



Chestnut Walk, Reading, Berkshire

Written Scheme of Investigation for Archaeological Evaluation

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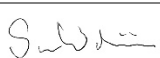
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Statutory designations NHLE1007932
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Chestnut Walk, Reading, Berkshire

Written Scheme of Investigation for Archaeological Evaluation

1 INTRODUCTION

1.1 Project and planning background

- 1.1.1 Wessex Archaeology has been commissioned by Reading Borough Council to carry out a programme of archaeological works within the scheduled area of Reading Abbey in central Reading, Berkshire, centered on National Grid Reference 472085 173485 (**Figure 1**), hereafter referred to as 'the Site'.
- 1.1.2 Reading Borough Council is seeking Scheduled Monument Consent to remove the existing avenue of horse chestnut trees ("only stump grind main to a shallow depth to allow grass reseeding") and plant 14 replacement trees (tree pits: 1.0 m long by 1.0m deep by 0.45 m deep) in the gaps. To improve safety of this pedestrian route, four new light columns (requiring excavation 0.15 m by 0.8 m deep) would be installed on the north side of the footpath and a CCTV camera (requiring excavation 0.15 m by 0.8 m deep) at the eastern end near the Oscar Wilde gate footpath to the tow path bridge underpass. The existing tarmac footpath surface will be overlaid with new tarmac and drainage covers replaced as part of the improvements (see **Appendix 1**, section 3.1).
- 1.1.3 In order to assess the potential for the survival of archaeological remains and to enable their preservation by record or in situ, depending on circumstances a programme of archaeological evaluation through the excavation of trial pits is proposed. This is will inform Reading Borough Council, their archaeological advisors (Berkshire Archaeology) and Historic England, as to the implications of the proposed tree and lighting works, identify suitable locations for the specific elements of work, and determine whether mitigation or alterations would be required.
- 1.1.4 *A Brief for Archaeological Field Evaluation (Appendix 1)* has been prepared by Berkshire Archaeology (Berkshire Archaeology 2019) to cover the proposed evaluation, which will be used to inform a decision on the requirement and nature for further archaeological mitigation, if needed.
- 1.1.5 The specified archaeological works consist of an archaeological evaluation, which will comprise the excavation of 19 trial pits measuring 0.5 m x 0.5 m, one in each of the proposed locations for 14 trees (to a maximum depth of 0.45 m), 4 lighting columns and 1 CCTV column (to a maximum depth of 0.80 m). Pits are to be located with agreement from Berkshire Archaeology and Historic England and take into consideration the alignment of associated structures in order to capitalise on the targeted areas.

1.2 Scope of document

- 1.2.1 This WSI sets out the aims of the evaluation, and the methods and standards that will be employed. In format and content, it conforms to current best practice, as well as to the guidance in *Management of Research Projects in the Historic Environment* (MoRPHE,

Historic England 2015) and the Chartered Institute for Archaeologists' (CIfA) *Standard and guidance for archaeological field evaluation* (CIfA 2014a).

- 1.2.2 This document will be submitted to Berkshire Archaeology on behalf of Reading Borough Council, and Historic England, on behalf of DCMS for approval, prior to the start of the evaluation.

1.3 Location, topography and geology

- 1.3.1 The proposed evaluation area is located immediately north of the River Kennet in central Reading, adjacent to HMP Reading and within the Abbey Ruins complex (an ancient monument scheduled under the Ancient Monuments and Archaeological Areas Act 1979. Chestnut Walk comprises a broad, tree-lined walkway on an alignment with the river.
- 1.3.2 The underlying bedrock geology is mapped as Seaford Chalk Formation and Newhaven Chalk Formation, which is a sedimentary bedrock formed approximately 72 to 90 million years ago in the Cretaceous Period. Local environment previously dominated by warm chalk seas. The Site is shown (BGS 2019) as within the area covered by superficial deposits relating to the Taplow Gravel Member (sand and gravel) formed 2 million years ago during the Quaternary Period. There is, however, an area of alluvium close-by (clay, silt, sand and gravel).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following summary is largely drawn from the brief (Berkshire Archaeology 2019).

2.2 Historical background

- 2.2.1 One of the earliest references to the town of Reading is in the Anglo-Saxon Chronicle for AD 870–871, as the site of a Danish winter camp, probably situated on or near the site of the later Abbey (Astill 1978, 75–77). By the 11th century the town included a market, a mint that functioned between 1044 and 1046 and a nunnery, that may have been founded during the reign of Edgar (AD 959–978); however, this had ceased to function by AD 1071 when William I granted the estate to Battle Abbey (Astill 1978, 75). The reference to Reading in Domesday indicates that it had achieved borough status by the Conquest and contained a large royal estate. The likely centre of the late Saxon town is the area around St. Mary's church and the Old Market (now St. Mary's Butts) at the crossing of major roads between Oxford and Winchester and London and Bath.
- 2.2.2 Expansion of the town during the medieval period was due largely to the influence of the Cluniac, and subsequently Benedictine, abbey that was founded by Henry I in AD 1121. The abbey was built in the Romanesque style and many architectural fragments in this style survive re-used within later structures.
- 2.2.3 The abbey became one of the principal religious foundations in the country by virtue of large endowments, royal patronage and collections of relics. The whole area of the abbey, approximately 12 ha, was enclosed by a gated boundary wall and the interior was divided between an outer court, the Forbury, and the separately enclosed inner precinct. The inner precinct backed onto the River Kennet and the Holy Brook and several of the industrial elements of the abbey, such as a mill, wharf and stables were located here. The abbey gave the town an increased impetus to urban development, which continued until Reading had become established as the major town in Berkshire by the 15th century.

2.2.4 At the Dissolution in 1539, although some of the abbey buildings were retained as a royal residence, occupation of the precinct effectively ended with the dispersal of the monks. By 1549, documents recorded that the buildings were being robbed and most of the church and cloisters had probably been razed by 1642, when the abbey precinct wall was fortified, and a substantial defensive ditch and rampart were dug across the remains of the abbey (Cram 2001). Since then, the site has been used not only as a source of building stone, but as a gravel pit. Numerous gravel pits, dating from the 17th to the 19th century have been located by earlier archaeological excavations (Vince *et al* 1982).

2.3 Archaeological background

2.3.1 The readily available information relating to the abbey indicates that the most likely structure to be encountered by the trial pits is the toilet block (reredorter or necessarium), and a related inflow and outflow channel linked to the River Kennet.

2.3.2 Archaeological investigations in the vicinity have encountered abbey remains as little as 0.55 m below the present ground level. However, there is evidence that these have been subject to considerable disturbances including the construction of the Civil War defences and gravel quarrying. Much of the site was excavated, though poorly recorded, in around 1857 to provide work for the unemployed. This excavation appears to have recovered much of the ground plan of the abbey as “the entire area of the site was excavated to a depth varying from two to five feet” (Slade 2001, 65).

2.3.3 A long programme of archaeological excavations and watching briefs was undertaken within the abbey precinct between 1964 and 1986. These were principally to the west and south-west of the standing abbey remains, with excavations of the cloister and refectory area (Vince *et al* 1982), the abbey mill (Slade 1976), the abbey stables (Hawkes 1991), the abbey wharf (Hawkes and Fasham 1997) and a small area within the east end of the abbey church (Slade 1976).

2.3.4 Of particular relevance are two recent pieces of fieldwork by Wessex Archaeology and Foundations Archaeology, which were both undertaken immediately adjacent to, or within, the proposed fieldwork locations.

2.3.5 In 2004 to early 2005, Wessex Archaeology undertook an evaluation, watching briefs and building recording within the ruins of Reading Abbey and Forbury Garden as part of the Forbury Gardens Restoration Project (Wessex Archaeology 2005). A number of trenches were located within the area of the dormitory and reredorter, immediately to the north-west of Chestnut Walk. A medieval mortar floor, probably that of a cellar or undercroft was recorded approximately 2.25 m below the present ground level in the dormitory, at the same level as the present ground surface within the reredorter. Other works within the dormitory area showed that most of the buried archaeological remains have been very badly disturbed or completely destroyed by two large air-raid shelters (**Figure 1**).

2.3.6 In 2006, Foundations Archaeology undertook a watching brief along the southern edge of Chestnut Walk during the erection of signage and associated cabling (Foundations Archaeology 2006). Although the small-scale excavations were relatively shallow (a maximum depth of 0.60 m) and no medieval archaeological features were identified, the works demonstrated that there was a potential for deeply buried significant archaeological remains and deposits to survive intact within this riverside area.

3 AIMS AND OBJECTIVES

3.1 General aims

3.1.1 The general aims (or purpose) of the evaluation, in compliance with the ClfA' *Standard and guidance for archaeological field evaluation* (ClfA 2014a), are:

- To provide information about the archaeological potential of the site; and
- To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.2 General objectives

3.2.1 In order to achieve the above aims, the general objectives of the evaluation are (Berkshire Archaeology 2019):

- To determine the existence or absence of archaeological remains and, should archaeological remains be present, to assess their general nature and significance.
- To determine or confirm the approximate date or date range of the remains, by means of artefactual or other evidence.
- To determine or confirm the approximate extent of the remains.
- To determine the condition and state of preservation of the remains.
- To determine the degree of complexity of the horizontal and/or vertical stratigraphy present.
- To assess the associations and implications of any remains encountered with reference to the historic landscape.
- To determine the implications of the remains with reference to economy, status, utility and social activity.
- To determine or confirm the likely range, quality and quantity of the artefactual evidence present.
- To determine the potential of the site to provide palaeo-environmental, geoarchaeological and/or economic evidence and the forms in which such evidence may be present

4 FIELDWORK METHODS

4.1 Introduction

4.1.1 All works will be undertaken in accordance with the detailed methods set out within this WSI. Any significant variations to these methods will be agreed in writing with Berkshire Archaeology, and Historic England, prior to being implemented.

4.1.2 The evaluation will comprise the excavation (by hand), investigation and recording of 19 trial pits (each measuring 0.5 m by 0.5 m).

4.2 Setting out of the trenches

4.2.1 All pits will be set out using GNSS or TST in the positions shown in **Figure 1**. Minor adjustments to the layout may be required to take account of any on-site constraints such as vegetation or located services. The pit locations will be tied in to the Ordnance Survey



(OS) National Grid and Ordnance Datum (OD) (Newlyn), as defined by OSGM15 and OSTN15.

4.3 Service location and other constraints

- 4.3.1 The client will provide information regarding the presence of any below/above-ground services, and any ecological, environmental or other constraints.
- 4.3.2 Before excavation begins, the evaluation area will be walked over and visually inspected to identify, where possible, the location of any below/above-ground services. All trial pits locations will be scanned before and during excavation with a Cable Avoidance Tool (CAT).

4.4 Excavation methods

- 4.4.1 The pits will be excavated by hand to a depth suitable for assessing the significance of the archaeological stratigraphy (whilst leaving more important deposits *in situ*), or 450 mm (for trees) or 800 mm (for lights/CCTV) or undisturbed natural, whichever is higher. For the purposes of this evaluation more important deposits to be left *in situ* will include those relating to the medieval abbey (walls, surfaces, human remains). Those of lesser importance that will be excavated within the test pits include soil layers, and post-Dissolution structures and deposits. Prior to excavation the turf will be removed.
- 4.4.2 Where the test pits for trees encounter deposits of lesser importance consideration will be given (in consultation with Historic England and Berkshire Archaeology, if required) to extending the test pit(s) to the area required for planting and to detailed excavation and recording; where this be in the interests of efficiency.
- 4.4.3 A sample of the archaeological features and deposits identified will be excavated by hand, sufficient to address the aims of the evaluation. Spoil will be visually scanned for the purposes of finds retrieval, and where appropriate will also be metal-detected by trained archaeologists. Artefacts and other finds will be collected and bagged by context.
- 4.4.4 If an exceptional number and/or complexity of archaeological deposits are identified, sample excavation will aim to be minimally intrusive, but sufficient to resolve the principal aims of the evaluation.
- 4.4.5 If human remains are uncovered, the specific methods outlined below (section 4.9.2–5) will be followed.
- 4.4.6 Where complex archaeological stratification is encountered, deposits will be left *in situ* and alternative measures taken to assess their depth. Where modern features are seen to truncate the archaeological stratification, these may be removed, where practicable, in a manner that does not damage the surrounding deposits in order to enable the depth of stratification to be assessed.
- 4.4.7 Hard surfaces (modern concrete, medieval walls etc) will not be excavated.

4.5 Reinstatement

- 4.5.1 Pits completed to the satisfaction of Historic England and Berkshire Archaeology will be backfilled using excavated materials in the order in which they were excavated, with the turf placed on top and left level on completion.



4.6 Recording

- 4.6.1 All exposed archaeological deposits and features will be recorded using Wessex Archaeology's pro forma recording system.
- 4.6.2 A complete drawn record of excavated archaeological features and deposits will be made. This will include plans and sections, drawn to appropriate scales (generally 1:20 or 1:50 for plans, 1:10 for sections) and tied to the OS National Grid. The OD heights of all principal features will be calculated (as defined by OSGM15 and OSTN15) and the levels added to the drawings.
- 4.6.3 A full photographic record will be made using digital cameras equipped with an image sensor of not less than 10 megapixels. This will record both the detail and the general context of the principal features and the site as a whole. Digital images will be subject to managed quality control and curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image set. Photographs will also be taken of all areas, including access routes, to provide a record of conditions prior to and on completion of the evaluation.

4.7 Survey

- 4.7.1 The real time kinematic (RTK) survey of all trenches and features will be carried out using a Leica GNSS connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50mm.

4.8 Monitoring

- 4.8.1 A minimum of one week's notice is required to inform Historic England and Berkshire Archaeology of the start of the evaluation and its progress. Reasonable access will be arranged for the Principal Archaeologist for Berkshire Archaeology to make site visits in order to inspect and monitor the progress of the evaluation. Any variations to the WSI, if required to better address the project aims, will be agreed in advance with Historic England and Berkshire Archaeology.

4.9 Finds

General

- 4.9.1 All archaeological finds from excavated contexts will be retained, although those from features of modern date (19th century or later) may be recorded on site and not retained, depending on the site-specific objectives. Where appropriate, soil samples may be taken and sieved to aid in finds recovery. Any finds requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1998).

Human remains

- 4.9.2 In the event of discovery of any human remains (articulated or disarticulated, cremated or unburnt), all excavation of the deposit(s) will cease pending Wessex Archaeology obtaining a Ministry of Justice licence (this includes cases where remains are to be left *in situ*).
- 4.9.3 Initially the remains will be left *in situ*, covered and protected, pending discussions between the client, Wessex Archaeology's osteoarchaeologist, Historic England and Berkshire Archaeology regarding the need for excavation/removal or sampling. Where this is deemed appropriate, the human remains will be fully recorded, excavated and removed from site in compliance with the Ministry of Justice licence.



- 4.9.4 Excavation and post-excavation processing of human remains will be in accordance with Wessex Archaeology protocols and current guidance documents (e.g. McKinley 2013) and the standards set out in ClfA Technical Paper 13 *Excavation and post-excavation treatment of cremated and inhumed remains*. Appropriate specialist guidance/site visits will be undertaken if required.
- 4.9.5 The final deposition of human remains subsequent to the appropriate level of osteological analysis and other specialist sampling/examinations will follow the requirements set out in the Ministry of Justice licence.

Treasure

- 4.9.6 Wessex Archaeology will immediately notify Historic England and Berkshire Archaeology on discovery of any material covered, or potentially covered, by the *Treasure Act 1996* (as amended by *The Coroners and Justice Act 2009*). All information required by the Treasure Act (ie, finder, location, material, date, associated items etc.) will be reported to the Coroner within 14 days.

4.10 Environmental sampling

- 4.10.1 All sampling will be undertaken following Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011 and Historic England 2015).
- 4.10.2 Bulk environmental soil samples, for the recovery of plant macrofossils, wood charcoal, small animal bones and other small artefacts, will be taken as appropriate from well-sealed and dateable contexts or features. In general, features directly associated with particular activities (eg, pits, latrines, cesspits, hearths, ovens, kilns, and corn driers) should be prioritised for sampling over features, such as ditches or postholes, which are likely to contain reworked and residual material.
- 4.10.3 If waterlogged or mineralised deposits are encountered, an environmental sampling strategy will be devised and agreed with Historic England and Berkshire Archaeology as appropriate, in this context such deposits are not anticipated to be present. Specialist guidance will be provided by a member of Wessex Archaeology's geoarchaeological and environmental team, with site visits undertaken if required.
- 4.10.4 Any samples will be of an appropriate size – typically 40 litres for the recovery of environmental evidence from dry contexts, and 10 litres from waterlogged deposits.
- 4.10.5 Following specialist advice, other sampling methods such as monolith, Kubiena or contiguous small bulk (column) samples may be employed to enable investigation of deposits with regard to microfossils (eg, pollen, diatoms) and macrofossils (eg, molluscs, insects), soil micromorphological or soil chemical analyses.

5 POST-EXCAVATION METHODS AND REPORTING

5.1 Stratigraphic evidence

- 5.1.1 All written and drawn records from the evaluation will be collated, checked for consistency and stratigraphic relationships. Key data will be transcribed into an Access database, which can be updated during any future analyses. Archaeological features and deposits will be preliminary phased using stratigraphic relationships and the spot dating from finds, particularly pottery.



5.1.2 A written description will be made of all archaeologically significant features and deposits that were exposed and excavated, ordered either by pit or by period as appropriate. Detail of all contexts will be provided in trench tables in an appendix to the report.

5.2 Finds evidence

5.2.1 All retained finds will, as a minimum, be washed, weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the evaluation. The report will include a table of finds by feature/context or pit.

5.2.2 Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by Wessex Archaeology's in-house conservation staff, or by another approved conservation centre.

5.2.3 Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and generally in accordance with the standards of the ClfA (2014b).

5.3 Environmental evidence

5.3.1 Bulk environmental soil samples will be processed by standard flotation methods and scanned to assess the environmental potential of deposits. The flot will be retained on a 0.25 mm mesh, with residues fractionated into 5.6/4 mm, 2 mm, 1 mm and 0.5 mm and dried if necessary. Coarse fraction (>5.6/4 mm) will be sorted, weighed and discarded, with any finds recovered given to the appropriate specialist. Finer residues will be retained until after any analyses, and discarded following final reporting (in accordance with the selection policy, below).

5.3.2 In the case of samples from cremation-related deposits the flots will be retained on a 0.25 mm mesh, with residues fractionated into 4 mm, 2 mm and 1 mm. In the case of samples from inhumation deposits, the sample will be artefact sieved through 9.5 mm and 1 mm mesh sizes. The coarse fractions (9.5 mm) will be sorted with any finds recovered given to the appropriate specialist together with the finer residues.

5.3.3 Any waterlogged or mineralised samples will be processed by standard waterlogged flotation methods.

5.4 Reporting

General

5.4.1 Following completion of the fieldwork and the evaluation of the stratigraphic, artefactual and ecofactual evidence, a draft report will be submitted for approval to the client, Historic England and Berkshire Archaeology, for comment. Once approved, a final version will be submitted.

5.4.2 The report will include the following elements:

- Non-technical summary;
- Project background;
- Archaeological and historical context;
- Aims and objectives;
- Methods;

- Results – stratigraphic, finds and environmental;
- Conclusions in relation to the project aims and objectives, and discussion in relation to the wider local, regional or other archaeological contexts and research frameworks etc;
- Archive preparation and deposition arrangements;
- Appendices, including pit summary tables;
- Illustrations; and
- References.

5.4.3 A copy of the final report will be deposited with the HER, along with surveyed spatial digital data (.dxf or shapefile format) relating to evaluation.

Publication

5.4.4 If no further mitigation works are undertaken, a short report on the results of the evaluation will be prepared for publication in a suitable journal, if considered appropriate and agreed with the client, Historic England and Berkshire Archaeology.

OASIS

5.4.5 An OASIS online record (<http://oasis.ac.uk/pages/wiki/Main>) will be created, with key fields completed, and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

6 ARCHIVE STORAGE AND CURATION

6.1 Museum

6.1.1 It is recommended that the project archive resulting from the evaluation be deposited with Reading Museum. Provision has been made for long-term storage in the post-fieldwork costs. The museum will receive notification of the project prior to fieldwork commencing, and an accession number will be obtained.

6.2 Transfer of title

6.2.1 On completion of the evaluation (or extended fieldwork programme), every effort will be made to persuade the legal owner of any finds recovered (ie, the landowner), with the exception of human remains and any objects covered by the *Treasure Act 1996 (as amended by the Coroners and Justice Act 2009)*, to transfer their ownership to the museum in a written agreement.

6.3 Preparation of archive

6.3.1 The complete project archive, which may include paper records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Reading Museum, and in general following nationally recommended guidelines (SMA 1995; ClfA 2014c; Brown 2011; ADS 2013). The archive will usually be deposited within one year of the completion of the project, with the agreement of the client.

6.4 Selection policy

- 6.4.1 Wessex Archaeology follows national guidelines on selection and retention (SMA 1993; Brown 2011, section 4). In accordance with these, and any specific guidance prepared by the museum, a process of selection and retention will be followed so that only those artefacts or ecofacts that are considered to have potential for future study will be retained. The selection policy will be agreed with the museum, and fully documented in the project archive. Material not selected for retention may be used for teaching or reference collections by the museum, or by Wessex Archaeology.

6.5 Security copy

- 6.5.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

7 COPYRIGHT

7.1 Archive and report copyright

- 7.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.
- 7.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research, or development control within the planning process.

7.2 Third party data copyright

- 7.2.1 This document, the evaluation report and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

8 WESSEX ARCHAEOLOGY PROCEDURES

8.1 External quality standards

- 8.1.1 Wessex Archaeology is registered as an archaeological organisation with the Chartered Institute for Archaeologists (CIfA) and fully endorses its *Code of conduct* (CIfA 2014d) and *Regulations for professional conduct* (CIfA 2014e). All staff directly employed or subcontracted by Wessex Archaeology will be of a standard approved by Wessex Archaeology, and archaeological staff will be employed in line with the CIfA codes of practice, and will normally be members of the CIfA.



8.2 Personnel

- 8.2.1 The fieldwork will be directed and supervised by an experienced archaeologist from Wessex Archaeology's core staff, who will be on site at all times for the length of archaeological fieldwork as required. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's project managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. Where required, monitoring visits may also be undertaken by Wessex Archaeology's Health and Safety manager. The appointed project manager and fieldwork director will be involved in all phases of the investigation through to its completion.
- 8.2.2 The analysis of any finds and environmental data will be undertaken by Wessex Archaeology core staff or external specialists, using Wessex Archaeology's standard methods, under the supervision of the departmental managers and the overall direction of the project manager. A complete list of finds and environmental specialists can be provided on request.
- 8.2.3 The following key staff are proposed:
- Project Manager Simon Woodiwiss MCIfA.
 - Site Manager To be advised.
- 8.2.4 Wessex Archaeology reserves the right, due to unforeseen circumstances (eg, annual leave, sick leave, maternity, retirement etc) to replace nominated personnel with alternative members of staff of comparable expertise and experience.

8.3 Internal quality standards

- 8.3.1 Wessex Archaeology is an ISO 9001 accredited organisation (certificate number FS 606559), confirming the operation of a Quality Management System which complies with the requirements of ISO 9001:2008 — covering professional archaeological and heritage advice and services. The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to providing quality heritage services to our clients. ISO (the International Organisation for Standardisation) is the most recognised standards body in the world, helping to drive excellence and continuous improvement within businesses.
- 8.3.2 Wessex Archaeology operates a computer-assisted project management system. Projects are assigned to individual project managers who are responsible for the successful completion of all aspects of the project. This includes monitoring project progress and quality; controlling the project budget from inception to completion; and all aspects of Health and Safety for the project. At all stages the project manager will carefully assess and monitor performance of staff and adherence to objectives, timetables and budgets, while the manager's performance is monitored in turn by the team leader or regional director.
- 8.3.3 All work is monitored and checked whilst in progress on a regular basis by the project manager, and all reports and other documents are checked (where applicable) by the team leader/technical manager, or regional director, before being issued. A series of guideline documents or manuals form the basis for all work. The technical managers in the Graphics, Finds and Analysis, GeoServices and IT sections provide additional assistance and advice.
- 8.3.4 All staff are responsible for following Wessex Archaeology's quality standards but the overall adherence to and setting of these standards is the responsibility of the senior management team in consultation with the team leaders/regional directors who also ensure



projects are adequately programmed and resourced within Wessex Archaeology's portfolio of project commitments.

8.4 Health and Safety

- 8.4.1 Health and Safety considerations will be of paramount importance in conducting all fieldwork. Safe working practices will override archaeological considerations at all times. Wessex Archaeology will supply trained, competent and suitably qualified staff to perform the tasks and operate the equipment used on site. All work will be carried out in accordance with the *Health and Safety at Work Act 1974* and the *Management of Health and Safety at Work Regulations 1999*, and all other applicable Health and Safety legislation, regulations and codes of practice in force at the time.
- 8.4.2 Wessex Archaeology will supply a copy of the company's Health and Safety Policy and a Risk Assessment to the client before the commencement of the evaluation. The Risk Assessment will have been read, understood and signed by all staff attending the site before any fieldwork commences. Wessex Archaeology staff will comply with the Personal Protective Equipment (PPE) requirements for working on the site, and any other specific additional requirements of the principal contractor.
- 8.4.3 All fieldwork staff are certified through the Construction Skills Certification Scheme (CSCS) or UK equivalent and have had UKATA Asbestos Awareness Training. Key staff also have qualifications in the use of CAT and Genny equipment and as banksmen/Plant Machinery Marshalls through the National Plant Operators Recognitions Scheme (NPORS).

8.5 Insurance

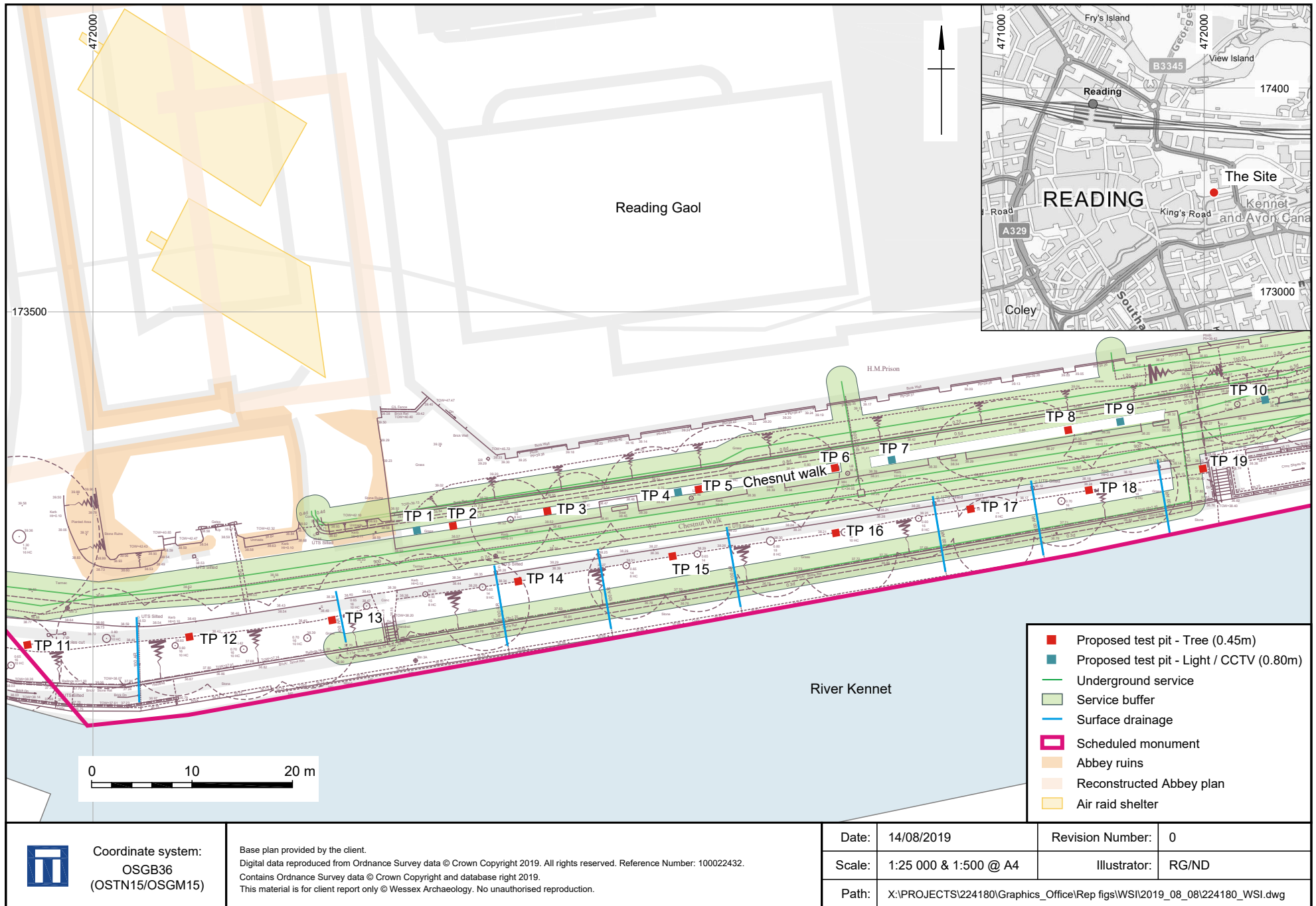
- 8.5.1 Wessex Archaeology has both Public Liability (£10,000,000) and Professional Indemnity Insurance (£5,000,000).

REFERENCES

- ADS 2013 *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service & Digital Antiquity Guides to Good Practice
- Astill, G.G., 1978 *Historic Towns in Berkshire: an Archaeological Appraisal*. Berkshire Archaeological Committee Publication Number 2
- Berkshire Archaeology, 2019 Chestnut Walk, Reading: Brief for an Archaeological Evaluation, August 2019
- BGS 2019 British Geological Survey online viewer
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed 07/08/2019)
- Brown, D H 2011 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum
- ClfA 2014a *Standard and Guidance for Archaeological Field Evaluation*. Reading, ClfA
- ClfA 2014b *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading, ClfA
- ClfA 2014c *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading, ClfA
- ClfA 2014d *Code of Conduct*. Reading, ClfA
- ClfA 2014e *Regulations for Professional Conduct*. Reading, ClfA
- Cram, L., 2001 Notes on the History of the Forbury Gardens and Reading Abbey. Unpublished Reading Museums Service Report
- English Heritage 2011 *Environmental Archaeology: A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation* (second edition). Portsmouth, English Heritage
- Foundations Archaeology, 2006 Chestnut Walk, Reading, Berkshire, Unpublished Client report
- Handley, M 1999 Microfilming Archaeological Archives. Institute of Field Archaeologists Paper 2, Royal Commission on the Historical Monuments of England
- Hawkes, J.W., 1991 *Excavations on the site of Reading Abbey stables, 1983, Berkshire Archaeological Journal* J 73, 1986-90 (1991) 66-87
- Hawkes, J.W. and Fasham, P.J., 1997 *Excavations on Reading Waterfront Sites, 1979-1988, Wessex Archaeol. Monograph* 5, 11-35
- Historic England 2015 *Management of Research Projects in the Historic Environment: the MoRPHE project managers' guide*. Swindon, Historic England
- Historic England 2015 *Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record*. Swindon, Historic England



- McKinley, J I 2013 Cremation: excavation, analysis and interpretation of material from cremation-related contexts, in S Tarlow and L Nilsson Stutz (eds) *The Oxford Handbook of the Archaeology of Death and Burial*. Oxford University Press 147–71
- Slade, C., 1976 *Excavation at Reading Abbey, 1971-73*. *Berkshire Archaeological Journal*, Volume **68**, 29-70.
- Slade, C., 2001 *The Town of Reading and its Abbey 1121-1997*, MRM Associates Ltd, Reading.
- SMA 1993 *Selection, Retention and Dispersal of Archaeological Collections*. Society of Museum Archaeologists
- SMA 1995 *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists
- Vince, A.G., Fasham, P.J. and Hawkes J.W., 1982 Excavations at Reading Abbey 1979 and 1981, *Berkshire Archaeological Journal*, Volume **71**, 33-55
- Watkinson, D. and Neal, V. 1998 *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works
- Wessex Archaeology, 2005 Forbury Gardens Restoration Project, Reading, Berkshire: Archaeological investigations, Unpublished Client report 56410.01, April 2005



Site location plan

Figure 1



APPENDICES

Appendix 1

Proposed Tree and Light Works to Chestnut Walk, Reading:

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION

1 Introduction

- 1.1 This brief sets out the background and general conditions to enable a detailed specification for an archaeological scheme to be prepared and submitted for approval to Berkshire Archaeology on behalf of Reading Borough Council, and Historic England, on behalf of DCMS. The brief is valid for six months only from 1st August 2019, after which time Berkshire Archaeology should be contacted. Specifications produced in accordance with this brief will be considered valid for the same period of time.

2 Site location and description

- 2.1 The site is located immediately north of the River Kennet in central Reading, adjacent to HMP Reading and within the Abbey Ruins complex. The Chestnut Walk is centred on NGR SU 7208 7348, and comprises a broad, tree-lined walkway on an alignment with the river.

3 Project background

- 3.1 Reading Borough Council is seeking Scheduled Monument Consent to remove the existing avenue of horse chestnut trees (only stump grind main to a shallow depth to allow grass re-seeding) and plant 14no replacement trees (tree pits: 1m*450mm deep) in the gaps. To improve safety of this pedestrian route, 4no new light columns (requiring excavation 150mm*800mm deep) would be installed on the north side of the footpath and a CCTV camera (requiring excavation 150mm*800mm deep) at the eastern end near the Oscar Wilde gate footpath to the tow path bridge underpass. (note: we have previous SMC approval for the installation of the cctv camera in August 2017 but it was not implemented). The existing tarmac footpath surface will be overlaid with new tarmac and drainage covers replaced as part of the improvements. See attached improvement plan for locations.

4 Archaeological background

The site is located within an area with high potential for significant archaeology, forming part of Reading Abbey, a large and significant 12th century Benedictine and Cluniac monastery, which is legally designated a Scheduled Ancient Monument (NHLE1007932). The monastery is currently in ruins, its stonework having been robbed extensively after its fall during the Dissolution.

The site of the Chestnut Walk, to the rear of the abbey's dormitories and reredorter, is within an area known to have been exploited for riverside activities, including a wharf. Previous archaeological investigations taking place throughout the Abbey ruins have shown good survival of archaeological remains of Medieval and later date, including some artefactual evidence for earlier use of the site. Details of these works are available at the Berkshire Historic Environment Record. In particular a watching brief carried out by Foundations Archaeology in 2000, during the installation of street furniture in the Chestnut Walk, whilst failing to identify any archaeological features or finds, noted the potential for undiscovered remains below the level of the current roadway.

5 Requirement for work

- 5.1 In order to assess the potential for the survival of archaeological remains and to enable their preservation by record or in situ, depending on circumstances a programme of archaeological evaluation trial pitting is proposed. This is in order to inform Reading Borough Council, their archaeological advisors (Berkshire Archaeology) and Historic England, as to the implications of the proposed tree and lighting works, identify suitable locations for the specific elements of work, and determine whether mitigation or alterations would be required.

6 Aims and objectives

6.1 The aims and objectives of the evaluation are as follows:

- (i) To determine the existence or absence of archaeological remains and, should archaeological remains be present, to assess their general nature and significance.
- (ii) To determine or confirm the approximate date or date range of the remains, by means of artefactual or other evidence.
- (iii) To determine or confirm the approximate extent of the remains.
- (iv) To determine the condition and state of preservation of the remains.
- (v) To determine the degree of complexity of the horizontal and/or vertical stratigraphy present.
- (vi) To assess the associations and implications of any remains encountered with reference to the historic landscape.
- (vii) To determine the implications of the remains with reference to economy, status, utility and social activity.
- (viii) To determine or confirm the likely range, quality and quantity of the artefactual evidence present.
- (ix) To determine the potential of the site to provide palaeo-environmental, geo-archaeological and/or economic evidence and the forms in which such evidence may be present.

7 Stages of work and techniques

7.1 The project specification will provide a clear statement of the archaeological objectives, detailing the relevant aims, objectives and recording strategies.

7.2 The evaluation is to be carried out as a single stage in a potential wider programme of investigation, the requirement of which is to be based upon the results of initial investigations. All works are to be carried out to the highest possible standards in line with Berkshire Archaeology standards and requirements, ClfA standards (as a registered organisations) and professional best practice. The general requirements of the evaluation are as follows:

It is proposed that 18no small trial pits measuring 0.5m x 0.5m are excavated, one in each of the proposed locations for 14no trees and 4no light columns. Pits are to be located with agreement from Berkshire Archaeology and Historic England and are to take into consideration the alignment of associated structures in order to capitalise on the targeted areas. The project specification must contain a plan of the area clearly marking the locations.

- (i) It should be assumed that excavation will be by hand only, to a depth suitable for assessing the significance of the archaeological stratigraphy (whilst leaving potentially important deposits in situ), or 450mm (trees) / 800mm (lights) or undisturbed natural, whichever comes sooner.
- (ii) Spoil should be scanned for artefacts, which should be recorded and retained.
- (iii) Sufficient of the features located will be excavated by hand in order to fulfil the aims of the project specification, with reference to the general aims and objectives given above. This will be achieved through an agreed sampling strategy.
- (iv) Care should be taken not to compromise the integrity of archaeological features or deposits, which might better be excavated under the conditions pertaining to full excavation, or preserved in situ.

- (v) The depth and complexity of the deposits across the locations should be assessed. Written and drawn records shall be made of the stratigraphy of all pits, even if no archaeological deposits have been identified.
 - (vi) Full written and drawn records of all excavated contexts shall be made in accordance with best archaeological practice. Archaeological deposits, which are not excavated, should be recorded to the maximum extent possible. Records shall include overall pit and site plans. All excavation and recording shall be in accordance with the ClfA *Standard and Guidance for Field Evaluations* and Berkshire Archaeology's *General Standards for Archaeological Projects*.
 - (vii) Recording, cleaning and conservation of finds should follow the ClfA *Guidelines for Finds Work*.
 - (viii) Where human remains are encountered, they should initially be left in-situ and the coroner should be informed as soon as possible. Where their removal is necessary, an appropriate licence should be obtained from the Home Office.
 - (x) A programme of soil sampling to recover palaeobotanical, palaeozoological and pedological evidence shall be undertaken as appropriate. Specialist advice shall be sought as necessary from a named palaeo-environmentalist / geoarchaeologist. Provision for at least one visit to the site should be included in the contractors programme. Indicative bulk samples should be taken for generic assessment as appropriate.
 - (xi) Adequate assessment of interpretative material shall be carried out to appropriately inform of the requirement for further stages of work.
- 7.3 The project will be supervised on a daily basis by a competent archaeologist and managed on a regular, agreed basis by a Member of the Chartered Institute for Archaeologists or a person of equivalent competence and experience.
- 8 Methods**
- 8.1 The project specification will include a Written Scheme of Investigation (WSI) detailing the methods and standards to be applied in the programme of evaluation, both field and post-field. Resourcing levels for the project should be included in the project WSI.
- 9 Timetable and monitoring arrangements**
- 9.1 Details of timing should be the subject of discussion between Reading Borough (the client), Berkshire Archaeology, the Historic England Inspector of Ancient Monuments and the archaeological contractor. A programme of works, monitoring, recording and access will be agreed in writing before the project commences.
- 9.2 Berkshire Archaeology will monitor the progress and quality of the work at intervals to be agreed. A representative of the archaeological contractor should be present at all monitoring inspections. The Historic England e IAM may also wish to visit the site once the works are ongoing.
- 9.3 In order to facilitate the monitoring programme, the following will be required:
- A minimum period of 1 weeks notice is required to inform Berkshire Archaeology prior to the commencement of site works following the award of the contract. A longer notice period may be required for Historic England
 - A projected timetable of work on site.
- 9.4 Where finds are made which could not have been reasonably anticipated and whose recording and conservation would be beyond the resources allocated for the evaluation, all

work will cease and the Principal Archaeologist for Berkshire Archaeology, and IAM for Historic England will be invited to attend a site meeting to discuss a way forward.

10 Site Archive

- 10.1 The site archive will contain all the data collected during the evaluation including records, finds and environmental samples. It should be quantified, ordered, indexed and internally consistent.
- 10.2 Adequate resources shall be provided during fieldwork to ensure that records are checked and internally consistent.
- 10.3 Archive consolidation shall be undertaken immediately following the conclusion of fieldwork.
- 10.4 The archive shall be assembled in accordance with the relevant current guidelines
- 10.5 The integrity of the primary field record shall be preserved. Security copies in digital or fiche format shall be maintained where appropriate.
- 10.6 All finds (other than those of gold or silver) are the property of the landowner. The agreement of the landowner for the ownership of any finds to be transferred to an appropriate museum will be sought.
- 10.7 Provision shall be made for the deposition of archive and artefacts in Reading Museum. The museum shall be advised of the proposed investigation before excavation starts and the contractor shall adhere to any reasonable requirements they may have regarding conservation and storage of excavated material and archive. The archive shall be prepared in accordance with the guidelines published in *Guidelines for the preparation of Excavation Archives for long-term storage* (United Kingdom Institute for Conservation, 1990) and *Standards in the Museum care of archaeological collections* (Museum and Galleries Commission, 1994). Deposition shall take place after completion of the works.

11 Reporting requirements

- 11.1 A preliminary report should be produced no later than **2 weeks** after the completion of the fieldwork. Copies should be sent to the Reading Borough Council client, the Historic England IAM and Berkshire Archaeology (see para 14.1 below)
- 11.2 The report will address the aims and objectives of the evaluation.
- 11.3 An estimate of time and staff resources required for report production should be provided. This should include details of arrangements for specialist conservation and analysis of artefacts and ecofacts.
- 11.4 Details of style and format to be determined by the archaeological contractor. In any event it should include: -
 - (i) A summary of the project's background;
 - (ii) The site location;
 - (iii) A methodology;
 - (iv) A stratigraphic description of the depositional and archaeological sequence encountered;
 - (v) A description of the project's results;
 - (vi) An interpretation of the results in the appropriate context;
 - (vii) A summary of the contents of the project archive and its location (including summary catalogues of finds and samples);

- (viii) Site layout plans on an Ordnance Survey base, with the location of the trenches superimposed on the results of any earlier, non-intrusive surveys;
- (ix) Plans of each trench and / or area (unless trenches are void of archaeology);
- (x) Trench sections and feature sections (unless the trenches are void of archaeology in which case indicative sample sections may be reproduced to illustrate the depositional sequence encountered on site);
- (xi) Site matrices where appropriate;
- (xii) A consideration of evidence within the wider setting.
- (xiii) A consideration for the potential for further requirements for work with reference to the planning application and the proposed impact of the development after discussion with Berkshire Archaeology.

12 OASIS reporting requirements

- 12.1 Berkshire Archaeology supports the *Online Access to Index of Archaeological Investigations* (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. **The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>.** Contractors are advised to contact Berkshire HER prior to completing the form. Once a report has become a public document by forming part of a planning application, Berkshire Archaeology will place the information on a website. Please ensure that you agree to this procedure in writing as part of the process of submitting the report to the Principal Archaeologist for consideration.

13 Standards

- 13.1 The project should be carried out to the highest professional standards and conform to the ClfA *Code of Conduct and Code of Practice*. The ClfA's *Code of approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* will be applied throughout the selection procedure and contract period.

14 Publication and dissemination

- 14.1 A good quality pdf version of the approved final report document will be supplied to the Berkshire Archaeology HER on the understanding that this will become a public document after an appropriate period of time (usually not exceeding six months).

15 Other factors

- 15.1 The specification may be varied, subject to agreement between the contractor, Reading Borough Council, Berkshire Archaeology, and Historic England in response to significant discoveries during the evaluation process. The contractor is advised to clarify with the client as to any relevant special conditions that may be required to carry out these works



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