



Swan School and Meadowbrook College New Marston Oxford

Archaeological Excavation



for: RPS Consulting Services Ltd.

CA Project: MK0354 CA Report: MK0354_1 OASIS ID: cotswold2-502866

December 2021



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SUMMARY

Project name:	Swan School and Meadowbrook College, New Marston
Location:	Oxford
NGR:	452526 208373
Туре:	Excavation
Date:	April-July 2019
Planning reference:	18/01173/FUL (Condition No. 33)
OASIS ID:	cotswold2-502866
Location of Archive:	To be deposited with Oxford Museum Service and the Archaeology Data Service (ADS)
Accession Number:	OXCMS: 2019.35
Site Code:	SSMO19

Between April and July 2019, Cotswold Archaeology carried out an archaeological excavation at Swan School and Meadowbrook College, New Marston, Oxford. An area of 1.92ha was excavated across the 5.6ha development area.

The site was the focus of settlement activity from as early as the Middle Iron Age up to the end of the Roman period in the 4th century AD. Middle Iron Age settlement was characterised by enclosed and unenclosed elements with the main focus being two enclosures that contained pits, a sub-enclosure and the remains of three roundhouses. After a short hiatus in activity from around the mid 2nd century BC, renewed activity in the Late Iron Age/Early Roman transitional period saw the establishment of a trapezoidal enclosure, two trackways and associated pits, postholes and smaller sub-enclosures on land to the south-west of the main Middle Iron Age settlement focus. Activity continued into the Roman period with the establishment of a complex-type farmstead, as defined by the *Rural Roman Settlement Project*, comprising a rectilinear enclosure system focused on the junction of three trackways. It was remodelled and maintained throughout the Roman period with the most significant focus of the site being the construction and use of a pottery kiln during the 3rd to 4th centuries AD and part of the Oxford Roman pottery industry. Two Late Roman period, with no evidence of use

until the establishment of a ridge-and-furrow agricultural system in the medieval period. Postmedieval remains were limited to former field boundaries and a gully.

A large assemblage of pottery dating to the Iron Age and Roman periods and small amounts of medieval and post-medieval material was recovered. Finds typical of a rural settlement were also recovered and provide evidence for small-scale textile production, crop processing and domestic activity. Significant artefacts include an Iron Age loomweight and spindlewhorl, Roman bone needle shank/hairpin, two Roman copper-alloy brooches, a lower rotary quern and a coin dating to AD 307–318.

A complementary article synthesising this report will be submitted to Oxoniensia. The archive will be deposited with Oxfordshire Museum Service.

1. INTRODUCTION

- 1.1. Between April and July 2019 Cotswold Archaeology (CA) carried out an archaeological investigation on land at Swan School and Meadowbrook College, New Marston, Oxford (centred on NGR: 452526 208373; Fig. 1). This was undertaken at the request of RPS Consulting Services Ltd. in order to fulfil a condition (No. 33) placed on planning consent by Oxford City Council, for development of the site to include the demolition of existing buildings and replacement with new education facilities, associated parking and external play areas (ref. 18/01173/FUL).
- 1.2. The condition required the implementation of a programme of further archaeological works in defined areas of the development site, which was informed by two phases of archaeological evaluation undertaken pre-determination (CA 2018a-b).
- 1.3. The archaeological investigations were carried out in accordance with two detailed written schemes of investigation (WSI) produced by RPS Consulting Services Ltd. (RPS 2018) and CA (2019). Both of these documents were approved by the Local Planning Authority (LPA) acting on the advice of David Radford (Archaeologist, Oxford City Council (AOCC)). The fieldwork followed Standard and Guidance for Archaeological Excavation (CIfA 2014a, updated October 2020); Standards and Guidance for Archaeological Watching Brief (CIfA 2014b, updated October 2020) the Management of Research Projects in the Historic Environment: The MoRPHE Project Manager's Guide (HE 2015a) and accompanying PPN3: Archaeological Excavation (HE 2015b). It was monitored by David Radford throughout the course of the excavation and watching brief works.

The site

- 1.4. The site encloses an area of approximately 5.6ha and is located on the north-western edge of New Marston, north of the city of Oxford. It is bounded by open farmland to the north and west, Marston Brook and residential properties along Arlington Drive to the south and Cherwell Drive to the east (Figs 1 and 2).
- 1.5. Prior to the archaeological investigations, the site comprised the buildings and grounds of Meadowbrook College in the south-east and recreation land associated with Meadowbrook College and St Nicholas' Primary School across the remainder of the area. The site lies at approximately 60m aOD (above Ordnance Datum), sloping gently down from north to south.

1.6. The underlying bedrock geology of the area is mapped as Oxford Clay Formation and West Walton Formation mudstone of the Jurassic period. No overlying superficial deposits are recorded (BGS 2021). Following archaeological evaluation of the site in 2018, alluvial deposits were recorded within the southern and western parts of the site. These were probably the result of intermittent flooding within the floodplain of the River Cherwell (CA 2018a and 2018b).

2. ARCHAEOLOGICAL BACKGROUND

2.1. Archaeological interest in the site arises from previous archaeological works undertaken within the development area. These comprise a Heritage Statement (RPS 2017) and two phases of trial-trench evaluation (CA 2018a-b). The first phase of trial-trench evaluation (CA 2018a) identified archaeological remains pertaining to the Iron Age, Roman, medieval and post-medieval periods. The second phase (CA 2018b) revealed no archaeological remains. The results of these works, along with the archaeological background of the site (and 1km study area), are summarised below.

Prehistoric period (pre-AD 43)

- 2.2. The first phase of trial-trench evaluation identified two small fragments of residual worked flint, attributable to the Neolithic or earlier, within a Middle to Late Roman ditch in the south-western part of the development site (CA 2018a). A ditch containing Middle Iron Age pottery, as well as a further ditch, pit/ditch terminus and pit, likely domestic in nature and containing pottery of Late Iron Age to Early Roman date, were also recorded.
- 2.3. Within the wider study area evidence for Early prehistoric activity is limited to a flint hand axe of Palaeolithic date, found close to Marston Ferry 0.7km to the north-east of the development site (MOX9937). Activity from the Neolithic and later is generally more visible within the Oxford region, with the development of ceremonial and funerary monuments on the gravel spurs between the confluence of the Thames and Cherwell rivers (Lambrick 2013, 9–32). Within the study area the possible ploughed-out remains of a round barrow of probable Bronze Age date was identified to the north-west of the site and a barrow cemetery of a similar date was identified at University Parks to the southwest. Both sites were situated to the west of the River Cherwell (Fig. 1, MOX10055 and MOX11619). A bronze spearhead of Bronze Age date was also found in the bank of the Peasmoor Brook, 0.6km south of the development site.

2.4. Undated cropmarks are visible to the north and north-west of the development site on Google Earth imagery, and may represent the remains of buried archaeological features including prehistoric enclosures, trackways and settlement features. These features were not visible on any of the historic aerial photographs viewed at the Historic England archives in Swindon.

Roman period (AD 43 to AD 410)

- 2.5. Evidence for Roman activity was identified in the southern part of the site during the first phase of trial-trench evaluation. This comprised eight ditches, provisionally interpreted as domestic in function, that were found to contain pottery dating to the 2nd to 4th centuries AD (CA 2018a).
- 2.6. During the Early 2nd century AD an extensive pottery industry developed to the east and south-east of Oxford, aligned on the north/south Dorchester to Alchester Roman road (MOC26953). The first mention of a kiln in this area of Oxford was during the early 19th century and since then production sites have been identified in numerous locations, including Headington, Littlemore and Cowley; and as far south as Dorchester (Young 1973, 105–115, fig. 1). In the 1960s large quantities of 3rd to 4th-century AD pottery and kiln debris were found during road construction on Cherwell Drive, situated approximately 480m to the south-east of the development site (Fig. 1, Headley Way, MOX8501), and most likely represents a kiln site. Finds spots in the vicinity of Swan School and Meadowbrook College comprise a Roman coin recovered from the western bank of the Cherwell, close to Marston Ferry. This was a bronze Antoninianus of the Emperor Aurelian (AD 270–275; Fig. 1).

Medieval period (1066 to 1539)

- 2.7. Investigations within the historic core of Marston have produced evidence for settlement activity from the 11th century AD onwards, although no investigations to date have suggested that settlement was larger than at present or extended towards the vicinity of the site.
- 2.8. LiDAR imagery held by the Environment Agency shows that land within the development site was previously used for arable cultivation, with the western part of the site crossed by the distinctive elongated 'S'-shaped lines associated with medieval ridge-and-furrow agriculture. The presence of plough furrows on the northern part of the site was confirmed by the first phase of trial-trenching evaluation (CA 2018a).

Post-medieval to modern periods (1800 to present)

- 2.9. The 1814 Ordnance Survey Drawing of Ot Moor depicts the development site within an area of fields defined by very straight boundaries, indicative of piecemeal enclosure. Documentary sources indicate that the process of draining and enclosing the land in this area started as early as 1520; as a result, no Parliamentary Act was required (Clark 1924; 1927). The major landowners comprised the Oxford colleges of Brasenose, Magdalen and Corpus Christi, and it is possible that the enclosure of the former open fields resulted from collaboration between these bodies in order to maximise revenues.
- 2.10. The 1845 Tithe Map of Marston Parish shows that there has been considerable reorganisation of the field pattern and depicts the site as lying wholly within two fields. The First Edition Ordnance Survey Map of 1887 shows few changes from the 1843 Tithe Map and this remains the case for the 2nd and 3rd editions of this map (published 1900 and 1922 respectively).
- 2.11. St Nicholas' Primary School, situated immediately to the south-east, was built in 1954 to replace the old village school, whilst Meadowbrook College was originally constructed as the Old Marston County Secondary School that opened in 1958. It was subsequently renamed the Harlow School and then the Marston Middle School.

3. AIMS AND OBJECTIVES

- 3.1. The aim of the investigation was to establish the character, quality, date, significance and extent of any archaeological remains or deposits surviving within the development site (RPS 2018 and CA 2019). The general objectives of the archaeological investigations were to:
 - record the nature of the main stratigraphic units encountered;
 - assess the overall presence, survival and potential of structural and industrial remains; and
 - assess the overall presence, survival, condition, and potential of artefactual and ecofactual remains.
- 3.2. The specific aims of the work were to:
 - Provide further information regarding the nature, character, date and extent of the archaeological remains identified within the development site;

- Assess the survival, quality, condition and significance of any archaeological remains;
- Ensure the preservation by record of all archaeological remains revealed during the course of the further investigation; and
- Prepare an appropriate archaeological archive including the treatment and preservation of any finds, incorporating the material already available from previous archaeological work associated with the planning application for the development.
- 3.3. An overview of the current state of knowledge regarding the archaeology of the Oxford area during the Iron Age and Roman periods has been produced by Oxford City Council (OCC) in the form of the relevant parts of the Oxford Archaeological Resource Assessment. Archaeological Research Agendas have been published by OCC for both the Iron Age (Beckley and Radford 2012a) and Roman periods (Beckley and Radford 2012c). These identify several 'zones of potential'; these are landscape zones, based on surface geology and relief and their potential to contribute to topics/research questions within the archaeological research agenda. The development site lies on the boundary between Zone A: The North Oxford terrace (Summertown-Radley and Wolvercote gravel terrace) and Zone C: The Cherwell floodplain (with pockets of gravel).
- 3.4. Research aims identified from this regional research framework relating to the Iron Age period include:
 - To what extent might changes in overall rural settlement density and hydrology explain the changing patterns of land-use on the 1st and 2nd terrace gravel terrace? How do patterns of activity compare with similar Upper Thames complexes?
 - Farming and clearance may be explored through further targeted study of deposits sealed by alluvium or colluvium (see Lambrick 2010). There is also good potential for palaeoenvironmental evidence to develop our understanding of grassland, woodland cover and localised cultivation patterns in the Local Authority Area (LAA).
 - Can patterns of tree clearance be identified in the different geologies of the LAA? Can any cycles of clearance and regeneration be identified?
 - To what extent does the settlement evidence reflect seasonal or peripatetic activity rather than long term sedentary occupation during this period?

- Can we further establish the origins, character and longevity of field/enclosure systems within the LAA?
- Can mixed farming patterns be demonstrated to be reasonably uniform and unspecialised across the floodplain, terrace and ridge?
- To what extent is the regional Middle Iron Age pattern of small paddocks or cultivation plots adjacent to settlement sites the dominant model (given the lack of well-excavated sites such as Whitehouse Road)?
- Lambrick (2010) has suggested that in the Thames Valley the transition from earlier Bronze Age pastoralists/herders to settled farmers may have been a gradual trend from recurrent but dispersed occupation (both within and separate from enclosure) to highly organised settlement. By the Early to Middle Iron Age, compact, tightly constrained settlements, often indicative of more permanent year-round settlement, were typically located on topographical and/or land-use divisions. To what extent can this model be confirmed within the LAA?
- A wide variety of geologies were occupied in the Middle to Late Iron Age. What are the similarities and differences between these and other settlements in terms of the specialization, evidence for mixed farming, un-enclosed or enclosed morphology, evidence for higher or lower status in diets and artefacts?
- Can the intensification of settlement density and patterns of mixed farming be related to a switch from family to communal management strategies of animals and crops that might be reflected in settlement layout and material culture?
- A general model for Middle Iron Age settlement in the Upper Thames would be intensified occupation of the gravel terraces by the Early 3rd century BC followed by a shift or abandonment in the 1st century BC possibly coinciding with the onset of clay alluviation. Can this model be confirmed and developed?
- Is there an 'average' population or landholding unit size underlying the distribution of Middle Iron Age settlement in the Late Iron Age; if so, how does this vary between the terrace, floodplain and ridge?
- Noting the small amount of animal bone recovered from Oxford sites, careful consideration should be given to sampling strategies for well-preserved pit assemblages, especially where organic waste is present.

- The potential for well-preserved waterlogged deposits associated with Iron Age settlement should be noted.
- Is the dearth of human remains on some settlement sites (e.g. Whitehouse Road) a reflection of settlement longevity or some other factor to do with location or function?
- Greater use of environmental sampling to help model changes to the paleohydrology throughout the Iron Age may help to explain how this affected settlement patterns on the floodplain such as at Whitehouse Road and Port Meadow.
- 3.5. For the Roman period, the following research objectives are relevant to the proposed archaeological work at the development site:
 - Can closer dating of middle 1st century assemblages be obtained by using scientific dating techniques? 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 (see Fulford 2010).
 - Environmental analysis can further contribute towards a reconstruction of the agricultural landscape in the Roman period including the extent and impact of farming.
 - Can the size and shape of identified Roman fields be related to agricultural regimes?
 - Can further subtleties in agricultural patterns be identified (e.g. evidence for emmer wheat and peas from Mansfield College, and barley from Manor Road, Headington)?
 - Can a significant and well-preserved bone assemblage be identified to help establish husbandry practices in the manufacturing and agricultural/ husbandry zones?
 - In what way was the character of settlement near the floodplain and terrace distinct from the manufacturing zone?
 - Can patterns of landscape re-organisation, migration of boundaries and patterns of disuse be further characterised?
 - To what extent is the general regional pattern of 2nd century relocation and reorganisation of settlements patterns reflected in the LAA? There is some

evidence that Oxford was not as significantly affected as other areas. Why might this be?

- Is there any evidence for settlement specialisation?
- Can the character of Roman activity at Port Meadow and elsewhere on the floodplain and its gravel islands be further understood? How did alluviation and changes in water level over time impact on activity on the floodplain?
- The regional fabric series for pottery (including non-local fabrics) requires further work (see Fulford 2010). Can the existing framework of Roman fabrics be enhanced in terms of the identification of vessel types?
- 3.6. These OCC research goals are aligned with those expressed in the relevant regional archaeological research agenda (Hey and Hind 2014).

4. METHODOLOGY

- 4.1. The fieldwork followed the methodology set out within the WSI (RPS 2018) and WSI addendum (CA 2019). The location of excavation Areas A, B and C and watching brief Area F (Fig. 2) was informed by the results of the preceding Heritage Statement (RPS 2017) and two trial-trench evaluations (CA 2018a-b) based on the anticipated major impact areas associated with the development. The locations were agreed by David Radford, Oxford City Council's Archaeologist (OCCA) and RPS Planning and Environment. A total of 1.92ha of the development site was subjected to open area excavation or watching brief.
- 4.2. The excavation area was set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with *CA Technical Manual v5 Survey Manual* (CA 2017a).

Excavation Areas A, B and C (Fig. 2)

4.3. Archaeological excavation commenced in Areas A, B and C with the removal of topsoil and subsoil by a mechanical excavator fitted with a toothless grading bucket. All machine excavation was conducted under archaeological supervision and ceased when the first archaeological horizon or natural substrate was revealed (whichever was encountered first). The archaeological features thus exposed were hand-excavated to the base of archaeological stratigraphy. Archaeological features and deposits were planned and recorded in accordance with CA Technical Manual 1: Fieldwork Recording Manual (CA 2017b).

- 4.4. Examination of features concentrated on recovering the plan and structural sequences, with particular emphasis placed upon gaining a secure understanding of the stratigraphic and chronological development of the site, including the recovery of samples suitable for radiocarbon dating where appropriate, and on upon obtaining details of the phasing of the site.
- 4.5. The following sampling strategy was employed:
 - All funerary/ritual activity and domestic/industrial deposits were 100% excavated;
 - All discrete features (postholes, pits) were sampled by hand excavation (average sample typically not exceeding 50%) unless their common/repetitious nature suggested they were unlikely to yield significant new information;
 - All linear features (ditches, pathways etc.) were sampled to a maximum of 10%, although, the exact sample percentage reflected the quality and quantity of dating evidence recovered from the excavated sections;
 - Bulk horizontal deposits were sampled by hand excavation to 10% by area as a minimum.
- 4.6. Deposits were assessed for their paleoenvironmental potential and samples were taken in accordance with CA Technical Manual 2: The taking and processing of environmental and other samples from archaeological sites (CA 2012). Ninety-one samples (2420 litres of soil) were deemed suitable for sampling and were taken from pits, ditches, postholes, layers, graves and Phase 3.2 kiln AL which were considered to have potential for characterising the activity. All artefacts recovered from the excavation were retained in accordance with CA Technical Manual 3: Treatment of finds immediately after excavation (CA 1995).

Watching brief Area F (Fig. 2)

4.7. Area F was monitored under watching brief methodology. It commenced in the southeastern corner with the removal of topsoil and subsoil by a mechanical excavator, fitted with a toothless grading bucket. Machine excavation ceased when the first archaeological horizon or natural substrate was revealed (whichever was encountered first). Excavation of all features encountered followed the same methodology as Areas A, B, C and F.

- 4.8. In agreement with the contractors, RPS Planning and Environment and David Radford (AOCC), the methodology for the northern, southern and western part of Area F was altered, with the remainder of the area being stripped to subsoil only. A small number of features were encountered where only thin patches of subsoil were encountered and the natural substrate revealed. Excavation of these features followed the same methodology as Areas A, C and C.
- 4.9. Following the fieldwork, a programme of post-excavation assessment (PXA) was undertaken, which quantified and assessed the stratigraphic evidence from the excavation. All the artefacts and biological material recovered were fully assessed and recorded during the assessment process and full details can be found within the Post-Excavation Assessment and Updated Project Design (CA 2020). The evidence was considered in its local, regional and national context, and a series of updated aims and objectives were compiled. The updated project design included a second phase of post-excavation analysis, to include stratigraphic analysis and further work on artefacts and ecofacts (biological evidence) of intrinsic interest, with the results to be presented in an excavation report (the current document), and a summary account to be published in Oxoniensia.
- 4.10. A summary of information from this project, as set out in Appendix T, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS

- 5.1. The archaeological potential of the 5.6ha site had been highlighted by the earlier trialtrench evaluations (CA 2018a-b). The earliest recorded archaeological features, those dating to the Middle Iron Age, included 22 ditches and 36 pits and postholes in Areas A and F. This activity appeared to represent definable settlement elements including the remains of two sub-circular or oval enclosures, three possible roundhouses, and two possible trackways. Late Iron Age to Early Roman agricultural and possible settlement activity was characterised by a trapezoidal enclosure, two trackways and associated pits and lengths of ditch in Areas A and C, a small, possibly square enclosure, a ditch and unenclosed pits and postholes in Areas B and F.
- 5.2. Activity continued into the Roman period with the most significant remains uncovered in Areas B and F. These comprised a circular enclosure, five rectangular enclosures, three possible trackways, two inhumation burials, pits and postholes and an occupation deposit.

Three short ditches were identified in Area F that may represent the remains of further enclosures. The focus of activity appeared to be a kiln producing pottery of a 3rd to 4th-century date. The charred plant and animal bone remains recovered do provide some evidence for the disposal of general refuse, suggesting an agricultural and/or possible settlement function to the enclosures. No post-Roman features were identified with no evidence of site use until the establishment of a ridge-and-furrow agricultural system in the medieval period. Post-medieval remains were limited to four ditches in Areas A and F.

- 5.3. A total of 6329 sherds/103.93kg of pottery was recovered from the site. The large Late Prehistoric assemblage (2354 sherds/26.53kg) includes material that can stylistically be dated to the later Early Iron Age continuing into the Middle Iron Age. Pottery dating to the Late Iron Age to Roman periods accounts for the large bulk of the remainder of the assemblage with wheel-thrown grog-tempered pottery (563 sherds/9.49kg) characteristic of the Late Iron Age to Early Roman 'transition' also recovered. The remainder of the assemblage (3247 sherds/66.76kg) demonstrates that activity continued into the Middle and Late Roman periods, at least into the later 3rd or earlier 4th centuries AD. A small number of medieval (7 sherds/0.05kg) and post-medieval/modern (14 sherds/0.26kg) sherds were identified.
- 5.4. This section provides an overview of the excavation results. Detailed summaries of the recorded contexts are given in Appendix A. Artefactual material recovered from the site are given in Section 6 and Appendix B to N. Details of the environmental samples (biological evidence) are given in Section 7 and Appendix M to S. Radiocarbon dates are quoted below at the 95.4% probability range.
- 5.5. Artefactual dating evidence indicates that the majority of the archaeological activity on the site dates to the Iron Age and Roman periods. Stratigraphic analysis of the features indicates five periods of activity:
 - Geology and soils
 - Period 1: Middle Iron Age (400 100 BC)
 - Period 2: Late Iron Age to Early Roman transitional (100 BC AD 100)
 - Period 3: Roman (AD 43 AD 410)
 - Phase 3.1: Early Roman (1st 2nd century AD)
 - Phase 3.2: Middle to Late Roman (2nd 4th century AD)
 - Phase 3.3: Late Roman (4th century AD)

- Period 4: Medieval (1066 1539)
- Period 5: Post-medieval/modern (1540 2000)
- 5.6. Some features, mainly isolated pits and postholes yielded no datable material and could not be definitively assigned a phase based on stratigraphy or spot-dating evidence. Therefore, where possible, such features have been phased through spatial association with features of known date.

Geology and soils

5.7. The natural geological substrate was identified at an average depth of 0.6m below the overlying subsoil and topsoil layers. It comprised compact mid-brown orange clay with occasional patches of small flints and gravel. This was overlain by compact mid-grey brown silt clay subsoil measuring 0.28m thickness and containing a few small stones. There were also some areas of mid-green grey sand clay subsoil with frequent small pebbles. The overlying topsoil deposit comprised a loose dark-black brown clay silt and measured 0.32m–0.42m thick.

Period 1: Middle Iron Age (400 – 100 BC) (Figs 3 and 11–15)

- 5.8. An assemblage of residual Mesolithic to Early Neolithic worked flint artefacts found in later features potentially represent the earliest activity in the development site. No features pertaining to these periods were identified during the excavation, but the flints could be an indication of contemporary occupation in the vicinity of the site.
- 5.9. The first firm evidence for settlement occurred during the Middle Iron Age and comprised two possible settlement enclosures (1.1 and 2.1), roundhouses (1.2, 2.2 and 2.3), a sub-enclosure (2.4), square enclosure (3.1), two trackways (4.1 and 4.2), pits and postholes that were identified in excavation Areas A and F (Fig. 3). Settlement-related features were accompanied by a large assemblage of pottery (808 sherds, 9.5kg) and animal bone (1473 fragments, 13.96kg), as well as fired/burnt clay (68 fragments, 0.74kg) and slag cakes and non-diagnostic ironworking slag. Cattle, sheep/goat, horse and pig were represented in the animal bone assemblage, as well as examples of canid and a single example of a thrush or blackbird (Holmes, Appendix O).
- 5.10. Assignment to Period 1 was based on the recovery of pottery dominated by sand and shell-tempered wares, together with vessel forms and decoration suggestive of occupation spanning the latter part of the Early Iron Age continuing into the Middle Iron Age. A suite of eight radiocarbon dates (SUERC-98593–94, SUERC-97598–99 and

SUERC-97603–06; SUERC, Appendix S) were taken to help refine the chronology. The results almost exclusively suggest the majority of the activity in this area was during the earlier part of the Middle Iron Age period, in the 4th and 3rd centuries BC. One later Early Iron Age date (SUERC-98592) was obtained on charred material recovered from a pit that also contained shell and sand tempered pottery. The remaining later Early Iron Age pottery was recovered residually from Middle Iron Age features. This suggests this site may have had earlier Iron Age origins, but no archaeological features were uncovered securely dating to this period. A small quantity of Late Iron Age/Roman transitional and Roman pottery was also present in some of the ditches, but these were intrusive artefacts deposited through later truncation.

Settlement enclosure 1.1 (Fig. 3)

- 5.11. The first episode of activity was represented by two ditches, BW and CY, that appear from their layout to have defined part of a sub-circular or oval Enclosure (1.1), at least 20m by 13m in size. No corresponding boundary was found to the south or west within excavation Area B, but it may have been removed by later activity. A west-facing entrance was suggested by a 5m-wide gap between ditches BW and CY.
- 5.12. The enclosure ditches varied in width (0.6–1.3m wide) and depth (0.2–0.4m deep) but consistently had steep sloping sides and flat or concave bases (Fig. 11, Section AA). They contained a single fill of naturally derived mid-brown grey clay silt, but a deposit of backfilled material in ditch BW, comprising of dark-brown grey silty clay mixed with pottery (13 sherds, 0.3kg) and animal bone (16 fragments, 0.06kg), was visible adjacent to the enclosure's entrance.
- 5.13. A short length of ditch, CU, was identified on the east side of enclosure 1.1 and suggests that the interior had been partially sub-divided. Ditch CU entered excavation Area F from the east and extended across Enclosure 1.1 for 1.7m before terminating. It was similar in width and depth to the main enclosure ditches and had a steep sloping concave profile. Three pits (6011, 6015 and 6017; pit group CO) of varying size, a posthole (6041) and a roundhouse, 1.2, containing four pits (6052, 6054, 6056 and 6058), were situated immediately to the south of it, whilst a further six pits (6043, 6026, 6077, 6206, 6316 and 6319) were dispersed across the interior of the enclosure.
- 5.14. The nine pits within the enclosure (6011, 6015, 6017, 6026, 6043, 6077, 6206, 6316 and 6319) varied in size (0.3–1.3m in diameter) and depth (0.2–1m), but the majority had concave profiles. Pit 6026 was deeper than the rest (1m) and had steep to near vertical

sloping sides and a flat base. Its profile and shape were similar to examples identified on other Iron Age sites, which have been interpreted as having a possible storage function (Lodwick 2017, 66–67). It had been infilled with mid-grey brown clayey sand mixed with 40 sherds (0.64kg) of Middle Iron Age pottery and approximately 0.8kg (106 fragments) of animal bone, including a bone of a perinatal lamb. A small quantity of indeterminate charred cereal grains and charcoal recovered from the lower fill, however, could be associated with the use of the pit for storage. A small assemblage of cereal grains identified as hulled wheat and barley was found in pit 6077 and tentatively suggests that domestic activities, such as crop processing and food preparation, were being undertaken within Enclosure 1.1. The presence of charcoal in this assemblage most likely represents a dump of domestic hearth waste.

5.15. The function of the other pits is unknown, but domestic debris was found in several of them, including 24 sherds of contemporary pottery (0.49kg) in pit 6319, a fragment of possible daub in pit 6068 and fragments (0.684kg) of two slag cakes in pit 6316. Of note, was a fragment of adult human cranium found in pit 6316. The pit did not appear to represent a disturbed grave; breaks in the fragment, although well-preserved, suggest that the bone was disarticulated at the time of deposition.

Roundhouse 1.2 (Fig. 3)

- 5.16. The location of a roundhouse was suggested by semi-circular ditch CT (0.6–1m wide) with a postulated internal diameter of 10m. It was 0.2m deep with moderate sloping sides and a flat base (Fig. 12, Section BB). The shape of its profile suggests that it most likely defined the area of a building and did not represent an actual structural element. Possible structural elements were represented by four pits (6052, 6054, 6056 and 6058) and a posthole (6041) that were spread across the interior of 1.2. They had only survived to a depth of 0.1–0.2m but could pertain to roof supports or internal partitions, for example.
- 5.17. No artefactual material was recovered from the internal features, but roundhouse ditch CT contained 54 sherds (0.62kg) of Middle Iron Age pottery and approximately 1kg of animal bone, with sheep/goat the most abundant. In contrast to this, cattle was most abundant in other Period 1 features in Area F, followed by sheep/goat, pig and horse (Holmes, Appendix O). A charred deposit of possible domestic hearth waste was also recovered from ditch CT. It comprised wood charcoal, including oak, blackthorn,

alder/hazel, ash and field maple; weed seeds and cereal remains, the latter providing evidence for hulled wheat and possibly barley.

5.18. Two consistent radiocarbon determinations were obtained on a sheep/goat radius (SUERC-97599: 390–206 cal. BC) and a fragment of charcoal of Maloideae-type (hawthorn/crab apple/rowan; SUERC-97598: 383–200 cal. BC) and support activity in either the 4th or 3rd century BC or the early Middle Iron Age.

Settlement Enclosure 2.1 (Fig. 3)

- 5.19. The northern boundary of a possible second enclosure (2.1) in Area F was defined by curved ditch BU (Fig. 3). It was 1–2m wide and 0.7m deep with near vertical sides and a concave base. Enclosure 2.1 extended beyond the area of excavation to the west, but it defined an area of at least 15m by 23m within the excavation area. The south-east end of ditch BU had been dug into the ditch defining Enclosure 1.1, but it appeared to respect the layout of the existing entrance. No continuation of the ditch was identified in the interior of Enclosure 1.1, and it is considered likely that they were both in use concurrently; Enclosure 1.2 representing an episode of later but broadly contemporary activity.
- 5.20. Two roundhouses (2.2 and 2.3), a sub-enclosure (2.4) and an isolated pit (6188) were situated inside Enclosure 2.1. This activity was accompanied by a larger assemblage of pottery (246 sherds, 2.85kg) and animal bone (562 fragments, 6.56kg) compared to Enclosure 1.1, the majority deriving from ditch BU. A small assemblage of non-diagnostic ironworking debris (0.7kg) was also found in ditch BU.
- 5.21. The animal bone assemblage includes the partial skeletons of at least three dogs (ABG 1; Fig. 3) found in ditch BU. Cut marks were identified on some of the bones, indicating that the lower hind legs of one of the dogs had been dismembered. Two radiocarbon determinations were obtained from a cattle ?humerus and phalanx also recovered from ditch BU. The earliest date range was 384–199 cal. BC (SUERC-98594), with a second overlapping date of 354–57 cal. BC (SUERC-98593).

Roundhouses 2.2 and 2.3 (Fig. 3)

5.22. Two curved ditches, CN (2.2) and CR (2.3) defined the possible location of a further two roundhouse buildings, similar in diameter to Roundhouse 1.2. The ditches were 0.4–0.8m wide and 0.2m deep with moderate to steep sloping sides and flat bases (for example, ditch CN, Fig. 13, Section CC). Ditch CR (2.3) had been partially dug into ditch

CN (2.2), but it is feasible that they were both in use at the same time. An entrance was indicated by a gap on the south-east side of Roundhouse 2.3. Possible east and west facing entrances were indicated by terminals at either end of ditch CN (Roundhouse 2.2), but it is also feasible that ditch CN represents a semi-circular working area rather than a full roundhouse.

5.23. Internal activity was only present in Roundhouse 2.2 and comprised three pits (6142, 6165 and 6263). They were 0.7–1m in diameter and generally 0.2m deep with concave profiles. Pit 6263 was up to 0.6m deep and had a U-shaped profile similar to the possible storage pit associated with Enclosure 1.1. An assemblage of Middle Iron Age pottery (45 sherds, 0.36kg) was recovered from the pits and both roundhouse ditches. This dating was supported by paired radiocarbon determinations obtained from animal bone recovered from Roundhouse 2.2 ditch CN. These comprised date ranges of 361–175 cal. BC (SUERC-97603), obtained from a pig mandible, and 388–204 cal. BC (SUERC-97604) from a horse metatarsal indicating that deposition took place either in the 4th or 3rd century BC.

Sub-enclosure 2.4 (Fig. 3)

- 5.24. A sub-square enclosure (2.4) was established in the northern half of Enclosure 2.1 and had been partially dug into the enclosure ditch BU. Sub-enclosure 2.4 was defined by ditch CB on the north side and curved ditch CW on the south and east sides, which enclosed an area at least 12m by 8m. The ditches were 0.5–1m wide and 0.5m deep with concave profiles. An entrance in the north-east corner was indicated by an approximately 4m wide gap between ditches CB and CW. A gap on the south-west side of the sub-enclosure may represent a second entrance but this area has been obscured by a Period 4 plough furrow.
- 5.25. Three pits (6308, 6310 and 6267) were situated in the interior of the enclosure; two broadly located in the centre and pit 6267 in the southern entrance of the enclosure. Pit 6267 was the largest (1.9m in diameter) and deepest (0.7m) of the three and had a U-shaped profile like other examples identified within the excavation area (Fig. 14, Section DD). It contained a main fill of dark-browngrey silty clay that was mixed with an assemblage of charred cereal grains and weed seeds, along with charcoal, a triangular loomweight and fifteen sherds (0.1kg) of Middle Iron Age pottery. Two vertical deposits of dark-orange brown silty clay were also identified on the sides and could suggest that it had been lined. An inconsistent Early Iron Age radiocarbon date (725–398 cal. BC;

SUERC-98592) was obtained from a charcoal fragment of Maloideae-type (hawthorn/rowan/crab apple) recovered from this pit. The presence of Middle Iron Age pottery, however, suggests that the charcoal is likely to represent wind-blown material derived from earlier activity in the vicinity of the development site.

Square enclosure 3.1 (Fig. 3.1)

- 5.26. Immediately to the north of Enclosures 1.1 and 2.1 was a small sub-square enclosure, 3.1. It was 7m by 5m in size and defined on the north-east side by ditch CG, the southwest side by ditch CD and Enclosure 1.1 on the south-east side. A possible entrance was indicated by a 5m-wide gap on the north-west side (Fig. 3).
- 5.27. Middle Iron Age pottery (132 sherds, 1.58kg) was recovered from the associated ditches and assignment of this enclosure to Period 1 was supported by a radiocarbon date range of 354–58 cal. BC (SUERC-97606) obtained from burnt food residues found on an almost complete small globular jar (Ra. 47) recovered from the eastern terminus of ditch CG (Fig. 3, Fig. 15 and Fig. 23, no. 11). The same terminus (ditch CG) also contained fragments of an adult distal femur (Clough, Appendix P). It is unclear whether they were part of a disturbed burial or deposited as disarticulated remains in the ditch, but the latter is most likely. The occurrence of vessel Ra. 47 and human bone in the same ditch may not be coincidental and could represent a structured deposit. This deposit was also found 6m to the north-east of the adult cranial fragment in pit 6316, although it has not been possible to determine whether they were from the same individual. Animal bone (325 fragments, 2.26kg) and fired/burnt clay (0.22kg) was also recovered, which included a large fragment of fired clay (0.16kg), triangular in section with a curved interior, that may represent part of an oven structure. A possible globular spindle whorl was also recovered from the south-east terminus of ditch CD (Ra. 49). The animal bone assemblage from ditch CD was dominated by sheep/goat remains, similar to Roundhouse 1.2 ditch CT.

Unenclosed activity to the north of Enclosure 3.1 (Fig. 3)

5.28. Unenclosed activity to the north of Enclosure 1.1 and 2.1 was defined by a cluster of three pits (6240, 6276 and 6325) and two pairs of intercutting postholes (6414, 6416, 6296 and 6298), spread across an 8m by 5m area. The majority contained a small quantity of Middle Iron Age pottery (12 sherds, 0.06kg), and have been assigned to Period 1 on this basis. The three pits were spaced 1.5 to 5m apart but had similar

concave profiles, 0.1m deep. The intercutting postholes were situated to the south-east of the pits. They were spaced 2.5m apart and could represent part of a post-built structure, although they did not form any clear layout.

Trackways 4.1 and 4.2 in Areas A and F (Figs 3 and 12)

- 5.29. Two trackways, 4.1 and 4.2, were situated to the west/south-west of Enclosures 1.1 and 2.1 (Fig. 3). Trackway 4.1 was well defined and crossed the eastern end of Area A on a north-south alignment. It continued south and northwards beyond the excavation area, but no continuation was identified in Area F to the north. Trackway 4.1 was defined by straight, parallel ditches P and T that defined an approximately 4.5m-wide corridor. The ditches varied in width (1–1.5m) but were consistent in depth (0.5m) along their course.
- 5.30. A second trackway (4.2) was tentatively suggested by ditches DN and DJ in Area F. They were east-west aligned (0.4–2.6m wide and 0.3–0.4m deep) and spaced approximately 5.5m apart. This trackway terminated to the west, possibly representing a junction with trackway 4.1. Its eastern extent was not determined but it may have joined the boundary of Enclosure 2.1. Two possible recuts on the north side were represented by ditches DL and DK, although DK it took a slightly different course, perhaps suggesting a narrowing of the trackway.
- 5.31. Assignment to Period 1 was based on a small quantity of Middle Iron Age pottery (60 sherds, 0.42kg). This was confirmed by a radiocarbon determination of 356–106 cal. BC (SUERC-97605) that was obtained from a possible cattle humerus recovered from ditch P of trackway 4.1. Animal bone (104 fragments, 0.8kg) and 1.08kg of non-diagnostic ironworking debris was also found in ditch DN.
- 5.32. A pit (1071) was situated to the east of trackway 4.1. It was circular (1.6m in diameter) with a steep sloping concave profile, 0.5m deep (Fig. 15). It contained a single, silty fill that had a mottled appearance suggestive of having been waterlogged. A small assemblage of Middle Iron Age pottery (35 sherds, 0.53kg) and a moderate quantity of animal bone (76 fragments, 0.82kg) were recovered from the pit, but no plant remains were present.

Unenclosed pits and postholes in Area A (Fig. 3)

- 5.33. Three postholes (1088, 1137, 1160), three pits (1084, 1034 and 1080) and a group of four intercutting pits (pit group R) were situated to the west of Trackway 4.1 in excavation Area A and were spread across an area of 20m by 6m. They contained single silt-derived fills, from which a total of 14 sherds (0.07kg) of Middle Iron Age pottery was recovered, along with 55 fragments (6g) of animal bone, some of which was burnt, and a small quantity of indeterminate cereal grains and charcoal fragments. The function of these features is unclear, but the low quantity of artefacts suggests that they represent peripheral domestic activity.
- 5.34. Four intercutting pits, pit group R, were situated on the northern boundary of excavation area A and extended to the north. They varied in size (0.8–3.8m) and depth (0.4–0.6m) and had steep sloping, irregular profiles. Based on their irregular profiles they may represent an area of quarrying. A moderately-high quantity of charcoal was recovered from the fill of pit 1107, along with a small quantity of indeterminate cereal grains and hulled wheat grains. Both deposits are likely to represent a dump deposit of hearth/domestic waste.

Period 2: Late Iron Age to Early Roman transition (100 BC – 100 AD) (Figs 4, 5, 16 and 17)

- 5.35. During the Late Iron Age to Early Roman transitional period, an enclosure (5.1) and integral trackway (6.1) were established in excavation Areas A and C, immediately west of the Period 1 trackway 4.1 (Fig. 4). An area of unenclosed pits and postholes (AQ, CJ and CK), a ditch (DQ) and a small enclosure (7.1) were situated in Areas B and F (Fig. 5). Both areas of activity were positioned on the periphery of the Middle Iron Age settlement and it is feasible that elements of it continued to be utilised during Period 2. However, only 13 sherds (0.14kg) of Late Iron Age to Early Roman transitional pottery was recovered from Period 1 features, suggesting that the ditches had mostly infilled by this stage, possibly surviving as hedges and/or banks.
- 5.36. The majority of the Period 2 pits and ditches contained Late Iron Age to Early Roman transitional pottery (275 sherds, 4.22kg), with 'Belgic' style grog-tempered wares accounting for the large majority of the Period 2 assemblage. Sandy wares and organic, flint- and other grog-tempered wares were present in much smaller quantities. Jars, and to a lesser extent bowls, occurred in forms commonly in use during the first century AD and probably post-date the Roman conquest (Banks, Appendix C). Almost 10kg of animal bone (962 fragments, 9.95kg), 35 fragments of fired/burnt clay and non-diagnostic ironworking slag (0.24kg) was also recovered. The animal bone assemblage

included an articulated cattle skeleton (ABG 2) deposited in the ditch defining Enclosure 5.1. Animal bone was recovered from ditches, pits and postholes spread across Areas A, B and F. Sheep/goat were more commonly recorded, followed by cattle, whilst canids (dog or fox) equids (horse or donkey) and pig were represented in much smaller quantities (Holmes, Appendix O). Further examples of non-diagnostic ironworking debris (0.27kg) was also found in Period 2 ditches, although in much smaller quantities to Period 1 features.

Enclosure 5.1 (Figs 4, 13 and 14)

- 5.37. Almost the entirety of Enclosure 5.1 was exposed and was found to be trapezoidal in layout and 55m by 25m in extent. It was defined on four sides by ditches B and C in Area A and by ditches BR and BP in Area C. They varied in width (1.2–2.5m) and depth (0.2–0.7m) but were widest on the south side where ditch C was up to 2.5m. They had moderate to steep sloping sides and wide flat or concave bases (Fig. 16, Section EE). The east side of Enclosure 5.1 was recut as narrow, concave ditch D (0.7m wide), on the same alignment but on a slightly different course on the west side of ditch C. A northfacing entrance was indicated by a terminus in ditch B. The entrance was at least 5m wide and would have facilitated access to adjacent trackway 6.1. A second entrance was identified on the west side where ditch BQ and BP defined a 6.2m wide gap.
- 5.38. Ditch O was located to the south of Enclosure 5.1 and was aligned parallel to its southern boundary ditch C. It was situated 0.8 to 3.8m from the enclosure and is not considered to represent a trackway. It could represent an outer boundary, perhaps acting as an enhancement to this side of the enclosure. It contained a single, silty clay fill derived from natural processes, which contained seven fragments (0.12kg) of animal bone.
- 5.39. A large assemblage of animal bone was recovered from the Enclosure 5.1 ditches (660 fragments, 7.7kg) and this included an adult female cattle skeleton found in ditch B, in the south-western corner of the enclosure. The animal had been deposited in the upper part of the ditch and darker soil surrounding it suggests that it may have been contained within a grave, possibly 2m long by 1.1m wide in size and 0.4m deep (Figs 4 and 17). The skeleton had been articulated when buried, but evidence of disarticulation of the hind legs suggests that post-depositional disturbance had occurred. Four sherds of Late Iron Age to Early Roman pottery recovered from the grave. As the grave potentially post-dated the infilling of the ditch two attempts were made to radiocarbon date the bone, but unfortunately there was insufficient collagen preserved to yield a radiocarbon date. The

burial of complete cattle carcasses is well attested to on both Iron Age and Roman sites, carried out for a variety of reasons, and it is possible that this burial is later in date, but due to the lack of dating evidence it has been assigned to Period 2.

5.40. The interior of Enclosure 5.1 contained three Sub-enclosures, 5.2, 5.3 and 5.4, adjoining the north and east sides, as well as an isolated pit (1014) of unknown function. A short length of ditch, BQ, was also identified in Area C and could represent a further partition in the interior of Enclosure 5.1. It did not contain any dating evidence but its broadly north-east/south-west alignment was consistent with other Period 2 ditches in Area A.

Sub-enclosures 5.2, 5.3 and 5.4 (Fig. 4)

- 5.41. Sub-enclosure 5.2 was situated on the north side and was positioned on a slightly different alignment to the main enclosure boundaries. It contained 29 sherds (0.57kg) of Late Iron Age to Early Roman transitional pottery but also 13 sherds (0.18kg) of Middle Iron Age pottery, suggesting that it may have had earlier origins. It was defined by ditch J that enclosed an area of approximately 15m by 9m. The ditch was similar in width (1.5m) and depth (0.5–0.6m) to the main enclosure ditches and had similar steep sloping sides and a flat base. A north-east-facing entrance was formed by the eastern terminal of ditch J and was approximately 6.6m wide. A possible internal sub-division was represented by ditch L.
- 5.42. Sub-enclosure 5.3 was aligned parallel to Sub-enclosure 5.2 but had been dug across its north-east entrance, effectively blocking it. It was defined by ditch K that enclosed a triangular area with an entrance on the east side. The ditch was V-shaped and 0.6–0.9m wide and 0.5–0.6m deep.
- 5.43. Ditches G and F defined a rectangular sub-enclosure (5.4), approximately 16m by 11m in extent, on the east side of Enclosure 5.1. An entrance was indicated by a 2.7m wide gap in the north-west corner. The two ditches were 0.4–0.6m wide and 0.3m deep with near vertical sides and narrow, concave bases. Internal activity comprising of a pit (1078) and a posthole (1043) were identified in the northern half of Sub-enclosure 5.4. They each had single, sterile silted-in fills.
- 5.44. A moderate assemblage of pottery (174 sherds, 1.94kg), as well as animal bone (268 fragments, 0.83kg) and fired clay (14 fragments, 0.08kg) was recovered from the ditches defining Sub-enclosures 5.2, 5.3 and 5.4 and attests to the presence of domestic activity within rectangular Enclosure 5.1.

Trackway 6.1 (Fig. 4)

- 5.45. A trackway in excavation Area A was defined by ditch M and the north side of Enclosure 5.1 (ditches B and BP); together forming a north-west/south-east aligned corridor, 3.5m wide (Fig. 4). Trackway 6.1 entered Area A from the west side and extended south-eastwards across the area for 25m, before terminating. After a gap of 17m a possible continuation may have been represented by parallel ditches V and W on the eastern side of the excavation area, spaced approximately 3m apart. They differed in alignment to the rest of the trackway but could be part of the same activity, perhaps suggesting that beyond Enclosure 5.1 the trackway took a more sinuous course.
- 5.46. Ditch M varied in width (1.7–2.8m) but was 0.5m in depth with a concave profile. Ditches V and W were much narrower (0.4–0.9m) and generally shallower (0.2–0.4m) and had concave or U-shaped profiles. A 0.2m thick deposit (1139) of compacted mid-brown grey silty clay, was observed along the length of the trackway corridor in excavation Area A. It was not identified beyond the trackway ditches to the north and south and appears to represent an associated trample deposit created by movement along the trackway.

Enclosure 7.1 and four-post structure AG (Fig. 5)

- 5.47. A sub-square enclosure (7.1) was identified in excavation Area B, approximately 93m to the north-east of Enclosure 5.1. It was defined by ditches AF and AO on four sides, which enclosed an area 10m by 10m. An entrance was indicated by an approximately 4m-wide gap in the north-west corner. The enclosure ditches varied in width (0.9–1.7m), with depth (0.2–0.6m) and generally had steep sloping sides and narrow flat bases. Ditch AO on the south side continued beyond the enclosure to the west, possibly defining part of a more extensive boundary.
- 5.48. No internal activity was identified but a square arrangement of four postholes (AG), including a double post setting, was situated adjacent to the enclosure entrance. They defined an area of approximately 2m by 2m and survived to a depth of up to 0.3m. It is likely that they represent a four-post structure common to Iron Age and Roman sites across England.

Unenclosed pits/postholes (pit/posthole group AQ) (Fig. 5)

5.49. A cluster of seven oval pits (2077, 2228, 2232, 2051, 2258, 2043 and 2015) and five postholes (2034, 2049, 2073, 2079 and 2260) were spread across the area to the north of Enclosure 7.1. They were between 0.1–0.2m deep with steep sloping sides and wide, flat bases. The majority contained sterile, silty clay fills but a small quantity of Late Iron

Age to Early Roman transitional pottery (four sherds, 0.01kg) and animal bone (3 fragments, 0.2kg) was recovered from three pits and three postholes, as well as 14 sherds (0.07kg) of residual Middle Iron Age pottery.

Unenclosed posthole groups CK and CJ and ditch DQ in Area F (Fig. 5)

- 5.50. Seven dispersed postholes (posthole groups CK and CJ) were situated in Area F, between 30m to 120m to the west and north-west of Enclosure 7.1. They had a wide distribution but have been dated to Period 2 based on 68 sherds (1.8kg) of Late Iron Age to Early Roman transitional pottery recovered from five of them. The remaining postholes have been assigned based on the spatial location in relation to the more securely-dated features. Posthole 9002 (group CJ), contained the majority of the pottery, comprising of 63 sherds (1.79kg) in an organic-tempered fabric that most likely represents a single vessel (Banks, Appendix B). A small assemblage of residual Middle Iron Age pottery was also recovered.
- 5.51. A broadly north-south aligned ditch (DQ) was situated in the northern half of Area F, immediately east of posthole group CJ. It was at least 6m long but appeared to have been truncated away at both ends and the surviving length was only 0.1m deep. It contained a small assemblage of Middle Iron Age pottery (8 sherds, 0.01kg) but has been assigned to Period 2 based on its similar alignment to Enclosure 5.1 ditches and its location adjacent to two Late Iron Age to Early Roman pits. It remains a possibility, however, that it had earlier or later origins.

Period 3: Roman (AD 100 – AD 410) (Figs 6–9 and 18–22)

- 5.52. During the Early Roman period a farmstead was established on the eastern side of the development site (Areas B and F) (Fig. 6), in the same location as Period 2 Late Iron Age/Early Roman Enclosure 7.1 (Fig. 5). Dating evidence indicates that the main episode of farmstead activity occurred during the 2nd and 4th centuries AD.
- 5.53. The farmstead was at least 0.66ha in extent and extended beyond the excavation area to the north, south and east. The potentially earliest component of the farmstead was represented by a sub-circular enclosure (8.1) situated on the south-eastern corner of the excavation area. The main episode of farmstead activity comprised rectangular enclosures (9.1, 10.1, 11.1, 12.1, 13.1 and 15.1) laid out around the junction of three trackways (14.1–14.3) and these were accompanied by large quantity of artefacts and

animal bone (Fig. 6). Associated activity included a burial (2234) and a pottery kiln (AL). An episode of later activity, although broadly contemporary, was defined by Enclosure 16.1 and a second burial (6085), as well as an alteration to the one of the Phase 3.2 trackways.

5.54. An assemblage of 2928 sherds of Roman pottery (approximately 59.5kg) was recovered from the farmstead, with Oxfordshire white ware mortaria and red slipped wares produced in kiln AL accounting for the majority of the assemblage. Regional and imported wares were infrequent, with South and Central Gaulish samian and wares from the Lower Nene Valley, Verulamium and South East Dorset accounting for less than 1% of the Roman assemblage, by weight. Approximately 26.5kg (3017 fragments) of animal bone was recovered and the main species represented comprised cattle, sheep/goat, pig, canid and dog/fox. A dearth of charred plant remains and a limited range of domestic-related and personal artefacts was also noticeable and it seems likely that the enclosures represent an industrial zone rather than a focus of domestic activity.

Period 3: Phase 3.1 Early Roman (1st to 2nd century AD) (Fig. 7)

- 5.55. The earliest component of the farmstead comprised part of a circular or possible D-shaped enclosure (8.1) situated 7m to the south-east of earlier Period 2 Late Iron Age to Early Roman transitional Enclosure 7.1 (Fig. 5). The majority of the enclosure was exposed within the excavation area and was defined by truncated lengths of two ditches (AD and AP) that enclosed a sub-circular area of at least 480 sqm. Ditches AD and AP varied from 1m to 3m wide with steep sloping profiles that were general 0.7m deep.
- 5.56. The ditches contained pottery (275 sherds, 4.74kg) and animal bone (244 fragments, 5.85kg), including two groups of cattle bone (ABG 3) that most likely represent food waste (Holmes, Appendix O). Some of the bones displayed evidence of gnawing by dogs or foxes. A small quantity of non-diagnostic ironworking debris (0.16kg) was also recovered.
- 5.57. The phasing of this feature has been problematic to resolve. Its curved layout stood in contrast to the rectilinear layout of enclosures associated with the main farmstead layout (Period 3: Phase 3.2) and is more reminiscent of the Period 1 Middle Iron Age Enclosures 1.1 and 2.1. However, assignment to Period 3 is based on the presence of 4.74kg (275 sherds) of Roman pottery, the overwhelming majority being of 3rd to 4th-century date (272 sherds, 4.72kg). A smaller, although relatively substantial assemblage of Late prehistoric pottery (90 sherds, 1.08kg) was also recovered but is deemed to be

residual. However, it is possible that Enclosure 8.1 represents an earlier, long-standing feature that had been backfilled in the Middle to Late Roman period. No internal activity was identified and, as such, its function is unknown.

Period 3: Phase 3.2 Middle to Late Roman (2nd to 4th century AD (Figs 6, 8 and 18–22)

5.58. Phase 3.1 sub-circular Enclosure 8.1 was superseded by six rectangular enclosures (9.1, 10.1, 11.1, 12.1, 13.1 and 15.1) arranged around three trackways (14.1, 14.2 and 14.3). The interiors of Enclosures 9.1, 10.1, 11.1 and 12.1 were partitioned by subenclosures and one within Enclosure 9.1 contained a pottery kiln (AL). Other activity comprised a burial (2234) and a small number of pits that were present in the majority of the enclosures.

Trackways 14.1, 14.2 and 14.3 (Fig.8)

- 5.59. The farmstead was laid out around three trackways, 14.1, 14.2 and 14.3, on north/south or east/west alignments. Trackway 14.1 was east/west aligned and comprised an approximately 4–5m wide corridor defined on either side by ditches associated with the adjacent Enclosures 9.1, 10.1, 12.1 and 13.1. It was at least 70m long and extended beyond the excavation area to the west; a possible continuation was represented by ditch DH in Area F (Fig. 6). At the eastern end it appeared to turn towards the southeast and join up with trackway 14.2.
- 5.60. North/south aligned trackway 14.2 was 8m wide and defined on the west side by Enclosure 9.1 and to the east by ditch BM (approximately 1.4m wide and 0.6–0.8m deep). Ditch BM was recut at least once on the same alignment (Figs 6 and 8). Trackway 14.2 extended beyond the excavation area to the south but is known to be at least 30m long.
- 5.61. A north/south-aligned trackway (14.3) was suggested by a gap between Enclosures 12.1 and 13.1, although the western side of this possible trackway was not identified in excavation Area F. Trackway 14.3 was at least 15m long and extended beyond the excavation area to the north. At the southern end it merged with trackway 14.1.

Enclosures 9.1, 10.1 and 11.1 to the south of trackway 14.1 (Figs 8 & 18)

5.62. Three enclosures, 9.1, 10.1 and 11.1, were situated to the south of trackway 14.1 and west of trackway 14.2. Only Enclosure 9.1 was exposed in its entirety and enclosed a rectangular area approximately 45m by 30m in size. Enclosures 10.1 and 11.1 extended

beyond the excavation areas to the south and west but were most likely to be rectangular in layout.

- 5.63. Enclosure 9.1 was defined by ditches (AB, AE, AR, AK, BT and DB) on four sides, most of which had been recut on the same alignment and on similar courses at least three times. The ditches varied between 0.6–1m wide and 0.3–0.8m deep, with steep sloping sides and concave or flat bases. The latest episode of boundary maintenance was represented by the recutting of the eastern and northern boundaries of the enclosure as much wider (1–2.7m) ditch AA (Fig. 18, Section FF).
- 5.64. A large assemblage of pottery (938 sherds, 19.64kg) and animal bone (412 fragments, 4.63kg) were recovered from the associated enclosure ditches and pits, including two articulating canid (dog or fox) lumbar vertebrae and a group of large cattle foreleg bones that probably came from the same individual (Fig. 8, ABG 4; Holmes, Appendix O). A small assemblage of residual Middle Iron Age and Late Iron Age/Early Roman transitional pottery was also recovered. Artefacts comprising a possible fragment of rotary quern in Faringdon Greensand (1.33kg) and a bell-shaped lead-alloy steelyard weight with iron suspension loop (Ra. 46; Fig. 28, no. 3) were recovered from ditches AB and DB, respectively (Fig. 8). A radius bone of a neonate was found in ditch AA on the north side of Enclosure 9.1.
- 5.65. Enclosure 10.1 was situated to the west of Enclosure 9.1 with a shared boundary defining its eastern side (ditch DB). It was at least 16m by 17m in extent and was defined on the north by the continuation of ditch BT. No boundaries were identified on the south or western sides, with both situated outside of the excavation area. It contained a smaller assemblage of pottery (384 sherds, 5.48kg) to that from Enclosure 9.1, but a similar quantity of animal bone (374 fragments, 4.77kg). Ditch BT also contained a deposit of disarticulated human cranial and humerus fragments from an adult, whilst an edge fragment of lower rotary quern in Old Red Sandstone (3.25kg) was found at the western end of the ditch (Fig. 8).
- 5.66. Enclosure 11.1 was located immediately south of Enclosure 9.1 and its northern boundary had been partially dug into the ditch defining 9.1. The majority of Enclosure 11.1 lay outside of the excavated area, but it was defined by ditch AZ on three sides, which enclosed an area of at least 26m by 7m. Ditch AZ was up to 0.9m wide and 0.4–0.6m deep with consistently steep, concave sides and a flat base. Pottery (138 sherds, 2.43kg) and animal bone (39 fragments, 0.46kg) were recovered from the ditches

associated with this enclosure, as well as a fragment (0.04kg) of mortar, identified in ditch AY defining the east side of Enclosure 11.1.

- 5.67. The west side of Enclosure 11.1 (ditch AZ) was partially redug by ditch AY that extended beyond the excavation area to the west. It's possible that ditch AY represents the location of another enclosure (Figs 8 and 19, Section GG). Ditch AY contained the partial skeleton of a sub-adult equid, including the left humerus, pelves and right hind leg (ABG5), which had been gnawed (Holmes, Appendix O). Short lengths of ditch (BJ, BG, BH, BI and BK), on north/south or broadly east/west alignments, were also situated to the east of Enclosure 11.1. It is unclear from their layout what their function was, but it is possible that they represent remains of further enclosures that lay to the south of the excavation area. The close spacing of ditches BG, BH and BI suggests that they represent several episodes of boundary maintenance and were not in use concurrently.
- 5.68. The interiors of all three enclosures had been partitioned. In Enclosure 11.1 this comprised a sub-enclosure (11.2) defined on the west side by ditch BD and to the north and east by the ditch (AZ) defining Enclosure 11.1. They enclosed an area of 9m by 5m with a possible entrance in the north-west corner, defined by the terminus of ditch BD.
- 5.69. A single pit (2036) was situated in the interior of Sub-enclosure 11.2 (Fig. 20, Section HH). It contained a single dark-brownish grey silty clay that was mixed with animal and human bone, wood charcoal, charred cereal remains and weed seeds, and fragments of lime mortar (0.43kg). The charred plant remains were sparse and fragmented and are more likely to represent wind-blown material rather than dumped domestic waste; the similarity of the wood charcoal assemblage to that from kiln AL suggests that the material may have derived from this feature. Most of the cereal remains were indeterminate, but a single hulled barley grain and spelt wheat glume base were identified, along with a possible legume fragment and hazelnut fragments. A human neonate-sized demi arch of the atlas vertebra and the disarticulated bones of a juvenile sheep/goat skeleton (ABG 6) were also recovered from the pit and are likely to represent a structured deposit.
- 5.70. Three partition ditches, CP, CQ and CS, were situated in the interior of Enclosure 10.1. They were broadly north-west/south-east aligned and represented at least two episodes of activity, with ditch CP representing the earliest stratigraphically. They varied from 0.8– 1.6m in width and were generally 0.1–0.2m deep with gradual to moderate sloping concave profiles

- 5.71. The interior of Enclosure 9.1 was partitioned by two sub-enclosures (9.2 and 9.3). They were defined by ditches similar in width (0.5–1.2m) to those defining Enclosure 9.1 but were often shallower (0.1–0.5m deep). Sub-enclosure 9.2 was trapezoidal in layout and 15m by 13m in extent. Two possible entrances were suggested by 1.7m wide and 2.3m wide gaps in the north-west and south-east corners, respectively. Internal activity comprised a pottery kiln (AL), situated in the northern half of the sub-enclosure and positioned parallel to the northern boundary.
- 5.72. Sub-enclosure 9.3 (ditches AJ and CV) was situated in the north-west corner of Enclosure 9.1. It was broadly rectangular in layout and approximately 18m by 12m in extent. An entrance was suggested by a 2.5m wide gap in the north-east corner. Unlike Sub-enclosure 9.2 it was devoid of internal activity.
- 5.73. Other activity in Enclosure 9.1 comprised five pits (2130, 1170, 2297, 2147 and 2149) and two postholes (2291 and 2292) situated in the northern half of the enclosure. They varied in shape and size, but the majority were less than 0.1m deep. Two intercutting pits, 2147 and 2149, survived to a depth of 0.4–0.5m and one of these contained 0.6kg (65 sherds) of Roman pottery. Pit 2130 contained possible fragments of daub with wattle impressions.

Kiln AL and occupation deposit L1 (Figs 8 and 21)

- 5.74. The presence of a pottery kiln (2.6m long and 1.2–2.2m wide) was indicated by the below-ground remains of a heat-affected structure in Sub-enclosure 9.2, which was situated 1m to the south of the northern boundary. It was east/west aligned (6m long) and was defined by an oval-shaped firing chamber at the west end and stoke pit to the east (Fig. 21). They were connected by a short flue that was approximately 0.6m long and 0.4m wide with vertical sides. The stoke pit was amorphous in shape (3.5m long and 2.2m wide), the likely result of regular rake-outs of spent fuel material, distorting any original cut. It was 0.7m deep and its base sloped upwards towards the firing chamber that was 0.3m deep.
- 5.75. The junction of the flue and chamber was the only part of the kiln to be lined with limestone and sandstone (2243) that had been bonded with a green-grey clay (2244) scorched red by successive firing events. The walls of the firing chamber were concave and also heavily burnt. There was some indication that the upper level had been clay lined (2309) (Fig. 21); this would account for some of the 246 fragments (8189g) of clay recovered from the backfill of the kiln, but based on contemporary examples from the

Oxford region, it is likely that the superstructure was also constructed of clay (Banks, Appendix E). Oval holes or notches were visible in the clay lining around the rim of the chamber and may represent vent-holes used to draw heat into the chamber from the furnace (Salzman 1939, 303–306; Harden 1936, 94–97). The base of the kiln chamber was also heavily scorched and was overlain by a layer of crushed sandstone (2310) and mid-grey yellow silt mixed with occasional fired/burnt clay inclusions, occasional stones and charcoal (2241 and 2242; Fig. 21, Section II). The kiln had been backfilled with a black-grey silty sand and mid-grey sandy clay (2238 and 2239). The uppermost fill (2240) comprised a mid-grey silty clay, likely formed by natural siltation processes following the abandonment of the kiln.

- 5.76. The kiln contained a large assemblage of pottery (446 sherds/11.85kg), the majority being of 2nd to 4th-century date and representative of the kiln output. Early to Middle Iron Age and Late Iron Age to Early Roman pottery (11 sherds/200g) also recovered from the kiln is considered intrusive. The main product of the kiln was M17 (whiteware) mortarium, associated with production during the period c. AD 240-300 (Banks, Appendix C). Colour coated (red slipped) wares were also produced in the kiln, with the most common vessels being C45 dishes, C18 jars and C97 mortaria. These were probably produced from the mid-3rd century onwards (Banks, Appendix C). The presence of C100 Mortaria suggests that production continued into the 4th century AD but the absence of other key forms, suggests that it was not used beyond the first quarter of the 4th century. A copper-alloy coin (Ra. 8; Fig. 28, no. 4) was recovered from the upper backfill of the kiln (2239) (Fig. 21 Section II), consisting of a nummus (AE2) of Constantine I, minted in Trier c. 310–313 AD. The reverse had a depiction of Sol Invictus with hand raised and holding a globe (Walton Appendix G). Other finds included a worked bone needle or hairpin shank (Ra. 9), recovered from lower fill (2242); animal bone; a piece of blue-green vessel glass broadly dated to the 2nd to 4th century (Fig. 27) and an iron nail shank.
- 5.77. Charred plant remains were identified throughout the kiln and the dominance of cereal chaff and arable weeds suggests that they represent waste from the final stages of cereal processing. These appear to be remains used as kindling, rather than suggesting an alternative/additional function for the kiln (West, Appendix Q). This material was more abundant in the upper backfill (2239) material of kiln AL and spelt was more commonly identified, with emmer and hulled barley represented by single grains. Other sources of fuel were represented by wood charcoal of a range of species that comprised oak,

Maloideae-type (hawthorn/rowan/crab apple), field maple, alder/hazel, ash, probable polar/willow and possibly two types of *Prunus* (blackthorn and wild/bird cherry).

5.78. A deposit (L1) of dark grey-brown silty clay (0.3–0.4m thick) was spread across the interior of Sub-enclosure 9.2 (Fig. 8). It contained pottery (139 sherds, 2kg), animal bone (141 fragments, 1.46kg) and fragments of fired clay (1.45kg), mixed with stone inclusions. Half of the pottery assemblage (sixty-eight sherds, 1.2kg) was represented by whiteware and red slipped ware fabrics and represents the output of the kiln. This material is most likely associated with the use of the kiln and overlies a more extensive layer of occupational debris (L2; discussed below).

Grave 2234 (Fig. 8)

- 5.79. An inhumation burial (grave 2234, SK2235) was positioned immediately to the east of Sub-enclosure 9.3. It comprised an east/west-aligned sub-rectangular grave (1.3m long, 0.7m wide and 0.2m deep) that contained the heavily disturbed remains of an adult. The bone was very fragmented and a lack of diagnostic skeletal elements hindered age and sex estimations, but it appeared likely to be that of a male, 35 years or older (Clough, Appendix P).
- 5.80. The grave backfill contained 34 sherds (1.44kg) of pottery dating to the mid to late 3rd century AD, which included fragments representing a near complete M22 mortaria (Fig. 25, no. 59) and R24 girth grooved jar (Fig. 25, no. 58). Due to the fragmented condition of the vessels, it is unclear whether they represent grave goods, but they appear not to have been a product of the adjacent kiln and their intentional deposition in the grave seems most likely. Fired/burnt clay and an iron hobnail were also present. A fragment of right femur was sent for radiocarbon dating, returning a date from the mid-Roman to the post-Roman period (258–534 cal. AD, SUERC 92340; 94% probability). However, the calibrated date at 68.2% probability produced a narrower date range of 266–427 cal. AD (SUERC, Appendix T), which is more consistent with the main period of use of the farmstead and the accompanying M22 mortaria that has a suggested date range of AD 200–400 (Banks, Appendix C). On balance, the absence of any other post-Roman settlement features within the site suggests that the inhumation was most likely contemporary with the farmstead.

Enclosures 12.1 and 13.1 to the north of trackway 14.1 (Fig. 8)

5.81. Two enclosures (12.1 and 13.1) were situated on the north side of trackway 14.1 and separated by trackway 14.3. They were only partially exposed within the excavation area

but were likely to have been rectangular in layout. Enclosure 12.1 was defined by ditches BO and BV on the south and west sides, which enclosed an area at least 24m by 19m in extent. They were 0.9–1.3m wide and 0.3–0.6m deep, with concave profiles. The western boundary (ditch BO) was recut on the same alignment twice, its final iteration (ditch BX) was considerably wider (1.4m) and took a slightly different course at its southern end. Enclosure 13.1 was defined on the south and west sides by ditch Q that had been recut at least twice on the same course. It was at least 28m by 14m in extent and extended beyond the excavation area to the north and east. Ditch Q had concave profiles and varied in width (0.7–1.7m) and depth (0.3–0.6m).

5.82. The interior of 13.1 contained a sub-enclosure (13.2) that was defined on two sides by narrow (0.4-0.5) ditches AH and BF, with a possible opening to the north. They enclosed an area of at least 20m by 9m. Enclosure 12.1 was partially sub-divided by ditch CH and contained a posthole and small pit.

Enclosure 15.1 in Area F (Fig. 6)

5.83. A small enclosure (15.1) was possibly suggested by L-shaped ditch DE, situated 35m to the west of Enclosure 12.1 in Area F (Fig. 6), although the truncated nature of the feature makes it difficult to confirm with any certainty. The ditch (1.7m wide and 0.6m deep) defined part of the south and east boundaries of the enclosure. Associated activity comprised a shallow posthole (0.1m deep) of no known function.

Occupation layer L2 (Fig. 8)

5.84. The southern enclosures, 9.1 and 11.1, were associated with an extensive layer (L1) of mid orange-brown silty clay (0.2m thick), with darker brown-grey patches. It was at least 50m by 25m in size and extended beyond the excavated area to the south but did not continue northwards beyond Enclosure 9.1. The layer was mixed with small stones, 218 sherds (2.6kg) of pottery, animal bone (160 fragments, 1.55kg), a fragment of Roman tile and fragments of fired clay (0.5kg). It did not appear to overlay the Roman activity and is likely to represent an occupation layer formed through the use of the enclosures.

Peripheral activity DP (Fig. 6)

5.85. A zone of peripheral activity (ditch DP) lay approximately 25m to the north of the main area of enclosures in Area F. It comprised an east-west-aligned ditch that was 1.5m wide and 0.4m deep, with steep sloping sides and a flat base. It contained a small quantity of Roman pottery (37 sherds, 0.2kg) and has been assigned on this basis. The

position of ditch DP suggests that further enclosures may have existed to the north of the main area of the farmstead in Areas B and F.

Period 3: Phase 3.3 Late Roman (4th century AD) (Figs 6, 9 and 19)

5.86. An episode of modification to the layout of the enclosure system was represented by Enclosure 16.1 and reworking of the layout of the southern end of Phase 3.2 trackway (Figs 6 and 9). Burial 6085 and a pit (6031) were also placed in the corridor of Phase 3.2 trackway 14.1 during this phase, suggesting that it had fallen out of use. The central location of the burial in particular, suggests that it may represent an example of a closure deposit marking the abandonment of Trackway 14.1.

Enclosure 16.1 (Figs 9 and 19)

- 5.87. Enclosure 16.1 was situated immediately to the south of Phase 3.2 Enclosure 9.1. It had been dug into the northern boundary of Phase 3.2 Enclosure 11.1 and could represent an easterly extension to the original enclosure layout. To the east it was dug across the corridor of Trackway 14.2 at the southern end. Enclosure 16.1 was defined by ditch AT on the north, east and west sides and enclosed an area at least 60m wide. Ditch AT varied along its length from 1.3 to 2.5m wide but was consistently 0.5m to 0.6m deep with a steep sloping concave profile (Fig. 19, Section EE). It was recut at least once on the same course and alignment.
- 5.88. Almost all the pottery assemblage (654 sherds, 13.18kg) and half of the animal bone assemblage (311 fragments, 2.16kg) from Phase 3.3 was recovered from enclosure ditch AT. The pottery assemblage was dominated by 2nd to 4th-century fabrics (306 sherds, 10.74kg), with broadly dated Roman pottery constituting 2.44kg (348 sherds). Residual Iron Age and Late Iron Age to Early Roman transitional pottery was also present, but in lower quantities (113 sherds, 1kg). Animal bone included the partial skeleton of a juvenile sheep/goat (ABG 7), found in the north-west corner of ditch AT. The hind-leg of a small dog, alongside a horse tooth and red deer metacarpal, were also recovered from the ditch at the west end (ABG 8; Holmes, Appendix O). A cut mark was noted on the distal shaft of the dog tibia, suggesting that it had been dismembered, potentially for consumption. Consistent with Phase 3.2 activity, only a small quantity of charred plant remains were present in ditch AT, mostly comprising of indeterminate cereal grains and wood charcoal fragments most likely representing wind-blown material rather than a deliberate dump of domestic debris (West, Appendix Q). A smithing slag

cake (0.12kg) was also recovered from ditch AT and implies that small-scale ironworking was being undertaken in or adjacent to Enclosure 16.1 (Dungworth, Appendix M).

Ditch AW (Fig. 9)

5.89. A possible alteration to the layout of Phase 3.2 trackway 14.2 was represented by ditch AW and its recut (1.3m wide and 0.7m deep) that were situated to the north-east of Enclosure 16.1 (Fig. 9). It followed a similar alignment to the eastern boundary of Enclosure 16.1 and may represent the re-alignment and narrowing of the trackway. Alternatively, it could form part of another enclosure extending to the east.

Grave 6085 (Figs 9 and 22)

- 5.90. A north-east/south-west-aligned grave was placed in the centre of Phase 3.2 trackway 14.1. It was rectangular (1.8m long, 0.6m wide and 0.1m deep) and contained the fragmented and truncated remains of a male, over 45 years of age (SK6087, Fig. 22). The individual had been placed in an extended, supine position with its head to the south-west and feet to the north-east. The skull and left shoulder of the individual were absent as a result of later truncation by a Period 4 medieval plough furrow. A broad date range of 240–530 cal. AD (SUERC-92339) was obtained from a fragment of bone through radiocarbon analysis. This was refined to 260–420 cal. AD (at 68.3% probability) and would be consistent with its location within the disused Phase 3.2 trackway and suggestion that it represented a potential closure deposit. As with grave 2234, the absence of any other post-Roman settlement features within the site suggests that grave 6085 was most likely contemporary with the farmstead.
- 5.91. An assemblage of 57 iron hobnails (Ras 23–45) was recovered from the grave. All apart from one derived from the north-east end and most likely pertain to footwear deposited with the body. A flat head iron nail (Ra. 23) and stud (Ra. 39) were also identified, but it is unclear whether they represent an accidental inclusion or fixtures of a coffin. The grave had been backfilled with dark grey-brown sandy clay mixed with occasional stones and flecks of charcoal, Roman pottery and fragments of cattle, sheep/goat and equid bones. A small assemblage of residual Middle Iron Age and Late Iron Age to Early Roman transitional pottery was also found.

Pit 6031 (Fig. 9)

5.92. Pit 6031 had been dug into the northern side of trackway 14.1 (Fig. 9). It only contained two sherds (0.01kg) of broadly dated Roman pottery but has been assigned to Phase 3.3 based on its location. It was 1.3m in diameter and had gradual sloping sides and a flat base, 0.1m deep. It contained an unremarkable single silty clay fill that was mixed with burnt stone and two fragments of animal bone.

Period 4: Medieval (1066 – 1539) (Figs 2 and 10)

- 5.93. No archaeological features dating to the medieval period were identified across the site, with the exception of the remains of infilled plough furrows in Areas B and F, consistent with former ridge-and-furrow agricultural practices. The plough furrows were broadly north/south orientated, curving slightly east towards the north, and curving slightly west to the south. They were between 2m and 3m wide and, where excavated, varied in depth between 0.1m and 0.3m. Artefacts recovered from the plough furrows include Middle Iron Age, Late Iron Age to Early Roman Transitional and Roman pottery, animal bone, fired/burnt clay and an iron nail, all considered to be residual deriving from earlier settlement and agricultural activity on site.
- 5.94. Distinctive S-shaped lines shown on LiDAR imagery held by the Environment Agency, provides evidence for medieval ridge-and-furrow agriculture in the western part of the site (RPS 2017). The plough furrows identified during the excavation appear to broadly correlate with the LiDAR and for this reason are considered to be medieval in date.

Period 5: Post-medieval/modern (1540 – 2000) (Figs 2 and 10)

5.95. A small number of post-medieval and modern features were identified in Areas A and F (Fig. 10). In addition to these, the fragmented remnants of a series of north-east/south-west and north-west/south-east-aligned modern field drains, averaging 5.5–6m apart were recorded across Areas A, B, C and F (Fig. 2). These were considered to be modern and not excavated, so are not discussed in any further detail.

Field boundary ditches DM, H and N/U (Fig. 10)

5.96. Three ditches were situated in Areas A, F and I that were either north/south or east-west aligned and matched the alignments of boundaries depicted on late 19th and early 20th-century Ordnance Survey maps. They were 0.8–1m wide and 0.2–0.3m deep with concave profiles. Pottery dating to the post-medieval and modern periods, along with residual sherds of Middle Iron Age and Roman pottery were recovered from two of them. Other finds included coal, non-diagnostic ironworking slag (0.02kg), fired/burnt clay, animal bone and post-medieval clear window and green bottle glass. No finds were

recovered from ditch H in Area F, though it did cut a medieval plough-furrow suggesting a post-medieval or modern date.

Ditch BZ (Fig. 10)

5.97. Ditch BZ was only visible for 20m in Area B and did not appear to continue into Areas F or B to the north-east and south-west respectively. It was 0.39m wide and 0.24m deep with moderate sloping concave sides and a flat base. The alignment of ditch BZ (north-east/south-west) differed to that of post-medieval ditches DM, H and N/U and for this reason it is considered likely to be modern in origin, although no dating evidence was recovered to support this.

6. THE FINDS

6.1. Finds recovered are listed in the table below. Details are to be found in Appendices B to
N.

Туре	Category	Count	Weight (g)
Pottery	Late prehistoric	2354	26,528
	Late Iron Age and Roman	3975	77,405
	Post-Roman	31	423
	Total	6360	104,356
Lithics	Worked	13	28
Metals	Iron	104	608
	Copper alloy	9	37
	Lead	4	89
	Composite lead and iron	1	278
	Total	118	1012
Mortar		6	537
Coins	Roman	1	3
Glass	vessel	8	134
CBM	Tile (roof, floor and wall), brick	16	700
Fired/burnt clay/daub	All	869	18,209
Clay tobacco pipe		4	18
Stone	Worked	2	4572
	Burnt	37	1900
Industrial waste	Metalworking	-	3151
Bone	Worked	1	1

6.2. The finds assemblage comprises Late prehistoric, Late Iron Age to Early Roman transitional, Roman and post-Roman pottery; worked flint; metalwork and a coin; mortar; glass; fired clay and daub, ceramic building material (CBM); clay tobacco pipe; stone

and industrial waste. A relatively small component of the pottery assemblage is of Late Iron Age to Early Roman transitional and post-Roman date, with the remainder dominated by Late prehistoric and Roman material. Where diagnostic, the worked flint is of likely Mesolithic or Early Neolithic date. The majority of the CBM was postmedieval/modern but most of the remaining finds were of Roman date.

Pottery

- 6.3. A total of 2354 sherds (26,528g) of handmade Late prehistoric pottery was recorded from the site, with a combination of vessel forms suggestive of a date range encompassing the later part of the Early Iron Age into the earlier Middle Iron Age. Overall, the assemblage was dominated by sandy and shell-tempered fabrics, with limestone-tempered fabrics making up only a small portion. The fabrics and vessel forms are broadly comparable to pottery from several Early and Middle Iron Age sites in the Thames valley region.
- 6.4. Late Iron Age and Roman pottery comprises 3975 sherds (77,405g), with Late Iron Age to Early Roman transitional fabrics accounting for just under 20% of the overall assemblage. Relatively large quantities of transitional grog-tempered wares were present; most or all of this material probably dating to the 1st century AD. Jars occurred more frequently than bowls, but both included forms commonly in use during the 1st century AD.
- 6.5. The Roman assemblage was dominated by Oxfordshire wares which together accounted for over 90% of the group by weight. By far the most common were Oxfordshire white ware mortarium and Oxfordshire red slipped ware mortarium, dishes and bowls, representing vessels produced in kiln AL from the mid-3rd century onwards. Pottery not derived from the kiln is dominated by locally produced reduced, oxidised and white wares, with vessels such as beakers, flagons, jugs, bottles and cups occurring most frequently. Regional and imported wares are almost entirely absent and most likely the result of the strong and well-established pottery industry already present in the region.
- 6.6. A small quantity of post-Roman pottery, 31 sherds, weighing 423g, was recorded. Two thirds of the assemblage was unstratified and came from subsoil or topsoil type deposits, the remainder mostly from the ditches and pits associated with the sparse post-medieval/later activity (Period 5). Two medieval sherds were seemingly intrusive from

within Iron Age or Roman-phased deposits. The earliest material consists of nine sherds in medieval fabrics, all of which have a lengthy production period.

Lithics

6.7. A total of 13 worked lithics (28g) was recovered. Features of some of the lithics are suggestive of 'soft hammer' percussion which typically features in Mesolithic or Early Neolithic knapping strategies. Most of these artefacts were redeposited in Middle Iron Age or later features but they do allude to activity on the site during this period.

Metal (including coins)

6.8. The 118 items of metalwork (1012g) included objects in copper alloy (37g), lead alloy (89g), iron (608g) and an item of composite lead and iron (278g). Copper-alloy objects included a Late Roman coin and two Roman brooches. Two lead-alloy objects comprised Roman weights. Ninety-one iron objects included 58 hobnails recovered from two Roman graves. A composite lead and iron object is of uncertain date and function.

Mortar

6.9. Six fragments (537g) of lime mortar are recorded from three deposits. Lime mortar is widely used in Britain, beginning in the Roman period and commonly up to recent periods. It is rarely dateable in isolation, though Roman dating can be assumed for material recovered from Phase 3.2 features.

Glass

6.10. Eight fragments (134g) of glass were recorded from five deposits. The majority of the glass assemblage was highly fragmented and in moderately-poor condition and mainly composed of material datable to the post-medieval/modern periods. However, an abraded rim fragment from a vessel of blue-green glass (2g) was recovered from the backfill material of kiln AL. It most likely derives from a shallow bowl type vessel dateable in the 2nd to 4th-century AD range.

Ceramic Building Material (CBM)

6.11. A total of 16 fragments (700g) of ceramic building material (CBM) dating to the Roman and post-medieval/modern periods were recorded. Three fragments (105g), including a piece of tile, are Roman in date and derive from contemporary features. The remaining 13 fragments (595g) date to the post-medieval/modern period and comprise tile, brick and undiagnostic fragments.

Fired clay/daub

- 6.12. A total of 869 fragments (18,209g) of fired or burnt clay were recorded, the majority deriving from Roman Phase 3.2 features. Most cannot be identified but two fragmentary clay objects, both associated with Period 1 (Middle Iron Age), are identified as the corner fragment of a triangular weight and part of a globular spindle whorl. A large fragment of fired clay (216g) was also recovered from a Period 1 ditch. It was triangular in section with a curved interior and may represent part of an oven structure, although it is not possible to identify it with any certainty due to it being incomplete.
- 6.13. The majority of the assemblage (17,831g) comprised fragments that were formless, lacking original surfaces or other features indicative of their use. The abundance of such material from within the Phase 3.2 Kiln AL (246 fragments) suggests use relating to the operation of this feature, most likely capping or lining material.

Clay tobacco pipe

6.14. Four fragments (18g) of post-medieval or modern clay-tobacco pipe are recorded from modern or unphased deposits.

Stone

6.15. A total of 39 items of worked or utilised stone (37 burnt, two worked) was recovered. The two worked items (4.572g), a fragment of lower rotary quern and a possible fragment of Faringdon Greensand rotary quern, were recovered from Roman Phase 3.2 deposits. The burnt stone (1900kg) includes fragments that have been exposed to extremes of heat and have been turned pink as a result, some that has been heated and rapidly cooled, so that it is cracked or fractured, and one piece that is blackened through exposure to open fire.

Industrial waste

6.16. The industrial debris includes 3151g of metalworking debris, the majority from Period 1 (Middle Iron Age) and Roman Phases 3.1–3.3 deposits. The assemblage includes three smithing slag cakes, from Middle Iron Age and Roman-dated deposits, although these are rather lighter than usual, and the identification is a little uncertain. The remaining ironworking slag is non-diagnostic, that is slag that is fayalitic and was clearly produced by ironworking. However, the fragments lack clear features that would allow the identification of the exact process which produced them. These slags could have been produced by either smelting or smithing. The absence of any smelting slags makes it quite likely that some or even all of the non-diagnostic slag was produced during iron smithing.

7. THE BIOLOGICAL EVIDENCE

7.1. Biological evidence recovered is listed in the table below. Details are to be found in Appendices L and Q (including radiocarbon dating).

Туре	Category	Count	Weight (g)
Animal bone	Fragments	6400	55,521
Environmental samples	Bulk soil samples	91	-
Human bone	Inhumation burials	2	-
	Disarticulated remains	5	-

7.2. The mixed biological evidence includes a sizable assemblage of animal bones, with cattle and sheep/goat occurring most frequently during the Iron Age and Roman periods, followed by equid (horse or donkey), pig and canids (dog or fox). Of the 91 environmental samples taken, 28 were processed for assessment and six of these were subject to more detailed analysis. Material from the samples indicates the cultivation of hulled barley, emmer and spelt. Charcoal from the samples was poorly preserved and fragmentary but provides some insights into the local environment in the Iron Age and Roman periods. Human remains include two inhumations of Roman date and disarticulated bones of at least two neonates and three adults that had been deposited in Middle Iron Age and Roman ditches and pits.

Animal bone

- 7.3. The animal bone assemblage comprises approximately 6400 fragments (55,521g), of which 2800 fragments were deemed suitable for further analysis. Just over 1000 were identified to taxon, the majority from Middle Iron Age Period 1 and Roman Phase 3.2 (2nd to 4th century) contexts. Bones are well preserved though highly fragmentary, indicating that they were friable upon excavation. There was very little evidence for butchery or burning, although observations of both indicates processing of the animal carcasses took place. There were no obvious deposits of primary butchery, skin-processing or craft-working waste, although a single equid (horse or donkey) metacarpal had been polished and smoothed along the shaft and at the proximal end. Several primary contexts were evident from ABGs and unfused epiphyses recovered alongside their corresponding metaphyses, indicating deposits that saw little post-depositional movement.
- 7.4. Middle Iron Age animal remains were distributed fairly evenly throughout the various features, with cattle the most abundant, followed by sheep/ goats then horses and pigs.

The largest assemblage came from Middle to Late Roman Phase 3.2. Cattle and sheep/ goat remains were recovered in similar proportions, as were pigs and equids, though fewer in number, with a few canids also identified. Isolated bones of cat, red deer (hunted) and domestic fowl were recovered, and the samples produced micro-mammals (including field vole), frogs/ toads (including frogs) and fish (including eels). Animal bone predominantly occurs in small quantities in Late Iron Age to Early Roman features, but the main domesticates were represented. The exception to this is an articulated female cattle skeleton deposited in an enclosure ditch.

Plant macrofossils

- 7.5. Iron Age and Roman charred plant assemblages from two features (six samples) were taken through to analysis. The two features were dominated by cereal remains, chiefly chaff, and contained hulled barley and emmer and spelt wheat. The charred seed assemblage most likely represents weeds of arable fields, accidently collected along with the crop and forming part of the waste from the final stages of cereal processing. It appears this material has been used as tinder within Phase 3.2 pottery kiln AL.
- 7.6. Charcoal analysis was undertaken on five samples from Middle Iron Age and Roman Phase 3.2 features. It was moderately abundant in the assemblages and condition was generally fair to poor, with highly fragmented and small assemblages. Eight taxa were positively determined all of which were anatomically consistent with native species: Maloideae-type Prunus spinosa (blackthorn), (hawthorn/crab apple/pear, whitebeams/rowan), Rhamnus cathartica (purging buckthorn), Quercus sp. (oak), Corylus aveilana (hazel), Populus/Salix (poplar/willow), Acer campestre (field maple) and Fraxinus excelsior (ash). The charcoal from the Middle Iron Age and Roman period assemblages shows a similar use of a range of local hardwoods sourced from mixed deciduous woodland with some harvesting from woodland margins or hedgerow/scrub types. The exploitation of damp ground habitats, such as the River Cherwell to the west, was not extensive, and traces of wet-ground species were only identified in Kiln AL

Human Remains

7.7. Human bone comprising two articulated skeletons, each recovered from a grave, and five fragments representing a minimum of two neonates and two adults were recovered from Middle Iron Age and Roman ditches and a pit. The inhumation burials, both dating to the Roman period but in variable completeness and preservation, were recovered from graves aligned on and near ditches. They were in extended supine positions,

reflecting known practices common at rural settlements. It is tentatively suggested that both were male and one was in the older age range, the other possibly younger. The disarticulated human bones were not identified in the field as human, so it is not possible to confirm how these remains came to be in the features. There are many possibilities from truncated graves to intentional deposits.

8. DISCUSSION

8.1. The programme of excavation at Swan School and Meadowbrook College, Marston, confirmed the results of the previous trial-trench evaluations (CA 2018a and b), that a series of enclosures of Iron Age and Roman date were present across the southern part of the site. Many of the ditches continued outside of the excavated areas, but did not appear to continue in the evaluation trenches located outside of the excavation areas, implying that the probable focus of Middle Iron Age and Roman activity lay within excavation Areas A, B, C and F. Residual flints of Mesolithic or Early date indicted some limited activity at the site during the Early prehistoric period. The results are contextualised below with regard to the local and national settlement pattern.

Site location and geology

8.2. The development site is situated within the city of Oxford on low-lying ground (60m aOD) on the edge of the River Cherwell floodplain and immediately north of the Marston Brook. The land rises gradually towards the suburb of Marston, which sits on a low gravel island overlooking the Cherwell. The site traverses an area of alluvium and Oxford Clay Formation and West Walton Formation mudstone (BGS 2021), capped by seasonally wet, acidic but base-rich loamy and clayey soils that typically support areas of pasture and woodland (Soilscape 2021). Evidence of waterlogging was absent from the ditches on site and maintenance to the ditches was minimal up until the Roman period. The presence of alluvium on the southern and western areas identified in the previous evaluations, however, indicated that the development site had been intermittently impacted by flooding events within the floodplain (CA 2018a and 2018b).

Early prehistoric (Mesolithic to Early Neolithic)

8.3. A small assemblage of Mesolithic or Early Neolithic flints indicates activity at the site or in the near vicinity during this period, although no cut features were demonstrably of this date. This is consistent with evidence of Mesolithic/Early Neolithic period activity in Oxfordshire and often in the wider Thames Valley, which is generally represented by findspots of flint tools and residual assemblages recovered from later features (Beckley and Radford 2012a, 13; Hey and Robinson 2011a, 193). However, these assemblages have provided evidence on the extent to which the region was visited during these periods and distinct clusters have been identified along the major river valleys and some upland areas (Hey and Hayden 2011, 151). Flint scatters have also shown marked similarities in the settlement pattern during the Mesolithic and Early Neolithic periods (Hey and Robinson 2011b, 241). A number of sites containing similar assemblages have been recorded around Oxford with residual flints found in later features at Manor Ground, London Road, Headington (Hart 2003; Fig 1, MOX12797), 2.1km to the south-east.

Middle Iron Age in Areas A and F

- 8.4. The first definitive evidence of occupation within the excavation area occurred during the Middle Iron Age in Areas A and F and comprised several curved ditches that have been tentatively interpreted as two oval enclosures These contained roundhouse gullies, pits and postholes. Beyond the enclosures to the north and south-west, trackways (4.1 and 4.2) and clusters of unenclosed pits and postholes were identified. No definitive evidence for Middle Iron Age activity was identified outside of Areas A and F and it is possible that the settlement did not extend far beyond the excavation areas, although further settlement remains may also have been truncated by Roman activity.
- 8.5. The Late prehistoric pottery assemblage from Swan School and Meadowbrook College suggested evidence for both Early and Middle Iron Age activity, with fabrics, vessel forms and decoration characteristic of both periods identified. However, the majority of the vessel forms were consistent with a Middle Iron Age date and styles associated with this period occurred more frequently in Period 1 features. A Middle Iron Age date was supported by eight radiocarbon dates obtained from animal bone, charred residues and charcoal, which produced date ranges spanning the earlier Middle Iron Age in the late 4th century to the mid 1st century BC (SUERC, Appendix S). Only one pit produced a slightly earlier date that overlapped in the 95% and 60% probability range to suggest activity in the 5th century BC (SUERC-98592). On balance, it seems likely that the settlement was established during the Middle Iron Age with styles more characteristic of the Early Iron Age representing residual material (Banks, Appendix B). In the Thames Valley there is growing evidence that Middle Iron Age enclosures succeeded earlier, scattered settlements (Lambrick and Robinson 2009, 109). Within the development site no features were demonstrably of an earlier date although it is possible that earlier settlement activity existed in the vicinity. Alongside pottery, a relatively large animal bone

(13.9kg) assemblage, as well as fragments of a clay oven and metalworking debris were recovered and suggest that the features represent settlement.

- 8.6. At least two episodes of settlement activity may be represented by Enclosures 1.1 and 2.1, but their layout in relation to each other suggests that they could have been in-use concurrently. This is supported by the pottery assemblage that presents a consistent picture across the settlement. Several settlements of a similar date have been excavated within Oxford and provide comparative Iron Age evidence to that discovered at Swan School and Meadowbrook College. Contemporary examples include sites at Whitehouse Road (Mudd 1993; Fig. 1, MOX2694), situated approximately 3km to the south-west; Blackbird Leys (Booth *et al.* 2003; Fig. 1, MOX12199), 7km to the south-east; and in the University Parks on the west side of the River Cherwell (Thompson 2015, 97–109; Fig. 1), 1.4km to the south-west of the development site.
 - 8.7. The Middle Iron Age settlement comprised both enclosed and 'open' elements, similar to contemporary, local sites at Blackbird Leys (Booth et al. 2003) and Whitehouse Road (Mudd 1993). It most likely fits into the open settlement type termed 'house, pen and paddock' by Lambrick (2009, 109–115), although great variation exists within this category of settlement. For example, Blackbird Leys and Whitehouse Road both contained enclosures, but they were smaller in size, 34m and 16m respectively, to those within the development site and contained far fewer domestic-related features. At Whitehouse Road it was surmised from the layout of postholes and small pits inside enclosure B that it would have only enclosed a single roundhouse structure (Mudd 1993, 79; Lambrick 2013, 40–41, fig. 23). The presence of larger enclosures, containing one or more roundhouse gullies, pits and sub-enclosures is more akin to those at Latton Lands and Gill Mill, Stanton Harcourt in Wiltshire, where some elements of the settlements were enclosed by larger, curved enclosures (Lambrick 2009, 109-115). Ditches and pits revealed at Bernwood First School (Gilbert 2005; Fig. 1, MOX12794) and a possible sub-circular enclosure in the University Parks (Thompson 2015, 102, fig. 2; Fig. 1) provide one of the few excavated examples of likely enclosed settlements in Oxford, although only a small portion of the enclosures on either site were exposed within the excavation areas.
- 8.8. Evidence for structures within Enclosures 1.1 and 2.1 comprised shallow, curved ditches representing the likely remains of circular drainage gullies, similar in layout and size (10m in diameter) to contemporary examples identified on Iron Age sites across

England, including Gravelly Guy, Stanton Harcourt to the west of Oxford (Lambrick and Allen 2004, 119–141). Few potential structural remains were associated with those within the development site, apart from a few small pits and postholes, but based on contemporary examples from Whitehouse Road, Oxford, and Gravelly Guy it is possible that the gullies enclosed circular rings of posts. Where entrances were present in the case of Roundhouses 2.2 and 2.3, they were east and west facing. It can be surmised that the entrance of Roundhouse 1.2 was also similarly orientated. Other types of structure common to Iron Age sites appeared absent from the settlement, although two postholes, spaced 2.5m apart, on the northern edge of Enclosure 1.1 could represent the remains of a four-post structure, predominately interpreted as raised granaries, although other interpretations exist (Lodwick 2017, 67–68).

- 8.9. No formal human burials of Middle Iron Age date were identified but a fragment of human cranium and femur were recovered from a pit (6316) and ditch (CG) respectively, representing the minimum of one adult individual. It is possible that they represent the disturbed remains of a formal burial, but the fragmented condition of the bone indicates that this was unlikely to be the case. The occurrence of disarticulated human bone is well documented on Iron Age sites (Lambrick 2009, 313-315; Smith 2018, 208-209) and is consistent with the burial patterns in the region, where deposits of disarticulated human bone are common, along with burial in pits (Beckley and Radford 2012b, 18–19). Commensurate with this pattern was the occurrence of unburnt bone of at least one foetal or neonatal individual in the terminus of a ditch in University Parks (Thompson 2015, 103). Both human bones at Swan School and Meadowbrook College also occurred alongside objects of interest. In the case of the adult femur, it was accompanied by an almost complete Middle Iron Age globular jar (Ra. 47; Fig. 3), whereas the cranium fragment was buried in the same pit as fragments of two slag cakes. Whilst there may be a mundane explanation for these deposits, the absence of slag cakes or complete vessels from any other part of the settlement implies that they may represent special deposits of some significance to the settlement's occupants.
- 8.10. The burial of animals was represented by the partial remains of at least three adult dogs that had been deposited in the same location in ditch BU, defining settlement Enclosure 2.1 (Fig. 3). Butchery evidence on some of the bone indicates that at least one individual was dismembered and skinned prior to deposition (Holmes, Appendix M). Lambrick and Robinson (2009, 156–157) have noted that evidence for the butchery of dogs in the Upper Thames Valley was slight but the existence of a sufficient number of bones

displaying butchery marks suggests that dog sometimes contributed to the diet. It is also plausible, based on the partially articulated nature of the skeletons, that in this instance the pelt was removed, perhaps as a keepsake. The repeated deposition of dogs in the same location and absence of any other examples in the settlement, may suggest that these were prized animals, family pets or working animals, whose burial was carried out with an element of care.

- 8.11. Limited charred plant remains were recovered from Middle Iron Age features but the cultivation of emmer or spelt wheat and barley is implied by a small number of grains and this evidence is consistent with contemporary sites in Oxford and beyond (Letts 1993, 74–78). Weed species representative of arable fields, such as cleavers and brome, were also present amongst the assemblage and indicate that the later stages of crop processing and food preparation were undertaken within the settlement, albeit piecemeal and not necessarily the main focus of activity in the area excavated. Evidence for crop storage is tentatively provided by two steep sided and flat bottomed pits, situated in Enclosures 1.1 and 2.1. Although small and shallow examples, they did bear similarities to types of pits commonly found on Iron Age sites, which are often interpreted as having a storage function, such as those at Bernwood First School, Oxford (Gilbert 2005, 30–32). Supporting evidence was not present in the pits, however, and charred grain recovered from them was mixed with charcoal and most likely represents domestic hearth waste, suggesting a secondary use of these features. In general, the Middle Iron Age features in the excavation area were deemed to have low potential for charred plant remains and this was reflected in the seven samples taken from Period 1 features. This apparent dearth of plant remains would suggest a more pastoral focus to the economy that is consistent with its low-lying location.
- 8.12. The main domesticates were represented, with cattle accounting for 45% of the identified species, followed by sheep/goat (34%) and then horse (10%) and pig (7.5%). A slightly greater number of cattle over sheep/goat was also noted at Whitehouse Road (Hamilton-Dyer 2003, 68–71) and to a lesser extent at the site in University Parks and reflects a general trend in the Upper Thames Valley (Lambrick and Robinson 2009, 242–244, fig. 7.3) sites (Holmes, Appendix M). This may be explained by the location of Swan School and Meadowbrook College and the examples above on low-lying ground close to or on the floodplains, areas ideal for grazing cattle (Soilscape 2021). During the Middle Iron Age in the Oxford area, the drier, low-lying areas within the floodplain became the focus of small farming settlements engaged in pastoralism (Lambrick 2013, 39). A

possible stockade with a funnelled entrance was identified at the site in University Parks and has been taken to represent activities associated with animal husbandry (Thompson 2015, 99). Within the development site, cattle and sheep/goat were culled at a variety of ages, indicating that as well as being kept for meat, they also provided secondary products, such as milk. Cattle would have provided traction as well and pathological changes observed on the pelvis of one animal could have been caused by wear and tear associated with this type of activity (Holmes, Appendix O). Pigs were culled prior to maturity, indicating that they were kept for consumption, whilst horses appeared to have been mature and most likely utilised for transport, and only occasionally consumed. The presence of only a single bone from a small bird, such as a thrush or blackbird, implies that the diet of the occupants was rarely supplemented by wild sources of food, although charcoal of alder/hazel, blackthorn, field maple and Maloideae-type the (hawthorn/rowan/crab apple) indicates the availability of hedgerow sources, with oak implying access to woodland.

8.13. Information on other activities undertaken in the settlement is limited to evidence for iron smithing, provided by the two smithing slag cakes in Enclosure 1.1 and two deposits of non-diagnostic ironworking debris, but there is no indication of precisely where this was undertaken within the settlement. Evidence for smelting within the settlement was absent and the paucity of remains implies occasional repair rather than production (Dungworth, Appendix M). This is consistent with contemporary sites around Oxford, such as Whitehouse Road (Mudd et al. 1993, 64), and in the wider Upper Thames region, where in most examples production and maintenance of objects appeared to have been the main concern (Lambrick and Robinson 2009, 218-219; Beckley and Radford 2012a, 20). Similar evidence exists for Wessex, where it is considered likely that changing attitudes to iron production during Middle Iron Age led to restrictions on iron working and the development of itinerant specialist metalworkers/artisan, with production occurring in more peripheral locations (Sharples 2010, 133-139). In the Upper and Middle Thames Valley only five roasting/smelting sites have been identified (Lambrick and Robinson 2009, 218-219) and it appears likely that the specialised activities involving the transformation of iron ore were restricted to specific, perhaps peripheral, locations.

Late Iron Age to Early Roman transition in Areas A, B, C and F

8.14. Radiocarbon dates suggest a short hiatus or decline in activity from around the mid 2nd century BC to the Late Iron Age to Early Roman transitional period when an enclosure

and associated trackway and area of unenclosed activity was established in Areas A, C, B and F. This occurred directly to the north-east and south-west of the Middle Iron Age Period 1 settlement. A dearth of Late Iron Age to Early Roman transitional pottery was noted in Period 1 features, suggesting that whilst the Period 2 activity does not encroach on the Middle Iron Age settlement there is no evidence that it continued to be utilised beyond the 2nd century BC. This is consistent with the pattern of Late Iron Age to Early Roman occupation in the Oxford region that is often characterised by settlement shift (Lambrick 2013, 45). This was illustrated at Gravelly Guy, where the Late Iron Age to Early Roman settlement was established immediately to the north-east of the Early to Middle Iron Age settlement (Allen 2004, 161; figs 4.1 and 4.2). At both Middle Iron Age settlements at Whitehouse Road and Blackbird Leys, no Late Iron Age phase of activity has been identified (Lambrick 2013, 45).

- 8.15. Separation of the Period 1 and Period 2 activity was also apparent in the layout of enclosures, which were generally square or rectangular as opposed to the curved examples of the Middle Iron Age. The interior of the main enclosure, 5.1, was sub-divided by a series of small-ditched enclosures. No buildings were identified in the interior of 5.1 and in general, pits and postholes were sparse. Unenclosed activity to the north-east was, in contrast, predominately characterised by dispersed pits and postholes and a single four-post-structure. However, both areas of activity produced only small assemblages of pottery (275 sherds, 4.22kg) and few other types of domestic-related artefact, suggesting that they were not directly associated with domestic activity. The general silted-up fills suggested archaeobotanical potential was limited, and those sampled were generally devoid of botanical remains and charcoal.
- 8.16. Bones representing all elements of sheep/goat and cattle carcasses were present and found to be evenly distributed throughout the ditches and pits, as well as the articulated remains of a cow skeleton. Although the sample was small, this suggests a self-sufficient economy where animals were culled, processed, consumed and disposed of on site (Holmes, Appendix O). The composition of the animal bone assemblage also suggests that the Period 2 enclosures were the focus of animal carcass processing and most likely represent a peripheral farmstead. Animal bone provided evidence for a similar range of species to those associated with Period 1: cattle, sheep/goat, pig, canid and equid. However, sheep/goat were most commonly recorded, constituting 48% of the identified assemblage, followed fairly closely by cattle (39%) and then pig (5%) and equid (7%). This is perhaps curious given the access to grazing land on the floodplain; damper

conditions can cause parasite infestations in sheep. The sheep/goat appear to have been culled at all ages, suggesting that they were kept for meat and secondary products, such as milk and wool. Cattle bone was mostly from adult animals, suggesting an emphasis on secondary products, such as traction. The only associated animal bone group was an articulated cow skeleton (ABG 2) that had been deposited in the partially infilled ditch defining enclosure 5.1.

8.17. The burial of a complete cattle carcass in the ditch defining Enclosure 5.1 is of interest as it represents the only deposit distinct from the ordinary patterns of animal bone disposal during Period 2 on the site. The dating of this burial has proven elusive, with two failed attempts at radiocarbon dating due to degraded/absent collagen, but its location in the upper part of the ditch, and possibly in a grave, suggests that it occurred in the later stages of the Period 2 farmstead or during the earlier part of the Roman Period 3 farmstead. Based on this tentative dating it is possible that it represents a closure deposit, often identified in Iron Age contexts as marking specific events, such as the abandonment of a settlement or farmstead.

Roman farmstead in Areas B and F

- 8.18. Roman activity within the development site was represented by a newly established farmstead, the main phases of which (Phases 3.2 and 3.3) were characterised by conjoined, rectangular enclosures focused on the junction of three trackways. An interesting aspect of this farmstead is its location within an important Roman pottery production area. The development site is situated approximately 2.3km to the north-west of Headington, one of the main areas to produce evidence of Roman kilns (MOX9957, MOX23731, MOX11525, MOX11526, and MOX5422; Fig. 1; Young 1973, 105–106, fig. 1), but the possible site of a kiln has also been recorded much closer on Headley Way, approximately 480m to the south-east (MOX8501; Fig. 1). One of the factors of this successful pottery production area was its proximity to the Dorchester to Alchester Roman road (MOX26953; Fig. 1), situated approximately 3.5km to the east, but abundant supplies of clay, such as the white clay on Shotover Hill used for colour-coated wares, water and timber would have been also important contributing factors.
- 8.19. No apparent hiatus in occupation between Period 2 and Roman Period 3 activity was evident, although based on the limited quantity of Romanised pottery in ditches defining Late Iron Age to Early Roman Enclosure 5.1, it was probably not utilised beyond the 1st century AD. The Roman Period 3 farmstead also replaced unenclosed Period 2 activity

in Area B. The wider pattern of settlement in the Upper Thames valley is predominantly characterised by continued settlement from the Late Iron Age to the early 2nd century AD, with most farmsteads either abandoned or relocated after this point (Beckley and Radford 2012c, 10; Booth *et al.* 2007, 43–53). The Roman farmstead within the development site loosely conforms to this pattern, with the pottery evidence suggesting that it was most likely established in the early 2nd century AD (Banks, Appendix C).

Farmstead morphology

- 8.20. The earliest component of the farmstead comprised a circular or possibly D-shaped enclosure (Phase 3.1). A predominance of 3rd to 4th century Roman pottery recovered from the ditch placed it later in the site sequence, but it was more similar in size and layout to Period 1 Middle Iron Age Enclosures 1.1 and 2.1 identified within the development site. Its layout is also reminiscent of Late Iron Age to Early Roman examples from Gloucestershire, at Somerford Keynes, Neigh Bridge, and Horcott Totterdown Lane (Booth *et al.* 2007, 43–53, fig. 3.3). The most likely explanation for this enclosure is that it belonged to an earlier phase of activity but was backfilled in the later Roman period, potentially surviving as depression within the Phase 3.2 iteration of the farmstead and may have been partially incorporated into the layout of Enclosure 9.1, as a sub-division, for example.
- 8.21. The main period of farmstead activity, dating from the 2nd century AD, comprised a system of conjoined rectangular enclosures arranged around the junction of three trackways. This layout conforms to a 'complex' type farmstead that most frequently occurs in the Central Belt region, as defined by the *Rural Settlement of Britain project* (Allen and Smith 2016, 28–33). This region comprises a swathe of land in central Britain stretching from the Lincolnshire and Norfolk Fens in the east to parts of Somerset and South Glamorgan in the south-west and includes the river valleys of Oxfordshire (Smith 2016, 142, fig. 5.2). Differentiation of space within these types of farmsteads, often created by ditched internal divisions, has been found to reflect discrete activities (Allen and Smith 2016, 28–33) but apart from a focus on pottery production in one sub-enclosure, evidence for other activities is lacking at the Swan School and Meadowbrook farmstead. Fragments of a slag cake recovered from the ditch defining Phase 3.3 Enclosure 16.1 could be suggestive of iron smithing in the southern part of the farmstead but there are no further indicators of where exactly this occurred.

8.22. No evidence for buildings or other domestic-related features have been identified, and this is coupled with a dearth of charred plant remains and a limited range of domestic-related or personal artefacts. In general, evidence for domestic activity is sparse amongst the farmsteads situated in the main pottery producing area of Oxford, although pottery and burials are often encountered (Beckley and Radford 2012c, 10). It seems possible that the enclosures within the development site represent an industrial zone, possibly on the periphery of a larger farmstead area.

Economic status of the farmstead

8.23. Information on the economic status of the farmstead's occupants can be gleaned from the animal bone and charred plant remains but the presence of a pottery kiln producing wares common to the Oxfordshire industry provides the most definitive evidence of subsistence activities. From AD 250, when kiln AL was in use, the Oxford industry was one of the main producers of pottery and the main product of Kiln AL, whiteware mortaria, achieved a wide distribution extending eastwards down the Thames and as far as the Severn Valley (Beckley and Radford 2012c, 16–17)

Pottery production

- 8.24. Kiln AL represents the most northerly example of a pottery production site in Oxford; no associated workshop structures, dryers or any features associated with the processing and storage of clay were identified, however. The main product of kiln AL was M17 (whiteware) mortaria, but colour-coated (red slipped) wares were also produced at the site, possibly simultaneously. The production of these types of ware suggest that the kiln was in operation from the mid-2nd century, with red-slipped mortaria type C100 suggesting a date in the 4th century (Banks, Appendix C). Beckley and Radford have suggested that the focus of pottery production began in the Blackbird Leys area, to the south-east of Oxford city centre, and spread northwards, potentially suggesting that production within the development site started a little later in the early 3rd century (2012c, 24). Another product from kiln AL was red-slipped dishes with beaded rims, possibly representing copies of samian Ludowici Sb and Drag 31 bowls. Banks has suggested a production date closer to the mid 3rd century AD onwards (Appendix C).
- 8.25. The layout of the kiln structure bore many similarities to other examples in this area, such as Rose Hill, Cowley (Harden 1936, 94–102, fig. 18; Fig. 1, MOX11223) and Blackbird Leys, Zone D (Booth *et al. 2003*, 225–233, fig.12; Fig. 1, MOX12199), which were characterised by an oval or 'tear-drop-shaped' firing chamber and a short flue, with

ventilation notches and paddled clay walls. Like kiln AL, stone-lining was only applied to the junction of the flue and stoke pit. Predominantly, the kilns in this area had clay tongue pedestals that projected from the back wall of the firing chamber and even in the more truncated examples found at Blackbird Leys, Zone E the pedestal has served as a short pier (Booth *et al.* 2003, 233–239, figs 14 and 15). Curiously no evidence for a pedestal was found in Kiln AL, despite its relatively good state of preservation, but two kilns with permanent floors and no support were uncovered at the Churchill site (Beckley and Radford 2012c, 26). Pedestals were used to support a suspended floor upon which the pottery vessels were placed for firing. It is possible that an alternative design was used in this example, although no kiln furniture, such as kiln bars, was found.

Animal husbandry

- 8.26. The exploitation of cattle, sheep/goat, equids and pig was represented by bones recovered from all areas of the Roman Period 3 farmstead but the largest quantity (16.77kg) derived from features associated with the main phase of activity, Phase 3.2. Overall, cattle were the predominant species, constituting 35% of identified species, but followed closely by sheep/goat (32%) and then pig (8%) and equid (7%). The main phase of farmstead activity (Phase 3.2), however, produced similar proportions of cattle and sheep/goat (Holmes, Appendix M). Overall, cattle tended to be the dominant species in the Upper Thames Valley during the Roman period, although more variability existed in comparison to the Late Iron Age/Early Roman period
- 8.27. The cull pattern for cattle and sheep/goat was similar to that of the previous two periods, indicating that they were kept for secondary products as well as for meat. This reflects a general preference for 'general purpose' herds in the Upper Thames Valley (Booth *et al.* 2003, 295–298). In the later stages of the farmstead (Phase 3.3) an emphasis on meat production was indicted by sheep remains that had been culled prior to reaching maturity. The breeding of cattle close to the farmstead was also implied by bones of perinatal animals. Age indicators from several equids presented a range of 8 to 15 years and a horse second premolar had a bevel on the front edge consistent with bit wear (Holmes, Appendix M), suggesting that they were kept for transport. The presence of bones from all parts of the carcass indicate that animals were culled, processed, consumed and disposed of on site, reflecting the self-sufficient nature of the farmstead's economy and similar to that of the Period 2 Late Iron Age to early Roman transitional farmstead. Wild food sources were represented by red deer and fish, including eel, although they were not recovered in significant quantities. The carbon and nitrogen

isotope ratios in the skeletal remains from the Phase 3.3 burial, however, suggests that at least one individual had a diet high in marine content, possible fish or oysters (Clough, Appendix P).

Crop cultivation

8.28. Evidence for the exploitation of plants and cereals is limited to small quantities of chaff and grain of hulled barley, emmer/spelt and spelt wheat, as well as a single legume fragment. This range of cereals, although meagre, is reflective of the main cultivars during the Roman period (Lodwick 2017, 16–21; Booth *et al.* 2007, 293–294), but does not add significantly to our understanding of cultivation practices during the Roman period in this region. A single weed seed of stinking chamomile tentatively suggests that the water-retentive clay soils in the local area were exploited by the farmstead's occupants. The presence of assemblages dominated by weed seeds and chaff used as tinder within kiln AL represent crop-processing waste, suggesting that the final, de-husking, stages of cereal processing and food preparation were undertaken in parts of the farmstead (West, Appendix O). The absence of debris from earlier stages of crop processing suggest that these activities were carried out away from the farmstead.

Land-use and local environment

By the Roman period the landscape around Oxford had been extensively cleared, with 8.29. the floodplain utilised for grazing and hay meadows, whilst cultivation was focused on higher ground (Beckley and Radford 2012c, 5; Booth et al. 2007, 20-24). Botanical evidence recovered from the development site has made a limited contribution to our understanding of land-use and the local environment during the Roman period, but charcoal of oak, ash, field maple, Prunus (blackthorn and wild/bird cherry), Maloideae type and hazelnut shell indicates that the farmstead's occupants had access to hedgerows and mixed deciduous woodland. Charcoal recovered from the kiln represented a range of taxa that could have been sourced locally and does not indicate an over-reliance on managed woodland sources from further afield. Kilns require sustained heat but not necessarily high temperatures, so less favourable fuelwoods, such as willow and poplar from the floodplain, would be sufficient for this activity (Challinor, Appendix R). It is considered likely that the Oxfordshire pottery industry developed to the south and east of Oxford due to the soils being particular poor and consequently less favourable for cultivation (Beckley and Radford 2012c, 5); the geology would have been suitable for dense woodland, providing an important source of fuel for the kilns.

Ritual and religion

8.30. Two inhumation burials and three occurrences of disarticulated human bone (adult and neonate) were identified within the Roman Phase 3.2 farmstead. The inhumations had been placed in graves but the disarticulated bone had been deposited in ditches and a pit. Possible ritual activity was represented by the hind leg of a dog (ABG8) and partial remains of a sub-adult horse (ABG5) and two juvenile sheep/goats (ABG6 and ABG7) deposited in ditches and a pit.

Formal burials

- 8.31. Period 3 marks the first occurrence of formal burials on site. These comprised two graves containing probable adult males, one (SK6087, grave 6085) laid extended and supine and the other (SK2235, grave 2234) too disturbed to determine the layout of the body. Bone samples from both individuals produced radiocarbon dates that range from the mid 3rd century into the post-Roman period (Aitken, Appendix S). The absence of Post-Roman activity in the excavation area suggests that they are more likely to be broadly contemporary with the farmstead and the small number of graves and their position parallel to enclosure boundaries conforms to the usual burial practice on Roman rural sites (Smith 2018b, 233). Their location, within a trackway (burial 6085, Fig. 6) and just to the north of Kiln AL (burial 2234), however, is unusual and suggests that there was some purpose to their deposition beyond the usual distribution pattern.
- 8.32. Burials in close proximity to pottery kilns have been found on several local sites, although the best comparative example is a male and a female found close to a kiln on Ellesmere Road in the Rose Hill area of Cowley (OAHS 1937, 202). Grave 2234 contained an individual with signs of flattening of the tibia and femur, possibly as the result of squatting, mechanical stress and pathology (Clough, Appendix N). It is tempting to think that the individual had been associated with pottery production on the site, although there could be other causes for this type of wear. The individual was also accompanied by a near complete M22 mortaria and a R24 girth grooved jar that are likely to represent grave goods, rather than accidental inclusions. Few examples of pottery grave goods, particularly mortaria, exist for this period and in this location and Banks has suggested that there may have been a personal, occupational association to the finds (Appendix C).
- 8.33. Burial 6085 was situated in the centre of Trackway 14.1 (Phase 3.2) and would appear to represent the blocking or closure of the routeway. The Late Roman radiocarbon date

of 260–420 cal. AD (SUERC-92339; at 68% probability) from the skeleton would be broadly consistent with the disuse of the trackway by the 4th century. No pottery grave goods were identified but hobnails found in the area of the feet indicate that the individual had been buried wearing Roman style footware; a common practice in the Middle to Late Roman period throughout southern Britain (Walton, Appendix G).

Disarticulated human bone

- 8.34. Fragments of an adult femur and cranium and two deposits of neonate bones, one a atlas demi arch and the other a radius bone, had been deposited in enclosure ditches and a pit associated with the main phase of farmstead activity (Phase 3.2). The porous nature and small size of neonate bones means that these disarticulated may represent the disturbed remains of burials. The adult cranial and humerus fragment may also have derived from a burial, although structured/special deposits of human bone are well attested to on Roman sites, with cranial fragments encountered more frequently (Smith 2018b, 276–277). The deposition of disarticulated human bone was historically viewed as an Iron Age practice but now is acknowledged as a continuing theme throughout the Roman period. A large proportion of these types of deposits are concentrated in the Central Belt with over half deriving from rural farmstead contexts (Smith 2018b, 276–277).
- 8.35. In general, no items of any significance were found accompanying the bone, but the partial remains of a juvenile sheep/goat (ABG7) was found in the same pit as the neonate atlas demi arch in Sub-enclosure 11.2 (Fig. 8) and will be discussed further, below.

Structured deposits

8.36. Structured deposits are groups of items or deposits that cannot be easily explained in practical terms. These can include 'unusual' animal bone assemblages, groups of artefacts or associated artefact assemblages, whereby a combination of deposits and artefacts collectively appear to be of some significance. Five instances of potential 'structured deposits' have been highlighted within the Roman farmstead within the development site and are spread throughout the three phases of activity (Phase 3.1–3.3). These predominantly comprised deposits of associated, partially articulated animal bone (ABGs 5–8) and all four examples occurred in the same area of the farmstead, in ditches and a pit associated with Phase 3.2 Enclosure 11.1 and Phase 3.3 Enclosure 16.1. The animals were limited in age range, with two partial juvenile (ABGs6 and 7) and

one sub-adult animal (ABG7) represented. The other assemblage was from the hind leg of a dog (ABG8). This range of species is present elsewhere in the farmstead, but the articulation of bone and age of these animals suggests that there was some purpose behind their deposition. The occurrence of the neonate bone in the same pit as a juvenile sheep/goat is also of interest.

8.37. The other deposit of interest comprised a single coin that had been deposited in the upper fill of Kiln AL. Given the absence of coins from elsewhere on the site, the presence of a coin in Kiln AL is of likely significance and potentially represents a closure deposit (Walton, Appendix D), marking the abandonment of the kiln in the early 4th century. An increase in structured deposits has been observed in the Later Roman period, and they often appear to mark specific events (Smith 2018a, 184–191). Similar parallels are known from East Anton, Hampshire (Brindle 2017, 263–264).

Medieval and post-medieval land-use

- 8.38. A hiatus in activity followed the Roman period until the establishment of ridge-and-furrow cultivation on the development site during the medieval period. The orientation of furrows (north/south) was very similar to the main Late Iron Age and Roman boundary alignments, and it is feasible that their layout was influenced by surviving relic boundaries, hedges or banks.
- 8.39. The site continued under arable cultivation throughout the post-medieval period, until 1954 when St Nicholas's Primary School was constructed. Cartographic sources of the 19th and early 20th century (NLS 2021) depict the site corresponding to two fields, possibly pertaining to division of land established as early as the 16th century (Clark 1924; 1927). No ditches corresponding to these two fields were identified within the excavation area but three ditches on north/south or east/west alignments were identified and most likely pre-date the 19th century.

9. CA PROJECT TEAM

- 9.1. Fieldwork was undertaken by James Coyne, assisted by Sharon Amann, Adrian Arenas, Luke Bateson, Abigail Breen, Eduardo Cabrera, Mark Davies, Fanny Dubuc, Molly Day, Harriet Farr, Mat Ferron, Susanna Ferron, Barbara Grahame, Ed Grenier, John Hardisty, Rosie Maguiness, Chloe Merrett and Callum Ruse.
- 9.2. This report was written by Jo Barker. The artefactual evidence reports were written by Peter Banks, David Dungworth, Ed McSloy, Katie Marsden, Ruth Shaffrey, Jacky

Sommerville and Philippa Walton. The biological evidence reports were written by Dana Challinor, Sharon Clough, Matilda Holmes and Anna West. SUERC undertook the radiocarbon dating and the results were summarised by Emma Aitken. The report illustrations were prepared by Li Sou. The project archive has been compiled and prepared by Hazel O'Neill. The project was managed for CA by Stuart Joyce and the post-excavation work was managed by Sarah Cobain.

9.3. Peter Banks would like to thank Mr Paul Booth and Dr Christopher Young for discussions and advice about the interpretation and dating of the Roman site and in particular the advice regarding the kiln and its associated material.

10. STORAGE AND CURATION

- 10.1. The archive is currently held at CA offices, Milton Keynes, whilst post-excavation work proceeds. Upon completion of the project, CA will make arrangements with the Oxford Museum Service (accession number: OXCMS: 2019.35) for the deposition of the site archive and, subject to agreement with the legal landowner(s), the artefact collection. The Oxford Museum Service has agreed in principle to accept the archive upon completion of the project.
- 10.2. A digital archive will be deposited with the Archaeology Data Service (ADS). This archive will be compiled in accordance with the ADS Guidelines for Depositors.
- 10.3. The archives (museum and digital) will be prepared and deposited in accordance with Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CIfA 2014; updated October 2020).

11. **REFERENCES**

- Allen, T. 2004 'Late Iron Age and Early Roman occupation', in Lambrick, G. and Allen, T. 2004, 161–215
- Allen, M. and Smith, A. 2016 'Chapter 2: Rural settlement in Roman Britain: Morphological classification and overview', in Brindle, T., Smith, A.T., Allen, M.G. and Fulford, M. 2016, 17–43
- Beckley, R. and Radford, D. 2012a Oxford archaeological resource assessment 2011: Palaeolithic to Mesolithic Oxford, Oxford City Council https://www.oxford.gov.uk/downloads/file/1619/palaeolithic to mesolithic oxford 500000 - 4000 bc (accessed 10 October 2021)
- Beckley, R. and Radford, D. 2012b Oxford archaeological resource assessment 2011: The Iron Age Oxford, Oxford City Council https://www.oxford.gov.uk/downloads/file/1621/iron_age_oxford_800_bc_-____43_ad (accessed 17 September 2021)
- Beckley, R. and Radford, D. 2012c Oxford archaeological resource assessment, 2011: Roman Oxford, Oxford City Council https://www.oxford.gov.uk/downloads/file/1622/roman oxford 43 -410 ad (accessed 10 October 2021)
- BGS (British Geological Survey) 2021 '*Geology of Britain Viewer*' https://www.bgs.ac.uk/map-viewers/geology-of-britain-viewer_(accessed 10 October 2021)
- Booth, P. and Edgeley-Long, G. 2003 'Prehistoric settlement and Roman pottery production at Blackbird Leys, Oxford', *Oxoniensia LXVIII*, 201–262
- Booth, P., Dodd, A., Robinson, M and Smith, A. 2007 *The archaeology of the gravel terraces of the upper and middle Thames: The Early historical period: AD 1– 1000* Oxford, Thames Valley Landscapes Monograph 27
- Brindle, T., Smith, A.T., Allen, M.G. and Fulford, M. 2016 The rural settlement of Roman Britain: New visions of the countryside of Roman Britain vol. 1 London, Britannia Monograph Series 29
- Brindle, T. 2017 'Coins and markets in the countryside', in Allen, M., Lodwick, L., Brindle, T., Fulford, M. and Smith, A. *New visions of the countryside of*

Roman Britain Volume 2: The rural economy of Roman Britain London, Britannia Monograph 30, 237–80

- CA (Cotswold Archaeology) 1995 *Treatment of finds immediately after excavation: Technical manual No.* 3
- CA (Cotswold Archaeology) 2012 The taking and processing of environmental and other samples from archaeological sites: Technical manual No. 2
- CA (Cotswold Archaeology) 2017a Fieldwork survey manual v5
- CA (Cotswold Archaeology) 2017b *Fieldwork recording manual technical manual No. 1*
- CA (Cotswold Archaeology) 2018a The Harlow Centre, Raymund Road, Oxford: Archaeological evaluation, August 2018 CA Report **18394**
- CA (Cotswold Archaeology) 2018b The Harlow Centre, Raymund Road, Oxford: Phase II Archaeological evaluation, November 2018 CA report **18541**
- CA (Cotswold Archaeology) 2019 Swan School and Meadowbrook College, New Marston, Oxfordshire: Written scheme of investigation for an archaeological strip, map and sample excavation and watching brief
- CA (Cotswold Archaeology) 2020 Swan School and Meadowbrook College, Marston, Oxfordshire: Post-excavation assessment and updated project design CA report MK0066_1
- ClfA (Chartered Institute for Archaeologists) 2014a Standard and guidance for archaeological excavation Reading, Chartered Institute for Archaeologists
- ClfA (Chartered Institute for Archaeologists) 2014b Standard and guidance for archaeological watching brief Reading, Chartered Institute for Archaeologists
- ClfA (Chartered Institute for Archaeologists) 2014c Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives Reading, Chartered Institute for Archaeologists
- Clark, G.N. 1924 Open fields and Inclosure at Marston, Oxfordshire, Blackwell
- Clark, G.N. 1927 'Enclosure by agreement at Marston, near Oxford', *English History Review* **42**

- Fulford, M. 2010 'Solent Thames research framework research agenda: The Roman period' https://oxfordarchaeology.com/images/pdfs/Solent_Thames/Resource_ase ssment/Roman.pdf (accessed 10 October 2021)
- Gilbert, D. 2005 An archaeological excavation at Bernwood First School, North Way, Barton, Oxford John Moore heritage Services unpublished report
- Hamilton-Dyer, S. 1993 'Animal Bone', in Mudd, A. 1993, 68-72
- Harden, D.D. 1936 'Two Romano-British potters' fields near Oxford', Oxoniensia I, 81–102
- Hart, D. 2003 An archaeological excavation at manor Ground, London Road, Headington, Oxford John Moore Heritage Services unpublished report
- Hey, G. and Hayden, C. 2011 'Chapter 8: An introduction to the Holocene of the Thames', in Morigi, A., Schreve, D. and White, W. *The Thames through time: The archaeology f the gravel terraces of the upper and middle Thames* Thames Valley Landscapes Monograph 32, 151–1
- Hey. G. and Hind, J. 2014 Solent-Thames research framework for the historic environment resource: Assessment and research agendas, Oxford Wessex Monograph 6
- Hey, G. and Robinson, M. 2011a 'Chapter 10: Mesolithic communities in the Thames Valley: living in the natural landscape', in Morigi, A., Schreve, D. and White, W. The Thames through time: The archaeology f the gravel terraces of the upper and middle Thames Thames Valley Landscapes Monograph 32, 193– 220
- Hey, G. and Robinson, M. 2011b 'Chapter 11: Neolithic communities in the Thames Valley: the creation of new worlds', in Morigi, A., Schreve, D. and White, W. *The Thames through time: The archaeology f the gravel terraces of the upper and middle Thames* Thames Valley Landscapes Monograph 32, 221– 260
- HE 2015a Management of research projects in the historic environment: The MoRPHE project managers' guide Swindon: Historic England
- HE 2015b Management of research projects in the historic environment. Project planning note 3: Archaeological Excavation Swindon: Historic England

- Lambrick, G. 2009 'Chapter 4: Settlement and settlement patterns', in Lambrick, G and Robinson, M. 2009, 91–131
- Lambrick G. 2010 'Solent Thames research framework research agenda: The Later Bronze Age and Iron Age period' https://oxfordarchaeology.com/images/pdfs/Solent _Thames/Research_agendas/LBA_and_IA_RA.pdf (accessed 10 October 2021)
- Lambrick, G. 2013 'Prehistoric Oxford (The Tom Hassall Lecture for 2012)', Oxoniensia LXXVIII, 1–48
- Lambrick, G. and Allen, T. 2004 *Gravelly Guy, Stanton Harcourt, Oxfordshire: The development of a prehistoric and Roman-British community* Oxford, Thames Valley Monograph 21
- Lambrick, G. and Barclay, A. 2004 'Early and Middle Iron Age occupation', in Lambrick, G. and Allen, T. 2004, 103–159
- Lambrick, G. and Robinson, M. 2009 *The Thames through time: The archaeology of the gravel terraces of the upper and middle Thames. The Thames Valley in Late prehistory: 1500 BC-AD 50* Oxford, Thames Valley Landscapes Monograph 29
- Letts, J. 2005 'Charred plant remains', in Mudd, A. 1993, 74–78
- Lodwick, L. 2017 'Chapter 2: Arable farming, plant foods and resources', in Brindle, T., Smith, A.T., Allen, M.G, Fulford, M. and Lodwick, L. 2017, 11–84
- Mudd, A. 1993 'Excavations at Whitehouse Road, Oxford, 1992', *Oxoniensia LVIII*, 33–85
- NLS (National Library of Scotland) 2021 <u>https://maps.nls.uk/view/102346822</u> (accessed 10 October 2021)
- OAHS (Oxford Architectural and History Society) 1937 'Rose Hill, Cowley, Oxford', Oxoniensia II, 202
- RPS Planning and Environment 2017 *The Swan School and Meadowbrook College, New Marston, Oxford: Heritage Statement* RPS report **JAC23874**
- RPS Planning and Environment 2018 Swan School and Meadowbrook College, New Marston, Oxford: Written scheme of investigation (WSI) for a programme of

further archaeological investigation, also method statement regarding groundworks RPS report **JAC24663**

- Salzman. L.F. 1939 'Romano-British remains: industries', in *A history of the county* of Oxford, Vol. 1 (London), 303–306 <u>https://www.british-</u> <u>history.ac.uk/vch/oxon/vol1/pp303-306</u> (accessed 10 October 2021)
- Sharples, N. 2010 Social relations in Later prehistory: Wessex in the first millennium BC Oxford, Oxford University Press, 133–139
- Smith, A. 2016 'Chapter 5: The central belt', in Brindle, T., Smith, A.T., Allen, M.G. and Fulford, M. 2016, 141–207
- Smith, A. 2018a 'Chapter 5: Religion and the rural population', in Smith, A., Allen, M., Brindle, T., Fulford, M., Lodwick, L. and Rohnbogner, A. 120–204
- Smith, A. 2018b 'Chapter 6: Death in the countryside: Rural burial practices', in Smith, A., Allen, M., Brindle, T., Fulford, M., Lodwick, L. and Rohnbogner, A. 2018, 205–280
- Smith, A., Allen, M., Brindle, T., Fulford, M., Lodwick, L. and Rohnbogner, A. 2018 Life and death in the countryside of Roman Britain: New visions of the countryside of Roman Britain vol. 3 London, Britannia Monograph Series 31
- Soilscapes 2021 <u>http://www.landis.org.uk/soilscapes/index.cfm</u> (accessed 10 October 2021)
- Thompson, S. 2015 'Evidence for Iron-Age land-use and settlement in the University Parks, Oxford', *Oxoniensia* LXXX, 97–109
- Young, C. 1973 'The pottery industry of the Oxford region', in Detsicas, A. (ed.) *Current research in Romano-British coarse pottery* London, CBA Research Report 10, 105–115

APPENDIX A: CONTEXT DESCRIPTIONS

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1000	Layer		Natural soil	Topsoil. Mid brown grey, silt clay			
1001	Layer	-	Natural soil	Subsoil. Mid Grey Brown, silt clay, compact			
1002	Layer	-	Natural soil	Natural. Mid brown orange, clay, compact			
1003	Cut	-	Ditch/other linear	Cut of gully, N-S	2		
1004	Fill	1003	Ditch/other linear	Mid brown grey/orange brown mottling, silt clay, compact.	2		
1005	Cut		Ditch/other linear	Cut of gully	2		
1006	Fill	1005	Ditch/other linear	Mid brown grey, silt clay, compact, natural infilling	2	LIA-ERB	
1007	Cut		Ditch/other linear	Cut of ditch	2		
1008	Fill	1007	Ditch/other linear	Mid yellow brown, sand silt, loose	2		
1009	Fill	1007	Ditch/other linear	Mid blue grey, silt clay, friable	2		
1010	Cut		Ditch/other linear	Cut of gully terminus	2		
1011	Fill	1010	Ditch/other linear	Mid brown grey, silty clay, compact	2		
1012	Cut		Ditch/other linear	Cut of ditch, N-S	1		
1013	Fill	1012	Ditch/other linear	Mid blue grey, silt clay, compact	1	RB	
1014	Cut		Pit	Cut of small pit/tree bowl	2		
1015	Fill	1014	Pit	Mid grey brown, silt clay, compact	2	LIA-ERB	
1016	Cut		Ditch/other linear	Cut of ditch, N-S	1		
1017	Fill	1016	Ditch/other linear	Mid blue grey, sand clay, compact	1	LIA-ERB	356–106 cal. B0 (SUERC-97605
1018	Cut		Ditch/other linear	Cut of ditch, possible boundary/enclosure, SE- NE	2		
1019	Fill	1018	Ditch/other linear	Mid blue grey, silt clay, friable	2	C2	
1020	Layer		Unknown/ unspecified	Layer of alluvial deposits	0		
1021	Cut	465.4	Ditch/other linear	Cut of ditch, E-W	2		
1022	Fill	1021	Ditch/other linear	Mid orange grey, silt clay, compact	2		
1023	Cut		Ditch/other linear	Cut of ditch, E-W	2		
1024	Fill	1023	Ditch/other linear	Mid blue grey, silt clay, compact	2	LIA-ERB	
1025	Deposit		External cultivation	Mid grey brown, silt clay, compact			
1026	Deposit		Unknown/ unspecified	Orange mottled/light grey brown, silt clay, compact			
1027	Cut		Ditch/other linear	Cut of ditch, possible boundary/enclosure, E-W	5		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1028	Fill	1027	Ditch/other linear	Mid grey brown, silt clay, compact	5		
1029	Cut		Ditch/other linear	Cut of ditch, N/S	1		
1030	Fill	1029	Ditch/other linear	Light brown grey, silt clay, friable	1		
1031	Fill	1029	Ditch/other linear	Dark brown grey, silt clay, compact	1	LIA-ERB	
1032	Cut		Ditch/other linear	Cut of ditch, N-S	5		
1033	Fill	1032	Ditch/other linear	Mid grey brown, silt clay, compact	5	Post- medieval	
1034	Cut		Pit	Cut of pit, function unclear	1		
1035	Fill	1034	Pit	Dark grey brown, silt clay, compact	1		
1036	Cut		Ditch/other linear	Cut of curvilinear ditch, NW-SE curves NE	2		
1037	Fill	1036	Ditch/other linear	Mid brown grey, silt clay, compact	2		
1038	Cut		Ditch/other linear	Cut of ditch, NE-SW	2		
1039	Fill	1038	Ditch/other linear	Mid brown grey, silt clay, compact	2	Late prehistoric	
1040	Cut		Ditch/other linear	Cut of ditch, W-E	2		
1041	Fill	1040	Ditch/other linear	Light brown grey/red mottling, sand clay, compact	2		
1042	Fill	1040	Ditch/other linear	Light brown grey/red mottling, sand clay, moderate	2		
1043	Cut		Pit	Cut of small pit/tree bowl	2		
1044	Fill	1043	Pit	Mid brown grey, silt clay, compact	2		
1045	Cut		Ditch/other linear	Cut of ditch, N-S, possible enclosure.	2		
1046	Fill	1045	Ditch/other linear	Dark brown grey, silt clay, compact	2	LIA-ERB	
1047	Cut		Ditch/other linear	Cut of ditch E-W	2		
1048	Fill	1047	Ditch/other linear	Dark brown grey, silt clay, compact	2	Late prehistoric	
1049	Cut		Ditch/other linear	Cut of ditch, E-W	5		
1050	Fill	1049	Ditch/other linear	Mid grey brown, silt clay, compact	5	LIA-RB	
1051	Cut		Ditch/other linear	Cut of ditch, NW-SE	2		
1052	Fill	1051	Ditch/other linear	Mid black brown, silt clay, compact	2	LIA-ERB	
1053	Cut		Pit	Cut of elongated shallow pit, E-W. Root disturbance	0		
1054	Fill	1053	Pit	Mid grey brown, silt clay, compact	0		
1055	Cut		Ditch/other linear	Cut of ditch, E-W	2		
1056	Fill	1055	Ditch/other linear	Mid black brown, silt clay, compact	2		
1057	Cut		Ditch/other linear	Cut of curvilinear ditch, SW turning N	2		
1058	Fill	1057	Ditch/other linear	Mid blue grey, silt clay, friable	2		
1059	Cut		Skeleton	Cut of animal burial	2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1060	Fill	1059	Skeleton	Mid grey yellow, silt sand, loose	2	LIA-ERB	
1061	Fill	1045	Ditch/other linear	Mid grey brown, silt clay, compact	2		
1062	Fill	1045	Ditch/other linear	Mid orange brown with grey flecks (redeposited natural), gravel sand clay, compact	2		
1063	Cut		Pit	Cut of pit	2		
1064	Fill	1063	Pit	Dark black grey, silt clay	2		
1065	Cut		Ditch/other linear	Cut of ditch terminus, E-W	2		
1066	Fill	1065	Ditch/other linear	Mid brown grey, silt clay, friable	2		
1067	Cut		Ditch/other linear	Cut of ditch, NNW-SSE	2		
1068	Fill	1067	Ditch/other linear	Mid brown, sand clay, compact	2		
1069	Cut		Ditch/other linear	Cut of ditch, NNW-SSE, possibly part of a large enclosure.	2		
1070	Fill	1069	Ditch/other linear	Same as (1068)	2	LIA	
1071	Cut		Pit	Cut of pit	1		
1072	Fill	1071	Pit	Mid blue grey, silt clay, friable	1	MIA	
1073	Deposit		Unknown/ unspecified	Mid grey brown, silt clay, compact	Subsoil	Late prehistoric	
1074	Cut		Ditch/other linear	Cut of segmented ditch or elongated pit, NNW-SSE	2		
1075	Fill	1074	Ditch/other linear	Mid grey brown, silt clay, compact	2		
1076	Cut		Pit	Cut of small/shallow pit or tree throw	0		
1077	Fill	1076	Pit	Mid grey brown, silt clay, compact	0	Late prehistoric	
1078	Cut		Pit	Cut of pit or tree bowl	2		
1079	Fill	1078	Pit	Mid grey brown, silt clay, compact	2		
1080	Cut		Pit	Cut of pit or posthole	1		
1081	Fill	1080	Pit	Mid grey brown, silt clay, compact	1		
1082	Cut		Pit	Cut of possible pit or tree throw, NW-SE	0		
1083	Fill	1082	Pit	Mid grey brown, silt clay, compact	0		
1084	Cut		Posthole	Cut of posthole or small pit	1		
1085	Fill	1084	Posthole	Mid brown grey, silt clay, compact	1		
1086	Cut		Posthole	Cut of posthole	1		
1087	Fill	1086	Posthole	Dark brown grey, silt clay, compact	1	LIA-ERB	
1088	Cut		Posthole	Cut of small, shallow posthole	1	LIA-ERB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1089	Fill	1088	Posthole	Mid grey brown, silt clay, compact	1		
1090	Cut		Ditch/other linear	Cut of ditch, NW-SE	2		
1091	Fill	1090	Ditch/other linear	Mid black brown, silt clay, friable	2	RB	
1092	Cut		Ditch/other linear	Cut of ditch, NW-SW	2		
1093	Fill	1092	Ditch/other linear	Mid grey brown, silt clay, friable	2		
1094	Cut		Ditch/other linear	Cut of ditch, E-W	2		
1095	Fill	1094	Ditch/other linear	Mid brown/blue grey, silt clay, friable	2	Late prehistoric	
1096	Cut		Ditch/other linear	Cut of ditch, E-W	2		
1097	Fill	1096	Ditch/other linear	Mid orange grey, silt clay, compact	2		
1098	Layer		Unknown/ unspecified	Mid grey brown, silt clay, compact,	0		
1099	Cut		Tree-throw hole	Cut of tree throw, N-S, created naturally by the falling or uprooting of a tree.	0		
1100	Fill	1099	Tree-throw hole	Mid brown grey/orange mottling, clay silt, moderate compaction	0		
1101	Cut		Pit	Cut of pit	1		
1102	Fill	1101	Pit	Mid brown grey, silt clay, compact	1		
1103	Cut		Pit	Cut of pit	1		
1104	Fill	1103	Pit	Mid brown grey, silt clay, compact	1		
1105	Cut		Pit	Cut of pit	1		
1106	Fill	1105	Pit	Mid brown grey, silt clay, compact	1	LIA-ERB	
1107	Cut		Pit	Cut of pit	1		
1108	Fill	1107	Pit	Mid brown grey, silt clay, compact, formed through natural infilling.	1		
1109	Fill	1057	Ditch/other linear	Dark grey, silt clay, friable, formed through natural infilling.	2	RB	
1110	Cut		Ditch/other linear	Cut of ditch, SW turning N	2		
1111	Fill	1110	Ditch/other linear	Dark grey, silt clay, friable, formed through natural infilling	2		
1112	Cut		Ditch/other linear	Cut of ditch, SW turning N, possible agricultural field system.	2		
1113	Fill	1112	Ditch/other linear	Dark grey, silt clay, friable, formed through natural infilling.	2	RB	
1114	Cut		Pit	Cut of pit, SE-NW function unknown.	2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1115	Fill	1114	Pit	Mid brown yellow, sand silt, loose, possibly a primary fill formed through natural infilling.	2		
1116	Cut		Ditch/other linear	Cut of ditch, SW-NW	2		
1117	Fill	1116	Ditch/other linear	Mid grey, silt clay, friable, formed through natural infilling.	2		
1118	Layer		Unknown/ unspecified	Mid grey, silt clay, friable, layer of possible alluvial deposits	0		
1119	Cut	_	Ditch/other linear	Cut of gully, NE-SW	2		
1120	Fill	1119	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling.	2		
1121	Cut		Ditch/other linear	Cut of ditch, N-S	2		
1122	Fill	1121	Ditch/other linear	Mid black grey, silt clay, compact, inc: flecks of charcoal, formed through natural infilling.	2	RB	
1123	Cut		Ditch/other linear	Cut of ditch, E-W, function and formation unclear.	2		
1124	Fill	1123	Ditch/other linear	Mid orange brown, sand silt, friable, possibly backfilled (redeposited natural).	2	LIA-ERB	
1125	Fill	1123	Ditch/other linear	Mid black grey, silt clay, compact, formed through natural infilling.	2		
1126	Fill	1114	Pit	Mid blue grey, silt clay, friable, formed through natural infilling.	2		
1127	Cut		Pit	Cut of pit. Likely to be a tree-throw based on irregular base	0		
1128	Fill	1127	Pit	Dark brown grey, silt clay, compact, formed through natural infilling.	0	LIA-ERB	
1129	Cut		Pit	Cut of possible pit or ditch terminus	0		
1130	Fill	1129	Pit	Mid grey, silt clay, friable, inc: occ. Charcoal, formed through natural infilling,	0		
1131	Cut		Ditch/other linear	Cut of ditch, N-S	1		
1132	Fill	1131	Ditch/other linear	Mid blue grey, silt clay, friable, inc: occ. charcoal, formed through natural infilling.	1		
1133	Fill	1131	Ditch/other linear	mid brown grey/mottled orange, silt clay, compact, inc: occ. charcoal, possibly redeposited natural.	1	Late prehistoric	
1134	Cut		Ditch/other linear	Cut of ditch, T-junction so N-S/E-W.	2		
1135	Fill	1134	Ditch/other linear	Dark grey, silt clay, compact, inc: occ. charcoal, formed through natural infilling.	2	LIA-ERB	
1136	Fill	1134	Ditch/other linear	Mid orange brown, silt clay, compact, possibly deliberately backfilled.	2	LIA-ERB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1137	Cut		Posthole	Cut of posthole	1		
1138	Fill	1137	Posthole	Dark black grey, clay silt, compact, including occ. Charcoal, formed through natural infilling.	1	LIA-ERB	
1139	Layer		Unknown/ unspecified	Mid brown grey, silt clay, compact, alluvial deposit	2	Late prehistoric	
1140	Cut		Ditch/other linear	Cut of ditch, E-W	2		
1141	Fill	1140	Ditch/other linear	Dark brown grey, silt clay, compact, formed through natural infilling.	2	LIA-ERB	
1142	Cut		Pit	Cut of pit, SW-NE, function unknown.			
1143	Fill	1142	Pit	Mid grey brown, silt clay, moderate compaction, formed through natural infilling.			
1144	Cut		Ditch/other linear	Cut of curvilinear ditch, NW-SE, possibly an enclosure.	2		
1145	Fill	1144	Ditch/other linear	Orange brown, sand clay, loose, deposited through slumping (redeposited natural).	2		
1146	Fill	1144	Ditch/other linear	Light grey/mottled red, silt clay, friable, formed through natural infilling.	2	RB	
1147	Fill	1144	Ditch/other linear	Mid grey, clay sand, compact, formed through natural infilling.	2		
1148	Cut		Ditch/other linear	Cut of ditch, W-E, function unknown.	2		
1149	Fill	1148	Ditch/other linear	Mid red brown, sand clay, loose, most likely redeposited natural	2		
1150	Fill	1148	Ditch/other linear	Light grey/mottled red, sand clay, firm, formed through natural infilling during disuse.	2		
1151	Fill	1148	Ditch/other linear	Mid grey, sand clay, compact, possibly backfilled.	2		
1152	Cut		Ditch/other linear	Cut of ditch, W-E, function is unknown.	2		
1153	Fill	1152	Ditch/other linear	Orange brown, sand clay, loose, redeposited natural.	2		
1154	Fill	1152	Ditch/other linear	Light grey/mottled red, sand clay, firm, formed by natural infilling.	2	RB	
1155	Fill	1152	Ditch/other linear	Same as 1151, formed through natural infilling by disuse of feature, and slight deliberate backfilling.	2		
1156	Cut		Ditch/other linear	Cut of ditch	2		
1157	Fill	1156	Ditch/other linear	same as 1146, possibly formed through natural infilling.	2		
1158	Cut		Ditch/other linear	Cut of shallow ditch, N-S, function is unclear.	2	LIA-ERB	
1159	Fill	1158	Ditch/other linear	Mid grey/mottled red, clay sand, compact, formed through natural infilling.	2	LIA-ERB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
1160	Cut		Posthole	Cut of small posthole, may indicate small structure was present.	1		
1161	Fill	1160	Posthole	Mid brown grey, silt clay, compact, formed through natural infilling.	1		
2000	Layer		Natural soil	Dark black brown, clay silt, loose, topsoil			
2001	Layer		Ditch/other linear	Same as 1001, subsoil			
2002	Layer	1	Natural soil	Same as 1002, natural			
2003	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.2		
2004	Fill	2003	Ditch/other linear	Mid orange brown, silt clay, compact, formed through natural infilling	3.2	RB	
2005	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.3		
2006	Fill	2005	Ditch/other linear	Mid blue grey, silt clay, compact, formed through natural infilling.	3.3	RB	
2007	Cut		Posthole	Cut of posthole, could indicate presence of a structure.	2		
2008	Fill	2007	Posthole	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through natural infilling with occasional backfilling.	2	LIA-ERB	
2009	Cut		Posthole	Cut of posthole, could indicate part of a structure	2		
2010	Fill	2009	Posthole	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through natural infilling.	2	LIA-ERB	
2011	Cut		Posthole	Cut of posthole, could indicate presence of a structure	2		
2012	Fill	2011	Posthole	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	2		
2013	Cut		Posthole	Cut of posthole, could indicate presence of a structure	2		
2014	Fill	2013	Posthole	Mid brown grey, silt clay, compact, inc: some charcoal, formed through natural infilling	2	LIA-ERB	
2015	Cut		Pit	Cut of sub-oval pit, NW- SE, function unknown	2		
2016	Fill	2015	Pit	Mid brown grey, silt clay, compact, formed through natural infilling	2		
2017	Cut		Ditch/other linear	Cut of ditch, NE-SE, function unknown	3.2		
2018	Fill	2017	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.2	LIA-ERB	
2019	Cut		Ditch/other linear	Cut of ditch, NW-SE, function unknown	3.2		
2020	Fill	2019	Ditch/other linear	Mid orange grey, silt grey, compact, formed through natural infilling	3.2	LIA-ERB	
2021	Cut		Ditch/other linear	Cut of ditch, NW-SE, function and formation is unknown	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2022	Fill	2021	Ditch/other linear	Mid grey, silt clay, compact, formed through natural infilling	3.2		
2023	Cut		Ditch/other linear	Cut of ditch, NW-SE, function unknown	3.2		
2024	Fill	2023	Ditch/other linear	Mid grey, silt clay, compact, formed through natural infilling	3.2	RB	
2025	Cut		Ditch/other linear	Cut of ditch, E-W, function unknown	3.3		
2026	Fill	2025	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling	3.3	RB	
2027	Cut		Ditch/other linear	Cut of ditch, E-W, function unknown	3.2		
2028	Fill	2027	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.2	C2-C4	
2029	Cut		Ditch/other linear	Cut of ditch, NW-SE, function unknown	3.2		
2030	Fill	2029	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.2		
2031	Fill	2029	Ditch/other linear	Mid grey, silt clay, compact, formed through natural infilling	3.2	LIA	
2032	Cut		Ditch/other linear	Cut of ditch, NW-SE	3.2		
2033	Fill	2032	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.2		
2034	Cut		Pit	Cut of oval, shallow pit	2		
2035	Fill	2034	Pit	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through dumping/backfilling	2	RB	
2036	Cut		Pit	Cut of pit, possibly used for dumping	3.2		
2037	Fill	2036	Pit	Dark grey brown, silt clay, compact, potentially dumped/backfilled	3.2	RB	
2038	Cut		Ditch/other linear	Cut of ditch, NW-SE, function unknown	3.3		
2039	Fill	2038	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.3	RB	
2040	Fill	2038	Ditch/other linear	Mid orange grey, clay silt, compact, formed through natural infilling	3.3	Late prehistoric	
2041	Cut		Ditch/other linear	Cut of small ditch, NW-SE, function is unknown	3.3		
2042	Fill	2041	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.3	RB	
2043	Cut		Pit	Cut of oval pit, NE-SW	2		
2044	Fill	2043	Pit	Dark brown grey, silt clay, compact, formed through dumping/backfilling	2	LIA	
2045	Cut		Ditch/other linear	Cut of large ditch, N-S, truncated	3.2		
2046	Fill	2045	Ditch/other linear	Mid brown grey, silt clay (mostly clay), compact, formed through natural infilling (weathering)	3.2	RB	
2047	Cut		Ditch/other linear	Cut of ditch terminus, NE- SW	3.1		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2048	Fill	2047	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.1		
2049	Cut		Posthole	Cut of posthole or small pit	2		
2050	Fill	2049	Posthole	Dark brown grey, silt clay, compact, inc: freq. charcoal, formed through the combination of natural silting and probable dumping	2	LIA-ERB	
2051	Cut		Posthole	Cut of posthole or shallow pit	2		
2052	Fill	2051	Posthole	Mid brown grey, silt clay, compact, formed through a combination of natural silting and probable dumping	2	Late prehistoric	
2053	Cut		Ditch/other linear	Cut of possible linear, N-S	3.2		
2054	Fill	2053	Ditch/other linear	Mid grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	3.2	RB	
2055	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2056	Fill	2055	Ditch/other linear	Light brown grey, sand clay, friable, inc: occ. Charcoal, formed through natural infilling (weathering)	3.2		
2057	Fill	2055	Ditch/other linear	Mid grey, sand clay, compact, inc: occ. Charcoal, formed through natural infilling (weathering)	3.2		
2058	Fill	2055	Ditch/other linear	Mid grey, sand clay, compact, inc: occ. Charcoal, formed through natural infilling	3.2	RB	
2059	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2060	Fill	2059	Ditch/other linear	Mid grey, sand clay, compact, formed through natural infilling (weathering)	3.2	LIA-ERB	
2061	Layer		Unknown/ unspecified	Light brown grey, sand clay, compact	0		
2062	Layer	-	Unknown/unspecif ied	Mid brown grey, silt clay, compact, possibly formed through natural infilling (weathering)			
2063	Cut		Pit	Cut of oval pit. Appears root disturbed and probably isn't a feature	0		
2064	Fill	2063	Pit	Mid grey brown, silt clay, compact, formed through natural infilling (weathering)	0	LIA-ERB	
2065	Cut		Ditch/other linear	Cut of ditch, N-S, probably used as a boundary	2		
2066	Fill	2065	Ditch/other linear	Mid yellow brown, silt clay, compact, inc: occ. Charcoal, possible	2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
				redeposited slumped material deposited			
2067	Fill	2065	Ditch/other linear	Mid grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	2		
2068	Fill	2065	Ditch/other linear	Mid grey brown, silt clay, compact, inc: occ. Charcoal flecks, formed through natural infilling	2		
2069	Cut		Ditch/other linear	Cut of ditch, NW-SE, function is unclear	3.2		
2070	Fill	2069	Ditch/other linear	Mid orange brown, clay sand, compact, inc: occ. Charcoal, possibly redeposited natural	3.2	RB	
2071	Fill	2069	Ditch/other linear	Dark grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	3.2	RB	
2072	Fill	2303	Unknown/ unspecified	Mid grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	4		
2073	Cut		Pit	Cut of pit	2		
2074	Fill	2073	Pit	Mid brown grey, silt clay, compact, formed through natural infilling (weathering)	2	LIA-ERB	
2075	Cut		Ditch/other linear	Cut of a small shallow linear, N-S, function unclear	3.2		
2076	Fill	2075	Ditch/other linear	Dark grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	3.2	C2-C4	
2077	Cut		Pit	Cut of pit, part of an area of pits and postholes, function is unclear	2		
2078	Fill	2077	Pit	Mid grey brown,/orange mottling, silt clay, compact, formed through natural infilling	2	LIA-ERB	
2079	Cut		Pit	Cut of pit, part of series of pits and postholes	2		
2080	Fill	2079	Pit	Mid brown grey, silt clay, compact, inc: occ. Charcoal and baked clay, formed through natural infilling (weathering)	2		
2081	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2082	Fill	2081	Ditch/other linear	Light grey brown, sand clay, friable, formed through natural infilling	3.2	C2-C4	
2083	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2084	Fill	2083	Ditch/other linear	Light grey brown, sand clay, friable, possibly formed through natural infilling	3.2		
2085	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2086	Fill	2085	Ditch/other linear	Mid orange grey, clay silt, compact, formed through natural infilling	3.2	LIA-ERB	
2087	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.3		
2088	Fill	2087	Ditch/other linear	Mid grey, silt clay, compact, formed through possible dumping	3.3	LIA-RB	
2089	Fill	2087	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.3	C3-C4	
2090	Cut		Ditch/other linear	Cut of gully, NW-SE	2		
2091	Fill	2090	Ditch/other linear	Dark brown grey, silt clay, compact, formed through natural infilling	2	LIA-RB	
2092	Cut		Ditch/other linear	Cut of gully, NW-SE	3.2		
2093	Fill	2092	Ditch/other linear	Dark brown grey, silt clay, compact, inc: occ. Charcoal, formed with a combination of natural infilling and backfilling	3.2	RB	
2094	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.2		
2095	Fill	2094	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2		
2096	Cut		Ditch/other linear	Cut of ditch, NW-SE	3.2		
2097	Fill	2096	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling (weathering)	3.2	RB	
2098	Cut		Ditch/other linear	Cut of ditch, NW-SE	3.2		
2099	Fill	2098	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling (weathering)	3.2	RB	
2100	Fill	2093	Ditch/other linear	Dark brown grey/dark orange mottling, silt clay, compact	3.2		
2101	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2102	Fill	2101	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling	3.2	RB	
2103	Cut		Ditch/other linear	Cut of ditch, N-S, function unknown. Reinterpreted as a furrow based on depth, width and location	4		
2104	Fill	2103	Ditch/other linear	Mid orange grey, clay silt, compact, formed through natural infilling	4	C3	
2105	Cut		Ditch/other linear	Cut of shallow gully, N-S	0		
2106	Fill	2105	Ditch/other linear	Mid orange grey, clay silt, compact, formed through natural infilling	0		
2107	Cut		Ditch/other linear	Cut of gully terminus, NW- SE	4		
2108	Fill	2107	Ditch/other linear	Mid orange grey, clay silt, compact, formed through natural infilling	4	LIA	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2109	Cut		Ditch/other linear	Cut of ditch	3.3		
2110	Fill	2109	Ditch/other linear	Mid orange grey, sand clay, compact, inc: occ. Charcoal, formed through natural deposition	3.3	RB	
2111	Fill	2109	Ditch/other linear	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through natural deposition	3.3	C3-C4	
2112	Cut		Ditch/other linear	Cut of ditch, SE-NW	3.3		
2113	Fill	2112	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural deposition	3.3	RB	
2114	Layer		Unknown/ unspecified	Mid yellow brown, silt clay, compact, deposit of material	3.2		
2115	Cut		Ditch/other linear	Cut of small gully, N-S, could be part of enclosure	0		
2116	Fill	2115	Ditch/other linear	Light brown grey, silt clay, compact, formed through natural infilling (weathering)	0	RB	
2117	Layer		Occupation deposit (internal)	Dark brown grey, silt clay, friable - compact, possible occupation layer formed from trample	3.2	C3	
2118	Cut	_	Ditch/other linear	Cut of ditch, NW-SE, possible boundary function	3.1		
2119	Fill	2118	Ditch/other linear	Light orange grey, silt clay, compact, formed through natural infilling	3.1		
2120	Fill	2118	Ditch/other linear	Dark brown grey, silt clay, compact, finds suggest deliberate backfilling to level ground after use	3.1	C3	
2121	Cut		Ditch/other linear	Cut of furrow, N-S, partially excavated to determine extent	4		
2122	Fill	2121	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling (weathering)	4	RB	
2123	Cut		Ditch/other linear	Cut of ditch, NW-SE	3.1		
2124	Fill	2123	Ditch/other linear	Light brown grey, silt clay, compact, formed through natural infilling (weathering)	3.1	RB	
2125	Cut		Ditch/other linear	Cut of ditch, NW-SE, possible recut of boundary	3.1		
2126	Fill	2125	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling (weathering)	3.1	RB	
2127	Cut		Ditch/other linear	Cut of large pit or wide ditch, likely dump pit due to finds recovered	3.3		
2128	Fill	2127	Ditch/other linear	Mid grey brown, silt clay, compact, water-based silt deposited over time	3.3	RB	
2129	Fill	2125	Ditch/other linear	Dark brown grey, silt clay, compact, likely deliberately deposited due to amount of finds	3.3	C3-C4	
2130	Cut		Pit	Cut of pit	3.2		

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Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2131	Fill	2130	Pit	Dark grey brown, silt clay, compact, inc: occ. Burnt clay, most likely backfilled	3.2	C4	
2132	Cut		Ditch/other linear	Cut of ditch	3.2		
2133	Fill	2132	Ditch/other linear	Mid grey brown, silt clay, compact, inc: occ. Burnt clay, possibly backfilled	3.2	C3-C4	
2134	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2135	Fill	2134	Ditch/other linear	Dark brown grey/orange mottling, silt clay, compact, formed through natural infilling	3.2	RB	
2136	Cut		Ditch/other linear	Cut of ditch, W-E	3.2		
2137	Fill	2136	Ditch/other linear	Dark brown grey/orange mottling, silt clay, compact, formed through natural infilling (water borne/wind blown action)	3.2		
2138	Fill	2136	Ditch/other linear	Dark grey brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling (water borne/wind blown action)	3.2	RB	
2139	Cut		Ditch/other linear	Cut of small ditch, NW-SE	3.2		
2140	Fill	2139	Ditch/other linear	Mid orange brown, silt clay, compact, formed through natural infilling	3.2	RB	
2141	Cut		Ditch/other linear	Cut of ditch, E-W, possible enclosure	3.3		
2142	Fill	2141	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.3	C3-C4	
2143	Layer		Unknown/ unspecified	Mid orange brown, silt clay, compact, function and formation is unknown	3.2	LIA-RB	
2144	Layer	_	Unknown/ unspecified	Dark grey brown, silt clay, compact, possibly formed through natural infilling	3.2	C3	
2145	Cut		Ditch/other linear	Cut of ditch, W-E,	3.2		
2146	Fill	2145	Ditch/other linear	Mid brown grey, silt clay, compact, formed through deliberate backfilling	3.2	C3	
2147	Cut		Pit	Cut of pit	3.2		
2148	Fill	2147	Pit	Mid grey brown, silt clay, firm, formed through natural infilling	3.2	LC1-C2	
2149	Cut		Pit	Cut of pit	3.2		
2150	Fill	2149	Pit	Mid grey brown, silt clay, firm, formed through combination of natural infilling and dumping	3.2		
2151	Cut		Pit	Cut of pit	0		
2152	Fill	2152	Pit	Mid grey brown, silt clay, firm, can speculate fill was backfilled	0		
2153	Cut		Ditch/other linear	Cut of ditch, E-SW	3.1		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2154	Fill	2153	Ditch/other linear	Mid grey brown, silt clay, firm, inc: occ. Burnt stone, formed through natural infilling following disuse	3.1	LIA-ERB	
2155	Fill	2153	Ditch/other linear	Mid orange brown/mottled orange, sand clay, inc: occ. Charcoal, formed through a combination of natural infilling and early redepositing of natural	3.1	C3	
2156	Cut		Pit	Cut of possible pit	3.2		
2157	Fill	2156	Pit	Dark grey brown, silt clay, friable, possibly formed through dumping of material	3.2	C3?	
2158	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2159	Fill	2158	Ditch/other linear	Mid grey brown, silt clay, friable, inc: occ. fired clay, formed through deliberate dumping	3.2	C3-C4	
2160	Fill	2158	Ditch/other linear	Stone/rubble deposit, compact, deposit of rubble/stone within linear 2158, contemporary with 2159	3.2	C3	
2161	Cut		Ditch/other linear	Cut of possible pit/ditch, N-S	3.2		
2162	Fill	2161	Ditch/other linear	Dark grey brown, silt clay, friable, inc: large amount of fired clay, most likely backfilled	3.2	C3-C4	
2163	Cut		Pit	Cut of pit, N-S	3.2		
2164	Fill	2163	Pit	Dark grey brown, silt clay, friable, inc: large amount of fired clay, deliberate backfill	3.2	C3	
2165	Layer		Unknown/ unspecified	Mid orange brown, silt clay, compact, formation of spread is unclear	3.2	C3	
2166	Cut	_	Ditch/other linear	Cut of ditch, N-S	3.2		
2167	Fill	2166	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2	RB	
2168	Cut		Ditch/other linear	Cut of ditch, N-S, possibly used as a boundary/enclosure	3.2		
2169	Fill	2168	Ditch/other linear	Mid orange brown, silt clay, compact, formed through natural infilling	3.2		
2170	Fill	2168	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2	RB	
2171	Fill	2168	Ditch/other linear	Light brown grey, silt sand, loose, formed through natural infilling	3.2		
2172	Fill	2153	Ditch/other linear	Mid brown grey, clay, firm, formed through redeposition of natural	3.1		
2173	Fill	2147	Ditch/other linear	Mid orange grey/mottled brown, sand, silt clay, firm, formed through combination of redeposited natural and natural infilling	3.2		
2174	Fill	2149	Pit	Mid orange grey/ mottled brown, sand, silt clay, firm, inc: occ. Charcoal, formed	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
				through redeposition of natural			
2175	Fill	2166	Ditch/other linear	Mid orange brown, sand clay, loose, formed through natural infilling	3.2		
2176	Layer		Unknown/ unspecified	Mid orange brown, silt clay, compact, function and formation in unclear, same as 2143	3.2		
2177	Cut		Ditch/other linear	Cut of gully terminus, N-S	3.2		
2178	Fill	2177	Ditch/other linear	Dark brown grey/orange mottling, silt clay, firm, formed through natural infilling (water borne and wind blown action)	3.2		
2179	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.2		
2180	Fill	2179	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2	RB	
2181	Cut		Ditch/other linear	Cut of ditch, NE-SW	3.2		
2182	Fill	2181	Ditch/other linear	Dark grey brown, silt clay, compact, formed through natural infilling	3.2	RB	
2183	Cut		Ditch/other linear	Cut of ditch, NW-SE	3.2		
2184	Fill	2183	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2	RB	
2185	Layer		Unknown/ unspecified	Dark grey brown/ orange mottling, silt clay, compact, formation is unclear	3.2		
2186	Layer	-	Unknown/ unspecified	Mid orange brown, silt clay, compact, formation unclear	3.2	C3	
2187	Layer	_	Unknown/ unspecified	Dark grey brown, silt clay, compact, formation unclear	3.2	CE	
2188	Cut	-	Ditch/other linear	Cut of ditch, E-W	3.3		
2189	Fill	2188	Ditch/other linear	Mixed mid orange brown/mid brown grey, gravely sand, loose	3.3		
2190	Fill	2188	Ditch/other linear	Mixed mid brown grey/dark black grey, sand clay, compact, inc: occ. Charcoal flecks, formed through backfilling	3.3	RB	
2191	Fill	2188	Ditch/other linear	Mid brown grey/mid orange brown, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	3.3	C3	
2192	Fill	2188	Ditch/other linear	Mid black grey, silt clay, compact, inc: occ. Charcoal flecks, formed through natural infilling	3.3	C3	
2193	Cut		Ditch/other linear	Cut of a ditch, NW-SE	3.1		
2194	Fill	2193	Ditch/other linear	Mixed mid orange brown/ mid brown grey, gravel sand, loose, formed through natural infilling	3.1		
2195	Fill	2193	Ditch/other linear	Mid brown grey, silt clay, compact, inc: occ. Flecks of charcoal, formed through natural infilling	3.1	C3	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2196	Fill	2193	Ditch/other linear	Mid grey brown, silt clay, compact, inc: occ. Flecks of charcoal, formed through natural infilling	3.1	RB	
2197	Layer	_	Unknown/ unspecified	Mid grey brown, silt clay, compact, inc: occ. Flecks of charcoal, formation unknown	3.2	C3	
2198	Cut		Ditch/other linear	Cut of furrow, NE-SW, part of agricultural field system	4		
2199	Fill	2198	Ditch/other linear	Light brown grey, silt clay, compact, formed through natural infilling	4		
2200	Cut		Ditch/other linear	Cut of ditch, W-E	3.2		
2201	Fill	2200	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling	3.2	LIA-RB	
2202	Cut		Ditch/other linear	Cut of ditch, E-W	3.2		
2203	Fill	2202	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling	3.2	RB	
2204	Cut		Ditch/other linear	Cut of ditch, E-W	3.2		
2205	Fill	2204	Ditch/other linear	Mid yellow grey, silt clay, compact, formed through natural infilling (weathering)	3.2	RB	
2206	Cut		Ditch/other linear	Cut of ditch, E-W	2		
2207	Fill	2206	Ditch/other linear	Mid orange grey, sand clay, compact, formed through natural infilling (weathering)	2	Late prehistoric	
2208	Fill	2206	Ditch/other linear	Mid orange grey, silt clay, compact, formed through natural infilling (weathering)	2	RB	
2209	Cut		Ditch/other linear	Cut of ditch, E-W	3.2		
2210	Fill	2209	Ditch/other linear	Mid yellow brown, sand clay, compact, formed through natural infilling	3.2	C3	
2211	Cut		Ditch/other linear	Cut of shallow gully, N-S	3.2		
2212	Fill	2211	Ditch/other linear	Mid yellow brown, silt clay, compact, formed through natural infilling	3.2		
2213	Cut		Ditch/other linear	Cut of ditch, SE-NW	3.2		
2214	Fill	2213	Ditch/other linear	Mid grey brown/ mid orange mottling, silt clay, friable, formed through natural infilling	3.2	MLC3	
2215	Layer		Unknown/ unspecified	Mid brown, silt clay, friable-firm, spread of material, formation unknown			
2219	Cut		Tree-throw hole	Cut of tree throw, N-S, formed from the falling of a tree	0		
2220	Fill	2219	Tree-throw hole	Mid grey brown/orange mottling, clay silt, firm, formed through natural infilling	0		
2221	Fill		Ditch/other linear	Cut of small ditch, NE-SW	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2222	Fill	2221	Ditch/other linear	Mid orange brown, silt clay, compact, formed through natural infilling	3.2	LIA-RB	
2223	Cut		Ditch/other linear	Cut of ditch, E-W	3.2		
2224	Fill	2223	Ditch/other linear	Dark orange brown, silt clay, compact, formed through natural infilling	3.2	RB	
2225	Cut		Ditch/other linear	Cut of ditch, N-S	3.1		
2226	Fill	2225	Ditch/other linear	Mottled mid grey brown/ mid orange brown, silt clay, friable, formed through natural infilling	3.1	RB	
2227	Layer		Unknown/ unspecified	Mid brown, silt clay, friable-firm, formation is unclear, spread material	3.2		
2228	Cut		Pit	Cut of pit	2		
2229	Fill	2228	Pit	Grey brown, sand clay, compact, possibly formed through natural infilling	2	LIA-RB	
2230	Cut		Pit	Cut of pit	0		
2231	Fill	2230	Ditch/other linear	Grey brown, sand clay, compact, possibly formed through natural infilling	0	Late prehistoric	
2232	Cut		Pit	Cut of pit	2		
2233	Fill	2232	Pit	Grey brown, sand clay, compact, formed through natural infilling	2	LIA-RB	
2234	Cut		Grave	Cut of burial, N-S, contained disarticulated human remains	3.2		
2235	Fill		Skeleton	see 2235 sheet	3.2		258–534 cal. AD (SUERC-92340)
2236	Fill	2234	Grave	Dark brown grey/orange mottling, silt clay, compact, formed from deliberate backfilling	3.2	C3	(30210-32340)
2237	Cut		Structural cut	Cut for the insertion of the kiln	3.2		
2238	Fill	2237	Furnace or other pyrotechnic installation	Black grey, silt sand, soft, inc: occ. Baked clay, formed as part of the kiln structure collapse	3.2	C3	
2239	Fill	2237	Furnace or other pyrotechnic installation	Mid grey, sand clay, soft, inc: occ. Baked clay, part of kiln chamber, formed through natural infilling	3.2	C3-C4	
2240	Fill	2237	Furnace or other pyrotechnic installation	Mid grey, silt sand, soft, inc; occ. Baked clay, formed through natural infilling	3.2	C3-C4	
2241	Fill	2237	Furnace or other pyrotechnic installation	Mid grey, silt clay, soft, inc: occ. Baked clay, primary fill after disuse of kiln	3.2	RB	
2242	Fill	2237	Furnace or other pyrotechnic installation	Mid yellow grey, clay, soft, inc: occ. Baked clay and charcoal, formed through natural infilling	3.2	C3-C4	
2243	masonry		Furnace or other pyrotechnic installation	Wall made from sandstone with clay bonding, kiln floor made from crushed sandstone and baked clay for dome	3.2		
2244	Fill		Furnace or other pyrotechnic installation	Mid green grey, refined clay, firm, bonding material for kiln walls	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2245	Fill	2307	Ditch/other linear	Mid orange brown, silt clay, firm, formed through natural infilling	2	RB	
2246	Fill	2307	Ditch/other linear	Light brown orange, sand clay, firm, inc: occ. Charcoal, burnt stone, redeposited natural	2	Late prehistoric	
2247	Cut		Ditch/other linear	cut of ditch, SE-NW	3.2		
2248	Fill	2247	Ditch/other linear	Mid grey brown/mid orange brown, silt clay, friable, formed through natural infilling	3.2		
2249	Cut		Ditch/other linear	cut of ditch, N-S	2		
2250	Fill	2249	Ditch/other linear	Mid grey brown/orange brown mottling, silt clay, friable, formed through natural infilling	2		
2251	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2252	Fill	2251	Ditch/other linear	Mid brown grey, silt clay, compact, inc: occ. Charcoal, formed through natural infilling	3.2	RB	
2253	Fill	2251	Ditch/other linear	Mid grey brown/ orange brown, silt clay, compact, formed through natural infilling	3.2	RB	
2254	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2255	Fill	2254	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling	3.2	RB	
2256	Cut		Ditch/other linear	Cut of ditch, N-S	3.2		
2257	Fill	2256	Ditch/other linear	Mid brown grey, silt clay, compact, formed through natural infilling	3.2	C2-C4	
2258	Cut		Pit	Cut of pit, SW-NE	2		
2259	Fill	2258	Pit	Mid grey brown, sand clay, compact, formed through natural infilling	2		
2260	Cut		Posthole	Posthole, steep sloping sides and concave base	2		
2261	Fill	2260	Posthole	Dark grey brown, compact, sandy clay	2		
2262	Cut		Ditch/other linear	Ditch, southeast/northwest orientation, concave, moderate sloping sides and concave base	3.2		
2263	Fill	2262	Ditch/other linear	Mid brown grey, compact, silty clay	3.2	C2-C4	
2264	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides and concave base	3.2		
2265	Fill	2264	Ditch/other linear	Mid grey brown, compact, silty clay	3.2	C2-MC3	
2266	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides and concave base	3.2		
2267	Fill	2266	Ditch/other linear	Mixed mid yellow brown and mid grey brown, compact, silty clay	3.2	RB	
2268	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides and concave base	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2269	Fill	2268	Ditch/other linear	Mid black grey, compact, silty clay	3.2	RB	
2270	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides and concave base	2		
2271	Fill	2270	Ditch/other linear	Mid grey brown, compact, silty clay	2	LIA-ERB	
2272	Layer		External occupation	Mid orange brown, moderately compact, silty clay	3.2	RB	
2273	Cut	_	Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides and concave base	3.2		
2274	Fill	2273	Ditch/other linear	Dark grey brown, moderately compact, silty clay	3.2	RB	
2275	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, shallow, gentle sloping sides and flat base, partially truncated	0		
2276	Fill	2275	Ditch/other linear	Mid orange brown, moderately compact, silty clay. Same as layer 2143	0	RB	
2277	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, convex, moderate sloping western side, stepped towards the bottom, and a concave base, eastern side unexcavated	3.1		
2278	Fill	2277	Ditch/other linear	Dark grey brown, moderately compact, silty clay	3.1	LC3-C4	
2279	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, straight, steep sloping north-eastern side, southwestern side imperceptible	3.2		
2280	Fill	2279	Ditch/other linear	Mottled mid grey brown and orange brown, moderately compact, silty clay	3.2	RB	
2281	Cut		Ditch/other linear	Ditch, concave, moderate sloping western side, base and eastern side unexcavated	3.2		
2282	Fill	2281	Ditch/other linear	Dark brown grey, compact, silty clay	3.2		
2283	Cut		Ditch/other linear	Ditch, straight moderate sloping eastern side, base and western side unexcavated. Missing feature	0		
2284	Fill	2283	Ditch/other linear	Dark brown grey, compact, silty clay	0	C2-C3	
2285	Cut		Ditch/other linear	Ditch, convex, steep sloping sides and concave base. Missing feature	0		
2286	Fill	2285	Ditch/other linear	Dark brown grey, compact, sandy clay	0		
2287	Cut		Ditch/other linear	Ditch, convex, gentle sloping northern side, southern side and base unexcavated	0		
2288	Fill	2287	Ditch/other linear	Dark brown grey, compact, sandy clay	0	C2-C4	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2289	Cut		Ditch/other linear	Ditch, straight, moderate sloping eastern side, base and western side unexcavated	0		
2290	Fill	2289	Ditch/other linear	Mid brown grey, compact, silty clay	0	C4	
2291	Cut		Pit	Cut of pit, NW-SE	3.2		
2292	Fill	2291	Pit	Dark black grey/orange mottling, clay silt, loose, inc: occ. Charcoal, formed through natural infilling	3.2	LIA-ERB	
2293	Cut		Posthole	Cut of posthole, SW-NE, possibly associated with the kiln SW of the feature. Root disturbed	0		
2294	Fill	2293	Posthole	Dark brown grey/orange mottling, clay silt, loose, formed through natural infilling (water borne and wind blown action)	0		
2295	Cut		Posthole	Cut of posthole, NW-SE, possibly associated with the kiln SW of the feature. Root disturbance	0		
2296	Fill	2295	Posthole	Mid brown, grey/orange mottling, clay silt, loose, formed through natural infilling (water borne and wind blown action)	0		
2297	Cut		Pit	Cut of pit	3.2		
2298	Fill	2297	Pit	Mid brown grey/orange mottling, clay silt, loose, inc: occ. Manganese, formed through natural infilling (water borne and wind blown action)	3.2	RB	
2299	Cut		Pit	Cut of pit, N-S, function is unknown but may be associated with the kiln SW of the feature	3.2		
2300	Fill	2299	Pit	Mid brown grey/orange mottling, clay silt, loose, inc: occ. Manganese, formed through natural infilling (water borne and wind blown action)	3.2	MC1-C2	
2301	Cut		Ditch/other linear	Cut of ditch, N-S	0		
2302	Fill	2301	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling (weathering)	3.2		
2303	Cut		Destruction debris	Cut of furrow, N-S, part of N-S aligned system of ridge and furrow	4		
2304	Cut		Ditch/other linear	Ditch, northeast/southwest orientation, concave, moderate sloping sides and a concave base	4		
2305	Fill	2304	Ditch/other linear	Fill of 2304	4		
2305	Layer	2004	Occupation deposit (internal)	Mid brown grey, silt clay, compact, inc: occ. Charcoal, spread of waste or occupational material	3.2		
	Cut	1	Ditch/other linear	Cut of ditch, SW-NE	2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
2308	Cut		Furnace or other pyrotechnic installation	Construction cut for kiln	3.2		
2309	masonry	2308	Furnace or other pyrotechnic installation	Kiln lining (side) wall	3.2	RB	
2310	Layer	2308	Furnace or other pyrotechnic installation	Kiln base lining	3.2		
2311	Layer	2308	Furnace or other pyrotechnic installation	Baked clay layer	3.2		
2312	Layer	2308	Furnace or other pyrotechnic installation	Baked clay layer	3.2		
2313	Layer	2308	Furnace or other pyrotechnic installation	Occupation deposit	3.2		
2314	Cut		Ditch/other linear	Cut of ditch. Missing	0		
2315	Fill	2314	Ditch/other linear	Fill of ditch. Missing	0	C2-C4	
2316	Cut		Ditch/other linear	Cut of ditch. Missing	0		
2317	Fill	2316	Ditch/other linear	Fill of ditch. Missing	0	C4	
3000	Layer	2010	Natural soil	Topsoil. Dark black brown, clay silt, loose			
3001	Layer		Natural soil	Subsoil. Mid grey brown, silt clay, compact			
3002	Layer		Natural soil	Natural. Mid brown orange, clay, compact			
3003	Cut		Ditch/other linear	Cut of ditch, SE-NW, possibly used as a boundary.	2		
3004	Fill	3003	Ditch/other linear	Mid blue grey, silt clay, friable, formed through natural infilling.	2	EIA	
3005	Cut		Ditch/other linear	Cut of ditch, E-W,	2		
3006	Fill	3005	Ditch/other linear	Mid brown grey, silt sand, friable, formed through natural infilling.	2		
3007	Cut		Ditch/other linear	Cut of ditch, N-S	2		
3008	Fill	3007	Ditch/other linear	Dark grey, silt clay, friable, formed through natural infilling.	2		
3009	Cut		Ditch/other linear	Cut of ditch, N-S	2		
3010	Fill	3009	Ditch/other linear	Mid grey brown, silt clay, compact, formed through natural infilling.	2	RB	
3011	Cut		Tree-throw hole	Cut of probable tree throw, N-S, rooting suggests tree throw.	0		
3012	Fill	3011	Tree-throw hole	Mid blue grey, sand clay, friable, formed through natural infilling.	0	Late prehistoric	
4000	Layer		Natural soil	Topsoil, dark grey brown, compact, silty clay			
4001	Layer		Natural soil	Subsoil, mid grey brown, compact, silty clay		RB	
4002	Layer		Natural soil	Natural geology, mid orange brown, compact, silty clay			

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
4003	Cut		Ditch/other linear	Furrow	4		
4004	Fill	4003	Ditch/other linear	Fill of furrow 4003	4		
4005	Cut		Ditch/other linear	Furrow	4		
4006	Fill	4005	Ditch/other linear	Fill of furrow 4005	4		
4007	Cut		Ditch/other linear	Furrow	4		
4008	Fill	4007	Ditch/other linear	Fill of furrow 4007	4		
4009	Cut		Ditch/other linear	Furrow	4		
4010	Fill	4009	Ditch/other linear	Fill of furrow 4009	4		
5000	Layer	1000	Natural soil	Topsoil, Dark grey brown,	•		
		_		compact, silty clay			
5001	Layer	_	Natural soil	Subsoil, mid grey brown, compact, silty clay			
5002	Layer		Natural soil	Natural geology, mid orange brown, compact, silty clay			
5003	Cut		Ditch/other linear	Furrow	4		
5004	Fill	5003	Ditch/other linear	Fill of furrow 5003	4		
5005	Cut		Ditch/other linear	Furrow	4		
5006	Fill	5005	Ditch/other linear	Fill of furrow 5005	4		
5007	Cut		Ditch/other linear	Furrow	4		
5008	Fill	5007	Ditch/other linear	Fill of furrow 5007	4		
5009	Cut	0001	Ditch/other linear	Furrow	4		
5010	Fill	5009	Ditch/other linear	Fill of furrow 5009	4		
6000		5009	Natural soil	Topsoil, Dark grey brown,	4		
	Layer	_		compact, clayey sand			
6001	Layer		Natural soil	Subsoil, mid green grey, compact, sandy clay			
6002	Layer		Natural soil	Natural geology, mid orange yellow, compact, clayey sand			
6003	Cut	_	Ditch/other linear	Ditch, northeast/southwest orientation, concave, moderate sloping sides and concave base	1		
6004	Fill	6003	Ditch/other linear	Mid brown grey, friable, clayey silt	1	RB	
6005	Cut		Ditch/other linear	Ditch, west/east orientation, concave, moderate sloping sides and concave base	3.2		
6006	Fill	6005	Ditch/other linear	Mid brown grey, friable, clayey silt	3.2	Late prehistoric	
6007	Cut		Pit	Context void but finds from fill recovered and processed	0	P. STROUGHO	
6008	Fill	6007	Pit	Context void but finds recovered and processed	0	C2-C4	
6011	Cut		Pit	Pit, shallow, concave, gentle sloping sides and concave base	1		
6012	Fill	6011	Pit	Mid grey brown, compact, silty clay	1		
6013	Cut		Pit	Pit, concave, steep sloping sides and concave base	1		
6014	Fill	6013	Pit	Mid grey brown, compact, silty clay	1		
6015	Cut		Pit	Pit, concave, moderate sloping sides and a flat base	1		
6016	Fill	6015	Pit	Mid grey brown, compact, silty clay	1	Late prehistoric	
6017	Cut		Pit	Pit, straight, steep sloping sides and flat base	1		
6018	Fill	6017	Pit	Mid grey brown, compact, silty clay	1	MIA-LIA	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6019	Cut		Pit	Pit, straight, steep sloping sides and concave base	1		
6020	Fill	6019	Pit	Mid grey brown, compact, silty clay	1	Late prehistoric	
6021	Cut		Pit	Pit, irregular, moderate sloping sides and concave base	1		
6022	Fill	6021	Pit	Light yellow brown, compact, sandy clay	1		
6023	Layer		External occupation	Mid yellow grey, compact, sandy clay	1		
6024	Cut		Ditch/other linear	Ditch, north/south orientation, straight, gentle sloping sides and a flat base	1		
6025	Fill	6024	Ditch/other linear	Mid grey brown, moderately compact, clayey silt	1	Late prehistoric	
6026	Cut		Pit	Pit, straight, steep to moderate sloping sides, with a break of slope to concave undercutting sides towards to bottom, and a flat base	1		
6027	Fill	6026	Pit	Mid grey brown, moderately compact, clayey sand	1		
6028	Cut		Pit	Pit, straight, steep sloping northern side, base and southern side unexcavated	1		
6029	Fill	6028	Pit	Mid orange brown, moderately compact, clayey sand	1		
6030	Fill	6028	Pit	Dark grey brown, moderately compact, clayey sand	1	MIA-LIA	
6031	Cut		Pit	Pit, concave, gentle sloping sides and concave base	3.3		
6032	Fill	6031	Pit	Mid grey brown, moderately compact, silty clay	3.3	LIA-ERB	
6033	Cut		Ditch/other linear	Ditch, straight, moderate sloping southern side, gentle sloping stepped to moderate sloping towards the bottom on northern side, and concave base	1		
6034	Fill	6033	Ditch/other linear	Dark grey brown, moderately compact, clayey silt	1	C2-C4	383–342 cal. BC (SUERC-97598) 390–206 cal. BC (SUERC-97599)
6035	Cut		Ditch/other linear	Ditch, northeast/southwest orientation, concave, moderate sloping sides and a flat base	3.2		
6036	Fill	6035	Ditch/other linear	Dark grey brown, compact, silty clay	3.2	MLC3	
6037	Cut		Ditch/other linear	Ditch, southeast/northwest orientation, concave, moderate sloping eastern side and flat base, western side truncated	1		
6038	Fill	6037	Ditch/other linear	Dark grey brown, friable, clayey silt	1	LIA-ERB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6039	Cut		Ditch/other linear	Ditch, east/west orientation, concave, moderate sloping southern side and irregular base, northern side unexcavated	3.2		
6040	Fill	6039	Ditch/other linear	Dark grey brown, friable, clayey silt	3.2	LIA-ERB	
6041	Cut		Posthole	Posthole, concave, steep sloping sides and concave base	1		
6042	Fill	6041	Posthole	Dark grey brown with lenses of mid orange brown, friable, clayey silt	1		
6043	Cut		Pit	Pit, shallow, concave, gentle sloping eastern side and concave base, western side truncated	1		
6044	Fill	6043	Pit	Mid orange grey, moderately friable, silty clay	1		
6045	Cut		Ditch/other linear	Ditch or furrow, north/south orientation, straight, moderately sloping sides and concave base	3.2		
6046	Fill	6045	Ditch/other linear	Mid orange grey, moderately compact, silty clay	3.2	LIA-ERB	
6047	Cut		Pit	Pit, moderate sloping sides and irregular base	3.2		
6048	Fill	6047	Pit	Mid yellow grey, firm, silty clay	3.2	C2-C4	
6049	Cut		Ditch/other linear	Ditch, east/west orientation, deep, moderate sloping, concave northern side, irregular southern side, and concave base	3.2		
6050	Fill	6049	Ditch/other linear	Dark yellow grey, firm, silty clay	3.2	C2-C4	
6051	Layer		External occupation	Mid grey brown, firm, silty clay			
6052	Cut		Pit or Posthole	Posthole or pit, concave, steep sloping sides, and flat base	1		
6053	Fill	6052	Pit or Posthole	Dark grey brown with patches of light grey brown, moderately compact clayey silt	1		
6054	Cut		Pit or tree bole	Pit or tree bowl, concave, gentle sloping south- eastern side, concave steep sloping north- western side, and irregular base	1		
6055	Fill	6054	Pit or tree bole	Mid grey brown, moderately compact, clayey silt	1		
6056	Cut		Pit or Tree-throw hole	Pit or tree throw, concave, steep sloping north- eastern side, convex, gentle sloping southwestern side, and flat base	1		
6057	Fill	6056	Pit or Tree-throw hole	Dark grey brown, moderately friable, silty sand	1		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6058	Cut		Pit or posthole	Posthole or pit, concave, moderate sloping northeast side, concave, steep sloping southwestern side, and flat base	1		
6059	Fill	6058	Pit or posthole	Dark grey brown with patches of mid orange brown, friable, silty sand	1		
6060	Cut		Ditch/other linear	Ditch, north- northwest/south-southeast orientation, concave, moderate sloping eastern side, and flat base, western side unexcavated	1		
6061	Fill	6060	Ditch/other linear	Dark grey brown, friable, sandy silt	1		
6062	Cut		Ditch/other linear	Ditch, west- northwest/east-southeast orientation, concave, steep sloping north- western side and irregular base	1		
6063	Fill	6062	Ditch/other linear	Dark brown grey, friable, sandy silt	1		
6064	Cut		Ditch/other linear	Ditch, southwest/northeast orientation, concave, moderate breaking to gentle sloping southwestern side, straight, moderate sloping south-eastern side, and flat base (sectioned obliquely)	3.2		
6065	Fill	6064	Ditch/other linear	Dark blue grey, compact, silty clay	3.2	LC2-MC3	
6066	Cut		Pit	Pit, straight, steep sloping south-western side, moderate sloping south- eastern side, and flat base. Disturbance from field drain	5		
6067	Fill	6066	Pit	Mid blueish grey with yellow grey mottling, compact, silty clay	5		
6068	Cut		Pit	Pit, concave, moderate sloping south-eastern side, stepped and partly truncated, base and north- western side unexcavated	3.2		
6069	Fill	6068	Pit	Mid yellow brown, loose, silty clay	3.2		
6070	Fill	6068	Pit	Dark blackish grey, compact, silty clay	3.2	C3-C4	
6071	Cut		Furrow	Furrow, southwest/northeast orientation, shallow, straight, gentle sloping sides, and flat base	4		
6072	Fill	6071	Furrow	Mid grey brown, compact, silty clay	4	RB	
6073	Cut		Pit	Pit, concave, moderate sloping sides, and concave base. Reinterpreted as root disturbance	0		
6074	Fill	6073	Pit	Mid brown grey, firm, silty clay	0	RB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6075	Cut		Pit	Pit, concave, moderate sloping sides, and flat base. Reinterpreted as root disturbance	0		
6076	Fill	6075	Pit	Mid yellow grey, firm, silty clay	0	Late prehistoric	
6077	Cut		Pit	Pit, concave, steep sloping sides, and concave base	0		
6078	Fill	6077	Pit	Dark grey brown, friable, silty clay, with frequent charcoal	0		
6079	Fill	6077	Pit	Mid brown orange, firm, sandy clay	0		
6080	Cut		Ditch/other linear	Ditch, north/south orientation, concave, moderate sloping sides, and concave base	5		
6081	Fill	6080	Ditch/other linear	Mid grey brown, moderately compact, silty clay	5		
6082	Fill	6080	Ditch/other linear	Dark grey brown, moderately compact, silty clay	5	Late prehistoric	
6083	Cut		Ditch/other linear	Ditch terminus, north/south orientation, concave, gentle sloping eastern side, and concave base, western side unexcavated	5		
6084	Fill	6083	Ditch/other linear	Dark grey brown, moderately compact, silty clay	5		
6085	Cut		Grave	Grave cut, northeast/southwest orientation, concave, gentle sloping sides, and flat base	3.3		
6086	Fill	6085	Grave	Dark grey brown, compact, sandy clay	3.3	Late prehistoric	
6087	skeleton	6085	Skeleton	Inhumation, extended, supine, partially truncated (head and upper left side of body)	3.3	RB	245–402 cal. AD (SUERC-92339)
6088	Cut		Pit	Pit, northwest/southeast orientation, straight, moderately sloping northwest side, gentle sloping southeast side, and flat base			
6089	Fill	6088	Pit	Dark blue grey with orange grey mottling, compact, silty clay		Late prehistoric	
6090	Cut		Tree-throw holel	Tree hole, shallow, concave gentle sloping sides, and irregular base	0		
6091	Fill	6090	Tree-throw hole	Mid brown grey, compact, silty clay	0	LIA-RB	
6092	Cut		Tree-throw hole	Pit or tree throw, shallow, concave, moderately sloping sides, and concave base	0		
6093	Fill	6092	Tree-throw hole	Mid blue grey, very compact, silty clay	0	Late prehistoric	
6094	Cut		Ditch/other linear	Ditch, east/west orientation, straight, moderate sloping sides, and flat base	3.2		
6095	Fill	6094	Ditch/other linear	Mid grey green, compact, clay	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6096	Fill	6094	Ditch/other linear	Mid brown grey with red grey mottling, compact, clayey silt	3.2	C2-EC3	
6097	Cut		Ditch/other linear	Ditch, straight, steep sloping sides, and flat base	3.2		
6098	Fill	6097	Ditch/other linear	Mid brown grey with red grey mottling, compact clayey silt	3.2		
6099	Layer		Natural soil	Light brown grey with red grey mottling, compact clayey silt. Same as 2098	0		
6100	Cut		Pit	Pit, west/east orientation, concave, moderate sloping sides, and flat base	2		
6101	Fill	6100	Pit	Mid grey brown, compact, silty clay	2	LIA-RB	
6102	Layer		External occupation	Light grey brown, compact, silty clay	3.2		
6103	Cut		Ditch/other linear	Ditch, shallow, straight, moderate sloping sides, and slightly concave base	5		
6104	Fill	6103	Ditch/other linear	Mid orange grey, firm, silty clay	5	Late prehistoric	
6105	Layer		Natural soil	Mid yellow grey with orange grey mottling, firm, silty clay. General disturbance on the side of the ditch	0	MED (C13+?)	
6106	Cut		Ditch/other linear	Ditch terminus, east/west orientation, concave, moderate sloping northern side, and flat base, southern side unexcavated	3.2		
6107	Fill	6106	Ditch/other linear	Dark grey, friable, silty clay	3.2	RB	
6108	Layer		External occupation	Mid yellow grey, friable, silty clay	3.2		
6109	Cut		Ditch/other linear	Ditch terminus, northeast/southwest orientation, straight, steep sloping northern side, and concave base, southern side unexcavated	3.2		
6110	Fill	6109	Ditch/other linear	Mid orange brown, compact, silty clay	3.2	LIA-RB	
6111	Cut		Furrow	Furrow, north/south orientation, straight, moderate sloping eastern side, western side unexcavated, and flat base	4		
6112	Fill	6111	Furrow	Mid orange brown, compact, silty clay	4		
6113	Cut		Pit	Pit, straight, moderate sloping western side, steep sloping eastern side, and uneven base. Root disturbance	0		
6114	Fill	6113	Pit	Mid brown grey with orange grey mottling, compact, silty clay	0	Late prehistoric	
6115	Cut		Pit or Tree-throw hole	Pit or tree throw, concave, gentle sloping sides, and concave base	0		
6116	Fill	6115	Pit or tree-throw hole	Mid brown grey, very compact, silty clay	0		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6117	Cut		Tree-throw hole	Tree bowl, shallow, concave, gentle sloping sides, and irregular base	0		
6118	Fill	6117	Tree-throw hole	Mid brown grey, very compact, silty clay	0	LIA	
6119	Cut		Ditch/other linear	Ditch terminus, east/west orientation, convex, steep sloping southern side, moderate sloping northern side, and concave base	1		
6120	Fill	6119	Ditch/other linear	Mid grey brown, compact, silty clay	1		
6121	Fill	6119	Ditch/other linear	Dark grey brown, compact, silty clay	1	LIA-RB	
6122	Cut		Ditch/other linear	Ditch, east/west orientation, concave, steep sloping northern side, moderate sloping southern side. Patch of root disturbance on the side of ditch 6119	0		
6123	Fill	6122	Ditch/other linear	Dark grey brown, compact, silty clay	0		
6124	Layer		Natural soil	Light grey brown, compact, silty clay	0		
6125	Cut	_	Ditch/other linear	Ditch, north/south orientation, straight, steep sloping sides, and concave base	3.2		
6126	Fill	6125	Ditch/other linear	Mid yellow grey, firm, silty clay	3.2	LIA-RB	
6127	Cut		Ditch/other linear	Ditch, east/west orientation, concave, moderate sloping northern side, southern side and base unexcavated			
6128	Fill	6127	Ditch/other linear	Mottled mid brown grey, very compact, silty clay			
6129	Cut		Ditch/other linear	Curvilinear ditch, east/west turning northeast/southwest orientation, straight, moderate sloping sides, slightly stepped approximately half-way down sides, concave base	1		
6130	Fill	6129	Ditch/other linear	Light yellow grey, firm, silty clay	1		
6131	Fill	6129	Ditch/other linear	Mid brown grey, firm, silty clay	1	MIA	
6132	Cut		Ditch/other linear	Ditch, east/west orientation, straight, moderate sloping sides, and concave base	1		
6133	Fill	6132	Ditch/other linear	Mid yellow grey, firm, silty clay	1	LIA-RB	
6134	Cut		Ditch/other linear	Ditch, east/west orientation, shallow, moderate sloping, convex southern side, concave northern side, and flat base	1		
6135	Fill	6134	Ditch/other linear	Mid grey orange, firm, silty clay	1		
6136	Fill	6134	Ditch/other linear	Dark brown grey, firm, silty clay	1	EIA-MIA	
6139	Layer		Natural soil	Mid brown grey, friable, silty clay	0		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6140	Cut		Ditch/other linear	Ditch terminus, east/west orientation, concave, moderate sloping southern side, northern side unexcavated, and concave base	1		
6141	Fill	6140	Ditch/other linear	Mid yellow grey, firm, silty clay	1	LIA	
6142	Cut		Pit	Pit, shallow, straight, moderate sloping sides, and flat base. Missing pit.	0		
6143	Fill	6142	Pit	Mid brown grey, very compact, silty clay	0	Late prehistoric	
6144	Cut		Ditch/other linear	Ditch, east/west orientation, slightly convex, steep sloping sides, and concave base	3.2		
6145	Fill	6144	Ditch/other linear	Dark yellow grey, compact, silty clay	3.2		
6146	Fill	6144	Ditch/other linear	Dark orange grey, compact, silty clay	3.2		
6147	Layer		Natural soil	Mid grey brown with orange brown mottling, compact, silty clay	0		
6148	Cut		Ditch/other linear	Curvilinear ditch terminus, northwest/southeast orientation, concave, moderate sloping sides, and flat base	1		
6149	Fill	6148	Ditch/other linear	Mid grey brown and orange brown, compact, sandy clay	1	MIA-LIA	
6150	Cut		Ditch/other linear	Curvilinear ditch, east/west orientation, straight, moderate sloping sides, and flat base	1	MIA-LIA	
6151	Fill	6150	Ditch/other linear	Mid grey brown, very compact, sandy clay	1	MIA-LIA	388–204 cal. BC (SUERC-97604) 361–175 cal. BC (SUERC-97603)
6152	Fill	6109	Ditch/other linear	Dark brown grey, compact, silty clay	3.2	LIA-RB	
6153	Layer		External occupation	Mid yellow grey, firm, silty clay	3.2	Late prehistoric	
6154	Cut		Ditch/other linear	Curvilinear ditch terminus, north/south orientation, concave, moderate sloping eastern side, western side unexcavated, and concave base	1		
6155	Fill	6154	Ditch/other linear	Mid grey brown, moderately compact, silty clay	1	MIA-LIA	
6156	Cut		Pit	Pit, concave, moderate sloping southeast side, gentle sloping northwest side, and flat base	3.2		
6157	Fill	6156	Pit	Light grey brown with mid brown orange patches, moderately compact, clayey silt	3.2		
6158	Cut		Ditch/other linear	Ditch, southwest/northeast orientation, moderate sloping convex northwest side, concave southeast side, and concave base	3.2		
6159	Fill	6158	Ditch/other linear	Light yellow brown, moderately compact, silty clay	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6160	Fill	6161	Pit	Dark brown grey, moderately compact, silty clay	3.2	LIA-RB	
6161	Cut		Pit	Ditch, northeast/southwest orientation, concave, moderate sloping northwest side, southeast side truncated, and flat base	3.2		
6162	Fill	6161	Pit	Mid yellow brown, moderately compact, silty clay	3.2		
6163	Cut		Ditch/other linear	Ditch terminus, east/west orientation, straight, steep sloping south side, north side unexcavated, and flat base	3.2		
6164	Fill	6163	Ditch/other linear	Dark grey brown, moderately compact, clayey silt	3.2	RB	
6165	Cut		Pit	Pit, concave, moderate sloping south side, gentle sloping north side, and concave base	1		
6166	Fill	6165	Pit	Mid brown grey, firm, sandy clay	1	LIA	
6167	Layer		Natural strata	Mid brown grey with orange mottling, firm, silty clay	0		
6168	Cut		Ditch/other linear	Ditch, east/west orientation, concave, moderate sloping south side, north side unexcavated, and flat base	3.2		
6169	Fill	6168	Ditch/other linear	Mid grey brown, firm, silty clay	3.2		
6170	Cut		Ditch/other linear	Ditch, north/south orientation, straight, moderate sloping eastern side, western side truncated, and concave base	3.2		
6171	Fill	6170	Ditch/other linear	Light grey brown, firm, silty clay	3.2	MIA-LIA	
6172	Cut		Ditch/other linear	Ditch, north/south orientation, straight, moderate sloping sides, and concave base	3.2		
6173	Fill	6172	Ditch/other linear	Mid blue grey, firm, silty clay	3.2	Late prehistoric	
6174	Cut		Furrow	Furrow, north/south orientation, shallow, straight, gentle sloping sides, and flat base	4		
6175	Fill	6174	Furrow	Mid brown grey, firm, clayey silt	4	MLC3	
6176	Cut		Tree-throw hole	Tree bowl, shallow, concave, moderate sloping sides, deeper in southern portion, and irregular base	0		
6177	Fill	6176	Tree-throw hole	Mid brown grey with frequent iron panning, very compact, silty clay	0		
6178	Fill	6161	Pit	Mid grey brown with frequent brown orange patches, moderately compact, clayey silt	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6179	Cut		Ditch/other linear	Ditch terminus, northwest/southeast orientation, moderate sloping sides, and concave base	1		
6180	Fill	6179	Ditch/other linear	Mid orange grey, moderately compact, silty clay	1	MIA-LIA	
6181	Cut		Ditch/other linear	Ditch, northeast/southwest orientation, slightly concave, steep sloping sides, and flat base	1		
6182	Fill	6181	Ditch/other linear	Dark brown grey, firm, silty clay	1	EIA	
6183	Layer		External surface	Light brown grey with brown orange mottling, firm, silty clay	1		
6184	Cut		Ditch/other linear	Curvilinear ditch, concave, moderate sloping sides, and concave base	1		
6185	Fill	6184	Ditch/other linear	Mid brown grey, very compact, silty clay	1	Late prehistoric	
6186	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides, and flat base	3.2		
6187	Fill	6186	Ditch/other linear	Mixed grey brown and orange brown, very compact, silty clay	3.2		
6188	Cut		Pit	Pit, moderate sloping sides, concave base	1		
6189	Fill	6188	Pit	Mid grey brown, firm, silty clay	1	Late prehistoric	
6190	Cut		Ditch/other linear	Possible furrow, northwest/southeast orientation, shallow, slightly concave, gentle sloping sides, and slightly concave base	3.2		
6191	Fill	6190	Ditch/other linear	Mid grey with orange mottling, very compact, silty clay	3.2		
6192	Cut		Ditch/other linear	Curvilinear ditch, northeast/southwest orientation, concave, moderate sloping sides, and concave base	1		
6193	Fill	6192	Ditch/other linear	Dark brown grey with orange mottling, very compact, silty clay	1	C2-C4	
6194	Cut		Pit	Pit, concave, moderate sloping sides, and concave base	0		
6195	Fill	6194	Pit	Dark grey brown, very compact, silty clay	0		
6196	Cut		Pit	Pit, concave, moderate sloping sides, and concave base. Missing pit	0		
6197	Fill	6196	Pit	Mid brown grey, firm, clayey silt	0		
6198	Cut		Pit	Pit, concave, moderate sloping sides, and slightly concave base. Missing pit	0		
6199	Fill	6198	Pit	Mid brown grey with orange mottling, firm, silty clay	0		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6200	Cut		Furrow	Furrow, northwest/southeast orientation, straight, gentle sloping sides, and flat base	4		
6201	Fill	6200	Furrow	Mid brown grey, very compact, silty clay	4	RB	
6202	Cut		Ditch/other linear	Curvilinear ditch, east/west orientation, concave, moderate sloping sides, and flat base	1		
6203	Fill	6202	Ditch/other linear	Dark blue grey, firm, silty clay	1	EIA / LP	
6204	Cut		Ditch/other linear	Ditch, northwest/southeast orientation, concave, moderate sloping sides, slightly concave base	1		
6205	Fill	6204	Ditch/other linear	Dark brown grey, firm, silty clay	1	MIA-LIA	
6206	Cut		Pit	Pit, northwest/southeast orientation, slightly concave, moderate sloping southwest side, gentler sloping northeast side, and slightly concave base	1		
6207	Fill	6206	Pit	Mid grey brown, firm, silty clay	1		
6208	Cut		Ditch/other linear	Ditch terminus, northwest/southeast orientation, shallow, concave, moderate sloping western side, eastern side unexcavated, slightly concave base	1		
6209	Fill	6208	Ditch/other linear	Dark brown grey, firm, silty clay	1	LIA-RB	
6210	Cut		Ditch/other linear	Ditch, north/south orientation, concave, slightly stepped approximately half-way down sides, steep sloping southeast side, moderate sloping northwest side, and slightly concave base	3.2		
6211	Fill	6210	Ditch/other linear	Mid brown grey, friable, silty clay	3.2	LIA-RB	
6212	Layer		Natural soil	Dark brown grey, firm, silty clay	0	Late prehistoric	
6213	Cut		Ditch/other linear	Curvilinear ditch, east/west orientation, straight, steep sloping sides, northwest side stepped towards the top, and V-shaped base	1		
6214	Fill	6213	Ditch/other linear	Mid grey brown, firm, clayey silt	1	RB	
6215	Cut		Ditch/other linear	Curvilinear ditch, northeast/southwest orientation, concave, moderate sloping sides, and flat base	1		
6216	Fill	6215	Ditch/other linear	Dark grey brown, clay silt, moderately firm	1		
6217	Cut		Ditch/other linear	Curvilinear ditch, northwest/southeast orientation, concave, steep sides, concave base	1		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6218	Fill	6217	Ditch/other linear	Context void but finds recovered and processed likely to be same as 6226 or 6225	3.2	MIA-LIA	
6219	Fill	6217	Ditch/other linear	Mid yellow brown, friable, sandy clay	1	RB	
6220	Fill	6217	Ditch/other linear	light grey brown, soft, clay	1	Late prehistoric	
6224	Cut		Ditch/other linear	Ditch, east west orientation, moderate to steep sloped sides, irregular flat base	3.2		
6225	Fill	6224	Ditch/other linear	Mid yellow brown, firm, silty clay	3.2	Late prehistoric	
6226	Fill	6224	Ditch/other linear	Mid orange brown, firm, silty clay	3.2		
6227	Cut		Pit	Pit, circular, steep sides, convex base	2		
6228	Fill	6227	Pit	Light grey brown, firm, silty clay	2		
6229	Cut		Ditch/other linear	Gully, north south orientation, steep sides, not excavated to base	3.2		
6230	Fill	6229	Ditch/other linear	Mid orange brown, firm, silty clay	3.2		
6231	Layer		Natural soil	Dark grey brown, compact, silty clay	0	Late prehistoric	
6232	Cut		Ditch/other linear	Ditch, NW-SE orientation, concave sides, concave base	3.2	promotorio	
6233	Fill	6232	Ditch/other linear	Mid brown grey, very compact, silt clay	3.2	Late prehistoric	
6234	Cut		Ditch/other linear	Ditch or Furrow, NW-SE orientation, concave sides, concave base	3.2	•	
6235	Fill	6234	Ditch/other linear	Mid brown grey, very compact, silt clay	3.2	MIA	
6236	Cut		Ditch/other linear	Ditch, NW-SE orientation, concave sides, concave base	3.2		
6237	Fill	6236	Ditch/other linear	Mid grey brown, very compact, silty clay	3.2		
6238	Cut		Ditch/other linear	Context void but finds from fill recovered and processed	0		
6239	Fill	6238	Ditch/other linear	Context void but finds recovered and processed	0		
6240	Cut		Pit	Pit, circular, moderate steep, concave sides, irregular flat base	1		
6241	Fill	6240	Pit	Mid grey brown, moderately firm, sandy silt	1		
6243	Cut		Ditch/other linear	Ditch, E-W orientation, gentle sloping, straight sides, sharp concave base	1		
6244	Fill	6243	Ditch/other linear	Dark brown grey, hard, silty clay	1	MIA-LIA	354–58 cal. BC (SUERC-97606)
6246	Cut		Ditch/other linear	Ditch, curving southwest to northeast orientation, sharp sides, pointed base	1		
6247	Fill	6246	Ditch/other linear	Mid brown grey, compact, silty clay	1	Late prehistoric	
6248	Layer	_	Natural soil	Spread, mid grey brown, compact, silty clay	0	promotorio	
6249	Cut	_	Ditch/other linear	Ditch, N-S orientation, moderately sloping, straight sides, concave base	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6250	Fill	6249	Ditch/other linear	Mid grey orange brown, compact, clay silt	3.2	LIA-RB	Toodito
6251	Cut		Ditch/other linear	Ditch, N-S orientation, moderately sloping, straight sides, flat base	3.2		
6252	Fill	6251	Ditch/other linear	Mid grey brown, compact, silty clay	3.2	MLC1	
6253	Cut		Ditch/other linear	Gully, NW-SE orientation, gentle, concave sides, flat base	1		
6254	Fill	6253	Ditch/other linear	Mid brown grey, compact, silty clay	1	Late prehistoric	
6255	Cut		Pit	Pit, moderate concave to E side, steep concave to W, flat base	3.2		
6256	Fill	6255	Pit	Dark brown grey, moderately firm, clayey silt	3.2	C2-C4	
6257	Cut		Ditch/other linear	Ditch, N-S, moderately sloping, straight sides, concave base	3.2		
6258	Fill	6257	Ditch/other linear	Light brown grey, compact, silty clay	3.2		
6259	Cut		Furrow	Furrow, N-S orientation, gentle sloping, straight sides, flat base	4		
6260	Fill	6259	Furrow	Mid brown grey, compact, clay silt	4		
6261	Cut		Ditch/other linear	Ditch, NW-SE orientation, gentle concave sides, slightly concave base	3.2		
6262	Fill	6261	Ditch/other linear	Dark grey brown, very compact, silty clay	3.2		
6263	Cut		Pit	Pit, steep, irregular sides, concave base	1		
6264	Fill	6263	Pit	Dark grey brown, moderate, silty clay	1	EIA	
6265	Fill	6263	Pit	Mid brown grey, moderate, sandy clay	1		
6266	Fill	6263	Pit	Dark brown grey, moderate, sandy clay	1	MIA-LIA	
6267	Cut		Pit	Pit, NW-SE orientation, very steep sides, flat base	1		725–398 cal. BC (SUERC-98592)
6268	Fill	6267	Pit	Mid yellow brown, firm, silty clay	1		
6269	Fill	6267	Pit	Mid yellow grey, firm, silty clay	1	EIA?-MIA	
6270	Cut		Ditch/other linear	Ditch, N-S orientation, concave sides, concave base	3.2		
6271	Fill	6270	Ditch/other linear	Mid brown grey, firm, silty clay	3.2		
6273	Layer		Natural soil	Mid yellow grey, firm, silty clay	0		
6274	Cut		Ditch/other linear	Ditch, E-W orientation, steep sides, slightly concave base	3.2		
6275	Fill	6274	Ditch/other linear	Dark brown grey, compact, silty clay	3.2	Late prehistoric	
6276	Cut		Pit	Pit, moderate concave sides, flat base	1		
6277	Fill	6276	Pit	Mid grey brown, moderately firm, clay silt	1	MIA	
6278	Cut		Ditch/other linear	Ditch, N-S orientation, concave sides, concave base	3.2		
6279	Fill	6278	Ditch/other linear	Mid grey brown, compact, silty clay	3.2	RB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6280	Fill	6278	Ditch/other linear	Mid grey yellow brown, compact, silty clay	3.2	Late prehistoric	
6281	Cut		Ditch/other linear	Ditch, NE-SW, concave sides, concave base	0		
6282	Fill	6281	Ditch/other linear	Mid orange brown, compact, silty clay	0		
6283	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6284	Fill	6283	Ditch/other linear	Blackish grey, friable, silty clay	3.2	RB	
6285	Cut		Ditch/other linear	Ditch, north-south orientation, straight sides, concave base	3.2		
6286	Fill	6285	Ditch/other linear	Mid orange grey, friable, silty clay	3.2	Late prehistoric	
6287	Layer		Natural soil	Spread, mid brown grey, compact, silty clay.	0	MLC3	
6288	Cut	-	Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6289	Fill	6288	Ditch/other linear	Mid greenish brown, friable, silty clay	3.2	LIA-RB	
6290	Fill	6288	Ditch/other linear	Mid black brown, firm, silty clay	3.2	RB	
6291	Layer		Natural soil	Spread, mid brown grey, compact, silty clay	0	RB	
6292	Cut		Ditch/other linear	Ditch, NW-SE orientation, moderate, rounded sides, concave base	3.2		
6293	Fill	6292	Ditch/other linear	Mid yellow grey, very firm, silty clay	3.2		
6294	Cut		Ditch/other linear	Ditch, NW-SE orientation, moderate, concave sides, flat base	3.2		
6295	Fill	6294	Ditch/other linear	Mid yellow grey, firm, silty clay	3.2	Late prehistoric	
6296	Cut		Pit	Pit, circular, moderately steep, concave sides, flat base	1		
6297	Fill	6296	Pit	Mid grey brown, moderately friable, sandy silt	1	Late prehistoric	
6298	Cut		Pit	Pit, moderate concave sides, flat base	1		
6299	Fill	6298	Pit	Dark grey brown, moderately firm, clay silt	1	Late prehistoric	
6300	Cut		Ditch/other linear	Ditch, NW-SE orientation, moderate, straight sides, concave base	1		
6301	Fill	6300	Ditch/other linear	Dark brown, grey, very compact, silty clay	1	Late prehistoric	
6302	Cut		Ditch/other linear	Ditch, north-south orientation, moderately, straight sides, flat base	3.2		
6303	Fill	6302	Ditch/other linear	Orange light grey brown, compact, silty clay	3.2	LIA	
6304	Cut		Ditch/other linear	Ditch, north-south orientation, straight sides, flat base	3.2		
6305	Fill	6304	Ditch/other linear	Mid grey brown, compact, silty clay	3.2	LIA-RB	
6306	Cut		Furrow	Furrow, north-south orientation, gentle sloped, straight sides, flat base	4		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6307	Fill	6306	Furrow	Mid grey brown, compact, silty clay	4	Late prehistoric	
6308	Cut		Pit	Pit, circular, shallow sides, concave base	1		
6309	Fill	6308	Pit	Light grey brown, compact, silty clay	1	Late prehistoric	
6310	Cut		Pit	Pit, circular, shallow sides, concave base	1		
6311	Fill	6310	Pit	Mid grey, compact, silty clay	1	EIA-MIA	
6312	Cut		Pit	Pit, sub-oval, shallow sides, flat base. Root disturbance	0		
6313	Fill	6312	Pit	Light grey brown, compact, silty clay	0		
6314	Cut		Ditch/other linear	Ditch, NE-SW orientation, edges steep to NW and moderate to SE, irregular, concave base	3.2		
6315	Fill	6314	Ditch/other linear	Dark grey brown, compact, silty clay	3.2	MLC3	
6316	Cut		Pit	Pit, oval, slightly concave sides, slightly concave base	3.2		
6317	Fill	6316	Pit	Light yellow brown, compact, silty clay	3.2	EIA?-MIA	
6318	Fill	6316	Pit	Dark brown grey, compact, silty clay	3.2	LIA	
6319	Cut		Pit	Pit, oval, E-W orientation along longest axis, steep, slightly concave sides, uneven base	1		
6320	Fill	6319	Pit	Light orange grey, compact, silty clay	1	Late prehistoric	
6321	Fill	6319	Pit	Dark brown grey, compact, silty clay	1	EIA?-MIA	
6322	Cut		Ditch/other linear	Ditch, NE-SW orientation, moderate, slightly concave sides, slightly concave base	1		
6323	Fill	6322	Ditch/other linear	Mid yellow grey, compact, silty clay	1		
6324	Fill	6322	Ditch/other linear	Dark brown grey, compact, silty clay	1	IA	
6325	Cut		Pit	Pit, oval, north-south along longest axis, steep, concave sides, flat base	1	RB	
6326	Fill	6325	Pit	Mid grey brown, light yellow orange patches, moderately firm, sandy silt	1	Late prehistoric	
6327	Cut		Ditch/other linear	Ditch, E-W orientation, steep straight sides, sharp rounded tapered base	3.2		
6328	Fill	6327	Ditch/other linear	Dark grey brown, hard, silty clay	3.2	LIA-RB	
6329	Layer		External occupation	Spread, dark grey brown, hard, silty clay	3.2	LIA-RB	
6330	Cut		Ditch/other linear	Ditch, NE-SW orientation, gradual, concave sides, base not seen	1		
6331	Fill	6330	Ditch/other linear	Dark brown grey, hard, silty clay	1	Late prehistoric	
6332	Cut		Ditch/other linear	Gully, E-W, steep sides, flat base	5		
6333	Fill	6332	Ditch/other linear	Mid grey brown, friable, silty clay	5	RB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6334	Cut		Ditch/other linear	Ditch terminus, NW-SE orientation, straight sides, flat base	1		
6335	Fill	6334	Ditch/other linear	Dark brown, grey, very compact, silty clay	1	LIA-RB	
6336	Cut		Tree-throw hole	Pit/treethrow, circular, steep sides, flat base	2		
6337	Fill	6336	Tree-throw hole	Mid grey brown, compact, silty clay	2	Late prehistoric	
6338	Cut		Pit	Pit, sub-circular, E-W along longest axis, steep concave sides, flat base	5		
6339	Fill	6338	Pit	Dark grey brown, moderately firm, clay silt	5	Post- medieval	
6340	Cut		Pit	Pit, heavily truncated, gentle concave base	1		
6341	Fill	6342	Ditch/other linear	Mid orange brown, compact, sandy clay	1		
6342	Cut		Ditch/other linear	Ditch, NW-SE orientation, moderate, straight sides, concave base	1		
6343	Fill	6342	Ditch/other linear	Light grey brown, moderately compact, clay sand	1	EIA-MIA	384–199 cal. BC (SUERC-98594)
6344	Fill	6342	Ditch/other linear	Dark grey brown, compact, clay silt	1	MIA-LIA	354–57 cal. BC (SUERC-98593)
6345	Cut		Furrow	Furrow, north-south orientation, gentle sloped, straight sides, flat base	4		
6346	Fill	6345	Furrow	Light orange brown, compact, clay silt	4		
6347	Cut		Ditch/other linear	Ditch terminus, north- south, straight sides, flat base	1		
6348	Fill	6347	Ditch/other linear	Mid grey brown, compact, silty clay	1	Late prehistoric	
6349	Cut		Ditch/other linear	Ditch, NE-SW orientation, moderate sides, concave base	5		
6350	Fill	6349	Ditch/other linear	Mid grey brown, compact, silty clay	5		
6351	Cut		Ditch/other linear	Gully, E-W orientation, moderately steep sides, flat base	5		
6352	Fill	6351	Ditch/other linear	Mid grey brown, friable, silty clay	5		
6353	Cut		Ditch/other linear	Gully terminus, north- south orientation, steep concave sides, irregular base	3.2		
6354	Fill	6353	Ditch/other linear	Dark grey brown, moderately firm, clay silt	3.2		
6355	Cut		Pit	Pit, heavily truncated, rounded base	3.2		
6356	Fill	6355	Pit	Dark grey black, firm, silty clay	3.2	MC1-C2	
6357	Layer		Natural soil	Spread, mottled grey blue with orange flecks, firm, silty clay. Natural interface between subsoil and natural	0	RB	
6358	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6359	Fill	6358	Ditch/other linear	Dark brown grey, compact, silty clay	3.2		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6360	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6361	Fill	6360	Ditch/other linear	Mid grey brown, compact, silty clay	3.2	LIA	
6362	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6363	Fill	6362	Ditch/other linear	Mid yellow/blue grey, compact, silt clay	3.2	RB	
6364	Cut		Pit	Pit, north-south orientation, concave sides, concave base.	3.2		
6365	Fill	6364	Pit	Dark brown grey, compact, silty clay. Same as fill 6364	3.2		
6366	Layer		Natural soil	Spread, mid grey brown, compact, silty clay	0	Late prehistoric	
6367	Fill	-	Ditch/other linear	Context void as cut no. duplicated but finds recovered and processed	0		
6368	Cut	-	Pit	Pit, sub-circular, moderate straight sides, concave base. Missing pit	0		
6369	Fill	6368	Pit	Mid orange brown, compact, sandy silt	0		
6370	Fill	6362	Ditch/other linear	Mid grey/yellow brown, compact, silty clay	3.2		
6371	Cut		Ditch/other linear	Ditch terminus, NW-SE, moderate, concave then convex sides, slight concave base	3.2		
6372	Fill	6371	Ditch/other linear	Mid brown grey, compact, silty clay	3.2		
6373	Cut		Ditch/other linear	Ditch, curvilinear, NE-SW orientation, slightly concave sides, slightly concave base	1		
6374	Fill	6373	Ditch/other linear	Mid yellow brown, compact, silty clay	1	LIA	
6375	Fill	6373	Ditch/other linear	Mid brown grey, compact, silty clay	1	Late prehistoric	
6376	Cut		Ditch/other linear	Ditch, E-W orientation, moderate, concave sides, concave base	1		
6377	Fill	6376	Ditch/other linear	Mid orange brown, compact, silty clay	1		
6378	Fill	6376	Ditch/other linear	Mid grey brown, compact, silty clay	1	RB	
6379	Cut		Pit	Pit, oval, heavily truncated, flat, uneven base	0		
6380	Fill	6379	Pit	Mid brown, compact, silty clay	0	LIA	
6381	Cut		Ditch/other linear	Ditch terminus, E-W orientation, steep, slightly concave sides, slightly concave base	5		
6382	Fill	6381	Ditch/other linear	Mid orange brown, compact, silty clay	5		
6383	Cut		Ditch/other linear	Ditch, NW-SE orientation, concave sides, concave base	3.2		
6384	Fill	6383	Ditch/other linear	Mid yellow grey, compact, silty clay	3.2	Late prehistoric	
6385	Fill	6383	Ditch/other linear	Dark brown grey, compact, silty clay	3.2	C2-C4	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6386	Cut		Ditch/other linear	Ditch, E-W orientation, steep sides, flat uneven base	1		
6387	Fill	6386	Ditch/other linear	Mid orange grey, soft, sandy clay	1	Late prehistoric	
6388	Fill	6386	Ditch/other linear	Mid blue grey, friable, silty clay	1	MIA-LIA	
6389	Fill	6386	Ditch/other linear	Dark grey, firm, silty clay	1	MIA-LIA	
6390	Cut		Ditch/other linear	Ditch, curvilinear, southeast-northwest orientation, irregular, concave sides, concave base	1		
6391	Fill	6390	Ditch/other linear	Mid orange grey, friable, sandy clay	1	Late prehistoric	
6392	Fill	6390	Ditch/other linear	Dark grey, friable, silty clay	1	Late prehistoric	
6393	Cut		Ditch/other linear	Gully, north-south orientation, moderate steep concave sides, rounded base	3.2		
6394	Fill	6393	Ditch/other linear	Dark brown grey, moderately friable, clay silt	3.2	Late prehistoric	
6395	Cut		Ditch/other linear	Ditch terminus, north- south orientation, concave/convex/concave sides, concave base.	0		
6396	Fill	6395	Ditch/other linear	Mid brown grey, friable, sandy clay	0		
6397	Fill	6395	Ditch/other linear	Dark orange brown, friable, silty clay	0		
6398	Cut		Furrow	Furrow, NW-SE orientation, gentle concave sides, flat base	4		
6399	Fill	6398	Furrow	Mid orange brown, very compact, silty clay	4		
6400	Cut		Tree-throw hole	Pit, oval, Moderate, convex sides, concave base	0		
6401	Fill	6400	Tree-throw hole	Mid brown grey, moderately compact, silty clay	0		
6402	Fill	6400	Tree-throw hole	Mid black grey, very compact, silty clay	0	LIA	
6403	Cut		Ditch/other linear	Ditch, E-W orientation, steep, straight sides, slightly concave base	3.2		
6404	Cut		Ditch/other linear	Ditch, E-W orientation, moderate sides, slight concave base	3.2	LIA-RB	
6405	Fill	6403	Ditch/other linear	Dark brown grey, compact, silty clay	3.2	LIA-RB	
6406	Cut		Ditch/other linear	Ditch, curvilinear, southeast-northwest orientation, moderate straight sides, concave base	1		
6407	Fill	6406	Ditch/other linear	Mid grey brown, moderately compact, silty clay	1	LIA-RB	
6408	Cut		Ditch/other linear	Ditch, E-W orientation, moderate straight sides, flat base	3.2		
6409	Fill	6408	Ditch/other linear	Mid brown grey, moderately compact, silty clay	3.2	LIA-RB	
6410	Layer		Natural soil	Spread, mid orange grey, firm, silty clay	0	LIA-RB	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6411	Cut		Furrow	Furrow, north-south orientation, mostly flat base	4		
6412	Fill	6411	Furrow	Light orange brown, compact, silty clay	4		
6413	Fill	6179	Ditch/other linear	Mid black grey, moderately compact, silty clay	1	MIA-LIA	
6414	Cut		Posthole	Possible posthole, moderate concave sides, concave base	1		
6415	Fill	6414	Posthole	Dark brown grey, compact, silty clay	1		
6416	Cut		Posthole	Possible pit, straight moderate sides, slightly concave base	1		
6417	Fill	6416	Posthole	Mid brown yellow, compact, silty clay	1	Late prehistoric	
6418	Cut		Ditch/other linear	Possible furrow, north- south orientation, gentle concave sides, irregular flat base	4		
6419	Fill	6418	Ditch/other linear	Mid grey brown, compact, silty clay	4		
6420	Cut		Ditch/other linear	Ditch, E-W orientation, gentle, straight sides, sharp tapered concave base	3.2		
6421	Fill	6420	Ditch/other linear	Dark brown grey, compact silty clay	3.2	Late prehistoric	
6422	Cut		Ditch/other linear	Ditch terminus, E-W orientation, concave sides, flat base	1		
6423	Fill	6422	Ditch/other linear	Dark grey, hard, silty clay	1	MIA-LIA	
6424	Cut		Ditch/other linear	Gully terminus, north- south orientation, moderate concave sides, irregular flat base	3.2		
6425	Fill	6424	Ditch/other linear	Mid/dark brown grey, moderately compact, clay silt	3.2	RB	
6426	Cut		Ditch/other linear	Ditch, north-south orientation, moderate sides, concave base	1		
6427	Fill	6426	Ditch/other linear	Mid brown grey, firm, silty clay	1	LIA	
6428	Cut		Ditch/other linear	Ditch, E-W orientation, moderate concave sides, concave base	3.2	MLC3	
6429	Fill	6428	Ditch/other linear	Dark brown grey, firm, silty clay	3.2		
6430	Cut		Ditch/other linear	Ditch, curvilinear, NE-SW curving west at both ends of slot, not fully excavated	1		
6431	Fill	6430	Ditch/other linear	Dark grey brown, moderately compact, silty clay	1	Late prehistoric	
6432	Fill	6406	Ditch/other linear	Mid brown grey, moderately compact, clay	1	Late prehistoric	
6433	Fill	6408	Ditch/other linear	Mid brown grey, moderately compact, clay	3.2	MIA-LIA	
6434	Layer		Natural soil	Spread, mid grey brown, compact, silty clay			
6435	Cut	Furrow	Ditch/other linear	Furrow, north-south orientation, gentle straight sides, flat base	4		
6436	Fill	Furrow	Ditch/other linear	Light yellow brown, compact, clay silt	4		

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6437	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6438	Fill	6437	Ditch/other linear	Mid brown grey, compact, silt clay	3.2	RB	
6439	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6440	Fill	6439	Ditch/other linear	Mid blue grey, compact, silt clay	3.2		
6441	Cut		Ditch/other linear	Ditch, E-W orientation, concave sides, concave base	3.2		
6442	Fill	6441	Ditch/other linear	Mid brown grey, compact, silty clay	3.2	C3-C4	
6443	Cut		Posthole	Posthole, circular, concave sides, concave base	2		
6444	Fill	6443	Posthole	Mid grey brown, compact, silty clay	2		
6445	Cut		Ditch/other linear	Ditch, curvilinear, stepped sides, sloping base	1		
6446	Fill	6445	Ditch/other linear	Mid blue grey, firm, silty clay	1	RB	
6447	Fill	6445	Ditch/other linear	Mottled blue grey and orange, friable, sandy clay	1		
6448	Cut		Ditch/other linear	Ditch, NE-SW orientation, sharp, vertical sides, flat base	3.2		
6449	Fill	6448	Ditch/other linear	Mid blue grey, firm, silty clay	3.2	RB	
6450	Fill	6448	Ditch/other linear	Mottled blue grey and orange, friable, sandy clay	3.2		
6451	Cut		Furrow	Furrow, north-south orientation, sides and base not seen	4		
6452	Fill	6451	Furrow	Mid grey brown, compact, clay	4	MIA-LIA	
6453	Layer		Natural soil	Spread, mid green brown, compact, silty clay.	0	RB	
6454	Cut		Ditch/other linear	Ditch, north-south orientation, moderate concave sides, concave base	1		
6455	Fill	6454	Ditch/other linear	Dark brown grey, moderately compact, clay silt	1	MIA-LIA	
6456	Cut		Ditch/other linear	Gully, E-W orientation, concave sides, concave base	5		
6457	Fill	6456	Ditch/other linear	Mid yellow grey, firm, silty clay	5		
6458	Fill	6404	Ditch/other linear	Dark brown grey, compact, silty clay	3.2		
6459	Cut		Furrow	Furrow, north-south orientation, gentle concave sides, slightly concave base	4		
6460	Fill	6459	Furrow	Red brown grey, compact, silty clay	4		
6461	Cut		Ditch/other linear	Ditch, E-W orientation, steep sides, flat base	3.2		
6462	Fill	6461	Ditch/other linear	Mid orange brown, compact, clay silt	3.2		
6463	Fill	6461	Ditch/other linear	Dark brown grey, compact, clay silt	3.2	MLC3	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
6464	Cut		Ditch/other linear	Ditch, north-south orientation, concave sides, concave base	3.2		
6465	Fill	6464	Ditch/other linear	Mid yellow grey, compact, silty clay	3.2	RB	
6466	Fill	6464	Ditch/other linear	Mid brown grey, compact, silty clay	3.2		
6467	Cut		Ditch/other linear	Ditch, E-W orientation, Steep concave sides, concave	3.2		
6468	Fill	6467	Ditch/other linear	Mid yellow grey, compact, silty clay	3.2	MIA-LIA	
6469	Fill	6467	Ditch/other linear	Mid brown grey, compact, silty clay	3.2	RB	
6470	Cut		Furrow	Furrow, north-south orientation, unknown sides, flat base	4		
6471	Fill	6470	Furrow	Light orange grey, compact, silty clay	4		
6472	Cut		Ditch/other linear	Furrow, north-south orientation, gentle straight sides, flat base	4		
6473	Fill	6472	Ditch/other linear	Light yellow brown, compact, silty clay	4		
6474	Fill	6340	Pit	Dark grey brown, compact, clay silt	1		
7000	Layer		Natural soil	Topsoil, dark grey brown, compact, clay sand			
7001	Layer	_	Natural soil	Subsoil, Mid green/yellow grey, compact, sandy clay		Post- medieval	
7002	Layer		Natural strata	Natural, mid grey, hard, clay with mottling of orange sand			
7003	Cut	-	Ditch/other linear	Ditch, NE-SW orientation, moderate sides, concave base	5		
7004	Fill	7003	Ditch/other linear	Mid orange grey, moderately compact, silty clay	5	C17-C19	
7005	Cut		Posthole	Posthole, oval, moderate sides, concave base	1		
7006	Fill	7005	Posthole	Mid orange grey, moderately compact, silty clay	1	LIA-ERB	
7007	Cut		Ditch/other linear	Ditch, curvilinear, gentle sides, flat base. Likely to be a tree-throw	-		
7008	Fill	7007	Ditch/other linear	Mid orange grey, compact, silty clay	-		
7009	Cut		Ditch/other linear	Pit, irregular shape, sharp stepped sides, flat base	3.2		
7010	Fill	7009	Ditch/other linear	Mid grey brown, firm, clay silt	3.2	RB	
8000	Layer		Natural soil	Topsoil, dark grey brown, compact, clay sand	-		
8001	Layer		Natural soil	Subsoil, mid green grey/yellow, hard, sandy clay	-		
8002	Cut		External dump	Spread, irregular shape, sloping sides, uneven base	-		
8003	Fill	8002	External dump	Mid grey brown, compact, clay	5	LC18-C20	
9000	Layer		Natural soil	Topsoil, dark grey brown, compact, clay sand	-		
9001	Layer		Natural soil	Subsoil, mid green grey/yellow, compact, sandy clay	-	Post- medieval	

Context No.	Туре	Fill of	Interpretation	Description	Period/ Phase	Spot-date	Radiocarbon results
9002	Cut		Pit	Pit, circular, moderate sides, slightly concave base	2		
9003	Fill	9002	Pit	Mid brown grey, very compact, clay	2	LIA-ERB	
9004	Cut		Pit	Pit, irregular oval, moderate sides, concave base	2	LIA-ERB	
9005	Fill	9004	Pit	Mid orange brown, compact, silty clay	2		
9006	Cut		Ditch/other linear	Gully, north-south orientation, sharp sides, flat base	2		
9007	Fill	9006	Ditch/other linear	Mid grey brown, compact, clay	2	LIA-ERB	
9008	Cut		Ditch/other linear	Gully, north-south orientation, sharp sides, uneven sloping base	2		
9009	Fill	9008	Ditch/other linear	Mid grey brown, compact, clay	2	MIA-LIA	
9010	Cut		Pit	Pit, oval shaped, gentle sides, flat base	2		
9011	Fill	9010	Pit	Dark grey brown, compact, clay	2	LIA-ERB	

APPENDIX B: LATE PREHISTORIC POTTERY

By Peter Banks

Introduction and Methodology

A total of 2354 sherds (26,528g) of handmade Late prehistoric pottery were recorded from 319 deposits. The material was recovered by hand and from 14 bulk soil samples.

The pottery assemblage was fully recorded, as per the 'detailed record' set out by the Historic England standards for pottery recording (Barclay *et al.* 2016) and in accordance with the Prehistoric Ceramics Research Group guidelines (PCRG 2010). Fabric codes used are defined below and are based on primary and, in some cases, secondary inclusions followed by a number which denotes their coarseness (1 Fine – 3 Coarse). Quantification was according to sherd count and weight, with estimated vessel equivalents (EVEs) and a minimum number of vessels (MNV) provided where possible. Vessel and rim forms have been recorded where the material has allowed for this; rim diameters have been measured (mm). Decoration, surface treatments and residues have been recorded when present.

The condition of the assemblage was moderate for a Late prehistoric assemblage; most surfaces and fractures exhibit modest signs of wear. The mean sherd weight for the assemblage was 11.3g; moderately high for a Late prehistoric group particularly as the majority (60% by both count and weight) was residual in later features (Table B1).

Assemblage composition

Fabrics

Overall, the assemblage was dominated by sandy and shell-tempered fabrics. Individually the two largest fabric types consisted of medium sandy fabric Q2 and a distinctive shelly/calcareous fabric with clay pellet inclusions SHCP2. Each fabric accounted for just under one third of the Late prehistoric material (by count and weight). Fabric SHCP2 was generally softer and tended to survive in poorer condition than Q2. Limestone-tempered fabrics make up only a small portion of the assemblage, although calcareous inclusions were a feature of the common sandy fabric QC2. Shell-tempered fabrics (SH1-3) made up the only other substantial fabric group of any size. Several fabrics appeared in nominal quantities including those containing flint, carbonised organic matter, grog, quartzite or calcareous inclusions were probably indicative of clays sourced from the Thames gravel terraces in the Oxford region (Booth and Biddulph 2011, 353). The raw materials for fabrics containing limestone or glauconitic sand would have been readily available in the less immediate vicinity. The nearest outcrop of limestone to the site would have been approximately 13km to the north west on the eastern edge of the Cotswolds, whilst the glauconitic inclusions were probably derived from Greensand formations approximately 25km to the south along the northern fringes of the Ridgeway (BGS 2021).

Fabric descriptions

Calcareous fabrics (including shell) (18 Sherds; 168g; 0.05 EVEs (<1% NOSH)).

- C1 Moderate to common fine calcareous fabric. Soft fired. Calcareous inclusions ≤0.5mm. 6 sherds; 14g.
- C2 Sparse to moderate medium to coarse calcareous fabric. Very hard fired. Calcareous inclusions ≤3mm. 1 sherd; 15g.
- LI2 Common to very common fine limestone-tempered fabric. Soft fired. Limestone ≤1mm. 11 sherds; 139g.

Flint-tempered fabrics (1 Sherd; 15g; (<1% NOSH)).

- FL2 Sparse to moderate medium flint-tempered fabric. Soft fired. Flint ≤3mm 1 sherd; 15g Grogtempered fabrics (2 Sherds; 39g; (<1% NOSH)).
- GR1 Silty matrix with rare to sparse grog and quartz. Soft fired. Grog ≤2mm. Quartz sand ≤1mm.
 Some rare organic inclusions. 2 sherds; 39g.

Organic-tempered fabrics (2 Sherds; 10g; (<1% NOSH)).

V3 Moderate to common coarse organic-tempered fabric. Soft fired. Organic inclusions/voids ≤5mm. 2 sherds; 10g.

Sandy fabrics (1287 Sherds; 13,847g; 7.49 EVEs (54.67% NOSH)).

- Q1 Silty matrix with rare to sparse fine quartz sand. Soft fired. Quartz sand ≤1mm. 20 sherds; 148g.
- Q2 Common to very common medium quartz sand fabric. Some with clay pellets. Soft fired. Quartz sand ≤1mm 742 sherds; 7771g.
- QG2 Common medium quartz sand fabric with common black iron rich/glauconitic sand. Soft fired. Quartz sand and black particles ≤1mm. 7 sherds; 109g.
- QC2 Common medium quartz sand fabric with sparse medium calcareous inclusions. Soft fired. Quartz sand ≤1mm Calcareous ≤3mm. 457 sherds; 5436g.
- QFL2 Sparse coarse flint and moderate medium quartz sand fabric. Soft fired. Quartz sand ≤1mm Flint ≤3mm. 1 sherd; 6g.
- QI2 Common medium quartz sand with sparse to moderate medium red iron ore inclusions. Some with clay pellets. Soft fired. Quartz sand ≤1mm Iron ore ≤2mm. 32 sherds; 265g.

QV2 Moderate to common medium quartz sand fabric with sparse to moderate fine organic voids.Some with clay pellets. Soft fired. Quartz sand ≤1mm Organic voids ≤1mm. 28 sherds; 112g.

Quartzite-tempered fabrics (1 Sherds; 6g; (<1% NOSH)).

QZ3 Moderate coarse quartzite and moderate to common medium quartz sand fabric. Soft fired. Quartzite ≤3mm Quartz sand ≤1mm. 1 sherd; 6g.

Shell-tempered fabrics (1043 Sherds; 12,456g; 2.61 EVEs (44.3% NOSH)).

- SH1 Common to very common fine shell-tempered fabric. Soft fired. Shell ≤1mm. 151 sherds; 1528g.
- SH2 Common medium shell-tempered fabric. Soft fired. Shell ≤2mm. 186 sherds; 2424g.
- SH3 Moderate to common coarse shell-tempered fabric. Soft fired. Shell ≤5mm. 5 sherds; 159g.
- SHCP2 Moderate to common medium clay pellets and moderate shell/calcareous fabric. Clay pellets ≤1mm Shell/calcareous ≤1mm. 701 sherds; 8345g.

Vessel Forms

Based on rim count the assemblage contained a minimum of 149 of vessels (10.25 EVEs), however, fragmentation was such that only rarely could vessel class be determined with any certainty. Where it was not possible to fully ascertain vessel profile a generic jar/bowl description has been assigned. Where vessel profiles could be determined jars and bowls were present in roughly equal quantities. Two tall-necked jars with flaring rims (V1) and four tripartite/carinated bowls (V6) (Fig. 23, no.12), also with flaring rims, correspond to forms commonly associated with Early Iron Age activity in Thames Valley region (Booth and Biddulph 2011, 362). Globular (V3) (Fig. 23, no.11 and 15) and straight-sided jars (V2) (Fig. 23, no.6 and 13–14) occurred most frequently. Two straight-sided jars may belong to the saucepan pot tradition (V4) (Fig. 23, no.3 and 6). This tradition is better known from Middle Iron Age assemblages in the Wiltshire, Berkshire and Hampshire area, including Danebury (cf. Cunliffe 1984, 350, fig. 6.75, no.588). These may be suggestive of cultural or economic links with communities to the south and west. Their presence this far north of the Ridgeway was notable, in particular given their absence from sites like Yarnton (Booth and Biddulph 2011) and Gravelly Guy (Duncan et.al. 2004). Five straight-sided bowls (V8) with externally expanded rims were the most common Middle Iron Age bowl variety (Fig. 23, no.8). Slack-shouldered (V9) (Fig. 23, nos 1 and 17) and globular vessels (V10) were also probably of a similar date.

Ra. 47 was a near complete small globular jar (V3) with a simple upright rim (Fig. 23 no.11) recovered from Enclosure 3.1 ditch CG. It was likely to date to the Middle Iron Age and comparable vessels were recorded from both Gravelly Guy, Oxon (Duncan *et al.* 2004, 297, fig. 7.7, no. 108) and Yarnton, Oxon (Booth and Biddulph 2011, 2397, fig.14.5, no.128).

Jars	
V1	Tall-necked jars with flaring rims: 2 vessels (0.14 EVEs).
V2	Straight-sided jars with simple or square upright rims: 3 vessels (0.4 EVEs). (Fig. 23, nos 9,
	13 and 14).
V3	Globular jars with simple upright rims: 3 vessels (1.02 EVEs). (Fig. 23, nos 11 and15).
V4	Saucepan pots: 2 vessels (1.09 EVEs). (Fig. 23, nos 3 and 6).
\ <i>\</i> E	Let of indeterminate form with equate unright rim: 1 years $(0.1 \text{ C})(\text{Ca})$ (Fig. 22, no.5)

V5 Jar of indeterminate form with square upright rim: 1 vessel (0.1 EVEs). (Fig. 23, no 5).

Bowls

V6	Bipartite bowls with flaring rims: 4 vessels (0.42 EVEs). (Fig. 23, no 12).
V7	Open bowls with simple/plain rims: 1 vessel (0.05 EVEs). (Fig. 23, nos 4, 7 and 10)
V8	Straight-sided bowls with externally expanded rims: 5 vessels (0.29 EVEs). (Fig. 23, no

Jars/Bowls

- V9 Slack shouldered jar or bowl with everted, expanded or simple upright rims: 10 vessels (0.53 EVEs). (Fig. 23, nos 1 and 17).
- V10 Globular jars or bowls with everted or simple/square upright rims: 7 vessels (0.32 EVEs). (Fig. 23, no 2).

Rim Morphology

- R1 Everted rims: 10 vessels (0.48 EVEs)
- R2 Externally expanded rims: 8 vessels (0.46 EVEs)
- R3 Flared rims: 24 vessels (1.78 EVEs)
- R4 In-turned rims: 1 vessel (0.05 EVEs)
- R5 Internally expanded rims: 2 vessels (0.08 EVEs)
- R6 Square upright rims: 9 vessels (0.59 EVEs)
- R7 Simple upright rims: 91 vessels (6.61 EVEs)
- R8 T-shaped rims: 4 vessels (0.2 EVEs)

Decoration and surface treatment

Overall, decoration was rare in the assemblage, recorded on only 31 sherds. The most frequently occurring form of decoration was the use of fingertip or fingernail impressions (Fig. 23, nos.8 and 16; Table B4). Eleven body sherds were decorated using this technique, its presence at the shoulder or

8).

girth of the vessel, a feature usually associated with Early Iron Age pottery traditions. In addition, nine vessel rims were decorated using fingertip impressions. This style of rim decoration was common during both the Early and Middle Iron Age periods. Incidence of fingertip decoration were most commonly recorded on fabric QC perhaps indicating that this fabric was favoured during the Early or earlier Middle Iron Age. Incised decoration was also common in the Late prehistoric group. A carinated shoulder sherd recorded from Period 1 ditch BP (fill 3004) was decorated with an incised crosshatch design. Fineware vessels with comparable decoration occur among Cunliffe's Long Wittenham-Allen's Pit and Chinnor-Wandlebury stylistic groupings (Cunliffe 2004) for which an Early Iron Age date can be applied. The style was also recorded locally from Harwell (Brook 2018, 163, fig. 6, nos 6-8). Four examples of East Midlands scored ware were recorded, exclusively in shell-tempered fabrics. The dating of scored wares is still uncertain, although at present evidence indicates their use may have begun as early as the 5th century BC and continued into the late 1st century BC or possibly the early 1st century AD (Knight 2001, 71-2/Knight 2002, 134). Its purpose is considered to be the roughening of the vessel surface to improve handling. It is unusual to find such material this far south-west of its heartlands in the East Midlands. Scored wares were not identified from other Oxfordshire sites like Yarnton (Booth and Biddulph 2011) and Gravelly Guy (Duncan et al. 2004), but its presence at Marston may indicate cultural or economic ties to the north-east.

Chronology and Stratigraphy

Ceramic Period 1: Early to Middle Iron Age (Stratigraphic Period 1)

Fabrics contemporary with this ceramic phase were largely restricted to Q2, QC2 and SHCP2 (Table B1). Shell-tempered fabrics as a group (SH1-SH3) were also moderately common. Although other fabrics were present, they were recorded in small quantities. Forms were limited and included two carinated bowls (V6) with flaring rims (Fig. 23, no.12) (Period 1 pit 6263 (fill 6264) and Period 1 Enclosure 2.1 ditch BU (fill 6343)) and a tall neck jar (V1) (Period 1 Enclosure 2.1 ditch BU (fill 6389)). Two straight sided jars (V2) (Fig. 23, no.13), including one possible saucepan pot (V4) (Fig. 23, no.3), were recorded from Period 1 pits 6319 (fill 6321) and 6028 (fill 6030) respectively. Slack-shouldered (V9) and globular vessels (V10) were also recorded during this ceramic period. Sherds exhibiting signs of surface treatment were rare. Early Iron Age styles of fingertip impressed shoulders (Period 1 pit 1071 (fill 1072) and Period 1 Enclosure 2.1 ditch BU (fill 6343)) and red surfaced wares (Period 1 pit 1071 (fill 1072)) were present in small quantities. Styles associated with Middle Iron Age activity were more common in Period 1 features; they included two sherds of East Midlands scored ware (Period 1 ditch CT (fill 6034)) and 19 burnished sherds (Period 1 pit 1071 (fill 1072) and Period 1 burnished sherds (Period 1 pit 1071 (fill 1072) and Period 1 features; they included two sherds of East Midlands scored ware (Period 1 ditch CT (fill 6034)) and 19 burnished sherds (Period 1 pit 1071 (fill 1072) and Period 1 ditches DK (fill 6131), CN (fills 6151 and 1655) and BU (fill 6219).

Illustration Catalogue

- 1. Fabric Q2; Form: V9/R7. Phase 3.2 Ditch AB (fill 2058).
- 2. Fabric Q2; Form: V10/R7. Period 1 Ditch BW (fill 6004).

- 3. Fabric Q2; Form: V4/R7. Period 1 Pit 6028 (fill 6030).
- 4. Fabric Q2; Form: V7/R7. Period 1 Pit 6028 (fill 6030).
- 5. Fabric Q2; Form: V5/R6. Phase 3.2 Ditch BT (fill 6050).
- 6. Fabric QC; Form: V2/R6. Phase 3.2 Ditch BT (fill 6065).
- 7. Fabric QC; Form: V7/R7.. Phase 3.2 Ditch BT (fill 6065).
- 8. Fabric SHCP; Form: V8/R2. Fingertip impressed rim. Undated Pit 6073 (fill 6074).
- 9. Fabric Q2; Form: V4/R7. Phase 3.2 Ditch BU (fill 6218).
- 10. Fabric QC; Form: V7/R1. Phase 3.2 Ditch BU (fill 6218).
- 11. RA 47 Fabric Q2; Form: V3/R7. Ditch 6243 (fill 6244).
- 12. Fabric QI; Form: V6/R3. Period 1 Pit CG (fill 6264).
- 13. Fabric SH2; Form: V2/R7. Period 1 Pit 6319 (fill 6321).
- 14. Fabric Q2; Form: V2/R7. Unstratified.
- 15. Fabric Q2; Form: V3/R7. Unstratified.
- 16. Fabric QC; R7. Fingertip impressed rim. Unstratified.
- 17. Fabric SHCP; Form: V9/R2. Unstratified.

Discussion

Most of the Late prehistoric group at Swan School and Meadowbrook College was redeposited (Table B1) and the pottery attributable to Period 1 features was modest in comparison to the much larger assemblages recovered from the region at nearby Gravelly Guy (40,000 sherds) (Duncan et al. 2004) and Yarnton (11,000 sherds) (Booth and Biddulph 2011). In terms of size, it was more closely comparable to Whitehouse Road, Oxford (630 sherds) (Timby 1993). In the Thames Valley region there is evidence for a transition from shell-tempered to sandy fabrics during the Early and Middle Iron Ages, this was demonstrated at Farmoor (Lambrick 1979) and is also seen at Yarnton (Booth and Biddulph 2011, 353). At both Yarnton (68% by weight) (Booth and Biddulph 2011, 350) and during Early Iron Age phases at Gravelly Guy (43-55% by weight) (Duncan et al. 2004, 265) shelly wares comprise a much greater proportion of the assemblage than at Swan School and Meadowbrook College. At both, sandy wares accounted for around 20% of fabrics during Early Iron Age phases. At Whitehouse Road, Oxford, there was little evidence that shelly (27.3% by weight) or sandy wares (18.6% by weight) were favoured over the other (Timby 1993, 57–8). Mixed gritted, quartz and shell-tempered, wares were the only other significant fabric group at Whitehouse Road (ibid. 59). At Swan School and Meadowbrook College, a more equal distribution was evident. Sandy fabrics accounted for over 50% of the assemblage by weight whilst shelly wares made up 47%. Chronologically significant indicators of Early Iron Age activity, including bipartite/carinated or tall-necked vessels with flaring rims and fingertip impressed shoulders and rims, tended to be associated with shell-tempered fabrics (SH1-3, SHCP). Most of the Early Iron Age material, however, was derived from features containing later material and was most likely residual. Where group size was large enough to allow for comparison between the two main fabric groups it was noted that very few deposits contained either sandy or shelly fabrics exclusively. In most features, they were present together and although not necessarily in equal numbers, the presence of sandy fabrics in at least moderate quantities was suggestive of a Middle Iron Age date. The presence of shell-tempered material, however, may point towards a date during the earlier part of the period.

Overall, the programme of absolute dating supports that suggested on stylistic grounds for the pottery. One feature, Period 1 pit 6267 (fill 6269) returned an Early Iron Age date (546 – 398 cal. BC (SUERC-98592). The majority of determinations fall within the earlier Middle Iron Age range, 4th to 3rd centuries range, including those from Period 1 ditch CT (fill 6034) (323 – 200 cal. BC (SUERC-97598) and 312-206 cal. BC (SUERC-97599)), ditch CN (fill 6151) (361 – 175 cal. BC (SUERC-97603) and 315 – 204 cal. BC (SUERC-97604); and ditch BU (324 – 199 cal. BC (SUERC-98594)). One date, also from ditch BU (fill 6344) (230 – 97 cal. BC (SUERC-98593), indicated that use of this feature might extend later.

Aside from those Early Iron Age forms already mentioned, the majority of the vessels recorded were also consistent with a Middle Iron Age date. Straight-sided and globular vessels, characteristic of Middle Iron Age assemblages from both Yarnton (Booth and Biddulph 2011, 385) and Gravelly Guy (Duncan et al. 2004, 283) were present, as were a number of slack-shouldered vessel, a type associated with Early Iron Age occupation at Yarnton (Booth and Biddulph 2011, 363). The combination of both types may again be suggestive of a date range encompassing the later part of the Early Iron Age to earlier Middle Iron Age. Evidence for activity continuing beyond the 2nd century BC was lacking from the radiocarbon determinations. Further possible evidence for a hiatus or downscaling of activity in the Late Iron Age (1st century BC/earlier 1st century AD) may come from the absence of forms elsewhere suggestive of such dating, including handmade bead rim jars. Most vessels were of medium size with rim diameters between 120–180mm (Tables B2 and B3; Graph B1), perhaps suggesting their use as medium-sized vessels for domestic food preparation or serving. Although vessels made in both sandy and shelly fabrics tended to be clustered between 130-180mm, Sandy fabrics were exclusively favoured for the construction of both smaller (<120mm) and very large vessels (>280mm), possibly suggesting that a greater diversity in vessel size can be recognised towards the end of the Early Iron Age into the Middle Iron Age associated with the introduction of sandy wares. This possible chronological distinction is supported by the evidence relating to vessel form (Table B3). Both Early Iron Age forms V1 and V6 were made with rim diameters between 140-219mm, whereas Middle Iron Age vessels V2-4 and V8 exhibited much broader vessel size ranges between 100–299mm. Similar patterns are represented within the vessel groups studied at Yarnton. Here barrel-shaped, slack-shouldered and tripartite jars all had clear concentrations of rim diameters between 140-170mm, however all were represented by both smaller (<120mm) and larger vessels (180-250mm) in smaller quantities (Booth and Biddulph 2011, 364–5). Incidences of residues, however, were rare and too infrequent to offer any insights into the function of vessels by form with any certainty. The possible presence of both East Midlands Scored wares and vessels belonging to the saucepan pot tradition is interesting, suggesting either cultural or economic links with communities to both the north-east and south-west, a pattern that is not mirrored at the larger sites of both Gravelly Guy (Duncan et al. 2004) and Yarnton (Booth and Biddulph 2011).

References

- Barclay, A., Booth, P., Knight, D., Evans, J., Brown, D.H. and Wood, I., 2016 *A Standard for Pottery Studies in Archaeology* Historic England
- BGS 2021 Geology of Britain viewer <u>https://mapapps.bgs.ac.uk/geologyofbritain/home.html?&_ga=2.69637011.2054901434.1629</u> 290821-821089802.1628847726 (accessed 17 August 2021)
- Booth, P. and Biddulph, E. 2011 'Iron Age pottery', in Hey et al. (eds) 2011, 348-362
- Brook, E. 2018 'The pottery', in Thompson, S. (ed.) 2018, 155-171
- Cunliffe, B. 1984 Danebury: An Iron Age hillfort in Hampshire, Vol 2 the excavations 1969–78: The finds Counc. Brit. Archaeol. Res. Rep. **52**
- Cunliffe, B. 2004 Iron Age communities in Britain: An account of England, Scotland and Wales from the seventh century BC until the Roman Conquest London, Routledge
- Duncan, D., Lambrick, G. and Barclay, A. 2004 'Final Bronze Age to Middle Iron Age pottery', in Lambrick and Allen (eds) 2004, 259–303
- Hey, G., Booth, P. and Timby, J. (eds) 2011 *Yarnton: Iron Age and Romano-British settlement and landscape* Oxford, Thame Valley Landscape Monograph **35**
- Knight, D. 2001 'Iron Age pottery' in Lane and Morris (eds) 2001, 64-73
- Knight, D. 2002 'A regional ceramic sequence: pottery of the first millennium BC between the Humber and the Nene' in Woodward and Hill (eds) 2002, 119–142
- Lambrick, G. 1979 'The Iron Age pottery', in Lambrick and Robinson (eds) 1979, 35-46
- Lambrick, G. and Allen, T. (eds) 2004 *Gravelly Guy, Stanton Harcourt, Oxfordshire: The development* of a prehistoric and Romano-British Community Oxford, Thames Valley Landscape Monograph **21**
- Lambrick, G. and Robinson, M. 1979 *Iron Age and Roman settlements at Farmoor Oxfordshire* Counc. Brit. Archaeol. Res. Rep. **32**
- Lane, T. and Morris, E. 2001 A millennium of saltmaking: prehistoric and Romano-British salt production in the Fenland Lincolnshire Archaeology and Heritage Reports **4**
- Mudd, A. 1993 'Excavations at Whitehouse Road, Oxford, 1992', Oxoniensia 58, 33-86

PCRG, 2010 Prehistoric ceramics research group guidelines Occasional Papers 1 and 2

Thompson, S. 2018 'Early to Middle Iron-Age and later settlement at Grove Road, Harwell', *Oxoniensia* **83**, 139–196

Timby, J. 1993 'Iron Age Pottery', in Mudd (ed) 1993, 56-60

Woodward, A. and Hill, J.D. 2002 *Prehistoric Britain: the ceramic basis* Prehistoric Ceramics Research Group Occasional Papers **3**

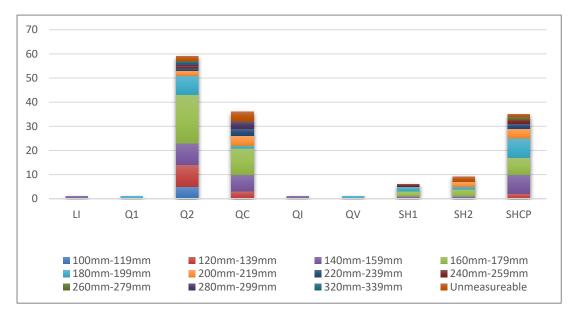
			Period 1		Period 2		Phase 3.1		Phase 3.2		Phase 3.3		Period 4		Period 5	notuntifiod	Ullsuatilieu	40 cm/h c40 h c11	disturbance	т	otals
Fabric Groups	Fabrics	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)
Calcareous	C1			4	7			2	7								(3/			6	14
	C2	1	15																	1	15
	LI2	7	120					2	5	1	2							1	12	11	139
Flint	FL2			1	2															1	2
Grog	GR1							2	39											2	39
Sandy	Q1	3	22					4	33					1	18	12	75			20	148
	Q2	241	2811	63	260	26	288	253	2914	65	501	12	136	8	44	15	278	59	539	742	7771
	QG2			7	109															7	109
	QC2	158	2051	54	503	20	312	173	2012	24	368	4	27	1	6	15	124	8	33	457	5436
	QFL2							1	6											1	6
	QI2	28	164	1	13			1	73	1	12							1	3	32	265
	QV2	14	38			1	1	12	67	1	6									28	112
	QZ3									1	6									1	6
Shelly	SH1	71	688	7	75			41	391	19	150			1	5	11	218	1	1	151	1528
	SH2	42	635	12	81	25	183	90	1426	6	53	1	9					10	37	186	2424
	SH3	2	65					3	94											5	159
	SHCP2	225	2691	65	631	18	293	235	2671	53	637	11	144	1	13	42	599	51	666	701	8345
Organic	V	2	10																	2	10
Grand Total		794	9310	214	1681	90	1077	819	9738	171	1735	28	316	12	86	95	1294	131	1291	2354	26528

Table B1: Pottery totals by stratigraphic period and according to fabric. Shown as sherd count (NOSH) and weight

Fabric Group	100-119	120-139	140-159	160-179	180-199	200-219	220-239	240-259	260-279	280-299	320-339	Not Measured
Calcareous			1									
Sand	5	12	17	31	11	6	4	1		4	1	6
Shell		2	10	12	11	6	2	3	1			3
Total	5	14	28	43	22	12	6	4	1	4	1	9

Table B2: Vessel rim diameter range shown by grouped fabrics. Values as no. vessels (MNV)

Graph B1: Vessel Rim diameter range shown by grouped fabrics. Values as no. vessels (MNV)



Swan School and Meadowbrook College, New Marston, Oxford: Archaeological Excavation © Cotswold Archaeology

Table B3: Vessel size by rim diameter (mm) range shown for vessel forms. Shown as number of vessels (MNV)

Form	100-119	120-139	140-159	160-179	180-199	200-219	220-239	240-259	280-299	Not Measured
V1				1	1					
V2				3						
V3	1	1	1							
V4				2						
V5								1		
V6			1	2		1				
V7					1					
V8					2				2	1
V9	1	1	1	2	3		1			1
V10			1	3	2	1				
Total	2	2	4	13	9	2	1	1	2	2

Table B4: Surface treatments incidence by fabric (grouped). Shown as number of sherds (NOSH)

Fabric Code	Fingertip	Impressed	Incised	Scored	Red Slipped	Burnished
Q1						4
Q2	1		2		1	
QC	10	1	1			14
SH1	2		1	3		
SH2	2					
SHCP	5		1	1		
Total	20	1	7	4	1	18

APPENDIX C: LATE IRON AGE AND ROMAN POTTERY

By Peter Banks

Introduction and Methodology

A total of 3975 sherds (77,405g) of Late Iron Age and Roman pottery were recorded from 242 deposits. The total EVE was 62.87. The material was recovered by hand and from 16 bulk soil samples.

Recording of the assemblage was in accordance with or exceeding the basic levels set out in the Historic England guidelines, co-produced with the Study Group for Roman Pottery (Barclay *et al.* 2016). The pottery was examined by context and quantified according to sherd count and weight per fabric. Estimated vessel equivalents (EVEs) and a minimum number of vessels (MNV) are provided where possible. The fabric codes used are defined below and where appropriate a concordance with the National Roman Fabrics Reference Collection (Tomber and Dore 1998) and Oxfordshire fabric series (Booth unpublished) have been provided. Vessel and rim forms have been recorded and rim diameters have been measured (mm) where the material has allowed for this. Decoration, surface treatments and residues have also been recorded when present. Late Iron Age 'Belgic' forms are discussed with reference to Thompson (1982) whilst reference is made to Webster (1996) and Young (2000) when discussing the samian and Oxfordshire Roman forms respectively.

The assemblage was in moderately good condition; most surfaces and fractures exhibit only minor signs of wear. The mean sherd weight was moderately high for a Late Iron Age and Roman assemblage at 19.5g.

Assemblage composition

Fabrics (Table C1)

Late Iron Age to Early Roman transitional fabrics accounted for just under 20% of the overall assemblage. Within that group 'Belgic' style grog-tempered wares (UNS GR) accounted for 89% of all transitional wares by weight. Other wheel-thrown transitional fabrics included various other grog-tempered (UNS GRL/UNS GRV/UNS SHGR), organic-tempered (UNS V), flint-tempered (UNS FL) and sandy wares (UNS Q/UNS QI), although all were present in very small quantities (≤5% by weight each).

The Roman assemblage was dominated by Oxfordshire wares which together accounted for over 90% of the group by weight. By far the most common were Oxfordshire white ware mortaria (**OXF WH**) and Oxfordshire red slipped wares (**OXF RS**) which accounted for 62% and 15% (by weight) of the Roman group respectively. To illustrate the abundance of the Oxfordshire white ware mortaria produced at the site, sherds in non-mortaria Oxford region white ware have been assigned a different code (OXF WW). Oxfordshire reduced (OXF RE 1-4), white (OXF WW) and Parchment wares (**OXF PA**) were all present in relatively small numbers. It should be noted that the relative abundance of oxidised wares (OXF OX) may be an overemphasis, as this type almost certainly incorporates red-slipped wares where diagnostic

features of form or surface treatment were lost. A variety of Roman sandy wares (UNS BW/UNS EOX/UNS FWW/UNS GW/UNS OX/UNS WW) were recorded in small quantities, together with grog-tempered (UNS GTG), limestone-tempered (UNS L) and shell-tempered wares (UNS SH). The source of these fabrics could not be identified but they were most likely of local production.

Regional wares were almost entirely absent and most likely the result of the strong and well-established pottery industry already present in the region. South East Dorset Black Burnished wares (**DOR BB1**), Lower Nene Valley colour coated wares (**LNV CC**) and Verulamium white wares (**VER WH**) together made up less than 1% of the assemblage by both count and weight.

Imported wares were also infrequent. Where recorded they consisted of samian wares from South Gaulish (LGF SA) or Central Gaulish (LMV SA/LEZ SA2) industries.

Fabric descriptions

Transitional flint-tempered fabrics (6 sherds; 9g; 0.02 EVEs (<1% NOSH)).</th>UNS FLUnsourced flint-tempered ware. 6 sherds; 29g; 0.02 EVEs.

Transitional grog-tempered fabrics (587 sherds; 9774g; 5.01 EVEs (14.8% NOSH)).					
UNS GRUnsourced grog-tempered ware. 561 sherds; 9477g; 4.51 EVEs.					
UNS GRL	Unsourced grog and limestone-tempered ware. 1 sherd; 3g.				
UNS GRV	Unsourced grog and organic-tempered ware. 1 sherd; 9g.				
UNS SHGR	Unsourced shelly grog-tempered ware. 24 sherds; 285g; 0.5 EVEs.				

Transitional sandy fabrics (72 sherds; 700g; 0.54 EVEs (1.8% NOSH)).

UNS Q Unsourced early romanised sandy ware. 65 sherds; 611g; 0.54 EVEs.
 UNS QI Unsourced early romanised sandy ware with black iron rich or glauconitic sand. 7 sherds; 89g.

Transitional organic-tempered fabrics (63 sherds; 138g; (1.6% NOSH)).

UNS V Unsourced organic-tempered ware. 63 sherds; 138g.

Sandy reduced wares (541 sherds; 5483g; 8.52 EVEs (13.6% NOSH)).

DOR BB1	South-East Dorset Black Burnished ware. 22 sherds; 236g; 0.45 EVEs.
OXF RE1-2	Oxfordshire coarse sandy reduced wares. 20 sherds; 154g.
OXF RE3	Oxfordshire sandy grey wares. 110 sherds; 1308g; 1.96 EVEs.
OXF RE4	Oxfordshire fine sandy grey wares. 171 sherds; 1341g; 3.49 EVEs.
UNS BW	Unsourced black sandy wares. 21 sherds 119g; 0.22 EVEs.

UNS GW Unsourced sandy grey wares. 197 sherds; 2325g; 2.4 EVEs.

Sandy oxidised wares (751 sherds; 5630g; 2.96 EVEs (18.9% NOSH)).

OXF OX	Oxfordshire sandy oxidised wares. 703 sherds; 5325g; 2.35 EVEs.
UNS EOX	Unsourced Early Roman oxidised ware with micaceous inclusions. 18 sherds; 117g;
	0.1 EVEs.
UNS OX	Unsourced sandy oxidised wares. 30 sherds; 188g; 0.51 EVEs.

Sandy white wares (excl. Mortaria) (186 sherds; 2543g; 1.70 EVEs (4.7% NOSH)).

OXF PA	Oxfordshire Parchment ware. 6 sherds; 135g; 0.14 EVEs.
OXF WW	Oxfordshire sandy white wares. 147 sherds; 2135g; 1.32 EVEs.
UNS FWW	Unsourced fine sandy white ware. 20 sherds; 129g; 0.17 EVEs.
UNS WW	Unsourced sandy white ware. 10 sherds; 124g; 0.02 EVEs.
VER WH	Verulamium white ware. 3 sherds; 20g; 0.05 EVEs.

Roman grog-tempered wares (21 sherds; 481g; 0.21 EVEs (<1% NOSH)).</th>UNS GTGUnsourced grog-tempered grey ware. 21 sherds; 481g; 0.21 EVEs.

Calcareous wares (including shell) (146 sherds; 977g; 0.82 EVEs (3.7% NOSH)).

UNS L	Unsourced limestone-tempered ware. 1 sherd; 8g.
UNS SH	Unsourced shell-tempered ware. 145 sherds; 969g; 0.82 EVEs.

Colour coated wares (510 sherds; 9249g; 12.09 EVEs (12.8% NOSH)).

LNV CC	Lower Nene Valley colour coated wares. 4 sherds; 10g.	
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OXF RS Oxfordshire red slipped wares. 506 sherds; 9239g; 12.09 EVEs.

Mortaria (1073 sherds; 42,175g; 30.75 EVEs (26.9% NOSH)).

OXF WH	Oxfordshire white ware mortaria. 1041 s	herds; 41,572g; 29.07 EVEs.
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Imported wares (samian) (13 sherds; 204g; 0.47 EVEs (<1% NOSH)).

LGF SA	La Graufesenque South Gaulish samian ware. 2 sherds; 77g; 0.25 EVEs.
LMV SA	Les Martres-de-Veyre Central Gaulish samian ware. 3 sherds; 90g; 0.12 EVEs.
LEZ SA2	Lezoux Central Gaulish samian ware. 8 sherds; 34g; 0.1 EVEs.
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SAM Unidentified samian. 3 sherds; 3g.

Miscellaneous (3 sherds; 22g; (<1% NOSH)).

BURNT Over fired burnt sandy ware. Impossible to determine actual ware. 3 sherds; 22g.

Vessel Forms

Based on rim count the likely non-kiln assemblage comprised a minimum of 229 vessels (27.04 EVEs). The range of vessel forms according to generic class is set out in Tables C2 and C3. Where sherds were poorly preserved, it was not possible to ascertain a full vessel profile and a generic jar/bowl description has been assigned. Without the distortion of the forms most likely produced by the kiln, jars were the most common vessel type (31 MNV) closely followed by utilitarian open vessels such as dishes and bowls (22 MNV). Vessels associated with the serving of liquids (beakers/flagons/jugs/bottles/cups) were also common (22 MNV). Those associated with the service of food, such as platters, were comparatively rare (2 MNV), as were specialist wares like mortaria (2 MNV). The utilitarian nature of the assemblage was consistent with rural settlement activity during the Roman period in the region.

Samian

A total of 13 sherds of samian were recorded. Products of both South and Central Gaulish production areas are represented with Central Gaulish fabrics most common. South Gaulish products consist of a Drag 18 platter (Phase 3.2 ditch DB (fill 6252)), most likely of Flavian date (Webster 1996, 35), and a featureless body sherd recovered from Phase 3.2 layer 2117, which was most likely redeposited. Central Gaulish forms comprised a Drag 33 cup, from Phase 3.2 ditch AA (fill 2257), and a Drag 36 bowl, from Phase 3.2 pit 2147 (fill 2148). Both date to the second half of the 2nd century AD (*ibid.* 45–46).

Chronology and Stratigraphy

Ceramic Period 2: Late Iron Age to Early Roman (Stratigraphic Period 2 and Phase 3.1)

The majority of the Late Iron Age and Early Roman material was redeposited in Phase 3.2 and 3.3 features. The evidence suggests that activity began during the 1st century AD, possibly pre-dating the conquest. Amongst the Late Iron Age and Early Roman transitional material (Table C2) jars tended to be more common. The most frequently occurring were round jars with beaded rims (Thompson 1982, 216, C1-2), large grog-tempered storage jars (ibid. 256, C6-1) or jars with everted rims (ibid. 85, B1-1 and B1-2 and 228, C2-1). Bowls were less common and only the wide mouthed variety (ibid. 310, D1-4) were recorded. These vessels were commonly in use during the first century AD and probably postdate the Roman conquest. A cauldron or large bowl with a vertically looped handle made in grogtempered fabric UNS GR (Fig. 24, no.1), was recorded from Period 2 Ditch J (fill 1135). Although a comparative local example could not be found the form and grog-tempered fabric together would suggest a Late Iron Age date. Early Roman forms include both globular (Fig. 24, no.45) and poppyhead beakers (Young 2000 218, fig. 79, no. R31 & R34). Native copies of butt beakers were represented by two rims; one was intrusive within Period 1 ditch P (fill 1013), the other was recorded from Phase 3.2 ditch AM (fill 2146). Pre-Flavian (before c. 70 AD) dating would be expected for such vessels which are recorded elsewhere in the region from sites like Dorchester-on-Thames, Oxon (Frere 1962, 132, fig. 12, no. 9). A carinated cup from Period 2 ditch L (fill 1122) in an Early Roman oxidised fabric (UNS

EOX) is likely to be a native copy of the Gallo-Belgic CAM56 (Hawkes and Hull 1947). No matching vessels could be found in the Oxfordshire region but a similar vessel found at Baldock dates to between the mid-1st to early 2nd centuries AD (Rigby 1986, 315, fig. 129, no. 307).

Ceramic Period 3: Middle to Late Roman (Stratigraphic Phases 3.2 to 3.3)

The pottery from this period comprises a mix of reduced or oxidised coarsewares and fine or specialist wares, overwhelmingly from local, Oxfordshire sources. Among vessel forms assignable to the Middle Roman period were bowls or dishes and included both straight-side dishes with bead rims (Young 2000, 223, fig.82, R52) and carinated bowls with out-turned rims (ibid. R57). The latter form probably dates to the 2nd century or later. Straight-sided bowls/dishes with out-turned rims (R43) were also recorded and together with R52 dishes can be dated to between the 2nd and 3rd centuries (*ibid.* 221, fig.81, no. R43; 223, fig.82, no. R52). Narrow neck jars made in Oxfordshire fabrics were recorded in small quantities (*ibid.* 151, C16 and 213, R17) (Fig. 25, no 68) and together with a wide mouth jar (*ibid.* 115, BW2) they were most likely late Roman forms (c. mid-3rd to 4th centuries AD). A wall-sided carinated bowl (P23, Fig. 24, no.25) made in Oxfordshire Parchment ware (OXF PA) was recorded from Phase 3.2 ditch AM (fill 2133). These vessels are extremely rare (Booth pers. comm.) and Young dates them to the mid-3rd or 4th centuries AD (Young 2000, 85). Four plain rim dishes (DOR BB1) were recorded from Phase 3.2 ditches BM (fill 2170) and Q (fill 2201) and Phase 3.3 ditch AT (fill 2129). This was a common Black Burnished ware form and most likely dates to the exportation of the wares throughout Britain (c. mid-2nd to 4th centuries AD) (Seager Smith et al. 1993, 232, fig. 123, no. TYPE20; Holbrook and Bidwell 1990, 99-100). A single example of a dropped flange bowl (DOR BB1) is also recorded from Phase 3.3 ditch AT (fill 2129). This form is known to have been produced during the mid 3rd and 4th centuries AD (Davies and Seager Smith 1993, 234, fig.124, no. TYPE25; Holbrook and Bidwell 1990).

Phase 3.2 grave 2234 (fill 2236) contained a near complete M22 mortarium (Fig. 25, no. 58) and a R24 girth grooved jar (Fig. 25, no. 57). Neither vessel appears to have been a product of kiln AL; no examples of the M22 mortarium form were recorded from this feature. R24 jar forms were produced throughout the Roman period, however Young's suggested dating for the M22 form is in the range *c*. AD 240 – 400+ (Young 2000, 77). This is consistent with the radiocarbon determination 260 – 526 cal. AD (SUERC 92340) for a fragment of femur from the burial. The position of the two vessels in the grave was not documented and it is unclear whether they were intentionally deposited. While it is possible that they were unintentional inclusions, perhaps deriving from a second, unrecorded kiln, an intentional deposit of grave goods appears more likely. Pottery grave goods are relatively rare for the period represented and in this location and mortaria are almost unknown (Philpott 1991). An early 4th century inhumation at Bray, Berks, was accompanied by two burnt and fragmented mortaria (Wilson 1972, 349), whilst inhumations at both Cock Lane and West Street, London were each accompanied by a mortarium (Pritchard 1982, 163). Given the rarity of such finds and the evidence for pottery production (including mortaria) at this location, it is tempting to ascribe a personal, occupational association to the finds.

Phase 3.2 Kiln AL group

Kiln AL seems to have produced a limited range of vessel forms in only one or two fabrics (Table C4). Based on rim count, the minimum number of vessels thought to be associated with the production at the kiln is 377 (35.83 EVEs). Most of these can be dated to the Late Roman period from the mid-3rd century onwards. The most common form and most likely the main product of the kiln was whiteware (OXF WH) mortarium corresponding to Young's Type M17 (e.g. Fig. 24, nos 4, 6-7, 10-15, 19-24, 33-44, Fig. 25, nos 46-56, 61-66, 72–78, 80-83, 85-89, 92 Fig. 26 nos 93-97, 99-112). A minimum of 245 vessels (26.28 EVEs) from the site were of this type, the dating for which has been previously established within the range of AD 240 - AD 300 (Young 2000, 74, fig. 21, no. M17). Red-slipped (OXF **RS**) mortaria were also common with both C97 (Fig. 24, no. 32; Fig. 25, nos 67 and 90; Fig. 26, no. 98) and C100 (Fig. 25, nos 59, 79, 84 and 91) forms recorded. C97 wall-sided mortaria are thought to have been produced from AD 240 onwards (ibid. 175, fig. 67, no. C97). C100 mortaria with an angular flange have a more restricted date range and are dated by Young to the 4th century AD (*ibid.* no.C100). After mortaria, bowls are the most common form within the group. Red-slipped dishes with beaded rims (C45) were present in large numbers (e.g. Fig. 24, nos 2, 5, 9, 17-18, 26-30, Fig. 25, nos 60 and 69-71). These are likely copies of samian Ludowici Sb and Drag 31 bowls and although Young dates these to between the late 3rd and 4th centuries AD (ibid. 158) an earlier date for their production commencing in the mid-3rd century is almost certainly more accurate (Booth et.al. 1993, 163). Red-slipped dishes with flanged rims (Young 2000, 159, fig.58, no. C47) (Fig. 24, no 31), probably copying samian Form 36 bowls, are present in smaller quantities but are likely to date to the same period (Fig. 24, no. 31). Two examples of hemispherical flanged bowls (OXF RS) dating to the mid-3rd or 4th centuries AD (*ibid*. 161, fig. 59, no. C51) were recovered from inside the kiln (fill 2239). Jars occurred in relatively small quantities compared with the bowls and mortaria. The only jar form to occur in any real quantities was the C18 wide mouth variety (OXF RS), but the uniformity between vessels is such that they were most likely produced on site (Fig. 24, nos 8 and 16). This form is likely to date to the late 3rd century AD until the end of the Roman period (*ibid.* 153, fig. 55, no. C18). There are a further 27 hooked rims (2.26) EVEs) made in oxidised fabrics (OXF OX/**OXF RS**) similar to those recorded on the C18 jars and it may be that the C18 form was more widespread than can be determined due to the poor condition of the material. The likely kiln products seem to have been produced in a narrow range of variability (Table C4). The C45 bowls and M17 mortaria in particular were concentrated in a limited number of variants. Although much of the material from the site was most likely associated with pottery production very few sherds were identified as wasters, and none were from within the kiln. Most sherds identified as potential wasters tended to be over rather than underfired. This is a pattern reflected at kiln sites elsewhere in the Oxford region at both Blackbird Leys, Oxford (Booth and Edgeley-Long 2003, 245) and Lower Farm, Nuneham Courtenay (Booth et.al. 1993, 135).

Illustration Catalogue (Figs 24-26)

- Fabric UNS GR; Form: Large bowl/cauldron/Rim: simple upright rim. Vertical handle Period 2 Ditch J (fill 1135).
- 2. Fabric OXF RS; Form: C45.4. Phase 3.3 Ditch AT (fill 2026).
- 3. Fabric OXF WW; Form W33.1. Phase 3.2 Ditch AY (fill 2028).
- 4. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2089).
- 5. Fabric OXF RS; Form C45.4. Phase 3.3 Ditch AT (fill 2111).
- 6. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2111).
- 7. Fabric OXF WH; Form M17.4. Phase 3.2 Layer L2 (fill 2117).
- 8. Fabric OXF RS; Form C18.1 Phase 3.3 Ditch AT (fill 2129).
- 9. Fabric OXF RS. Form C45.4. Phase 3.3 Ditch AT (fill 2129).
- 10. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2129).
- 11. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2129).
- 12. Fabric OXF WH; Form M17.5. Phase 3.3 Ditch AT (fill 2129).
- 13. Fabric OXF WH; Form M17.5. Phase 3.3 Ditch AT (fill 2129).
- 14. Fabric OXF WH; Form M17.6. Phase 3.3 Ditch AT (fill 2129).
- 15. Fabric OXF WH; Form M17.6. Phase 3.3 Ditch AT (fill 2129).
- 16. Fabric OXF RS; Form C18.1? Phase 3.2 Pit 2130 (fill 2131).
- 17. Fabric OXF RS; Form C45.2 Phase 3.2 Pit 2130 (fill 2131).
- 18. Fabric OXF RS; Form C45.4. Phase 3.2 Pit 2130 (fill 2131).
- 19. Fabric OXF WH; Form M17.2. Phase 3.2 Pit 2130 (fill 2131).
- 20. Fabric OXF WH; Form M17.4. Phase 3.2 Pit 2130 (fill 2131).
- 21. Fabric OXF WH; Form M17.4. Phase 3.2 Pit 2130 (fill 2131).
- 22. Fabric OXF WH; Form M17.5. Phase 3.2 Pit 2130 (fill 2131).
- 23. Fabric OXF WH; Form M17.5. Phase 3.2 Pit 2130 (fill 2131).
- 24. Fabric OXF WH; Form M17.6. Phase 3.2 Pit 2130 (fill 2131).
- 25. Fabric OXF PA; Form P23.1. Phase 3.2 Ditch AM (fill 2133).
- 26. Fabric OXF RS; Form C45.4. Phase 3.2 Ditch AM (fill 2133).
- 27. Fabric OXF RS; Form C45.4. Phase 3.2 Ditch AM (fill 2133).
- 28. Fabric OXF RS; Form C45.4. Phase 3.2 Ditch AM (fill 2133).
- 29. Fabric OXF RS; Form C45.4. Phase 3.2 Ditch AM (fill 2133).
- 30. Fabric OXF RS; Form C45.4. Phase 3.2 Ditch AM (fill 2133).
- 31. Fabric OXF RS; Form C47.3. Phase 3.2 Ditch AM (fill 2133).
- 32. Fabric OXF RS; Form C97.2. Phase 3.2 Ditch AM (fill 2133).
- 33. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2133).
- 34. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2133).
- 35. Fabric OXF WH; Form M17.4. Phase 3.2 Ditch AM (fill 2146).
- 36. Fabric OXF WH; Form M17.4. Phase 3.2 Ditch AM (fill 2146).

37. Fabric OXF WH; Form M17.4. Phase 3.2 Ditch AM (fill 2146). 38. Fabric OXF WH; Form M17.4. Phase 3.2 Ditch AM (fill 2146). 39. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2146). 40. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2146). 41. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2146). 42. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AM (fill 2146). 43. Fabric OXF WH; Form M17.6. Phase 3.2 Ditch AM (fill 2146). 44. Fabric OXF WH; Form M17.6. Phase 3.2 Ditch AM (fill 2146). 45. Fabric OXF RE3; Form R31.1. Phase 3.2 Pit 2147 (fill 2148). 46. Fabric OXF WH; Form M17.4. Phase 3.2 Ditch AS (fill 2159). 47. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AS (fill 2159). 48. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AS (fill 2159). 49. Fabric OXF WH; Form M17.5. Phase 3.2 Ditch AS (fill 2159). 50. Fabric OXF WH; Form M17.10. Phase 3.2 Ditch AS (fill 2159). 51. Fabric OXF WH; Form M17.2. Phase 3.2 Ditch AS (fill 2160). 52. Fabric OXF WH; Form M17.6. Phase 3.2 Pit AN (fill 2164). 53. Fabric OXF WH; Form M17.5. Phase 3.2 Layer L1 (fill 2187). 54. Fabric OXF WH; Form M17.2. Phase 3.3 Ditch AT (fill 2192). 55. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2192). 56. Fabric OXF WH; Form M17.4. Phase 3.3 Ditch AT (fill 2192). 57. Fabric OXF RE3; Form R24. Phase 3.2 Grave 2234 (fill 2236). 58. Fabric OXF WH; Form M22.9. Phase 3.2 Grave 2234 (fill 2236). 59. Fabric OXF RS; Form C100.1. Phase 3.2 Kiln AL (fill 2238). 60. Fabric OXF RS; Form C45.4. Phase 3.2 Kiln AL (fill 2238H). 61. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2238). 62. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2238). 63. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2238B). 64. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2238F). 65. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2238F). 66. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2238H). 67. Fabric OXF RS; Form C97.11. Phase 3.2 Kiln AL (fill 2239I). 68. Fabric OXF RS; Form C16.6. Phase 3.2 Kiln AL (fill 2239I). 69. Fabric OXF RS; Form C45.1. Phase 3.2 Kiln AL (fill 2239C). 70. Fabric OXF RS; Form C45.4. Phase 3.2 Kiln AL (fill 2239G). 71. Fabric OXF RS; Form C45.4 Phase 3.2 Kiln AL (fill 2239G). 72. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2239). 73. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2239). 74. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2239). 75. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2239I).

76. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2239I). 77. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2239F). 78. Fabric OXF WH; Form M17.5. Phase 3.2 Kiln AL (fill 2239F). 79. Fabric OXF RS; Form C100.1. Phase 3.2 Kiln AL (fill 2240). 80. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2240). 81. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2240). 82. Fabric OXF WH; Form M17.5. Phase 3.2 Kiln AL (fill 2240). 83. Fabric OXF WH; Form M17.5. Phase 3.2 Kiln AL (fill 2240). 84. Fabric OXF RS; Form C100.1. Phase 3.2 Kiln AL (fill 2241K). 85. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2241). 86. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2241K). 87. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2241K). 88. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2241). 89. Fabric OXF WH; Form M17.4. Phase 3.2 Kiln AL (fill 2241K). 90. Fabric OXF RS; Form C97.11. Phase 3.2 Kiln AL (fill 2242). 91. Fabric OXF RS; Form C100.7. Phase 3.2 Kiln AL (fill 2242). 92. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2242). 93. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2242). 94. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2242). 95. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2242). 96. Fabric OXF WH; Form M17.2. Phase 3.2 Kiln AL (fill 2242). 97. Fabric OXF WH; Form M17.11. Phase 3.2 Kiln AL (fill 2242). 98. Fabric OXF RS; Form C97.8. Phase 3.1 Ditch AP (fill 2278). 99. Fabric OXF WH; Form M17.4. Phase 3.1 Ditch AP (fill 2278). 100. Fabric OXF WH; Form M17.4. Phase 3.1 Ditch AP (fill 2278). 101. Fabric OXF WH; Form M17.5. Phase 3.1 Ditch AP (fill 2278). 102. Fabric OXF WH; Form M17.6. Phase 3.1 Ditch AP (fill 2278). 103. Fabric OXF WH; Form M17.6. Phase 3.1 Ditch AP (fill 2278). 104. Fabric OXF WH; Form M17.6. Phase 3.1 Ditch AP (fill 2278). 105. Fabric OXF WH; Form M17.4. Undated Ditch 2289 (fill 2290). 106. Fabric OXF WH; Form M17.4. Undated Ditch 2289 (fill 2290). 107. Fabric OXF WH; Form M17.4. Undated Ditch 2289 (fill 2290). 108. Fabric OXF WH; Form M17.11. Undated 0 Ditch 2316 (fill 2317). 109. Fabric OXF WH; Form M17.1. Phase 3.2 Ditch BT (fill 6065). 110. Fabric OXF WH; Form M17.6. Period 4 Furrow 6174 (fill 6175). 111. Fabric OXF WH; Form M17.2. Phase 3.2 Ditch BT (fill 6315). 112. Fabric OXF WH: Form M17.6. Unstratified.

Discussion

The presence of transitional grog-tempered wares in relatively large quantities suggests activity at Swan School and Meadowbrook College began to intensify during the Late Iron Age to Early Roman period, most or all of this material probably dating to the 1st century AD. Although a proportion of this material relates to features ascribed to Late Iron Age to Early Roman Period 2, the majority was residual in Middle or Late Roman features (Phases 3.2–3.3). The limited presence of South and Central Gaulish samian and of Early Roman vessel forms among local oxidised or reduced ware suggest that activity in the later 1st or mid/later 2nd centuries was at a comparatively low level. This may represent small scale rural settlement activity predating the main phase of pottery production at the site. Pottery from non-kiln features/deposits relating to Phases 3.2–3.3 is dominated by locally produced reduced (OXF RE1-4), oxidised (OXF OX) and white wares (OXF WW). The few non-local types represented were limited to a few sherds of South-East Dorset Black Burnished ware and Lower Nene Valley colour coated ware.

It is clear that the main product associated with the operation of Kiln AL was the M17 (whiteware) mortarium, a form associated with production in the period c. AD 240-300. At least 245 M17 mortaria (MNV) were recorded; in terms of a single product this was more than double the 112 vessels recorded from the Lower Farm kilns, Nuneham Courtenay, Oxon (Booth et al. 1993, 140). Although the Lower Farm kilns did produce other white ware mortaria in smaller quantities, the total number of mortaria recovered (257 vessels) barely exceeds the numbers recovered at Swan School and Meadowbrook College and they were most likely produced over a longer period of time (c. 2nd to 4th centuries AD). Given that the total quantities of mortaria recovered from both sites are roughly equal, this may reflect a more intensive production of M17 mortaria at Swan School and Meadowbrook College perhaps over a shorter period of time (mid to late 3rd century AD). The limited range of vessel variants among this group might also support a relatively short production period, although the chronological significance of Young's subforms is unclear. The proximity of Swan School and Meadowbrook College to a source of white clays compared to Lower Farm may also have been a factor in the comparative numbers of white ware mortaria recovered from both sites. An absence of white slipped wares at Swan School and Meadowbrook College may be significant; their relatively common presence at Lower Farm perhaps reflecting greater distance from suitable clays and a need to provide an alternative. It is worth emphasising the similarities in production between Swan School and Meadowbrook College and Lower Farm; the frequency of both M17 mortaria and C45 bowls was a common characteristic of both. That said the excavated area of Lower Farm was relatively small at approximately 500m2 and no kiln structure was found. It is difficult to assess whether production of M17s at Swan School and Meadowbrook College exceeded or matched that from Young's seminal sites at Churchill (Phase 4a) (Young 1974) or St Lukes Road, Cowley (Atkinson 1941/Young 1973). That the M17 was an important form produced in the Cowley area is hinted at by Green (1983, 11).

Whether production of colour coated (red slipped) wares at Marston ran concurrently with that of the white ware mortaria is difficult to say. Colour coated forms were recorded in a reasonably diverse range

when compared with the white wares, although the most common vessels were C45 bowls, C18 jars and C97 mortaria. Accepting Young's chronology, all forms have currency from the mid-3rd century onwards and could have been produced alongside the M17s in the latter half of the 3rd century or once production of the M17s had ceased, probably around the beginning of the 4th century AD. That kiln production continued into the 4th century is suggested by the presence (Nine vessels) of C100 mortaria, a form considered by Young to start production c. AD 300 (Young 2000, 174). The likely brief working life of a Roman kiln would tend not to support the production of both M17 and C100 during the same cycle of production, unless a second undiscovered kiln was active shortly before or after. Alternatively, given that production at Swan School and Meadowbrook College seems to have been intense over a short period of time, a very narrow window spanning the end of the 3rd and beginning of the 4th centuries AD, when production of both the M17 and C100 forms could have run concurrently, is possible. The possible use of a nummus of Constantine I (AD310-313) to mark the abandonment of the kiln in the early 4th century would support this. Since Young's Corpus was compiled over 40 years ago (revised 20 years ago) new evidence has come to light. The production of C45 bowls has been extended into the mid-3rd century AD (Booth et al. 1993) and it is possible the production ranges of either the M17 or C100 mortaria could be extended. Production of M17s might be prolonged into the early 4th century or that of the C100's brought forward to the late 3rd century. Except for one possible late 3rd century C100 example recovered from a rubbish layer at Shakenoak IV (Brodribb et al. 1973, 31, fig.11) most examples dated by Young tended to be later rather than earlier in the 4th century (Young pers.comm.). It is therefore perhaps more likely that an extension of the M17 currency into the early 4th century is most likely, although a late 3rd century date for the C100 is not impossible. The absence of later 4th century markers such as stamped or painted bowls and mortaria (e.g. C84/5 and C98/99) and the chronologically significant C75 bowls, most of which post-date AD325 (Young 2000 166), probably suggests that production at Marston had ceased sometime during the first quarter of the 4th century AD sometime before AD 325. If the nummus (Ra.8) marks the cessation of production at the kiln this may have been as early as AD 313.

References

Atkinson, R.J.C. 1941 'A Romano-British potters' field at Cowley, Oxford', Oxoniensia 6, 9-22

- Barclay, A., Booth, P., Knight, D., Evans, J., Brown, D. H. and Wood, I. 2016 A standard for pottery studies in archaeology Historic England
- Bentley, D. and Pritchard, F. 1982 'The Roman cemetery at St. Bartholomew's Hospital', *Trans. London Middlesex Archaeol. Soc.* **33**, 134–172

Booth, P. 'Oxford Archaeology fabric series' unpublished

- Booth, P., Boyle, A. and Keevil, G. 1993 'A Romano-British kiln site at Lower Farm, Nuneham Courtenay, and other sites on the Didcot to Oxford and Wootton to Abingdon water mains, Oxfordshire', Oxoniensia 58, 87–218
- Booth, P. and Edgeley-Long, G. 2003 'Prehistoric settlement and Roman pottery production at Blackbird Leys, Oxford' *Oxoniensia* **68**, 201–262
- Brodribb, A.C., Hands, A.R. and Walker, D.R. 1973 *Excavations at Shakenoak Farm, near Wilcote, Oxfordshire: VI Site C Roman structures and Saxon burial-ground,* Privately published
- Frere, S. 1962 'Excavations at Dorchester on Thames, 1962', Archaeol. J. 119, 114-149
- Green, S. 1983 'The Roman pottery manufacturing site at Between Towns Road, Cowley, Oxford', *Oxoniensia* **48**, 1–12
- Hawkes, C.F.C. and Hull M.R. 1947 *Camulodunum: First Report on the excavations at Colchester* 1930–39 London, Society of Antiquaries
- Holbrook, N. and Bidwell, P. 1990 Roman finds from Exeter Exeter Archaeological Reports 4
- Philpott, R. 1991 *Burial practices in Roman Britain. A survey of grave treatment and furnishing AD 43– 410* Oxford, Brit. Archaeol. Rep. British Series **219**
- Pritchard, F. 1982 'Supporting finds evidence', in Bentley and Pritchard (eds), 163-172
- Rigby, V. 1986 'Stratified groups of Iron Age and Roman pottery', in Stead, I.M. and Rigby, V. (eds) 1986, 257–380

Seager Smith, R. and Davies, S.M. 1993 'Roman pottery', in Woodward, P.J. et al. (eds), 202-289

Stead, I.M. and Rigby, V. 1986 Baldock: excavation of a Roman and pre-Roman settlement 1968–72

Thompson I. 1982 Grog-tempered 'Belgic' pottery of South Eastern England Brit. Archaeol. Rep. 108

- Tomber, R. and Dore, J. 1998 *The national Roman fabric reference collection: A handbook* London, Museum of London Archaeological Service
- Webster, P. 1996 *Roman Samian pottery in Britain* Practical Handbook in Archaeology **13**, York, Council for British Archaeology
- Wilson, D.R. 1972 'Roman Britain in 1971: I Sites explored', Britannia 5, 298-351
- Woodward, P.J., Davies, S.M. and Graham, A.H. 1993 *Excavations at Greyhound Yard, Dorchester* 1981–84 Dorset Natural History and Archaeological Society Monograph Series **12**

Young, C. 1973 'The Roman Kiln Site at St Luke's Road, Cowley, Oxford', *Oxoniensia* **38**, 215–232 Young, C. 1974 'Excavations at the Churchill Hospital, 1973: Interim Report', *Oxoniensia* **39**, 1–11 Young, C. 2000 *The Roman pottery industry of the Oxford Region* Oxford, Brit. Archaeol. Rep. **43**

Period/ Phase		Oxford Fabric	Pe	eriod 1			Pha	se 3.1	Pha	se 3.2	Pha	se 3.3	Pei	riod 4	Pei	riod 5	Unst	ratified		ed/root bance	Totals	
		Series*	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)												
LIA/Early	UNS FL	E60			1	5			2	10									3	14	6	29
Roman Pottery	UNS GR	E80	11	129	194	3974	4	54	291	4406	27	448	2	44			20	263	12	159	561	9477
-	UNS GRL	E85							1	3											1	3
	UNS GRV	E85							1	9											1	9
	UNS Q	E30			1	3			55	569	8	36					1	3			65	611
	UNS QI	E35?			-		1	6	5	79									1	4	7	89
	UNS SHGR	E820	2	12	2	5	1	8	19	260											24	285
	UNS V	E10			63	138															63	138
Roman	BURNT								2	11	1	11									3	22
Pottery	OXF OX	O21	13	23	2	18	73	458	382	2959	173	1273	9	36	1	6			50	552	703	5325
	OXF PA	W11							5	119	1	16									6	135
	OXF RE1-2	R21							14	107	1	9	1	4	1	5	2	26	1	3	20	154
	OXF RE3	R30	1	5			1	5	87	1055	9	92	1	56			9	60	2	35	110	1308
	OXF RE4	R11	5	35			12	100	115	924	24	127			1	2	7	57	7	96	171	1341
	OXF RS	F51/M41					33	229	404	6319	82	3007					7	94	12	193	538	9842
	OXF WH	M22	2	91	1	6	102	3328	610	25674	204	7413	15	596			38	1855	69	2609	1041	41572
	OXF WW	W12							101	1518	44	592					1	14	1	11	147	2135
	UNS BW	R62					2	17	17	95	1						1	2			21	119
	UNS EOX	013			17	110			1	7											18	117
	UNS FWW	W10							20	129											20	129
	UNS GTG	R98			2	78			18	398	1	5									21	481
	UNS GW	R30	2	15	2	,0	17	313	159	1843	12	123	1	6					6	25	197	2325
	UNS GW	C20	2	10			17	515	109	1043	12	8		0					0	23	197	
		620									1	ð									I	8

Table C1: Pottery totals by stratigraphic period and according to fabric. Shown as sherd count (NOSH) and weight.

Period/ Phase	Fabrics	Oxford Fabric	Pe	riod 1	Pei	riod 2	Pha	ise 3.1	Pha	se 3.2	Pha	se 3.3	Pe	riod 4	Pe	riod 5	Unst	ratified		ed/root bance	Tot	tals
		Series*	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)	Ct.	Wt. (g)
	UNS OX	O20	1	9	1	8			22	112	2	21					4	38		(•)	30	188
	UNS SH	C10					3	6	26	250	115	663					1	50			145	969
	UNS WW	W20			1	1			6	76	2	6					1	41			10	124
	DOR BB1	B11							6	117	15	111					1	8			22	236
	LNV CC	F52							1	1	3	9									4	10
	VER WH	W21					1	4	2	16											3	20
	SAM	S							1	1			2	2							3	3
	LEZ SA2	S30			1	3			6	21	1	10									8	34
	LGF SA	S20							2	77											2	77
	LMV SA	S32							3	90											3	90
Grand Total	1		37	319	286	4349	250	4528	2384	47255	727	13985	31	744	3	13	93	2511	164	3701	3975	77405

*Oxford Archaeology fabric series (Booth *unpublished*)

LIA-Early Roman Vessels	Vessel Count	% of Vessel Count	EVEs	% of EVEs
Bowl	3	6.8	0.77	13.8
Jar	14	31.8	2.74	49.0
Jar/Bowl	27	61.4	2.08	37.2
Grand Total	44	100.0	5.59	100.0

Table 2: Pottery summary of Late Iron Age to Early Roman vessel forms (excludes likely kiln material).

Table 3: Pottery summary of Roman vessel forms (excludes likely kiln material).

Roman Vessels (Non-kiln)	Vessel Count	% of Vessel Count	EVEs	% of EVEs
Beaker	11	5.9	1.61	7.5
Bottle	3	1.6	0.17	0.8
Bowl	13	7.0	1.61	7.5
Dish	1	0.5	0.12	0.6
Сир	2	1.1	0.11	0.5
Flagon	5	2.7	2.4	11.2
Jar	17	9.2	3.48	16.2
Jug	1	0.5	0.15	0.7
Mortarium	2	1.1	1.28	6.0
Platter	2	1.1	0.3	1.4
Dish/Bowl	5	2.7	0.47	2.2
Jar/Bowl	123	66.5	9.75	45.5
Grand Total	185	99.9	21.45	100.1

Roman Vessels (Kiln)	Vessel Count	% of Vessel Count	EVEs	% of EVEs
Bowls	61	16.2	4.37	12.2
C45.1	1	0.3	0.12	0.3
C45.2	1	0.3	0.06	0.2
C45.4	55	14.6	3.81	10.6
C45.6	1	0.3	0.05	0.1
C49	1	0.3	0.08	0.2
C51	2	0.5	0.25	0.7
Dishes	4	1.1	0.17	0.5
C47	2	0.5	0.02	0.1
C47.2	1	0.3	0.01	0.0
C47.3	1	0.3	0.14	0.4
Jars	16	4.2	2.04	5.7
C18	16	4.2	2.04	5.7
Mortaria	296	78.5	29.25	81.6
C100	5	1.3	0.07	0.2
C100.1	3	0.8	0.16	0.4
C100.7	1	0.3	0.07	0.2
C97	14	3.7	0.73	2.0
C97.1	2	0.5	0.17	0.5
C97.2	3	0.8	0.19	0.5
C97.8	1	0.3	0.05	0.1
C97.11	2	0.5	0.19	0.5
M17	15	4.0	1.03	2.9
M17.2	49	13.0	5.22	14.6
M17.3	2	0.5	0.15	0.4
M17.4	82	21.8	9.1	25.4
M17.5	61	16.2	6.72	18.8
M17.6	33	8.8	3.65	10.2
M17.10	1	0.3	0.22	0.6
M17.11	2	0.5	0.19	0.5
Unidentified	20	5.3	1.34	3.7
Grand Total	377	100	35.83	100

Table 4: Pottery summary of Roman vessel forms (likely kiln products only).

Form	<100mm	100mm- 119mm	120mm- 139mm	140mm- 159mm	160mm- 179mm	180mm- 199mm	200mm- 219mm	220mm- 239mm	240mm- 259mm		280mm- 299mm	300mm- 319mm	320mm- 339mm	340mm- 359mm	360mm- 379m	380mm- 399mm	≥400mm	Unmeas.
Beaker	3	4	2		1	1												
Bottle	1																	2
Bowl	1	2	2	2	3	1	1	3		1								
Cup				1	1													
Dish						1												
Dish/Bowl					4		1											
Flagon	5																	
Jar			4	7	3	4	4	1	2	2			1	1		2		
Jar/Bowl	3	6	17	18	31	23	21	12	9	1	1							8
Jug	1																	
Mortaria									1	1								
Platter					1			1										
Total	14	12	25	28	44	30	27	17	12	5	1	0	1	1	0	2	0	10

Table 5: Pottery summary of vessel forms by rim diameter (mm) (non-kiln products only).

APPENDIX D: POST-ROMAN POTTERY

By E. McSloy

A small quantity of post-Roman pottery, 31 sherds, weighing 423g, was recorded. All was recovered by hand, from nine deposits and as unstratified material. The pottery, dating to the medieval and post-medieval/modern periods has been fully recorded to the standard recommended for archaeological material (Barclay *et al.* 2016). Fabric codings used for recording are defined in Table D1. Medieval types are matched against Mellor's type series for Oxfordshire (Mellor 1994).

Two thirds of the assemblage was unstratified and came from subsoil or topsoil type deposits, the remainder mostly from the ditches and pits associated with the sparse post-medieval/later activity (Period 5). Two medieval sherds were seemingly intrusive from within Iron Age or Roman-phased deposits; Middle Iron Age Period 1 fill 6214 of sub-enclosure 2.4 ditch CW and Roman Phase 3.2 fill 2180 of ditch BG. Condition of the recovered pottery is typically poor, most sherds exhibiting moderate or heavy surface abrasion and/or loss or glaze.

Range (Table D1)

The assemblage range is set out in Table D1. Earliest material consists of the few (nine) sherds in medieval fabrics (types OXAC, OXY and OXAM), all of which have a lengthy production period. Oolitic limestone-tempered type OXAC is the only unglazed type, present a joining rim sherds from subsoil deposit 7001. The fabric is widely distributed and probably made at multiple sites across the Cotswolds region across the 11th to 13th centuries. The glazed types consists of one sherd (23g) in sandy fabric OXY and six sherds (28g) in type OXAM. The Oxford Ware (type OXY) sherd is from the base of a jug, recorded from Phase 3.2 ditch BG (fill 2180). This type is produced across the mid/later 11th to the 13th or early 14th centuries (Mellor 1994, 71). Brill/Boarsall ware (type OXAM) occurs as bodysherds only, three with underglaze strips and probably from jugs. This type is common from Oxfordshire sites and dates across the 13th to 14th/early 15th centuries (Mellor 1994, 117).

The majority of the assemblage, 22 sherds (365g), dates to the post-medieval and modern periods. Earliest are the sherds in a pale-bodied glazed earthenware fabric identified as post-medieval Brill/Boarstall fabric (type PBRIL), a type produced into the 16th and earlier 17th centuries. The two sherds in this type, both from subsoil deposits, comprise rim sherds from a wide, shallow bowl and a skillet or pipkin. A single (unstratified) sherd of Frechen stoneware is of similar dating and the only imported type from the group. The remainder of the group is later, with the sherds in refined whiteware, porcelain and 'flowerpot' types as late as the 19th or 20th centuries.

References

Barclay, A., Booth, P., Knight, D., Evans, J., Brown, D.H. and Wood, I., 2016 *A standard for pottery studies in archaeology* Historic England

Mellor, M. 1994. 'A synthesis of Middle and Late Saxon, medieval and Early post-medieval pottery in the Oxford region', *Oxoniensia* **69**, 17–217

Date	Fabric*		Ct.	Wt.(g)	EVEs
medieval	OXAC	Cotswold type oolitic limestone-tempered	2	7	0.04
	ΟΧΑΜ	Brill/Boarstall glazed ware (medieval)	6	28	
	ΟΧΥ	Oxford ware (quartz-tempered) ware	1	23	
Sub-total			9	58	0.04
Post-	BPRP		2	111	0.10
medieval/	ESTON	English stoneware	6	77	
modern	FRE	Frechen stoneware	1	10	
	BGE	Black glazed earthenware	1	1	
	GRE	Clear/green glazed earthenware	8	149	0.16
	FLOP	Unglazed earthenware (flowerpots)	1	2	
	PORC	English Porcelains	1	4	
	REFW	Refined whitewares	1	6	
	REFWTP	Refined whitewares (transfer-printed)	1	5	0.02
Sub-total			22	365	0.28
Total			31	423	0.32

Table D1: Post-Roman pottery summary

*Types in bold from Mellor's Type Series for medieval Oxfordshire (Mellor 1994)

APPENDIX E: FIRED CLAY/DAUB

by Peter Banks

Introduction

A total of 869 fragments (18,209g) of fired or burnt clay were recorded from 152 deposits and 14 bulk soil samples. The fired clay was scanned by context and quantified by count/weight and recording was direct to an Access database. Broad fabric divisions were identified and where possible form or function have been recorded. The assemblage was largely made in orange or red coloured fabrics most of which were soft fired. As a result, some of the material is highly fragmented; however, the condition of the assemblage overall is moderately good.

The assemblage is derived from a variety of feature types although other than from Kiln AL, only Phase 3.2 layer L1 (61 fragments, 1108g) and pit 2130 in Enclosure 9.1 (fill 2131) (71 fragments, 2296g) produced fired clay in significant quantities. Phase 3.2 Kiln AL produced a significant quantity of fired clay (246 fragments, 8189g) from five fills and it is clear that such material related to the operation of this feature.

Assemblage range

Objects

Two fragmentary clay objects, both associated with Period 1 (Middle Iron Age) deposits are described and illustrated. Triangular weights such as no. 1 appear to have been used throughout the Iron Age comparable examples dating to this period are recorded from Alfred's Castle, Ashbury, Oxon (Brown *et al.* 2013, 104, fig. 4.14, nos 552–4). They are most often interpreted as weights for use with vertical, warp-weighted looms. Object no. 2 is identified as a spindle whorl; comparable objects dating to the Early or Middle Iron Age are recorded from Coxwell Road, Faringdon (Brown 2004, 238, fig. 28, nos 41–42).

- 1. Corner fragments of a triangular weight with perforation. Period 1 Pit 6267 (Fill 6269). *Not illustrated*
- Fragmentary object, probably a globular spindle whorl. Approximate diam. 42mm. Period 1 Ditch CD (fill 6413). Ra. 49. Not illustrated

Oven fragments

A large fragment of fired clay, triangular in section with a curved interior was recovered from Period 1 ditch CD (cut 6406, fill 6432). The fragment is incomplete but may represent part of an oven structure. Domed structures with an upper chimney or vent were used as ovens during the Iron Age (Poole 1984, 115). Due to the small quantity of material, it is not possible to identify it with any certainty.

Daub

Four possible fragments of burnt daub are recorded from Period 1 pit 6068 (fill 6069), in Enclosure 1.1, and Phase 3.2 pit 2130 (fill 2131), in Enclosure 9.1. They are made in soft orange sandy fabrics with wattle impressions preserved on all four fragments. This material is most likely derived from domestic or industrial structures and has probably preserved as a result of accidental 'firing'.

Miscellaneous including possible kiln lining/structure

The remainder of the assemblage comprises 853 fragments (17,831g) that could not definitively be ascribed to a form or function. Flat, smoothed surfaces were recorded on 32 fragments; however, the majority are formless, lacking original surfaces or other features indicative of their use. The abundance of such material from within the Phase 3.2 Kiln AL (246 fragments) suggests use relating to the operation of this feature, most likely capping or lining material. Further similar material from the site may represent dumps of material deriving from this or other pottery kilns. 'Clay walls' are a feature of kilns of the 3rd and 4th-century Oxfordshire industry (Young 2000, 37–38), much of the above ground structure likely to have been built and coated with clay before each firing and then destroyed when its contents were removed. This may explain the presence of large dumps of material is characterised by coarse organic inclusions/surface impressions identifiable as grass or straw and it is likely that it was used in conjunction with turves or similar to construct and seal the kiln dome. Comparable material was recovered from the Roman kiln at Cowley, Oxford, and identified as kiln capping (Atkinson 1941, 12). Use as lining would seem appropriate for material identified from Kiln AL basal fill 2241 which exhibited vitrified surfaces resulting from prolonged exposure to high temperatures.

References

Atkinson, R.J.C. 1941 'A Romano-British potters' field at Cowley, Oxon', Oxoniensia 6, 9-22

Brown, K. 2004 'The fired clay', in Cook, J. et al. (eds) 2004, 239-240

Brown, K., Nelson, S. and Raven, S. 2013 'The fired clay', in Lock, G. and Gosden, C. (eds) 2013 Histories in the making: excavations at Alfred's Castle 1998-2000 Oxford, University of Oxford School of Archaeology Monograph 79, 102–105

Cook, J., Guttman, E.B.A. and Mudd, A 2004 'Excavations of an Iron Age site at Coxwell Road, Faringdon', *Oxoniensia* **69**, 181–285

- Cunliffe, B. 1984 Danebury: An Iron Age hillfort in Hampshire. Vol 1 the excavations, 1969-1978: The site Counc. Brit. Archaeol. Res. Rep. **52**
- Poole, C. 1984 'The structural use of daub, clay and timber', in Cunliffe (ed), 110-122

Young, C. 2000 The Roman pottery industry of the Oxford region Brit. Archaeol. Rep. 43

APPENDIX F: LITHICS

By Jacky Sommerville

Introduction

A total of 13 worked lithics (28g) was recovered, which were classified according to broad debitage/artefact type and recorded onto a Microsoft Access database. All were made using brown flint, most of which is fine-grained. All lithics were redeposited in features assigned to Periods 1-3 (Middle Iron Age to Roman) and 5 (Post-medieval) or were unstratified.

Mesolithic to Neolithic flints

The flints comprise eight flakes, one blade, three chips (debitage with a maximum dimension of <10mm) and a truncation. Features of the debitage – the presence of the blade, plus one linear and one punctiform butt type on the flakes – are suggestive of 'soft hammer' percussion (Inizan et al. 1992, 80) which typically features in Mesolithic or Early Neolithic knapping strategies. The truncation, which is a Mesolithic tool type (Butler 2005, 109), was recovered unstratified. It was made on a flake blank and features fine, nibbled retouch on the distal dorsal edge. Evidence of Mesolithic activity in the vicinity of Oxford is also known from Iffley (Case 1952, 11), Shotover (ibid., 13), Littlemore (Lamdin-Whymark 2001) and along the Oxford Flood Alleviation Channel (Radford 2018, 234).

References

Butler, C. 2005 Prehistoric Flintwork Stroud, Tempus

Case, H. 1952-53 'Mesolithic Finds in the Oxford Area', Oxoniensia XVII-XVIII, 1-13

Inizan, M-L, Roche, H and J Tixier. 1992 *Technology of Knapped Stone* Meudon, France Meudon, Cercle de Recherces et d'Etudes Préhistoriques

Lamdin-Whymark, H. 2001 'Flint', in Moore, J. 2001, 198-9

Moore, J. 2001 'Excavations at Oxford Science Park, Littlemore, Oxford' Oxoniensia 66, 163-219

Radford, D. 2018 'Archaeological Work in Oxford 2017' Oxoniensia 83, 233-5

APPENDIX G: METALWORK AND COINS

By Philippa Walton

Introduction

A total of 118 items of metalwork, weighing 915.4g, were recovered from 22 deposits and as unstratified material, comprising 104 iron (608g), nine copper alloy (37g), four lead (89g) and one composite lead and iron object (278g). One Roman coin was also found (Ra. 8). The assemblage was fully recorded and catalogued with the assistance of low-powered magnification and digital radiographs. The radiographs will be deposited with the archive.

Most of the metalwork was hand-recovered during the course of the excavations, with a small number of items (29: all of iron), found subsequently in bulk soil sample residues. The majority of items by count were recovered from grave deposits with most coming from a single feature, Phase 3.3 inhumation burial 6085, and consisting of 57 hobnails. Smaller numbers of objects were recovered from ditches and from occupation layers, external dumps, kiln deposits and unknown feature types. Some 21 items were unstratified finds. Table G1 provides a quantification of the assemblage by period.

The discussion and catalogue produced below is selective, detailing items that may assist with dating or in understanding the variety of activities occurring within the vicinity of the site. A full catalogue database listing all recovered items including nails and fragmentary items is included in the archive.

Period/Phase	Total number of finds recovered
2: Late Iron Age to Early Roman transition (100 BC-AD 43)	1
3.2: Middle to late Roman (2nd – 4th century AD)	12
3.3: Late Roman (4th century AD)	70
4: Medieval (1066-1539)	1
Undated features	2
Unstratified/undated	32

Table G1: Quantification of the assemblage by Period/Phase

Discussion

There are relatively few diagnostic objects within the metalwork assemblage. However, the small number which can be dated are indicative of Roman period activity at the site.

The earliest datable objects found during the excavation were two copper-alloy Roman brooches, Ra. 1 (cat. no. 1; Fig. 28, no. 1) and Ra. 51 (cat. no. 2; Fig. 28, no. 2). Ra. 1 is a penannular brooch of a relatively common type and is likely to date to the Early to Middle Roman period (Fowler 1960). Ra. 51 is a far more unusual. Probably dating to the 2nd century AD, it can be classified as being of Mackreth's PL CONT 2.c2 type, although the saltire decoration is untypical (Mackreth 2011). Such brooches are relatively rare with Mackreth's corpus recording only 12 brooches of the 2.c2 subtype, mostly from south

or central England and south Wales. Although the broader type is considered to have Continental origins, the bilateral spring of this example may be an indicator of British manufacture (Mackreth 2011, 170). Unfortunately, both brooches were recovered from subsoil layers in Areas A (1025) and Area F (8001). However, they provide some evidence for Early to Middle Roman activity in the vicinity and as both were broken, they are likely to be indicative of casual loss or refuse disposal.

Two lead alloy weights which are likely to be Roman in date attest to the measurement and quantification of resources at the site. Ra. 46 (cat. no. 3; Fig. 28, no. 3) is a lead alloy steelyard weight with iron suspension loop of Tyrell's Type B3 (Tyrrell 2015) and was recovered from fill 6173 of ditch DB. Ra. 4 (cat. no. 4) is a small, perforated weight of Tyrrell's Type A2 (Tyrrell 2015) and was an unstratified find.

Despite the presence of objects associated with weighing and measuring, the dearth of Roman coins from the site suggests that monetary activity was not a feature of activity there. However, a single coin was recovered. Ra. 8 (cat. no. 5; Fig. 28, no. 4) is a nummus of Constantine I dating to the period AD 310–313 and was found in backfill 2239 of kiln AL. While it provides some useful dating evidence for the cessation of pottery production at the site, its presence within the kiln may also be significant. It is possible that the coin represents a deliberate deposit marking the abandonment of the structure in the early 4th century AD, something which is paralleled in coin deposits in kilns and corn driers elsewhere such as Hayton, East Yorkshire (Bland *et al.* 2020, 205) and East Anton, Hampshire (Brindle 2017, 263–264).

The remainder of datable objects were associated with the two inhumation burials excavated, both of which produced iron hobnails. A single hobnail (cat. no. 6) was recovered from sample 73 in Phase 3.2 grave fill 2236. This is likely to represent a stray loss rather than a deliberate pars pro toto gesture although the latter cannot be ruled out. In contrast, grave fill 6086 contained 57 hobnails (Ras 23–45; samples 105, 107 and 108) with all but one recovered from the foot of the grave (7). This group is likely to represent the deposition of footwear as a grave good, a common practice throughout southern Britain in the Middle to Late Roman period, particularly at rural sites (Philpott 1991, 167). At such sites, hobnails are frequently the only grave goods recovered. For example, at Curbridge, Oxfordshire, 19 late Roman inhumations were accompanied by hobnailed shoes alone (Chambers 1976; Roman Rural Settlement Database ID 16070).

Catalogue

 Penannular brooch, copper alloy. Incomplete. Two fragments of a penannular brooch of Fowler Type A (1960). The circular-section body and one spherical knobeed terminal remain. Broadly Roman in date, with an emphasis on Early to Middle Roman period. D (external) 19mm D (internal) 14mm Th 2mm Wt 1.6g. Undated subsoil deposit 1025. Ra. 1. Fig. 28

- 2. Bow brooch, copper alloy. Incomplete. Classifed as Mackreth's PL CONT 2.c2 type, (Mackreth 2011). Bilateral sprung pin of which only a small portion remains. Arched bow which is lentoidal in plan and convex in section. The sides of the bow are horizontally notched. The bow is divided into three panels of decoration with two horizontal notched ribs. The central panel is incised with a saltire cross within a rectangular border and is flanked by panels decorated with three horizontal grooves. The bow narrows to an elongated trapezoidal foot concealing a solid triangular catchplate with rectangular cut-out at its terminal. 2nd century AD. L 35mm W (max) 12mm Wt 3.6g u/s. Undated subsoil deposit 8001. Ra. 51. Fig. 28
- Steelyard weight, lead alloy and iron. Roman hemispherical lead weight with flat circular base and corroded iron suspension loop at apex. Of Tyrrell's Type B3 (Tyrrell 2015). L 57mm D 40mm Wt 274.7g. Phase 3.2 fill 6173 of ditch DB. Ra. 46. Fig. 28
- ?Weight, lead alloy. Domed weight with flat base and central circular perforation of Tyrell's Type A2 (Tyrell 2015). Although the size of its perforation is at the small end of the range, its use as a spindle whorl using Alberti's criteria (Alberti 2018) cannot be ruled out. D (external) 21mm D (perforation) 7mm Th 9mm Wt 17.3g. Unstratified. Ra. 4
- Copper alloy nummus of Constantine I. AD 310 313. SOL INVICTO COMITI reverse depicting Sol left with hand raised and holding globe. Mint of Trier. Wt 3.1g D 23mm. Phase 3.2 fill 2239 of kiln AL. Ra 8. Fig. 28
- Hobnail, iron. Circular-section stem extending to domed head of Manning's Type 10 (Manning 1983). L 9mm W 7mm Wt 0.4g. Phase 3.2 grave fill 2236.
- Hobnails, iron. 57 hobnails or fragments thereof. Circular-section stems extending to domed or conical heads of Manning's Type 10 (Manning 1983). Wt 156.1g. Phase 3.3 grave fill 6086. Ras 23–45, Samples 105, 107 and 108.

Bibliography

- Alberti, M. 2018 'The construction, use and discard of female identities: interpreting spindle whorls at Vindolanda and Corbridge', *Theoretical Roman Archaeological Journal* **1** (1), 2, 1–16
- Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M. Holbrook, N., Lodwick, L., Richards, J.D. Smith,
 A. 2018 *The Rural Settlement of Roman Britain: an online resource* [data-set] York,
 Archaeology Data Service [distributor], <u>https://doi.org/10.5284/1030449</u> (accessed 10
 September 2021)
- Bland, R., Chadwick A., Ghey, E. Haselgrove, C. Mattingly, D.J., Rogers, A. and Taylor, J. 2020 *Iron Age and Roman Coin Hoards in Britain* Oxford, Oxbow Books

Brindle, T. 2017 'Coins and markets in the countryside', in Allen, M., Lodwick, L., Brindle, T., Fulford,
M. and Smith, A. New visions of the countryside of Roman Britain Volume 2: The rural economy of Roman Britain London, Britannia Monograph 30, 237–80

Chambers, R.A. 1976 'A Romano-British settlement at Curbridge', Oxoniensia 41, 38-55

- Fowler, E. 1960 'The Origin and Development of the Penannular Brooch in Europe' *Proc. Prehist. Soc.* **26**, 149–177
- Mackreth, D.F. 2011 Brooches of Late Iron Age and Roman Britain Oxford, Oxbow
- Philpott, R. 1991 *Burial practices in Roman Britain. A survey of grave treatment and furnishing AD 43-410* Oxford, Brit. Archaeol. Rep. British Series **219**
- Tyrrell, R. 2015 'Lead weights', in Atkinson, M. and Preston, S.J. (eds) 'Heybridge: A Late Iron Age and Roman settlement, Excavations at Elms Farm 1993-5', *Internet Archaeology* **40**

APPENDIX H: MORTAR

by Peter Banks

Introduction

Six fragments (537g) of lime mortar are recorded from three deposits. The mortar was scanned by context and quantified by count and weight. The assemblage was largely fragmented and in moderate condition.

Lime mortar is widely used in Britain, beginning in the Roman period and commonly up to recent periods. It is rarely dateable in isolation, though Roman dating can be assumed for material from Phase 3.2 pit 2036 (fill 2037) (432g) in Enclosure 11.1 and ditch AY (fill 2071) (38g), both of which contained Roman pottery. Material (67g) from the (Period 1) Middle Iron Age-dated pit 1071 (fill 1072) is intrusive.

APPENDIX I: GLASS

By Peter Banks

Introduction

Eight fragments (134g) of glass were recorded from five deposits. The glass was scanned by context and quantified by count and weight. Recording of the glass assemblage was direct to an Access database. The majority of the glass assemblage was highly fragmented and in moderately-poor condition and mainly composed of material datable to the post-medieval/modern periods.

Roman

Phase 3.2 kiln AL (fill 2238) produced an abraded rim fragment from a vessel of blue-green glass (1 fragment, 2g). The rim has been rolled over to be of tubular form and comes from a vessel *c*. 160mm in diameter. It might derive from a number of tableware vessel forms, with a 'shallow bowl with out-splayed tubular rim' (Price and Cottam 1998, 110–11; Fig. 27, no.1) perhaps the most likely. Such forms are dateable in the 2nd to 4th-century AD range, with the use of blue-green glass in this instance making pre-4th AD century dating probable, although its abraded condition suggests this fragment may be residual.

Post-medieval/modern

Seven fragments of glass date to the post-medieval or modern periods. Two fragment of green bottle glass, probably from a wine or spirits bottle, are recorded as unstratified. One of the fragments has a trailed 'string' rim typical of vessels produced between the mid-17th and mid-18th centuries. Two intrusive fragments of transparent bottle glass are recorded from Period 3 posthole 7005 (fill 7006). One intrusive fragment of blue-green bottle glass is recorded from Period 4 ditch 1144 (fill 1146). Period 6 ditch N (fill 1033) produced one fragment of transparent window glass and one fragment of green bottle glass.

Illustration Catalogue

• Shallow bowl with out-splayed tubular rim. Phase 3.2 Kiln 2237 (fill 2238). Fig. 27

References

Price, J. and Cottam, S. 1998 Romano-British glass vessels: A Handbook York, Counc. Brit. Archaeol.

APPENDIX J: CERAMIC BUILDING MATERIAL

By Peter Banks

Introduction

A total of 16 fragments (700g) of ceramic building material (CBM) were recorded from nine deposits. The assemblage was scanned by context and quantified by count and weight. The ceramic building material was highly fragmented and in moderately poor condition.

Roman

Three fragments (105g) of CBM, based on their fabric and firing, probably date to the Roman period. They are made in fine or medium sandy fabrics with clay pellet inclusions. One fragment of tile is recorded from Phase 3.2 layer L2 (2143) and two small, unidentifiable, fragments from Phase 3.2 ditch BT (fill 6315), Enclosure 10.1, and Phase 3.3 ditch AT (fill 2192), Enclosure 16.1.

Post-medieval/modern

A total of 13 fragments (595g) of CBM date to the post-medieval or modern periods. They comprise fragments in medium or fine sandy fabrics, some with calcareous or clay pellet inclusions. Six fragments of modern floor or wall tiles, made in refined white or red stoneware fabrics with white or red-brown glazed exteriors, are recorded from subsoil (6357) in Area F, modern dump layer 8003 and Phase 3.2 ditch CV (fill 6036) defining Sub-enclosure 9.3. Modern dump layer 8003 also produced a fragment of post-medieval or modern brick. Two roof tiles are recorded as unstratified. The remainder of the assemblage is undiagnostic of form/class.

APPENDIX K: CLAY TOBACCO PIPE

By Peter Banks

Introduction

Four fragments (18g) of post-medieval or modern clay-tobacco pipe are recorded from three deposits.

Four stem fragments were recovered from subsoil 4001 and undated tree-throw pit 6090 (fill 6091) and modern dump deposit 8003. In the absence of diagnostic features, such as bowl form or makers' marks, the clay pipe can only broadly be dated to the late 16th to late 19th centuries.

APPENDIX L: STONE

by Ruth Shaffrey

Introduction

A total of 39 items of worked or utilised stone (37 burnt, two worked) was recovered. The two worked items, both quern fragments from Roman Phase 3.2 deposits, are described below. The burnt stone (1.9kg) was recovered from 13 deposits. This material includes fragments that have been exposed to extremes of heat and have been turned pink as a result, some that has been heated and rapidly cooled, so that it is cracked or fractured, and one piece that is blackened through exposure to open fire.

Catalogue of worked stone

- Lower rotary quern. Old Red Sandstone. Edge fragment of quern with tapered profile. The base is roughly flat and coarsely pecked whilst the sides are straight, vertical and roughly pecked. The grinding surface has some traces of pecking but is mostly worn smooth. The centre does not survive, but the grinding surface slopes up, especially towards the centre, suggesting a lip around the socket/hole. Measures 380mm diameter x 42-76mm thick. Weight 3246g. Phase 3.2 Ditch BT (fill 6385). *Not illustrated.*
- 2. Possible rotary quern. Faringdon Greensand. Fragment of circular item, slightly tapered in thickness to the edge, which if a rotary quern, would suggest a lower stone. The edges are straight and vertical and roughly shaped. One face is roughly pecked and the other has some wear to it. It's not certain that this is from a quern: it may have served a structural purpose. Measures 75mm thick x indeterminate diameter. Weight 1326g. Phase 3.2 Ditch AB (fill 2058). Not illustrated.

APPENDIX M: ARCHAEOMETALLURGICAL DEBRIS

By David Dungworth

Introduction

The industrial debris was examined visually and recorded following standard guidance (Historic England 2015). The material was weighed and selected fragments were photographed.

Results

The industrial debris includes 3151g of metalworking debris (Table M1), the majority from Period 1 (Middle Iron Age) and Roman Phases 3.1–3.3 phased deposits. The assemblage includes three smithing slag cakes, from Middle Iron Age Period 1 pit 6316 and Roman Phase 3.3 ditch AT, although these are rather lighter than usual, and the identification is a little uncertain.

The remaining ironworking slag was recovered from Middle Iron Age Period 1 ditches BU and DN, Late Iron Age to Early Roman Period 2 ditch B, a medieval furrow and post-medieval/Modern ditch N/U. It comprises non-diagnostic fragments, that is slag that is fayalitic and was clearly produced by ironworking. However, the fragments lack clear features that would allow the identification of the exact process which produced them. These slags could have been produced by either smelting or smithing. The absence of any smelting slags makes it quite likely that some or even all of the non-diagnostic slag was produced during iron smithing.

Table M1. Weight of slag and related materials (Quantities by weight in grams shown by Stratigraphic period)

Туре	Unph.	Period 1	Period 2	Phase 3.1	Phase 3.2	Phase 3.3	Period 4	Period 5	Total (g)
Slag Cake		684				126			810
Non-diag. ironworking slag	14.2	1620	244				47.6	16.9	1942.7
Fired Clay						6.6			6.6
Vitrified fuel ash	1.4	131	23.1	159	24.2				338.7
Vitrified clay		4.4							4.4
Coal		4	3.9					18.7	26.6
Unidentified			0.0		26.1			10.7	26.1
Totals	15.6	2443.4	271	159	750.3	132.6	47.6	35.6	3155.1

The vitrified fuel ash represents a non-metallurgical waste material formed in a fire. It is very light, due in large part to the presence of air holes (vesicles) but also to some extent because of the low levels of metals (such iron). The vitrified fuel ash displays a range of colours but the most obvious (pale grey to creamy) are likely to represent compounds formed at the surface as the vitrified fuel ash weathered. Where fresh fracture surfaces are visible, the vitrified fuel ash tends to be greenish. Vitrified fuel ash is

usually amorphous to such an extent that it is not possible to see the original orientation when it formed. The surface morphology displays no flow textures: it is unlikely that this material was ever hot enough to flow under its own weight.

Vitrified fuel ash occasionally contains inclusions; and these usually comprise small lumps of fired clay, daub, or possibly soil. Almost all organic fuels (such as wood, peat, dung, charcoal, etc) contain a small proportion of inorganic elements (silicon, aluminium, calcium, potassium, etc). In many cases these will remain as ash; however, if the fire is hot enough this may vitrify (the temperature required will depend on the chemical composition of the ash, Dungworth 2016; HE 2015, fig. 54). One suggested origin of vitrified fuel ash is haystacks (Biek 1977; Nickolls 1977). The presence of earthy inclusions suggests the conflagration of wattle and daub structures. The detailed examination of similar material from Beckford (Dungworth and McDonnell forthcoming) suggests that vitrified fuel ash was produced by reactions between wood ash and soil and/or ceramic material (possibly daub) at temperatures between 850°C and 1150°C. Mack and McDonnell also rule out a metallurgical association but suggest a slightly higher temperature of formation (Mack and McDonnell 2006). The recovery of substantial amounts of vitrified fuel ash slag is a phenomenon often noted on prehistoric sites (Andrews 2009; Biek 1978; Cowgill *et al.* 2006; Grimes and Close-Brooks 1993; Lock *et al.* 2005; McDonnell 1986; Salter 2005; Young 2011). It is possible that the vitrified fuel ash described here corresponds to the 'Iron Age Grey' proposed by Cowgill and colleagues (Cowgill *et al.* 2001).

Discussion

The material examined suggests that iron smithing took place as early as the Middle Iron Age and probably continued into the Roman period; however, the quantity of material recovered is quite modest and suggests occasional repair rather than production. The vitrified fuel ash (a material which is most commonly recovered from Iron Age sites) was produced by a non-metallurgical high-temperature activity but the exact cause remains uncertain.

References

Andrews, P. 2009 'Slag', in Wright J. et al. (eds) 2009, 70

- Biek, L. 1977 'Slags and allied material', in Rahtz, P.A. and Greenfield, E. (eds) 1977, 357-359
- Biek, L. 1978 'Note on the scientific examination', in Drury, P.J. (ed.) 1978, 114-115
- Collard, M. and Harvard, T. 2011 'The prehistoric and medieval defences of Malmesbury: archaeological investigations at Holloway, 2005-2006', *Wiltshire Archaeol. Natur. Hist. Mag.* **104**, 79–94
- Cowgill, J., Mack, I. and McDonnell, J.G. 2006 'Slag and related material', in Jones, L. *et al.* (eds) 2006, 164–166

Drury, P.J. 1978 Excavations at Little Waltham 1970–71 London, Counc. Brit. Archaeol.

Dungworth, D. 2016 *Stanwick, Northamptonshire: Assessment of industrial debris,* Research Report **10/2016** Portsmouth, Historic England

Dungworth, D. and McDonnell, J.G. forthcoming 'Fuel ash slag', in Wills, J. (ed.)

Grimes, W.F. and Close-Brooks, J. 1993 'The excavation of Caesar's Camp, Heathrow, Harmondsworth, Middlesex, 1944', *Proc. Prehist. Soc.* **59**, 303–360

HE (Historic England) 2015 Archaeometallurgy: Guidelines for best practice London, Historic England

- Jones, L., Woodward, A. and Buteaux, S. 2006 Iron Age, Roman and Saxon Occupation at Grange Park. Excavations at Courteenhall, Northamptonshire Oxford, Archaeopress
- Lock, G., Gosden, C. and Daly, P. 2005 Segsbury Camp. Excavations in 1996 and 1997 at an Iron Age hillfort on the Oxfordshire Ridgeway Oxford, University of Oxford School of Archaeology
- Mack, I. and McDonnell, J.G. 2006 'Analysis of the Iron Age Grey slag', in Jones, L. *et al.* (eds) 2006, 166–172
- McDonnell, J.G. 1986 *Report on slag recovered from excavations at Beckford, Worcestershire,* Ancient Monuments Laboratory Report **64/1986** London, English Heritage
- Nickolls, L.C. 1977 'Note on some slags low in iron', in Rahtz, P.A. and Greenfield, E. (eds) 1977, 360
- Rahtz, P.A. and Greenfield, E. 1977 Excavations at Chew Valley Lake London, HMSO
- Salter, C. 2005 'The slag-like material', in Lock, G. et al. (eds) 2005
- Wills, J. forthcoming Excavations at Beckford, Worcestershire, 1972-1979
- Wright, J., Leivers, M., Seager Smith, R. and Stevens, C.J. 2009 Cambourne New Settlement. Iron Age and Romano-British settlement on the clay uplands of west Cambridgeshire Wessex Archaeology Reports 23

Young, T.P. 2011 'Possible metallurgical residues', in Collard, M. and Harvard, T. (eds) 2011, 89-90

APPENDIX N: WORKED BONE

By Katie Marsden

A single fragmentary worked bone item (1g), Ra. 9, was recovered from Phase 3.2 Kiln AL (fill 2242). It consists of a portion of the shaft from a needle or hairpin, probably of Roman date.

APPENDIX O: ANIMAL BONE

By Matilda Holmes

Introduction

A sizeable assemblage of approximately 6400 (55,521g) 2800 animal remains was recovered from features spanning the Middle Iron Age to medieval periods. After assessment (CA 2020), 2800 fragments were deemed suitable for further analysis based on good preservation and analytical potential. Just over 1000 were identified to taxon, the majority from Middle Iron Age and 2nd to 4th century contexts. Bones were well preserved but fragmentary and provide a good addition to the story of Iron Age and Roman Oxfordshire. The inclusion of sieved samples further maximises the available data. As described in the assessment of the animal remains, this report aims to investigate the diet of the inhabitants and the local animal economy as well as potential insights into site formation processes and the role of non-food animals.

Methodology

Bones were identified using the author's reference collection. Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/goat', unless a definite identification (Zeder and Lapham 2010; Zeder and Pilaar 2010) could be made. Horses, donkeys and mules were separated based on long bone measurements and teeth (Eisenmann 1986; Johnstone 2006) and dogs and foxes using metapodial measurements (Ratjen and Heinrich 1978). Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (micro – rat/ vole size; small – cat/ rabbit size; medium – sheep/ pig/ dog size; or large – cattle/ horse size). Ribs were identified to size category where the head was present, vertebrae were recorded when the vertebral body was present, and maxilla, zygomatic arch and occipital areas of the skull were identified from skull fragments. Due to problems with the identification of post cranial bones of micro-mammals, only their mandibles and maxillae were identified to taxa.

Tooth wear and eruption were recorded using guidelines from Grant (1982) and Payne (1973), as were bone fusion, metrical data (von den Driesch 1976), anatomy, side, zone (Serjeantson 1996) and any evidence of pathological changes, butchery (Lauwerier 1988) and working. The condition of bones was noted on a scale of 0–5, where 0 is fresh bone and 5, the bone is falling apart (Lyman 1994, 355). Other taphonomic factors were recorded, including the incidence of burning, gnawing, recent breakage and refitted fragments. All fragments were recorded, although articulated or associated fragments were entered as a count of one, so they did not bias the relative frequency of species present. Details of Associated Bone Groups (ABGs) were recorded in a separate table. Where bones from both sides of the body of a single individual could be identified from an ABG, only one set of bones were measured. A number of sieved samples were collected but because of the highly fragmentary nature of such samples a selective process was undertaken, whereby fragments were recorded only if they could be identified to species and/or element or showed signs of taphonomic processes.

Bones were only included in analysis if they came from features that could be securely dated. Quantification of taxa used a count of all fragments (NISP – number of identified specimens). Mortality profiles were constructed based on tooth eruption and wear of mandibles (Grant 1982; Jones and Sadler 2012) and bone fusion (O'Connor 2003). Horse ages were calculated from crown heights (Levine 1982). Redistribution of different carcass parts was investigated, whereby the more robust, dense elements are most likely to survive in terms of preservation if whole carcasses were disposed of (after Brain 1981). Cattle and sheep/ goats were sexed on the basis of the morphology of pelves (Davis 2000; Greenfield 2006) and pigs by their canines (Schmid 1972). Wither and shoulder heights were calculated using indices from Harcourt (1974), Kiesewalter (1888) Matolcsi (1970) and Teichert (1975).

Taphonomy and Condition

Bones were in good to fair condition (Table O1), though highly fragmentary with a large proportion of recently broken bones (between 33% and 54% of the assemblage) and mandibles as well as refitted fragments, indicating that they were friable upon excavation. Roughly 20% of the bones exhibited canine gnawing, further indicating that they were not always buried immediately following discard but were available for dogs to chew. This is exemplified by the ratio of loose mandibular teeth compared to those remaining in the mandible. Teeth are firmly rooted in the mandible and will tend to be lost only after a long period of time when the connective tissue has broken down, following re-deposition or disturbance.

There was very little evidence for butchery or burning, although observations of both indicates processing of the animal carcasses took place. There were no obvious deposits of primary butchery, skin-processing or craft-working waste, although a single equid (horse or donkey) metacarpal had been polished and smoothed along the shaft and at the proximal end. Several primary contexts were evident from ABGs and unfused epiphyses recovered alongside their corresponding metaphyses, indicating deposits that saw little post-depositional movement. The latter were recorded from Period 1 pit 6316 (context 6318) and Phase 3.3 ditch AT (context 2188, fill 2192) and skeleton 6085 (context 6087). ABGs were recorded as follows:

- ABG 1: Period 1 Middle Iron Age ditch BU, Enclosure 2.1, contained the partial skeletons of at least three adult dogs: Context 6375 lumbar vertebrae, sacrum, pelvis, femora and tibia; context 6344 vertebrae, ribs, scapula, humeri, radius, ulna, metacarpals, carpal, femur, tibia, tarsal, first and second phalanges, but no head or third phalanges. Cut marks on the left tibia and right astragalus indicate dismemberment of lower hind legs, consistent with absence of metatarsals and there are dismembering cuts on both distal humeri; context 6374 dog humerus, ulnae, radius, tibia, femur and ribs.
- ABG 2: Period 2 Late Iron Age to Early Roman ditch B, Enclosure 5.1, contained an adult female cattle skeleton (skull, mandibles, most vertebrae, ribs, scapula, pelvis, humeri, radii, ulnae, metacarpals, metatarsals, tarsals, carpals, first to third phalanges) buried in cut 1059.

Pathologies of the metapodials possibly indicate draught use. There was no evidence of butchery or skinning, and all extremities were recovered, including head, tail and foot bones. It is therefore possible that the animal died of a disease and was not considered fit for consumption, or that it was a prized animal that was deliberately buried in the large boundary ditch of Enclosure 5.1.

- ABG 3: Phase 3.1 Early Roman ditch AP, Enclosure 8.1, contained two groups of cattle bones from context 2195 comprising three cervical vertebrae and a tibia and associated tarsals. Both are likely food waste. The tibia had been disarticulated at the proximal end and the tibia and calcaneus had been gnawed by dogs or foxes, indicating that they were possibly cooked and the meat consumed, before the left-over bones were given to dogs to chew, though not long enough to be completely disarticulated. These may be from the same animal; the tibia was fully fused but the vertebrae were unfused which could be from an adult but not elderly animal.
- ABG 4: Phase 3.2 Middle to Late Roman ditch BT (context 6065) contained two articulating canid (dog or fox) lumbar vertebrae and a group of large cattle foreleg bones (radius, metacarpal, first and second phalanges) that probably came from the same individual..
- ABG 5: Phase 3.3 Late Roman ditch AY (context 2086), Enclosure 11.1, included a partial subadult equid skeleton including a left humerus, pelves and right hind leg (femur, tibia, tarsals and metatarsal), many of which had been gnawed.
- ABG 6: Phase 3.2 Middle to Late Roman pit 2036, in Sub-enclosure 11.2, contained disarticulated bones (ribs, radii, ulna, femur and tibia) of a juvenile sheep/ goat skeleton.
- ABG 7: Phase 3.3 Late Roman ditch AT, Enclosure 16.1, contained the partial skeleton (vertebrae, ribs, scapula, pelvis, humeri, radii, ulnae, carpals and metacarpal, femur, astragalus and first phalanx) of a juvenile sheep/ goat less than six months of age (context 2088).
- ABG8: Phase 3.3 Late Roman ditch AT, Enclosure 16.1, contained the hind leg (pelvis, femur and tibia) of a small dog (context 2006).

Period 1: Middle Iron Age (400–100BC)

A moderate assemblage of animal remains were recovered from ditches as well as pits and a posthole (6416) (Table O2). The largest sample came from Enclosure 2.1 ditch BU, which contained all the canid remains, including the three dog ABGs described above, and suggests that these animals were routinely buried at the site boundary even, as in the case of one animal, if they had been skinned and partially dismembered first. Animal remains were distributed fairly evenly throughout the various features, with cattle the most abundant, followed by sheep/ goats then horses and pigs. The exceptions to this are ditches CT and CD in which sheep/ goats were most abundant, but not to a great extent and probably reflects normal variation between deposits. As well as the domesticates recovered, a few

micro-mammal remains and a fragmentary carpometacarpal from a small turdidae (e.g. thrush or blackbird) were recorded from samples (Table O3).

The bones and teeth from all major domesticates (cattle, sheep/ goats, pigs and equids) were recorded in order of expected preservation (Table O4), suggesting that whole animals were culled, processed and consumed on site. Although mandibles are the densest elements and are expected to survive best, they were particularly abundant for sheep/ goats, where thirteen were recovered from ditches BD, BU (4), CD, CG, CN (2), CT, CW and CY and pit 6188. All four from ditch BU came from context 6344, which provides a bias that accounts for the apparent over representation.

Cattle were culled at a mixture of ages, from young adult to elderly (Tables O5 and O6) suggesting they were important for secondary products such as traction, milk and breeding, with the surplus culled early for meat. All four pelves that were complete enough to sex came from females. Cattle would have stood approximately 1m tall (Table O7), which is typical of animals from this period (Wilson *et al.* 1978). Pathological changes were observed on a pelvis exhibiting eburnation of the acetabulum, which can be caused by age-related wear and tear or the use of animals for traction. A mandible with alveolar recession in the area of the 1st molar was recorded at stage 5 (Levitan 1985), where the tooth had fallen out and the alveolar bone completely healed.

Sheep were also culled at all ages (Tables O5 and O6), from immature to elderly, again implying their use for a mixture of meat and secondary products (wool, milk, manure and breeding). Two mandibles came from sheep with alveolar recession, one at stage 3 and the other at stage 1 (Levitan 1985). A single wither height could be calculated, which produced evidence for a small animal approximately 49cm tall. Pigs were culled prior to maturity (Tables O5 and O6), reflecting their primary use for meat. Several canines were available to sex, of which two were male and one female. The porous bones of perinatal calves and sheep/ goats were recorded in the fusion data suggesting they were bred close by.

Butchery of dogs and horses was evident, the former described above on ABG1 in ditch BU, and the latter from a disarticulated tibia that had been chopped in half through the shaft, potentially to aid disarticulation or to remove marrow. It had also been gnawed. All canid remains that could be identified to species were dog rather than fox. Two individuals would have been approximately 53cm and 57cm tall at the shoulder.

Two mandibles could be identified as horse rather than donkey and were ponies around 12.2 hands high (Table O7). Nearly all horse long bones were fused, except for a femur, indicating the presence of an animal that died prior to reaching skeletal maturity. A horse metacarpal had massive exostosis affecting the anterior aspect of the distal shaft and a 2nd premolar had a substantial bevel indicating heavy bit wear (Photograph O1). This reflects the use of horses for riding or traction and has parallels

from the Irish Iron Age site at Newgrange, albeit later than this example (Robin Bendrey pers. com. and Bendrey *et. al.* 2013).

Period 2: Late Iron Age to Early Roman (100BC-AD43)

A small assemblage of animal remains was recovered as small quantities from several ditches (AF, AO, B, C, D, G, J, L, M and W) as well as pits (2015 and 1014), postholes (2034 and 2049) and structure AG. Remains of cattle and sheep/ goat were distributed throughout these features (Table O8) and the cattle ABG (ABG2) described above was found just outside the south-eastern corner of Enclosure 5.1. Pig, canid and equid bones and teeth were more common in ditches, notably enclosure ditches AF and J. Sheep/ goats were more commonly recorded in this period, followed by cattle (Table O3). Very few other taxa were recorded, but they included pigs, equids, canids as well as micro-mammals and frogs/ toads from the environmental samples.

Bones from cattle and sheep/ goats came from all parts of the carcass, indicating that there was no redistribution of carcass parts. There is little mortality data, though long bone fusion implies that cattle were mostly adult (Table O6) and the porous bone from a perinatal calf was also recorded. The cattle ABG (ABG1) was a mature female and would have stood approximately 1m tall. Slightly more data exist for sheep/ goats, consistent with culls of animals at all ages (Tables O5 and O6), suggesting that some were kept for secondary products, while the surplus were culled younger for meat. No mortality data were available for pigs, though one canine came from a male. All canid and equid bones were fused.

Period 3: Phase 3.1 Early Roman (1st to 2nd Century)

A few animal remains were recovered from Enclosure 8.1. A relatively large number of cattle came from ditch AP (ABG3) compared to ditch AD (Table O8), but the sample size is too small to tell if this is a real trend. Cattle were most common, followed by sheep/ goats and equids with a few pigs and canids (of which one tooth was from a dog rather than a fox) also present (Table O3).

The small amount of ageing data indicates a high proportion of mature cattle (those at wear stage H and the final fusion stage), with a few culled before reaching adulthood (Tables O5 and O6). A single cattle pelvis was female in morphology. Very few mortality data exist for sheep or pigs, and all equid bones were fused.

Period 3: Phase 3.2 Middle to Late Roman (2nd to 4th century AD)

The largest assemblage came from the Middle to Late Roman period (Table O3). Cattle and sheep/ goat remains were recovered in similar proportions, as were pigs and equids, though fewer in number, with a few canids also identified. Isolated bones of cat, red deer (hunted) and domestic fowl were recovered, and the samples produced micro-mammals (including field vole), frogs/ toads (including frogs) and fish (including eels). The majority of animal remains came from ditches, particularly ditch BT defining the northern side of Enclosures 9.1 and 10.1, which contained over a third of all material from these features (Table O9). The contents of all features were homogenous, with nothing to imply that different areas were used to dispose of specific waste.

Bones came from all parts of the carcass, roughly in order of expected preservation (Table O4), albeit with a slight over representation of cattle forelimb elements (humeri and radii) and pelves. This suggests a bias towards good quality food waste, but again no concentrations were observed in any one feature or group of features.

Cattle were culled as sub- and young adults for meat (at wear stages E and F), and as adult and elderly animals (stages G and H) that would have been used for milk, traction or breeding (Table O5), though younger animals are represented in the fusion data (Table O6). The porous bones of perinatal cattle were also present, implying that they were bred close by. Of the four sexed pelves, three were female and the other probably male. Two long bones were complete enough to calculate shoulder heights which indicated animals just over 1m tall (Table O7). Two third molars from different animals shared a congenital trait, where the hypoconulid was reduced, and a third had been worn away as a result of malocclusion of the upper tooth row.

Both tooth wear and fusion data (Tables O5 and O6) indicate that sheep/ goats were culled as young adults and older adults (wear stages F and G or H). One pelvis was morphologically consistent with a female. A sheep/ goat mandible had alveolar recession between the permanent 4th premolar and third molar at stage 1 (Levitan 1985). Pigs were all juvenile when culled (Tables O5 and O6), and four canines were recovered, three of which were male and one female.

All canid and equid bones were fused. Horses were pony sized, ranging from 12.1 to 13.1 hands high (Table O7). Teeth were consistent with horses rather than donkeys, and dogs (rather than foxes) were identified from canid metacarpals. One horse second premolar had a bevel on the front edge consistent with bit wear (Bendrey 2007). Several tooth heights were taken, indicating that horses were adult, ranging from 8 to over 15 years of age. The red deer was represented by a fused first phalanx that indicates an animal that was hunted.

Period 3: Phase 3.3 Late Roman (4th century AD)

A few cattle and sheep/ goat remains were recovered in similar quantities from ditches AT and AW. The former included further remains of pigs, equids, canids and red deer (Table O3). Context 2006 from ditch AT is worth noting because, although it is a small sample, it includes a fragment of red deer metacarpal, horse tooth and dog upper hind legs. The latter included a cut mark on the distal shaft of the tibia potentially indicating removal of meat or disarticulation. A canid humerus from context 2088 is probably from a fox. The backfill of inhumation 6085 also included a few fragments of cattle, sheep/ goat and equid bones and teeth.

A few mortality data were available for cattle and sheep/ goat (Tables O5 and O6), consistent with the use of cattle for meat, evidenced by the presence of subadult animals at wear stage D and unfused

long bones, as well as adults used for small-scale secondary products (at wear stage G and fused final stage long bones). Sheep remains were more consistent with an emphasis on meat production as they were culled prior to reaching maturity.

Period 4: Medieval

A few bones and teeth from the major domesticates were recovered from medieval ditches (Table O3).

Discussion

Only the Period 1 Middle Iron Age and Roman Phase 3.2 have large enough sample sizes to provide reliable zooarchaeological evidence to make robust temporal comparisons on a site level, and within the wider region. However, the Late Iron Age to Early Roman Period 2 will also be included to provide some continuity between the two settlement foci when discussing trends in diet, status and the animal economy.

The proportion of cattle and sheep varies over time, although pigs remain a fairly consistent, if infrequent, find (Graph O2). Cattle were more commonly recorded in the Middle Iron Age, to be replaced by sheep/ goats in the Late Iron Age to Early Roman period, with similar proportions of the two observed in the Roman Phase 3.2 deposits (Graph O2). Despite these trends, beef would probably have been the staple of the meat diet in all periods, with pork an occasional treat. While evidence for carcass processing of dogs and horses is present in the Middle Iron Age and Early Roman periods, they were unlikely to have contributed much to the diet given their low proportions (see below).

Hunted animals and domestic fowl are scarce, and only appear in the Roman Phase 3.2 and Phase 3.3 assemblages. This is not unusual, as the consumption of venison and chicken is rare at Middle Iron Age settlements (Hambleton 2008, 25, 35). There is nothing to suggest that those living in the area in any period were of elevated status. The presence of high proportions of wild mammals (hare and deer), pigs and birds observed at villas such as Fishbourne (Grant 1971) are missing from this site, which is more consistent with a subsistence-level diet based on livestock kept on site.

The Middle Iron Age is traditionally a period characterised by sheep farming (Hambleton 1999, figure 27), and the relatively high proportion of cattle observed at Swan School and Meadowbrook College is unusual in terms of the national trend and other sites in the county (Table O10). The abundance of sheep in the Late Iron Age to Early Roman period may be a result of the small sample size and is certainly at the high end of the species ratios observed at other sites in the area, though not the greatest. As at Swan School and Meadowbrook College, similar proportions of cattle and sheep can be observed at all but one farmstead sites in Oxfordshire in the 2nd to 4th century, with greater proportions of cattle typical of villas (Allen *et al.* 2015).

The economy of the site was largely geared towards mixed production of secondary products with a few animals that were surplus to requirement culled early for meat. The self-sufficient nature of the animal economy is reflected in the presence of elements from all parts of the carcass, generally in order

of expected preservation. This implies that animals were culled, processed, consumed and disposed of on site, with little evidence for redistribution of carcass parts either within the site or exported elsewhere. There does, however, appear to be a predominance of meat-bearing cattle fore limb elements in Roman Phase 3.2, which implies some redistribution of cattle shoulder joints into this area of the site, potentially reflecting waste from a communal meal, or a household of some status.

An increase in the size of livestock during the Roman period is well established (Albarella *et al.* 2008). This is evident in the comparison of metrical data between the Middle Iron Age and 2nd to 4th century (Phase 3.2), which sees larger cattle and sheep/ goats in the later period (Graph. O3), comparable with measurements of astragali and tibiae recorded from Elms Farm, Heybridge where imported, larger cattle have been identified (Albarella *et al.* 2008). It was also possible to observe an increase in the size of cattle at Swan School and Meadowbrook College in the Roman period by comparing the size of tibiae (Graph O3), unfortunately metrical data were not abundant enough for further comparisons of taxa or elements.

The deposition of several canids and equids as ABGs implies that they were treated differently to other domesticates. Butchery evidence suggests that some were skinned and potentially subject to meat removal, but if so, this was the exception rather than the norm. The deliberate placement of animals in specific features, whether the dogs in Middle Iron Age boundary ditch BU (ABG1), the cow in Late Iron Age to Early Roman pit 1059 (ABG2) just outside Enclosure 5.1, Roman horse skeleton from ditch AY (ABG5) or the dog and sheep skeleton from ditch AT (ABG 7 and 8), indicates a contrasting attitude towards these animals than the majority of the food refuse comprising disarticulated bone dumps. They may represent opportune burials in large features away from the focus of the settlement, but a less functional explanation may include the careful placement of working companions or prized animals respected in life. Even the apparently skinned dog may represent the act of keeping the pelt and head as a means of remembrance.

Summary

The human-animal relationships affecting the inhabitants of the settlements excavated at Swan School and Meadowbrook College appear to have changed little with time. Beef would have dominated the meat diet, followed by lamb, with some added pork on occasion and the rare addition of chicken and venison in the Roman period. Daily life would probably have revolved around tasks relating to a subsistence economy where cattle and sheep were used for arable, wool and milk production to satisfy needs at a household level. Animals surplus to requirements would be culled as they reached maturity and processed and consumed on site.

Despite the continuation of many aspects of farming life, some evidence for the influence of new Roman opportunities is apparent from the increase in size of cattle and sheep/ goats implying imported stock, and the introduction of chickens.

References

- Albarella, U., Johnstone, C. and Vickers, K. 2008 'The development of animal husbandry from the Late Iron Age to the end of the Roman period: a case study from South-East Britain', *J. Archaeol. Sci.* **35 (7)**, 1828–1848
- Allen, M., Blick, N., Brindle, T., Evans, T., Fulford, M. Holbrook, N., Lodwick, L., Richards, J.D. Smith,
 A. 2018 *The Rural Settlement of Roman Britain: an online resource* [data-set] York,
 Archaeology Data Service [distributor], <u>https://doi.org/10.5284/1030449</u> (accessed 10
 September 2021)
- Bendrey, R. 2007 'New methods for the identification of evidence for bitting on horse remains from archaeological sites', *J. Archaeol. Sci.* **34**, 1036–1050
- Brain, C. 1981 *The Hunters or the Hunted? An Introduction to African Cave Taphonomy* Chicago, University of Chicago Press
- Bendrey, R., Thorpe, N., Outram, A. and Van Wijngaarden-Bakker, L. H. 2013 'The origins of domestic horses in northwest Europe: new direct dates on the horses of Newgrange Ireland', *Proc. Prehist. Soc.* **79**, 1–13
- Davis, S. 2000 'The effect of castration and age on the development of the shetland sheep skeleton and a metric comparison between bones', *J. Archaeol. Sci.* **27** (5), 373–390
- Eisenmann, V. 1986 'Comparative osteology of modern and fossil horses, half-asses, and asses', in Meadow, R. and Uerpmann, H-P. (eds) *Equids in the Ancient World*, 67–116
- Grant, A. 1971 'The Animal Bones', in Cunliffe, B.W. (ed.) *Excavations at Fishbourne Volume II: The Finds* London, Society of Antiquaries, 377–88
- Grant, A. 1982 'The use of toothwear as a guide to the age of domestic ungulates', in Wilson, B.,
 Grigson, C. and Payne, S. (eds) Ageing and Sexing Animal Bones from Archaeological Sites
 Oxford, Brit. Archaeol. Rep. British Series 109, 91–108
- Greenfield, H. 2006 'Sexing fragmentary ungulate acetabulae', in Ruscillo, D. (ed.) *Recent Advances in Ageing and Sexing Animal Bones* Oxford, Oxbow, 68–86
- Hambleton, E. 1999 *Animal Husbandry Regimes in Iron Age Britain* Oxford, British Archaeological Reports British Series **282**
- Hambleton, E. 2008 *Review of Middle Bronze Age Late Iron Age faunal assemblages from Southern Britain* Swindon, English Heritage Research Department Report Series **71-2008**

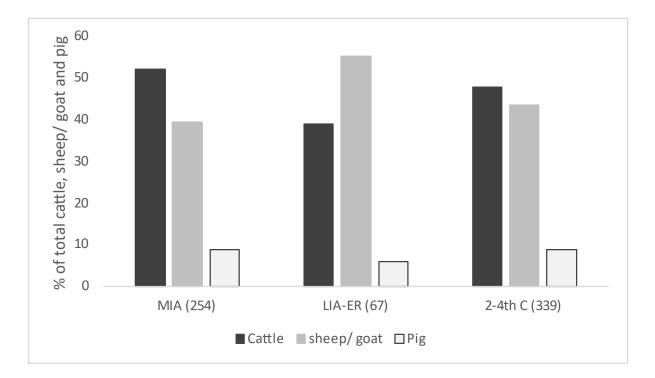
Harcourt, R. 1974 'The dog in prehistoric and early historic Britain', J. Archaeol. Sci. 1, 151–175

- Johnstone, C. 2006 'Those elusive mules: investigating osteometric methods for their identification', in Mashkour, M. (ed.) *Equids in Time and Space* Oxford, Oxbow, 183–191
- Jones, G.G. and Sadler, P. 2012 'Age at death in cattle: methods, older cattle and known-age reference material', *Environmental Archaeology* **17**, 11–28
- Kiesewalter, L. 1888 Skelettmessungen am Pferde als Beitrage zur theoretische Grundlage der Beurteilungslehre des Pferdes Leipzig, Inaugural-Dissertation einer hohen philosophischen Facultät der Universität Leipzig
- Lauwerier, R. 1988 *Animals in Roman Times in the Dutch Eastern River Area* Amersfoort, ROB Nederlandse Oudheden **12**
- Levine, M. 1982 'The use of crown height measurements and eruption-wear sequences to age horse teeth', in Wilson, B., Grigson, C. and Payne, S. (eds) Ageing and Sexing Animal Bones from Archaeological Sites Oxford, Council for British Archaeology 109, 223–243
- Levitan, B. 1985 'A methodology for recording the pathology and other anomalies of ungulate mandibles from archaeological sites', in Feiller, N., Gilbertson, D. and NGA, R. (eds) *Palaeobiological Investigations* Oxford, Brit. Archaeol. Rep. International Series **266**, 41–54
- Lyman, L.1994 Vertebrate Taphonomy Cambridge, Cambridge University Press
- Matolcsi, J. 1970 'Historische Erforschung der Korpergrosse des Rindes auf Grund von ungarischem Knochenmaterial', *Zeitschrift fürTienuchtung und Zuchtungbiologie* **87(2)**, 89–137
- O'Connor, T. 2003 *The Analysis of Urban Animal Bone Assemblages: A Handbook for Archaeologists* York, The Archaeology of York: Principles and methods **19/2**
- Payne, S. 1973 'Kill-off patterns in sheep and goats: The mandibles from Asvan Kale', *Anatolian Studies* **XXIII**, 281–303
- Ratjen, H. and Heinrich, D. 1978 Vergleichende untersuchungen an den metapodien von fuchsen und hunden Kiel, Schriften aus der Archäologischen-Zoologischen Arbeitsgruppe Schleswig-Kiel, Heft 4
- Schmid, E. 1972 Atlas of Animal Bones London, Elsevier Science Publishers
- Serjeantson, D. 1996 'The animal bones', in Needham, S. and Spence, T. (eds) Refuse and Disposal at Area 16 East Runnymede: Runnymede Bridge Research Excavations London, British Museum Press 2, 194–223

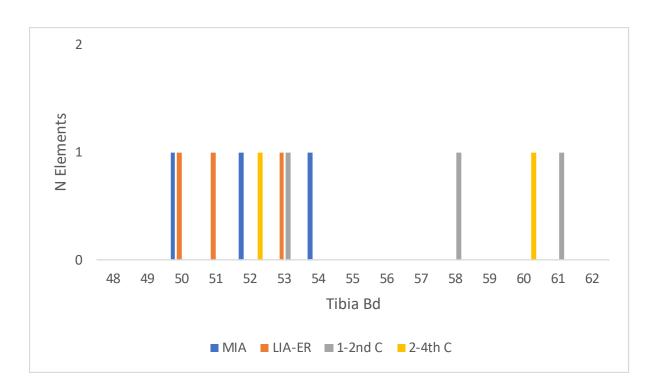
- Teichert, M. 1975 'Osteometrische Untersuchungen zur Berechnung der Widerristhöhe bei Schafen', in Clason, A.T. (ed.) *Archaeozoological Studies* Amsterdam, North Holland/ American Elsevier, 51–69
- von den Driesch, A. 1976 A Guide to the Measurement of Animal Bones from Archaeological Sites Cambridge, Massachusettes, Harvard University Press
- Wilson, B., Hamilton, J., Bramwell, D. and Armitage, P. 1978 'The animal bones', in Parrington, M. (ed.)
 The Excavation of an Iron Age settlement, Bronze Age Ring Ditches and Roman Features at
 Ashville Trading Estate, Abingdon (Oxfordshire) 1974-1976 Oxford, Counc. Brit. Archaeol. 28, 110–137
- Zeder, M. and Lapham, H. 2010 'Assessing the reliability of criteria used to identify post-cranial bones in sheep, Ovis, and goats, Capra', *J. Archaeol. Sci.* **37**, 2887–2905
- Zeder, M.A. and Pilaar, S. 2010 'Assessing the reliability of criteria used to identify mandibles and mandibular teeth in sheep, Ovis and goats, Capra' *J. Archaeol. Sci.* **37**, 225–242



Photograph O1: Middle Iron Age horse mandible fragment exhibiting a substantial bevel on the 2nd premolar



Graph O2: Changes in the proportion of the main domesticates through time (n)= sample size



Graph O3: Size of cattle tibia Bd (breadth of the distal end) through time

Condition	Period 1: MIA	Period 2: LIA-ER	Phase 3.1: 1-2nd C	Phase 3.2: 2-4th C	Phase 3.3: 4th C
Fresh					
Very good	2	1		8	
Good	115	25	35	159	27
Fair	87	20	18	98	12
Poor	5	4	1	4	
Very poor					
Total	209	50	54	269	39
Refit	46=172	18=55	13=44	59=203	9=23
Fresh break	82	27	18	103	14
Gnawed Loose mandibular	36	7	13	55	7
teeth*	21	7	3	37	5
Teeth in mandibles*	41	6	3	23	5
Butchery	8	2	6	14	2
Burning	2		1	3	1

Table O1: Condition and taphonomic factors affecting the hand-collected assemblage identified to taxa and/ or element. Teeth included where stated

					Ditche	es			Pits	Posthole
	BU	CD	CG	CN	СТ	CW	DK	others		CF
Cattle	39	6	16	7	8	8	6	12	29	1
Sheep/ goat	25	12	12	6	11	2	3	4	17	
Sheep	3		1		2	1			1	
Pig	5	1	3	5	1	1			6	
Equid	8	2	4	3	1	1	1	3	6	
Canid	8									
Total	88	21	36	21	23	13	10	19	59	1

Table O2: Species recovered from major Middle Iron Age features. Individual groups with at least ten bones/ teeth described

Table O3: Species representation (NISP) of hand collected assemblage. H= hand collected; S= samples

Таха	Perio Mi		Perio LIA		Phase 3.1: 1-2nd C	Phase 2-4t		Phase 4th		Period 4: Medieval
	Н	S	Н	S	Н	Н	S	Н	S	Н
Cattle	132	1	26*		24*	162	7	22		1
sheep/ goat	92	2	36	7	12	145*	14	20*	4	
Sheep	8		1			2				
Pig	22	1	4	1	5	30	8	4		
Equid	29		6		16	27*		3		5
Canid	8*		3	1	2	10		5*		
Cat						1				
Red deer						1		1		
Micro-mammal		5		3			31		11	
Field vole							8		1	
Domestic fowl						1				
Turdidae		1								
Frog/ toad				2			23		6	
Frog				2			2		2	
Fish							1			
Eel							4			
Total identified	291	10	76	16	59	379	98	55	24	6
Unidentified mamm										
al	91		6		2	133		8		53
Large mammal	328		80		94	510		65		
Medium mammal	184		60		33	214		44		
Total	894		222		188	1236		172		59

* Associated bone groups included as a count of 1

Table O4: Species representation by anatomical element in order of expected preservation (Epiphysis count), counts of phalanges are adjusted for frequency bias and mandibles are included if they contain the deciduous 4th premolar and/ or permanent molars. Hand collected bones

	Pe	eriod 1: Middle	Iron A	ge		Pha	ase 3.2: 2nd-4t	h Cent	ury
Element	Cattle	Sheep/ goat	Pig	Equid	Element	Cattle	Sheep/ goat	Pig	Equid
Mandible*	1	13	5	1	Mandible*	4	4		3
Metacarpal P	3	2	1	2	Metacarpal P	4	5		2
Metatarsal P	5	5		2	Metatarsal P	2	2		
Humerus D	6	5		2	Humerus D	10	2		
Tibia D	5		1	2	Tibia D	4	3	1	
Radius P	5	2	1	1	Radius P	9	2		3
Pelvis	5	1	1	2	Pelvis	7	3		1
Scapula D	3				Scapula D	1			
Metacarpal D	1	1		3	Metacarpal D	2	1		1
Metatarsal D	1			2	Metatarsal D		1		
Femur P	1	1		1	Femur P	1	2		1
Radius D	1			1	Radius D	5			2
Tibia P	2				Tibia P	2	1		
Femur D	1			1	Femur D	2	1		
Humerus P		1			Humerus P				
1st phalanx	1	1		1	1st phalanx	2		1	1
2nd phalanx	1	1			2nd phalanx	2	1	1	
3rd phalanx	1				3rd phalanx	1			
Total	43	33	9	21	Total	58	28	3	14

Tooth		Ca	ttle			Shee	p/ goat			Pig	
wear stage*	Period 1	Phase 3.1	Phase 3.2	Phase 3.3	Period 1	Period 2	Phase 3.2	Phase 3.3	Period 1	Phase 3.2	Period 4
A											
В											
С					3	1		1	1		
D				1	1	1			1	1	1
E	2		2		2				1	1	
F			1		2	1	4	1			
G	1		2	1							
GH					1	2	2				
н	1	1	3		2						
J	1				1						

Table O5: Tooth wear data for the main domesticates (tooth wear stage after Grant 1982)

Table 06: Fusion data for the major domesticates

	Per	iod		Ре	riod	Ph	ase	Pha	ase		Pha	ase		Pe	riod	Per	iod	Ph	ase		Pha	ise		Per	iod	Pha	ase
Cattle		1			2	3	.1	3.	.2		3.	.3	Sheep		1	2	2	3	.2		3.	3	Pig		1	3	.2
	U	F	%F	U	F	U	F	U	F	%F	U	F		U	F	U	F	U	F	%F	U	F		U	F	U	F
Neonatal	1	7	88		3		4	1	7	88		2	Neonatal		7				7	100		1	Neonatal		1		
Early		21	100		1		4	3	35	92		3	Early	1	9		1		9	100		3	Early	2		2	1
Intermediate	1	6	86		3		3	1	8	89	1	1	Intermediate	1		2	2	4	3	43	1		Intermediate	1		1	
Late	2	3	60	1	1	1	1	2	9	82			Late		1		2	3	1	25			Late			1	
Final	8	5	38		3	5	3	12	4	25	4	1	Final					4	2	33			Final				
Total	12	42		1	11	6	15	19	63		5	7	Total	2	17	2	5	11	22		1	4	Total	3	1	4	1

Period 2: MIA	Cattle Phase 3.1: 1-2nd C	Phase 3.2: 2-4th C	Period 2: MIA	Equid Phase 3.1: 1-2nd C	Phase 3.2: 2-4th C
0.98	1.04	1.04	12.3	12.1	12.1
1.10	1.12	1.09	12.2	12.2	13.1
				12.2	12.2

Table O7: Wither heights calculated on complete long bones from cattle (metres) and equids (hands).Data for other taxa were not available unless directly referred to in the text

Table O8: Species recovered from major Period 2 Late Iron Age/ Early Roman and early Romanfeatures. Individual groups with at least ten bones/ teeth described

Period 2:	Ditches		hes	Pits	Postholes		Ditc	hes
LIA-ER	AF	AO	Others			ER	AD	AP
Cattle	6	1	14	3	1	Cattle	4	20
Sheep/ goat	10	8	9	9		Sheep/ goat	4	8
Sheep					1	Sheep		
Pig	1	1	2			Pig	1	4
Canid	2		1			Canid		2
Equid	2		2	2		Equid	4	12
Total	21	10	28	14	2	Total	13	46

Table O9: Species recovered from major Phase 3.2 2nd-4th century features. Individual groups with at least ten bones/ teeth described

		Ditches									Kiln	Lay	ers	Pits
	AB	AE	AK	AY	во	BT	ΒV	ВX	DB	Others	AL	L1	L2	
Cattle	8	5	5	8	9	48	6	6	15	17	2	20	2	11
Sheep/ goat	2	7	3	10	7	30	16	6	6	16	2	17	3	20
Sheep										2				
Pig	2	4	1	1		6	3	1			1	2	1	8
Equid		1	2	1		9	1		1	7		2		3
Canid						8				1		1		
Cat										1				
Domestic fowl	1													
Red deer						1								
Total	13	17	11	20	16	102	26	13	22	44	5	42	6	42

Table O10: Comparative data from contemporary sites in Oxfordshire. Middle Iron Age data from Hambleton (2008), all others from Allen *et al.* (2015)

Middle Iron Age	Site type	Total N	Cattle	Sheep/ goat	Pig
Tuckwells Pit	Settlement	535	27	71	2
Mingies Ditch	Settlement	1538	34	59	7
Slade Farm	Settlement	178	39	55	6
Halfpenny Lane	Occupation	210	41	51	8
Watkins Farm	Settlement	921	44	47	9
Swan School	Settlement	254	52	39	9

Late Iron Age/ Early Roman	Site type	Total N	Cattle	Sheep/ goat	Pig
Mount Farm, Berinsfield	Farm	113	29	58	12
Whitelands Farm, Bicester	Farm	134	37	52	11
Swan School	Farm	67	39	55	6
Ashville Trading Estate, Abingdon	Farm	710	41	47	12
Barton Court Farm	Farm	951	47	44	10
Woodcote Road, South Stoke	Farm	108	49	44	6
Whitelands Farm, Bicester	Farm	136	50	42	8
Milton Hill North, Milton	Farm	121	54	36	11
Watchfield, Shrivenham	Farm	335	54	39	7
Berrick Salome	Farm	102	57	32	11
Yarnton	Farm	652	58	36	6

2nd-4th C	Site type	Total N	Cattle	Sheep/ goat	Pig
Alfred's Castle, Ashbury	Farm	2015	15	74	11
Asthall	Roadside	309	31	54	15
Castle Hill, Wittenhams	Farm	818	37	48	14
Woodcote Road, South Stoke	Farm	114	40	48	11
Asthall	Roadside	647	45	45	10
Lollingdon Hill, Cholsey	Farm	133	47	47	7
Whitelands Farm, Bicester	Farm	208	47	49	5
Swan School	Farm	339	48	43	9
Shakenoak Farm	Villa	6850	56	27	17
Didcot West (Great Western Park)	Villa	311	58	31	11
Barton Court Farm	Villa	3972	62	28	10
Wilcote	Roadside	4580	62	30	8
Gill Mill, Ducklington	Village	741	75	19	6

APPENDIX P: HUMAN REMAINS

By Sharon Clough

Summary

Two inhumation burials (Phase 3.2 burial 2234, Fig. 8; Phase 3.3 burial 6085; Fig. 9), one extended supine and the other a partially articulated, but disturbed burial, were recovered from site. They have both been radiocarbon dated to the Late Roman period. In addition, a neonate-size demi arch of the atlas vertebra was found in pit 2036 (fill 2037) during sieving sample 19, a neonate-size radius from ditch AA (2098, fill 2099), adult fragment of humerus and cranium from ditch BT (6448, fill 6449), all in Phase 3.2 (Fig. 8). A further fragment of cranium from pit 6316 and fragments of an adult distal femur from ditch CG (6422, fill 6423) were dated to Middle Iron Age Period 1 (Fig. 3).

Results

Analysis of the human remains was undertaken in accordance with the recommendations in Mays *et al.* 2018 and methodology recommended in Mitchell and Brickley 2017 and Brickley and McKinley 2004. Other methods are referred to in the text.

Period 1: Middle Iron Age

Ditch CG (Fig. 3), cut 6422, had within the fill 6423 fragments of an adult distal femur articulating surface. These were identified from amongst the animal bone, so it is not possible to comment further on whether this was from an intentional burial or special deposit.

Pit 6316 (Fig. 3), fill 6318, a fragment of adult human parietal cranial bone was recovered, approximately 5cm diameter. The fragment was well-preserved with old breaks.

Period 3: Phase 3.2 Roman

Inhumation burial

Grave 2234 located in Enclosure 9.1 (Fig. 8), contained SK2235 which was partially articulated. Although a heavily disturbed grave, the bone returned a calibrated radiocarbon date 258–534 cal. AD (SUERC-92340).

The recovered remains comprised heavily fragmented cranium, mandible and partial maxilla. The spine was represented by fragments of the atlas and axis, lumbar vertebrae 3–5 and superior first sacral vertebral body. Fragmented ribs of which only one head survived and fragmented pelves which had acetabulum and partial sciatic notch. The left arm was completely absent and only the lower half of the right humerus, but both radius and ulna. The right hand had four carpals and all the metacarpals and many of the phalanges. Parts of the femori, tibiae and fibulae, but all very heavily fragmented. Tarsals were all present, if somewhat damaged, metatarsals lacked the heads in most case, phalanges though were present.

Age and sex estimation were limited by the heavy fragmentation and absent elements. The skull morphology was very male with large protrusions and angled gonial for instance (Ferembach *et al.* 1980). Although much of the pelvis was absent, the parts observable was also masculine and in addition the size and robust nature of the long bones were in keeping with a male estimation. Age was limited to dental attrition since the publis and auricular surfaces were both absent. Attrition was low, indicating 25–35 years (Brothwell 1981), however the presence of joint disease and large entheses are more frequently found in older individuals. It is suggested that the age at death was probably more than 35 years, but it is not possible to be more accurate.

Dentition comprised 21 teeth from maxilla and mandible, seven of which were still in the alveolar. Attrition was light but affected all the teeth, calculus was present on all the lower teeth and the molars of the upper. No caries of abscess/granuloma were observed.

The platymeric (degree of flattening of the femur, front to back) and platycnemic (degree of flattening of the tibia front to back) indices were calculated:

Femur 90 - Eurymeria (moderate) - 85-99.9

Tibia 69.4 - Mesocnemia (moderately flat) 63-69.9

Squatting, mechanical stress and pathology have all been suggested as factors that cause the flattening (Brothwell, 1981: 88-9). Over time, the femoral and tibial shaft have become more rounded, meaning that it has increased in value, with earlier British populations being more likely to exhibit flattening (Brothwell, 1981: 88-9). The calculated values lie within the expected range for the time period.

Pathology

There was a healed rib fracture on a small piece of shaft fragment. The axis cervical vertebra had osteophytes on the inferior right facet and a lumbar arch (broken from body) had osteophytes and porosity on both inferior facets. The fifth lumbar body had osteophytes extending 5mm inferiorly, these all indicate degeneration of the spinal joints. Further degeneration of joints was evident on the toes, the distal phalanges had osteophytic growth around the periphery and the first proximal phalanx distal joint with distal phalanx also had osteophytic growth around the periphery of the joint surfaces. The lower limb long bones all had large entheses for the muscle insertion points, which are known to increase with age (Milella *et al.* 2012).

Disarticulated

Found amongst the animal bone from Enclosure 10.1 ditch BT (Fig. 8), intervention 6448, fill 6449, were fragments of an adult humerus and cranium. It is not possible to confirm whether these were from an inhumation or from a special deposit.

From Enclosure 9.1 ditch AA (Fig. 8) (cut 2098) part of a neonate-size radius was identified from fill 2099 from amongst animal bone. A neonate-size atlas demi arch was also found in fill 2037 of pit 2036 (Sub-enclosure 11.2; Fig. 8) during sieving sample 19. Both the above neonate bones may indicate that there was a neonate burial nearby somewhere which had been truncated and the remains incorporated into the backfill. Or alternatively, they had been placed into the feature intentionally.

Period 3: Phase 3.3 Roman

Grave 6085 (Figs 9 and 22), located in the corridor of Phase 3.2 Trackway 14.1, contained SK6087 laid supine extended, though truncation had removed most of the skull and left shoulder. The remaining bones were all heavily fragmented and often missing the joint surfaces.

The cranium had four tiny fragments recovered and a right mastoid process. Curiously two of the cranial fragments appeared to have a cut mark on one side, the edge was smoothed and bent over, a response you observe when green (or wet) bone has been sliced through. Since the grave had been truncated it is suggested that these marks relate to later activity and do not represent any direct trauma. A single fragment of mandible survived but with no teeth.

Six of the cervical vertebrae were represented by body fragments as well as the first thoracic, fifth lumbar and first sacral. There were two left and one right rib heads recovered as well as a number of shaft fragments.

The pelvis had only part of the right sciatic notch and fragments of acetabulum, the left had the same plus the pubis and ischium. The limbs comprised right lower humerus and most of the radius and ulna, the left radius and ulna similarly preserved in addition the mid-shaft of both clavicles and fragments of the right scapula. The hands had shafts of metatarsals on both sides and a total of 12 carpals. All the proximal and medial phalanges were present and a good number of the distal.

The lower limbs were all present and heavily fragmented, proximal fibulae absent, both patellae present. Feet had all tarsals and metatarsals with the heads absent. Only one proximal phalanx recovered, but there were three sesmoid bones.

The surviving elements did allow for age and sex estimation. The auricular surface indicated phase 7, 50–59 years, whilst the pubis phase 6, mean 61 years (range 34-86) (Lovejoy *et al.* 1985; Brooks and Suchey 1990). These both suggest an individual in the over 45 years category: older adult. The pelvis also had all the morphological elements of a male. This corresponded with the large and robust long bones.

The platymeric (degree of flattening of the femur, front to back) and platycnemic (degree of flattening of the tibia front to back) indices were calculated:

Femur 76.5 - Platymeric (flattened) - <85

Tibia 66.6 - Mesocnemia (moderately flat) 63-69.9

As with the previous skeleton these indices are within the expected for the period.

Pathology

On the fifth lumbar vertebra osteophytes were around the superior body and extended by 5mm, indicating lower back joint degeneration. Other joints were clear of degeneration where observable, though there were large enthese on the lower limbs.

The skeletal remains date to the later Roman period 252–540 cal. AD (SUERC- 92339) this calibrated date had a marine contribution of 14% (\pm 10%) since the δ 13C -19.8‰ and δ 15N 11.6‰. These isotope ratios suggest marine foods were consumed to an extent that it affected the average diet from the last 10 years. This is commonly observed in the Roman period (Muldner 2013) even for those who lived a long distance from the sea.

Discussion

Two inhumation burials both dating to the Roman period, but in variable completeness and preservation, were recovered from graves aligned on and near ditches. It is tentatively suggested that both were male and one was in the older age range, the other possibly younger. The incomplete nature of the burials limited observation for pathological lesions and estimation of stature, but it was possible to note that SK2235 (2234) had a healed rib fracture and degeneration of the spinal joints and toes. SK6087 (6085) also had lower back joint degeneration and the carbon and nitrogen isotope ratios indicated a diet with a portion of marine foods.

Roman period inhumation burials are often found individually or in small numbers often aligned on a field ditch or settlement boundary (Smith *et al.* 2018, 233). A local site such as the one at Rose Hill area (OAHS 1937; MOX11223 and MOX26642) where the inhumations were recovered in loose association with pottery kilns provides a more unusual setting. Kingston Road, Jericho, Oxford a single female inhumation was recovered, but was possibly part of a larger cemetery (Clough 2006) and at Mansfield College, Oxford a single adult male inhumation (decapitated) was recovered adjacent to a boundary ditch (Bradley *et al.* 2005) and partial remains of an infant from a gully (Booth and Hayden 2000). This demonstrates that the two burials (plus the potential neonate burials) from Swan School and Meadowbrook College, New Marston excavation fall within a typical rural Roman burial tradition.

The disarticulated human bones from ditches CG 6422, AA (2098), BT (6448), and pits 2036 and 6316, comprise remains from a minimum of two adults and two neonates. As the remains were not identified in the field as human it is not possible to confirm how these remains came to be in the features. There are many possibilities from truncated graves to intentional deposits.

References

- Bradley, P., Charles, B., Hardy, A. and Poore, D. 2005 'Prehistoric and Roman activity and a civil war ditch: Excavations at the chemistry research laboratory, 2–4 South Parks Road, Oxford', *Oxoniensia* **70**, 141–202
- Brickley M. and McKinley, J. (eds) 2004 *Guidelines to the standards for recording of human remains, IFA Paper No* 7 Reading, BABAO/Institute of Field Archaeologists
- Booth, P. and Hayden, C. 2000 'A Roman settlement at Mansfield College, Oxford', *Oxoniensia* **65**, 291–331
- Brothwell, D.R. 1981 Digging up bones Oxford, Oxford University Press
- Brooks, S. and Suchey, J.M. 1990 'Skeletal age determination based on the os pubis: a comparison of the Acsádi-Nemeskéri and Suchey-Brooks method', *Human Evolution* **5**, 227–238
- Clough, S. 2006 *16 Kingston Rood, Jericho, Oxford: Archaeological watching brief report*, Oxford Archaeological Unit, OA Job No. **TN 3021**
- Lovejoy, C.O., Meindl, R.S., Pryzbeck, T.R. and Mensforth, R.P. 1985 'Chronological metamorphosis of the auricular surface of the illium: a new method for determination of adult skeletal age-atdeath', *American Journal of Physical Anthropology* **68**, 15–28
- Ferembach, D., Schwidetzky, I. and Stloukal, M. 1980 'Recommendations for age and sex diagnoses of skeletons', *Journal of Human Evolution* **9**, 517–549
- Mays, S. Brickley, M., Dodwell, N and Sidell, J. 2018 *The Role of the human osteologist in an archaeological fieldwork project* Swindon, Historic England
- Milella, M., Belcastro, M.G., Zollikofer, C.P.E. and Mariotti, V. 2012 'The effect of age, sex, and physical activity on entheseal morphology in a contemporary Italian skeletal collection', *American Journal of Physical Anthropology* Volume **148**: 3, 379–388
- Mitchell, P. and Brickley, M. (eds) 2017 Updated Guidelines to the standards for recording of human remains Reading, BABAO/Chartered Institute of Field Archaeologists
- Muldner, G. 2013 'Stable isotopes and diet: their contribution to Romano-British research', *Antiquity* **87**: 335, 137–149
- OAHS (Oxford Architectural and History Society) 1937 'Rose Hill, Cowley, Oxford', Oxoniensia, 202

Smith, A., Allen, M., Brindle., T., Fulford, M., Lodwick, L. and Rohnbogner, A. 2018 New Visions of the countryside of Roman Britain Volume 3: Life and death in the countryside of Roman Britain London, Britannia Monograph 31

APPENDIX Q: CHARRED PLANT REMAINS

By Anna West

A total of 91 bulk samples were taken from a series of pits, ditches, postholes, layers, graves and a pottery kiln, ranging in date from the Middle Iron Age to the Late Roman periods across the site. Twentyeight of the samples (479 litres of soil) were selected for assessment of charred remains and six of these were recommended for further analysis of the charred plant remains (CA 2020). A single sample was selected from Period 1 pit 6077 and five samples were selected from Period 3, Phase 3.2: four from kiln AL and one from pit 2036.

The samples selected for analysis were scanned using a stereo-binocular microscope at x10 magnification and identifiable charred plant remains were recorded in Table Q1. Identification of plant remains is with reference to the digital seed atlas. Nomenclature follows that of Stace (1997) for wild plants and Zohary *et al.* (2012) for cereals.

Results

Period 1: Middle Iron Age

Settlement enclosure 1.1

A single sample dating to the Middle Iron Age was submitted for analysis, pit 6077, fill 6078 (sample 104), from within Enclosure 1.1. A small number of hulled wheat (emmer or spelt (*Triticum dicoccum/spelta*)) and barley (*Hordeum vulgare*) grains and a low number of brome (Bromus sp.) seeds were recovered. A single possible hawthorn (Crataegus sp.) haw fragment was also present within the flot. Although the material recovered from this sample is poor, it may indicate that domestic activities such as cereal processing and food preparation were taking place within Enclosure 1.1 during the Middle Iron Age.

A further six contexts dating to the Middle Iron Age were examined as part of the assessment, although identifiable charred plant remains were limited within these samples, they do indicate settlement activities were taking place across Areas A and F during the Middle Iron Age period.

Square enclosure 3.1

Fill 6244 (sample 111) of ditch CG, which defines the north-east boundary of Enclosure 3.1 in Area F, contained small quantities of charred plant remains. Indeterminate charred cereal grain fragments and weed seeds were present in low numbers. The presence of vetch/vetchling (Vicia/Lathyrus sp.) and dock (Rumex sp.) seeds may indicate that the soils being utilised were nutrient deficient. Wood charcoal was recorded in moderate quantities within the sample and recovery of fired clay fragments from the ditch fill, suggests that the source of this material may have been a domestic oven or hearth.

Roundhouse 1.2

Identifiable cereal remains were only recovered in very low numbers from fill 6033 (sample 102) of Roundhouse 1.2 ditch CT. Hulled wheat glumes were present in low numbers along with indeterminate cereal grain fragments, a small number of which have been tentatively identified as barley.

Pits in Areas A and F

Four samples were assessed from pits allocated to Period 1: pit 1084 (fill 1085, sample 7) and pit 1107 (fill 1108, sample 9) from Area A and pit 6026 (fill 6027, sample 101) and pit 6267(fill 6268, sample 110) from Area F. All contained small quantities of indeterminate cereal grain fragments and wood charcoal, indicative of waste produced by domestic activities such as cereal processing and food preparation. The charred seed assemblage recovered, although very limited, most likely represents weeds of arable fields. Cleavers (*Galium aparine*) germinates in the autumn and may indicate the winter sowing of crops, perhaps on heavier soils in the vicinity.

The samples assessed from the Period 1 features have little information to add to the results of the excavation beyond the fact that agricultural and domestic activities were taking place across the site during the Middle Iron Age.

Period 2: Late Iron Age to Early Roman

Five samples were assessed from contexts dated to Period 2 across Areas A, B and F with very limited results.

Sub-enclosure 5.4 in Area A

Ditch J (sample 3) and F (sample 1) within Area A, produced minimal charred plant remains, low numbers of indeterminate cereal grain fragments and a small number of charred weed seeds; vetch/vetchling, docks and knotgrass (Persicaria sp.) were recorded. These remains appear to be consistent with the settlement detritus recovered from the earlier phase of activity across these areas.

Enclosure 7.1 in Area B

Fill 2065 (sample14) from ditch AO, the southern boundary ditch of Enclosure 7.1, was devoid of charred plant remains other than a small quantity of wood charcoal. These results most likely represent sparse settlement detritus that has become incorporated within the backfill of the sampled feature through the actions of wind, water or trample.

Pit group CJ in Area F

Charred plant remains were largely absent within the samples from pit group CJ (samples 300 and 301) within Area F, with only wood charcoal fragments being recorded during the assessment. The porosity of the plant remains recovered from these samples suggests that domestic activities were largely absent from this peripheral area of the site.

Period 3: Phase 3.2 Middle to Late Roman

Five samples from contexts attributed to Period 3, Phase 3.2, were submitted for analysis. Identifiable charred plant remains were generally sparse within these samples with an average of 3.9 fragments per litre (fpl), although this figure is skewed by the fact that four samples were examined from more productive, in relation to other features from the site, deposits from kiln AL, which averaged at 4.5 fpl, with the remaining pit fill analysed containing a meagre 1.25 fpl.

Pit 2036

Pit 2036 lay within Sub-enclosure 11.2 in Area B. The charred plant remains were relatively sparse within fill 2037 (sample 11), consisting of a single grain being identifiable as hulled barley, a single spelt wheat (*Triticum spelta*) glume base and an indeterminate culm fragment. A small number of cereal grain fragments were also observed but were too fragmented and abraded to identify. All the cereal grain fragments were puffed with a honeycomb structure, possibly the result of burning at high temperatures or being subject to multiple burning events.

A single possible legume (Vicia/Pisum sp.) fragment was recovered from fill 2037, although the abraded nature of the remains makes this a tentative identification. Hazel (*Corylus avellana*) nutshell fragments were recovered in low numbers and suggest that the charred remains may also have included food waste.

Charred weed seeds were limited within the sample, mallows (Malva sp.), vetch/vetchling, cleavers, goosefoots (Chenopodium sp.), knotweeds (Polygonum sp.) and fescues (Festuca sp.) were present in low numbers or as single specimens. These species generally favour grassland, field margins and arable environments and most likely represent material accidently collected along with the crop, forming part of the waste from the final stages of cereal processing.

There is limited evidence of domestic activity in Sub-enclosure 11.2 within the excavated area. It is possible the material recovered from pit fill 2037 (sample 11) presents domestic waste, from small scale cereal processing and food preparation, deliberately disposed of within the pit, however, its sparse and fragmented nature means it may represent settlement detritus that has become incorporated within the backfill of the pit. Layers L1 and L2, which were recorded across much of enclosure 9.2, directly to the north of Sub-enclosure 11.2, appear to represent a mixed spread of occupation and kiln waste, it is possible that material from L1, or similar mixed occupation detritus, has made its way into the sampled feature most likely through the actions of wind, water or trample.

Kiln AL

Four samples were analysed from pottery kiln AL within Sub-enclosure 9.2. Two samples were analysed from within the oven structure; fills 2238 (sample 24) and 2239 (sample 23) and two were examined from the associated stoke pit; fill 2241 (samples 62 and 72).

Context 2238 (sample 24) was a lower fill within the firing chamber of kiln AL, containing frequent fired clay fragments from the collapsed structure. Charred plant remains were relatively sparse in comparison to the other samples examined from the kiln and may be more indicative of the oven at the point the kiln structure collapsed, rather than material used to backfill the redundant feature. A low number of hulled wheat and barley grains were recovered. The cereal grains present were fragmented with a honeycomb structure, suggesting exposure to high temperatures or repeated burning events. No chaff elements were recovered from this sample suggesting that the oven was thoroughly cleaned after use, or that the papery chaff had burnt away, leaving only the more robust cereal grains. With cereal grains only being present in low numbers and chaff being absent from this sample the grain, chaff, weed seed ratio is 90:0:10. Weed seeds were sparse but did include a single stinking chamomile (*Anthemis cotula*) achene, which suggests that some heavy, water retentive clay soils in the area may have been utilised for agriculture alongside lighter soils.

Charred plant remains were most common within upper fill 2239 (sample 23), cereal grain fragments were less common than chaff and weed seeds, being present at a ratio of 27:57:16, although the majority of the grains recorded were fragmented and puffed, with a honeycomb structure. Glume base and spikelet fork fragments were common and dominated over cereal grains within this sample. Only spelt wheat glumes were identified, a large percentage of the glumes had damage to the diagnostic elements and so have been recorded as emmer/spelt although no glumes were positively identified as being from emmer (*Triticum dicoccum*). The spikelet forks recovered were also fragmented and abraded and have been recorded as hulled wheats. Only a single grain was identified as emmer/spelt. The fact the identifiable glume bases were spelt suggests that the majority of the cereal grains present were also from spelt. Spelt wheat was the dominant wheat grown in this part of Britain during the Iron Age and Roman periods (Hillman, 1981; Greig 1991). A single hulled barley grain was also identified within this sample.

Both samples from fill 2241 of the stoke pit (samples 62 and 72) contained a low number of identifiable cereal grains, with the majority of the grains recorded being unidentifiable fragments. The whole or near whole grains present were from emmer/spelt with hulled barley only being recorded as a single grain. Spelt wheat glume bases were again common, however, a large percentage of the glume bases and all the spikelet forks recovered could only be recorded as being from hulled wheats due to their fragmented and abraded nature. A single barley rachis fragment was observed, along with a small number of indeterminate culm fragments, the more fragile nature of these chaff elements can mean that they are less suited to preservation through charring, and they can be underrepresented in comparison to more robust elements such as hulled wheat glumes and cereal grains. The grain to chaff and weed seed ratios for the stoke pit samples are 28:28:44 for sample 62 and 26:37:37 for sample 72, meaning chaff and weed seeds dominated over grain fragments. This material most likely represents the waste

from the final, de-husking, stages of cereal processing with the chaff and larger weeds seeds being removed through fine sieving.

A small number of the grains recovered were oozing sap suggesting that the grain may have had a high moisture content when burnt (Caruthers 2018), perhaps having spoiled during storage. It may be that spoiled grain was being used as tinder within the kiln, together with the cereal processing waste.

A small number of tree species were represented within the flot material scanned for analysis, possible blackthorn/hawthorn (Prunus spinosa/Crataegus sp.) thorns were identified within fill 2239 (sample 23) and 2241 (sample 62). And a single fragment of hazel nutshell was present in fill 2241 (sample 72, which may represent food waste. The above species have also been recorded within the charcoal examined from these contexts (Challinor, Appendix P) and most likely represent the utilisation of local hedgerow/scrub species.

The charred weed seeds from the four kiln samples analysed are dominated by grass caryopses; ryegrasses/fescues (Lolium/Festuca sp.), brome/wild oats (Bromus/Avena sp.) and meadow-grass/cat's tails (Poa/Phleum sp.) were all observed along with a moderate number of indeterminate grass caryopsis fragments. Other grassland herb species were also present within the kiln deposits, vetch/vetchlings, plantains (Plantago sp.), knotweeds, docks, mallow, campions (Silene sp.) and agrimonies (Agrimonia sp.) favour grassland, field edge or hedge and wayside habitats, these species can also be found growing as weeds within arable crops. Weeds with twining habits black bindweed (*Fallopia convolvulus*) and cleavers were also present within the samples and may represent arable or wayside weeds. These remains most likely represent arable weeds that have been gathered along with the crops. They would be cleaned from the grain during the final stages of processing and was most likely incorporated within the cereal waste being used as kindling or fuel in the kiln AL.

A further eight samples taken from kiln AL deposits were examined as part of the assessment (CA 2020). Fills 2238 (samples 39 and 49), 2239 (sample 38), 2242 (sample 51), 2241 (samples 47, 52 and 68) and 2310 (sample 75) were spatially distributed across the kiln structure, all appear to have produced similar results to those discussed above, expect 2310 (sample 75) which was taken from the base of the firing chamber, charred plant remains were absent from this sample. The cereal grains observed were fragmented with a honeycomb structure, most likely through exposure to high temperatures or repeated burning events. The consistency in condition of the cereal grains across the structure, within the oven and the stoke pit, may suggest the grains were incorporated within waste material used as fuel, rather than representing chance loss during cereal processing activities such as drying/parching.

The weed seeds recovered from the assessed samples are consistent with those discussed above, and suggest arable weeds formed part of the cereal waste being utilised as kindling or fuel within kiln AL

Two further samples were taken from Enclosure 11.1 ditch AK (fill 2031, sample 16) and pit 2036 (fill 2037, sample 19). The charred plant remains within these contexts were sparse, indeterminate cereal grain fragments and a small number of vetch/vetchling and meadow grass/cat's tail were recorded. The paucity of the material recovered from the non-kiln features dating to Phase 3.2, suggests it may represent general settlement detritus that has potentially been moved cross site through wind, water or trample, before becoming incorporated into the backfill of the excavated features.

Phase 3.3: Late Roman

Only a single sample was assessed from Period 3, Phase 3.3, ditch AT (fill 2088, sample 15). Charred plant remains were largely absent with only a low number of indeterminate cereal grain and wood charcoal fragments being recorded. This sample is consistent with the material recovered from the earlier phases of occupation on the site and suggests a continuation of activity or a similar source for the charred material. General occupation waste appears to litter much of the activity areas of the site.

Discussion

The material recovered from the four kiln AL deposits analysed, suggests that cereal processing waste, from the final de-husking and fine sieving stages (Hillman 1981 and 1984), was being utilised as fuel, within the pottery kiln during the Roman period. Chaff waste was largely absent from the settlement features, being largely confined to the backfill of the kiln.

It may be that cereals were being processed on site and the chaff waste stored for use as fuel within the kiln or as fodder. However, the absence of corn drier structures across the site may indicate that chaff was also being imported as a commodity for use as fuel within kiln AL, as suggested for similar Roman pottery kilns (Van der Veen 1999; Plouviez 1989).

The recovery of rotary quern fragments from the boundary ditches of enclosures 9.1 and 10.1, suggest the final stages of cereal processing was taking place on site, at least on a domestic scale; although querns may also have been used by potterys to prepare materials such as processing of grits for the mortarium (Jones, pers comm). During the Iron Age and Roman period, on some settlements hulled cereals would have been stored in their spikelet form and processed on a piece-meal, household basis. The chaff waste produced may have been used as kindling/disposed of within the domestic hearth or fire along with mixed house-hold refuse. However, the absence of charred animal bone and the limited wild plant remains, such as fruit and nut stones or shells, within the examined samples, suggests the material recovered is relatively pure cereal processing waste, rather than mixed domestic or food processing waste. The limited charred plant remains recovered from across the site and across the phases of occupation, suggest that the pottery kiln activity is the main producer of charred plant remains. It is possible this material then become incorporated within settlement occupation layers or middens and worked its way into the backfills of open features, rather than arriving there through deliberate deposition.

The chaff remains recovered from the kiln AL deposits may suggest additional cereal processing waste was imported as a commodity, to supplement the local supply (Van der Veen 1989). The material recovered from the firing chamber and stoke hole were consistent and suggest a mix of woods being used as fuel, with cereal waste being utilised as kindle or addition fuel. Due to its delicate nature, chaff may be disproportionately preserved within the reduced conditions of the kiln, and there is no clear evidence that kiln AL was being used to process cereals on a large scale or that it was repurposed as a corn dyer once pottery production had ceased.

The material recovered from the examined samples is limited and no clear changes in arable husbandry or land-use can be identified within this restricted assemblage. Spelt wheat is the dominant crop, with small amounts of emmer wheat and barley. These remains are consistent within the Iron Age and Roman phases of occupation on site and may indicate sustained agricultural practices in the vicinity. The weed seed assemblage possibly indicates nutrient deficiency of the soils, possibly through overuse of the same arable land, or an increase in production during the Roman period.

Spelt wheat remains predominating the Iron Age and Roman assemblages fits the general pattern during this period in Southern Britain (Greig 1991), and is consistent with assemblages examined within the region, such as at Gravelly Guy, Stanton Harcourt (Moffett, 2004), Newington Road, Stadhampton (Wyles, 2019) and Yarnton (Hey *et al.* 2011).

Other potential crops and food resources were limited within the samples, legumes were only tentatively identified, hazelnut and sloe remains were present in low numbers, but do demonstrate the exploitation of woodland or hedgerow environments within the vicinity of the site.

Summary

The cereal remains reflect the general crop trends seen in Southern Britain for this period and there is evidence for local crop processing and the exploitation of a number of different environments in the area.

Cereal processing was clearing taking place on site, at least on a domestic, household scale, during the earlier phases of occupation of site. The production of pottery within kiln AL during the Roman period, may have led to the importation of cereal waste on a commercial scale as little evidence was recovered within the excavated area for local, large-scale processing of cereals.

The majority of the samples examined suggest a rather 'messy' settlement, with widespread areas and layers of occupation detritus that has become incorporated within the backfill of many of the features. The material is generally consistent across all features and phases of occupation, with no deliberate dumps of waste material identifiable within any of the features examined other than in kiln AL, where settlement waste/midden material, such as that described in layers L1 and L2, may have been used, at least partially, to backfill the structure once pottery production ceased on site in the late Roman period.

These results are comparable with other assemblages of this date in the wider area and they add to the environmental information and data for the area.

References

- Brindle, T. 2021 Land at Post Farm, Thornbury, South Gloucestershire Archaeological Excavation CA Report 9270_1
- CA (Cotswold Archaeology) 2020 Swan School and Meadowbrook College, Marston, Oxfordshire: Postexcavation assessment and updated project design CA report **MK0066_1**

Carruthers, W. 2018 'Charred plant remains', in Brindle, T. 2021, 122-134

- Greig, J. 1991 'The British Isles', in van Zeist, W., Wasylikowa, K. and Behre, K-E. (eds), 229-334
- Hey, G., Booth, P. and Timby, J. 2011 Yarnton: *Iron Age and Romano-British settlement and landscape* Oxford, Thames Valley Landscapes Monograph 35
- Hillman, G.C. 1981 'Reconstructing crop husbandry practices from charred remains of crops', in R. Mercer (ed.) 1981, 123–162
- Hillman, G.C. 1984 'Interpretation of archaeological plant remains: the application of ethnographic models from Turkey', in van Zeist, W. and Casparie, W.A. (eds) 1984, 1–41
- Lambrick, G. and Allen, T. 2004 *Gravelly Guy, Stanton Harcourt: The development of a Prehistoric and Romano-British community* Oxford Archaeology Thames Valley Landscapes Monograph 21
- Massey, R. and Nichol, M. 2019 'A Late Iron-Age enclosed settlement at Newington Road, Stadhampton', *Oxonensia* 84, 159–203
- Mercer, R. (ed.) 1981 Farming practice in British prehistory Edinburgh, Edinburgh University Press
- Moffett, L. 2004 'The evidence for crop-processing products from the Iron Age and Romano-British periods and some earlier prehistoric plant remains', in Lambrick, G. and Allen, T. 2004, 421– 445
- Plouviez, J. 1989 'A Romano-British pottery kiln at Stowmarket, Suffolk', *Proceedings of the Suffolk Institute of Archaeology and History* **37**, 1–12
- Stace, C. 1997 New flora of the British Isles (2nd edition) Cambridge, Cambridge University Press
- van der Veen, M. 1989 'Charred grain assemblages from Roman-period corn driers in Britain', *Archaeol. J.* 146, 302–319

Van der Veen, M. 1999 'The economic value of straw and chaff in arid and temperate zones', *Vegetation History and Arcaheobotany* **8**, 211–224

- van Zeist, W., Wasylikowa, K. and Behre, K-E. (eds) 1991 *Progress in Old World Palaeoethnobotany* Rotterdam, Balkema
- Wyles, S.F. 2019 'Plant Macrofossils', in Massey, R. and Nichol, M. 2019, 194-200
- Zohary, D., Hopf, M. and Weiss, E. 2012 *Domestication of plants in the Old World: the origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*, 4th edition, Oxford, Clarendon Press

Table Q1: Charred plant remains

Sample Context Feature			11	24	23	62	72
			2037	2238	2239	22	241
			2036	2237			
Feature type Period/phase		pit	pit	kiln 3.2			
		1	3.2				
CEREAL GRAINS	COMMON NAME		1				
Triticum spelta	spelt grain	3		8	10	4	4
Triticum dicoccum	emmer grain				1		-
Triticum dicoccum/spelta	emmer/spelt grain, oozing sap				5		2
<i>Hordeum</i> sp.	hulled barley grain	1	1	1		1	
Indeterminate cereals		8	16	18	50	26	31
CHAFF			1				:
T. spelta	spelt glume base	4	1		25	15	21
T. dicoccum/spelta	emmer/spelt glume base				74	7	16
T. dicoccum/spelta	emmer/spelt spikelet fork				40	8	17
Hordeum sp.	rachis frag					1	
Indeterminate culm			1		2		1
OTHER CROPS			<u>.</u>		11		.1
<i>Vicia/Pisum</i> sp.	bean/pea fragment		1				1
<i>Linum</i> sp.	flax seed						1
TREE/SHRUB			1		11		
<i>Crataegus</i> sp.	endocarp frag	1					
Corylus avellana L.	ylus avellana L. nutshell		4				1
Prunus spinosa L.	thorn				2	1	
WEEDS & WILD PLANTS							
<i>Vicia/Lathyrus</i> sp.	<2mm small vetch seed		2				
<i>Plantago</i> sp.	plantain seed						1
Medicago/Trifolium/Lotus sp.	medick/clover/trefoil seed						1

Sample Context Feature Feature type			11	24	23	62	72
			2037 2036 pit	2238	2239	2241	
				2237			
				kiln			
Period/phase		1	3.2		3	2	
WEEDS & WILD PLANTS			1	1			
Polygonum sp.	knotgrass achene		1				
Persicaria sp.	knotweed achene				-		2
Fallopia convolvulus (L.) Á.Löve	black bindweed achene				1		
Rumex sp. dock achene				1	1		2
Rumex cf. conglomeratus Murray clustered dock					1		
Silene sp. campion seed							1
Chenopodium album L. fat hen seed			1		1		
Malva sp. mallow nutlet			2				
Galium aparine L.	cleavers nutlet		1		1		
Brassica/sinapis sp.	cabbage/mustard seed						1
Agrimonia cf. procera	agrimonies seed head				-	1	-
Anthemis cotula L.	stinking chamomile achene			1			
Indeterminate seed						1	
Carex sp.	sedge flat achene						1
<i>Festuca</i> sp.	fescue seed		1		-		3
<i>Lolium</i> sp.	rye-grass seed			1			
<i>Lolium/Festuca</i> sp.					2	13	
Bromus/Avena sp.					28	4	6
<i>Bromus</i> sp.	brome grass caryopsis	3			2		4
Poa/Phelum sp.	meadow-grass/cat's tail seed					4	3
Indeterminate Poaceae caryopsis		3				26	25
TOTAL		24	32	30	246	112	145
volume of soil processed (litres)		10	40	11	30	30	40
charred fragments per litre		2.4	1.25	2.7	8.2	3.7	3.6

APPENDIX R: WOOD CHARCOAL

By Dana Challinor

Introduction and Methodology

Five samples were provided for charcoal analysis from: Period 1 (Middle Iron Age) ditch CT (6033) and pit 6077; and Phase 3.2 pottery Kiln AL (2237) and pit 2036 (Table R1). The samples were examined to provide information on the species use and exploitation of local woodlands and resources.

Charcoal >2mm in transverse section was considered for identification, with 30 fragments per sample randomly selected for identification. The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at X7 to X45 magnifications. Representative fragments from each group were then selected for further examination using a Meiji incident-light microscope at up to X400 magnification. Identifications were made by comparison with identification keys (Hather 2000, Schweingruber 1990) and modern reference material. Heartwood was identified by the presence of multiple tyloses across more than one growth ring and sapwood was identified by the absence of tyloses. In the absence of pith and/or bark, roundwood was attributed to fragments which exhibited strong or moderate ring curvature. Classification and nomenclature follow Stace 2019.

Results

Charcoal was moderately abundant in the assemblages, with fair to poor condition. Two of the samples, from Period 1 ditch CT (sample 102) and Phase 3.2 pit 2036 (sample 19), contained charcoal showing strong blue-green staining, characteristic of vivianite, which is caused by deposition in waterlain or seasonally waterlogged conditions. In sample 102, this obscured the perforation plates, inhibiting differentiation between *Alnus* (alder) and *Corylus* (hazel), and either species might be represented.

Eight taxa were positively determined, all of which were anatomically consistent with native species: *Prunus spinosa* (blackthorn), Maloideae (hawthorn, apple, pear, whitebeams/rowan), *Rhamnus cathartica* (purging buckthorn), *Quercus* sp. (oak), *Corylus avellana* (hazel), *Populus/Salix* (poplar/willow), *Acer campestre* (field maple) and *Fraxinus excelsior* (ash). The *Prunus* in sample 23 was confirmed as *P. spinosa* (blackthorn) on the basis of wide ray widths and thorn stubs on one fragment. However, the *Prunus* from sample 72 was not so distinctive since it derived mostly from small roundwood where the ray widths tend to be variable, but it is possible that *P. avium* (wild cherry) is also represented.

Moderate quantities of roundwood were recorded in the samples, especially of *Prunus* and Maloideae (hawthorn group) types, but none with attached pith or bark. Oak heartwood was noted in pit 6077, along with some sapwood fragments. This sample was composed predominantly of oak, with abundant, comminuted fragments. In other samples, the oak charcoal was too fragmented to yield much maturity data.

Discussion

Period 1: Middle Iron Age

The two features from this phase, Roundhouse 1.2 ditch CT (6033) and pit 6077, produced moderate to abundant assemblages of charcoal. The assemblage from pit 6077, associated with Enclosure 1.1, was of low taxonomic diversity: chiefly oak, including heartwood; and some Maloideae type (roundwood). This may indicate that the charcoal derived from a specific activity, requiring highly calorific fuel, but it may also be that it represents the

deliberately deposited remnants of a short-term depositional (perhaps from a single burning) event. In contrast, the assemblage from ditch CT 6033 was more poorly preserved, less abundant yet more diverse: with recorded fragments of oak, Maloideae type, blackthorn, alder/hazel, ash and field maple. The context type, a ditch, plus the poorer preservation/quantities, suggest that this assemblage represents a longer-term deposition of material, which is more indicative of fuel use at the time. In short, the somewhat limited data, suggests that during the Middle Iron Age a range of local hardwoods were utilised for fuel, sourced from mixed deciduous woodland with some harvesting from woodland margins or hedgerow/scrub types.

Phase 3.2: Middle to Late Roman

Two samples from pottery kiln AL were analysed. The assemblages were somewhat varied in taxonomic character, but this is probably of low significance given the discrepancy in assemblage abundance and fragment size (fill 2239 was more poorly preserved than fill 2241). In any case, it is clear that a range of hardwood taxa were utilised to fuel the kiln: oak, Maloideae type, field maple, alder/hazel, ash, probable poplar/willow and possibly two types of *Prunus* (blackthorn and wild/bird cherry). The assemblage from pit 2036, representing domestic hearth material, was similar but less diverse, and included purging buckthorn (a hedgerow/woodland margin taxon). Roundwood fragments were common in the samples from both features.

The similarity in the character of the fuel utilised in the pottery kiln AL and the likely domestic heath waste from pit 2036 suggest that similar sources for firewood were utilised. The majority of the taxa would have been sourced from local deciduous woodland and margins, with a hint of wet-ground species (possible alder and poplar/willow). The vicinity of the Marston Book and River Cherwell to the site makes the availability of such riverside and floodplain taxa highly likely - suggesting that these taxa were only rarely exploited for fuel. This is unsurprising given that fuelling a pottery kiln, in an area of significant Roman pottery industry from the 2nd century AD onwards, is likely to have required some form of management. Whether this took the form of traditional forestry management practices (coppicing etc.) is unsubstantiated on this evidence, but some form of management in terms of firewood supplies (seasoning etc.) must have occurred to provide the necessary temperatures and sustained heat required for pottery firing. Pottery kilns do not require the high temperatures produced by charcoal fuel (which is needed, for instance, in metalworking), but they do need a sustained heat for a long period of time. This could readily be achieved using the main types of hardwood taxa - oak, ash, Prunus, Maloideae, field maple, hazel - identified in the kiln at Swan School and Meadowbrook College. It is clear that there was no need to select preferentially the best (most highly calorific) of those fuelwoods (e.g. oak, ash) for firing purposes. Some of the locally available but less favoured wood for fuel (such as willow/poplar) could be used. This, somewhat indiscriminate, selection of local woods for pottery firing is replicated at Blackbird Leys, in Oxford (Challinor 2003); but also elsewhere in Roman pottery kiln charcoal assemblages: East Sussex (Cartwright 1986); Worcestershire, (Gale 2000), Suffolk (Challinor 2021) and Norfolk (Gale 2003).

REFERENCES

- Bates, S. and Lyons, A.L. 2003 *The Excavation of Romano- British pottery kilns at Ellingham, Postwick and Two Mile Bottom, Norfolk, 1996*–7 Dereham, East Anglian Arch Occ Papers 13
- Benfield, S. and Newman, J. 2021 Early Roman pottery production at Pine Dell, Capel St Mary, Suffolk, *Journal of Roman Pottery Studies* **18**, 35–49

- Booth, P. and Edgeley-Long, G. 2003 Prehistoric settlement and Roman pottery production at Blackbird Leys, Oxford, Oxoniensia 68, 201–62
- Cartwright, C, 1986. Charcoal, in D.R. Rudling 1986, 191-230
- Challinor, D. 2003 'The Wood Charcoal', in Booth, P. and Edgeley-Long, G. 2003, 254-257
- Challinor, D. 2021 'Charcoal from the kiln', in Benfield, S. and Newman, J. 2021, 35-49
- Evans, C.J., Jones, L. and Ellis, P. 2000 Severn Valley Ware production at Newland Hopfields: excavation of a Romano-British kiln site at North End Farm, Great Malvern, Worcestershire in 1992 and 1994, BAR British Series **313**
- Gale, R. 2000 'The Charcoal', in Evans, C.J. Jones, L. and Ellis, P. 2000
- Gale, R. 2003 'Charcoal', in Bates, S. and Lyons, A.L. 2003, 93-94
- Hather, J.G. 2000 The identification of Northern European woods: A guide for archaeologists and conservators London, Archetype Publications
- Rudling, D.R. 1986 The Excavation of a Roman tilery on Great Cansiron Farm, Hartfield, East Sussex, *Britannia* **17**

Schweingruber, F.H. 1990 Anatomy of European woods Bern, Stuttgart, Verlag Paul Haupt

Stace, C. 2019 New flora of the British Isles Cambridge, Cambridge University Press

	Area	F		B 3.2: Roman 2nd-4th century AD			
	Period/Phase	1: Middle	Iron Age				
	Feature type			Kiln (AL) 2237		pit 2036	
	Feature no.						
	Context no.	6034	6078	2239	2241	2037	
	Sample no.	102	104	23	72	19	
Prunus spinosa L.	blackthorn	3		15 (r)			
<i>Prunus</i> sp.	cherry type				11 (r)		
Maloideae	hawthorn grp	8r	6 (r)		2r	15r	
Rhamnus cathartica L.	buckthorn					1r	
Quercus sp.	oak	10	24 (hs)	2	15 (r)	7	
Corylus avellana L.	hazel					4	
Alnus/Corylus	alder/hazel	3			1		
Populus/Salix	poplar/willow			(1)			
Acer campestre L.	field maple	1		10		1	
Fraxinus excelsior L.	ash	2		1	1		
Indeterminate		3		1r		2 (r)	

Table R1: Charcoal identifications from Period 1 and Phase 3.2

r=roundwood; h=heartwood; s=sapwood; +=present; brackets denotes 'cf.' identification or presence in some frags only

APPENDIX S: RADIOCARBON DATING

SUERC, summarised by Emma Aitken

Radiocarbon dating was undertaken in order to confirm the dates of skeletons SK6087 and SK2235, pit 2627, ditch CT, ditch CN, ditch BU, animal burial 1059, ditch P, and ditch CG. The samples were analysed during March 2020, May 2021 and July 2021 at Scottish Universities Environmental Research Centre (SUERC), Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow, G75 0QF, Scotland. The methodology employed by SUERC Radiocarbon Laboratory is outlined in Dunbar *et al.* (2016).

The uncalibrated dates are conventional radiocarbon ages. The radiocarbon ages were calibrated by SUERC using the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.3.2 (Bronk Ramsey 2017, Bronk Ramsey 2009) using the IntCal13 and a mix of the IntCal13 and Marine13 calibration curves (March 2020 dates). The May 2021 and July 2021 dates were calibrated using the University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.4.2 (Bronk Ramsey 2020, Bronk Ramsey 2009) using the IntCal20 (Reimer et al. 2020).

As the radiocarbon dates were commissioned in batches between March 2020 and July 2021, the March 2020 dates have all been recalibrated in Table S1 below using the IntCal20 and Marine20 curves (where applicable) for consistency across the report (Bronk Ramsey 2009, Bronk Ramsey 2020, Reimer *et al.* 2020 and Heaton *et al.* 2020).

References

Bronk Ramsey, C. 2009 'Bayesian analysis of radiocarbon dates', Radiocarbon 51 (1), 337-360

- Bronk Ramsey, C. 2017 University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.3.2, https://c14.arch.ox.ac.uk/oxcal.html
- Bronk Ramsey, C. 2020 University of Oxford Radiocarbon Accelerator Unit calibration programme OxCal v4.4.2, https://c14.arch.ox.ac.uk/oxcal.html (accessed 5 October 2021)
- Dunbar, E., Cook, G.T., Naysmith, P., Tripney, B.G., Xu, S. 2016 'AMS 14C dating at the Scottish Universities Environmental Research Centre (SUERC)', *Radiocarbon* **58** (1), 9–23
- Heaton, T., Köhler, P., Butzin, M, Bard, E., Reimer, R., Auston, W., Bronk Ramsey, C., Grootes, P., Hughen, K, Kromer, B., Reimer, P., Adkins, J., Burke, A., Cook, M, Olsen, J. and Skinner, L. 2020 'Marine20 the marine radiocarbon age calibration curve (0-55,000 cal. BP)', *Radiocarbon* 62, 779–820
- Reimer, P., Austin, W., Bard, E., Bayliss, A., Blackwell, P., Bronk Ramsey, C., Butzin, M. Cheng, H., Edwards, R., Freidrich, M., Grootes, P., Guilderson, T., Hajdas, I., Heaton, T., Hogg, A., Hughen,

K., Kromer, B., Manning, S., Muschleler, R., Palmer, J., Pearson, C., van der Plicht, J. Reimer, R., Richards, D., Scott, E., Southon, J., Turney, C., Wacker, L., Adolphi, f., Büntgen, U., Capano, M., Fahrni, S., Fogtmann-Schulz, A., Friedrich, R., Köhler, P., Kudsk, S., Miyake, F., Olsen, J., Reinig, F., Sakamoto, M., Sookdeo, A. and Talamo, S. 2020 'The IntCal20 Northern Hemisphere radiocarbon ago calibration curve (0–55 cal, kBP)', *Radiocarbon* **62 (4)**, 725–57

Table S1: Radiocarbon dating results

Feature	Lab No.	Material	Radiocarbon Age	δ 13C	δ 15Ν	C/N ratio	Calibrated radiocarbon age (95.4% probability)	Calibrated radiocarbon age (68.3% probability)
Calibrated using th	ne IntCal20 and Ma	rine 20 curves	•	•			·	·
SK6087 Grave 6085	SUERC-92339	Human bone (unburnt): Left femur fragment	1740 ± 30 yr BP	-19.8‰	11.6‰	3.3	240 – 440 cal. AD (94.0%) 460 – 480 cal. AD (1.1%) 520 – 530 cal. AD (0.3%)	260 – 280 cal. AD (10.2%) 330 – 420 cal. AD (58.1%)
Calibrated using th	he IntCal 20 curve							
SK2235 Grave 2234	SUERC-92340	Human bone (unburnt): Right femur fragment	1663 ± 30 yr BP	-20.1‰	11.7‰	3.4	258–280 cal. AD (7.7%) 334–439 cal. AD (77.5%) 461–478 cal. AD (3.2%) 496–534 cal. AD (7.1%)	266–272 cal. AD (2.8%) 361–427 cal. AD (65.5%)
Context 6034 Roundhouse 1.2 Ditch CT (cut 6033)	SUERC-97598	Charcoal: Hawthorn/Crab apple/Rowan (<i>Crateagus/Malus/Sorbus</i> sp.)	2225 ± 26 yr BP	-26.1‰	-	-	383–342 cal. BC (19.9%) 323–200 cal. BC (75.6%)	362–350 cal. BC (7.7%) 307–272 cal. BC (22.3%) 266–208 cal. BC (38.2%)
Context 6034 Roundhouse 1.2 Ditch CT (cut 6033)	SUERC-97599	Animal bone: Sheep radius	2249 ± 26 yr BP	-21.3‰	6.7‰	3.4	390–349 cal. BC (30.5%) 312–206 cal. BC (64.9%)	383–355 cal. BC (25.3%) 282–231 cal. BC (43.0%)
Context 6151 Roundhouse 1.2 Ditch CN (cut 6150)	SUERC-97603	Animal bone: Pig mandible	2198 ± 26 yr BP	-21.8‰	5.7‰	3.3	361–175 cal. BC (95.4%)	356–338 cal. BC (11.9%) 327–280 cal. BC (32.4%) 253–250 cal. BC (1.4%) 232–198 cal. BC (22.5%)
Context 6151 Roundhouse 2.2 Ditch CN (cut 6150)	SUERC-97604	Animal bone: Horse metatarsal	2242 ± 26 yr BP	-22.5‰	5.6‰	3.4	388–247 cal. BC (26.5%) 315–204 cal. BC (69.0%)	381–353 cal. BC (20.9%) 286–228 cal. BC (43.9%) 217–211 cal. BC (3.5%)
Context 1017 Trackway 4.1 Ditch P (cut 1016)	SUERC-97605	Animal bone: Cattle, possibly humerus	2167 ± 26 yr BP	-21.7‰	5.8‰	3.1	356–279 cal. BC (43.8%) 257–247 cal. BC (1.2%) 233–106 cal. BC (50.5%)	350–305 cal. BC (34.8%) 208–166 cal. BC (33.5%)
Context 6244 Enclosure 3.1 Ditch CG (cut 6243)	SUERC-97606	Charred residue: Burnt food residue (inside vessel)	2155 ± 26 yr BP	-27.6‰	-	-	354–285 cal. BC (32.7%) 229–97 cal. BC (60.8%) 71–58 cal. BC (1.9%)	348–314 cal. BC (25.4%) 205–152 cal. BC (41.7%) 128–125 cal. BC (1.2%)
Context 6269 Pit 6267	SUERC-98592	Charcoal: Hawthorn/Rowan/Crab Apple (<i>Crateagus/Sorbus/Malus</i> sp.)	2401 ± 27 yr BP	-25.5‰	-	-	725–704 cal. BC (3.8%) 664–651 cal. BC (2.5%) 546–398 cal. BC (89.1%)	514–500 cal. BC (8.3%) 486–406 cal. BC (60.0%)

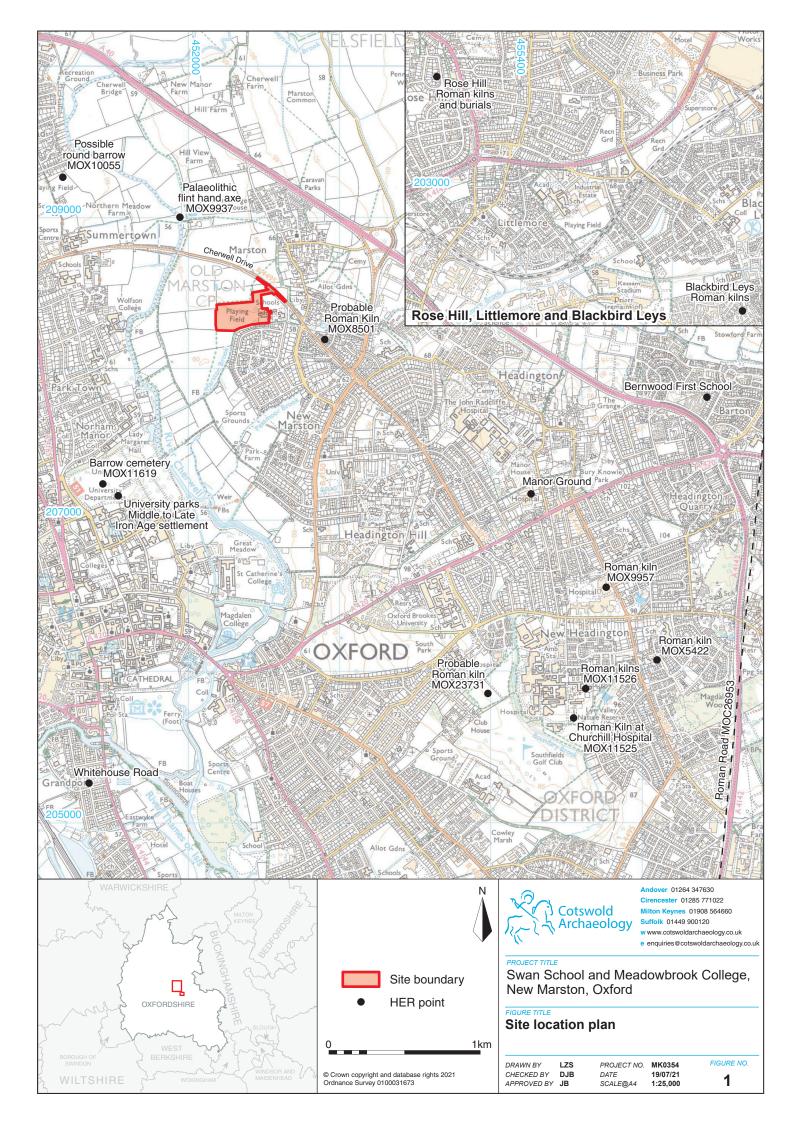
Feature	Lab No.	Material	Radiocarbon Age	δ 13C	δ 15N	C/N ratio	Calibrated radiocarbon age (95.4% probability)	Calibrated radiocarbon age (68.3% probability)
Context 6344 Enclosure 2.1 Ditch BU (cut 6342)	SUERC-98593	Animal bone: Cattle phalanx	2156 ± 27 yr BP	-22.4‰	5.4‰	3.2	354–283 cal. BC (33.6%) 230–97 cal. BC (59.8%) 72–57 cal. BC (2.1%)	348–312 cal. BC (25.5%) 206–151 cal. BC (40.1%) 130–122 cal. BC (2.7%)
Context 6343 Enclosure 2.1 Ditch BU (cut 6342)	SUERC-98594	Animal bone: Cattle? Humerus fragment	2224 ± 27 yr BP	-21.8‰	5.1‰	3.2	384–340 cal. BC (20.2%) 324–199 cal. BC (75.2%)	362–350 cal. BC (7.7%) 308–272 cal. BC (22.9%) 266–207 cal. BC (37.6%)
Context 6269 Pit 6267	GU57286	Charcoal: Hawthorn/Crab apple/Rowan (<i>Crateagus/Malus/Sorbus</i> sp.)	Failed	-	-	-	-	-
Context 6344 Enclosure 2.1 Ditch BU (cut 6342)	GU57291	Animal bone: Dog	Failed	-	-	-	-	-
Context 6343 Enclosure 2.1 Ditch BU (cut 6342)	GU57292	Animal bone: Cattle radius	Failed	-	-	-	-	-
Context 1060 Animal Burial 1059	GU57293	Animal bone: Cattle scapula	Failed	-	-	-	-	-
Context 1060 Animal Burial 1057	GU58095	Animal bone: Cattle scapula	Failed	-	-	-	-	-

APPENDIX T: OASIS REPORT FORM

PROJECT DETAILS

Project Name Short description	Swan School and Meadowbrook College, New Marston, Oxford The site was the focus of settlement activity from as early as the Middle Iron Age up to the end of the Roman period in the 4th century. Middle Iron Age settlement comprising enclosures, pits and the remains of three roundhouses were remodelled with Late Iron Age to Early Roman transitional activity characterised by a trapezoidal enclosure, two trackways and associated pits, postholes and smaller sub-enclosures. Activity continued into the Roman period with the establishment of a complex-type farmstead, as defined by the <i>Rural Roman Settlement Project, comprising of</i> a rectilinear enclosure system situated focused on the junction of three trackways. It was remodelled and maintained throughout the period with the most significant focus of the site being the construction and use of a pottery kiln, producing material dating to
Short description	Middle Iron Age up to the end of the Roman period in the 4th century. Middle Iron Age settlement comprising enclosures, pits and the remains of three roundhouses were remodelled with Late Iron Age to Early Roman transitional activity characterised by a trapezoidal enclosure, two trackways and associated pits, postholes and smaller sub-enclosures. Activity continued into the Roman period with the establishment of a complex-type farmstead, as defined by the <i>Rural Roman Settlement Project, comprising of</i> a rectilinear enclosure system situated focused on the junction of three trackways. It was remodelled and maintained throughout the period with the most significant focus of the site being the
	the 3rd to 4th centuries AD and consistent with products of the Oxford Roman pottery industry. Two Late Roman inhumation burials were also excavated. The site was abandoned during the Late Roman period, with no evidence of use until the establishment of a ridge-and-furrow agricultural system in the medieval period. Post-medieval remains were limited to former field boundaries and a gully.
	A large assemblage of pottery dating to the Iron Age and Roman along with small amounts of medieval and post-medieval material was recovered. Other finds, including a Iron Age loomweight and spindlewhorl. Roman bone needle shank/hairpin, two Roman copper-alloy brooches, a lower rotary quern, possible rotary quern, a coin dating to AD 307–318, animal bone and a small amount of charred plant and charcoal material were also found
Project dates	April to July 2019
Project type	Excavation and watching brief
Previous work	Heritage Statement (RPS 2017) Field evaluation x 2 (CA 2018) Post-excavation assessment and updated project design (CA 2020)
Future work	Unknown
PROJECT LOCATION	
Site Location	Swan School and Meadowbrook College, New Marston, Oxford
Study area (M2/ha)	5.6ha
Site co-ordinates	452526 208373
PROJECT CREATORS	
Name of organisation	Cotswold Archaeology
Project Brief originator	-
Project Design (WSI) originator	RPS Planning and Environment and Cotswold Archaeology
Project Manager	Stuart Joyce
Project Supervisor	James Coyne

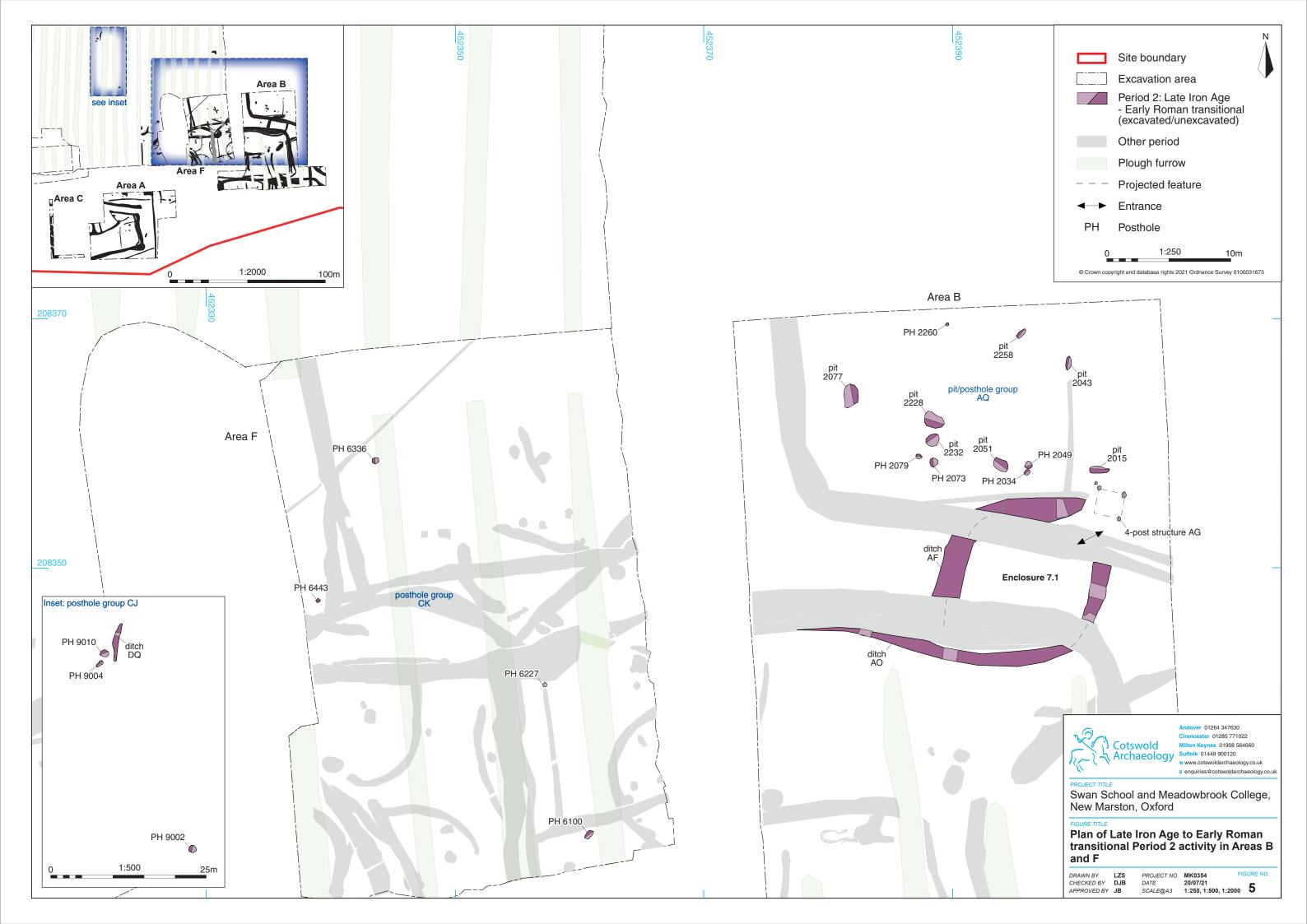
MONUMENT TYPE	Middle Iron Age settlement enclosures, ring ditches, Late Iron Age to Early Roman enclosures and trackway Roman farmstead and trackways Roman pottery kiln Roman inhumations						
SIGNIFICANT FINDS	None						
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.)	Content (e.g. pottery, animal bone etc)					
Physical	Oxfordshire Museum Service OXCMS: 2019.35	Ceramics, clay-tobacco pipe, fired/burnt clay, glass, lithics, metalwork, metalworking debris, mortar, worked stone, human bone, animal bone, plant macrofossils and charcoal					
Paper	Oxfordshire Museum Service OXCMS: 2019.35	Context sheets, registers, skeleton recording sheets, sample sheets, plans and sections					
Digital	Archaeological Data Service (ADS)	Database, GIS, digital					
BIBLIOGRAPHY		photos, site survey					
CA (Cotswold Archaeology) 2021 Swar Archaeological excavation CA F	n School and Meadowbrook College, Ne Report MK0354_1	ew Marston, Oxfordshire.					



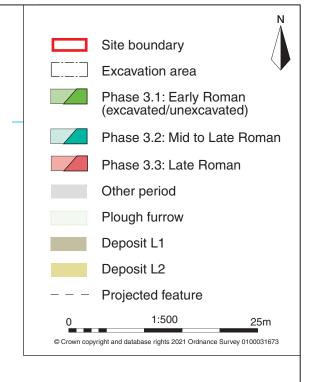


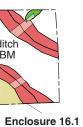














Swan School and Meadowbrook College, New Marston, Oxford

FIGURE TITLE Plan of Roman Period 3 activity in Areas B and F

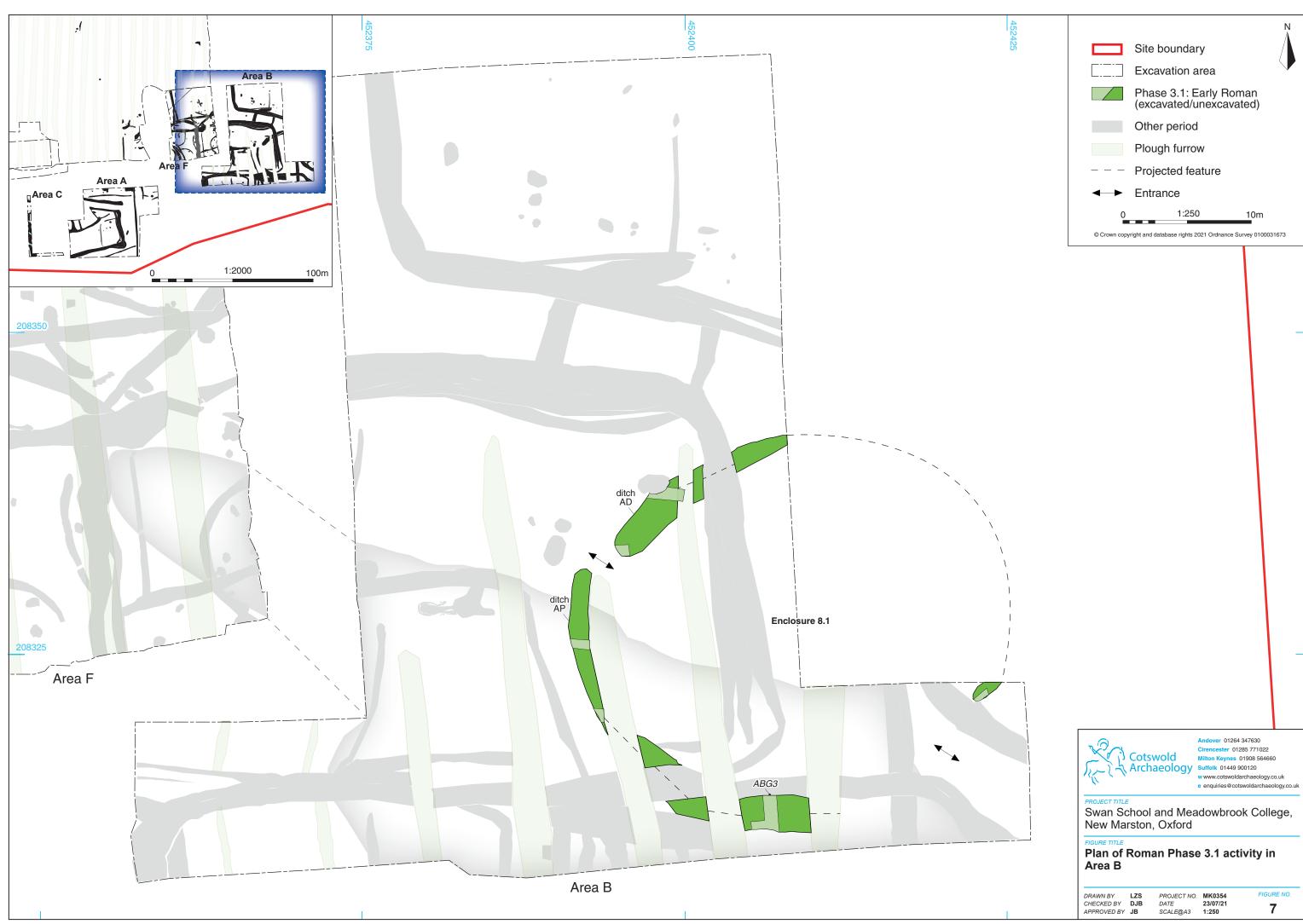
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APPROVED BY	JB

 PROJECT NO.
 MK0354

 DATE
 23/07/21

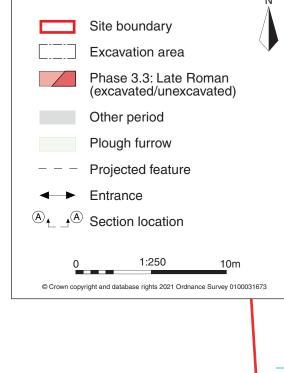
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FIGURE NO. 6

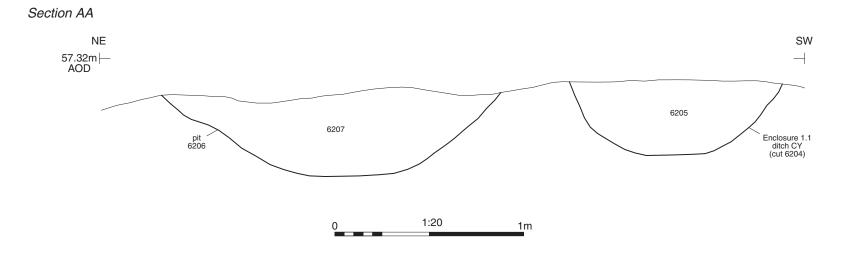














Period 1 Enclosure 1.1 ditch CY (cut 6204), looking south-east (1m scale)



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 w www.cotswoldarchaeology.co.uk
 e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford

FIGURE TITLE Section AA and photograph

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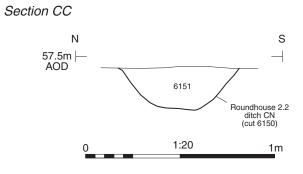
 PROJECT NO.
 MK0354

 DATE
 26/07/21

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FIGURE NO. 11



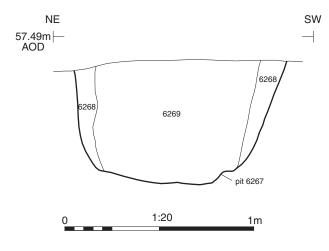




Period 1 Roundhouse 2.2 ditch CN (cut 6150), looking east (0.5m scale)

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PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford
Section CC and photograph
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Period 1 pit 6267 in Sub-enclosure 2.4, looking south-east (1m scale)

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PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford
FIGURE TITLE Section DD and photograph
DRAWN BY LZS PROJECT NO. MK0354 FIGURE NO. CHECKED BY DJB DATE 20/07/21 APPROVED BY JB SCALE@A4 1:20 14



Period 1 pit 1071, looking north-west (2m scale)

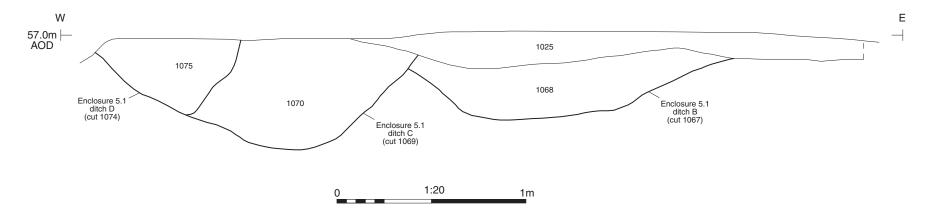


Period 1 vessel in ditch CG, looking north (0.3m scale)

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PROJECT TITLE Swan School and Meadow Bank College, Marston, Oxford		
FIGURE TITLE Photographs		

DRAWN BY	LZS	PROJECT NO.	MK0354	FIGURE NO.
CHECKED BY	DJB	DATE	20/07/21	
APPROVED BY	JB	SCALE@A4	N/A	

Section EE





Period 2 Enclosure 5.1 ditches B (cut 1067), C (cut 1069) and D (cut 1074), looking north-east (1m scale)



Andover 01264 347630 cester 01285 771022 eynes 01908 564660 folk 01449 900120 www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.

PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford

FIGURE TITLE Section EE and photograph

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 PROJECT NO.
 MK0354

 DATE
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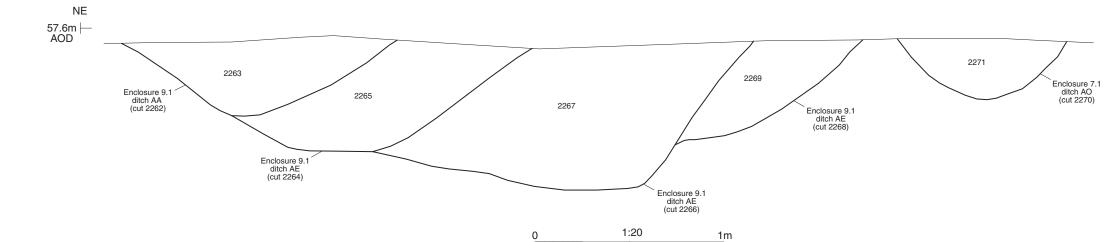
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FIGURE NO. 16



Period 2 cattle burial 1059, looking east (1m scales)

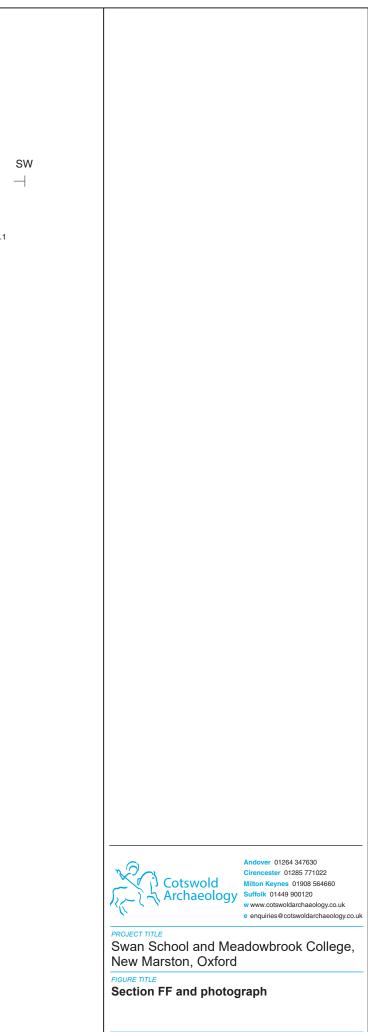
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www.cotswoldarchaeology.co.uk enquiries@cotswoldarchaeology.co.uk		NK-CUM
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MK0354 FIGURE NO.	ZS PROJECT NO.	DRAWN BY LZ
27/07/21	DJB DATE	CHECKED BY DJ



Section FF



Period 3, Phase 3.2 Enclosure 9.1 ditches AA (cut 2262) and AE (cuts 2264, 2266, 2268) and Period 2 Enclosure 7.1 ditch AO (cut 2270), looking south (2m scale)



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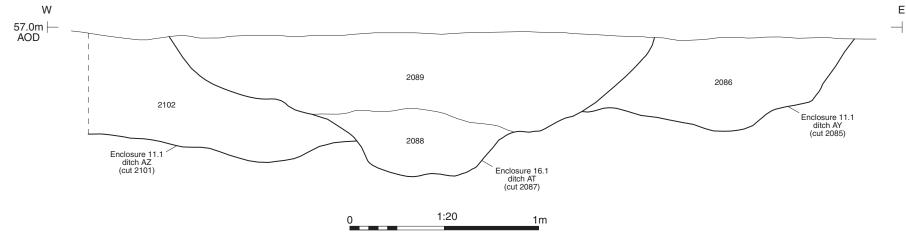
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 DATE
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FIGURE NO. 18







Period 3, Phase 3.3 Enclosure 16.1 ditch AT (cut 2087), Phase 3.2 Enclosure 11.1 ditch AY (cuts 2085) and ditch AZ (cut 2101) looking north-east (2m scale)

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PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford

FIGURE TITLE Section GG and photograph

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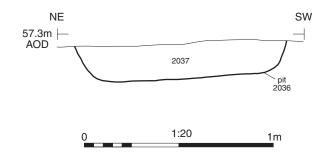
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FIGURE NO. 19

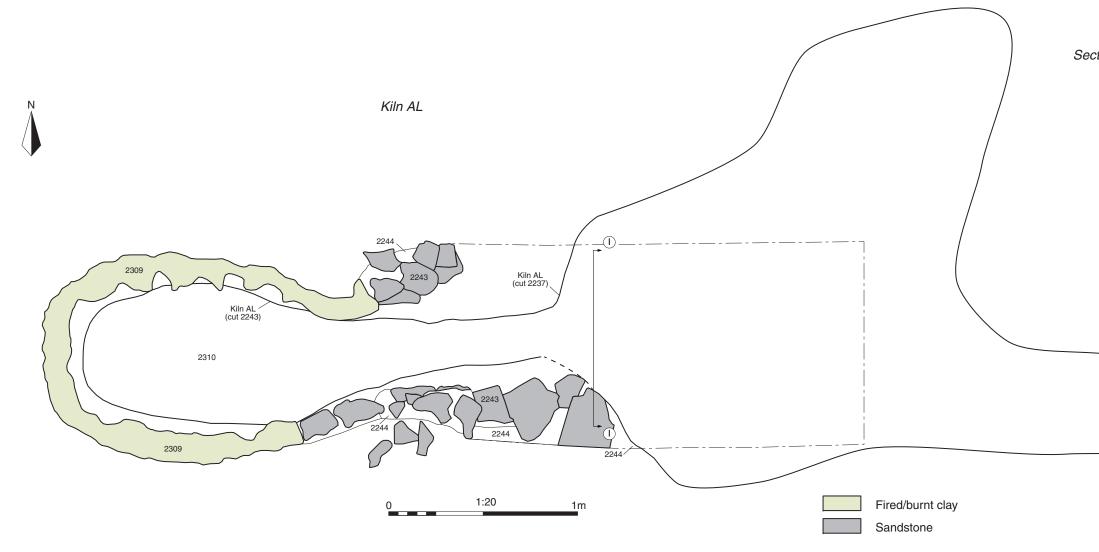






Period 3, Phase 3.2 pit 2036 in Enclosure 11.1, looking south-east (1m scale)

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ROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford
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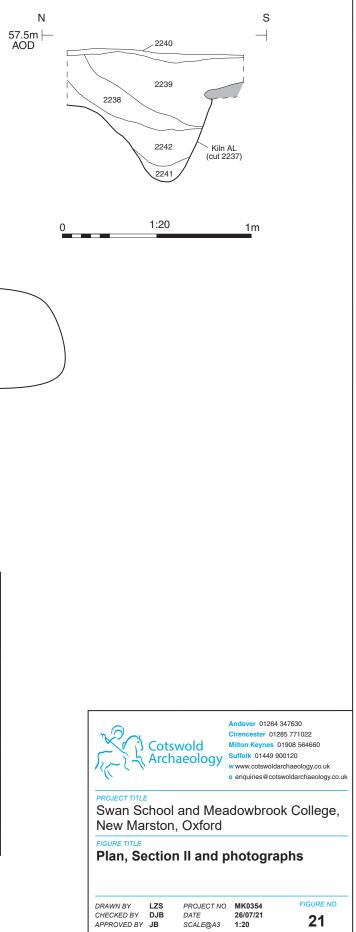


Period 3, Phase 3.2 kiln AL (cuts 2237, 2243), looking west



Period 3, Phase 3.2 kiln AL (cut 2237), looking east (0.5m scale)

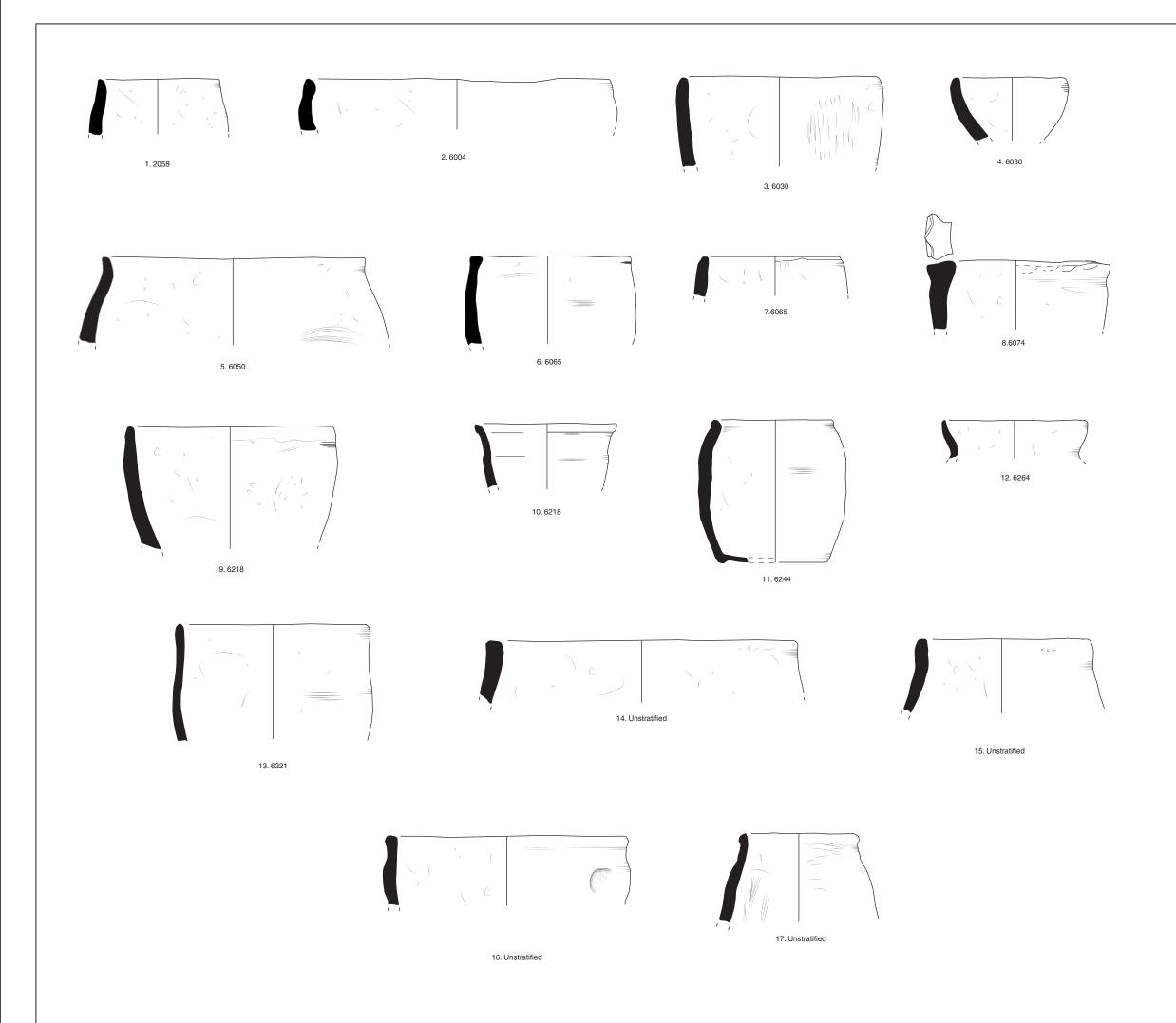
Section II





Period 3, Phase 3.3 skeleton 6087 (grave 6085), looking south-west (1m scales)

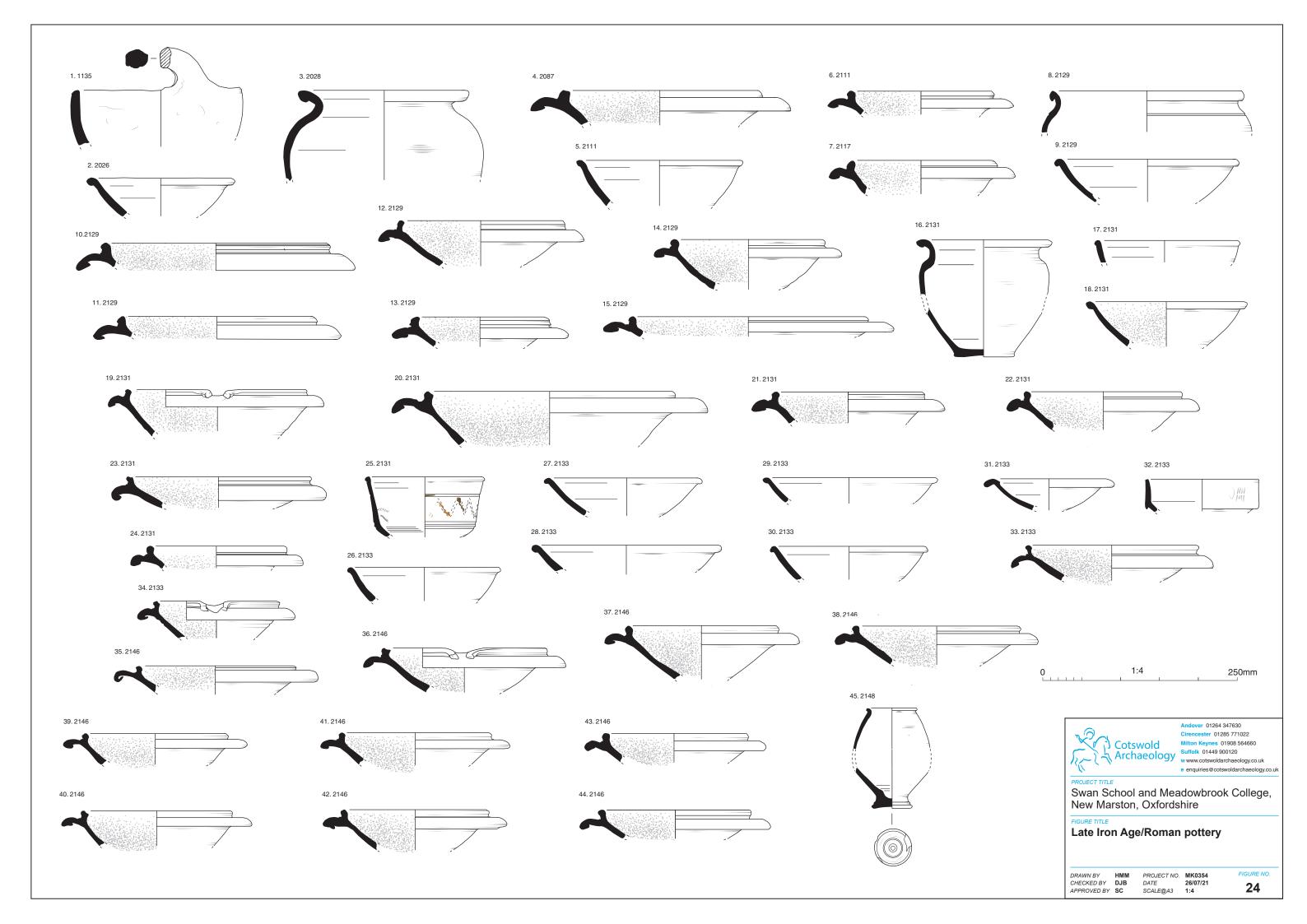
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PROJECT TITLE Swan School and Meadowbrook College, New Marston, Oxford
Figure title Photograph
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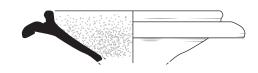


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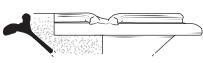
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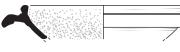




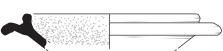
89. 2241K







81.2240



77. 2239f



71.2239G

65. 2238F

46.2159

51.2160

52.2164

57.2236









72.2239

78. 2239f

82.2240

86. 2241K

90.2242

53. 2187

54. 2192

58.2236

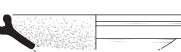






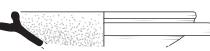






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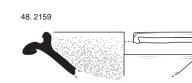
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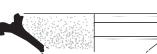




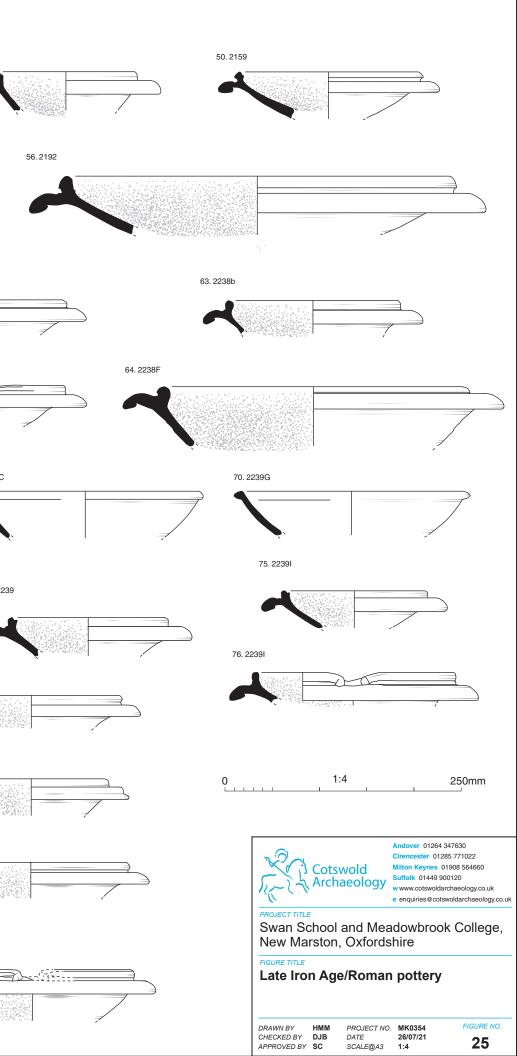


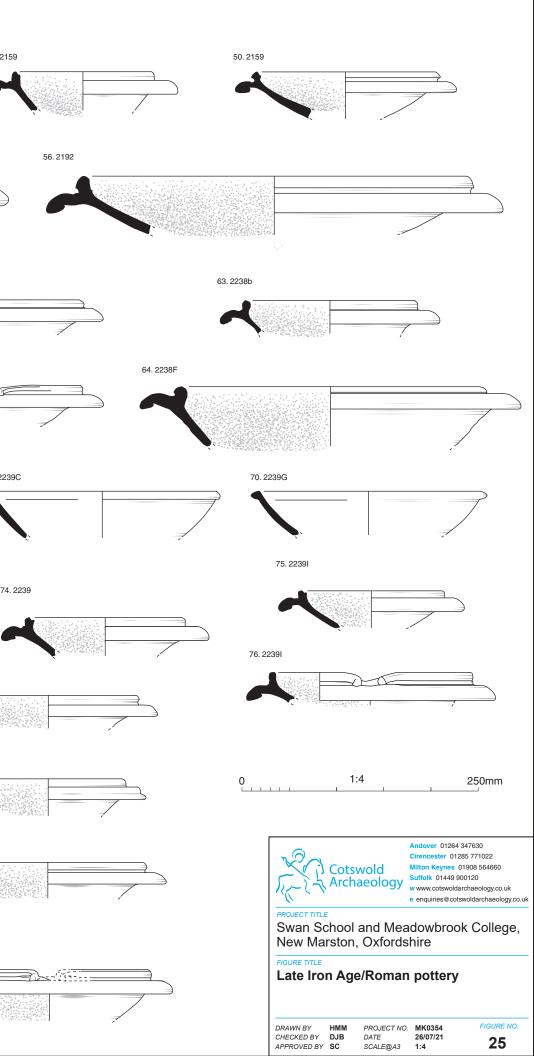


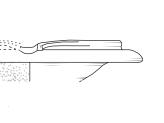




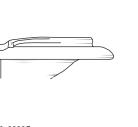








69.2239C







80.2240

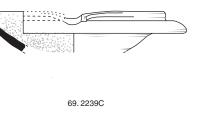
84. 2241K

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88.2241

92.2242

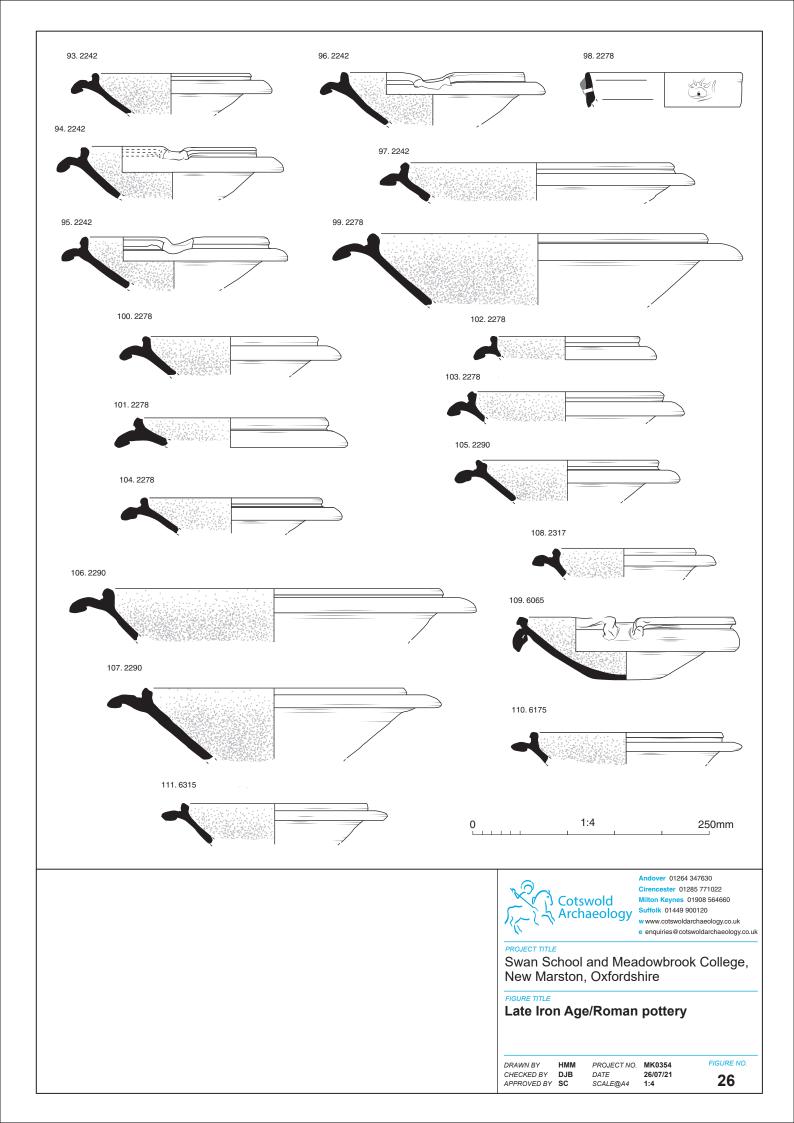
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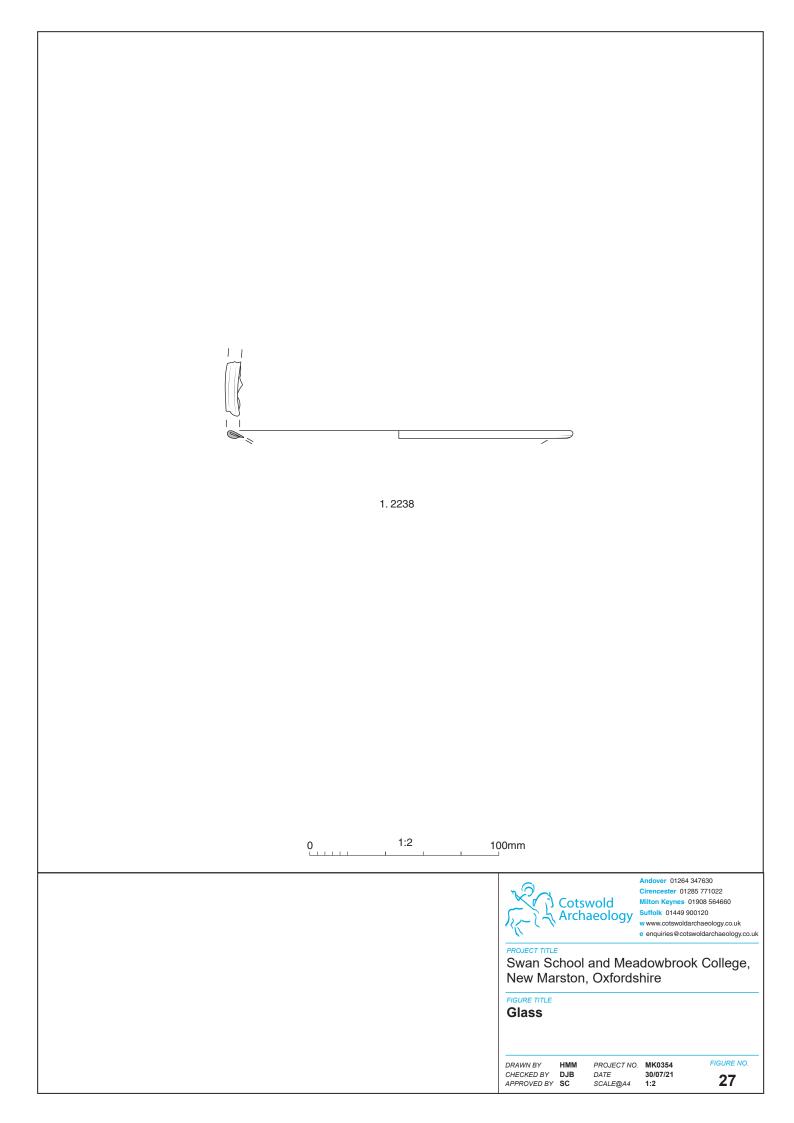


62.2238

61.2238

59.2238 A









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