



Station Approach/Carfax Winchester

Written Scheme of Investigation for a Programme of Archaeological Investigation, Recording, Analysis and Publication



winchester City Council

CA Project: 770370

August 2016



Station Approach Winchester

Written Scheme of Investigation for a Programme of Archaeological Investigation, Recording, Analysis and Publication

CA Project: 770370













DOCUMENT CONTROL GRID								
REVISION	DATE	Author	CHECKED BY	STATUS	REASONS FOR REVISION	APPROVED BY		
А	18/08/16	DC		INTERNAL REVIEW				

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

CONTE	ENTS	1
1.	INTRODUCTION	2
2.	THE SITE	4
3.	ARCHAEOLOGICAL BACKGROUND	6
4.	ARCHAEOLOGICAL OBJECTIVES	8
5.	METHODOLOGY	16
6.	OUTREACH AND PUBLIC ACCESS	25
7.	FINDS AND ENVIRONMENTAL	26
8.	POST-EXCAVATION, ARCHIVING AND REPORTING	29
9.	STAFF AND TIMETABLE	32
13.	QUALITY ASSURANCE	32
14.	BIBLIOGRAPHY	34
	NDIX 1: WINCHESTER CITY COUNCIL HISTORIC ENVIRONMENT TEAM – B RCHAEOLOGICAL FIELDWORK	
APPEN	NDIX 2: RELEVANT ARCHAEOLOGICAL STANDARDS AND GUIDELINES	49

1. INTRODUCTION

- 1.1 This document sets out details of a *Written Scheme of Investigation* (WSI) for Programme of Archaeological Investigation, Recording, Analysis and Publication of land at Station Approach, Winchester, Hampshire (also known as the old Carfax site) (centred at NGR: 447812 129911; Fig 1) (hereafter referred to as 'the Site') at the request of Winchester City Council (WCC). It has been prepared in line with the current (August 2016) development proposals; any significant changes to these proposals may lead to a requirement to update this document.
- 1.2 It is acknowledged that some elements of the archaeological work cannot be specified in detail at this stage. As part of the tender submissions or prior to works commencing further details, by way of an addendum to this document, will be required; to be submitted for approval to the Winchester City Council Historic Environment Team. These include:
 - Personnel
 - Specialists
 - Timescales
 - Environmental sampling and archaeological science strategy
- 1.3 WCC has commissioned this WSI as part of the process of preparing the site for redevelopment. The redevelopment forms part of the council's vision to develop the town's economy and make the best use of key sites for sustainable development. This WSI has been prepared to set out in detail what the archaeological strategy for the site will involve and what the key objectives for this work will be. It sets out as far as possible, based on the extensive research and previous archaeological investigations undertaken both on the site and in the close area, what the nature of the archaeological resource is and how that should be best be investigated, recorded, analysed and published. The inherent uncertainties of archaeological investigation are understood and the need to maintain a flexible approach to undertaking the archaeological works is emphasised.
- 1.4 A full 'brief for archaeological fieldwork' works has been prepared by Winchester City Council in March 2016 (Appendix 1). This WSI builds on the approaches outlined in that document and provides a more detailed set of objectives and specifications for the works that are required.

1.5 This WSI has been guided in its composition by the Standard and guidance for archaeological excavation (Chartered Institute for Archaeologists 2014a), the Standard and guidance for archaeological watching brief (Chartered Institute for Archaeologists 2014b), the Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists 2014c), the Management of Archaeological Projects 2 (English Heritage 1991), the Management of Research Projects in the Historic Environment: the MoRPHE Project Manager's Guide (Historic England 2015) and any other relevant standards or guidance contained within Appendix 2. It is a minimum requirement that all works comply with the standards identified unless written consent for an alteration has been provided by the Winchester City Council Historic Environment Team. This WSI has also been informed by previous archaeological works undertaken on the site and surrounding area; the Desk Based Assessment(Wessex Archaeology 2009), the Deposit Model (Wessex Archaeology 2010), the Archaeological Field Evaluation (Cotswold Archaeology 2015) and discussions with Tracy Matthews of the Winchester City Council Historic **Environment Team.**



2. THE SITE

- 2.1 The Site is located to the north-west of central Winchester, Hampshire and lies to the immediate south-east (c.20m) of the mainline railway station and c.80m west (outside) of the north-west corner of the former Roman and medieval town defences (Figure 1). The Site comprises a roughly rectangular parcel of land measuring approximately 110m in length and 85m in width, encompassing an area of approximately 0.93 hectares. The Site is entirely enclosed by roads: to the north by Station Hill, to the east by Sussex Street, to the south by Gladstone Street and to the west by Station Road.
- 2.2 The former Hampshire County Council Register Office lies in the north-west corner of the Site, which is included in the proposed redevelopment area, and in the north east corner the modern Hampshire County Council Records Office, which is not included in the proposed redevelopment area. Around these buildings are areas of landscaping. The remainder of the site is formed by the former Register Office car park accessed from Station Road, the Gladstone Street public car park, accessed from Station Road and Gladstone Street and the Records Office car park accessed from Gladstone Street.
- 2.3 The natural topography of the Site forms part of the western River Itchen valley and slopes down from the west to the east. Ground level within the Site slopes down from a high point of c.62m above Ordnance Datum (a OD) at the south-west extent of the Site decreasing to c.57m a OD at the corner of Gladstone Street and Sussex Street, to c.56m a OD at the corner of Station Road and Station Hill, and c.49m a OD on the corner of Sussex Street and Station Hill.
- 2.4 Across the Site, the current topography suggests extensive landscaping of the ground surface during the recent past with terraces, banks, retaining walls and tree planting schemes present, dominated by the Hampshire County Council Records Office in the north east corner.
- 2.5 The underlying geology of the Site is mapped as Cretaceous Upper Chalk (soft white chalk with flints) of the Seaford Chalk Formation (British Geological Survey, Drift, Sheet 299, 1:63,360). The depth at which natural deposits occur below ground level is likely to vary within the Site.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The Site and the immediate area around it has ben subjected to numerous archaeological investigations from the mid 1960's. It is expected that the archaeological contractor undertaking the works should familiarise themselves with these works and the various report concerning them. These include:
 - Biddle, M, 1964, "Excavations at Winchester 1964, 3rd interim report", Antiq. Journal, 45, 230-264;
 - Ottaway, P. J., Qualmann, K. E., Rees, H., Scobie, G. D., 2012, "The Roman Cemeteries and Suburbs of Winchester: Excavations 1971 – 1986",
 Winchester Museums Service / English Heritage;
 - Qualmann, K. E., Rees, H., Scobie, G. D., & Whinney, R., 2004, "Oram's
 Arbour, The Iron Age Enclosure at Winchester, Vol. 1: Investigations 1950 1999", Winchester Museums Service / English Heritage;
 - Wessex Archaeology, 2010, "The Carfax Site, Winchester, Hampshire: Archaeological Desk-based Assessment. Ref. 71660.01;
 - Wessex Archaeology, 2011, "The Carfax Site, Winchester, Hampshire: Archaeological Deposit Modelling and Potential. Ref. 71660.02;
 - Cotswold Archaeology, October 2015, "Station Approach, Winchester, Hampshire: Archaeological Evaluation" (Report ref. 15724).

In addition the following forthcoming publications will also be relevant:

- Ottaway, P. J., forthcoming, "Winchester: Swithun's 'City of Happiness and Good Fortune', An archaeological Assessment" (Winchester City Council / Historic England) – access to the draft volume can be gained by contacting the Archaeological Officer; and
- Ottaway, P. J. & Qualmann, K. E., forthcoming "Winchester's Anglo-Saxon and Later Suburbs: Excavations 1971-86" (Winchester Museums Service / English Heritage) - an early draft is held by the Hampshire Cultural Trust (contact Helen Rees):
- 3.2 The archaeological background has been summarised in a variety of these documents and within the Brief, which is reproduced as Appendix 1. A further detailed summary is not therefore produced here. The following summarises the main features and deposits:

- moderate potential for Bronze Age features based on the intercutting post holes observed at New Road, which point to a sporadic occupation of the area at this time;
- high potential for features of Iron Age date, relating to the Middle Iron Age
 Oram's Arbour enclosure ditch and to Mid-Late Iron Age occupation within the
 enclosed settlement;
- high potential for finds of Roman date. In particular these include evidence of Late Roman inhumations within the Oram's Arbour enclosure ditch, and further evidence for the road, and associated activity, that crosses the site;
- limited potential for Early or Middle Saxon features/deposits, but there is high
 potential for evidence of Late Saxon buildings, pits and associated activities
 related to the development of the western suburb from the late 9th century;
- high potential for the survival of medieval features and deposits. The recent evaluation found Saxo-Norman pits with evidence of butchery activity on the inside of the line of the Oram's Arbour defensive bank and ditch.

Impact of previous development

- 3.3 The Site has been subjected to intermittent development since the Roman period. Each successive development (some of which have included cellars) will have impacted earlier deposits to some degree, all (including 19th century terraced housing remains) should be regarded as part of the archaeological record.
- 3.4 Evidence suggests that the Site lay empty from the late medieval period until the early-mid 19th century when the area saw rapid development following the introduction of the railway in 1840.
- 3.5 Certain areas of the Site have been heavily developed during the mid-late 19th century late 20th century. In the south of the Site, two rows of mid-late 19th century cottages (Gladstone Street and Ashley Terrace) are likely to have resulted in impacts on any archaeological deposits. During Biddle's evaluation at Ashley Terrace (1964), the Oram's Arbour enclosure ditch was truncated by cellars to a depth of approximately 1.5m. Despite this damage, the evaluation revealed that the ditch extended for another 2.8m below the line of truncation. For the Gladstone Street Terrace the presence of cellars remains unproven.
- 3.6 Despite the impact caused by the 19th century terraces at Gladstone Street and Ashley Terrace, away from the footprint of the buildings the rear gardens of the

properties appears to have remained unaffected by development. This was largely confirmed by the evaluation undertaken in 2015 (Cotswold Archaeology).

Deposit modelling

- 3.7 The Archaeological Deposit Modelling and Potential Appraisal (Wessex Archaeology 2011) was able to model the archaeological potential of the site based on an overview of the nature, depth and distribution of archaeological deposits gained by assessment of the results of previous excavations within the site. This study was able to inform the evaluation works and has informed the development of this strategy.
- 3.8 All the archaeological assessment and excavation work has shown that with some isolated exceptions the Site does not contain any deep or complex stratigraphy as might be expected in an urban context. On the whole the modern layers, car park surfacing, landscaping etc. lie immediately above the natural chalk with cut archaeological features (post holes, pits, ditches, etc.). There is some potential for the lower levels of the former Iron Age defensive bank to survive in parts, sealing earlier features, and the Roman period road may also seal earlier features/deposits.

4. ARCHAEOLOGICAL OBJECTIVES

- 4.1 The brief makes it clear that the principle objectives of the project will be to:
 - The investigation and recording of archaeological, biological and palaeoenvironmental remains within the Site which are subject to disturbance / destruction by the proposed development (preservation by record).
 - The analysis and interpretation of the Site archive (including the evaluation archive) in order to promote local and national research objectives.
 - The dissemination and publication of the results.
 - The long term conservation of the project archive in appropriate conditions
- 4.2 As set out above the extensive archaeological works carried out on the Site and in the area allow a good understanding of the archaeological potential of the site and it is therefore possible to identify site specific research objectives that the project may be able to contribute towards. In particular, and in line with the brief, the Solent Thames Research Framework has been considered in this context. It should be stressed that at this stage the potential to deliver against these research questions is variable and an attempt to articulate the level of potential is included in the following.

- 4.3 The Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agenda sets out a series of questions that are regarded as being priorities for future research. These sections were prepared by experts in their field and subject to extensive peer review, but as is the nature of research agendas they are subject to change as new results are fed into the evidence base.
- 4.4 The objectives from the Solent Thames Research Agenda's relevant to the archaeological potential at Station Approach/Carfax, Winchester have been set out below and then related to site specific research questions.-

The Later Bronze Age and Iron Age:

4.5 (10.1.1) Investigation of the distribution of natural deposits that could provide natural pollen and insect sequences to map environmental change through the period. — Whilst investigation on the Carfax site indicated that plant remains were 'too poorly preserved to warrant publication' (Qualman et. Al. 2004), if the right deposits are located the site clearly has the potential to contribute towards this aim.

Site Specific Objectives -

- Does that paucity of environmental remains recorded on adjacent sites continue in this area?
- Do ditch deposits survive that contain material that might contribute to our understanding of land use and/or environmental change within the context of Oram's Arbour?
- 4.6 (10.5.3) The factors that led to the common shift of settlement location in the late Iron Age need to be identified. The evidence that Oram's Arbour appear to be abandoned in the later Iron Age is clearly relevant to this research aim.

Site Specific Objectives -

- Does evidence survive in the ditch deposits or in any related internal features which might relate to the process of abandonment and change?
- Can a sequence of construction, occupation and abandonment for Oram's Arbour be more closely defined?
- 4.7 (10.5.7) Levels of occupation of forts still need further investigation, and the presence of external settlements immediately outside forts, and the relationships between them, requires further research. Although only a small area of the interior

of the hillfort will be investigated on this project it does have the potential to further add to our knowledge of the site, its form, function and defensive function.

Site Specific Objectives -

- How do the deposits and features in the interior contribute to the picture of occupation established though previous investigations?
- Did Oram's Arbour have a genuine defensive function or was it more symbolic?
- 4.8 (10.5.11) Palaeo-environmental evidence should be used to develop spatial chronologies for settlement change and to identify functions of specific sites. As stated above the evidence suggest that palaeo-environmental deposits do not survive well at this location. However, their potential should not be overlooked where sampling opportunities occur.

Site Specific Objectives -

- Do palaeo-environmental deposits survive in any feature/deposits that can contribute to our understanding of the function of Oram's Arbour and provide a comparison with those from other sites in the wider area?
- Can the palaeo-environmental deposits contribute to our understanding of intra-site activities/uses and zoning within the Oram's Arbour enclosure?
- 4.9 (10.6.7) The size of communities in the Iron Age, their social and economic relationships and the degree of economic specialisation need more investigation. Although it is considered that on this project only limited opportunities to contribute to this area of research, this area does need consideration.

Site Specific Objectives –

- Can evidence help us understand the character and size of the population of Oram's Arbour?
- How did this site relate to the broader pattern of Iron Age settlement in the area?
- Can evidence for any specialist function of Oram's Arbour be located/identified?
- 4.11 (10.12.4) More investigation is needed into the extent to which construction, maintenance and remodelling of communal enclosures and forts, with the massive deployment of labour involved, was a major means of exerting and symbolising

social and political authority. – The excavation of another section through the enclosure ditch to explore the form of the defensive bank provides a good opportunity to contribute to this area of research. Of particular interest is evidence relating to the management and role of the Oram's Arbour enclosure after the Roman conquest.

Site Specific Objectives -

- Can more evidence of the nature and structure of the defences be located under any surviving bank material?
- Do the ditch deposits conform or contrast with earlier excavations in the area with regard to the initial construction?
- Can further evidence for maintenance of the ditch during the Iron Age be found?
- Is there any evidence of periods of stabilisation or abandonment of use from the paleo-environmental and geoarchaeological remains within the ditch deposits?
- How did Oram's Arbour appear and function in the period immediately after the Roman Conquest
- 4.12 (10.12.5) Evidence from settlements suggests that society was peaceful, although this conflicts somewhat with the picture from hillforts. The idea needs to be tested. – Although the previous investigations have not produced evidence for conflict, this project should allow this to be further explored/emphasised.

Site Specific Objectives -

- Can any evidence be found in ditch deposits, the surviving bank deposits or any internal features to suggest that Oram's Arbour was involved in any form of conflict?

The Roman Period:

4.13 (12.2.1) Sites with well-preserved deposits of both late Iron Age and Roman date should be given careful attention in order to investigate continuity of local tradition at these sites. Sampling strategies should ensure that as wide a range of contexts are sampled as possible. Excavations of deep, well-sealed features are required (as opposed to buildings). — The presence of albeit limited Later Iron Age activity on the site and the proximity to the Roman Town clearly demonstrate that there is potential for this project to contribute to this research question.

Site Specific Objectives -

- What is happening within Oram's Arbour in the very Late Iron Age and immediate post Conquest period?
- Does any evidence survive on the site for early Roman military activity?
- 'small' towns requires further research. Examples with hinterlands relatively untouched by modern development offer major opportunities for research. Whilst clearly not on a location 'untouched by modern development' the presence of significant numbers of Roman burials within the enclosure ditch is highly relevant here. Of particular importance is the population mix in the ditch, with large numbers of juveniles and the location away from the extensive and well known major Roman period cemeteries in Winchester. Scientific analysis of skeletal material from the Romano-British cemetery contained within the Oram's Arbour enclosure ditch has a high potential to answer questions relating to: cemetery population (age, gender, pathology, population origins), the spatial and chronological organisation of the burials and funerary traditions and the timeframe for the use of the cemetery. The potential for comparison and analysis in relation to existing published data is high.

Site Specific Objectives -

- Does the pattern of burial activity conform that that found elsewhere in the Oram's Arbour ditch?
- How does the burial population compare with that found on other sites in and around Roman Winchester?
- How does the burial population compare with that found in other Roman Towns in southern England?
- Can the causes of death be found for the neonatal and juvenile burials?
- Does any evidence survive that might indicate social status for the burials in the ditch?
- Can any connection between be drawn the neonatal burials and those of the adults – if so what can this tell us (if anything) about death during childbirth?
- 4.15 (12.8.3) Radiocarbon dating of burials potentially post-dating AD 400. Previous investigations indicated that the burial activity in the ditch extends into the 5th century. If so the Site is clearly relevant to this research question.

Site Specific Objectives -

 Can 5th century burials be identified and if so are they suitable for C14 dating?

The Early Medieval Period:

4.16 (14.5.9) More emphasis is needed on comparison of patterns of production and consumption to shed light on the relationships between rural, specialised and urban sites. – Whilst some early medieval activity has been recorded on the Site it is not clear how extensive this activity is. However, its location on the edge of one of the most important urban centres in England for the period highlights the potential contribution that the project might make to this research question.

Site Specific Objectives –

- Can the artefactual and palaeo-environmental data provide any indications as to the nature of the activity's present on the site in the early medieval period?
- How does the chaff tempered ware found in the ditch relate to other post Roman activity on the site or in the area?
- How does that activity identified on the site compare or contrast with that from the town during this period?
- Is there evidence that the activity on site was extra-mural because of its anti-social character?
- 4.17 (14.6.8) Archaeological evidence for specialised production (eg vineyards recorded in Domesday) should be sought. The potential evidence for pre-conquest butchery activity on the Site suggests that there is some potential for specialist activities are being carried out here or very close by.

Site Specific Objectives -

 Does the evidence for butchery activity relate to a specific industry, or simply the preparation/processing of food prior to important into the town?

The Later Medieval Period:

4.18 (16.5.3) The study of faunal remains, both by quantitive analysis and through analyses such as deficiencies evident in teeth or bones, should be routinely pursued for an indication of diet. – As above the potential for butchery activity on the Site suggests that some information from the related faunal remains would be of use in this research area.

Site Specific Objectives -

- What species of cattle were being exploited?
- Is there any evidence to suggest how far these animals are being moved to bring them to Winchester?
- Can evidence for disease, diet or lifestyle of the domesticated animal remains present be determined?
- 4.19 (16.6.16) What were the reasons for the survival and persistence of urban sites from the early medieval period? As one of the most important pre-conquest urban areas in England the evidence about the continuing success or decline of the town in the post conquest period is of particular relevance here.

Site Specific Objectives -

- How does the site change in character and use through the medieval period?
- Can the relative decline in status of the City be seen in the archaeological record on site?
- 4.20 (16.6.17) What factors influenced the origins and growth of the principal towns? As above the location of the Site within the growing western suburb of the medieval city suggests that it does have the potential to contribute to this area of research, although the quantity of later medieval activity from previous excavations has been limited.

Site Specific Objectives -

- What evidence survives on the site for exploitation in the later medieval period?
- Can any evidence for occupation or the proximity to occupation be identified?
- 4.21 (16.6.23) What were the drivers for the formation of new towns, and for town extensions and retractions? Information derived from the Site for activity in the later medieval period will give a good indication of the growth and retraction of the western suburb, contributing to our understanding of these processes.

Site Specific Objectives -

- Does evidence for social or economic change in the medieval period survive on the site?

- Can the phasing of activity on the site help characterise growth and decline of the city through the medieval period?
- 4.22 In addition to these areas the brief (appendix 1 5.2) has identified a couple of research areas that are not covered by the agenda's set out in the Solent Thames research Framework. These are:
 - Chaff tempered wares have previously been recovered from the fills of the Oram's Arbour ditch; the recovery of such material from stratified deposits can contribute to on-going work to better define and date Winchester's pottery sequences in the Early – Middle Saxon period.

Site Specific Objectives -

- Can the chronology of the chaff tempered pottery be more closely defined?
- How does the chaff tempered potter relate to the stratigraphic sequence and can phasing on the site allow it to be related to more discrete features either side of the ditch?
- Are the quantities of material located any more than causal loss from nearby activity?
- Legacy and Inheritance the ending of the Roman Britain and the transition into the Anglo-Saxon period and following the Norman Conquest.

Site Specific Objectives – (As above)

- Can 5th century burials be identified and if so are they suitable for C14 dating?
- How does the chaff tempered ware found in the ditch relate to other post
 Roman activity on the site or in the area?
- How does the site change in character and use through the medieval period?
- Does evidence for social or economic change in the medieval period survive on the site?
- Can the phasing of activity on the site help characterise growth and decline of the city through the medieval period?

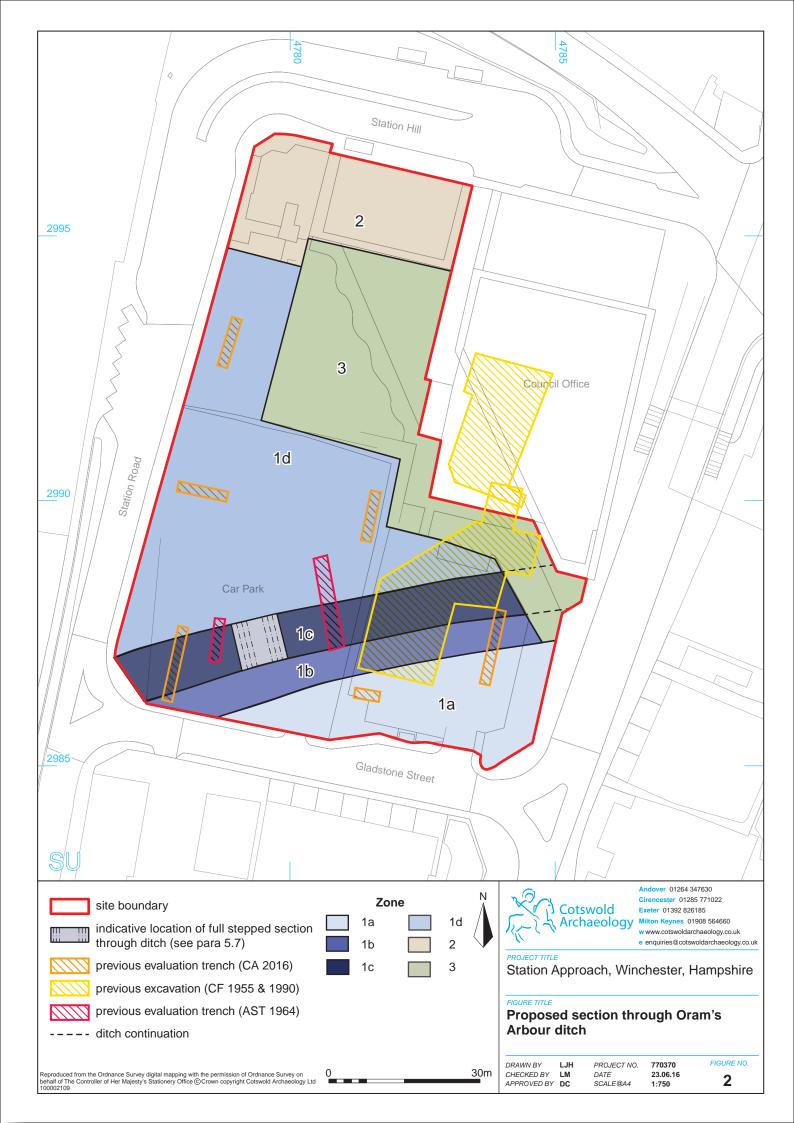
5. METHODOLOGY

Overview

- The brief (Appendix 1) has roughly subdivided the Site into three zones where different archaeological responses are required (Fig 2). The Site works can be summarised as 'Excavation' (Zone 1 for the purposes of this WSI), 'watching brief' (Zone 2 for the purposes of this WSI) and no development impacts and therefore no mitigation required (Zone 3). Since the brief was prepared it has been further confirmed that the landscaped land to the rear (west) of the Hampshire County Records office is to be excluded from the watching brief area (this is shown as part of Zone 3 on Fig 2).
- 5.2 For all areas within zones 1 and 2 all of the modern features and overburden, the current car park surfaces, wall, trees and buildings (former register office), etc. will be removed under archaeological direction. In this case it is not anticipated that permanent archaeological supervision of this operation will be required, but a briefing by the archaeological contractor before works commence and regular site visits will be required to ensure that this activity is being undertaken appropriately. Once all modern surfaces/features have been removed all further machine excavation should be undertaken in 0.10m spits deploying a toothless ditching bucket. All machining will be conducted under archaeological supervision and should cease when the first archaeological horizon or natural substrate is revealed (whichever is encountered first).
- 5.3 At this stage it anticipated that all arising's and spoil will be removed from site by the main contractor. The location of temporary spoil heaps and haul routes across the site should be agreed with the archaeological contractor at the earliest possible point.

Zone 1

5.4 For the purpose of this WSI the zone 1 'excavation' area has been subdivided into 4 sub-zones – a. the area inside the Iron Age defences in the South East corner of the site – b. the area under the former defensive bank – c. the Oram's Arbour ditch including the Roman period cemetery, - and d. the area outside the Iron Age ditch. These sub-divisions are not to be maintained into the interpretation and analysis unless the archaeological results indicate that they continue to be relevant. With the exception of the Oram's Arbour ditch (section 5.7) the sampling strategy should follow the generic approach set out below (section 5.28).



- 5.5 Zone 1a. The previous archaeological works and the evaluation results suggest that archaeological features cut into the natural chalk survive well in this area, but little natural overburden survives. This area should be stripped by machine to the top of the natural chalk deposits. Where necessary this surface should be cleaned by hand to ensure all archaeological features have been identified.
- Zone 1b. This are is linear in nature following the line of the former Iron Age rampart. In the previous Carfax excavations only a single deposit of compacted chalk with flints was 'tentatively' identified as a possible remnant of the rampart. However, elsewhere former rampart material has survived, albeit greatly eroded. Supervision of stripping in this area should take great care to ensure that any potential rampart deposits are identified. If any pre-rampart deposits are identified the appropriate level of environmental sampling should be undertaken to see whether the pre-enclosure environment can be characterised.
- Zone 1c. The most complex feature on the site, both archaeologically and in logistical terms is the Oram's Arbour ditch which runs through the Site and of which a section approximately 45m in length lying between the 1975 new Road excavation and the 1985 Carfax excavation will be exposed. As a good understanding of the ditch in this area already exists a full hand dug excavation of the total length of the ditch will not be necessary (see below for a discussion on the Roman period burials). In addition at least part of the ditch has been compromised by 19th century cellaring. It is therefore proposed to excavate a single section to its full depth, exposing a 3m linear length at its base. For health and safety reasons such a section will need to be stepped. On the assumption that the ditch is between 3.5 and 4m deep the linear length at ground level will be 9m, with 1m wide by 1m deep steps. This section should be located roughly half way between the previous sections, but the final location will be determined on site following stripping of overburden and taking into account the location of any cellars, services, etc.
- In order to ensure that a full and detailed stratigraphic sequence can be achieved though the ditch, especially those layers that might contain early medieval; chaff tempered ware pottery, the machining of the ditch deposits outside the hand excavated section, to the top of the burials (see below) should be undertaken with due care and attention. Where appropriate, where full undisturbed sequences survive, sections should be left to allow the ditch fill deposits to be appropriately recorded. These sections should ideally be contiguous where possible through the machine and hand excavated sections (but baulks / sections could be removed in

stages as depth increases, following appropriate recording, sampling and viewing from relevant specialists), but may need to be staggered. All machine excavation / sections should be completed down to the level of the Roman burials, followed by hand excavation of these, before proceeding with the remaining machine excavation in sections.

- 5.9 Although it is understood that final decisions on the strategy for excavation of the ditch will be made on site it is expected that a minimum of two further full sections of the ditch (in addition to the full had dug section, see 5.7 above) will be opened up through to the lower/base fills.
- 5.10 Zone 1c. burials following completion of the hand dug section, with the exception of the western end (see below 5.11), the remainder of the ditch should be excavated by machine (with the provision for retained/recorded sections as described in 5.8), using a flat grading bucket to the level of the burials (approximately 2.5m below current ground level). The depth of the burials will have been further clarified by the hand dug section. All burials should be excavated by hand and all human remains and associated grave goods, where present, recorded and removed.
- 5.11 It will not be possible to have a vertical section at the western end of the ditch, adjacent to the road and this end should be stepped and burials left *in situ* during this phase of works. Once final decisions on the construction approach/extents have been made it will be necessary to return to this area to remove the remaining burials under safe conditions. The final details of how this remaining area is to be excavated will be subject to discussion with the main contractor.
- 5.12 An estimate of the number of expected burials has been arrived at by comparing the numbers found in the New Road and Carfax excavations. If the burials continue at a similar distribution/density, it is expected that in the region of 150 inhumations will be present in the 45m section within the site. The previous excavations also give a good indication of the nature of the burials which can be expected. Roughly 20% (approximately 30) will be adult burials. The remainder of the burials will be neonates and infants up 18 months old. A small number of graves contained evidence for coffins, but grave goods were very limited, with only 2 of the 59 burials accompanied by pots. Hobnails were found in 6 of the graves.
- 5.13 Once all burials have been cleared and the full section described in 5.8 is completed the full depth of the ditch should be excavated by machine using a flat grading

bucket under constant archaeological supervision for the full available length, taking into account the potential restrictions at each end. Care should be taken to identify any layers/deposits of potential archaeological or paleoenvironmental and/or artefacts of interest during this exercise and manual excavation should be undertaken where these are identified.

Zone 1d. The area to the north of Oram's Arbour ditch is of mixed character with some indication that areas have been truncated, but in other areas there are indications of good archaeological survival. The previous Carfax excavations showed that upthrow from cleaning episodes of the ditch might survive here and a Roman period road runs across this area. As with Zone 1a it is expected that archaeological features will on the whole survive as cut features into the natural chalk. There are indications of early Iron Age activity in the form of enclosures demarcated by lines of post-holes, possibly representing agricultural divisions of the landscape prior to the construction of Oram's Arbour. A small Roman road/lane runs across the Site in an east to west alignment. There is also some limited evidence for 9th - 11th century activity in the area south of the former Register Office. This area should be stripped by machine to the top of the natural chalk deposits. Where necessary this surface should be cleaned by hand to ensure all archaeological features have been identified.

Zone 2

- 5.15 At the northern end of the site, adjacent to Station Hill the development area included the former Register Office (previously a Hotel, The Railway Tavern/South Western Inn) is known to have a large cellar and appears to be terraced into the hill. To its east lay a former garage/petrol station which is known to include a number of below ground fuel tanks. Whilst the archaeological potential in this area remains untested the modern use of the site is likely to have compromised any deposits/features present. Therefore it is expected that a watching brief will be undertaken in this area.
- 5.16 A further area of possible watching brief has been identified in the brief (Appendix 1 Fig 1) adjacent to the entrance of the County Records Office (the southern part of Area 3). At the current time it is thought that this area will be maintained as an open plaza, with little or no intrusive works. Therefore the requirement for archaeological watching brief in this area will be clarified once the design/construction plans have been finalised.

- 5.17 For all watching brief works it is expected that in all areas where undisturbed natural/archaeological deposits are encountered any ground reduction/excavation works should only be undertaken under archaeological supervision until such time as no further archaeological impacts are expected. Where no archaeological features and/or deposits are identified the contractor should be made aware of this by the attending archaeologist and any further excavation required can continue without the direct monitoring of the attending archaeologist.
- 5.18 Provision should be allowed to ensure that any archaeological deposits or features identified are adequately investigated and recorded following the approach set out below.

General Items

- 5.19 It is assumed that the Site will be fenced prior to the commencement of archaeological works and that this will be the responsibility of Winchester City Council and/or the main contractor. The fencing should be appropriate to ensure that the excavation of the burials can be carried out in a suitably respectful manner.
- 5.20 In areas of hard standing (tarmacadam, gravel and sub-base), machine excavation will progress using a breaker and/or toothed bucket to effect their removal. Once all hard standing has been removed all further machine excavation should be undertaken in 0.10m spits deploying a toothless ditching bucket. All machining will be conducted under archaeological supervision and should cease when the first archaeological horizon or natural substrate is revealed (whichever is encountered first).
- 5.21 Any modern cellars encountered should be recorded and emptied by machine. Excavation should be adapted to address the stability of deposits, but at all times Health and Safety will take priority.
- 5.22 The generated excavated spoil should be monitored in order to recover artefacts and a metal detector should be employed to enhance artefact recovery.
- 5.23 During and following completion of the machine excavation the excavated areas and any exposed surfaces should be cleaned by hand and all archaeological features should be planned and mapped using appropriate standard GPS equipment (Leica or equivalent) and Total Station (to be detailed prior to commencement of works). The use of hand tools such as mattocks, picks, shovels, trowels and small hand

tools to excavate archaeological remains should reflect and be appropriate to the features or deposits encountered.

- 5.24 All archaeological features revealed should be planned and recorded in accordance with 'the format established by the Museum of London Archaeological Recording Manual (1990)'. Each context should be recorded on a pro-forma context sheet by written and measured description; principal deposits should be recorded by drawn plans (scale 1:20 or 1:50, or electronically using appropriate standard GPS or Total Station (TST) as appropriate) and drawn sections (scale 1:10 or 1:20 as appropriate). The site plans should be tied into the National Grid and Ordnance Datum. Where detailed feature planning is undertaken using GPS/TST. Full details of the preferred recording system should be agreed prior to commencement of the works.
- 5.25 All artefact groups, and significant artefacts should be recorded in 3 dimensions,
- 5.26 Photographs (digital colour 18 mega pixel) should be taken as appropriate; black and white/medium format should be used as appropriate. The photographic record should illustrate both the detail and the general context of the principal features, finds excavated, archaeological works/activities (for outreach and publication purposes) and the Site as a whole. For all feature/deposit/area photography appropriate scales must be used.

Contingency

5.27 A contingency should be allowed for in the event that archaeological remains survive to a greater extent than anticipated within the areas to be subject to archaeological monitoring and recording and to address any as yet unknown impacts

Sampling strategy

- 5.28 All archaeological features should be sampled sufficiently to characterise and date them. However, with the exception of Oram's Arbour ditch (see 5.7 5.13 above), the following strategy should be employed as a minimum sample level:
 - 20% minimum of linear features, to be sampled in 1-2 wide sections at appropriate intervals (including termini / intersections as indicated below);
 - 100% of the deposits within linear features associated with industrial, funerary or ritual features;
 - 100% of intersections between linear features should be examined;
 - 100% of ditch terminals;

- 50% (by plan area) of each post hole except for post holes relating to structures and pits internal to structures should be 100% excavated;
- 50% (by plan area) of each pit;
- Discrete, datable and significant cut features of less that 2m² should be 100% excavated, together with 100% of discrete features manifestly rich in artefacts and/or paleo-environmental remains
- 100% of features such as hearths, kilns, storage pits, industrial, funerary or ritual structures or buildings;
- Domestic, agricultural, industrial, funerary or ritual structures and buildings should be fully excavated and recorded so that their extent, nature, form, date, function and relationships to other features and deposits can be established.
- Built structures, such as walls, should be examined to destruction and sampled so that their extent, nature, form, date, function and relationship to other features and deposits can be established
- Human remains see 5.30 5.35 below.
- 5.29 All archaeological features and significant deposits should be scanned with a metal detector prior to excavation. Any indication of metal objects present in feature fills should help guide the sampling strategy to be utilised.

Human remains

- 5.30 As detailed above it is expected that a number of human burials should be located on the Site. These should be fully recorded, excavated and removed from the Site subject to compliance with the relevant Ministry of Justice Licence which should be obtained by the archaeological contractor prior to the commencement of any site works. Removal should only take place under the terms of the appropriate Ministry of Justice licence and with due regard for environmental health regulations. Such removal should be in compliance with the Burial Act 1857 and Disused Burial Grounds Amendment Act 1981 (where appropriate).
- 5.31 All excavation and post-excavation related to human remains should be in accordance with the standards set out in IFA Technical Paper 13, 'Excavation and post-excavation treatment of cremated and inhumed remains' (McKinley and Roberts 2004).
- 5.32 Excavation of the human remains will be under the supervision of the project osteologist. Excavation will be in accordance with the 'British Association of

Biological Anthropology and Osteoarchaeology – Code of Practice' - BABAO working-group for ethics and practice, 2010. In brief this will involve; each burial given a unique context number, dug by hand and with a basic plan and photograph of each inhumation. A written description will be made of its disposition, survival, grave fill and other aspects such as grave goods or coffin fittings. Burials will not normally be 'chased' beyond the limits of the excavation, except where it is practicable or deemed necessary. Disarticulated or re-deposited bone will be given a different context number and bagged separately from any *in situ*. The articulated burials will be carefully lifted and the different skeletal areas bagged separately and placed in a box correctly labelled. Following lifting the soil remaining in the grave floor will be sampled. This will then be wet-sieved and sorted to remove loose teeth and small bone fragments. As the site anticipates a high level of non-adult remains, sampling the remaining loose soil will promote complete recovery of all the unfused epiphyses and deciduous teeth. In addition, field staff will be given instruction regarding the nature of non-adult skeletal remains.

- 5.33 Any unusual, or burials which are deemed 'complicated', will be excavated following consultation with the project osteologist on the appropriate methodology.
- 5.34 Post-excavation analysis of the human remains will follow the guidelines for best practice 'Human bones from archaeological sites Guidelines for producing assessment documents and analytical reports' (Mays et al 2002). The assessment report will comprise quantification of the material, condition of the bone and nature of the assemblage, potential of the assemblage and proposals for further study (this will include reference to scientific analysis such as radiocarbon dating and stable isotopes).
- 5.35 The final placing of human remains following analysis should be subject to the requirements of the Ministry of Justice Licence.

Treasure

5.36 The archaeological contractor should comply fully with the provisions of the Treasure Act 1996 and Treasure (Designation) Order 2002 and the Code of Practice referred to therein.

Reinstatement

5.37 No reinstatement or backfilling of areas subject to archaeological investigation should be required and at the end of the on site works it is expected that the Site

should be handed over to Winchester City Council or the main contractor. Discussions should be held prior to the completion of works to ensure that the Site is handed over in a suitable state, with no potential hazards left for others to resolve.

6. OUTREACH AND PUBLIC ACCESS

- 6.1 The brief (Appendix 1 section14) requires that the archaeological works include provision for 'public access' and a range of options for this are suggested:
 - Temporary display boards (which should be updated on a regular basis);
 - The provision of visible access to the excavation;
 - · Press releases;
 - Articles for media release:
 - Site tours / 'open days';
 - · Permanent information panels within the development;
 - A temporary exhibition at an appropriate time following completion of the fieldwork;
 - Talks to local societies / the community.
- It is accepted that the potential sensitivities associated with the excavation of human remains and the logistical issues associated with the site means that it may not be possible to provide for 'visible access to the excavation'. However, provision should be made for temporary display boards (to be updated on a regular basis), the use of social media/websites to provide updates on progress, a least 2 press releases (at the commencement of the project and one towards the completion of the main phase of fieldwork) and at least one open day to be held at a time convenient to the general public. All media activities should be undertaken in partnership with Winchester City Council. The potential for a permanent display board on site and a temporary exhibition should be discussed and agreed with Winchester City Council following the completion of the sites works and once the full significance of the results obtained are known. Allowance should be made to provide at least 3 talks to local societies/communities.

7. FINDS AND ENVIRONMENTAL

7.1 All finds and samples should be bagged separately and related to the context record. All artefacts should be recovered and retained for processing and analysis in accordance with the appropriate standards.

Finds

- 7.2 Finds should be treated in accordance with the relevant guidance given in the Institute of Field Archaeologist's Standard and Guidance for Archaeological Excavation (revised 1999), the UK Institute of Conservators Guidelines "Conservation Guideline No 2" and the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" and archaeological contractors own Technical Manuals/guidance as appropriate.
- 7.3 All artefacts from excavated contexts should be retained, except those from features or deposits of obviously modern date. No finds should, however, be discarded without the prior approval of the Local Planning Authority's Archaeological Advisors and Winchester Museums. In such circumstances, sufficient artefacts should be retained in order to elucidate the date and/or function of the feature or deposit. Although previous excavations of the Oram's Arbour enclosure have identified large quantities of animal bone, these have generally come from the lower fills of the ditch or pits adjacent to the ditch. Should such assemblages be identified they will need comparing to the published record.
- 7.4 A suitable metal detector should be used to enhance artefact recovery during the course of the fieldwork. Spoil dumps along with archaeological areas should be scanned.
- 7.5 All retained artefacts should, as a minimum, be washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions on site should be dealt with immediately in line with First Aid for Finds (Watkinson & Neal 1998). Ironwork from stratified contexts should be X-rayed and stored in a stable environment along with other fragile and delicate material.
- 7.6 Information should be obtained from the Hampshire Cultural Trust concerning conditions and arrangements for the deposition of finds.

Environmental and Archaeological Science

- 7.7 Due care should be taken to identify deposits which may have environmental potential, and where appropriate, a programme of environmental sampling will be initiated. Samples will be taken, processed and assessed for potential in accordance with Historic England (HE) guidelines "Environmental Archaeology, a guide to the theory and practice of methods, from sampling and recovery to post-excavation" and the archaeological contractors own technical manuals/guidance.
- 7.8 The sampling strategy should align with the research objectives for the site, as set out above in section 4, and the potential of deposits, such as the Oram's Arbour ditch fills, rampart deposits or sealed topsoil layers beneath this, to contribute to our understanding of the site or the wider area should be grasped. The 'Environmental sampling and archaeological science strategy' to be supplied as part of the tender submission/WSI Addendum should set out how the strategy will seek to deliver against the research objectives identified.
- 7.9 The potential for the preservation of plant macrofossils in large quantities on the Carfax site is low, as shown by the poor preservation of material in samples from earlier phases of work on the site (Qualmann *et al* 2004; Cotswold Archaeology 2015). There was better preservation of material from Middle Iron Age deposits, however, at the nearby site at Staple Gardens (Qualmann *et al* 2004). Therefore any sampling strategy should consider:
 - any early features sealed by the rampart;
 - any features with good Middle Iron Age finds assemblages; and
 - any features dated to the Romano-British period or later that can be related to specific functions e.g. corn driers, metal working areas
 - the Iron Age ditch.

There should however be a flexible approach to any proposed sampling strategy and it should be reviewed in consultation with the environmental specialist during the excavation.

- 7.10 Allowance should be made for the attendance on site of relevant specialists, geoarchaeologist and environmental archaeologist, to record exposed sections/deposits and to advise on the sampling strategy.
- 7.11 Bulk environmental soil sample sizes should be taken as per the HE guidelines, with the option to review this with the environmental specialist following on site

discussion / preliminary processing of samples. Sample processing should take place in tandem with the excavation in order to facilitate this review process. Samples should be taken following the sampling strategy from well-sealed and dated or datable archaeological features for the recovery of plant macro-fossils (charred, mineralised or waterlogged plant remains and wood charcoal), small animal bones and small artefacts.

- 7.12 Previous mollusc analysis on deposits on the Carfax site and other sites in the local area (Qualmann *et al* 2004) has indicated a local environment of a well-established open landscape during the Middle Iron Age, with a mixture of pasture and arable environments during the Roman period. The proposed sampling strategy for the recovery of molluscs is that the sampling should be concentrated on any suitable features of early date and from any buried soil layers or turves uncovered in the enclosure ditch. This should be undertaken in consultation with the mollusc specialist. Mollusc sampling should follow standard guidelines and methods.
- 7.13 If buried soils or turves are seen within the ditch, these should also be sampled by monolith. This will enable the examination of these deposits in laboratory conditions by a geoarchaeologist to further elucidate the depositional history of the Site and enable sub-sampling for microfossils and radiocarbon samples as appropriate. The potential for soil micromorphological analysis should also be considered from these deposits. This should be undertaken in consultation with the geoarchaeologist.
- 7.14 If large areas of industrial activity are uncovered, a specific sampling strategy should be developed with the specialist to try to identify the spread of hammerscale and the specific locations of the different industrial activities.
- 7.15 Bulk environmental soil samples and mollusc samples should be processed by flotation and scanned to assess the environmental potential of deposits, but will not be fully analysed. The flots and sieved fractions should be recorded and retained with the project archive. The monoliths should be subject to detailed description by the geoarchaeologist and sub-samples taken as appropriate for microfossils and radiocarbon dating, should suitable material exist. These will be assessed, but not fully analysed by the archaeological contractor or appropriate external specialist.
- 7.16 Suitable samples for radio carbon dating should be subsampled from the processed and identified plant remains in the bulk samples, well stratified remains from the monoliths or bone assemblages as deemed appropriate. Contingency should be

made for obtaining a number of radiocarbon dates at the assessment stage to address any key dating issues.

8. POST-EXCAVATION, ARCHIVING AND REPORTING

- 8.1 Following completion of fieldwork, all artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with the chosen archaeological contractors own Technical Manuals/guidance as appropriate and Winchester Museums guidelines.
- 8.2 The nature and scale of the archaeological deposits/features present indicate that a post-excavation assessment report will be required. This should be agreed with the client and Winchester City Council Historic Environment Team. The report should incorporate the results of all stages of fieldwork undertaken at the site comprising the evaluation and excavation/watching brief. Within 9 months of completion of all fieldwork a post-excavation assessment report will be prepared. This should be prepared in accordance with the standards set out in 'Management of Research Projects in the Historic Environment' MoRPHE (English Heritage 2006), the ClfA 'Standard and guidance for archaeological excavation' (sections 3.4, 3.5 & 3.6) (2014) and the ALGAO 'Advice Note for Post Excavation Assessment' produced in October 2015. Any variations to these post-excavation requirements should require the written approval of the Winchester City Council Historic Environment Team.
- 8.3 The report must contain, as a minimum the following:
 - o a site location plan at an appropriate scale;
 - o details of the archaeological organisation and personnel involved;
 - o the date of works:
 - o a site-centred grid reference;
 - a concise non-technical summary of the results;
 - a summary of the excavation methodology, indicating whether this differed from the original proposals set out in the approved Written Scheme of Investigation;
 - a summary of the nature of the features/deposits that were investigated, with supporting tabulated evidence in appendices;;
 - specialist assessment reports (see below);
 - a summary of the archive contents;
 - o a proposed radiocarbon dating programme;

- o a proposed updated project design for the detailed analysis;
- o a site plan/s to show locations of assessed samples;
- a discursive appraisal of the extent to which the site archive might enable the data to meet the research aims of the project;
- new/revised research objectives/ Update Project Design;
- a description of the type(s) of publication appropriate for the dissemination of the archaeological record;
- o survey and technical illustrations as appropriate; and
- a copy of this WSI as an appendix.
- 8.4 An assessment of the potential of the archive for further analysis should be undertaken. The assessment phase may include the following elements:
 - Consideration and assessment of the site with reference to the wider research aims as set in the Solent Thames Research Framework and the project specific research objectives set out above.
 - The conservation of appropriate materials, including the X-raying of metalwork
 - The spot-dating of all pottery from excavated contexts. This should be corroborated by scanning of other categories of material;
 - The preparation of site matrices with supporting lists of contexts by type (ditch fill, pit fill etc.), by spot-dated phase (e.g. Iron Age, Roman, Saxon, medieval, Post-medieval etc.) and by structural grouping (e.g. contexts by structure, by ditch etc.) supported by appropriate scaled plan;
 - A list of all the graves excavated with an initial assessment of the character of the burial population, an indication of any special features of this population. This should include any requirements for any scientific techniques (radiocarbon dating, isotopes) that may be necessary as part of further analysis;
 - An assessment statement should be prepared for each category of material (artefacts and environmental) and/or each technique applied, including reference to quantity, provenance, range and variety, condition and existence of other primary sources;
 - Pottery spot dating this should use the local fabric series held by the Hampshire Cultural Trust (formerly Winchester Museums).
 - The bulk soil samples should be taken for artefactual, economic, environmental and dating purposes. The samples should be assessed

and a statement made on charred food and plant remains, waterlogged remains and mollusca, including references as for the categories of finds material.;

- An assessment statement should be prepared on the geoarchaeological potential of the samples taken;
- An assessment statement should be prepared on the Zooarchaeological potential of the material recovered from the site;
- A statement of potential for each material category and for the data set as
 a whole should be prepared, including specific questions that can be
 answered and the potential value of the data to local, regional and
 national investigation priorities.
- 8.5 GIS data of the, mitigation areas and archaeological features should be submitted to the Winchester HER and UAD, ideally as ESRI shapefiles.
- 8.6 The potential for investigative conservation works to further explore artefacts should be considered. The requirement for specific conservation works to stabilise material recovered from the excavation to allow for display or long term storage should be included in the assessment.
- 8.7 Copies of any reports arising from the fieldwork should be deposited with the Winchester Historic Environment Record (HER) in PDFA format. A summary of information from the project should also be entered onto the OASIS online database of archaeological projects in Britain.

Publication

8.8 Arrangements should be made for an appropriate level of academic publication of the results of the excavations, which is anticipated to be published as an article appropriate to the level of significance in the relevant county journal. Consideration for the publication of specific aspects, such as the osteology, in spate specialist journals may also be required.

Archive storage and curation

8.9 An ordered, indexed, and internally consistent site archive should be prepared and deposited in accordance with 'Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation' (Archaeological Archives Forum 2007).

8.10 Arrangements should be made with the Hampshire Cultural Trust for the deposition of the site archive and the artefact collection.

9. STAFF AND TIMETABLE

- 9.1 Details of staff to be deployed on the project are to be supplied prior to the commencement of fieldwork. CV's for relevant staff should be made available on request. It is expected that the team will contain staff with relevant and proven experience in excavating the type, range and date of the deposits expected.
- 9.2 A full programme/timetable for the investigations and post-excavation programme should be provided prior to the commencement of any site works.

10. HEALTH AND SAFETY

10.1 All works should be conducted in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, the archaeological contractor own Health, Safety and Welfare Policies and procedures, and any Winchester City Council policies or procedures. A risk assessment should be undertaken prior to commencement of fieldwork. All staff on site should also be required to undertake a drugs and alcohol test prior to work on site.

11. INSURANCES

11.1 The archaeological contractor is expected to hold Public Liability Insurance to a minimum limit of £10,000,000 and Professional Indemnity Insurance to a minimum limit of £1,000,000, evidence for which should be provided on request.

12. MONITORING

12.1 Adequate notification of the start of site works, should be made to the Winchester City Council Historic Environment Team so that there will be opportunities to visit the excavation and check on the quality and progress of the work.

13. QUALITY ASSURANCE

13.1 The chose archaeological contractor should be a Registered Organisation (RO) with the Institute for Archaeologists. The Project Manager and Project Officers should hold either full Member or Associate status within the CIfA.

13.2 Details of the archaeological contractors Quality Control mechanisms should be made available on request.

14. BIBLIOGRAPHY

- Archaeological Archives Forum 2007 'Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation'
- Association of Local Government Archaeological Officers 2015 'Advice Note for Post Excavation Assessment'.
- British Association of Biological Anthropology and Osteoarchaeology 2010 'British Association of Biological Anthropology and Osteoarchaeology Code of Practice'
- British Geological Survey 2011 *Geology of Britain Viewer* http://maps.bgs.ac.uk/geology viewer_google/googleviewer.html
- Biddle, M, 1964, 'Excavations at Winchester 1964, 3rd interim report', *Antiq. Journal*, **45**, 230-264
- Biddle, M, 1975 'Ptolemaic Coins from Winchester', Antiquity 49, 213-215
- Biddle, M, (ed), 1976, Winchester in the Early Middle Ages: an edition and discussion of the Winton Domesday, Winchester Studies 1, Oxford: Clarendon Press
- Chartered Institute for Archaeologists 2014a 'Standard and guidance for archaeological excavation'.
- Chartered Institute for Archaeologists 2014b 'Standard and guidance for archaeological watching brief'.
- Chartered Institute for Archaeologists 2014b 'Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives'.
- Collis, J, 1978, Winchester Excavations, Excavations in the Suburbs and Western Parts of the Town, Vol. II 1949-1960, Winchester City Museum
- Cotswold Archaeology, October 2015, "Station Approach, Winchester, Hampshire: Archaeological Evaluation" (Report ref. 15724)
- Cunliffe, B, 1964, Winchester excavations 1949-60, 1. Winchester, Winchester City Council
- Historic England 2015 'Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide'.
- James, T B, 1997, Winchester, English Heritage
- James, T B, 2007, Winchester: From Prehistory to the Present, Tempus
- Keene, D, 1985 Survey of Medieval Winchester, Winchester Studies 2, Pt 2, Oxford: Clarendon Press

- Mays, S, Brickley, M, and Dodwell, N, 2002 *Human bones from archaeological sites Guidelines for producing assessment documents and analytical reports*, Centre for Archaeology Guidelines, English Heritage
- McKinley, J., and Roberts, C,.1993 'Institute for Archaeologists Technical Paper 13, Excavation and post-excavation treatment of cremated and inhumed human remains'.
- Ottaway, P. J., Qualmann, K. E., Rees, H., Scobie, G. D., 2012, "The Roman Cemeteries and Suburbs of Winchester: Excavations 1971 1986", Winchester Museums Service / English Heritage;
- Ottaway, P. J., forthcoming, "Winchester: Swithun's 'City of Happiness and Good Fortune', An archaeological Assessment" (Winchester City Council / Historic England)
- Ottaway, P. J. & Qualmann, K. E., forthcoming "Winchester's Anglo-Saxon and Later Suburbs: Excavations 1971-86" (Winchester Museums Service / English Heritage)
- Qualmann, K. E., Rees, H., Scobie, G. D., & Whinney, R., 2004, *Oram's Arbour, The Iron Age Enclosure at Winchester, Vol.1: Investigations 1950-1999*, Winchester Museums Service/English Heritage
- Scobie, G D, Zant, J M, & Whinney, R, 1991, *The Brooks, 1987-88*, Winchester Museums Service
- Wessex Archaeology, 2004 '19–20 Jewry Street, Winchester, Hampshire. Desk-Based Assessment', unpub. client report,
- Wessex Archaeology 2010. The Carfax Site. Winchester, Hampshire Archaeological Desk-based Assessment. Ref: 71660.01
- Wessex Archaeology 2011. The Carfax Site. Winchester, Hampshire. Archaeological Deposit Modelling and Potential. Ref: 71660.02
- Whinney, R, 1994 'Oram's Arbour: the Middle Iron Age Enclosure at Winchester', in A P Fitzpatrick and E L Morris (eds) *The Iron Age in Wessex: recent work*, Dorchester: Trust for Wessex Archaeology/Association Francaise D'Etude de L'Age du Fer, 86–91
- Yates, P, 2007, Time Gentlemen, Please! The Story of Winchester's Pubs, Breweries and Hotels past and present, The City of Winchester Trust Ltd

APPENDIX 1: WINCHESTER CITY COUNCIL HISTORIC ENVIRONMENT TEAM - BRIEF FOR ARCHAEOLOGICAL FIELDWORK



Site: Carfax site, Station Approach, Winchester

Date: 9th March 2016

Brief for Archaeological Fieldwork

Historic Environment, Winchester City Council

This brief is only valid for 6 months from the date of issue. After this time the Winchester City Council Archaeological Officer should be contacted. Any written scheme of investigation / Project Design resulting from this brief will only be considered for the same period.

It is expected that the Project Manager will visit the site and consult relevant grey literature and published sources before completing their written scheme of investigation / Project Design. The Archaeological Officer cannot guarantee the inclusion of all relevant information within the brief.

1. Project Background

- 1.1 Development proposals are currently being drawn up for the Carfax site (see Fig 1) and a design competition is currently underway. Further information on the project can be found on the City Council's website: http://www.winchester.gov.uk/planning/major-sites/station-approach/
- 1.2 The development will require a programme of archaeological mitigation work in accordance with the National Planning Policy Framework and policies of the Winchester District Local Plan.
- 1.3 This brief, prepared by the WCC Archaeology Officer, is for a programme of mitigation works, namely archaeological excavation and archaeological monitoring and recording (watching brief) to be carried out in advance of and intra-construction, should planning consent be granted.
- 1.4 Further to the appointment of an archaeological contractor, a *written scheme of investigation* or Project Design will need to be submitted for written approval, prior to the work commencing. The *written scheme of investigation* should include details of the number and qualifications of staff provided for the project, including specialist staff responsible for osteology, conservation, paleoenvironmental sampling and analysis and the project timetable.
 - 1.4.1 The written scheme of investigation / Project Design will conform to the guidelines contained in Historic England's Management of Research Projects in the Historic Environment MORPHE).
 - 1.4.2 The *written scheme of investigation* / Project Design must propose a timetable that is wholly compatible with the aims and objectives of the project as stated in

this brief. The proposed timetable must also consider the need for contingency, such as in the event of adverse weather conditions.

- 1.5 The following documents and publications must be read in conjunction with this brief:
 - Biddle, M, 1964, "Excavations at Winchester 1964, 3rd interim report", Antiq. Journal, 45, 230-264
 - Cotswold Archaeology, October 2015, "Station Approach, Winchester, Hampshire: Archaeological Evaluation" (Report ref. 15724)
 - Ottaway, P. J., Qualmann, K. E., Rees, H., Scobie, G. D., 2012, "The Roman Cemeteries and Suburbs of Winchester: Excavations 1971 – 1986", Winchester Museums Service / English Heritage
 - Qualmann, K. E., Rees, H., Scobie, G. D., & Whinney, R., 2004, "Oram's Arbour, The Iron Age Enclosure at Winchester, Vol. 1: Investigations 1950-1999", Winchester Museums Service / English Heritage
 - Wessex Archaeology, 2010, "The Carfax Site, Winchester, Hampshire: Archaeological Desk-based Assessment. Ref. 71660.01
 - Wessex Archaeology, 2011, "The Carfax Site, Winchester, Hampshire: Archaeological Deposit Modelling and Potential. Ref. 71660.02

The following forthcoming publications may also be relevant, for the former, access to the draft volume can be gained by contacting the Archaeological Officer; for the latter, an early draft is held by the Hampshire Cultural Trust (contact Helen Rees):

- Ottaway, P. J., forthcoming, Winchester: Swithun's 'City of Happiness and Good Fortune', An archaeological Assessment (Winchester City Council / Historic England)

 access to the draft volume can
- Ottaway, P. J. & Qualmann, K. E forthcoming "Winchester's Anglo-Saxon and Later Suburbs: Excavations 1971-86 (Winchester Museums Service / English Heritage)

2. Location and Site Description

- 2.1 For the purposes of this brief, the Site is defined as the land bounded to the south by Gladstone Street, to the west by New Road, to the north by Station Hill and to the east by Sussex Street, but excluding the Hampshire Records Office site (see Fig 1).
- 2.2 Centred at NGR SU47812 29911, the site lies on the western slope of the River Itchen valley to the north-west of the historic walled city of Winchester. The site's topography slopes from west to east, and ground levels across the site vary from c.62m aOD to c.49m aOD. The underlying geology is Upper Chalk (Seaford Formation), the depth of which varies across the site (see Cotswold Archaeology, 2015), with some deposits of orange-brown silty clay.

3. Archaeological and Historical Background

- 3.1 The Site lies to the north-west of the Roman *civitas* of *Venta Belgarum*, the late Saxon burh of *Wintancestor* and the medieval and later City of Winchester. Lying within the late Saxon and medieval western suburbs. The Site also lies just within the northern defences of the middle Iron Age enclosure known as Orams Arbour, part of whose circuit passes through the southern part of the Site.
- 3.2 An archaeological evaluation of the Site was undertaken by Cotswold Archaeology in August and September 2015 (see para. 1.5). Detailed archaeological information deriving from that investigation is contained therein, however in overview the evaluation confirmed the presence of the Middle Iron Age Oram's Arbour enclosure ditch and possible remnant bank material running across the southern part of the site. Other remains identified include Saxo-Norman / medieval pits, medieval ditches and cut features, as well as several undated features.

3.3 The 2015 evaluation findings are consistent with previous archaeological investigations undertaken in the vicinity (see para. 1.5 above) and demonstrate the survival / potential survival of archaeological features and deposits over large areas of the Site. This wider background to the Site is set out below:

3.4 Pre-Middle Iron Age period

Previous excavations within the vicinity of the Site indicate that only features cut into the natural chalk survive to the north of the Oram's Arbour enclosure, due to later truncation. These include a group of Middle Bronze Age post-holes, a pit and a group of fenced enclosures of Early Iron Age date. To the south of the Oram's Arbour ditch, less truncation seems to have occurred with a pre-Roman soil layer surviving together with an Early Iron Age ditched enclosure. An undated group of features located at the Carfax (1985) site lie below the area of the presumed enclosure rampart and thus may pre-date the Middle Iron Age enclosure, or, post-date its levelling.

3.5 Middle Iron Age period

Oram's Arbour enclosure and associated activity

During the Middle Iron Age, a substantial enclosure ditch was excavated across the southern part of the Site with an associated rampart constructed to the south of this. The ditch / rampart formed the northern defences of a large enclosure which may have comprised an Oppida or proto-town, a precursor to the Roman *civitas capital* of Venta Belgarum.

3.5.1.1 Ditch

The enclosure ditch was V-shaped with a small flat bottomed slot at its base. Previous excavations indicate that the (surviving) ditch had a width of between 7.2-9.5m and a depth of between 3.5-4.4m (or less in more truncated areas). The ditch profiles are however almost certainly the result of heavy weathering. The earliest ditch fills date to the early Roman period and there is evidence of recutting or cleaning. At the New Road site, at least two phases of re-cutting or cleansing was identified, the earliest possibly pre-Roman and the latest dating to the 2nd or early 3rd centuries. The northern edge of the ditch has also been altered by Romano-British quarrying and (at New Road), the excavation of a medieval ditch along its southern edge. There are also indications that the ditch was excavated in segments (New Road). Outside of the previously excavated areas, the enclosure ditch will survive well, although as indicated by the 1964 excavation, the cellars of the former Ashley Terrace have impacted the upper fills of the ditch in the western part of the Site.

3.5.1.2 Rampart and internal activity

An area of possible *in situ* rampart material was located, 1m deep, at the Carfax (1985) site. There was no evidence of structural remains within the possible rampart deposit, suggesting a dump or glacis style construction. Elsewhere, evidence for the rampart area is largely based on negative evidence and the location of contemporary (internal) occupation deposits / features and later deposits / activity. The rampart (including a possible berm) is thought to have been c.8m wide. To the south of the Site, a stratified sequence of Early/Middle Iron Age and Middle Iron Age activity was recorded however this level of preservation did not extend northwards towards the Site.

3.5.2 Activity north of the enclosure

There are indications of cultivation activity to the north of the enclosure in the Middle Iron Age. Above this a series of deposits (comprising frost shattered chalk and silts) have been identified at several sites, representing upcast material from

cleansing of the enclosure ditch. At the Carfax (1985) site, these deposits (representing at least 4 episodes separated by thin silt layers probably representing developed turf) were at least 4m wide and over 1.3m high, although at the western edge of that excavation they had been truncated by late medieval / post-medieval gardening activity. Much of this upcast material is likely to represent pre-Roman ditch silting. There is also some evidence (post-holes for activity to the north of the enclosure during the Iron Age.

3.6 Romano-British period

The earliest silts preserved in the Oram's Arbour ditch are largely Early Roman in date (possibly some are earlier). The pattern of erosion, silting and cleansing of the ditch observed in the Iron Age continued into the Early Roman period with re-cutting or removal of the upper ditch silts in the 2nd-3rd centuries also noted. Cutting the northern lip of the ditch (and the upcast deposits) was a series of intercutting quarries (also sealed by later ditch silting and deliberate infilling deposits)).

In the late Romano-British period (late 3rd-4th centuries), the enclosure ditch (and it is assumed the rampart due to the presence of a number of burials located in what is assumed to be the lee of the rampart) were utilised as a cemetery. Burials were observed in the western part of the ditch excavated at Carfax (1985) and at other sites to the west; however the eastern part of the ditch at Carfax (1985) had a different character, being deliberately infilled rather than used as a cemetery. Furthermore no burials were identified at Sussex Street, which may also indicate a different character to the ditch in this area (closest to the defenced town) in the late Romano-British period.

Phases of burial occur within the ditch, separated by episodes of silting; an unusually high proportion of burials inserted into the ditch are those of infants. Subsequent to the cemetery use, the ditch continued to silt into the Late Roman period, with some evidence for a water-worn channel in the ditch fills. The upper Late Roman ditch fills can be linked to deposits outside of the enclosure ditch, preserved in the lee of the slope of the Fulflood valley.

At both New Road and the Carfax (1985) sites, heavy truncation meant that the rampart and Roman deposits/ features both within and outside the enclosure were largely absent. However, upcast deposits survive immediately to the north of the ditch and, at the Carfax site, to the north of this bank of upcast, four phases of an east-west road with some evidence of roadside occupation was located.

3.7 Late Saxon / Medieval

Surveys in the Winton Domesday show that by the 12th century, the western suburb contained a large number of royal holdings, probably of Anglo-Saxon origin (Biddle and Keen 1976, 265) and included residences for Royal officials and a hawk mews (see particularly the Sussex Street excavations).

Silting of the Oram's Arbour ditch continued in the late Saxon and Saxo-Norman periods (the ditch was largely infilled by the 10th-12th centuries), and there is also some evidence of ploughing in the late Saxon period. Deposits of re-deposited natural observed at several sites over and to the south of the ditch may relate to the digging of the town defences in the late Saxon / medieval periods. The Oram's Arbour rampart possibly survived as a feature until the 13th-14th century and seems to have influenced later activity, land organisation and the reorganisation of the medieval western and northern suburban defences in the 12th century.

To the north of the Oram's Arbour ditch, pits and property boundary ditches of the late Anglo-Saxon and medieval date were recorded at the New Road site. A new ditch was dug along the southern lip of the silted Oram's Arbour ditch in the Saxo-Norman period and to the south further ditches may also have formed medieval property boundaries.

At the Carfax (1985) site late Saxon and medieval remains included property boundaries, a lane immediately to the north of the earlier Roman road surfaces, timber buildings and pits / other features. In the late medieval period a (?partly) masonry building was constructed, it's long axis aligned to Sussex Street and containing the remains of a stacked tile heath, oven base and contemporary floor deposits and a well were present (foundations observed at Sussex Street 77 Tr XIV may also relate to this building).

3.8 Post-Medieval – Modern

Remains of 17th-18th century hop gardens were recovered at the New Road site, together with contemporary pits and features of unknown function. Boundaries (post holes); pits / wells and the remains of Victorian services, features and gardens were recorded at the New Road and Carfax sites, including remains of the Station Master's House.

3.9 Potential of the Site

- 3.9.1 The Site is considered to have high potential for archaeological remains as well as areas of modern truncation. Earlier prehistoric remains are likely to comprise of scattered discrete features, for the later prehistoric period the main features comprise the Oram's Arbour enclosure and related activity, but there remains the potential for occupation activity both inside and outside of the enclosure, depending on the impact of later activity.
- 3.9.2 Previous excavations have removed the evidential value of deposits relating to the Iron Age ditch within the south-eastern part of the site. In the south-western part of the Site, the cellars of Ashley Terrace will have impacted on the upper ditch fills and two trenches were also excavated through the ditch here in 1964. However, with the exception of these impacts, the ditch is expected to survive well in this part of the Site and will likely contain further remains associated with the late Romano-British cemetery.
- 3.9.3 Deposits / layers associated with the later history of the ditch and subsequent activity are also likely to survive within the Site. Saxo-Norman and medieval occupation and activity is also likely to survive within the site. Occupation is likely to have fronted onto Sussex Street during these periods and as such, surviving archaeological remains within the areas of highest potential within the Site are likely to relate to backlands activity.
- 3.9.4 Given the location of the site and information from previous investigations within the area, the presence of waterlogged deposits and organic material preserved within anaerobic conditions is not anticipated, except potentially at the base of very deep features.

4. Development Impacts & Project Background

4.1 As the Site is currently the subject of an architectural competition, there are no detailed development proposals. However, the development brief is for a mixed use development, comprising housing and commercial development.

- 4.2 The Site is likely to be comprehensively developed and current indications are that it will include 1.5 floors below ground level, to accommodate car parking and to take account of the levels change across the site. The development is likely to comprise between of between 3-5 storey's, in a number of blocks across the site. Development impacts will also include new services, drainage and landscaping.
- 4.3 The Site currently comprises areas of car parking, landscaping and the former Hampshire Register Office, which are set on different levels, with terraces and retaining walls forming part of extensive landscaping of the Site in the recent past. This landscaping will have affected the archaeological potential differentially across the site, with some areas in the centre / north of the Site likely to have been heavily truncated. Conversely the 2015 evaluation has demonstrated that large parts of the Site, particularly in the west and south (except where the subject of previous archaeology work), have been less truncated, with consequent good survival / potential survival of archaeological remains.
- 4.4 Further to the impacts of recent landscaping and previous archaeological investigations and the likely impacts of the proposed development, the Archaeological advisor to the Local Planning Authority has advised that preservation by record will form an appropriate mitigation strategy.
- 4.5 The broad mitigation strategy comprises areas of open excavation and archaeological monitoring and recording, as set out in Section 6 below and shown on Fig 1.

5. Aims and Objectives

- 5.1 The principle objectives of this project are:
 - The investigation and recording of archaeological, biological and palaeoenvironmental remains within the Site which are subject to disturbance / destruction by the proposed development (preservation by record).
 - The analysis and interpretation of the Site archive (including the evaluation archive) in order to promote local and national research objectives.
 - The dissemination and publication of the results.
 - The long term conservation of the project archive in appropriate conditions.
- 5.2 The principle objectives are to be realised within the context of a site specific research framework, focusing on local, regional and national research agendas. Although no overarching research strategy has yet been developed for Winchester, there is still scope for setting research priorities against which fieldwork and off-site analysis should be set, based on the forthcoming Winchester Urban Archaeological Assessment, knowledge from previous archaeological investigations within and around the site and the Solent Thames Regional Research Framework (RRF). For example:
 - Evidence may be located which could help to address the role and function of the Orams's Arbour enclosure, whether in terms of political and social organisation or defensive capabilities.
 - Inheritance evidence may be recovered relating to the management and role of the Oram's Arbour Enclosure after the Roman conquest.
 - Scientific analysis of skeletal material from Romano-British cemetery remains contained
 within the Oram's Arbour enclosure ditch have a high potential to answer questions
 relating to: cemetery population (age, gender, pathology, population origins), the spatial
 and chronological organisation of the burials and funerary traditions and the timeframe for
 the use of the cemetery (potential for burials to post-date 400 AD?). The potential for
 comparison and analysis in relation to existing published data is high.

- The study of Roman material culture from stratified deposits has the potential to provide information on manufacturing and trade.
- Chaff tempered wares have previously been recovered from the fills of the Oram's Arbour
 ditch; the recovery of such material from stratified deposits can contribute to ongoing
 work to better define and date Winchester's pottery sequences in the Early Middle
 Saxon period.
- Legacy and Inheritance the ending of the Roman Britain and the transition into the Anglo-Saxon period and following the Norman Conquest.
- Evidence from the site can provide information on the development of the medieval suburb, increasing the corpus of knowledge which can be used to consider this in relation to the occupation and activity within the defended area and other contemporary settlements. Evidence of tenements, living conditions, rubbish and deposit survival, the economy, manufacturing and trade may be recovered.
- 5.3 The contractor should develop a research agenda, based on the identified research priorities (and other questions thought appropriate) as part of the *written scheme of investigation*. The research agenda will be reviewed as necessary during the course of the archaeological programme.

6 Archaeological Programme

The archaeological mitigation programme set out below will be undertaken in accordance with the aims and objectives and research priorities as expressed above in Section 5 and in accordance with the methodologies expressed below in Section 7.

Note: The Mitigation areas shown in Fig 1 are partly based on GIS data pertaining to previous archaeological investigations, the precise accuracy of which is not guaranteed.

6.1 Archaeological Excavation

- 6.1.1 Open area excavation will be undertaken across the western and southern parts of the site (as shown on Fig 1), where the survival of archaeological remains and untruncated natural chalk which may contain archaeological remains has been demonstrated.
- 6.1.2 Following stripping of modern surfaces (see 7.1 below); the area will be cleaned and planned prior to hand excavation.
- 6.1.3 The full extent of an area of large modern deep disturbance identified in Tr 5 during the 2015 evaluation has not been determined, but this will be excluded from the archaeological excavation
- 6.1.4 The Oram's Arbour ditch comprises a significant cut feature running across the southern part of the Site. Given the likely significant impacts which will arise from the proposed development full excavation of deposits within the surviving sections of the Oram's Arbour ditch is required (with attendant environmental / geoarchaeological sampling and biological, osteo-archaeological and dating considerations, etc).
- 6.1.4.1 A safe methodology for working at depth should be developed (see para. 15.4 below); this relates both to the Oram's Arbour ditch and any other deep intrusions encountered (such as pits and wells).
- 6.2 Archaeological Monitoring and Recording
- 6.2.1 Archaeological monitoring and recording will be undertaken in two areas as shown in Fig 1.

- 6.2.2 The first area comprises the former Hampshire Register Office and land to the east and south-east of this, where previous landscaping and other impacts are considered likely to have affected the archaeological potential of the area.
- 6.2.3 The second area is located at the east of the Site, to the south of the Hampshire Record Office. Here groundworks in the area of the Oram's Arbour enclosure ditch alignment will be monitored. Although this area has been subject to significant landscaping and truncation, it is considered prudent to maintain a watching brief in the event that basal deposits of the ditch survive below the existing ground levels and to confirm that no human remains are present (previous investigations have suggested that this part of the ditch did not contain any burials).

6.3 Areas where no archaeological mitigation work is required

6.3.1 Two area shown on Fig 1 are excluded from the archaeological mitigation programme on the basis that they have been subject to extensive ground reduction such that their surviving archaeological potential is considered negligible, or they have been the subject of previous archaeological excavation, which, together subsequent landscaping has removed any remaining archaeological potential (with the possible exception of an area discussed in para. 6.2.3 above).

6.4 Additional development impacts

6.4.1 As the development proposals are still at an early design stage, there is the potential for as yet unknown development works to impact on archaeological remains, particularly any services, drainage or enabling works undertaken outside of the development red line. Any such works will be the subject of appropriate archaeological mitigation, but cannot as yet be defined. Such mitigation work may range from archaeological monitoring and recording through to archaeological excavation.

6.5 Contingency

6.5.1 A contingency amount should be allocated in the event that archaeological remains survive to a greater extent than anticipated within the areas to be subject to archaeological monitoring and recording (Section 6.2) and to address any as yet unknown impacts (para. 6.4.1).

7 Excavation Methodology

- 7.1 If a machine is to be used for excavation this must be fitted with a toothless ditching bucket and must be used only to remove modern surfaces and overburden down to the top of archaeological deposits or the top of natural deposits, whichever is encountered first. All machining should be undertaken under the supervision of a suitable qualified archaeologist. Upon reaching the first significant archaeological horizon machine excavation will stop and hand excavation proceed.
- 7.2 'Mattock testing' of archaeological features should only be undertaken in exceptional circumstances.
- 7.3 Homogenous horizontal deposits (such as 'dark earth' deposits) must be removed in spits, samples sieved (to act as a control) and recorded in spits to allow for vertical separation of artefacts and ecofacts. Specialist samples may also be required (see para's. 8.1, 8.4 and 8.6 below).
- 7.4 For all areas excavated the contractor will identify, characterise, record and excavate stratigraphically all archaeological elements. A single context planning methodology should be utilised and for stratified deposits, a matrix should be constructed of all contexts located to aid interpretation during fieldwork and in post-excavation analysis.

- 7.5 Pits and other non-structural intrusions should be excavated in a manner that allows for their stratigraphic recording. The manner of excavation should allow for the identification of post-pipes, post-packing and any related material.
- 7.6 As parts of the archaeological sequence / cut features present within the site are expected to exceed a depth of 1.2m, the *written scheme of investigation* should outline a methodology (normally trench shoring) to enable deeper excavation to proceed, whilst minimising the effects upon the archaeological programme.
- 7.7 Geoarchaeological and environmental samples should be collected as appropriate following the strategies presented in the *written scheme of investigation* and in consultation with the relevant specialist (see Section 8 below).
- 7.8 Spoil from the trenches should be scanned (including using a metal detector) to facilitate recovery of artefactual material.

8 Sampling Methodology

- 8.1 The written scheme of investigation should include a strategy for Archaeological Science (biological analysis, conservation, dating, geoarchaology, isotope analysis, molluscs, osteology, soil science, and analysis of technological residues, ceramics and stone etc), which should be fully integrated into the project. The sampling strategy should include a reasoned justification for the selection of deposits for sampling and should be developed in collaboration with appropriate specialists. The strategy should be based on the previous fieldwork results and the research objectives and will be reviewed during the course of the project. All specialists must be named in the written scheme of investigation.
- 8.2 The contractor should consult the English Heritage Regional Advisor for Archaeological Science (Jane Corcoran, Historic England Science Advisor (South East), Eastgate House, 195-205 High Street, Guildford, Surrey, GU1 3EH Jane.Corcoran@english-heritage.org.uk) prior to the completion of the strategy.
- 8.3 Where there is evidence for industrial activity, large technological residues will be collected by hand. Soil samples should be taken from contexts containing hammerscale, particularly primary contexts. Reference should be made to "Archaeometallurgy Guidelines for good practice", Historic England 2015).
- 8.4 Buried soils and sediment sequences should be inspected and recorded on site by a recognised geoarchaeologist as this may provide sufficient data for understanding site formation processes. Samples may be collected for analysis of chemistry, magnetic susceptibility, particle size, micromorphology and/or other techniques as appropriate.
- 8.5 Environmental samples (bulk samples and samples for coarse sieving from dry deposits) should be processed at the time of fieldwork wherever possible, partly to allow for variation to the sampling strategy if necessary, but also because processing at a later stage causes delays.
- 8.6 Geoarchaeological and environmental samples should be taken in accordance with the guidelines contained in the Historic England documents "Geoarchaeology, 2015" and "Environmental Archaeology" (2011). Sampling strategies for wooden structures should follow Brunning (1996).
- 8.7 All finds (artefacts and ecofacts) from the site will be retained (unless a sampling procedure has been agreed). They will be removed from the site for processing,

including the X-ray of all metal objects (excluding obviously recent objects and objects of lead) and conservation where necessary, in preparation for further analysis and archiving. Provision must be made for specialist treatment of finds (including investigative conservation), by a conservator.

9 Recording Methodology

- 9.1 The recording system utilised by the appointed contractor should closely follow the format established by the Museum of London Archaeological Recording Manual (1990).
- 9.2 Comparative site levels will be recorded for each feature or importance context with reference to an OS datum or, if unfeasible, an on-site datum.
- 9.3 All plans should be digitised and 3D recording of artefact groups and single significant finds and environmental samples undertaken.
- 9.4 A photographic record of all stratigraphic units and trenches should be compiled, together with a representative photographic record of the progress of the archaeological work. If digital photography is used, both tiff and RAW formats should be taken
- 9.5 Provision should also be made for the use of a medium format camera to maintain a black and white record of significant discoveries for publication purposes.
- 9.6 A diary record of the progress of the archaeological work must be kept, including details of liaison and monitoring meetings, visits and a record of staff on site.

10 Post-Fieldwork

- 10.1 Following completion of on-site work and sign off of the work, a preliminary summary of the results shall be submitted to the Archaeological Officer.
- 10.2 A programme of post-excavation assessment (to include the evaluation archive), following procedures set out in MORPHE should be undertaken. The resulting assessment report should include a Statement of Potential and an Updated Project Design. The assessment report should also include relevant tabulated data and catalogues, including a 'Harris Matrix'.
- 10.3 The Updated Project Design should be designed in light of the recent academic publications from adjacent excavations and in consideration of the advances in archaeological science since these excavations were undertaken / and the post-excavation work on these archives largely completed. For example, C14 dating and Bayesian Statistics, Isotope Analysis, DNA analysis, OSL, etc).
- 10.4 The assessment report should normally be available within 9 months of the completion of all site works.
- 10.5 Following review and approval of the assessment report and the Updated Project Design, the approved programme of post-excavation analysis will be implemented.

11 Publication

11.1 The results of the archaeological programme shall be published appropriately. This will include the submission of a summary report to the HER and publication of the results in a suitable academic journal(s) or monograph as required. The provision permanent display panels within the development (see 13.2 below) should also be explored.

12 Archive and Storage

- 12.1 Provision should be made for the assembly of a site archive which should be prepared in accordance with the guidelines contained in "Guidelines for the Preparation of Excavation Archives for long-term storage" (UKIC, 1990), "Standards and Guidance for the creation, compilation, transfer and deposition of archaeological archives" (CIFA, 2014) and "MORPHE" (Historic England, 2015) and deposited with the Hampshire Cultural Trust.
- 12.2 The archive will need to conform to any specific requirements of the receiving Trust. The Curator of Archaeology (Helen Rees, tel. 01962 826700 Helen.Rees@hampshireculturaltrust.org.uk) should be contacted with regard to this.
- 12.3 A copy of the archive report and digital data relating to the archaeological remains investigated (preferably ESRI shapefile format) shall be deposited with the Winchester Historic Environment Record for incorporation into the Winchester Urban Archaeological Database, which is a publicly accessibly record.

13 Public Access

- 13.1 Winchester City Council is committed to securing access to the historic environment for the benefit of the local and wider community. Archaeological remains uncovered during the course of the project are likely to be of great interest to the local community, local societies and a wider academic and professional audience. Accordingly a strategy for providing publicity on-site and off-site should be produced.
- 13.2 The public access strategy should consider provision of the following:
 - Temporary display boards (which should be updated on a regular basis)
 - The provision of visible access to the excavation
 - Press releases
 - Articles for media release
 - Site tours / 'open days'
 - Permanent information panels within the development
 - A temporary exhibition at an appropriate time following completion of the fieldwork
 - Talks to local societies / the community

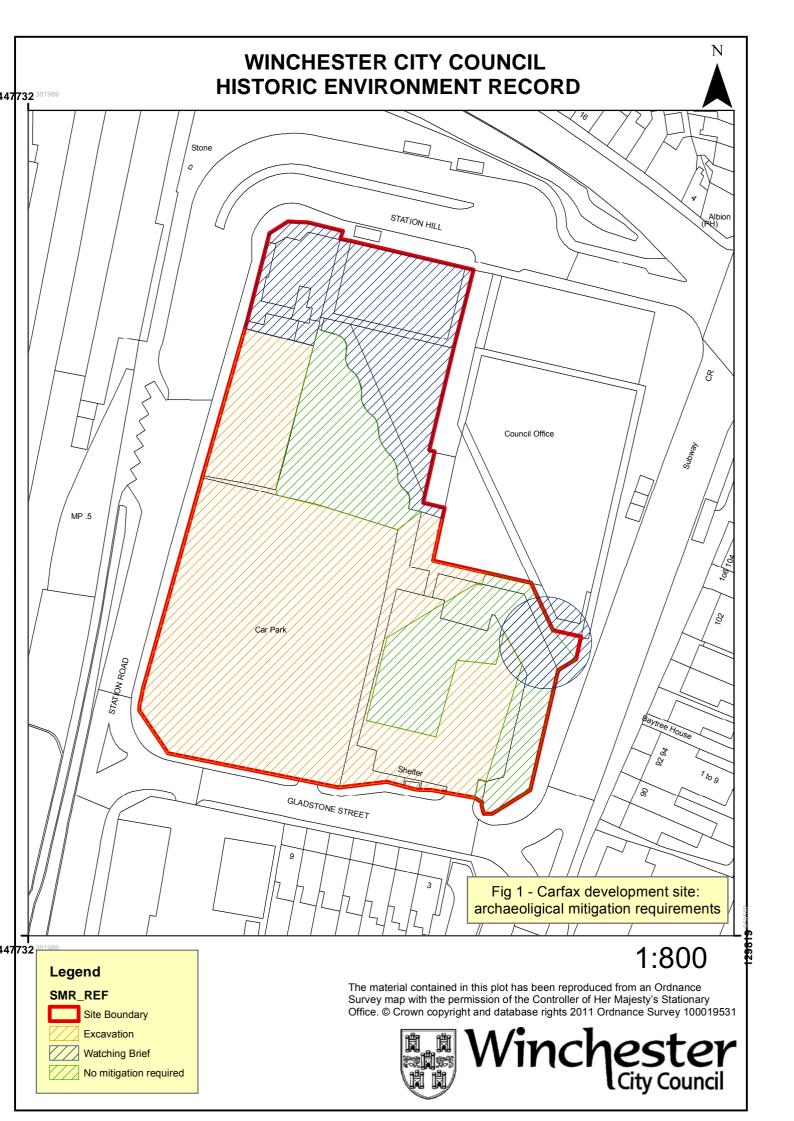
14 Monitoring

- 14.1 The archaeological programme on site, the subsequent post-excavation programme and report preparation will be monitored by the Archaeological Officer on behalf of the local planning authority by means of regular project meetings and site visits.
- 14.2 The archaeological contractor will inform the Archaeological Officer of the start date and progress of work, so that provision can be made for monitoring. The Archaeological Officer shall also be informed of any proposed changes to the timetable and also of the completion of fieldwork.

15 General Requirements

- 15.1 The Project team will comprise professional archaeologists, of whom the Project Manager, Project Officer and other relevant site staff are expected to have substantial experience of complex / urban archaeology.
- 15.2 The Project Manager will be a Member of the Institute of Field Archaeologists or equivalent EU professional body and have an appropriate level of experience for a project of this nature.

- 15.3 The Archaeological Contractor is expected to work to the relevant *Standards and Guidance for Archaeological Excavation* and *Standards and Guidance for An Archaeological Watching* Brief issued by the Chartered Institute of Field Archaeologists (CIFA) and to follow the CIFA *Code of Conduct* and *Code of Approved Practise for the Regulation of Contractual Arrangements in Field Archaeology.*
- 15.4 All current Health and Safety legislation must be followed on site, which may include undertaking a site-specific risk assessment. Specific issues identified on this site are:
 - Working at height
 - The provision of a Public Access Strategy
- 15.5 Any variation to the approved written scheme of investigation / Project Design must be agreed prior to implementation.
- 15.6 Appropriate procedures under the relevant legislation must be followed in the event of the discovery of human remains, or of artefacts covered by the provisions of the Treasure Act, 1996 (Revised 2002).



APPENDIX 2: RELEVANT ARCHAEOLOGICAL STANDARDS AND GUIDELINES

- AAF 2007 Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation.

 Archaeological Archives Forum
- AAI&S 1988 The Illustration of Lithic Artifacts: A guide to drawing stone tools for specialist reports.

 Association of Archaeological Illustrators and Surveyors Paper 9
- AAI&S 1994 The Illustration of Wooden Artifacts: An Introduction and Guide to the Depiction of Wooden Objects. Association of Archaeological Illustrators and Surveyors Paper 11
- AAI&S 1997. Aspects of Illustration: Prehistoric pottery. Association of Archaeological Illustrators and Surveyors Paper 13
- AAI&S nd Introduction to Drawing Archaeological Pottery. Association of Archaeological Illustrators and Surveyors, Graphic Archaeology Occasional Papers 1
- ACBMG 2004 Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material. (third edition) Archaeological Ceramic Building Materials Group
- AEA 1995 Environmental Archaeology and Archaeological Evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England. Working Papers of the Association for Environmental Archaeology No. 2
- Barber, B., Carver, J., Hinton, P. and Nixon, T. 2008 Archaeology and development. A good practice guide to managing risk and maximising benefit. Construction Industry Research and Information Association Report C672
- Bayley, J. (ed) 1998 Science in Archaeology. An agenda for the future. English Heritage (London)
- Blake, H. and P. Davey (eds) 1983 Guidelines for the processing and publication of Medieval pottery from excavations, report by a working party of the Medieval Pottery Research Group and the Department of the Environment. Directorate of Ancient Monuments and Historic Buildings Occasional Paper 5, 23-34, DoE, London
- Brickley, M. and McKinley, J.I., 2004 *Guidelines to the Standards for Recording Human Remains*. IFA Paper No 7,Institute of Field Archaeologists (Reading)
- Brickstock, R.J. 2004 The Production, Analysis and Standardisation of Romano-British Coin Reports. English Heritage (Swindon)
- Brown, A. and Perrin, K. 2000 A Model for the Description of Archaeological Archives. English Heritage Centre for Archaeology/ Institute of Field Archaeologists (Reading)
- Brown, D.H. 2007 Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation. IFA Archaeological Archives Forum (Reading)
- Buikstra, J.E. and Ubelaker D.H. (eds) 1994 Standards for Data Collection from Human Skeletal Remains. (Fayetteville, Arkansas)
- ClfA, 2014, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.

 Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Desk-based Assessment. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Watching Brief. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Excavation. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Field Evaluation. Chartered Institute for Archaeologists (Reading)
- Coles, J.M., 1990 Waterlogged Wood: guidelines on the recording, sampling, conservation and curation of structural wood. English Heritage (London)
- Cowton, J., 1997 Spectrum. The UK Museums Documentation Standard. Second edition. Museums Documentation Association
- Darvill, T. and Atkins, M., 1991 Regulating Archaeological Works by Contract. IFA Technical Paper No 8, Institute of Field Archaeologists (Reading)
- Davey P.J. 1981 Guidelines for the processing and publication of clay pipes from excavations. Medieval and Later Pottery in Wales, IV, 65-87
- Eiteljorg, H., Fernie, K., Huggett, J. and Robinson, D. 2002 *CAD: A guide to good practice*. Archaeology Data Service (York)
- EA 2005 Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management. English Heritage/ Environment Agency Science Report P5-077/SR (Bristol)
- EH 1991 The Management of Archaeological Projects. Second Edition (MAP2) English Heritage (London)

- EH, 1995 Archaeometallurgy in Archaeological Projects. English Heritage Scientific and Technical Guidelines No 2
- EH 1995, Guidelines for the Care of Waterlogged Archaeological Leather. English Heritage Scientific and Technical Guidelines No 4
- EH 1995, A Strategy for the Care and Investigation of Finds. English Heritage Ancient Monuments Laboratory (London)
- EH 1998, Dendrochronology. Guidelines on producing and interpreting dendrochronological dates. English Heritage (London)
- EH, 2002 *Human Bones from Archaeological Sites*. Guidelines for producing assessment documents and analytical reports. English Heritage (London)
- EH 2003 Where on Earth Are We? The Global Positioning System (GPS) in archaeological field survey. English Heritage (London)
- EH, 2003 (revised 2008), Metric Survey Specifications for English Heritage. English Heritage (Swindon)
- EH 2003 Archaeological Science at PPG16 interventions: Best Practice Guidance for Curators and Commissioning Archaeologists. English Heritage (Swindon)
- EH 2004 Dendrochronology. Guidelines on producing and interpreting dendrochronological dates. English Heritage (Swindon)
- EH 2004 Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical report. English Heritage Centre for Archaeology Guidelines
- EH 2006 Guidelines on the X-radiography of Archaeological Metalwork. English Heritage (Swindon)
- EH 2006 Archaeomagnetic Dating. English Heritage (Swindon)
- EH 2006 Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors). English Heritage (Swindon)
- EH 2007 Geoarchaeology. Using earth sciences to understand the archaeological record. (London)
- EH 2008 Luminescence Dating. Guidelines on using luminescence dating in archaeology. English Heritage (Swindon)
- EH 2008 Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use. English Heritage (Swindon)
- EH 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of archaeological wood. English Heritage (London)
- EH 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. English Heritage Centre for Archaeology Guidelines (London)
- EH and Church of England, 2005, Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England. English Heritage (London)
- Ferguson, L. and Murray, D., 1997, *Archaeological Documentary Archives*. IFA Paper 1, Institute of Field Archaeologists (Reading)
- Gillings, M. and Wise, A., 1999, GIS: A guide to good practice. Archaeology Data Service (York)
- Gurney, D.A., 1985, *Phosphate Analysis of Soils: A Guide for the Field Archaeologist.* IFA Technical Paper 3, Institute of Field Archaeologists (Reading)
- Historic England 2015 'Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide'.
- IFA, 1992, Guidelines for Finds Work. Institute of Field Archaeologists (Reading)
- Mays, S., 1991, Recommendations for Processing Human Bone from Archaeological Sites. Ancient Monuments Lab Report 124/91 (London)
- Mays, S., Brickley, M. and Dodwell, N., 2002, *Human Bones from Archaeological Sites. Guidelines for Producing Assessment Documents and Analytical Reports.* Centre for Archaeology Guidelines, English Heritage (Portsmouth)
- McKinley, J.I. and Roberts, C., 1993, Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains. Institute of Field Archaeologists Technical Paper No. 13 (Reading)
- MGC, 1992, Standards in the Museum Care of Archaeological Collections. Museums and Galleries Commission
- Murphy, P.L. and Wiltshire, P.E.J. 1994, A Guide to Sampling Archaeological Deposits for Environmental Analysis. English Heritage (London)
- MPRG 2000, A Guide to the Classification of Medieval Ceramics. Medieval Pottery Research Group Occasional Papers No. 1.
- MPRG 2001, Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics. Medieval Pottery Research Group
- Owen, J., 1995, Towards an Accessible Archaeological Archive. The Transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales. Society of Museum Archaeologists
- PCRG 1997, The Study of Later Prehistoric Pottery: General polices and guidelines for analysis and publication. Prehistoric Ceramics Research Group Occasional Paper 12
- RCHME 2007, MIDAS: A manual and data standard for monuments inventories. RCHME (Swindon)
- Richards, J. and Robinson, D. (eds), 2001, *Digital Archives From Excavation and Fieldwork: A guide to good practice*. Archaeology Data Service
- Robinson, W., 1998, First Aid for Underwater Finds. Archetype Books (London)

- RFG and FRG, 1993, Guidelines for the Preparation of Site and Assessments for all Finds other than Fired Clay Vessels. Roman Finds Group And Finds Research Group
- SGRP, 1994, Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery
- SMA, 1993, Guidelines on the Selection, Retention and Dispersal of Archaeological Collections. Society of Museum Archaeologists
- UKIC, 1983, Packaging and Storage of Freshly Excavated Artefacts from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 2)
- UKIC, 1984, Environmental Standards for Permanent Storage of Excavated material from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 3)
- UKIC, 1990, Guidance for Conservation Practice. United Kingdom Institute for Conservation
- UKIC, 1990, Guidelines for the Preparation of Excavation Archives for Long-term Storage. United Kingdom Institute for Conservation Archaeology Section
- UKIC, 2001, Excavated Artefacts and Conservation. (United Kingdom Institute for Conservation, Conservation Guidelines No 1, revised)
- Watkinson, D.E., and Neal, V., 1998, First Aid for Finds. (3rd edition) RESCUE/United Kingdom Institute for Conservation, Archaeology Section and Museum of London
- Willis, S., 1997, (ed) Research Frameworks for the Study of Roman Pottery. Study Group for Roman Pottery
- World Archaeology Congress 1989, *The Vermillion Accord Human Remains*. Motion Approved at the First Inter-Congress on the Disposal of the Dead (Vermillion)
- Young C., 1980, Guidelines for the Processing and Publication of Roman Pottery. Department of the Environment



Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 53
Basepoint Business Centre
Yeoford Way
Marsh Barton Trading Estate
Exeter
EX2 8LB

t: 01392 826185

Milton Keynes Office

41 Burners Lane South Kiln Farm Milton Keynes Buckinghamshire MK11 3HA

t: 01908 564660

