



# Plot 91, Estcourt Road, Gloucester

## Written Scheme of Investigation for an Archaeological Excavation

October 2020

Client: RPS on behalf of Miller Homes Ltd

Issue No: 1

OA Reference No: TN: 24978

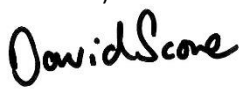
NGR: SO 83981 19743





Client Name: RPS on behalf of Miller Homes Ltd  
Document Title: Plot 91, Estcourt Road, Gloucester  
Document Type: Written Scheme of Investigation  
Grid Reference: SO 83981 19743  
Planning Reference: 20/00167/FUL  
Site Code: OAGLER20  
Invoice Code: OAGLEREX  
HER No.: TBC

OA Document File Location: X:\g\Gloucester\_Estcourt Road\WSI\EX  
OA Graphics File Location: X:\g\Gloucester\_Estcourt Road\010Gemoatics

Issue No: 1  
Date: 23rd October 2020  
Prepared by: John Boothroyd (Senior Project Manager)  
Checked by: Gerry Thacker (Senior Project Manager)  
Edited by: Gerry Thacker (Senior Project Manager)  
Approved for Issue by: David Score (Head of Fieldwork)  
Signature: 

**Disclaimer:**

*This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.*

**OA South**

Janus House  
Osney Mead  
Oxford  
OX2 0ES

t. +44 (0)1865 263 800

**OA East**

15 Trafalgar Way  
Bar Hill  
Cambridge  
CB23 8SQ

t. +44 (0)1223 850 500

**OA North**

Mill 3  
Moor Lane Mills  
Moor Lane  
Lancaster  
LA1 1QD

t. +44 (0)1524 880 250

e. [info@oxfordarch.co.uk](mailto:info@oxfordarch.co.uk)

w. [oxfordarchaeology.com](http://oxfordarchaeology.com)

Oxford Archaeology is a registered Charity: No. 285627



Director and Chief Executive  
Gill Hey, BA PhD FSA MCIFA  
Private Limited Company, No: 1618597  
Registered Charity No: 285627  
Registered Office: Oxford Archaeology Ltd  
Janus House, Osney Mead, Oxford OX2 0ES



**Plot 91, Estcourt Road, Gloucester**  
***Written Scheme of Investigation for an Excavation***  
***Centred on SO 83981 19743***

**Contents**

|   |           |
|---|-----------|
| List of Figures .....   | vii       |
| <b>1 INTRODUCTION .....</b>   | <b>1</b>  |
| 1.1 Project details .....   | 1         |
| 1.2 Location, topography and geology.....                             | 1         |
| <b>2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL .....</b> | <b>2</b>  |
| 2.1 Archaeological and historical background .....                    | 2         |
| 2.2 Previous archaeological works.....                                | 2         |
| <b>3 PROJECT AIMS.....</b>  | <b>4</b>  |
| 3.1 General .....   | 4         |
| 3.2 Specific aims and objectives.....                                 | 4         |
| <b>4 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY .....</b>  | <b>5</b>  |
| 4.1 Scope of works.....   | 5         |
| 4.2 Programme .....   | 5         |
| 4.3 Site specific methodology .....                                   | 5         |
| <b>5 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY .....</b>     | <b>8</b>  |
| 5.1 Programme .....   | 8         |
| 5.2 Content.....  | 8         |
| 5.3 Specialist input.....   | 8         |
| 5.4 Archive .....   | 8         |
| <b>6 HEALTH AND SAFETY.....</b>                                       | <b>9</b>  |
| 6.1 Roles and responsibilities.....                                   | 9         |
| 6.2 Method statement and risk assessment .....                        | 9         |
| 6.3 Monitoring of works .....   | 9         |
| <b>7 BIBLIOGRAPHY .....</b>   | <b>10</b> |
| <b>OA STANDARD FIELDWORK METHODOLOGY APPENDICES.....</b>              | <b>11</b> |
| <b>APPENDIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY .....</b>  | <b>11</b> |
| A.1 Standard methodology – summary.....                               | 11        |
| A.2 Relevant industry standards and guidelines.....                   | 12        |
| A.3 Relevant OA manual and other supporting documentation .....       | 12        |

---

|                   |   |           |
|-------------------|---|-----------|
| <b>APPENDIX B</b> | <b>GEOMATICS AND SURVEY</b> .....                           | <b>13</b> |
| B.1               | Standard methodology - summary .....                        | 13        |
| B.2               | Relevant industry standards and guidelines.....             | 15        |
| B.3               | Relevant OA manual and other supporting documentation ..... | 15        |
| <b>APPENDIX C</b> | <b>ENVIRONMENTAL EVIDENCE</b> .....                         | <b>16</b> |
| C.1               | Standard methodology – summary.....                         | 16        |
| C.2               | Relevant industry standards and guidelines.....             | 16        |
| C.3               | Relevant OA manual and other supporting documentation ..... | 17        |
| <b>APPENDIX D</b> | <b>ARTEFACTUAL EVIDENCE</b> .....                           | <b>18</b> |
| D.1               | Standard methodology - summary .....                        | 18        |
| D.2               | Relevant industry standards and guidelines.....             | 19        |
| D.3               | Relevant OA manual and other supporting documentation ..... | 19        |
| <b>APPENDIX E</b> | <b>HUMAN REMAINS</b> .....                                  | <b>20</b> |
| E.1               | Standard methodology - summary .....                        | 20        |
| E.2               | Relevant industry standards and guidelines.....             | 22        |
| E.3               | Relevant OA manual and other supporting documentation ..... | 23        |
| <b>APPENDIX F</b> | <b>REPORTING</b> .....                                      | <b>24</b> |
| F.1               | Standard methodology - summary .....                        | 24        |
| F.2               | Relevant industry standards and guidelines.....             | 25        |
| <b>APPENDIX G</b> | <b>LIST OF SPECIALISTS REGULARLY USED BY OA</b> .....       | <b>27</b> |
| <b>APPENDIX H</b> | <b>DOCUMENTARY ARCHIVING</b> .....                          | <b>29</b> |
|                   | Standard methodology – summary.....                         | 29        |
| H.2               | Relevant industry standards and guidelines.....             | 30        |
| H.3               | Relevant OA manual and other supporting documentation ..... | 31        |
| <b>APPENDIX I</b> | <b>HEALTH AND SAFETY</b> .....                              | <b>32</b> |
| I.1               | Standard Methodology - summary .....                        | 32        |
| I.2               | Relevant industry standards and guidelines.....             | 32        |

## List of Figures

- Fig.1            Site location  
Fig.2            Proposed excavation area





## 1 INTRODUCTION

### 1.1 Project details

1.1.1 Oxford Archaeology (OA) has been commissioned by RPS Consulting on behalf of Miller Homes Ltd to undertake an archaeological excavation of the site of a proposed residential development.

1.1.2 Planning permission (ref: 20/00608/FUL) for the development was granted in August 2020. Condition 11 of the Decision Notice states:

*No development, other than demolition to ground floor level of the existing building only, shall take place within the application site until the applicant, or their agent or successors in title, has secured the implantation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the application and approved in writing by the local planning authority.*

1.1.3 Discussions between Nick Cooke of RPS Consulting and Andrew Armstrong, City Archaeologist for Gloucester, have established the scope of work required; this document outlines how OA will implement those requirements.

1.1.4 All work will be undertaken in accordance with local and national planning policies and Chartered Institute for Archaeologists Guidance (CIfA 2014 revised 2020).

### 1.2 Location, topography and geology

1.2.1 The site lies to the north of Gloucester city centre, Gloucestershire, NGR: SO 83981 19743.

1.2.2 The area of proposed development consists of a single domestic dwelling and its associated garden. The site is enclosed to the east, south and west by residential properties that front onto Estcourt Road, which runs on a broadly east-west alignment 80m to the south of the site. The proposed development forms part of the much larger redevelopment of the former Bishops College which lies to the north of the site (Fig. 1)

1.2.3 The geology of the area is mapped as Blue Lias Formation and Charmouth Mudstone Formation, Sedimentary Bedrock formed approximately 183 to 210 million years ago in the Jurassic and Triassic Periods. Superficial deposits of Cheltenham Sand and Gravel, formed 3 million years in the Quaternary Period, are recorded across the site (BGS Online).

## 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL

### 2.1 Archaeological and historical background

- 2.1.1 The archaeological and historical background of the wider development has been described in detail in a heritage desk-based assessment (CA 2015a), and will not be reproduced here. A summary is provided to place these works in context.
- 2.1.2 Prehistoric activity within the area is very sparse. Apart from occasional finds of Neolithic worked flint to the east of the site, no Bronze Age or Iron Age activity has been recorded.
- 2.1.3 Between 1983 and 1985 a large Roman cemetery was partially excavated at Gambier Parry Lodge approximately 400m to the west of the site. Over 300 burials, mostly inhumations of 2nd–4th century AD date, were excavated. An earlier 1st century AD polygonal building, interpreted as a shrine, was also recorded, along with gravel extraction pits. Roman burials have also been recorded along the route of Estcourt Road to the south of the site.
- 2.1.4 The site is located beyond the limits of the medieval city, some 900m north-east of the city walls, in an area believed to be occupied by agricultural land and small hamlets.
- 2.1.5 The 1780 Estate Map depicts the site as being within an enclosed field known as Pedmoor or Pedmarsh Field. The later 1885 Ordnance Survey Map shows the development of a farmhouse, Pedmarsh Cottage, and several associated outbuildings. The present structure within the site, known as the Knoll, is believed to date to the late 19th century and it is likely to be the same structure as the one shown on the 1885 map. Part of a medieval trackway, likely an access route to Pedmarsh Field, was identified during the laying of a driveway to the Knoll, which lies outside the site boundary.

### 2.2 Previous archaeological works

#### *Bishops School*

- 2.2.1 Previous archaeological work within the school has identified Roman remains. A dupondius of Antonia, mother of Claudius I, was recovered during the construction of school buildings in 1967. An archaeological evaluation and watching brief were undertaken in advance of and during the construction of new school buildings in 1995. The works revealed a Roman ditch and gravel pits, along with undated gravel pits, post-medieval and later plough-soils and modern building foundations.
- 2.2.2 In 2015 a trial trench evaluation was undertaken to support a planning application for the redevelopment of the school located to the north of the site (CA 2015b). The works comprised the excavation of seven trenches and revealed two pits and three postholes of Roman date in the south-east corner of the site. Evidence of ridge and furrow cultivation was observed across the site as well as modern landscaping.
- 2.2.3 Trial trenching was also undertaken immediately to the north of the development area on playing fields associated with the school (OA 2015; 2016). No archaeological features, other than plough furrows, were recorded in the eight trenches excavated.

- 2.2.4 In 2018 further evaluation and strip, map, and sample excavation was undertaken around and within the school structures during their demolition (OA 2018a). The works identified a quarry pit of possible Roman date, and linear boundary ditches and plough furrows dating to the post-medieval period. An area to the east of the site contained ditches that may have been field boundaries, dating either to the Roman or medieval period.
- 2.2.5 There was a large amount of modern disturbance and truncation in the trenches located in the footings of the Bishop's College School buildings and their environs. These areas were found to have been heavily truncated and disturbed by the construction of the buildings and associated concrete pads, and as such no archaeology remained in these areas.
- 2.2.6 A final phase of excavation was undertaken targeting the impacts of the proposed development (OA 2018b). The results included Roman features comprising a ditch terminus, a couple of pits and a quarry pit. Two undated ditches were also recorded towards the east of the site, and a number of post-medieval furrows were identified. A rectangular pit of unknown function in the south-eastern part of the site contained pottery dating to c 1700-1800.

### ***Plot 91***

- 2.2.7 In January 2020 a trial trench evaluation was undertaken within the area of the proposed development (OA 2020). The works comprised the excavation of two trenches, both of which contained archaeological remains. The remains comprised two broadly parallel NNE-SSW aligned ditches, a north-south aligned ditch and a suspected cremation burial. Artefactual evidence was limited with only animal bone recovered from the ditches, however, pottery recovered from the surface of the cremation burial was dated to 1st-2nd Century AD.

### **3 PROJECT AIMS**

#### **3.1 General**

3.1.1 The general aims of the excavation are to determine and understand the nature, function and character of the archaeological remains within their cultural and environmental setting.

#### **3.2 Specific aims and objectives**

3.2.1 The specific aims and objectives of the evaluation are:

- i. To determine and understand the nature, function and character of the archaeological remains within their cultural and environmental setting.
- ii. To mitigate the impact of the proposed housing development on the archaeological remains present.
- iii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
- iv. To establish the extent, date and longevity of the remains identified by the recent evaluation.
- v. To contextualize the finding within the local and regional landscapes, and in particular their relationship to the remains previously identified immediately to the north at former site of Bishops School.
- vi. To make available the results of the excavation.

3.2.2 The programme of archaeological investigation will be conducted within the general research parameters and objectives defined by *The South West Archaeological Research Framework, Resource Assessment And Research Agenda* edited by C J Webster.

## **4 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY**

### **4.1 Scope of works**

- 4.1.1 The works comprise the excavation of an area measuring 147m<sup>2</sup> and encompasses the footprint of the proposed residential properties and associated utilities. However, the site is currently occupied by a single residential property which will need to be demolished prior to the commencement of the archaeological works.
- 4.1.2 The existing structure will be demolished to ground level and the floor slab removed. The below ground foundations will be removed during the archaeological investigations.

### **4.2 Programme**

- 4.2.1 It is anticipated that the fieldwork will take one week to complete, by a team consisting of a Project Supervisor, directing up to two Project Archaeologists, under the management of John Boothroyd, Senior Project Manager.
- 4.2.2 All fieldwork undertaken by Oxford Archaeology (South) is overseen by the Head of Fieldwork, David Score MCIfA.

### **4.3 Site specific methodology**

- 4.3.1 A summary of OA's general approach to excavation and recording can be found in Appendix A. Standard methodologies for geomatics and survey, environmental evidence, artefactual evidence and burials can also be found below (Appendices B, C, D and E respectively).
- 4.3.2 Site-specific methodologies will be as follows:
- i. Prior to archaeological attendance on site, the existing structure will be demolished and the ground slab removed. Below ground foundations will be left *in situ* and removed during the archaeological excavation.
  - ii. The area of excavation will be set out by a trained OA surveyor using a GPS system with a sub 25mm accuracy.
  - iii. Removal of the overburden will be undertaken by a suitably powered excavator fitted with a toothless ditching bucket under constant archaeological supervision. This will be done in level spits of no more than 100mm down to the first archaeological horizon, or natural geology, whichever is encountered first.
  - iv. Once removal of the overburden deposits is complete a digital pre-excavation plan showing any revealed features will be produced using a GPS with sub 25mm accuracy.
  - v. A sufficient sample of the revealed features will be investigated by hand to establish their character and date, where possible. Focus will be on establishing the date and nature of the features and how they might have functioned. The level of hand investigation will be discussed with Nick Cooke of RPS Consulting and Andrew Armstrong, City Archaeologist for Gloucester, during on-site monitoring meetings.

- vi. Where cremation, or inhumation, burials are encountered, excavation will be undertaken in consultation with OAs Heritage Burials Services, under a license from the Ministry of Justice. All burial contexts will be 100% excavated.
- vii. Environmental samples will be taken from a range of datable features that exhibit the potential to contain ecofacts. Advice on the specific environmental sampling strategy will be determined by the types of features revealed, in consultation with Rebecca Nicholson, OA's Environmental Manager.
- viii. No development will occur within the archaeological mitigation area until the area has been signed off by Andrew Armstrong.

### ***Planning***

- 4.3.3 Site plans will be by electronic distance measurement, measured survey or a combination of these techniques; data-capture for site plans will as standard be capable of reproduction at a scale of 1:100; more complex features or areas of complex archaeological remains will be recorded at greater resolution (for reproduction at 1:10, 1:20, or 1:50 as necessary). All plans will be established relative to the Ordnance Survey National Grid and all levels taken will be relative to Ordnance Datum.

### ***Environmental sampling***

- 4.3.4 Appendix C provides an environmental sampling strategy. In general, different environmental sampling strategies may be employed according to the perceived importance of the strata under investigation. Bulk samples, preferably of 40 litres if possible, will be taken for flotation for charred plant remains. Bulk samples will be taken from any waterlogged or mineralised deposits present for macroscopic plant remains. Columns for pollen analysis and mollusc samples will be taken if appropriate. Other bulk samples for small animal bones and other small artefacts may be taken from appropriate contexts. Sub-sampling will be undertaken to retrieve evidence of metal-working. The sampling process will be constantly reviewed on-site with the advice of Dr Rebecca Nicholson, Head of the Environmental Department at Oxford Archaeology.
- 4.3.5 Samples will be taken from a series of dated contexts which cover the various phases of activity present on the site. The sampling strategy, including the quantity and type of samples, will be agreed with Andrew Armstrong during the excavation process, once archaeological features and deposits have been revealed and spot dated. The types of features and deposits revealed, their date and their environmental potential will also inform this strategy.
- 4.3.6 Opportunities will be sought for scientific dating, including secure stratigraphic sequences containing contexts yielding CPR (charred plant remains) relating the occupation and use of structures.

### ***Finds recovery***

- 4.3.7 Artefact assemblages will be recovered (by context) by hand to assist in dating the stratigraphic sequences and for obtaining ceramic assemblages for comparison with other sites. The finds will provide an invaluable contribution to the interpretation of

the functions and activities taking place on (and off) the site, as well as reveal aspects of trade and economy. All artefacts will be retained from excavated contexts unless they are of recent origin. In these cases, sufficient material will be retained to date and establish the function of the feature.

### *Human remains*

- 4.3.8 Due to the identification of a suspected cremation during the evaluation, a burial licence will be obtained from the Ministry of Justice licence prior to the commencement of the fieldwork.
- 4.3.9 Human remains will be cleaned and placed in boxes by following the methods described by Brickley and McKinley (2004). Current guidance issued by English Heritage and the Church of England (2005, 43) states that human remains must be marked. However, the recent Code of Practice (see: <http://www.babao.org.uk/index/ethics-and-standards>), published by BABAO, acknowledges that marking bone is not always feasible and that there are economic, curatorial, conservational and ethical issues associated with this practice.
- 4.3.10 Any changes both to the above methodology and the final specification will be agreed with the City Archaeologist.

### *Treatment of Treasure*

- 4.3.11 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 HCC. 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.
- 4.3.12 All metal objects, other than late post-medieval objects, will be x-rayed unless otherwise agreed with the City Archaeologist.

## **5 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY**

### **5.1 Programme**

- 5.1.1 The level of reporting will depend on the results of the excavation. It is envisaged that it will comprise a grey literature report accompanied by a note or, should the results warrant, an article in an appropriate journal such as *Glevensis*. The report will be produced within six months of the fieldwork, subject to the level and nature of archaeological remains present.
- 5.1.2 A draft copy of the report will be issued to the Nick Cooke of RPS and Andrew Armstrong, City Archaeologist for Gloucester for comment prior to being finalised and prior to formal submission to Planning Authority.
- 5.1.3 Digital copies of the completed report in Adobe Acrobat (.pdf) format will be provided to the Nick Cooke and Andrew Armstrong.
- 5.1.4 A digital copy of the report will also be submitted to Gloucestershire HER.
- 5.1.5 Digital data, including GIS .shp files, will be made available to the City Archaeologist on request.

### **5.2 Content**

- 5.2.1 The content of this report will be as defined in Appendix F.

### **5.3 Specialist input**

- 5.3.1 OA has a large pool of internal specialists, as well as a network of external specialists with whom OA have well established working relationships. A general list of these specialists is presented in Appendix G; in the event that additional input should be required, an updated list of specialists can be supplied.

### **5.4 Archive**

- 5.4.1 The site archive will be deposited with Gloucester City Museum and Art Gallery following completion of the project.
- 5.4.2 A summary of OA's general approach to documentary archiving can be found in Appendix H.
- 5.4.3 It is recognised that ClfA have issued guidance for the compilation, transfer and deposition of archaeological archives and data management plans (ClfA 2014 revised 2020). These are recent introductions during the Coronavirus crisis and ClfA recognise that these will take some time to implement. ClfA expect member organisations such as OA to implement these over the next 12 months. OA are working towards including these requirements in all WSIs. Currently, it should be noted that OA does work in conjunction with the receiving museum and has a robust finds selection strategy and archives policy that adheres to existing GCC requirements as outline in the Gloucestershire Archaeological Archive Standards (Reynolds and Paul 2018).



## **6 HEALTH AND SAFETY**

### **6.1 Roles and responsibilities**

- 6.1.1 The Senior Project Manager, John Boothroyd, has responsibility for ensuring that safe systems of work are adhered to on site. He delegates elements of this responsibility to the Project Supervisor, who implements these on a day to day basis.
- 6.1.2 The Director with responsibility for Health and Safety at OA is Dan Poore Tech IOSH (Chief Business Officer).

### **6.2 Method statement and risk assessment**

- 6.2.1 A summary of OA's general approach to health and safety can be found in Appendix I. A risk assessment has also been undertaken and approved and will be kept on site, along with OA's standard Health and Safety file, which will contain all relevant health and safety documentation.
- 6.2.2 The Health and Safety file will be available to view at any time.

### **6.3 Monitoring of works**

- 6.3.1 At least 5 days' notice of the commencement of the evaluation works will be given to Andrew Armstrong, City Archaeologist for Gloucester.
- 6.3.2 He will have free access to the site (subject to Health and Safety considerations) and all records to ensure the works are being carried out in accordance with this WSI and all other relevant standards.
- 6.3.3 It is proposed to undertake the works during the COVID-19 Pandemic and therefore site visits may not be possible. If required OA can provide the City Archaeologist with access to its bespoke online recording system and will provide regular updates accompanied by photographs to enable remote monitoring / sign offs during the during the fieldwork.

## 7 BIBLIOGRAPHY

BGS Online, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, British Geological Survey online viewer, (accessed October 2020).

CIFA 2014 revised 2020, *Standard and guidance for archaeological excavation*, Chartered Institute for Archaeologists.

CA 2015a, *Bishops College Redevelopment, Gloucester, Gloucestershire*, Heritage Desk-Based Assessment, Cotswold Archaeology, unpublished client document.

CA, 2015b, *Bishops College, Estcourt Close, Gloucester, Gloucestershire, Archaeological Evaluation*, Cotswold Archaeology

OA, 2015, *Plock Court and Oxstalls Campus Gloucester: Archaeological Evaluation Report*, Oxford Archaeology

OA, 2016, *Plock Court and Oxstalls Campus Gloucester: Archaeological Evaluation Report Phase 2*, Oxford Archaeology

OA, 2018a, *Bishops College, Estcourt Road, Gloucester, Gloucestershire: Archaeological Evaluation and Strip, Map and Sample Excavation Report*. Oxford Archaeology

OA, 2018b, *Bishops College, Estcourt Close, Gloucester, Gloucestershire: Archaeological Excavation Report*. Oxford Archaeology

OA 2020, *Estcourt Road, Gloucester, Archaeological Evaluation Report*, Oxford Archaeology, unpublished client document.

Reynolds and Paul 2018, *Gloucestershire Archaeological Archive Standards*, <https://www.gloucestershire.gov.uk/media/13651/gloucestershire-archaeological-archive-standards-version-1b-jan-2018.pdf>

Webster 2007, *The Archaeology of South West England, South West Archaeological Research Framework, Resource Assessment and Research Agenda*, Somerset County Council, ed. C J Webster

---

## OA STANDARD FIELDWORK METHODOLOGY APPENDICES

---

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by the accompanying detailed Written Scheme of Investigation.

Copies of all OA internal standards and guidelines referred to below are available on request.

---

### APPENDIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY

#### A.1 Standard methodology – summary

##### *Mechanical excavation*

- A.1.1 An appropriate mechanical excavator will be used for machine excavation. This will normally be a JCB or 360° tracked excavator with a 1.5 m to 2 m wide toothless ditching bucket. For work with restricted access or working room a mini excavator may be used.
- A.1.2 All mechanical excavation will be undertaken under direct archaeological supervision.
- A.1.3 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.
- A.1.4 Following mechanical excavation, all areas that require examination or recording will be cleaned using appropriate hand tools.
- A.1.5 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Modern artefacts will be noted but not retained.
- A.1.6 After recording, evaluation trenches and test pits will usually be backfilled with excavated material in reverse order of excavation, and compacted as far as is practicable with the mechanical excavator. Area excavations will not normally be backfilled.

##### *Hand excavation*

- A.1.7 All investigation of archaeological levels will usually be by hand, with cleaning, examination and recording both in plan and section.
- A.1.8 Within significant archaeological levels the minimum number and proportion of features required to meet the aims of the excavation will be hand excavated. Pits and postholes will usually be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. More complex features such as those associated with funerary activity will usually be subject to 100% hand excavation.
- A.1.9 In the case of evaluations, it is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the site will be assessed. The stratigraphy of a representative sample of the evaluation trenches will be recorded even where no archaeological deposits have been identified. Any excavation, both by machine and by hand, will be undertaken with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.

## **Recording**

- A.1.10 Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- A.1.11 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.
- A.1.12 Plans will normally be drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10 or recorded using geo-referenced digital photography.
- A.1.13 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- A.1.14 A register of plans will be kept.
- A.1.15 Long sections of showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.
- A.1.16 A register of sections will be kept.
- A.1.17 Generally, all sections will be tied in to Ordnance Datum.
- A.1.18 A full photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.
- A.1.19 Photographs will be recorded on OA Photographic Record Sheets.

## **A.2 Relevant industry standards and guidelines**

- A.2.1 The Chartered Institute for Archaeologists Standard and Guidance notes relevant to fieldwork are:
- Standard and guidance for archaeological field evaluation (2020)
  - Standard and guidance for archaeological excavation (2014)
  - Standard and guidance for an archaeological watching brief (2020)
- A.2.2 These will be adhered to at all times.

## **A.3 Relevant OA manual and other supporting documentation**

- A.3.1 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming).
- A.3.2 Further guidance is provided to all excavators in the form of the OA 'Fieldwork Crib Sheets - a companion guide to the Fieldwork Manual'. These have been issued ahead of formal publication of the revised Fieldwork Manual.

## APPENDIX B GEOMATICS AND SURVEY

### B.1 Standard methodology - summary

- B.1.1 The aim of OA methodology is to provide comprehensive survey cover of all investigation areas. Additionally, it is designed to provide coverage for any areas, beyond the original scope of the project, which arise as a result of further work. It provides digital plans of all required elements of the project and locates them within an overall grid.
- B.1.2 It also maintains all necessary survey data and ensures that the relevant information is copied into the primary record, in order to ensure the integrity of the project archive. Furthermore, it ensures that all core data is securely stored and backed up. It establishes accurate project reference systems utilising a series of control stations and permanent base lines.
- B.1.3 The survey will be conducted using a combination of Total Station Theodolite (TST) survey utilising Reflectorless Electronic Distance Measurement (REDM) where appropriate, hand-measured elements and GPS (Global Positioning System), or photogrammetry.
- B.1.4 Before the main work commences, a network of control stations will be laid out encompassing the area. Control stations will be tied in to known points or existing features using rigorous metric observation. The control network will be set in using a TST to complete a traverse or using techniques as appropriate to ensure sufficient accuracy. A GPS, or other appropriate method, will be used to orientate the control network to National Grid or other recognised coordinate system.
- B.1.5 All control stations will be checked by closed traverse and/or GPS, as appropriate. The accuracy of these control stations will be accessed on a regular basis and re-established accordingly. All stations will be recorded on Survey Control Station sheets.
- B.1.6 Each control station will be marked with a PGM (Permanent Ground Marker). Witness diagrams will include the full 3-D co-ordinates generated, a sketch diagram and measurements to at least three fixed details, written description of the mark and a photograph of the control point in its environs.
- B.1.7 Prior to entry into the field all equipment will be checked, and all pre-survey information will be logged onto the field computer and uploaded onto survey equipment as appropriate. The software in the field computer will be verified and all cabling between the GPS and/or TST and computer will be checked. Prior to conducting the survey, the site will be reconnoitred for locations for a viable control network and check the line of sight and any possible hindrance to survey. Daily record sheets will be kept to record daily tasks and conditions.
- B.1.8 All spatial data will be periodically downloaded onto a field computer, and backed up onto CD, or DVD. It will be cleaned, validated and inspected.
- B.1.9 All survey data will be documented on daily survey record sheets. Information entered on these sheets includes key set up information (Instrument height etc.) as well as daily variables and errors/comments. All survey data will be digitally recorded in a raw

format and translated during the download process this shall allow for any errors to be cross referenced with the daily survey record and corrected accordingly.

- B.1.10** A weekly summary of survey work will be produced to access development and highlight problems. This information also will be recorded on the weekly survey journal. Technical support for the survey equipment and download software shall be available at all times. In those instances, where sites are remotely operated, all digital data will be backed up regularly and a copy returned to Oxford on a weekly basis.
- B.1.11** A site plan will initially be created by a rapid survey of relevant archaeological features by mapping their extent using a combination of TST and GPS. This will form the basis for deciding excavation strategy and will be updated as the excavation clarifies the extent of, and relationships between, archaeological features.
- B.1.12** Excavated archaeological interventions and areas of complex stratigraphy will be hand drawn. At least two Drawing Points (DPs) will be set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans will be referenced to the digitally captured pre-site plan by measuring in the DPs with a TST or GPS. These hand drawn elements will then be scanned in, geo-referenced using the DPs as reference points and digitised following OA's digitising protocols. For further details on hand planning procedure please refer to the fieldwork guidelines.
- B.1.13** Where appropriate photogrammetry or rectified photography may be used to record standing structures or burials. This will be carried out in line with Standard OA procedures for photogrammetry or rectified photography.
- B.1.14** Survey data recorded in the field will be downloaded using appropriate downloading software, and saved as an AutoCAD Map DWG file, or an ESRI Shapefile. These files will be regularly updated and backed up with originals being stored on an OA server in Oxford.
- B.1.15** All drawings will be composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work will normally be carried out at the local OA central office or at on-site remote locations when appropriate. Support for all GIS/CAD work will be available from OA's Oxford Office during normal office hours. The aim of the GIS/CAD work is to produce workable draft plans, which can be produced as stand-alone products, or can be readily converted to GIS format. Any hand-drawn plans will be scanned and digitised on site in the first instance. Subsequent plans will be added to the main drawing as it develops.
- B.1.16** All plan scans will be numbered according to their plan site number. Digital plans will be given a standard new plan number taken out from the site plan index.
- B.1.17** All digital data will be backed up incrementally on CD or DVD. On each Friday the entire data directory will be backed up and returned to Oxford where it will be copied onto the OA projects server. Each CAD drawing will contain an information layout which will include all the relevant details appertaining to that drawing. Information (metadata) on all other digital files will be created and stored as appropriate. At the end of the survey all raw measurements will be made available as hard copy for archiving purposes.

## **B.2 Relevant industry standards and guidelines**

- B.2.1 Historic England, 2017 Understanding the Archaeology of Landscapes A Guide to Good Recording Practice
- B.2.2 Historic England, 2015 Metric Survey Specifications for Cultural Heritage (3rd edn)
- B.2.3 Historic England, 2016 Understanding Historic Buildings: A Guide to Good Recording Practice
- B.2.4 Historic England, 2017 Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice

## **B.3 Relevant OA manual and other supporting documentation**

- B.3.1 OA South Metric Survey, Data Capture and Download Procedures
- B.3.2 OA South Digitising Protocols
- B.3.3 OA South GIS Protocols
- B.3.4 These will be superseded by the OA South Geomatics Manual (in progress).

## APPENDIX C ENVIRONMENTAL EVIDENCE

### C.1 Standard methodology – summary

- C.1.1 Different environmental and geoarchaeological sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Where possible an environmental specialist(s) will visit the site to advise on sampling strategies. Sampling methods will follow guidelines produced by Historic England and Oxford Archaeology. A register of samples will be kept. Specialists will be consulted where non-standard sampling is required (e.g. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit the site and take the samples.
- C.1.2 Geoarchaeological sampling methods are site specific, and methodologies will be designed in consultation with the geoarchaeological manager on a site by site basis.
- C.1.3 Bulk soil samples, where possible of 40 litres or 100% of a deposit if less is available, will be taken from potentially datable features and layers for flotation for charred plant remains and for the recovery of small bones and artefacts. Larger soil samples (up to 100L) may be taken for the complete recovery of animal bones, marine shell and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 10-20 litres will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2L samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments. Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods and foraminifera if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) and possibly for metallurgical analysis in consultation with the appropriate specialists.
- C.1.4 Bulk samples from dry deposits will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.25mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). Heavy residues will be wet sieved, air dried and sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples (1L sub-sample) and snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.25mm (waterlogged plants) and 0.5mm (snails) respectively; these flots and residues will be sorted by the specialist. Samples specifically taken for insects, pollen, other microflora and microfauna, metallurgy and soil analysis will be submitted as whole earth to the appropriate specialists or processed following their instructions.

### C.2 Relevant industry standards and guidelines

- C.2.1 Historic England, 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.
- C.2.2 Historic England, 2011 Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation, (2nd ed)



- C.2.3 Historic England, 2004 Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates (revision due 2020).
  - C.2.4 University of Bradford, 2019 Archaeomagnetism: Magnetic Moments in the Past <https://www.brad.ac.uk/archaeomagnetism/>
  - C.2.5 Historic England, 2008 Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology (revision due 2020).
  - C.2.6 Historic England, 2008 Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains (currently being revised).
  - C.2.7 Historic England, 2015 Archaeometallurgy. Guidelines for Best Practice.
  - C.2.8 Historic England, 2015 Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record.
  - C.2.9 Historic England, 2017 Organic Residue Analysis and Archaeology.
  - C.2.10 Baker, P and Worley, F, 2019 Animal Bones and Archaeology: Recovery to Archive. Historic England
- C.3 Relevant OA manual and other supporting documentation**
- C.3.1 Oxford Archaeology 2017. Environmental Sampling Guidelines, 4th ed.

## APPENDIX D ARTEFACTUAL EVIDENCE

### D.1 Standard methodology - summary

- D.1.1 Before a site begins arrangements concerning the finds will be discussed with the Finds Team Leader. Information will be provided by the project manager about the nature of the site, the expected size and make-up of the finds assemblage and any site specific finds retrieval strategies. On-site requirements will be discussed and a conservator appointed who can be called on to make site visits if required. Special requirements regarding particular categories of material will be raised at this early stage for instance the likelihood of recovering assemblages of waterlogged material, large timbers, quantities of structural stone or ceramic building material. Specialists may be required to visit sites to discuss retrieval strategies.
- D.1.2 The project manager will supply the Finds Team Leader with contact details of the landowner of the site so that consent to deposit any finds resulting from the investigation can be sought.
- D.1.3 The on-site retrieval, lifting and short term packaging of bulk and small finds will follow the detailed guidelines set out in the OA Finds Manual (sections 2 and 3), First Aid for Finds and the UKIC conservation guidelines No.2.
- D.1.4 All finds recovered from site will be transported to an OA regional office for processing; local sites will return finds at the end of each day, away based sites at the end of each week. Special arrangements can be discussed for certain sites with the Team Leader before the start of a project. Larger long running sites may in some instances set up on-site processing units to deal with the material from a particular site.
- D.1.5 All finds qualifying as Treasure will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996), and the Treasure (Designation) Order 2002. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- D.1.6 Each box of finds will be accompanied by a finds context checklist itemising the finds within each box. The number of bags of finds from each context and individual small find from each context will be recorded. A member of the processing team will check the list when it arrives in the department. There are separate forms for finds recovered from fieldwalking.
- D.1.7 The processing programme is reviewed on a weekly basis and priorities are worked out after discussions with the Fieldwork Team Leader and the Post-excavation Team Leader. Project managers will keep the Finds Team Leader informed of any pressing deadlines that they are aware of. All finds from evaluations are dealt with as a matter of priority.
- D.1.8 All bulk finds are washed (where appropriate), marked, bagged and boxed by the processing team according to the guidelines set out in section 4 and 5 of the OA Finds Manual, First-aid for finds and the UKIC guidelines No.2. They must also take into account the requirements of the receiving museum. Primary data recording count and weight of fragments by material from each context is recorded on the site database.

- D.1.9 Unstable and sensitive objects are recorded onto the database and then packaged and stored in controlled environments according to their individual requirements. The advice of a conservator will be sought for sensitive objects in need of urgent conservation. All metalwork will be x-rayed prior to assessment (and to meet the requirements of most receiving museums).
- D.1.10 Finds recovered from the environmental sample processing will be incorporated into the main assemblage and added to the database.
- D.1.11 On completion of the processing and data entry a finds file for each archaeological investigation will be produced, a summary of which is available for the project manager. The assemblage is allocated an OA number for storage purposes. Bulk finds are stored on a roller racking system, metals in a secure controlled storage and organic finds are refrigerated where possible.
- D.1.12 The movement of finds in and out of the storage areas is strictly monitored and recorded. Carbon copy transit forms exist to record this information. Finds will not be removed from storage without the prior knowledge of the Finds Team Leader.
- D.1.13 Finds information summarised in the finds compendium is used to assess the finds requirements for the post excavation stages of the project. The Team Leader holds a list of all specialists used by OA (see below) both internal and external.
- D.1.14 On completion of the post excavation stage of the project the team prepares the finds assemblage for deposition with the receiving museum. Discussions will be held with the museum, the excavator and the Finds Team Leader to finalise any selection, retention or discard policy. Most museums issue strict guidelines for the preparation of archives for deposition with their individual labelling, packaging and recording requirements.

## **D.2 Relevant industry standards and guidelines**

- D.2.1 ClfA, 2014 Standard and guidance for the collection, documentation, conservation and research of archaeological materials
- D.2.2 Society of Museum Archaeologists, 1993 Selection, retention and dispersal of Archaeological Collections. Download available via <http://www.socmusarch.org.uk/publica.htm>)
- D.2.3 UKIC, 1983 Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites. Conservation Guidelines No.2. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.4 UKIC, 1988 Excavated Artefacts and Conservation: UK sites Revised Edition. Conservation Guidelines No.1. Archaeology Section, United Kingdom Institute for Conservation.
- D.2.5 Watkinson, D E & Neal, V, 1998 First Aid for Finds (3rd edition). RESCUE & UKIC

## **D.3 Relevant OA manual and other supporting documentation**

- D.3.1 Allen, L, and Cropper, C (internal publication only) Oxford Archaeology Finds Manual.

## APPENDIX E HUMAN REMAINS

### E.1 Standard methodology - summary

- E.1.1 Human remains will not be excavated without a relevant licence/faculty and, where applicable (for example, a post medieval cemetery), a risk assessment from the local environmental officer.
- E.1.2 All human remains will be treated with due care and regard to the sensitivities involved, and will be screened from the public throughout the course of the works.
- E.1.3 Excavation will be undertaken in accordance with ClfA (Roberts and McKinley 1993), Historic England (2018), the Advisory Panel on the Archaeology of Burials in England (APABE, 2015, 2017) and British Association of Biological Anthropology and Osteoarchaeology Code of Practice (2019) and Code of Ethics (2019). For crypts and post-medieval burials, the recommendations set out by the ClfA (Cox 2001) and by the Association of Diocesan and Cathedral Archaeologists and APABE (2010) are also relevant.
- E.1.4 In accordance with recommendations set out in the Historic England and Church of England (2005) and updated by the Advisory Panel on the Archaeology of Burials in England (2017), skeletons will not be excavated beyond the limits of the trench, unless they are deemed osteologically or archaeologically important.
- E.1.5 Where any soft tissue survives and/or materials (for example, inner coffins, mattresses and other paddings) soaked in body liquor, no excavation or handling of the remains will take place until an appropriate risk assessment has been undertaken. Relevant protocols (i.e. Cox 2001) for their excavation, recording and removal will be adhered to.
- E.1.6 OA does not excavate or remove modern burials (those less than 100 years old) and does not remove or open sealed lead coffins. Appropriate PPE (e.g. chemical suit, latex gloves) will be worn by all staff when working with lead coffins.
- E.1.7 Graves and their contents will be hand excavated in plan. Each component (for example, skeleton, grave cut, coffin (or remains of), grave fill) will be assigned a unique context number from a running sequence. A group number will also be assigned to all of these, and small finds numbers to features such as coffin nails, hobnails and other grave goods (as appropriate).
- E.1.8 Soil samples will be normally taken during the excavation of inhumations, usually from the region of the skull, chest, right hand, left hand, abdomen and pelvis, right foot and left foot. Infants (circa. less than 5 years) will normally be recovered as bulk samples. Soil samples will also be taken from graves that appear to contain no human bone.
- E.1.9 Burials (including the skeleton, cremation, coffin fittings, coffin, urn, grave goods / other) will be recorded by photographic and written record using specialised pro forma context sheets, although these records may only include schematic representations of the location and position of the skeletons, depending on the nature and circumstances of the burial.

- E.1.10 Where digital imaging is used it will be done in accordance with the British Association of Biological Anthropology and Osteoarchaeology Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (2019).
- E.1.11 Where necessary, hand drawn plans (usually at 1:10, sometimes 1:5) will be made, especially of contexts where required details cannot be adequately seen using photography (for example, urned cremations; undisturbed hob nails).
- E.1.12 Levels will be taken. For inhumations this will be on the skull, pelvis and feet as a minimum.
- E.1.13 Human remains that are exhumed will be bagged and labelled according to skeletal region and carefully packed into suitable containers (for example, acid free cardboard boxes) and transported to a suitable storage location. Any associated coffins and coffin fittings will be contained with the human remains wherever possible.
- E.1.14 Urned cremations will not usually be half sectioned, but excavated in spits and/or quadrants (i.e. large deposits or spreads), or recovered as a bulk sample.
- E.1.15 Wherever possible, urned cremations will be carefully bandaged, recovered whole and will be excavated in spits in the laboratory, as per the recommendations of McKinley (2004, 2017).
- E.1.16 Unless deemed osteologically or archaeologically important disarticulated bone / chanel will be collected and reserved for re-burial if immediate re-internment as close to its original position is not practicable. In some instances, a rapid scan of this material may be undertaken by a qualified osteologist, if deemed relevant.
- E.1.17 If undisturbed, pyre sites will normally be excavated in quadrants, at the very least in 0.5 m blocks of 0.5 m spits.
- E.1.18 Pyre debris dumps will be half sectioned or quadrant and will be subject to 100% sampling.
- E.1.19 Wooden and lead coffins and any associated fittings, including fixing nails will be recorded on a pro forma coffin recording sheet. All surviving coffin fittings will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue that is being compiled by OA. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Biographical details obtained from legible departum plate inscriptions will be recorded and further documentary research will be made.
- E.1.20 Funerary structures, such as brick shaft graves and/or vaults will be recorded by photogrammetry or hand-drawn at a scale of 1:10 or 1:20, as appropriate. Location, dimensions and method of construction will be noted, and the structure added to the overall trench plan.
- E.1.21 Memorials, including headstones, revealed within the areas of development will be recorded irrespective of whether they are believed to be in situ.
- E.1.22 Where required, memorials will be accorded an individual context number and will also be included as part of the grave group, if the association with a burial is clear.

E.1.23 Memorials will be recorded on pro-forma context sheets, based on and following the guidelines set out by Mytum (2002), and will include details of:

- Shape
- Dimensions
- Type of stone used
- Condition, completeness and fragmentation of stones, no longer in original positions
- Iconography (an illustration may best describe these features)
- Inscription (verbatim record of inscription; font of the lettering)
- Stylistic type

## E.2 Relevant industry standards and guidelines

- E.2.1 Advisory Panel on the Archaeology of Burials in England, 2013 Science and the Dead. A guideline for the destructive sampling of archaeological human remains for scientific analysis. English Heritage Publishing.
- E.2.2 Advisory Panel on the Archaeology of Burials in England, 2017 Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England
- E.2.3 Advisory Panel on the Archaeology of Burials in England, 2015 Large Burial Grounds. Guidance on sampling in archaeological fieldwork projects
- E.2.4 Association of Diocesan and Cathedral Archaeologists and APABE, 2010 Archaeology and Burial Vaults. A guidance note for churches. Guidance Note 2
- E.2.5 British Association of Biological Anthropology and Osteoarchaeology. 2019a Code of Practice (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.6 British Association of Biological Anthropology and Osteoarchaeology. 2019b Code of Ethics (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.7 British Association of Biological Anthropology and Osteoarchaeology, 2019c Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (<http://www.babao.org.uk/index/ethics-and-standards>)
- E.2.8 Cox, M, 2001 Crypt archaeology. An approach. ClfA Paper No. 3
- E.2.9 English Heritage, 2002 Human Bones from Archaeological Sites. Guidelines for producing assessment documents and analytical reports
- E.2.10 Historic England, 2018 The Role of the Human Osteologist in an Archaeological Fieldwork Project. Swindon, Historic England
- E.2.11 McKinley, J, and Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains, ClfA Technical Paper No. 13

- E.2.12 McKinley, J, 2004 Compiling a skeletal inventory: cremated human bone. In Brickley, M, and McKinley, J (eds) Guidelines to the Standards for Recording Human Remains, ClfA Technical Paper No. 7. 9-13
- E.2.13 McKinley, J, 2017 Compiling a skeletal inventory: cremated human bone. In Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, ClfA 14-19
- E.2.14 Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, ClfA 2017
- E.2.15 Mytum, H, 2000 Recording and Analysing Graveyards. CBA Handbook No. 15
- E.2.16 Reeve, J, and Adams, M, 1993 The Spitalfields Project. Volume I – The Archaeology Across the Styx. CBA Research Report No. 85
- E.2.17 The Human Tissue Act 2004

### **E.3 Relevant OA manual and other supporting documentation**

- E.3.1 Loe, L, 2008 The Treatment of Human Remains in the Care of Oxford Archaeology. Oxford Archaeology internal policy document
- E.3.2 Oxford Archaeology 2018 *Fieldwork Manual Human Remains* unpublished

## APPENDIX F REPORTING

### F.1 Standard methodology - summary

F.1.1 For Watching Briefs and Evaluations, the style and format of the report will be determined by OA, but will include as a minimum the following:

- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

F.1.2 For Excavations, a Post-Excavation Assessment and Project Design will generally be prepared, as prescribed by Historic England Management of Research Projects in the Historic Environment (MoRPHE) 2006, Section 2.3. This will include a Project Description containing:

- A summary description and background of the project.
- A summary of the quantities and assessment of potential for analysis of the information recovered for each category of site, finds, dating and environmental data. Detailed assessment reports will be contained within appendices.
- An explicit statement of the scope of the project design and how the project relates to any other projects or work preceding, concurrent with or following on from it.
- A statement of the research aims of the fieldwork and an illustrated summary of results to date indicating to what extent the aims were fulfilled.
- A list of the project aims as revised in the light of the results of fieldwork and the current post-excavation assessment process.

F.1.3 A section on Resources and Programming will also be produced, containing:

- A list of the personnel involved indicating their qualifications for the tasks undertaken, along with an explanation of how the project team will communicate, both internally and externally.
- A list of the methods which will be used to achieve the revised research aims.



- A list of all the tasks involved in using the stated methods to achieve the aims and produce a report and research archive in the stated format, indicating the personnel and time in days involved in each task. Allowance should be made for general project-related tasks such as monitoring, management and project meetings, editorial and revision time.
- A cascade or Gantt chart indicating tasks in the sequence and relationships required to complete the project. Due allowance will be made for leave and public holidays. Time will also be allowed for the report to be read by a named academic referee as agreed with the County Archaeological Officer, and by the County Archaeological Officer.
- A report synopsis indicating publisher and report format, broken down into chapters, section headings and subheadings, with approximate word lengths and numbers and titles of illustrations per chapter. The structure of the report synopsis should explicitly reflect the research aims of the project.

F.1.4 The Project Design will be submitted to the County Archaeological Officer or equivalent for agreement.

F.1.5 Under certain circumstances (e.g. with very small mitigations), and as agreed with the County Archaeological Officer or equivalent, a formal Assessment and Project Design may not be required and either the project will continue straight to full analysis, or a simple Project Proposal (MoRPHE 2006 Section 2.1) will be produced prior to full analysis. This proposal may include:

- A summary of the background to the project
- Research aims and objectives
- Methods statement outlining how the aims and objectives will be achieved
- An outline of the stages, products and tasks
- Proposed project team
- Estimated overall timetable and budget if appropriate.

F.1.6 Once the post-excavation Project Design or Project Proposal has been accepted, the County Archaeological Officer or his appointed deputy will monitor the progress of the post-excavation project at agreed points. Any significant variation in the project design will be agreed with the County Archaeological Officer.

F.1.7 The results of the project will be published in an appropriate archaeological journal or monograph. The appropriate level of publication will be dependent on the significance of the fieldwork results and will be agreed with the County Archaeological Officer. An OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for each project as per Historic England guidelines.

## F.2 Relevant industry standards and guidelines

F.2.1 Oxford Archaeology (OA) adheres to the national standards in post-excavation procedure as outlined in Historic England's Management of Research Projects in the Historic Environment (MoRPHE; EH 2006). Furthermore, all post-excavation projects

take into account the appropriate regional research frameworks as well as national research agendas such as the Framework for Historic Environment Activities & Programmes in Historic England (SHAPE; EH 2008).

## APPENDIX G LIST OF SPECIALISTS REGULARLY USED BY OA

G.1.1 Below are two tables, one containing 'in-house' OA specialists, and the other containing a list of external specialists who are regularly used by OA.

### Internal archaeological specialists used by OA

| Specialist            | Specialism  | Qualifications                                  |
|-----------------------|---|---|
| John Cotter           | Medieval and Post Medieval pottery, Clay Pipe and CBM | BA (Hons), MCIfA                                |
| Dr Alex Davies        | Prehistoric Pottery                                   | BA (Hons), MA, PhD, ACIfA                       |
| Edward Biddulph       | Roman Pottery   | BA (Hons), MA, MCIfA                            |
| Kate Brady            | Roman Pottery   | BA, ACIfA                                       |
| Cynthia Poole         | CBM and Fired Clay                                    | BA (Hons), MSc                                  |
| Leigh Allen           | Metalwork and worked bone                             | BA (Hons), PGDip                                |
| Anni Byrd             | Metalwork, coins and glass                            | MSx, MCIfA                                      |
| Dr Ruth Shaffrey      | Worked stone artefacts                                | BA, PhD, MCIfA                                  |
| Julian Munby          | Architectural Stone                                   | BA, FSA   |
| Dr Rebecca Nicholson  | Fish and Bird Bone                                    | BA (Hons), MA, D.Phil, MCIfA, FSA Scot          |
| Dr Lee Broderick      | Animal bone   | BA (Hons), MA, MSc, FZG, SAC Dip (ecology), PhD |
| Dr Mairead Rutherford | Pollen  | BSc, MSc  |
| Ian Smith             | Animal Bone   | BA (Hons), MSc, PCIfA                           |
| Dr Martyn Allen       | Animal Bone   | BA (Hons), MA, PhD                              |
| Dr Denise Druce       | Charred plant remains, charcoal and pollen            | BA (Hons), PhD, MCIfA                           |
| Sharon Cook           | Charred plant remains                                 | BSc, MSc, ACIfA                                 |
| Elizabeth Stafford    | Geoarchaeology and land snails                        | BA (Hons), MSc                                  |
| Carl Champness        | Geoarchaeology  | BA (Hons), MSc, ACIfA                           |
| Nicola Scott          | Archaeological archive deposition                     | BA (Hons Dunelm)                                |
| Mike Donnelly         | Flint   | BSc, MCIfA                                      |
| Dr Louise Loe         | Human Bone  | BA PhD, MCIfA, BABAO                            |
| Helen Webb            | Human Bone  | BSc, MSc, MCIfA, BABAO                          |
| Mark Gibson           | Human Bone  | BA, MSc, ACIfA, BABAO                           |
| Dr Lauren McIntyre    | Human Bone  | BSc, MSc, PhD, MCIfA, BABAO                     |
| Ui Choileain          | Human Bone  | Pg Dip, MA, Msc, BABAO                          |
| Natasha Dodwell       | Human Bone  | BA, MSc, BABAO                                  |

External archaeological specialists regularly used by OA

| <b>Specialist</b>  | <b>Specialism</b>                           | <b>Qualifications</b>     |
|--|---|---------------------------|
| Lynne Keys   | Slag  | BA (Hons)                 |
| Quita Mould  | Leather                                     | BA, MA                    |
| Penelope Walton Rogers,<br>The Anglo Saxon<br>Laboratory | Identification of Medieval Textiles         | FSA, Dip.Acc              |
| Dana Goodburn-Brown                                      | Conservation                                | BSc (Hons), BA, MSc       |
| Steve Allen, York<br>Archaeological Trust                | Conservation                                | BA, MA, MAAIS             |
| Dr Richard Macphail                                      | Soils, especially Micromorphology           | BA (Hons), MSc, PhD       |
| Dana Challinor   | Charcoal                                    | MA, MSc                   |
| Dr Nigel Cameron   | Diatoms                                     | BSc, MSc, PhD             |
| Dr David Smith   | Insects                                     | BA (Hons), MA, PhD        |
| Professor Adrian Parker                                  | Phytoliths and pollen                       | BSc (Hons), D.Phil        |
| Dr David Starley   | Metalworking Slag                           | BSc (Hons), PhD           |
| Wendy Carruthers   | Charred and waterlogged plant<br>remains    | BA (Hons)                 |
| Dr John Whittaker  | Ostracods and Foraminifera                  | BA (Hons), PhD            |
| Dr John Crowther   | Soil Chemistry                              | MA, PhD                   |
| Dr Martin Bates  | Geoarchaeology                              | BSc, PhD                  |
| Dr Dan Miles   | Dendrochronology                            | D.Phil, FSA               |
| Dr Jean-Luc<br>Schwenninger                              | Optically Stimulated Luminescence<br>Dating | PhD                       |
| Dr David Higgins   | Clay Pipe                                   | BA, PhD, MCIfA            |
| Dr Hugo Anderson-<br>Wymark                              | Flint                                       | BSc, PhD, FSA Scot, MCIfA |
| Dr Damian Goodburn-<br>Brown                             | Ancient Woodwork                            | BA, PhD                   |

## APPENDIX H DOCUMENTARY ARCHIVING

### Standard methodology – summary

- H.1.1 The documentary archive constitutes all the written, drawn, photographic and digital records relating to the set up, fieldwork and post-excavation phases of the project. This documentary archive, together with the artefactual and environmental ecofact archive collectively forms the record of the site. The report is part of the documentary archive, and the archive must provide the evidence that supports the conclusions of the report, but the archive may also include data which exceeds the limitations of research parameters set down for the report and which could be of significant value to future researchers.
- H.1.2 At the outset of the project OA Archive manager will contact the relevant local receiving museum or archive repository to notify them of the imminent start of a new fieldwork project in their collecting area. Relevant local archiving guidelines will be observed and site codes, which integrate with the receiving repository, will be agreed for labelling of archives and finds.
- H.1.3 Where there is currently no receiving museum for the project archive, although responsibility for the archive ultimately lies with the client, OA will hold the archive on their behalf for a period of up to 3 years after completion of the report, after which time (in the event that a suitable depository has not been secured) provision for further storage of the archive will be made in agreement with Oxford Archaeology, the client and the relevant planning archaeologist.
- H.1.4 During the course of the project the Archive team will assist the Project Manager in the management of the archive including the cataloguing and development technique suitable for photographic archive requirements.
- H.1.5 The hard copy site archive will be security copied by scanning to PdFA and a copy of this will be housed on the OA Archive Server. A full digital copy of the archive, including scanned hard copy and born digital data, will be deposited with and made publicly available on-line through the ADS. A further copy will be maintained on the OA server and if requested a copy on disk will also be sent to the receiving museum with the hard copy. This will act as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.
- H.1.6 Born digital data will only be printed to hard copy for the receiving museum where practical. Archive elements that need maintaining in digital form will be sent to ADS in accordance with Arches Standard and ADS guidelines. A copy will be sent to the receiving museum by CD and back-up copies will be stored on the OA digital network. In most cases a digital copy of the report will be included in the OASIS project library hosted by ADS.
- H.1.7 Prior to deposition the Archive team will contact the museum regarding the size and content of the archive and discuss any retention and dispersal policies which may be applicable in line with local and SMA Guidelines ' Selection, Retention & Dispersal of Archaeological Collections' 1993.

- H.1.8 The site archive will then be deposited with the relevant receiving museum or repository at the earliest opportunity unless further archaeological work on the site is expected. The documentary archive will include correspondence detailing landowner consent to deposit the artefacts and any copyright licences in accordance with the receiving museum guidelines. Deposition charges will be required from the client as part of the project costs but the level of the fee is set by the receiving body, and may be subject to change during the lifespan of the project. Changes to archiving charges beyond OA's control will be passed across to the client.
- H.1.9 Oxford Archaeology 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 the receiving repository or museum for the archive with a full licence for use to the client in all matters directly relating to the project as described in the Written Scheme of Investigation, and in line with the relevant receiving body guidelines.
- H.1.10 OA will advise the receiving repository or museum for the archive of 3<sup>rd</sup> party materials supplied in the course of projects which are not OA's copyright.
- H.1.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. Archaeological findings and conclusions can be kept confidential for a limited period but will be made publicly available in line with the above procedure either after a specified time period agreed with the client at the outset of the project, or where no such period is agreed, after a reasonable period of time. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

## H.2 Relevant industry standards and guidelines

- H.2.1 At the end of the project the site archive will be ordered, catalogued, labelled and conserved and stored according to the following national guidelines:
- H.2.2 EAC, 2014 A Standard and Guide to Best Practice for Archaeological Archiving in Europe (EAC Guidelines 1)
- H.2.3 ClfA, 2014 Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives
- H.2.4 Brown, D, 2011 Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation. AAF
- H.2.5 UKIC, 1990 Guidelines for the preparation of excavation archives for long-term storage
- H.2.6 SMA, 2020 Standards and Guidance in the Care of Archaeological Collections
- H.2.7 Local museum guidelines such as Museum of London Guidelines: (<http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/DeposRe> source) will be adopted where appropriate to the archive collecting area.
- H.2.8 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, Historic England 1991.

---

## **H.3 Relevant OA manual and other supporting documentation**

### **H.3.1 The OA Archives Policy.**

## **APPENDIX I                    HEALTH AND SAFETY**

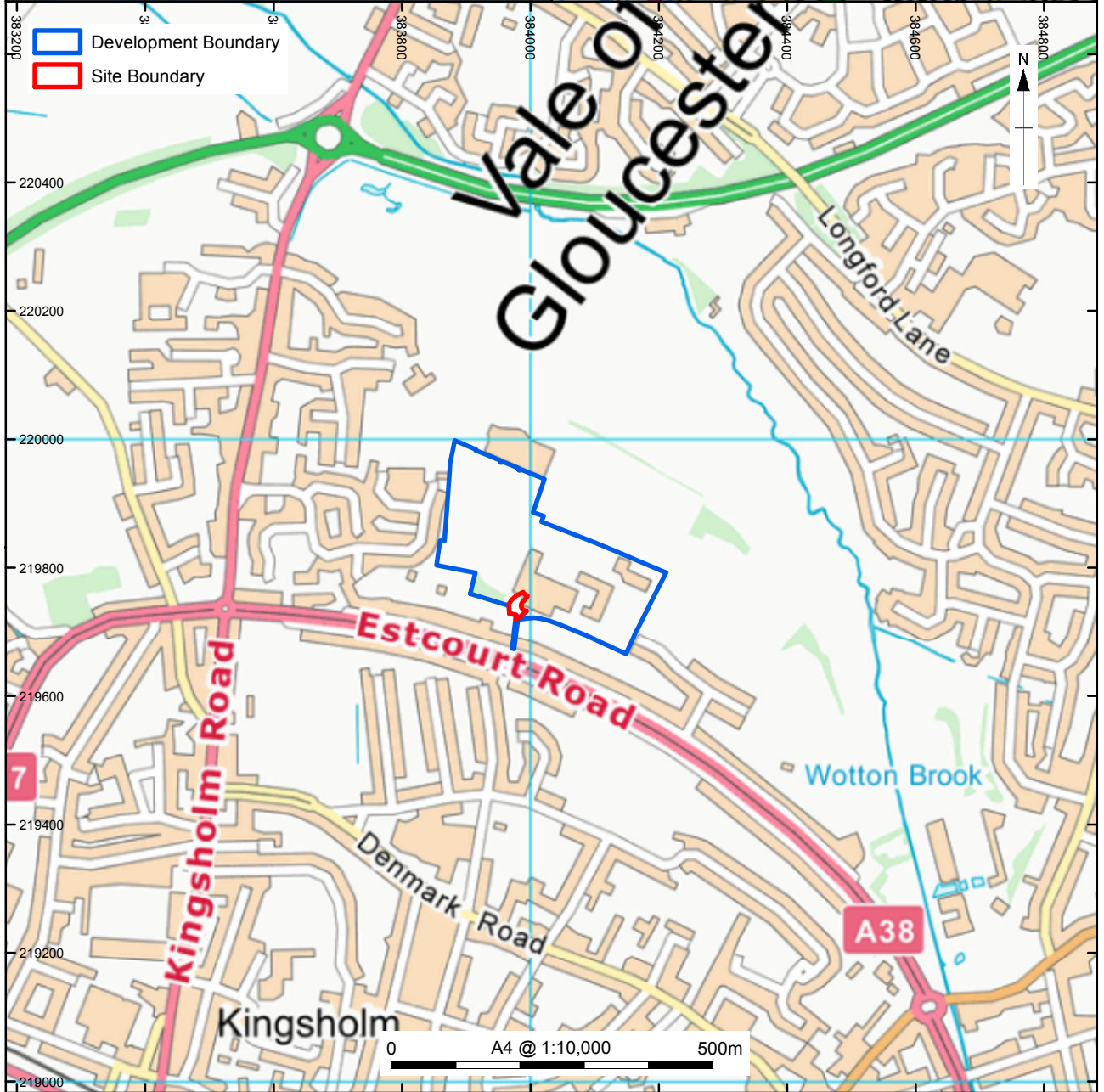
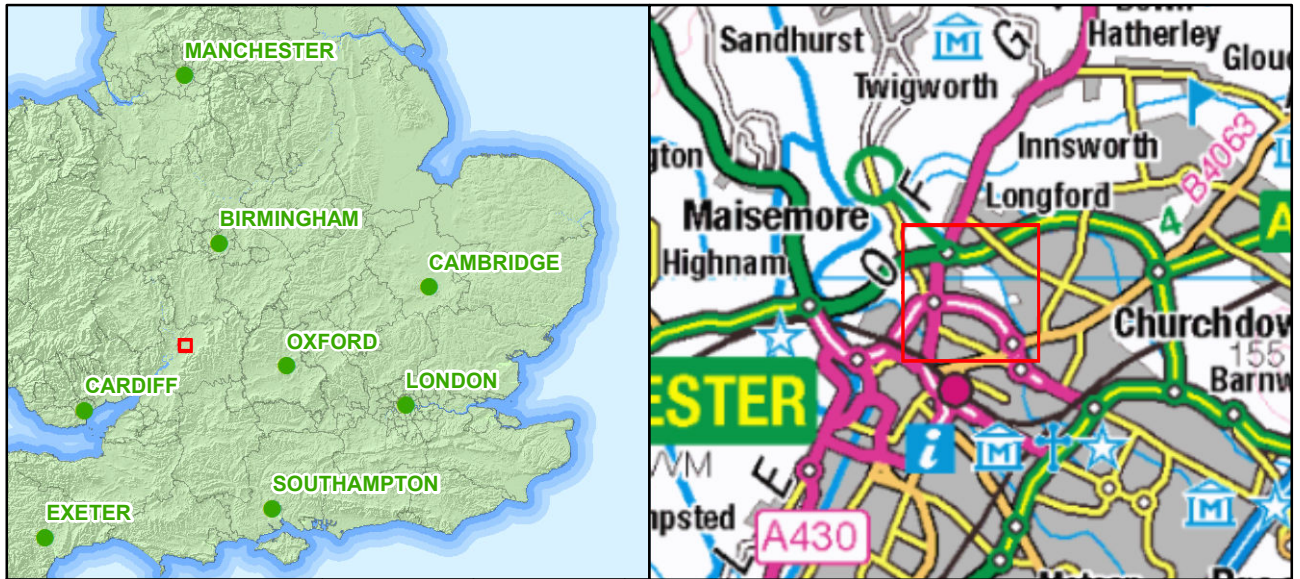
### **I.1        Standard Methodology - summary**

- I.1.1 All work will be undertaken in accordance with the current OA Health and Safety Policy, the OA Site Safety Procedures Manual, a site-specific Risk Assessment and, if required, Safety Plan or Method Statement. Copies of the site-specific documents will be submitted to the client or their representative for approvals prior to mobilisation, and all relevant H and S documentation will be available on site at all times. The Health and Safety documentation will be read in conjunction with the project WSI.
- I.1.2 Where a project falls under the Construction (Design and Management) Regulations (2015), all work will be carried out in accordance with the Principal Contractor's Construction Phase Plan (CPP).

### **I.2        Relevant industry standards and guidelines**

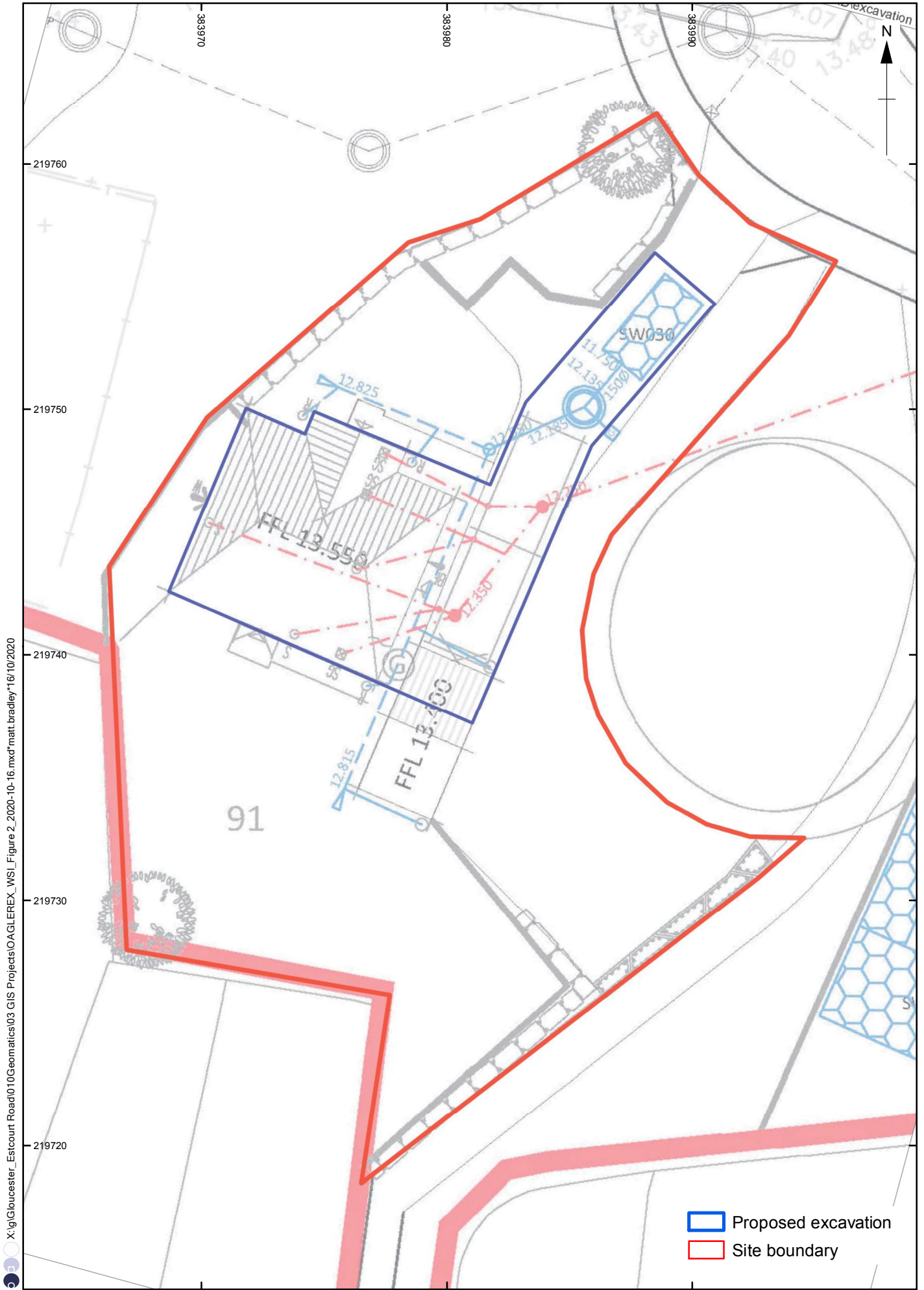
- I.2.1 All work will be carried out according to the requirements of all relevant legislation and guidance, including, but not exclusively:
  - I.2.2 The Health and Safety at Work Act (1974).
  - I.2.3 Management of Health and Safety at Work Regulations (1999).
  - I.2.4 Manual Handling Operations Regulations 1992 (as amended).
  - I.2.5 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (2013).
  - I.2.6 The Construction (Design and Management) Regulations (2015).
  - I.2.7 Relevant OA manual and other supporting documentation
  - I.2.8 The OA Health and Safety Policy.
  - I.2.9 The OA Site Safety Procedures Manual.
  - I.2.10 The OA Risk Assessment templates.
  - I.2.11 The OA Method Statement template.
  - I.2.12 The OA Construction Phase Plan template.





Contains Ordnance Survey data © Crown copyright and database right 2020

Figure 1: Site location



X:\g\Gloucester\_Estcourt Road\10\Geomatics\03 GIS Projects\OAGLEREX\_WS\Figure 2\_2020-10-16.mxd matt.bradley\*16/10/2020

0 1:200 @ A4 10 m

Figure 2: Proposed excavation area



**Head Office/Registered Office/  
OA South**

Janus House  
Osney Mead  
Oxford OX20ES

t: +44 (0) 1865 263 800  
f: +44 (0) 1865 793 496  
e: [info@oxfordarchaeology.com](mailto:info@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

**OA North**

Mill 3  
Moor Lane  
Lancaster LA1 1QD

t: +44 (0) 1524 541 000  
f: +44 (0) 1524 848 606  
e: [oanorth@oxfordarchaeology.com](mailto: oanorth@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

**OA East**

15 Trafalgar Way  
Bar Hill  
Cambridgeshire  
CB23 8SQ

t: +44 (0) 1223 850500  
e: [oaeast@oxfordarchaeology.com](mailto: oaeast@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>



**Director:** Gill Hey, BA PhD FSA MCIfA  
*Oxford Archaeology Ltd is a  
Private Limited Company, N<sup>o</sup>: 1618597  
and a Registered Charity, N<sup>o</sup>: 285627*