

The Provost's Garden Underground Library Extension The Queen's College Oxford



Written Scheme of Investigation

oxfordarchaeology



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The Provost's Garden, Underground Library Extension

The Queen's College, Oxford

NGR SP 5174 0636

Written Scheme of Investigation for Archaeological Mitigation

October 2014

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1 INTRODUCTION

- 1.1.1 The Queen's College are proposing to construct a new underground library extension within the college Provost's Garden (Planning Ref: 07/01232/FUL – approval of time extension 10/03007/EXT), Oxford (NGR SP 5174 0636).
- 1.1.2 Planning approval for the development was given in 2008. A condition addressing the archaeological potential of the site was attached to the planning permission. The condition and its requirements were detailed in a brief issued by David Radford, Oxford City Council's Archaeologist (OCC 2008).
- 1.1.3 The brief outlines the history of the site and the specific requirements for the site. In addition the brief requires the production of a Written Scheme of Investigation (WSI) to be produced by the archaeological contractor, setting out the detailed methodology by which the contractor will meet the requirements of the planning condition and brief.
- 1.1.4 In response to the 2008 brief OA has been commissioned by The Queen's College, to prepare this document which represents the required WSI to be approved by the Oxford City Council Archaeologist prior to the commencement of work.

2 SITE LOCATION AND DESCRIPTION

- 2.1.1 The site is located within the Provost's Garden in the north western quarter of Queen's College, High Street Oxford at NGR SP 51745 06365. The site is a combination of lawn and flower beds enclosed by high, listed retaining walls. The site lies within a Conservation Area and is bounded by several listed structures.
- 2.1.2 National Heritage List entries for the listed structure bounding the site.

List Name	List Grade and entry Number	List Description	Location in relation to the proposed development
THE QUEENS COLLEGE, BOUNDARY WALL ON QUEENS LANE TO WEST OF LIBRARY	Grade II 1046640	1485 Boundary wall on Queen's Lane to West of Library SP 5106 SE 9/355J II 2. C18. Rubble with triangular coping.	Northern boundary of the site
THE QUEENS COLLEGE, WALLS LINING THE LANE LEADING FROM THE BACK QUADRANGLE TO THE BREWHOUSE	Grade II 1046638	1485 Walls lining the lane leading from the Back Quadrangle to the Brewhouse SP 5106 SE 9/355G II 2. C18. Stone rubble with a triangular coping. Various openings. Running on either side of lane.	Southern boundary of the site
THE QUEENS COLLEGE, WEST RANGE	Grade I 1046636	1485 Back (or North) Quadrangle West Range SP 5106 SE 9/355B 12.1.54. I 2. The Library built in 1692-94 possibly to design of Dean Aldrich; it has been refaced in Clipsham stone. The master mason was John Townesend, Thomas Heughes the carpenter and the joiners Thomas Minn, senior and junior. The eagles on the pediment, the keystones and the statues in niches on West side were made by J Vanderstien. The ground floor had an open loggia but was enclosed by C R Cockerell in 1843. The interior was altered in 1756 when a plaster ceiling was made by Thomas Roberts.	Eastern boundary of the site
THE QUEENS COLLEGE, PROVOSTS LODGINGS	Grade II 1047049	Provost's Lodgings Queen's College II Provost's Lodgings. 1958-60. Raymond Erith. Stone ashlar. 2 storeys. Street facade symmetrical with rusticated stone to ground floor and ashlar to first floor. Central square headed entrance with Diocletian window over and tiny square-headed lights to left and right of entrance. Slightly raised rusticated pilasters flanking entrance with string course above given slightly greater emphasis than that to left and right. Upper storey with blind arched niche to centre flanked by two square headed windows. Pitched, hipped roof with dormers to west side; slab chimney.	West of the site



THE QUEENS COLLEGE, BREWHOUSE	Grade II 1369680	Timber framed, possibly C16-17, mainly remodelled in c18 and since altered. 6 Doric engaged columns with garage doors between. Weatherboarded above. Stone tile roof with 2 gabled dormers. Now a garage.	West of the site
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- 2.1.3 Queens College lies within the eastern extent of the historic city of Oxford, and the development site occupies an area measuring c 786 m².
- 2.1.4 The college lies within modern Oxford, on the north side of High Street, to the south of Queen's Lane, centred on National Grid Reference (NGR) SP 51745 06365 (Fig 1). Historically the area was located in the eastern suburb of medieval Oxford, east of the city's East Gate. The Provost's Garden lies to the north and west of the main College building.
- 2.1.5 Topographically, the college sits in a position between the edge of low lying ground that formed the river's natural floodplain and the eastern edge of the gravel promontory, upon which medieval Oxford developed. The site currently occupies relatively level ground, at approximately 62m OD. The underlying geology is the Summertown Radley Gravel Terrace overlying Oxford Clay (BGS Sheet 236).

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 General

- 3.1.1 The following is summarised from the brief (OCC 2008), evaluation and watching brief reports for the Provost's Garden (OAU 1998 and 2001), the Oxford Urban Archaeological Database (UAD) and *Anglo-Saxon pits and a medieval kitchen at The Queen's College kitchen extension, Oxford* (Norton and Mumford forthcoming).

3.2 Prehistoric

- 3.2.1 There is potential for prehistoric deposits to survive within the site, a Bronze Age collared urn and possible ring ditch were revealed at Logic Lane, 150 m to the south of the site (UAD No. 181).

3.3 Anglo-Saxon

- 3.3.1 The Queen's College lies within the eastern part of the Anglo-Saxon burh, which is thought to have been constructed at the turn of the tenth century; the town must have had fortifications at the time of the Burghal Hidage and there is no strong evidence for fortifications prior to that time (Dodd 2003, 22). Excavations and observations around the site's perimeter have produced evidence of Anglo-Saxon street levels (Dodd, 2003, 258-264).

3.4 Medieval

- 3.4.1 The site lay within the medieval walled town, but in the eastern part that may have been a secondary addition to the primary Saxon town, in the parish of St Peter in the East.
- 3.4.2 The area was occupied by long narrow medieval tenements fronting the High Street to the south, which were presumably established prior to the Norman Conquest (Salter 1921, 326-331). The buildings survived in truncated form until the 18th century. The tenements on Thorald's Lane (now New College Lane) continued through the churchyard of St Peter in the East and extended as far as the east town wall, with a turning into Queen's College Lane. Thorald's Lane are less well understood and their boundaries have not been identified,



though there is little reason to suppose that there were not a continuous series of houses there in the 12th-13th century. These included what may have been large town houses belonging to Peter Torold and the Stockwell family, and near to St Peter's Church was a one-time academic hall where the monks of Canterbury lived (Salter, *Survey of Oxford*, 1960, 151-2).

- 3.4.3 The site lies north of, and to the rear of, No. 33 High Street, Drawda Hall, the property of William de Drogheda in 1242. The tenement passed to University College in 1270 and was obtained by Magdalen college in 1901 (Salter 1921, 329); The Queen's College acquired the site in 1908. An academic hall was located on the site until 1436 and historic maps show several substantial structures to the rear of the plot.
- 3.4.4 Queen's Lane (formerly Torald Street) now forms the northern and eastern boundary of the College. It is possible that Queen's Lane originally continued past the parish church of St Peter's towards the east wall, and it is likely that houses lined the road in the 13th century.
- 3.4.5 The proposal site was evaluated by OA in 1998 and remains of late Saxon occupation were identified; at about 61m OD (UAD No. 407). A subsequent watching brief on test pits here produced little further significant information (OA 2001) other than the extension of archaeological deposits to the limit of the listed boundary wall foundations cuts to the north and south of the proposal area. Excavations and observations around the perimeter have also produced evidence of earlier street levels at various depths (UAD Nos. 230, 250, 1157, 1424).

3.4.6 Medieval Queen's College

- 3.4.7 Like many Oxford colleges, the process of the notional or actual foundation becoming a coherent collection of buildings was a gradual one. The site was mostly acquired between 1340 and 1347 and the fellows of the new college (founded in 1341) must first have occupied the existing houses. Building of the gatehouse fronting Queen's Lane began in 1352, and by the end of the century a quadrangle with a chapel and a hall was completed, but did not yet encroach upon the High Street. The Provost's Garden has always been open ground. In general, the north-east corner of Oxford fell into decay in the 14th century, a process which was hastened by the spread of Black Death in 1349.
- 3.4.8 The medieval college buildings are well depicted in views drawn by Agas (1577/88) and Loggan (1675) and in more detail in Loggan's view of the east front (1675), while the chapel plan was drawn by Loggan's pupil, Michael Burghers. James Green also drew the last remaining buildings in 1751 as a conscious antiquarian record (*VCH Oxon iii*, pls at 125 & 139). These all show that the space between the north range of the quadrangle and New College Lane was used for orchards and gardens (open in 1577 and subdivided by 1675), and outbuildings on New College Lane.
- 3.4.9 The lost college buildings can be generally located by the presence of the Williamson Building on Loggan's view, which still exists. Two key archaeological discoveries have enabled a more precise location. In 1887 the chapel foundations were observed during pipe laying (UAD No. 1350) and these were further investigated in 1903. In 1987 a trench in the north quadrangle located the outer wall of the medieval north range, and a resistivity survey outlined the west quadrangle and the library (Blair in *Queen's College Record*, VI.4 – Dec.1988).

3.4.10 Post-medieval Queen's College

- 3.4.11 The 18th-century rebuilding of Queen's College swept away all previous buildings except the Williamson Building, and gave the college a rectilinear layout based on the



new High Street frontage. The new buildings were partially cellared, with a narrow wine cellar down the middle of the hall, and a cellar in the space between the hall and kitchen, but no cellar beneath the kitchen itself (as confirmed by recent Oxford Archaeology The Queen's College, Oxford Kitchen Extension Archaeological Investigation Report explorations). The cellaring is linked to the cellars below the west range (buttery), and there is one short return to the north (just west of the kitchen) which may have given access for coal or other goods. The cellars are stone vaulted, but with few architectural features of note. There is also a crypt beneath the chapel, and this was uncovered in 1976 when the coffins of former provosts were noted (UAD No. 743).

3.5 Previous Archaeological Works

3.5.1 Provost's Garden Evaluations and Watching Briefs 1998 and 2001

3.5.2 In March 1998 and April 2001 an evaluation and watching brief were carried out within the Provost's Garden in the proposal area. The work revealed Anglo-Saxon, and post-Conquest occupation levels and deposits (OAU 1998 and 2001). Tenth- and eleventh-century pits were also revealed during excavations ahead of the construction of a new kitchen extension within the Back Quad, to the east of the site (Norton and Mumford 2010 – see below). One of these features, a large pit, contained fragments of slag indicative of metalworking which possibly took place within the proposed development area. The remains were indicative of settlement within the north-eastern quarter of the defended town, or within a suburb immediately to the east of the town's defences. Some evidence of post-medieval pits seen, might have been related to gravel extraction associated with local building.

3.5.3 OA 2007: Kitchen Foundations

3.5.4 A series of geo-technical test pits were excavated in 2007 to investigate the foundations for the existing College Kitchen (built in 1715). Two of the test pits, excavated adjacent to the outside face of the northern wall of the kitchen, the test pits extended to the base of the foundation which lay 2.3m below current ground level (bgl).

3.5.5 The eastern test pit revealed the east-west aligned construction trench for the kitchen wall, cut through a sequence of earlier deposits. This sequence, found between 1.8m and 1.2m bgl, was likely to comprise possible surface deposits below dumped deposits within the robbed out remains of the western range. Between 1.2m bgl and the current ground level there was a loose, mortar rich soil and rubble deposit which appeared contiguous with the backfill of the construction trench and might be interpreted as an infill of the cellar, or may be a general levelling-up deposit associated with the late-17th/early-18th century building programme at the college.

3.5.6 The sequence in the western test pit was consistent with that seen to the east with an additional structure consisting of three limestone blocks possibly representing a floor surface or fireplace within the western range.

3.5.7 OA 2008: Kitchen Extension

3.5.8 In 2008 an archaeological investigation took place at the Queen's College in advance of proposals to construct a new below-ground basement north of the existing kitchen building. The aim was to determine whether piled foundations would encounter below-ground structural remains associated with the medieval college.

- 3.5.9 The work revealed layers of construction/demolition debris cut by the foundation trench and wall forming the NE corner of the medieval West Range depicted on historic views. The northern end of West Range was equipped with a hearth, and later a possible doorway inserted within the wall leading to the yard outside. A narrow garden wall and a path were identified leading to the building, and these are probably of later medieval/early post-medieval date. The northern line of the medieval North Range, identified in a previous excavation, was confirmed in service trenches and trial pits by its robber trench. Demolition debris above the structures and the robber trench dates to c 1719, when the present North Quadrangle circuit was completed with a new North Range.
- 3.5.10 Domestic occupation in the form of six late tenth century pits was found during the excavations, one of which contained a halfpenny of Æthelred II that was probably in circulation from 997-1003 (Norton and Mumford 2010).
- 3.5.11 **OA 2010: Nun's Garden**
- 3.5.12 An excavation and watching brief in 2010 revealed a single late Saxon pit, which adds to the evidence for domestic occupation of this period recovered in previous work at Queen's College. The site lay at the rear of medieval properties fronting onto the High St. to the south and New College Lane to the north, and a number of quarry and rubbish pits were identified.
- 3.5.13 The site was unusual for the very low representation of high medieval Brill/Boarstall ware pottery, and it is suggested that this could reflect the gradual transformation of the area at this time into an academic enclave. A stone building revealed in the excavations may be identifiable as a structure shown on Loggan's map of 1675 that stood between the yard and the garden of No. 33 High St. Two phases of rebuilding at No. 33 High St. are identifiable from dumps of rubble, one in the late 16th or early 17th century and the other around a century later. The fills of pits and cellars dating from the late 17th century to the 19th century contained high quality ceramics, including Chinese porcelain, plates with the arms of University College, and numerous late 17th- and early 18th-century wine bottles. A highly decorated clay tobacco pipe is of the same date.
- 3.5.14 A watching brief within the adjacent Fellow's Garden behind No. 34 High St. revealed a large 18th-century barrel-vaulted cellar.
- 3.5.15 Most recently a series of boreholes and geotechnical testpits were excavated within the Nun's Garden. Although not archaeologically monitored the results of the work demonstrated that over 2 m of buried soils and pit fills survive within the site (GEA 2006).
- 3.5.16 **OA 2013: Queen's College WC / Toilet**
- 3.5.17 Work was undertaken, including historic building recording and below-ground archaeological recording, prior to the construction of a new WC and associated drainage routes in the north-east corner of the Fellows' Garden at The Queens College. The site was in the NE corner of the Provost's Garden.
- 3.5.18 The excavation of two test pits located in the areas to be directly impacted by the below-ground works recorded no pre-18th century remains. There were 19th and 20th century deposits and features forming the current garden landscape overlying a brick vaulted chamber, probably the cess pit associated with the original gardener's toilet and store which had been constructed in the mid to late 18th century. Evidence for remedial work along the base of the boundary wall was also encountered.



4 SCOPE OF WORK

4.1 General

4.1.1 The archaeological mitigation of the site will comprise the following phases of work.

- A photographic record will be undertaken of the internal and external face of the Grade II Listed 17th century wall on the northern boundary of the Queens prior to its removal to enable access to the site. The record will be undertaken to the standards set out in *Understanding Historic Buildings: A guide to good practice* (English Heritage 2006). The photographic record will be supplemented by notes and a location plan of the recorded area. The complete record will be commensurate with a Level II recording as defined in EH 2006.
- Area excavation of the main area (see Figure 1: Area A) of the proposed new basement will be undertaken (see Section 6 and appendices for standard methodology). The excavation will incorporate the below ground impact area of the construction proposal - however due to logistical constraints two areas will be completed following the main excavation works - see below.
- To the north of the proposal site there is a small area (Figure 1 - Area B) that is too close to the northern boundary wall to allow machine excavation prior to the installation of side support. During the main area excavation, once the absence/presence of archaeological remains extending upto the area is established, a site meeting will be held with the Archaeological Planning Advisor to discuss the necessity of installing localised shoring (possibly a 'hit and miss' strategy) in order to access the area for hand excavation.
- To the south of the site (Figure 1 - Area C) the connection between the existing and new library runs adjacent to the southern standing wall which will require underpinning. As above once the absence/presence of archaeological remains extending upto the area is established, a site meeting will be held with the Archaeological Planning Advisor to discuss the necessity of hand excavation carried out in conjunction with the underpinning operation.

5 RESEARCH AIMS

5.1 General

5.1.1 The aim of the works is to determine the existence or absence of any archaeological remains, within areas of the site impacted by the footprint of the new development, and preserve any remains by record.

5.1.2 Any archaeological deposits not affected by the development will be preserved in situ.

5.1.3 To make available the results of the investigation.

5.2 Specific

5.2.1 To identify and record any Saxon deposits, seeking to identify the date that occupation was established in this location, the duration and character of activity and the relationship of any remains to the known / hypothesised Saxon and later road surfaces and defences.

5.2.2 To identify and record any remains related to late Saxon manufacturing, bearing in mind the evidence for metal-working from the 1998 evaluation and the evidence Late Saxon



manufacturing elsewhere in the town e.g.g. evidence for 9th century leather-working, flax- retting and the making of linen from St Aldates (Crawford and Dodd 2007).

- 5.2.3 To investigate the environmental and economic context of the potential Late Saxon and early medieval settlement. What can environmental deposits tell us about the function, economy and environs of the settlement (noting the potential for waterlogged deposits in deeper pits).
- 5.2.4 To see if there is any evidence that could distinguish the community to the east of the proposed principal burh from the community within the burh? Brian Durham has noted that 'many other English town foundations of the 9-10th centuries were similarly enlarged before the Norman Conquest, and in many cases it has been speculated that this involved the assimilation of a resident Scandinavian community'.
- 5.2.5 To identify and record any medieval deposits, bearing in mind the potential for evidence for land division and 'back-yard' activity relating to properties fronting High Street and Thorald's Lane (later New College/St Anne's Lane). Is there any evidence for structures fronting onto the lane? Is there any evidence for manufacturing, including leather-working and weaving known to have been key local industries in the 12th century? Is there any evidence for expansion or contraction of activity corresponding to noted periods of urban expansion and decline?
- 5.2.6 To identify and record any remains related to the development of the medieval and post-medieval college. How was the land utilised by the college? What does the material culture tell us about the function, affluence and domestic requirements of the college over time?
- 5.2.7 To identify and record any significant remains relating to the construction and use of the Grade I listed 17th century college library.
- 5.2.8 To identify and record any previously unknown archaeological remains which are revealed by the construction works.

5.3 Planning and research framework

- 5.3.1 The archaeological excavation and watching brief will be carried out within the general parameters defined by PPG16 'Archaeology and Planning'; now updated to the National Planning Policy Framework, Section 12. In addition the results will be considered in light of the Oxford Research Agenda:

<http://www.oxford.gov.uk/PageRender/decP/OxfordArchaeologicalPlan.htm>

6 STANDARD METHODOLOGY

6.1 Site procedures

- 6.1.1 Site procedures will be as defined in the Appendix to this document except where detailed/amended here. All features and deposits will be issued with unique context numbers, and context recording will be in accordance with established OA practices as detailed in the OA Fieldwork Manual (OAU 1992). All contexts, and any small finds and samples from them will be allocated unique numbers. Bulk finds will be collected by context.
- 6.1.2 Digital photographs and black-and-white negative photographs will be taken of all significant archaeological features. Plans will be drawn at 1:20 or 1:50, section



drawings of features and sample sections will be drawn at a scale of 1:20 or 1:10 as appropriate.

- 6.1.3 The site will be related to the OS and details of the grid will be included in the report and archive.
- 6.1.4 All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute for Conservation "Conservation Guideline No 2". Appropriate guidelines set out in the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" will also be followed.
- 6.1.5 All work will be carried out under the following standards and guidelines:
- IFA Standards and Guidance for Archaeological Excavation 1995 (Revised 2001 and 2008).
- IFA Standards and Guidance for Collection, Documentation, Conservation and research of Archaeological Materials 2001 (Revised 2008).
- Environmental Archaeology (English Heritage 2002).
- Geoarchaeology (English Heritage 2007).

6.2 Environmental sampling

- 6.2.1 General sampling for the retrieval of biological remains will be informed by a sampling strategy devised by Dr Rebecca Nicholson, in consultation with palaeoenvironmentalist and the Regional English Heritage Science Advisor. All sampling methods will follow procedures laid out in Guidelines for Environmental Archaeology (EH 2002) and Oxford Archaeology Sampling Guidelines. In the event of the discovery of industrial remains, such as kilns or hearths, it may be necessary to carry out scientific dating. An environmental specialist/EH advisor may visit site to advise on techniques such as archaeomagnetic dating or luminescence dating.
- 6.2.2 Bulk Samples of (where possible) 40 litres will be taken from dry, stratigraphically intact and potentially datable deposits for the recovery of charred plant remains and small bones. The interpretation of both will provide information on past economic and dietary practices, and may potentially inform about the function of features. However, sampling sizes may vary following consultation with the Regional Archaeological Science Advisor. The samples will be processed using a modified Siraf-style flotation system to 250 microns (flot) and 0.5 mm (residue). Additional, larger, samples will be wet-sieved to 2 mm from bone-rich deposits in order to maximise the recovery of small bones.

7 STRATEGY

7.1 Recording of Wall

- 7.1.1 The extent of the wall requiring removal will be fully exposed. A photographic record location and written description of the wall element will be produced.

7.2 Area excavation

- 7.2.1 Service plans will be consulted prior to the start of excavation, and it may be necessary to scan the perimeter of the site with a CAT scanner, to check for uncharted services.



- 7.2.2 An excavation area measuring approximately 786 m² will be stripped by an 8-16 ton 360° mechanical excavator, fitted with a toothless bucket. All machine excavation shall be carried out under archaeological supervision at all times.

7.3 General

- 7.3.1 The site will be fenced off from visitors and members of The Queen's College by the principal contractor.
- 7.3.2 In the event of unexpected archaeological deposits being encountered, David Radford (OCC) will be informed immediately.
- 7.3.3 In the event that human remains are discovered, OA will obtain the necessary burial licence from the Ministry of Justice, and remove the remains to established OA practises and with due care and respect.
- 7.3.4 The work will be under the direction of Richard Brown, Project Manager (MIFA) and overall direction of Dan Poore, OA South Head of Fieldwork (MIFA).

7.4 Programme

- 7.4.1 The work is currently programmed to be carried out during March- May 2015.

8 MONITORING

- 8.1.1 The works will be monitored by David Radford (OCC), weekly monitoring meetings will be arranged as necessary.

9 OUTREACH

- 9.1.1 During the archaeological works the public will be kept informed of our progress. As a minimum, subject to client permission details of the excavation will be featured on OA's website, and information may also be disseminated by means of press releases, site talks and information sheets.
- 9.1.2 Visits by OCCAF and East Oxford Community Archaeology group (Archox) will be facilitated as well as a public open day, subject to the results of the excavation after machine excavation and cleaning.

10 REPORT AND ARCHIVE

- 10.1.1 A summary note will be prepared for inclusion in South Midlands Archaeology three months after the end of the calendar year.
- 10.1.2 A post-excavation assessment report in compliance with Management of Research Projects in the Historic Environment (MoRPHE), will be produced on the results of the investigation, and will be completed within nine months of the end of the fieldwork. The programme of works will be agreed with David Radford (OCC).
- 10.1.3 Following the completion of the assessment a post-excavation programme, and appropriate publication format will then be agreed with David Radford (OCC). The content and style of the report will be as defined in Appendix 9. Publication will aim to be within one year of the completion of fieldwork unless otherwise agreed in correspondence with David Radford.
- 10.1.4 The site archive including finds (subject to the landowner's agreement) will be deposited with Oxfordshire Museum Services, in an approved format.



- 10.1.5 The archive will be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage* (UKIC 1990).
- 10.1.6 The post-excavation work will include the processing, primary research, analysis and investigative conservation necessary to prepare the site archive for preservation in a usable form and to produce a report for publication. This work will be carried out according to the standards and procedures defined by MoRPHE.
- 10.1.7 A list of specialists used by OA is presented below:

Specialist	Subject
Richard McPhail (UCL)	Soil micromorphologist
Sheila Boardman (OA)	Carbonised Plant Remains (CPR)
Leigh Allen (OA)	Finds Manager
Magdalena Wachnik (OA)	Metal and bone small finds
John Cotter (OA)	Drawing Office Manager
	Saxon/medieval/post-medieval pottery
Paul Booth (OA)	Roman pottery
Matt Bradley (OA)	Head of Geomatics
Mike Donnelly (OA)	Lithic analysis
Cynthia Poole (OA)	Building Materials
Dr Louise Loe (OA)	Osteoarchaeologist
Dr Martin Allen (Fitzwilliam Museum Cambridge)	Coins
Steve Allen (York Archaeological Trust)/	Worked
Damien Goodburn Brown (Freelance)	wood/Dendrochronology
Paul Miles (OA)	IT manager
Julian Munby (OA)	Architectural Historian
Dr David Smith (Birmingham University)	Insects
Elizabeth Huckerby (OA)	Pollen
Lena Strid (OA)	Zooarchaeologist
Dr Rebecca Nicholson (OA)	Environmental manager
	Fish bone
Dana Goodburn Brown	Conservator
Elizabeth Stafford (OA)	Head of
	Geoarchaeology/Molluscs
Lynne Keys (Freelance)	Slag
Ian Scott (OA)	Metalwork
Nicola Scott (OA)	Archive Manager
Hugh Willmott (University of Sheffield)	Glass
Belfast Laboratory	C14 dating
Sarah Hall (Oxford Archaeological Research Laboratory)	Thermoluminescence dating



11 HEALTH AND SAFETY

- 11.1.1 OA will comply with all relevant health and safety legislation.
- 11.1.2 OA's Standard Fieldwork Methodology Appendix 11.4 applies.
- 11.1.3 Prior to any works agreements for access will be made with landowners/tenants and users. Accurate service plans will be obtained (together with relevant permissions) and services marked out on the ground by a competent contractor.
- 11.1.4 Secure and appropriate site welfare comprising accommodation and toilets will be provided by the Queen's College and the principle contractor as necessary.
- 11.1.5 The site will be secure but it may also be necessary to fence off deep features with *Netlon* fencing, which acts as a visual barrier only.

12 GENERAL

- 12.1.1 Appendices 7, 9 and 11 are relevant.



13 BIBLIOGRAPHY AND REFERENCES

Dodd, A (ed.), 2003 *Oxford Before the University, the late Saxon and Norman archaeology of the Thames Crossing, the defences and the town*, Oxford Archaeology Thames Valley Landscapes, Monograph No. 17

English Heritage, 2002 *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from sampling and recovery to post excavation*, Centre for Archaeology Guidelines

English Heritage, 2006 *Understanding Historic Buildings: A guide to good practice*

English Heritage, 2007 *Geoarchaeology: Using earth sciences to understand the archaeological record*

GEA, 2006 *Desk Study and Ground Investigation Report, Drawda Garden, Queen's College, Oxford*, unpublished client report

IFA, 2008a *Standard and Guidance for Archaeological Excavation*

IFA, 2008b *Standards and Guidance for Collection, Documentation, Conservation and research of Archaeological Materials*

Norton, A, and Mumford, J, 2010, *Anglo-Saxon pits and a medieval kitchen at The Queen's College kitchen extension, Oxford, Oxoniensia Vol LXXV*

OAU, 1992 *Field Manual* (ed. Wilkinson D), unpublished internal document

OAU, 1998 *Provost's Garden, Queen's College, Oxford, Archaeological Evaluation Report*, unpublished client report

OAU, 2001 *Provost's Garden, Queen's College, Oxford, Archaeological Watching Brief Report*, unpublished client report

OA 2012 *Late Saxon, medieval and post-medieval archaeology at the Nun's Garden Queen's College, Oxford (Nos. 33-38 High Street)*, Archaeological Watching Brief Report, unpublished client report

OA 2013 *Accessible Toilet, The Queen's College, Oxford, Archaeological Watching Brief Report*, unpublished client report

Oxford City Council, 2008 *Brief for an Archaeological Excavation, Queen's College, Provost's Garden*

Salter, H, E, 1921 *Appendix C*, in, J R Magrath *The Queen's College*, Vol. 1, pp. 326-331

UK Institute for Conservation, 1990 *Conservation Guideline No 2*



OA Standard Fieldwork Methodology Appendices

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by undertakings specified in a detailed Written Scheme of Investigation.

7 WATCHING BRIEFS

- 7.1 Ground disturbances (demolition, general site strip and levelling, reduction for roads, excavation for service trenches and foundation trenches) will be monitored by an archaeological supervisor assisted, where necessary, by archaeological technicians and under the overall guidance of a project manager.
- 7.2 All archaeological features and deposits exposed will be recorded.
- 7.3 Where only the tops of features or deposits are exposed, these will be located on a site plan, planned, and recorded by written description and by photographs.
- 7.4 Visible artefacts will be collected in order to assist in the dating of features and deposits.
- 7.5 Where trenches are excavated through cut features (pits, ditches, etc.) and vertical stratigraphy is not present, the features will be recorded in section with appropriate collection of finds.
- 7.6 Where ground disturbance exposes stratified remains or significant features, these will be hand excavated by the archaeologist and recorded.
- 7.7 The archaeological curator will be advised at the earliest opportunity of any archaeological features or deposits that appear worthy of preservation *in situ*.
- 7.8 On completion of the fieldwork the site archive will be compiled and security copied.
- 7.9 Proposals for analysis and publication will be determined in the light of the results of the fieldwork.

RECORDING

- 7.10 All on-site recording will be undertaken in accordance with the *OAU Field Manual* (OAU 1992).
- 7.11 A continuous unique numbering system will be operated. Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- 7.12 Plans will normally be drawn at 1:50 but in urban or deeply stratified sites a scale of 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at 1:10.
- 7.13 A register of plans will be kept.
- 7.14 Sections of features or trenches showing stratigraphy will be drawn at 1:20 or 1:10.
- 7.15 A register of sections will be kept.
- 7.16 All sections will be tied in to Ordnance Datum if possible or into the contractors TBM.
- 7.17 A black and white and digital 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.
- 7.18 Photographs will be recorded on OA Photographic Record Sheets.
- 7.19 All identified finds and artefacts from stratified archaeological deposits will be retained, although



certain classes of building material or post medieval pottery may sometimes be discarded after recording if an appropriate sample is retained.

9 AREA EXCAVATION

- 9.1 Prior to any area excavation, appropriate survey (e.g. earthwork, contour, geophysical) or sampling strategy (e.g. for topsoil artefact densities, phosphate analysis) will be undertaken prior to mechanical site strip.
- 9.2 In most cases area excavations will be stripped of topsoil and other overburden mechanically. An appropriate machine will always be used. This will normally be a 360° tracked excavator with a 1.5 or 1.8m wide toothless bucket. In other cases a JCB 3CX Sitemaster, or for work with restricted access or working room a mini-excavator such as a Kubota KH 90 will be employed. Lorries or dumpers will be used to move spoil to the storage areas. No machinery will be allowed to cross stripped areas.
- 9.3 All machining will be undertaken under direct archaeological supervision.
- 9.4 All undifferentiated topsoil or overburden will be removed down to the significant archaeological horizon in level spits; the level of the archaeological horizon having first been established by an evaluation or by the digging of test pits.
- 9.5 Mechanically excavated spoil will be monitored in order to recover artefacts that will assist in meeting the aims of the project.
- 9.6 The resulting surface will be cleaned adequately by hand using appropriate tools.
- 9.7 A site grid covering the area of investigation will be established. The grid will normally be on a 10m spacing and related to the Ordnance Survey grid. A temporary bench mark related to Ordnance Datum will be created. Alternatively the site and all features and sections will be surveyed using a Total Station or GPS, and related to the Ordnance Survey grid.
- 9.8 The sampling level of the archaeological remains that will be excavated will be determined after the initial surface clean, but will normally seek to maintain at least the following:
- All structures and all zones of specialised activity (e.g. industrial, agricultural processing, ceremonial, funerary) will be fully excavated and all relationships recorded.
 - Ditches and gullies: all significant relationships will be defined and investigated. All terminals will be excavated. Sufficient of the ditch lengths will be excavated to determine the character of each individual ditch over its entire course with consideration given to possible recutting of ditches which may not have taken place over the entire length. This will be achieved by a minimum 10% sample of each ditch length (1m wide section every 10m). Should specialised deposits (e.g. localised refuse dumping, industrial wastes) be present, then more extensive excavation will take place. Sufficient artefact assemblages will be recovered to assist in dating stratigraphic sequences and for obtaining sufficient ceramic assemblages for comparison with other sites.
 - Pits: 100% (by number) will be half sectioned. Usually at least 50% (by number) of the pits will be fully excavated. Decisions as to which pits will be fully excavated will be made in the light of information gained in half sectioning.
 - Post and stake holes: where they are not clearly forming a structure 100% (by number) will be half sectioned ensuring that all relationships are investigated. Where deemed necessary by artefact context a number may require full excavation.
 - For other features such as working hollows, quarry pits, etc., all relationships will be



ascertained. Further investigation will be a matter of on-site judgement, but should seek to define their extent, date and function.

- 9.9 Different environmental sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Bulk samples, usually 40 litres if possible, will be taken for flotation for charred plant remains. Bulk samples (10 litres) will be taken from any waterlogged deposits present for macroscopic plant remains. Columns for pollen analysis will be taken if appropriate. Mollusc samples will be collected if present. Other bulk samples (100 litres if possible) for small animal bones and other small artefacts may be taken from appropriate contexts.
- 9.10 All artefacts will be retained from excavated contexts unless they are of recent origin. In these cases sufficient of the material will be retained to date and establish the function of the feature.
- 9.11 All finds of gold and silver will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996). Where removal can not be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.
- 9.12 All known human remains will be excavated under the appropriate Ministry of Justice licence and local environmental health regulations.
- 9.13 In certain circumstances where unusual or extremely fragile and delicate objects are to be found, then their recovery will be by appropriate specialists.

RECORDING

- 9.14 All on-site recording will be undertaken in accordance with the requirements of the OAU Field Manual (OAU 1992).
- 9.15 A continuous unique numbering system will be operated. Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.
- 9.16 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.
- 9.17 Plans will normally be drawn at 1:50 but in urban or deeply stratified sites a scale of 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at 1:10.
- 9.18 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.
- 9.19 A register of plans will be kept.
- 9.20 Long sections of trenches showing layers will be drawn at 1:50 or 1:20. Sections of features or short lengths of trenches will be drawn at 1:20 or 1:10.
- 9.21 A register of sections will be kept.
- 9.22 Generally all sections will be tied in to Ordnance Datum.
- 9.23 A full digital and digital 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.
- 9.24 Photographs will be recorded on OA Photographic Record Sheets.



- 9.25 A register of small finds and environmental samples will be maintained.
- 9.26 All identified finds and artefacts will be retained, although certain classes of building material or post medieval pottery may sometimes be discarded after recording if an appropriate sample is retained. However, no finds will be discarded without the prior approval of the nominated representative of the local authority and the receiving Museum. All ironwork will be X-rayed.
- 9.27 All finds and samples will be treated in a proper manner and to standards agreed in advance with the approved recipient museum. These will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in UKIC's "Conservation Guidelines No. 2". All metal objects will be x-rayed and then selected for conservation.

ARCHIVING, POST-EXCAVATION AND PUBLICATION

- 9.28 On completion of the fieldwork the site archive will be prepared in the format agreed with the relevant local museum, who will be consulted at this stage concerning their requirements. The site archive will be security copied and a copy deposited with the NAR before post-excavation analysis begins or as soon thereafter as can be conveniently arranged. The Museum will be consulted about their conditions for accepting excavated material prior to commencement of the whole project.
- 9.29 The site archive (paper and photographic record, artefacts and environmental samples) will be prepared for long-term storage in accordance with Guidelines for the preparation of excavation archives for long term storage (Walker 1990 - UKIC) and Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission 1992).
- 9.30 A summary report will be prepared on completion of the site archive. This will include:
- 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 summary of the quantities and potential for analysis of the information recovered for each category of site, finds, dating and environmental data.
 - A list of the project aims as revised in the light of the results of fieldwork and post-excavation assessment.
 - A list of the methods which will be used to achieve the research aims (these should be explicitly linked to 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, wherever possible linking each task explicitly to the relevant method statement and 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 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.
 - A list of the personnel involved indicating their qualifications for the tasks undertaken.
 - 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 Inspector of Ancient monuments/County Archaeological Officer, and by the Inspector of Ancient monuments/County Archaeological Officer.

- 9.31 The summary report including analysis and publication proposals will be submitted to the County Archaeological Officer and/or Inspector of Ancient Monuments or equivalent for agreement.
- 9.32 Once the post-excavation project design has been accepted, the County Archaeological Officer or Inspector of Ancient Monuments or his/her 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 Inspector of Ancient Monuments/County Archaeological Officer.
- 9.33 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, but as a minimum the requirements of the Management of Research Projects in the Historic Environment (MoRPHE; EH 2005) will be met.

11 GENERAL

- 11.1 The requirements of the Brief will be met in full where reasonably practicable.
- 11.2 Any significant variations to the proposed methodology will be agreed with the local authority's archaeological representative in advance.
- 11.3 The scope of work detailed in the main part of the Written Scheme of Investigation is aimed at meeting the aims of the project in a cost effective manner. Oxford Archaeology attempts to foresee possible site specific problems and resource these. However there may be unusual circumstances which have not been included in the costing and programme.
- Unavoidable delays due to extreme bad weather, vandalism, etc.
 - Complex structures or objects, including those in waterlogged conditions, requiring specialist removal.
 - Extensions to specified trenches or feature sample sizes requested by the archaeological curator.
 - Trenches requiring shoring or stepping, ground contamination, unknown services, poor ground conditions requiring additional plant, specialist reinstatement of surfaces (i.e. tarmac, turf).

HEALTH AND SAFETY and INSURANCE

- 11.4 All work will be carried out to the requirements of Health and Safety at Work, etc. Act 1974, The Management of Health and Safety Regulations 1992, the FAME (Federation of Archaeological Managers and Employers) H & S manual Health and Safety in Field Archaeology 1991, OA Health and Safety Policy, and any main contractors requirements.
- 11.5 A copy of OA's Health and Safety Policy is available on request. OA will require copies of the H & S policies of all other contractors and operators present on site in compliance with The Manual of H & S Regulations 1992.
- 11.6 OA holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details will be supplied on request.
- 11.7 OA will not be liable to indemnify the client against any compensation or damages for or with respect to:



- Damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor);
- The use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement;
- Any other damage which is the unavoidable result of the Project in accordance with the Agreement;
- Injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents, servants or their contractors (not being employed by the Oxford Archaeological Unit) or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto.

COPYRIGHT and CONFIDENTIALITY

- 11.8 Oxford Archaeological Unit will retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide an exclusive licence to the client in all matters directly relating to the project as described in the Written Scheme of Investigation.
- 11.9 Oxford Archaeological Unit will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79).
- 11.10 OA will advise the client of any such materials supplied in the course of projects which are not OA's copyright.
- 11.11 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. OA further undertake to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

OA STANDARDS AND PROCEDURES

- 11.12 OA shall conform to the standards of professional conduct outlined in the Institute of Field Archaeologists' Code of Conduct, the IFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the IFA Standards and Guidance for Field Evaluations, Desk Based Assessments, etc. and the British Archaeologists and Developers Liaison Group Code of Practice.
- 11.13 OA is a member of the Institute of Environmental Assessment and the Council for British Archaeology.
- 11.14 Project Directors normally will be recognised in an appropriate Area of Competence by the IFA. For more extensive and complicated evaluation projects especially where they are part of large-scale programmes of work in historic urban centres, the procedures outlined in English Heritage's Management of Research Projects in the Historic Environment (MoRPHE; 2005) will be followed for immediate post-field archive preparation and initial assessment. Agreement to then be reached, in collaboration with the local authority's archaeological representative, about what aspects will need to be taken forward to provide a report in the required format containing the



information needed for planning purposes.

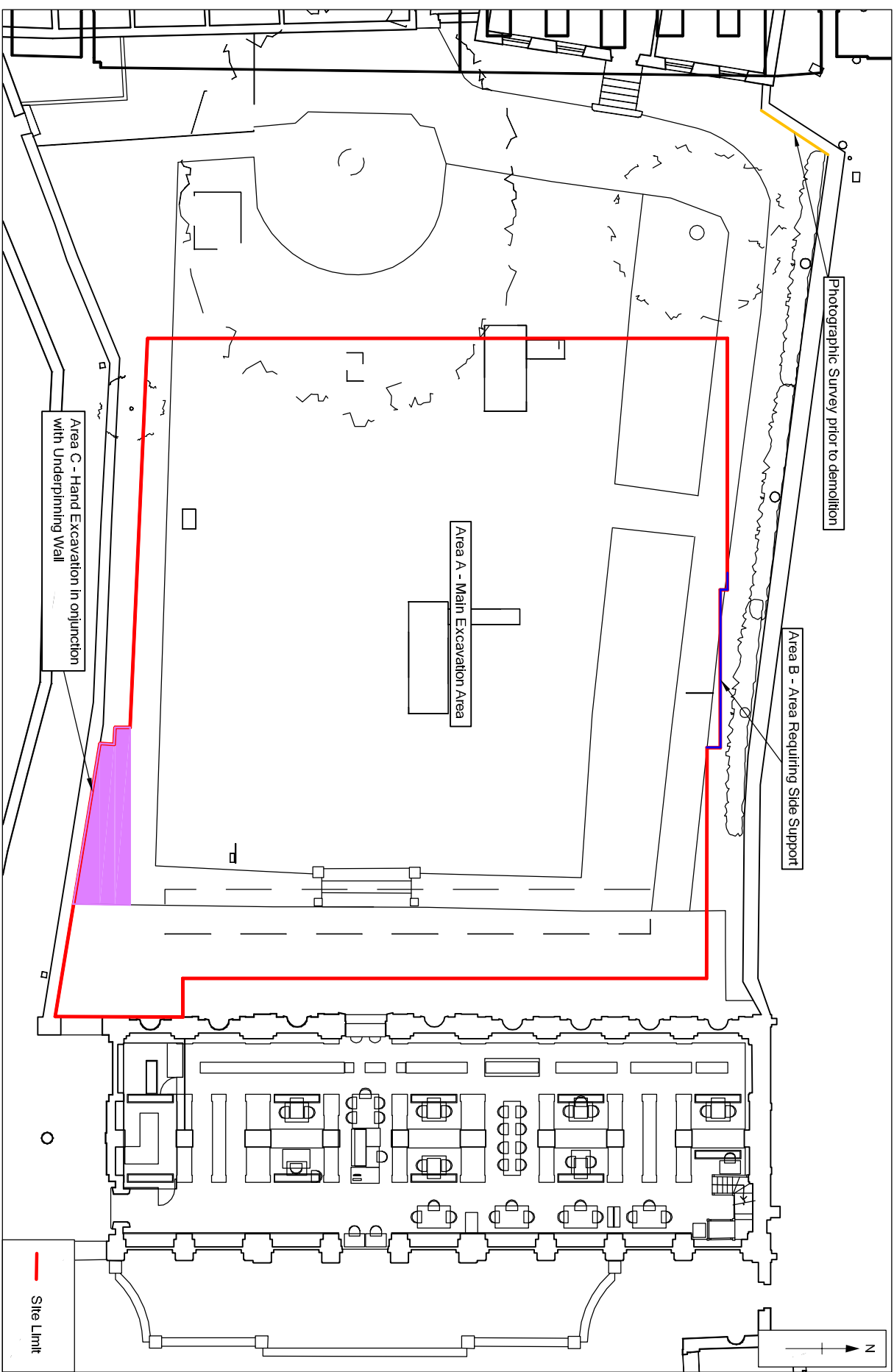


Figure 1: Site Plan

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