

LAND WEST OF THE JUNCTION WITH THE BOULEVARD,

OXFORD AIRPORT,

LANGFORD LANE, KIDLINGTON

ARCHAEOLOGICAL WATCHING BRIEF

WRITTEN SCHEME OF INVESTIGATION

Project No. 4818 Site code: KILL 22

SEPTEMBER 2022

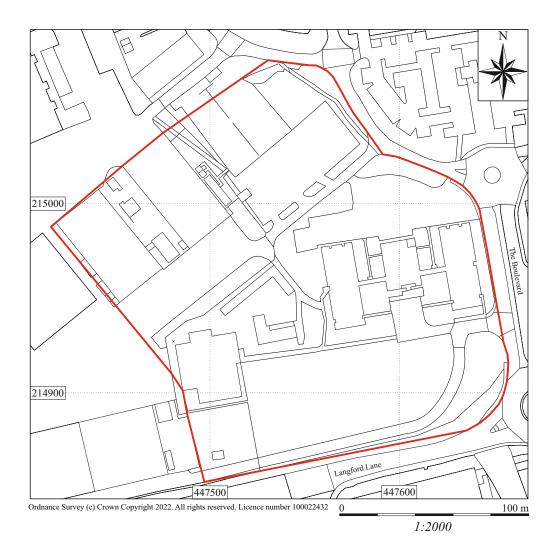


1 Introduction

- 1.1 A planning application has been submitted to Cherwell District Council for **Demolition of existing buildings and provision of 5 no. new buildings for R&D and warehouse use**. The Oxfordshire County Archaeological Services (OCAS) has advised Cherwell DC that an archaeological watching brief should be carried out during ground works due the archaeological potential of the site. This Written Scheme of Investigation outlines the procedures to be taken during the ground works.
- 1.2 The site is located (see figure) in the south-eastern corner of the airport on the north side of Langford Lane, Kidlington (SP 64345 27543). The land lies at 73m AOD and is currently in airport use. The underlying geology is Cornbrash Formation Limestone; Sedimentary Bedrock formed approximately 164 to 168 million years ago in the Jurassic Period: local environment previously dominated by shallow carbonate seas (https://mapapps.bgs.ac.uk/geologyofbritain/home.html).
- 1.3 The site lies in an area of historical and archaeological interest and potential. The site is within that of a former military airfield, which operated in 1938. The airport was established in 1935 as a municipal airport and used by the RAF in World War 11 as RAF Kidlington. Following the war it became established as a centre for aviation education, charter and maintenance facilities.
- 1.4 it also lies in an area of Roman activity, with a hoard of Roman coins recorded c.340m to the north of the development site (PRN 29298). 800m to the south of the site is a collection of cropmarks, recorded from aerial photographs, which likely represent Bronze Age barrows (PRN 13294), and undated enclosures and linear features (PRN 7536). Though the site has been built on, it is possible for remains to have survived under the MOD buildings.
- 1.5 An archaeological watching brief was maintained during the excavation geotechnical pits in 2022. No archaeological features or finds were observed.

2 Aims of the Investigation

- 2.1 To make a record of any archaeological remains revealed during the course of the ground works.
- 2.2 In particular to record any evidence relating to the known prehistoric and Roman remains in the area.
- 2.3 To record any evidence for the airfield's use during WWII.
- 2.4 Research aims of the archaeological works should be in line with the Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research (Agendas https://library.thehumanjourney.net/2597/) and should aim to investigate and inform our understanding of the wider historical landscape.



3 Strategy

- 3.1 The site work will be a watching brief during ground work. In agreement with OCAS some work may not be monitored if it is shown that there is no potential for archaeological remains to be present.
- 3.2 An archaeologist (Project Officer or Supervisor) will be present on site during ground work that has the potential to reveal archaeological remains. The overall archaeological manager will be John Moore (MCIfA).
- 3.3 Any archaeological deposits and features revealed will be cleaned by hand and recorded in plan before being excavated and recorded at an appropriate level. Any archaeological features or other remains i.e. concentrations of artefacts, will be recorded by written, drawn and photographic record. Where remains will be impacted on then they will be sample excavated. Any variation to this will be agreed with OCAS, on behalf of the local planning authority. All artefacts will be collected and retained except for concentrations of building material where a representative sample will be kept. Within the limits of the below ground site works, the sampling strategy will normally seek to maintain at least the following levels:
 - all structures and all zones of specialised activity (e.g. funerary, ceremonial, industrial, agricultural processing) will be fully excavated and all relationships recorded.
 - ditches and gullies will have all relationships defined, investigated and recorded. All terminals will be excavated. Sufficient of the feature lengths will be excavated to determine the character of the feature over its entire course; the possibility of recuts of parts, and not the whole, of the feature will be considered. This will be achieved by a minimum 10% sample of each feature (usually a 1m section every 10m). Sufficient artefact assemblages will be recovered (where possible) to assist in dating the stratigraphic sequence and for obtaining ample ceramic groups for comparison with other sites.
 - all pits, as a minimum, will be half-sectioned. Usually at least 50% (by number) of the pits will be fully excavated. Decisions as to which pits will be fully excavated will be taken in the light of information gained in the half-sectioning taking into consideration, amongst other things; pit function, artefact content and location.
 - for post and stake holes where they are clearly not forming part of a structure (see above) 100% (by number) will be half-sectioned ensuring that all relationships are investigated. Where deemed necessary, by artefact content, a number may demand full excavation.
 - for other types of feature such as working hollows, quarry pits etc., all relationships at least will be ascertained. Further investigation will be a matter of on-site judgement, but will seek to establish as a minimum their extent, date and function.
- 3.4 For palaeoenvironmental research different sampling strategies will be employed according to established research targets and the perceived importance of the strata under investigation. For carbonised remains, bulk samples of a minimum of 10 litres (but up to 30 litres for early prehistoric features) will be collected. Bulk samples of 10-30 litres will be taken from waterlogged deposits for analysis of macroscopic plant remains. Columns for pollen analysis will be taken where appropriate. Mollusc samples will be gathered when required. Other bulk samples for small animal bones

and other small artefacts may be taken from appropriate deposits depending on the aims of the project.

- 3.5 If any human remains are discovered a Ministry of Justice licence under Section 25 of the Burial Act 1857 will be obtained. Exhumation and post-excavation treatment will be carried out in accordance with published guidelines (McKinley & Roberts 1993; Brickley & McKinley 2004). OCAS will be informed of the discovery of human remains.
- 3.6 Treatment of treasure Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the landowner and the local planning authority's archaeological advisor. A Treasure receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find. 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.
- 3.7 The site records will be so organised as to be compatible with other archaeological records produced in Oxfordshire. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised databases. The site records will include:
 - A continuous unique numbering system.
 - Written descriptions, comprising both factual data and interpretative elements, which will be recorded on standardised sheets.
 - Where stratified deposits are encountered a 'Harris'-type matrix will be compiled during the course of the excavation.
 - A site grid/plan which will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
 - Plans which will normally be drawn at a scale of 1:100. On urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Burials will be drawn at 1:10. Other detailed plans will be drawn at an appropriate scale.
 - Long sections of trench edges or internal baulks showing layers and any cut features will be drawn at 1:50 or 1:20 depending on amount of detail contained. Sections of features will be drawn at 1:20 or 1:10 for very small features.
 - A Register of sections and plans will be kept.

- 3.8 All digital photography will be high resolution uncompressed TIFF format with a minimum 20 megapixel image capture. Image capture, storage and metadata standards as set out in the English Heritage Guidance note on Digital Image Capture and File Storage (Draft) are to be followed. The photographic record is to be regarded as part of the site archive and will also include working shots to illustrate more generally the nature of the archaeological operation mounted.
- 3.9 All identified finds and artefacts will be collected and retained. Certain classes of material i.e. post-medieval pottery and building material may on occasion be discarded after recording if a representative sample is kept. No finds will be discarded without the prior approval of OCAS and the Oxfordshire County Museum Service.
- 3.10 All finds and samples will be treated in a proper manner and to standards agreed in advance with the recipient museum. Finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation's *Conservation Guidelines No. 2*.
- 3.11 An experienced archaeological Project Officer or Supervisor will undertake the site monitoring and recording under the overall direction of J Moore MCIfA.
- 3.12 Should significant archaeological finds be made, which cannot be adequately dealt with within the watching brief, then works will halt and the advice of Oxfordshire County Archaeological Services (OCAS) will be sought.
- 3.13 At least a week's notice of commencement of site work will be given to OCAS

4 **Report and Archive**

- 4.1 Following completion of all on-site work a report will be prepared. This will take account of the minimum requirements of MoRPHE (English Heritage 2008).
- 4.2 The content and style of the report will be accordance with CIfA guidelines and the general requirements of OCAS.
- 4.3 A list of specialist staff that may be used for analysis of samples and artefacts is given in Appendix 2.
- 4.4 The site archive will be prepared in accordance with the guidelines contained in "Guidelines for the Preparation of Excavation Archives for long-term storage" (UKIC, 1990), "Digital Preservation Policies: Guidance for archives" (The National Archives, 2011), "Standards and Guidance for the creation, compilation, transfer and deposition of archaeological archives" (CIfA, 2014), and "Toolkit for Selecting Archaeological Archives" (CIfA & Historic England 2019). Specific requirements detailed in the guidelines issued by the Oxfordshire County Museum Service and Archaeology Data Service (ADS) will also be followed.
- 4.5 Additionally, a digital archive composed of the most recent version of all digital files will be maintained by John Moore Heritage Services and will be made available to the public upon request. Security copies of all primary records will be made in digital

format and stored on the Company's server, together with final versions of all borndigital files.

- 4.6 On completion of the project, it is anticipated that the landowner will consent to the deposition of artefacts and archive with the Oxfordshire Museums Service following all archaeological work associated with this development. A Transfer of Title form will be signed by the land owner and whether it has or not been done will be indicated in the report. See also Data Management Plan below.
- 4.7 In agreement with the Oxfordshire County Museum Service and all other stakeholders, archives generated by sterile projects (producing nothing of evidential value) will be preserved in the form of a single digital document that can be curated digitally by the trusted digital repository (ADS).
- 4.8 A draft report on the findings will be submitted to OCAS. On approval by OCAS, a copy of the final report will be submitted to OCAS, along with copies for the County Historic Environment Record as a public document and to Cherwell District Council.
- 4.9 As a minimum a report on the results will be prepared for publication in *South Midlands Archaeology*.
- 4.10 An OASIS entry will be completed.

5 General

- 5.1 Any changes to the methodology laid out in this WSI will only be carried out after consultation with OCAS.
- 5.2 The project will in conducted in accordance with procedures laid out in MoRPHE (English Heritage 2008).
- 5.3 All work will conform to CIfA standards (CIfA 2020, 2020a).
- 5.4 Appendix 1 is relevant.

6 Bibliography

- Brickley, M, & McKinley, J I, 2004 *Guidelines to the Standard for Recording Human Remains*, Institute of Field Archaeologists Technical Paper 7, BABAO University of Southampton
- Brown, D H, 2007 Archaeological Archives: a best practice in creation, compilation, transfer and curation. Archaeological Archives' Forum
- Chartered Institute for Archaeologists 2020 Standards and Guidance for the collection, documentation, conservation and research of archaeological materials

Chartered Institute for Archaeologists. 2020a. Standard and Guidance for Archaeological Watching Briefs.

English Heritage (now Historic England), 2001 Centre for Archaeology Guidelines Archaeometallurgy

English Heritage, 2002 Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation.

English Heritage, 2006a Management of Research Projects in the Historic Environment

- English Heritage, 2006b Science for Historic Industries: Guidelines for the investigation of 17th- to 19th century industries
- English Heritage, 2007 Geoarchaeology: Using earth sciences to understand the archaeological record

English Heritage 2008 MoRPHE: Project Planning Note 3 - Excavation

- English Heritage, 2011 Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation (Second Edition).
- European Association of Archaeologists Principles of Conduct for Archaeologists Involved in Contract Archaeological Work
- Jones, G, 2002 Environmental Archaeology
- McKinley, J, & Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains. Institute of Field Archaeologists Technical Paper 13

Museums and Galleries Commission 1992 Standards in the Museum Care of Archaeological Collections

Society of Museum Archaeologists 1993 Selection, Retention and Dispersal of Archaeological Collections

United Kingdom Institute for Conservation 1990 Archaeology Section Guidelines for the Preparation and Storage of Excavation Archives for Long-Term Storage

John Moore Heritage Services 30th September 2022

APPENDIX 1

1 General

- 1.1 The requirements of the Brief will be met in full where reasonably practicable (see also paragraph 2.2).
- 1.2 Any significant variations to the proposed methodology will be discussed and agreed with the local planning authority in advance of implementation.
- 1.3 The scope of fieldwork detailed in the main part of the Written Scheme of Investigation is aimed at meeting the aims of the project in a cost effective manner. John Moore Heritage Services attempts to foresee all possible site-specific problems and make allowances for these. However there may on occasions be unusual circumstances, which have not been included in the programme and costing. These can include:
 - unavoidable delays due to extreme bad weather, vandalism etc.
 - trenches requiring shoring or stepping, ground contamination, unknown services, poor ground conditions
 - extensions to specified trenches or feature excavation sample sizes requested by the local authority's archaeological advisor
 - complex structures or objects, including those in waterlogged conditions, requiring specialist removal

Health and Safety

- 1.4 All relevant health and safety legislation, regulations and codes of practice will be respected.
- 1.5 With the introduction of the Construction (Design and Management Regulations) 2007 John Moore Heritage Services works with Clients, Main Contractors, and Planning Supervisors to create a Health and Safety Plan. Each project will have its own unique plan.

Insurances

- 1.6 John Moore Heritage Services holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details can be supplied on request.
- 1.7 John Moore Heritage Services will not be liable to indemnify the client against any compensation or damages

for or with respect to:

- damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor)
- the use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way light air or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement
- any other damage which is the unavoidable result of the Project in accordance with the Agreement
- injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents servants or their contractors (not being employed by John Moore Heritage Services) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto.
- 1.8 Where excavation has taken place evaluation trenches will be backfilled with excavated material but will otherwise not be reinstated unless other arrangements have previously been agreed. Open area excavations normally will not be backfilled but left in a secure manner unless otherwise agreed.

Copyright and Confidentiality

- 1.9 John Moore Heritage Services will retain full copyright of any commissioned reports, tender documents or other project documents under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive licence to the Client in all matters directly relating to the project as described in the Written Scheme of Investigation.
- 1.10 John Moore Heritage Services will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988.
- 1.11 John Moore Heritage Services will advise the Client of any such materials supplied in the course of projects, which are not John Moore Heritage Service's copyright.
- 1.12 John Moore Heritage Services undertake to respect all requirements for confidentiality about the Client's proposals provided that these are clearly stated. In addition John Moore Heritage Services

further undertakes to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that Clients respect John Moore Heritage Service's and the Chartered Institute for Archaeologists' general ethical obligations not to suppress significant archaeological data for an unreasonable period.

Standards

- 1.13 JMHS conforms to the standards of professional conduct outlined in the Chartered Institute for Archaeologists' Code of Conduct, the CIfA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the CIfA Standards and Guidance for Desk Based Assessments, Field Evaluations etc., and the British Archaeologists and Developers Liaison Group Code of Practice.
- 1.14 Project Directors normally will be recognised by the Chartered Institute for Archaeologists.

APPENDIX 2

For specialist dating and where there are significant assemblages, specialists that may be used for analysis of materials include:

Prehistoric pottery	David Mullin	Freelance specialist
	Barbara McNee	Freelance specialist
	Emily Edwards	Freelance specialist
Roman and Romano-British pottery	Jane Timby	Freelance specialist
	Phil Mills	Freelance specialist
Lithics	Rebecca Devaney	Freelance specialist
Stone	Ann Clarke	Freelance specialist
	Ruth Shaffrey	Freelance specialist
Saxon, Medieval and Post-medieval pottery	Paul Blinkhorn	Freelance specialist
Ceramic Building Material	Andrew Peachey	Archaeological Solutions
Environmental Analysis, Plant macro		
remains and Insect remains		Border Archaeology
		Durham University
Marine molluscs	Jessica Winder	Freelance specialist
Land snails	Michael Allen	Freelance specialist
Human remains	Linzi Harvey	Freelance specialist
Animal bone	Rebecca Gordon	Freelance specialist
	Claire Ingrem	Freelance specialist
Clay tobacco pipes	John Moore	JMHS
Metalwork and Small finds	Nicola Rogers	Freelance specialist
Small and Other finds	Simona Denis	JMHS
C14	Gordon Cook	SUERC
Geophysics		SUMO
Geoarchaeology		QUEST

Experienced JMHS staff may be used for simple quantifications of material and identification although prior notification and approval in this instance will be agreed in advance with Oxfordshire County Archaeological Services.



KIDLINGTON LANGFORD LANE OXFORD AIRPORT LAND WEST OF THE JUNCTION WITH THE BOULEVARD

ARCHAEOLOGICAL WATCHING BRIEF

DATA MANAGEMENT PLAN

SEPTEMBER 2022

Document Information		
Data Management Plan		
Simona Denis		
This document describes the type of data that will be acquired and/or generated during the archaeological project, the way the data will be managed and stored, and the mechanisms to preserve and share the data.		

	Document History				
Version	Status	Date	Author	Changes from the previous version	
1.0	Draft	16/05/2019	Simona Denis	Not applicable	
2.0	Final Template	17/05/2019	Simona Denis	Minor edits	
3.0	Final	14/01/2020	Simona Denis	File migration	
4.0	Final	19/08/2020	Simona Denis	File migration	
5.0	Final	03/09/2020	Simona Denis	Minor edits to created data table	
6.0	Final	24/02/2021	Simona Denis	Minor edits to backup location	
7.0	Final	25/03/2021	Simona Denis	Edits to metadata	
8.0	Final	23/03/2022	Simona Denis	Edits to Created Data section	
9.0	Final	01/08/2022	Simona Denis	Edits to Long-Term Preservation of Selected Data	
				section	
10.0	Draft	30/09/2022	Simona Denis	Project-specific edits	

	Document Control Grid				
Revision	Status	Date	Author	Checked by	Reason for revision
1.1	Draft	17/05/2019	Sarah Doherty	Simona Denis	Minor edits
3.1	Draft	16/01/2020	Simona Denis		Minor edits
3.2	Draft	14/08/2020	Simona Denis		GPS metadata section edits
3.3	Draft	18/08/2020	Simona Denis		Minor edits
6.1	Draft	25/03/2021	Simona Denis		Formatting
7.1	Draft	24/11/2021	Simona Denis		Bibliography update Minor edits to Data Set ID Formatting
7.2	Draft	31/12/2021	Simona Denis		Minor edits to Responsibilities and Resources
8.1	Draft	23/03/2022	Simona Denis		Minor edits to Data Set ID Minor edits to Bibliography Created Data table update Minor edits to Responsibilities and Resources

Section 1 – Administrative Data
Data Set ID
Site code: KILL 22
JMHS project no: 4818
OASIS ID: TBC
ADS ID: TBC
Accession No.: OXCMS:TBC
Project Name
Land West of the Junction With The Boulevard, Oxford Airport, Langford Lane, Kidlington
Data Set Description
Nature of project: Watching Brief
Aims of investigation: to record any evidence relating to the known prehistoric and Roman remains in the
area, and to record any evidence for the airfield's use during WWII.
Investigation techniques: archaeological monitoring of ground work that has the potential to reveal
archaeological remains
Purpose: Demolition of existing buildings and provision of 5 no. new buildings for R&D and warehouse use
Project Funder
Civils
Project Manager
John Moore (Director), John Moore Heritage Services
Principal Investigator
TBC (Project Officer/Supervisor), John Moore Heritage Services
Data Contact Person
Simona Denis (Head of Archive), John Moore Heritage Services
Data Management Policies and Guidance
Archaeology Data Service, 2021 <i>Guidelines for Depositors</i>
Australian National Data Service, 2017 ANDS Guide. Data Management Plans
Chartered Institute for Archaeologists, Historic England, 2019 Toolkit for Selecting Archaeological
Archives
 Digital Curation Centre, 2013 Checklist for Data Management Plan v.4.0 Edinburgh
• Digital Preservation Coalition, 2015 Digital Preservation Handbook, 2 nd Edition. Technical Solutions
and Tools
• Duranti, L., Suderman, J. and Todd, M., 2005 A Framework of Principles for the Development of
Policies, Strategies and Standards for the Long-term Preservation of Digital Records. The
InterPARES 2 Project
• Foster, M., 2019 Work digital/think archive. A guide to managing digital data generated from
archaeological investigations. DigVentures
Historic England, 2018 Historic England Excavation Recording Manual
• International Standards Organization, 2003 standards: <i>Reference Model (ISO 14721:2003)</i>
 John Moore Heritage Services, 2021 POL0006: Quality Control Policy Statement
 John Moore Heritage Services, 2021 POLO000: Digital Archives Preservation Policy Statement
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John Moore Heritage Services, 2021 Archive Guidelines. Draft
• John Moore Heritage Services, 2022 Land West of the Junction with The Boulevard, Oxford Airport, Langford Lane, Kidlington Archaeological Watching Brief. Written Scheme of Investigation
• The National Archives, 2011 Digital Preservation Policies: Guidance for archives
• Oxfordshire County Museum Service, Requirements for Transferring Archaeological Archives 2020-
2021
 Thomas, S., 2009 A Guide to Archival and Related Standards. Society of Archivists Data Standard
Group
 Whyte, A., Wilson, A., 2010 How to Appraise and Select Research Data for Curation. DCC How-to
Guides. Edinburgh: Digital Curation Centre

Section 2 – Data Collection

Assessment of Existing Data

Existing quantitative and qualitative data provided by third parties as well as non-proprietary data will be accessed/re-used/re-evaluated and the generated information will supplement the data collected during the project. Selected generated data will be incorporated in the final report text included in the project archive. **Created Data**

This table summarises the data types, formats and estimated archive volume for this project.				
File Type	ile Type File Format Data Archive Estimated Volume			
Text	.odt	None		
	.docx	None		
	.doc	None		
	.pdf/a	4 files, 90,000 bytes		
Spreadsheet	.xlsx	1 file, 20,000 bytes		
Raster Image	.jpg	10 files, 42,500,000 bytes		
Vector Graphic .dxf 1 file, 1,500 bytes		1 file, 1,500 bytes		
	.svg	1 file, 1,800 bytes		
Photogrammetry	.obj/.mtl/.jpg	3 files, 140,000 bytes		
Geospatial Vector Data	shp/.shx/.dbf	3 files, 20,500 bytes		
Data Collection Standards and Methodologies				

Data Collection Standards and Methodologies

Analogue data sets

Acquisition standards are defined against the following, and will be updated as required:

Brickley, M., and McKinley, J. I., 2004 *Guidelines to the Standard for Recording Human Remains*, Institute of Field Archaeologists Technical Paper 7, BABAO University of Southampton

Chartered Institute for Archaeologists, 2014 Standards and Guidance for the collection, documentation, conservation and research of archaeological materials

English Heritage, 2011 Environmental Archaeology: A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation. 2nd Edition

English Heritage, 2015 Digital Image Capture and File Storage

John Moore Heritage Services, 2022 Field Handbook. Draft

Museum of London Archaeology Service, 1994 Archaeological Site Manual. Third Edition

• Digitised data sets

Acquisition standards are defined against the following, and will be updated as required:

The National Archives, 2016 Digitisation at The National Archives

Thomas, S., 2009 A Guide to Archival and Related Standards. Society of Archivists Data Standard Group
 Born-Digital data sets

Creation standards are defined against the following, and will be updated as required:

Archaeology Data Service/Digital Antiquity, 2011 Guides to Good Practice

Cole, S., 2015 Digital Image Capture and File Storage. Guidelines for Best Practice. English Heritage

Where appropriate, external specialists will be required to include data standards and metadata with individual reports.

Data Storage and File Naming System

- The working project archive will be stored in a dedicated project folder in the 'Projects' partition of the company's server
- All files will be renamed following the company's file naming format, based on ADS standard and including version control, as laid out in JMHS' Archive Guidelines
- All files included in the working project archive will include
 - o Company's project identifier
 - Repository accession number
 - $\circ \quad \text{Site code} \quad$
 - File descriptor
 - Version number

All files will be organised following the company's project folder structure laid out in JMHS' Archive Guidelines Quality Control

• All mechanical and electronic equipment used in the collection of data are calibrated prior to use and are periodically checked

All collected data will be checked during project delivery

Section 3 – Documentation and Metadata

Data Documentation

Data documentation will be compliant with the WSI, Oxfordshire County Museum Service and Archaeology Data Service requirements and will be provided via

- Collection-level metadata providing a detailed overview of the collection
- File-level metadata providing details of each data group and individual files

All data included in the project archive will be migrated to

- widely supported open international standards
- most recent format version

Metadata

All metadata will be created in compliance with relevant ADS standards, and will specify for all file types:

- File name
- File format
- o Language
- Creation/conversion software and version
- In addition, metadata for document files will indicate:
 - o Title
 - o Abstract
 - Name of the creator(s)
 - Page count
 - o Publishing details
 - In addition, metadata for spreadsheet files will indicate:
 - o Title
 - Description
 - Name of the creator(s)
 - Copyright holder
 - $\circ \quad \text{Date of creation} \quad$
 - Worksheet name
 - Worksheet purpose
 - Number of rows in each worksheet
 - o Field name
 - Description of field contents
- In addition, metadata for raster image files will indicate:
 - Caption
 - Subject keywords
 - Period
 - Name of the creator
 - o Copyright holder
 - \circ Location
 - $\circ \quad \text{Date of the capture of the image} \\$
- In addition, metadata for vector graphic files will indicate:
 - o Caption
 - Description
 - o Name of the illustrator
 - Copyright holder
 - Period of creation
 - o Location
 - Conventions used in the illustration
 - Location
- In addition, metadata for geospatial vector data files will indicate:
 - Type of element captured
 - o Type of features and/or contexts represented
 - Purpose of data collection
 - Data source and type

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Data accuracy level Coordinate system used

o Coordinate system used
 Method of capture
 Name of surveyor
Section 4 – Ethics and Intellectual Property
Legal and Regulatory Framework
The following acts and directives will be taken into consideration:
Copyright, Designs and Patents Act 1988
General Data Protection Regulation (GDPR) 2018
EU Copyright Directive 2001
Data Protection Act 1998
Current best practice
Personal Data
Personal data will be collected in the form of:
• Donor(s)
o Name
 Address
Project Team Members
o Name
External Specialist(s)
o Name
Personal Data Management
Management of personal data will be carried out in compliance with John Moore Heritage Services' Data
Protection Policy Statement.
Written consent to process and share with the repository personal data will be secured for the use
specified below:
 Donor(s): Names and addresses will be included in the transfer of ownership
documentation
copyright documentation
Files containing personal data will be:
• Password-protected
 Securely stored on a server partition with restricted access
Kept only as long as necessary for the relevant, valid purposes
Intellectual Property Rights (IPR)
Copyright Holder: John Moore Heritage Services will be the copyright holder of any collected and
created data included in the project archive in all forms of records and media
Permission to Reuse Third-Party Data: formal consent to include, reuse and share data generated by
external specialists will be secured
Licence of Copyright: John Moore Heritage Services will grant to the Oxfordshire County Museum
Service and Archaeology Data Service perpetual and royalty-free licence throughout the world to:
• reproduce all or any part of the project archive for the purposes of research, study,
conservation or publicity relating to the Oxfordshire County Museum Service and
Archaeology Data Service
 display copies of all or part of the project archive in any medium
 publish any part of the project archive in any form or medium
 permit third parties to do any of the above
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Section 5 – Storage and Backup

Storage System Details

• Long-term preservation of electronic records is ensured by storage on magnetic media on a Synology NAS server device with a storage capacity of 5.4TB

- The device is part of a network based on the client-server model with servers situated in separate geographical locations (JMHS's main office in Wheatley and the Director's office in Launton, Bicester)
- The system is managed via Lightweight Directory Access Protocol (LDAP)
- The system is set as a Redundant Array of Independent Disks (RAID) and failover

Security Copies

- Back-up of raw digital data generated during fieldwork is provided by secure remote access to the company's server. Where internet access for data backup is not available, a security copy of the raw data will be transferred onto a portable device
- Digital copies of the primary records will be made at the earliest opportunity and stored on the company's server
- Security copies of all archive records and born-digital files will be made in digital format and stored on the company's server

Data Storage and Access

Data storage

- Main and secondary servers are set up to constantly synchronise, effectively creating two copies of each file at any time
- Two additional copies of all files are created via backups:
 - The main server backs up to the Synology C2 Cloud Backup Server daily, starting at 17:30
 - The secondary server backs up to a local drive daily, starting at 17:30
- Versioning of files and backups is available for 30 days
- Multiple recovery methods are used, depending on the nature of the failure

Data access

- The company's server is accessible through a secure log-in by authorised staff on and off-site, via any web browser
- Secure access to the server is granted by a two-factor authentication method. Access to server's partitions containing sensitive data is restricted to authorised users through role-based access control

Section 6 – Selection and Preservation

Appraisal and Selection of Data

All data generated by all stages of the project will be stored on the company's server. An appraisal of the digital data will be carried out prior to the completion of the project, in order to select data for long-term curation.

The assessment of each dataset's value will be carried out by the Post-Excavation Project Team and will be based on the following criteria:

- Relevance
- Scientific/Historic value
- Uniqueness
- Non-Replicability
- Potential for redistribution

The selection of data will be agreed with all relevant stakeholders (Project Team Members, Repository, Local Authority, External Specialists, and Landowner).

Data Reuse

The project results are likely to provide new research data regarding the prehistoric and Roman occupation, as well as the WWII period in the Cherwell District.

The results might be:

- included in the Historic Environment Record
- reused to conduct new studies
- used to validate research findings
- used to aid the future management of the archaeological site

Selection Review Points

Selection Strategy and Data Management Plan will be revised in consultation with the relevant stakeholders and updated at the following stages:

- Project Design
- Post-Excavation Assessment

Project Reporting

Prior to the transfer, the Selection Strategy and Data Management Plan will be finalised in agreement with all stakeholders.

Selected Data Preparation

Selected data will be normalised and organised in standardised folders, to guarantee consistency and retrievability, and to prevent data loss.

Normalisation will include:

- Format migration to widely supported open international standards
- Version migration to most recent format version
- File naming normalisation to ADS standards
- Organisation in the predefined file structure
- Metadata compliant with ADS standards will be generated for all selected data.

Long-Term Preservation of Selected Data

Selected data will be transferred to the appropriate repository:

- Physical archive: documentary and material project archives will be transferred to the Oxfordshire County Museum Service. The documentary archive will include hard copies of all the digital-born data selected for long-term curation
- Digital data: selected data will be prepared for long-term curation and transferred to the CoreTrustSeal certified Archaeology Data Service, via ADS-Easy and/or OASIS V, as appropriate. A further copy of the full digital archive will be maintained on the company's servers; additionally, selected digital archives will be made publicly available via the company's website.

Contact will be made with the repository regarding the deposition of the project archive.

Long-Term Preservation of Deselected Data

- Long-term preservation of electronic records will be ensured by storage on magnetic media on a server device. The device is part of a network based on the client-server model, available online and securely accessible remotely via any web browser.
- The digital archives preservation strategy ensures that two copies of all born-digital items as well as digital surrogates of primary records are made available on two different server devices (server and backup) situated in separate locations (JMHS's main office in Wheatley and the Director's office in Launton).

Section 7 – Data Sharing

Data Accessibility

Final Results will be made available within 12 months from the completion of fieldwork

- Project final results for all types of recording actions will be made publicly available in digital format via the OASIS Index of Archaeological Investigations
- Complete final reports for recording actions yielding notable results will be made available in digital format via the company's website
- Summaries will be made publicly available via submission to relevant local, regional or period journals, to be included in the 'round-up' sections. Where significant discoveries are made, notes will also be sent to national journals

Primary and Digital Data will be made available after the completion of the documentation process

• All selected data will be made available upon direct request for reuse, re-analysis, re-interpretation, and re-publication by secondary researchers

Intellectual Property

- John Moore Heritage Services will hold the copyright of any collected and created data included in the project archive in all forms of records and media
- Digital elements of the project archive disseminated via ADS will be licenced under a creative commons licence
- A data sharing agreement will regulate the access and use of data by secondary researchers as appropriate

Long-Term Access

Long-term access to data will be granted via deposition with the Oxfordshire County Museum Service and Archaeology Data Service; additionally, selected digital data will be made accessible to the public via the company's website.

Section 8 – Responsibilities and Resources **Responsibilities** Roles and responsibilities will be as follows: Project Team Members (Fieldwork): Collection and storage of analogue data sets • Project Team Members (Post-Excavation): Storage and backup of analogue data sets, creation of digitised and born-digital data sets, data quality, data archiving and metadata production for all data sets External company (Oxford Mac Solutions Ltd): Data storage and backup management Post-Excavation Manager (Simona Denis): Implementation of relevant policies, implementation, review and revision of the DMP, supervision of collection, production, storage, backup and management of all data sets, management of data selection, archiving and metadata production for all data sets, data sharing, project archive transfer Resources Resources required to prepare selected data and implement the DMP were to be covered by standard John Moore Heritage Services resources and project budget. Repository charges were estimated using the Oxfordshire County Museum Service charges list and included in the project budget. Digital Repository charges were estimated using the ADS Costing Calculator and included in the project budget.



KIDLINGTON LANGFORD LANE OXFORD AIRPORT LAND WEST OF THE JUNCTION WITH THE BOULEVARD

ARCHAEOLOGICAL WATCHING BRIEF

SELECTION STRATEGY

SEPTEMBER 2022

Project Information			
Project Management			
Project Manager	John Moore		
Archaeological Archive Manager	Simona Denis		
Organisation	John Moore Heritage Services		
Stakeholders		Date Contacted	
Collecting Institutions	Oxfordshire County Museum Service		
	Archaeology Data Service		
County Archaeological Services	Oxfordshire County Archaeological Services		
Project Lead	John Moore		
Developer	Civilis		
Specialists	TBC		
Resources			
No unusual resources required in addition	on to JMHS normal operating equipment and s	taff	
Context			
The full aims and objectives of the proje	ct are detailed in the attached WSI.		
The aims of the projects are to investiga	te any evidence relating to the known prehistor	ric and Roman remains	
in the area, and to record any evidence	for the airfield's use during WWII.		
Certain classes of material are unlikely to be selected for inclusions in the Archaeological Archive subject to			
alterations in the aims of the project. Unstratified material and material with no or limited archaeological			
value will not routinely be selected for retention.			
Large assemblages of post-medieval or modern material will be noted and not retained or, if appropriate, a			
representative sample will be collected	and retained; no finds will, however, be disca	rded without the prior	
approval of the Oxfordshire County Arch	naeological Services.		
Selection of the working project archive	will be guided by the aims and objectives of the	e project as outlined in	
the WSI/Brief, Solent-Thames Research	Framework for the Historic Environment Reso	ource Assessments and	

Research Agendas, the Oxfordshire County Museum Service and material-specific guidance.

Section 1 - Digital Data			
Stakeholders			
Project Manager	John Moore		
Archaeological Archive Manager	Simona Denis		
Digital Repository	Archaeology Data Service		
Selection			
Location of Data Management Plan	Management Plan The DMP (in attachment) is accessible upon request and located as		
(DMP) outlined in Sections 5 and 6			
	All relevant standards, policies and guidelines are listed in Section 1		
De-Selected Digital Data The procedure is outlined in the DMP (in attachment) Section 6			
	JMHS POL0010 Digital Archives (in attachment)		
Amendments			
Date Amendment	Rationale	Stakeholders	

Stakeholders Project Manager John Moore Archaeological Archive Manager Simona Denis Repository Representative Angie Bolton Naomi Bergmans Selection The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments The procedure is outlined in the DMP (in attachment) Amendments Stakeholders	Section 2 - I	Documents		
Archaeological Archive Manager Simona Denis Repository Representative Angie Bolton Naomi Bergmans Selection The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments Amendments	Stakeholde	rs		
Repository Representative Angie Bolton Naomi Bergmans Selection The procedure is outlined in the DMP (in attachment) Section 6 at JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Amendments The procedure is outlined in the DMP (in attachment)	Project Mai	nager	John Moore	
Naomi Bergmans Selection Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments Image: Comparison of the procedure is outlined in the DMP (in attachment)	Archaeolog	ical Archive Manager	Simona Denis	
Selection Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments Amendments	Repository Representative Angie Bolton			
Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments Amendments			Naomi Bergmans	
JMHS POL0010 Digital Archives (in attachment) De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments	Selection			
De-Selected Documents The procedure is outlined in the DMP (in attachment) Section 6 a JMHS POL0009 Archives (in attachment) Amendments Example of the procedure is outlined in the DMP (in attachment)	Selected Do	Selected Documents The procedure is outlined in the DMP (in attachment) Section		n the DMP (in attachment) Section 6 and
JMHS POL0009 Archives (in attachment) Amendments			JMHS POL0010 Digital Archives (in attachment)	
	De-Selected	Documents	The procedure is outlined in the DMP (in attachment) Section 6 an JMHS POL0009 Archives (in attachment)	
Date Amendment Rationale Stakeholders	Amendmen	its		
	Date	Amendment	Rationale	Stakeholders

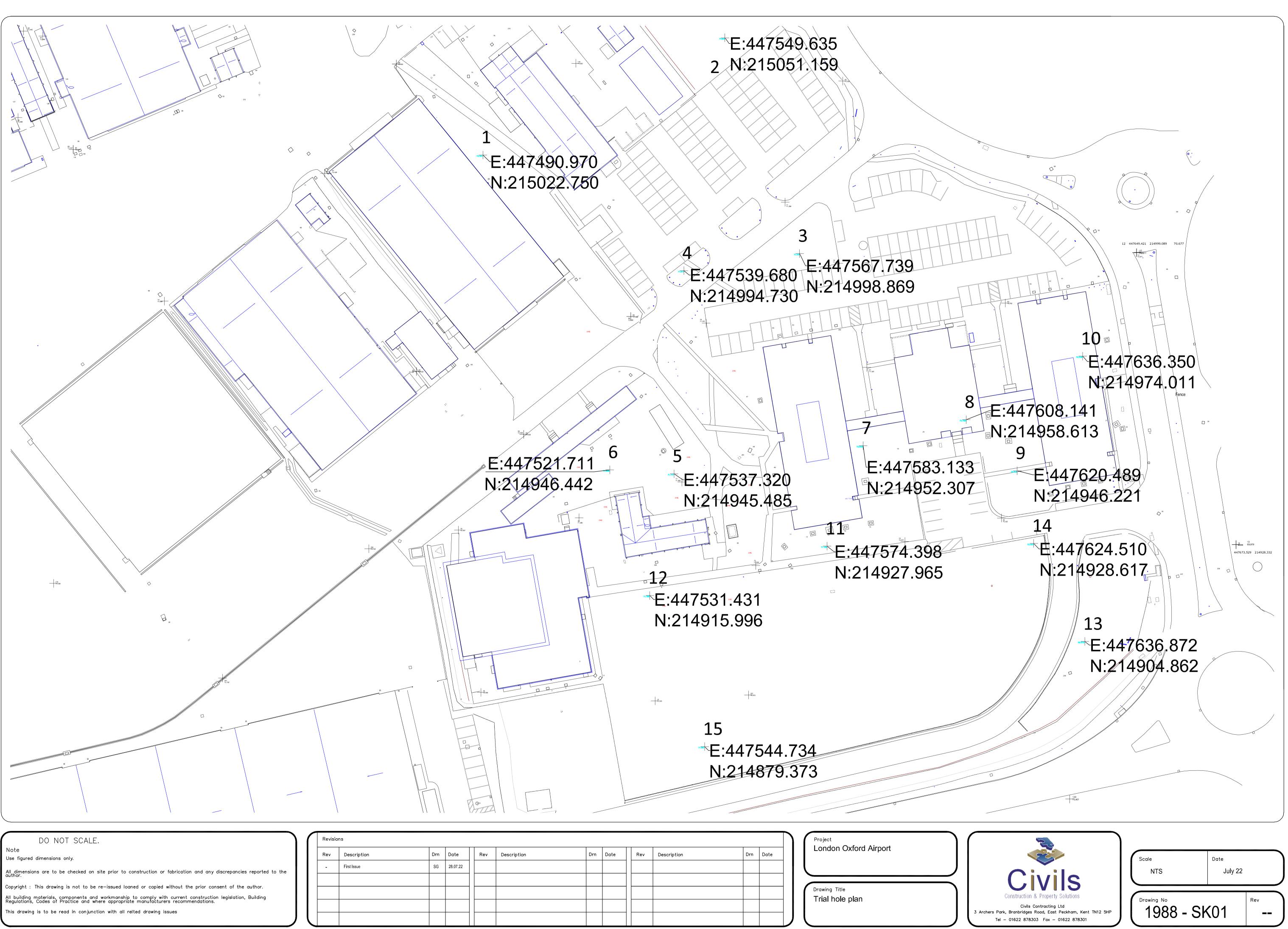
Section 3 - Materials	
Stakeholders	
Project Manager	John Moore
Archaeological Archive Manager	Simona Denis
Repository Representative	Angie Bolton
	Naomi Bergmans
County Archaeological Services	твс
Representative	
Specialist(s)	твс
Material Type	
Bulk Finds	
Selection	

Selected Materials

All materials recovered during fieldwork will be returned to JMHS offices for cleaning and assessment. Unstratified and Modern materials will be assessed and recorded on site.

The material archive will be reviewed and selected based on the results and recommendations of the specialists, the Oxfordshire County Museum Service collection policy and the Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas recommendations. The selection will take place during the archive completion.

Uncollected Material		Unstratified and Modern materials will not be collected. The presence		
		of the materials will be noted in the primary records.		
De-Selected Ma	terials	All bulk finds will be assessed and recorde	ed to appropriate standards.	
		Materials not selected for retention will I	pe reburied in a geo-located	
		position to prevent re-entering the archae	eological record.	
Amendments				
Date	Amendment	Rationale	Stakeholders	
Material Type				
Environmental F	Remains			
Selection				
Selected Materi	ials			
Remains extract	ed from the processed s	samples will be sent to the relevant specia	alist for assessment and/or	
analysis.				
The remains will be reviewed and selected based on the results and recommendations of the specialists.				
De-Selected Materials		Materials not selected for retention will be reburied in a geo-located		
		position to prevent re-entering the archaeological record.		
Amendments				
Date	Amendment	Rationale	Stakeholders	



Revisions						
Rev	Description	Drn	Date		Rev	De
-	First Issue	SG	28.07.22			