ?sub-contractor	All Risk Assessments seen by (initials)	
	PM	Archaeologists
	SA(s)	
	Client	
	Principal Contractor	
	Other	

11.8 Specific Risk Assessments

MOLA RISK ASSESSMENTS					**SITE: Middlesex Hospital Annexe SBR**			
APPROVAL (Name and Title)					**SIGNATURE**			**DATE**
Prepared by:		**Michael Smith**			Michael Smith			**21.11.17**
Approved by:								
RA N°	**ACTIVITY**	**Hazards**	**RISK**	**Risk Class L/M/H**	**N° at Risk**	**Control Measures**	**Final Risk: Insig or L/M/H**	**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	**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	Supervisor and staff
0008	SLIPS/TRIPS/ FALLS	Falls of persons Dropping of equipment/material	**Personal injury, Equipment damage**	M	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	L	Supervisor and staff

						sign posted. Staff to be physically fit for the conditions on site. No running or horseplay. Be cautious moving about site.		
0017	CONTAMINATED LAND Desk-based study indicates potential contamination, but should only be a risk if ground broken.	solid/liquid contaminants Gas/fumes/airborne particles Ingestion, inhalation, dermal contact Pollution of water table, drains, water supply Pollution of atmosphere	**Personal injury, illness damage to the environ-ment**	M	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
0018	WIELS DESEASE (leptospirosis) RATS	Rat (and Cattle) faeces and urine	**Personal injury Illness**	M	2	Brief staff on hazard. Carry HSE G 406 instruction card Wear gloves. Clean and cover any cuts or abrasions promptly with	L	Supervisor and staff

						a waterproof plaster. Wash hands before eating, drinking, smoking. No eating drinking and smoking outside designated areas. Keep Welfare facilities dry, tidy and secure. Keep food covered and secure. Basic surveillance of staff for flu like symptoms. Report ill health.		
0020	TETANUS	Bacteria or spores in ground/animals/faeces	Illness as result of infected puncture wound	M	2	Check staff vaccination status. i.e as per NHS Childhood vaccination status 5 shots for lifetime immunity. Recommend staff check vaccination status with GP if unclear. Assess work areas for hazards and remove where possible. Eg animal faeces/manure used drug paraphernalia (Sharps), puncture wound hazards. Clean all puncture wounds thoroughly and apply waterproof dressing promptly. All deep puncture wounds should be referred to	L	Supervisor and Staff

						A&E		
0022	ASBESTOS (Buildings) See Redhill report – requires confirmation that suggested remediation has been carried out	Inhalation of asbestos fibres	Chronic Illness, death asbestosis	M	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. 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	L	Supervisor and staff

						respirators where applicable.		
0024a	EMPTY PREMISES	Inability to summon help Unsafe conditions	Personal injury, entrapment,	M	2	**No lone working – at least two operatives will undertake all work in empty buildings**. Induct on layout and specific hazards and control measures prior to entry. Arrange for access with client /agent for specified time – if possible arrange for client or similar escort. Check identity of escort. Supervisor to be aware of work- use 'whiteboard' or similar to log details of work: staff, time duration, location, mobile, nature of task, monitoring Agree system of monitoring and emergency procedures Issue mobile phone – check charged, has coverage in building - or radio or alarm will be issued Charged torch and First Aid kit	L	Supervisor and staff
All persons affected by these hazards must be made aware of the contents of this Risk Assessment								

11.9 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.

11.10 RAMS and Induction Registers

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

INDUCTION 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 accordance with the induction content, RAMS and resulting safe systems of work and all legal and reasonable safety requirements and instructions	Confirmation Signature of MOLA inductor