Wykham Park Farm
Banbury
Oxfordshire

Archaeological Excavation Report

October 2022

Client: L&Q Estates

Issue No: 1
OA Report No: 7906
NGR: SP 44926 38686

oxfordarchaeology

Client Name:	L&Q Estates
Document Title:	Wykham Park Farm, Banbury, Oxfordshire
Document Type:	Excavation report
Grid Reference:	SP 44926 38686
Planning Reference:	14/01932/OUT
Site Code:	BAWP19
Invoice Code:	BAWPPX
Accession/HER No.:	OXCMS:2019.126
OA Document File Location:	https://files.oxfordarchaeology.com/nextcloud/index.php/s/nem5ZyzBLZainwW
OA Graphics File Location:	https://files.oxfordarchaeology.com/nextcloud/index.php/s/nem5ZyzBLZainwW
Issue No:	1
Date:	6 October 2022
Prepared by:	Andrew Simmonds (Senior Project Manager) and Kate Brady (Project Officer)
Checked by:	Andrew Simmonds (Senior Project Manager)
Edited by:	Leo Webley (Head of Post-excavation)
Approved for Issue by:	Leo Webley (Head of Post-excavation)
Signature:	

OA South
Janus House
Osney Mead
Oxford
OX2 0ES

t. +44 (0)1865 263 800

OA East
15 Trafalgar Way
Bar Hill
Cambridge
CB23 8SQ

t. +44 (0)1223 850 500

OA North
Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t. +44 (0)1524 880 250

e. info@oxfordarch.co.uk
w. oxfordarchaeology.com
Oxford Archaeology is a registered Charity: No. 285627

Chief Executive Officer
Ken Welsh, BSc., MCIfA
Private Limited Company, No: 1618597
Registered Charity, No: 285627
Registered Office: Oxford Archaeology Ltd
Janus House, Osney Mead, Oxford OX2 0ES

Wykham Park Farm, Banbury, Oxfordshire

Archaeological Excavation Report

Contents

List of figures

List of plates

Summary

Oxford Archaeology was commissioned by The Environmental Dimension Partnership, on behalf of L&Q Estates Ltd, to undertake an archaeological excavation prior to the proposed construction of up to 1000 dwellings together with a mixed-use local centre on the southern outskirts of Banbury, Oxfordshire. Six excavation areas totalling *c* 5ha were opened, targeted on the results of the preceding geophysical survey and two phases of trial-trench evaluation. Two excavation areas were targeted on possible ring ditches that had been identified from cropmark evidence, but neither the evaluation nor the excavation was able to find any evidence for archaeological features at these locations. In addition to the excavation areas, an area where the Wykham Farm causewayed enclosure extended into the development area was designated as an Area of Archaeological Preservation, to be preserved *in situ* beneath sports pitches.

Neolithic evidence, some of it probably representing activities associated with the causewayed enclosure, included a pit and a tree-throw hole that contained sherds of early Neolithic Plain Ware pottery, a pair of pits with middle Neolithic Mortlake Ware, and a feature that produced a late Neolithic radiocarbon date and is likely to represent a cremation burial or a pair of such features.

A group of three unurned cremation burials was attributed to the middle Bronze Age on the basis of radiocarbon dates from two of them, and an isolated inhumation burial that was radiocarbon dated to the late 6th or 5th century cal BC. No other features or artefactual material from either of these periods was found, suggesting that the burials were located away from areas of settlement.

Following an apparent hiatus of several centuries, there was a burst of settlement and agricultural activity that extended from the 1st century BC to the end of the 1st century AD. Two discrete enclosures may represent successive late Iron Age settlements, and a field system continued into the early Roman period, when a third enclosure, possibly for livestock, was constructed beside it. The features form part of an extensive though short-lived episode of occupation, and it is possible that the Iron Age enclosures represent the pastoral component of a farmstead with a domestic and arable focus located at a complex of enclosures that has been separately excavated in the fields adjacent to the east.

Acknowledgements

Oxford Archaeology would like to thank Matthew Morgan of EDP for his advice and guidance and Mukesh Ladwa and Stratos Constantinou of L&Q Estates for commissioning this project. Thanks are also extended to Richard Oram, who monitored the work on behalf of Oxfordshire County Council.

The project was managed for Oxford Archaeology by Gerry Thacker and the post-excavation work was managed by Andrew Simmonds and Daniel Stansbie. The fieldwork was directed by Mariusz Gorniak and Lee Sparks, who were supported by Jenna Kolotyluk, Curtis Goldstraw, Alastair Cooper, BJ Ware, Emma Forber, Laura Herradon, Rebecca Coombes, Camille Guezennec, Stephanie Black, Andrew Smith and Hannah Everett, with site survey by Simon Batsman. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the supervision of Leigh Allen, processed the environmental remains under the supervision of Rebecca Nicholson and prepared the archive under the supervision of Nicola Scott.

1 INTRODUCTION

1.1 Background

1.1.1 Oxford Archaeology (OA) was commissioned by The Environmental Dimension Partnership (EDP), on behalf of L&Q Estates Ltd, to undertake an archaeological excavation prior to the proposed construction of up to 1000 dwellings together with a mixed-use local centre on the southern outskirts of Banbury, Oxfordshire (Fig. 1). The site lay in an area that has seen considerable archaeological activity in recent years resulting from expansion to the periphery of the town, including sites immediately adjacent to the west and east. An excavation to the west at East of Bloxham Road had uncovered an Iron Age settlement enclosure that extended into the north-west part of the Wykham Park Farm site (MOLA 2017), and a programme of geophysical survey and trial-trench evaluation in the fields to the east at South of Saltway had identified early prehistoric ring ditches and Iron Age settlement (ARS 2014). The latter site has been subject to excavation since the fieldwork at Wykham Park Farm finished.

1.1.2 The excavation was undertaken between November 2019 and May 2020 as a mitigation measure to address a condition attached to a planning permission (planning application 14/01932/OUT). This followed two earlier Environmental Statements by Wardell Armstrong (WA 2013) and Cotswold Archaeology (CA 2016), a geophysical survey (WA 2012) and two phases of archaeological evaluation (CA 2013; 2015). Six excavation areas, totalling *c* 5ha, were investigated, targeted on the results of the preceding aerial photograph analysis, geophysical survey and evaluations (Areas 1–6, Fig. 2). In addition, two additional evaluation trenches (Trenches 1 and 2, Fig. 2) were excavated in the south-eastern part of the site to inform the need for any mitigation in this area, but they proved to be devoid of archaeological features and no further investigation was undertaken in this area. After the excavation, a further evaluation was undertaken at the site of a proposed drainage outfall to the south of the main development area, but no archaeological features were identified (OA 2020).

1.1.3 In addition to the excavation areas, an area where the Wykham Farm causewayed enclosure extended into the development area was designated as an Area of Archaeological Preservation, to be preserved *in situ* beneath sports pitches (Fig. 2).

1.1.4 A brief for the work was produced by Richard Oram, Planning Archaeologist, Oxfordshire County Council Archaeological Services, the archaeological advisors to Cherwell District Council, and the excavation was carried out in accordance with a master written scheme of investigation (WSI) produced by EDP (2019) and a subsequent addendum WSI produced by OA (2019) and approved by Richard Oram prior to the commencement of fieldwork.

1.2 Location, geology and topography

1.2.1 The development area was located at the southern edge of Banbury and comprised *c* 47.7 hectares of arable farmland consisting of six fields centred on SP 44926 38686

(Fig. 1). It was bounded to the north by a track recorded as the 'Salt Way' on current Ordnance Survey mapping, with the buildings and playing fields of Wykham Park Academy beyond. To the east and south it was bounded by arable farmland and to the west by the A361 Bloxham Road, with further arable farmland beyond that.

1.2.2 The bedrock geology of the site is mapped as iron-rich limestone of the Marlstone rock formation, which outcrops in the south-western part of the development area and at the east end and is overlain in the central area by sedimentary bedrock of the Whitby Mudstone Formation (BGS n.d.). The excavation areas were situated on the latter, with the exception of Area 6 at the east end.

1.2.3 Banbury is situated in the northern part of the county, where the River Cherwell cuts through the limestone hills that extend diagonally across the country from Somerset to Lincolnshire, and which here form the eastern extent of the Cotswolds. The historic core of the town lies within the low-lying ground of the Cherwell Valley, but much of the southern and western suburbs, including the site and more rural countryside, are situated on a linear spur that extends between the Cherwell and its western tributary the Sor Brook in the direction of Adderbury. The spur rises to 169m above Ordnance Datum (aOD) at Crouch Hill, but in the vicinity of the site forms something of a plateau at *c* 133m aOD, c 40m above the river. The landscape slopes gently southward toward the Sor and is divided into fairly regular blocks by minor tributary streams that flow from north to south. One such stream, which formed the boundary between the historic parishes of Banbury and Bodicote, passed between Excavation Areas 5 and 6, and a shallow dry valley that may once have contained a similar watercourse marked the south-west boundary of the site, the bases of the stream valleys forming the lowest points within the site, at *c* 126m aOD.

1.3 Archaeological and historical background

1.3.1 The Cherwell Valley and surrounding hills are rich in archaeological remains, and the area around Wykham Park Farm exhibits evidence dating from a range of periods, the most significant being the Wykham Farm causewayed enclosure, which extends into the south-eastern part of the development area, and an Iron Age settlement at East of Bloxham Road, immediately to the north-west, which similarly extended into the development area (Fig. 2).

1.3.2 The south side of the causewayed enclosure was discovered through aerial photography in 1996 near the end of a narrow arable field beside Wykham Farm (Featherstone and Bewley 2000, 20 and plate 4), and the geophysical survey undertaken for the Wykham Park Farm development confirmed that the north side of the circuit extended into the development area (WA 2012). At the eastern end it was obscured by an undated sub-rectangular enclosure. The causewayed enclosure ditch was targeted by two trenches during the subsequent trial-trench evaluation, which confirmed its form as a ditch more than 0.5m deep, but no artefactual material was found (CA 2013). Two Neolithic pits that were excavated immediately west of Wykham Farm during a watching brief on the Banbury Booster pipeline would have been little

more than 100m from the enclosure (JMHS 2005a). In the wider landscape a substantial group of 35 pits associated with middle Neolithic Peterborough Ware pottery was uncovered 4.5km to the north-east at the Banbury flood alleviation scheme (Simmonds 2014).

1.3.3 Bronze Age activity around Banbury is predominantly represented by cropmarks of the ring ditches of plough-levelled barrows, which are typically situated on the higher ground on either side of the Cherwell. Within the development area, three such cropmarks were identified from aerial photographs and were targeted by trenches during evaluation, but no archaeological features or deposits related to them were identified (CA 2013). Two ring ditches and a somewhat larger ring ditch, *c* 45m in diameter, have been excavated 350m east of the site, at South of Saltway, but produced no datable material other than worked flints (Rebecca Trow pers. comm.). A further pair of ring ditches are recorded as cropmarks on the far side of the causewayed enclosure, close to Wykham Farm. In the wider landscape, excavations in advance of the construction of the Banbury East-West Link Road (now Hennef Way) revealed part of a middle Bronze Age enclosed settlement on a low promontory overlooking the River Cherwell from the east (Allen 1989; JMHS 2005b), and a D-shaped settlement enclosure probably of similar date was excavated on the north side of the town east of Southam Road (WA 2015).

1.3.4 The site lay within an extensive landscape of Iron Age features, including enclosures that had been identified by the geophysical survey and evaluation trenching. This included an enclosure at the north-west corner of the development area that comprised the east end of a domestic settlement that had been largely excavated in 2014–15 in advance of the adjacent development at East of Bloxham Road, where it was revealed to enclose a single roundhouse (MOLA 2017). A boundary ditch and associated settlement of Iron Age date had also been identified by geophysical survey and trial-trenching to the east (ARS 2014) and has been subject to excavation since the fieldwork at Wykham Park Farm finished. Two kilometres south-west of the site, part of a short-lived middle Iron Age settlement has been excavated at Ells Lane, Bloxham, comprising a single roundhouse and boundary ditches (Ford 2009), and a little further afield a settlement within a double-ditched enclosure was excavated at Banbury Flood Alleviation Scheme (Simmonds 2014).

1.3.5 Roman occupation in and around the Cherwell Valley is well attested, but the trial-trench evaluation found only a small amount of Roman pottery and it would appear that the Iron Age features were abandoned by this time, as were those at the immediately surrounding sites. A road, the Port Way, followed the east side of the valley to a crossing point north of Banbury (Margary 1967, 168; route 161a), and Wykham Lane, which runs east-west past the southern end of the development, follows the line of a second route that branched off this and extended west across the northern part of the Cotswolds toward Droitwich (ibid., 153–4; route 56a). Significant settlements were situated along the latter road, including a possible villa at Wykham Park (now Tudor Hall School) (Salzman 1939, 331), a second villa at Broughton Castle (OA 2018), and a nucleated settlement at Swalcliffe Lea (Henig and Booth 2000, 68).

Two settlements are known north and west of Bloxham (Bond 1980, 105), one of which had a cemetery of at least 21 inhumation burials (Knight 1938). The Iron Age settlement at the Flood Relief Scheme either continued or was succeeded by a settlement that was occupied into the early 3rd century, but the extensive excavation at Southam Road uncovered only a small number of Roman features, comprising scattered burials and land division, with little evidence for settlement in the immediate vicinity (WA 2015, 10).

1.3.6 Very little evidence has been found for Anglo-Saxon occupation in the vicinity of the site, although place-name evidence indicates a pre-Norman origin for most of the local settlements, including Banbury and Wykham. At this time Banbury, along with Thame, Dorchester and other Oxfordshire manors, formed part of a great estate belonging to the see of Dorchester (Crossley 1972, 42). The path that marks the northern limit of the site forms part of the Salt Way, one of the network of early medieval routes involved in the distribution of salt from Droitwich (OA 2012). Mid-20th-century aerial photographs show the site under ridge and furrow earthworks, indicating the agricultural character of the site during the medieval period, when it lay within the open fields of the village of Wykham. The village became deserted during the 15th or 16th century (Crutchley *et al*. 1988), but the site retained its agricultural character until the present development.

Geophysical survey and trial-trench evaluation

1.3.7 The surveys confirmed that the north side of the Wykham Farm causewayed enclosure extended into the south-eastern part of the development area and also identified two Iron Age enclosures, one at the north-western limit of the area, which had previously been partly excavated at the adjacent East of Bloxham Road development, and one close to the northern boundary. Three sides of a possible rectilinear enclosure of unknown date were situated close to the causewayed enclosure and undated linear features including a trackway were located at the north-eastern corner.

1.3.8 Four possible ring ditches in the western, central and south-east parts of the development area that had been identified from cropmark evidence were targeted by trenches but no archaeological remains were found. Similarly, trenches that were located to investigate a sub-rectangular enclosure near the northern boundary and linear features in the north-eastern part of the area found no evidence for these features.

1.4 Aims and objectives

1.4.1 The general aims of the investigation were to determine and understand the nature, function and character of the archaeological remains within their cultural and environmental setting, within the excavation areas defined by the OCC brief (OA 2019). Based on the results of the previous geophysical survey and archaeological evaluations of the site, the following specific aims and objectives were identified:

- To determine or confirm the general nature of any remains present;

- To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
- To establish the extent of the Iron Age settlement and the longevity of activity;
- To establish the presence and or absence of the potential Bronze Age barrow remains on the site;
- To determine or confirm the approximate date or date range of any other remains, by means of artefactual or other evidence;
- To examine the potential of the site to produce environmental data;
- To place the revealed archaeological remains within the wider landscape with reference to the *Solent-Thames Research Framework for the Historic Environment*;
- To generate an accessible and useable archive which will allow future research of the evidence to be undertaken if appropriate;
- To disseminate the results of the work in a format and manner proportionate to the significance of the findings.

1.4.2 Following assessment of the data recovered by the excavation, the following revised research aims were identified with reference to the Solent-Thames regional research framework (Hey and Hind 2014):

Neolithic/Bronze Age activity

1.4.3 Solent Thames Research Framework research objective 8.5.5 calls for further attention to the extent and relative significance of Neolithic and early Bronze Age cremation burials. It would therefore be desirable to obtain radiocarbon determinations on the bone from the Neolithic/Bronze Age cremation burials.

1.4.4 Solent Thames research objective 8.4.1 calls for the establishment of the extent and character of settlement away from monument complexes. Can analysis of Neolithic pits 505 and 507 shed further light on the nature of settlement at the site, was this activity related either to the cremation burials, or the causewayed enclosure to the south of the site? Radiocarbon dating of one of the pits would help refine their chronological context.

Late Iron Age and early Roman activity

1.4.5 The late Iron Age to early Roman settlement appears to have been newly established in this period. Solent Thames research objective 10.5.3 states that 'the factors that led to the common shift of settlement location in the late Iron Age need identifying'. Therefore, can further analysis of the finds, animal bone and charred plant assemblages elucidate the reasons for the establishment of the settlement, for example do these assemblages shed light on specific subsistence or farming practices, or specific forms of social activity at the settlement?

1.4.6 The distribution of late Iron Age to early Roman enclosures across the site suggests a differentiation in the use of the landscape, with discrete oval, or rectangular enclosures in the north-western part of the site and integrated sub-rectangular

enclosures in the south-eastern part, on slightly lower ground. Does this distribution reflect different activities, for example settlement versus fields? Was the nature of occupation in the oval enclosures broadly similar? Or does this pattern reflect a chronological difference? Further comparison of the form of the enclosures and the distribution of finds and environmental material may help to elucidate these issues.

1.4.7 Solent Thames research objective 10.7.1 calls for 'clarification of the architecture of prehistoric houses over a long time scale from the middle Bronze Age to the late Iron Age'. The remains of two probable roundhouses were recorded during the excavation and of these the relationship of Structure 1 with Enclosure 1 – whether the house was contemporary with and integral to the enclosure – requires further investigation. Similarly the nature of Structure 2, which appears to have been sub-square in plan – whether a building or an enclosure – needs further elucidation.

1.4.8 The human inhumation burial next to Enclosure 1 and the cremation burials next to enclosure ditch 334 are currently undated. Radiocarbon dates should be sought in order to determine whether or not the burials are contemporary with the enclosures. This would feed into Solent Thames research objective 12.2.2: 'Radiocarbon dating should be used more widely and systematically to help understand change between the late Iron Age and early Roman period.'

1.4.9 Solent Thames research objectives 12.6.2 calls for better characterisation of Roman settlement and economy in North Oxfordshire. The late Iron Age and early Roman settlement and field system should therefore be investigated spatially and stratigraphically in relation to the finds and environmental assemblages recovered and placed in its wider landscape context.

1.4.10 The large curvilinear boundary or enclosure ditch in Area 6 is currently undated and may relate to prehistoric, Roman, medieval or post-medieval activity. It would therefore be desirable to secure a date for this feature either through stratigraphy, radiocarbon dating or artefact dating in order to establish its significance.

1.5 Fieldwork methodology

1.5.1 As specified in the WSI (OA 2019), six excavation areas totalling *c* 5ha were investigated, targeted on the results of the preceding geophysical survey and two phases of trial-trench evaluation (Areas 1–6, Fig. 2). Area 1 was targeted on a possible ring ditch that had been identified as a cropmark, and Area 3 was targeted on two similar features, but neither the evaluation nor the excavation identified any corresponding archaeological features at these locations. Area 2 was targeted on the east end of the Iron Age enclosed settlement that had previously been partly excavated on the adjacent development at East of Bloxham Road, and Area 4 was targeted on the Iron Age enclosure further east along the north boundary of the development. Area 5 was targeted on an enclosure and adjacent linear features that had been identified by the geophysical survey but which were not confirmed by the trial-trenching. This area was divided into two parts (5a and 5b) by a hedged field boundary, Area 5b being further subdivided due to a public right of way that extended

south from the Salt Way and an overhead power cable that extended across it from east to west. Area 6 was located to investigate an undated trackway and linear features at the north-eastern limit of the development area.

1.5.2 In addition to the excavation areas, an area of 1.83ha, comprising the part of the Wykham Farm causewayed enclosure that extended into the development area and also encompassing one of the possible ring ditches and the undated rectilinear enclosure, was designated as an Area of Archaeological Preservation (Fig. 2). In this area the existing ground level was raised with redeposited material from the development in order to secure the long-term preservation of the monument.

1.5.3 In each of the excavation areas the overburden, comprising topsoil and subsoil, was removed using a mechanical excavator with a toothless bucket working under archaeological supervision. The exposed features were digitally mapped using a combination of EDM and GPS and hand-excavation and recording then followed as detailed in the OA Fieldwork Manual (Wilkinson 1992). Up to 10% of each linear feature was excavated and discrete pits and postholes were generally half-sectioned.

1.5.4 Two additional evaluation trenches (Trenches 1 and 2, Fig. 2) were excavated in the south-eastern part of the site to inform the need for any mitigation in this area, which had not been included in the two previous phases of evaluation, but proved to be devoid of archaeological features, and consequently no further investigation was carried out here.

1.5.5 The excavation was undertaken in accordance with the Chartered Institute for Archaeologists' (2014) *Standard and guidance for archaeological excavation*, as well as local and national planning policies, and the WSI.

2 STRATIGRAPHY

2.1 Introduction

2.1.1 Archaeological remains were found in Areas 2, 4, 5 and 6. No remains were found in the southern parts of Area 5b, and only medieval/post-medieval furrows in Areas 1 and 3. A combination of ceramic evidence and radiocarbon dating enabled the features to be attributed to the following periods:

- Phase 1: Neolithic period
- Phase 2: Late Bronze Age
- Phase 3: Iron Age
- Phase 4: Early Roman
- Phase 5: Medieval/post-medieval

2.2 Phase 1: Neolithic period

2.2.1 There were six discrete features of Neolithic date distributed widely across the excavation areas, comprising an early Neolithic pit and tree-throw hole, a pair of middle Neolithic pits and two late Neolithic cremation burials.

1a: Early Neolithic

2.2.2 A pit (477) was located close to the north-eastern boundary of Area 4 (Fig. 4). It was sub-circular and fairly shallow, measuring 0.38m in diameter but only 0.08m deep. Its single fill (478) contained burnt stone and charcoal inclusions throughout, along with a single sherd of pottery (4g) from the rim of a Plain Bowl vessel and a flint end-scraper and flake.

2.2.3 Tree-throw hole 728 in the central part of Area 6 (Fig. 6) contained 20 small sherds (26g) of possible early Neolithic pottery from two vessels. The feature comprised a shallow irregular cut, 0.05m deep, which had been disturbed by ploughing, and it is not certain whether this material was *in situ* or residual. Early Neolithic activity in this area was also represented by a leaf-shaped arrowhead that was residual in ditch 760.

1b: Middle Neolithic

2.2.4 Pits 505 and 507 were located close together next to the north-eastern boundary of Area 5 (Figs 5 and 8). Although only 0.4m apart, they were clearly defined as separate features. Mortlake Ware pottery was recovered from both pits, with the presence of sherds from the same vessel in both features suggesting that they were deposited contemporaneously. A radiocarbon date of 3340–2930 cal BC at 95% confidence was obtained from a charred hazelnut shell from the lower fill of pit 507 (Table 14).

2.2.5 Pit 505 (Fig. 8, section 501; Plate 1) was the smaller feature, measuring 0.67 x 0.65m and 0.14m deep. It had a single fill (506) which contained frequent stone fragments and occasional charcoal. Five sherds (65g) of Mortlake Ware pottery from two vessels were recovered, as well as a single flint chip and an indeterminate animal bone fragment. The fill was sampled for charred remains, resulting in the recovery of pieces

of hazelnut shell and a small quantity of damaged and unidentifiable cereal grain fragments.

2.2.6 Pit 507 (Fig. 8, section 502; Plate 2) was located to the north-east of pit 505 and was only partially within the development area. From the excavated portion it appeared to be sub-circular and 0.95m in diameter with near-vertical sides and a concave base at a depth of 0.36m. The lower of the two fills (512) was greyish with patches and lumps of charcoal throughout and contained six sherds (113g) of Mortlake Ware pottery. The upper fill (511) was a compact brown clay-silt with occasional stones and charcoal inclusions, from which nine sherds (155g) of Mortlake Ware pottery were recovered. The pit produced the only substantial group of worked flint from the site, amounting to 41 pieces distributed more-or-less equally between the two fills. This included a side-and-end-scraper, microdenticulate and flake core from fill 512 and an end-scraper and a retouched blade from fill 511. A small assemblage of 9.1g of cremated human bone was recovered from the two fills, as were four fragments of fired clay. Both fills were sampled for charred remains, resulting in the recovery of hazelnut shell and unidentifiable cereal grain fragments.

1c: Late Neolithic

2.2.7 A radiocarbon date of 3010–2880 cal BC (Table 14) indicated a late Neolithic date for cremation burial 305 (Fig. 3). This was part of a complex feature whose interpretation was uncertain. It appeared to comprise a tree-throw hole or other natural feature (304) into which had been cut the pits for one, or possibly two discrete cremation burials (255 and 305). Alternatively, the cremation deposits may have been deposited directly into feature 304 without separate pits, prior to backfilling.

2.2.8 Cremation burial 255 (Plates 3 and 4) was situated near the south-west end of feature 304 and was irregular in profile, measuring 0.52 x 0.44m and 0.1m deep. The fill (258) contained a fairly small amount of burnt bone but quite a dense concentration of charcoal. The bone appeared to be concentrated toward the base of the deposit and amounted to only 18.1g of material, possibly from a sub-adult.

2.2.9 Cremation burial 305 was separated from deposit 255 by a distance of *c* 0.2m. It was notably richer in cremated bone but had less charcoal than deposit 255, and the bone was largely concentrated in one area. A total of 32.4g of bone were recovered, again possibly from a sub-adult.

2.2.10 Cremated bone fragments and charcoal were also found outside of the two putative cremation burials, within the fill of feature 304, almost certainly disturbed by ploughing. This constituted a further 11.3g of cremated bone.

2.3 Phase 2: Middle Bronze Age

2.3.1 Cremation burials 435, 438 and 446 were located in a small cluster in Area 4 (Fig. 4). Burials 435 and 446 both yielded radiocarbon dates that place them within the 14th to 12th centuries BC, and the otherwise undated burial 438 has been attributed to the same period based on its similarity and proximity to the other two.

2.3.2 Cremation burial 435 (Plate 5) was located in the north-west of the group and consisted of an oval cut (433) with steep sides and a concave base, measuring 0.54 x 0.46m and 0.15m deep. Cremated bone and charcoal were found throughout the fill, with a greater concentration in the central area, which was darker in colour. This was the only one of the group that produced a substantial quantity of bone, amounting to 453.7g from a female adult or late adolescent. A sample of cremated bone returned a radiocarbon date of 1380–1120 cal BC at 95% confidence (Table 14).

2.3.3 Cremation burials 438 and 446 lay 6m south-east of burial 435. Burial 438 measured 0.64 x 0.51m and 0.09m deep, with shallow sides and a flat base. The southern part had been disturbed by bioturbation and the surface had been disturbed by ploughing. A very small amount of cremated bone was visible in the dark reddish black fill, along with some charcoal and patches of burnt clay. A concentration of darker deposit was again noted, although this was less distinctive than the corresponding deposit in cremation burial 435. Only 4.2g of bone were recovered, the only ageable fragment being a tooth root that indicates an age of at least nine years.

2.3.4 Cremation burial 446 was located in the south-east of the group. It was oval in shape with a concave profile and base and measured 0.49 x 0.4m and 0.09m deep. A small assemblage of just 5.5g of bone was recovered. The feature contained 27g of very fragmentary pottery in three different fabrics, some or all of which may have been Neolithic and therefore residual. A fragment of cremated bone was dated by radiocarbon to 1370–1120 cal BC at 95% confidence (Table 14).

2.3.5 A small group of features was located immediately south of the cremation burials. Pits/postholes 415, 417, 419 and 423 were all quite similar, measuring 0.20–0.35m in diameter and 0.14–0.26m deep and were well defined with vertical sides and generally flat bases. Feature 415 contained a broken denticulate and 417 a small flint chip. Pit 403 was larger and more oval in shape, measuring 1.5 x 1.2m and 0.24m deep. Its fill contained burnt stone and a handful of animal bones, including specimens of horse and pig. The pits cannot be accurately dated and although they may have been contemporary with the cremations, they could just as easily relate to the later Iron Age settlement in this area.

2.4 Phase 3: Iron Age

3a: Early Iron Age

2.4.1 Inhumation burial 472 was the only early Iron Age feature and was situated in Area 4 (Figs 4 and 7; Plate 6). The grave was aligned N–S and was sub-oval in shape with irregular sides and a flat base. It measured 1.3 x 0.5m and 0.2m deep. The burial of an adult of unknown sex (464) had been interred in a flexed position, lying on the left side with the head to the north. Ploughing had disturbed the upper part of the grave and much of the right side of the skeleton was not present. No artefacts were recovered but a sample from the left femur yielded a radiocarbon date range of 540–400 cal BC at 95% confidence (Table 14).

3b: Late Iron Age

2.4.2 The late Iron Age saw a significant increase in activity on the site, with discrete enclosures exposed within Areas 2, 4 and 5a and further boundaries in Area 5b (Fig. 2). The features in Area 6 produced no artefactual material but might also be Iron Age or Roman in date. Most features assigned to this phase contained small amounts of pottery, but some did not and were phased by their alignment or association with more securely dated features.

Area 2 (Fig. 3)

2.4.3 The eastern side of the rectilinear enclosure that had been excavated at the adjacent East of Bloxham Road site (MOLA 2017) extended into the western edge of Area 2 (334, Fig. 3), where it took the form of a large V-shaped ditch, 1.6m wide and 1.85m deep with four fills (Fig. 9, Section 244; Plate 7). The earliest fill at the base of the ditch (330) was 0.48m thick and was a soft, greenish brown silt-clay which was notably different from the later fills, being finer and waterlogged. Above this was a light yellow-brown clay fill (331) with large flat stones concentrated along the edges of the cut on both sides. Fill 332 was a firm greenish brown clay, 1.05m thick. Above this, the upper fill of the ditch (333) was a firm brown-grey sand-clay, 0.52m thick with large stones. No artefacts were recovered, but to the west, in the MOLA excavation, the ditch contained pottery of late Iron Age date.

2.4.4 A shallow ditch 306, which was 0.42m wide and only 0.07m deep, extended from the south-east corner of the enclosure, and curved toward south where it ended in a T-junction with ditch 335. The latter ditch was equally shallow but extended east-west across the full width of Area 2, interrupted by a single break that is probably the result of truncation by ploughing rather than an original entrance.

Area 4 (Fig. 4)

2.4.5 This area exposed a conjoined penannular gully (495) and a sub-rectangular enclosure (Enclosure 1). Their arrangement suggested that they were contemporary, most likely representing a roundhouse site and livestock pen. The terminals of the inner circuit of the enclosure ditch cut those of the gully, indicating that the gully was the primary feature, but it was not certain which iteration of the enclosure ditch was the original.

2.4.6 Gully 495 measured 11.5m in diameter, with the gap on the eastern side measuring 8.27m. It was partially truncated by medieval/post-medieval plough furrows, which accounted for the gaps on the north-west and south-west sides. The gully was 0.8m wide and 0.4m deep, with a steep-sided concave profile, and contained a single fill that produced a single sherd of grog-tempered late Iron Age pottery and some animal bone (Fig. 9, section 420). It was associated with a single circular posthole (466) whose location on the east of the structure may indicate that it held a post for an east- or south-east-facing doorway. The posthole measured 0.45m wide and 0.11m deep with a shallow concave profile and produced no finds.

2.4.7 Enclosure 1 was sub-rectangular in shape, with a double circuit of ditches (485/490) and an interior area measuring 18.2 x 14.0m. The enclosure boundary was defined by an inner ditch (485) and a much shallower outer gully (490; Fig. 9, section 409). The two ditches were nowhere more than 0.5m apart, but only intersected near the north-eastern corner, and it was not possible to establish their sequence due to the similarity of the fills. The inner ditch was steep sided with a flat base and measured up to 1.85m wide and 0.49m deep. Its single fill contained 10 sherds (14g) of late Iron Age grog-and-sand-tempered pottery and 1.3kg of animal bone (including a red deer calcaneus). The outer ditch measured a maximum of 0.5m wide and 0.16m deep and did not contain pottery or any other finds.

Area 5 (Fig. 5)

2.4.8 Ditches lying forming an approximately rectilinear arrangement were recorded in Area 5, and a small amount of pottery recovered from one ditch dates them to the late Iron Age. In contrast to the discrete enclosures in Areas 2 and 4, the boundaries in Area 5b appeared to form two or more larger conjoined fields. Ditches 630 and 640 formed the south and east sides of one field (Enclosure 3), which measured at least 40 x 40m. Ditch 630 measured 0.42m wide and 0.1m deep and ditch 640 was 0.36m wide and 0.26m deep, but they may have originally been a single feature. Dating evidence was provided by five sherds (38g) of pottery of late Iron Age date in three different fabrics (grog-, sand- and flint-tempered) from ditch 630.

2.4.9 Although the relationship had been truncated by Roman ditch 638, it is likely that ditches 662 and 664 branched off the boundary defined by ditch 640 and marked the south side of an adjoining field to the east (Enclosure 4). The ditches ran closely parallel but did not intersect, and consequently no sequence could be established, although they presumably represent successive iterations of the boundary. Both ditches were concave in profile and shallow, measuring *c* 1.2m wide and 0.15m deep, and continued beyond the eastern edge of Area 5a. In the adjacent Area 5b this boundary was represented by a single ditch (523), but it was not certain which of ditches 622 and 664 this corresponds to.

2.4.10 Within the eastern field lay a smaller discrete enclosure (675). It was roughly square in plan, measuring 7.5 x 8.5m, and was defined by a shallow ditch 1.2m wide and 0.2–0.4m deep. An entrance 0.3m wide was identified at the eastern corner. There were no internal features and artefactual material was very scarce, limited to some unidentifiable fragments of animal bone and a rim from a necked jar. The enclosure was cut by ditch 533, which may have been a subdivision that branched off ditch 523, although the junction of the two features lay in the unexcavated strip beneath the modern footpath.

2.5 Phase 4: Early Roman

2.5.1 Features securely dated to the Roman period were less extensive than their late Iron Age processors, being limited to a shallow ditch in Area 2 and a discrete enclosure in Area 5 that may have been associated with continued use of the field system.

Area 2

2.5.2 Ditch 336 extended across the excavation area on a WNW–ESE alignment. It was 0.22m deep and 0.82m wide. A single sherd of pottery of late Iron Age to early Roman date was recovered, but a post-Conquest date is indicated by three sherds of Roman greyware from the continuation of the feature in the adjacent excavation at East of Bloxham Road (MOLA 2017, 22 and 30).

Area 5 (Fig. 5)

2.5.3 Ditch 670 defined Enclosure 2, which was oval or sub-rectangular in shape, with a curved north end but a squarer south end. It was aligned N–S and enclosed an area of 25.2 x 14.8m. The circuit was continuous, with no visible entranceway, although this may simply indicate that the entrance had been obscured by the repeated recutting of the ditch.

2.5.4 A sequence of between two and five phases of ditch was recorded in interventions excavated around the perimeter of the enclosure (Fig. 9, section 518; Plate 8). The earliest ditch was the deepest, comprising a wide, flat-based ditch 0.8–1.0m deep, with moderately sloping sides and several fills. The pottery assemblage recovered from this earliest ditch numbered 134 sherds (1.43kg) and all but five sherds of this came from an intervention at the north-western corner. The assemblage is almost wholly in Romanised fabrics with only 12 sherds (87g) of grog-tempered late Iron Age to early Roman pottery, showing that this earliest ditch was infilled after the conquest. There are few closely dateable forms or fabrics, but a carinated bowl in fine reduced ware dates to the latter half of the 1st century AD. The first recut of the ditch was slightly shallower but with a similar profile, and subsequent cuts were significantly shallower with the ditch eventually measuring around a third of the original width and depth. Pottery from these later cuts is a mixture of Romanised sherds of certain post-conquest date and residual late Iron Age to early Roman sherds. There was a concentration of sherds from an intervention in the southern side of the ditch that included an early Roman greyware beaker and a more broadly dated Roman storage jar. A single disarticulated human tibia shaft, probably from a late adolescent/adult individual, was recovered from this location. The fills also included 2.7kg of animal bone, and fired clay fragments including part of a possible spindle whorl or bead and possible oven walling. There were no features surviving in the interior or close to the exterior of the enclosure, and its function remains unclear, but the large domestic pottery assemblage (335 sherds, 3.4kg in total) suggests a settlement-related function.

2.5.5 To the east of the enclosure, in Area 5b, the field system that had been established in the preceding late Iron Age phase was redefined. The field boundary that was originally defined by ditches 630 and 640 was recut as ditches 626 and 638. A break in the latter boundary that appeared to be associated with a slight outward-curving of the ditch may have defined an entrance way that was not present in the earlier phase. Ditch 660 extended into the development area for 10m from the northern baulk and may have been a sub-division within the field. Pottery recovered from ditch 638

numbered 14 sherds (69g) and included E-ware of late Iron Age to early Roman date and post-conquest Romanised sherds, including one from a fine oxidised ware butt beaker dating to the latter half of the 1st century AD. Ditch 626 contained four sherds (72g), all of post-conquest date.

2.6 Phase 5: Medieval/post-medieval

2.6.1 Activity of this period was restricted to plough furrows, which extended N–S across Areas 4 and 5 and E–W across Areas 2 and 3. The few finds recovered were residual from earlier periods, with the exception of a nail shank of probable post-medieval date from a furrow in Area 2.

2.7 Undated features in Area 6

2.7.1 The excavation area was targeted on the junction of a ditched trackway and curved boundary that had been identified by the geophysical survey but were not dated during the trial-trench evaluation (Fig. 6). No dating evidence was recovered during the excavation, other than a Neolithic arrowhead from ditch 760, but the features pre-dated the ridge-and-furrow cultivation in this area and an Iron Age or Roman date is possible. The features were universally shallow and clearly plough-truncated.

2.7.2 The trackway was defined by ditches 705 and 765, which entered the excavation area on parallel alignments from the south-west, 20m apart. Ditch 765 exhibited evidence for two cuts, each *c* 0.2m deep, although it was not certain which was earlier. The western ditch terminated to the north-east but the eastern one turned toward north-west to form a boundary perpendicular to the alignment of the trackway, perhaps indicating that the trackway ended within the excavation area, although it is possible that segmented ditch 752 represented a north-eastward continuation. The corresponding end of ditch 705 was not located, as only a short section of the ditch was exposed at the south-east corner of the excavation area.

2.7.3 If the trackway did indeed end within the excavation area, it probably respected boundary ditch 760. This was a broad but shallow feature measuring *c* 3.2m wide and 0.2m deep. Its width varied significantly along its length, suggesting that the presence of localised recuts, and toward the eastern end it divided into two. A narrower ditch (721) was located on the northern side of ditch 760 at the western end and appeared to reflect the curvilinear form of the larger ditch.

2.7.4 Ditches 719 and 730 lay on a NNW-SSE alignment that was somewhat anomalous to the other boundaries in this area, but it was uncertain whether this was relevant to their date.

2.8 Trenches 1 and 2

2.8.1 Two evaluation trenches were excavated in the south-eastern part of the development area, which had not been included in the previous two phases of evaluation trenching (Fig. 2). Both trenches were 30m long and 1.8m wide. No archaeological evidence was

found, the trenches revealing natural clay overlain by a subsoil 0.1–0.22m thick and a modern ploughsoil 0.3m thick.

3 ARTEFACTS

3.1 Prehistoric pottery *by Alex Davies*

3.1.1 A small assemblage of prehistoric pottery, some 114 sherds (440g), was discovered during the excavations, probably all dating to the early and middle Neolithic. Many of the sherds were very small and highly abraded, often making identification difficult. The identifiable forms belong to two groups, early Neolithic Plain Bowl and middle Neolithic Peterborough Ware.

Methodology

3.1.2 The pottery was recorded broadly following the recommendations of the Prehistoric Ceramics Research Group (PCRG 2010; PCRG *et al*. 2016). Sherds from each context were separated into vessels, and details of each vessel were recorded. Cross-context refitting was attempted with sherd belonging to the same tradition. The following data was recorded on an Excel spreadsheet which is available in the archive: fabric, level of abrasion, vessel form, rim form, number of body sherds, number of rim sherds, number of base sherds, weight, wall thickness, decoration, surface treatment, rim diameter, estimated vessel equivalent (EVE, or percentage of rim surviving; Orton and Hughes 2013, 210–13), features (eg handles or modifications), and presence of carbonised residue (none was seen). Further details in fabric and vessel form are given below.

Fabrics

3.1.3 Six fabrics were defined (Table 1). Many of these bear close similarity to the fabrics in the predominantly middle Neolithic assemblage from the Banbury Flood Alleviation Scheme (BFAS; Brown 2014), and equivalent fabrics from that site are given in the table.

3.1.4 The small early Neolithic assemblage was made from shelly fabrics, all degraded and leached. The early Neolithic material from the nearby Banbury Booster pipeline was in shelly fabrics (Raymond 2005), as well as that from Briar Hill causewayed enclosure in Northampton to the north-east (Bamford 1985), and at Abingdon causewayed enclosure to the south (Avery 1982).

3.1.5 Most of the middle Neolithic pottery did not have any visible inclusions. The equivalent fabric accounted for a small part of the Peterborough Ware at the Banbury Flood Alleviation Scheme, although grog fabrics dominated (Brown 2014, table 4.16). These differences in fabric proportions cannot be used to reliably suggest any differences in chronology or provenance of the vessels between these sites as Peterborough Ware fabrics can be very diverse, as shown for example at Yarnton (Hey *et al*. 2016, fig. 4.2).

Table 1: Prehistoric pottery fabrics and quantification

Fabric	Description	BFAS fabric	E Neo?	M Neo	Neo/ prehis
Li1	Abundant fine oolites, mostly leached	O1			2/4g/1
No	Fine smooth clay with no visible inclusions	SM1		20/333g/3	61/25g/3
Qs2	Fine/medium grade quartz sand	Q1?			2/3g/2
Sh2	Medium grade, well sorted, very common leached shell	-	19/24g/1		
Sh3	Medium grade, moderately sorted, moderately common leached shell	V1	2/6g/2		
Sh4	Very similar to No but with very coarse, moderately sorted leached shell	SM1/ V1		8/45g/1	
Total			**21/30g/3**	**28/378g/4**	**65/32g/6**

Period quantification by Sherds/weight/vessels

Early Neolithic

3.1.6 A very small amount of probable early Neolithic Pain Bowl pottery was found. A single 2g sherd was the only pottery found in sole fill 434 of cremation burial 435 in Area 4 (Fig. 10, no, 1). The rim has a flat top and is slightly expanded and is from a closed vessel with an incurving neck. It has a wall thickness of 7mm and is in fabric Sh3. The sherd is very small and cannot be used to date the feature it was found within. A radiocarbon date of 1380-1120 cal BC (Table 14) was obtained from cremated remains in the pit. While it is possible that the sherd is typologically middle Bronze Age and contemporary with the creation deposit, an early Neolithic date is preferred and the sherd should be residual.

3.1.7 Another Plain Bowl rim sherd (4g) was found in pit 477 in Area 4. The rim is pointed, from a vessel with an outturned neck (Fig. 10, no. 2), in fabric Sh3. The sherd is again small and could be residual or intrusive.

3.1.8 Sherds possibly dating to the early Neolithic were found in tree-throw hole 728 in Area 6. Some 19 sherds (24g) from a thin-walled but highly abraded vessel in fabric Sh2 were found alongside a 2g sherd in fabric Qs2, datable only broadly to the prehistoric period.

Middle Neolithic

3.1.9 A more significant assemblage of middle Neolithic Peterborough (Impressed) Ware was found, totalling 28 sherds (378g) from three or four vessels (Fig. 10, nos 3 and 4). This all derived from adjacent pits 505 and 507 in Area 5. All belong to the Mortlake substyle, and all have very similar forms and decoration. Rim diameters were very similar, between 17 and 20cm. Two or three vessels have no visible inclusions (fabric No), and one vessel is in fabric Sh4. The total estimated vessel equivalent (EVE) is 0.35, meaning approximately a total of third of a circuit of complete rim was present, suggesting about a third of one complete pot is represented. The radiocarbon date of 3340–2930 cal BC at 95% confidence obtained for a charred hazelnut shell from the lower fill of pit 507 (Table 14) accords with current understanding of the span of

Peterborough Ware pottery, belonging to the second half of the fourth millennium and the early third millennium cal BC (Peter Marshall pers. comm.; Marshall and Cook 2010).

3.1.10 No precise cross-context refits were identified, but sherds found in context 506 and 511, respectively the only fill of pit 505 and the upper fill of pit 507, were sufficiently similar as regards the nature of the decoration, fabric, wall thickness, rim diameters, nature of the firing, and the general feel of the sherds, to suggest they almost certainly belonged to the same vessel. It is probable that sherds from the same vessel were also found in lower fill 512 of pit 507, although this was less certain. Another vessel almost certainly had sherds across both fills of pit 507.

3.1.11 The surfaces of the sherds were all very abraded, making identification of the decorative techniques uncertain, although all were profusely decorated. The internal side of the rim was decorated with chevron twisted or whipped cord in all but one of the vessels. The outer rims were decorated with twisted cord, whipped cord or bird bone impressions, in lines or chevrons, with two of the three cavettos decorated in the same way. Bodies were decorated with whipped cord and/or bird-bone impressions. The decorative techniques – twisted cord, whipped cord and bird-bone impressions – were deployed in similar ways. Overall, the assemblage is very consistent, with the vessels very similar to each other. Twisted cord, whipped cord and bird-bone impressions were also the most common techniques on the Peterborough Ware assemblage from the Banbury Flood Alleviation Scheme (Brown 2014, table 4.18).

3.1.12 The inclusion of sherds from the same vessels in both pits suggests that the pits were filled from the same parent source, presumably an above-ground midden or other 'pre-pit' context (Garrow *et al*. 2005, 149–51). The sherds from these pots were equally worn, indeed the surfaces of all the vessels were eroded, suggest the pits were filled at the same time and that the material had spent some time in such a 'pre-pit' context and/or had been well used prior to breakage.

Less datable sherds

3.1.13 Some 60 heavily abraded sherds weighing just 27g were recovered from cremation pit 446. The sherds probably come from different three vessels, with each pot only represented by a tiny fraction of its total, making it very unlikely that any of these were urns containing cremated remains even if very substantially truncated. It is quite likely that the sherds are not contemporary with the cremation deposit and they could either be residual or intrusive.

3.1.14 The highly fragmented and abraded nature of the sherds makes them very difficult to date. Two of the vessels have no visible fabric and are like some of the Peterborough Ware sherds in this respect. The other vessel is in fabric Li1, which was not otherwise seen at the site. One rim sherd has a flat top, another has an angle that might be from a rim or cavetto, and there is a flat sherd that might be from a base. Another sherd has parallel raised lines. The sherds are only dated broadly to the Neolithic, with a Bronze Age date possible for some of them. A radiocarbon date of 1290–1125 cal BC (Table

14) was obtained on cremated remains in the pit. It is likely that most if not all of the sherds are residual.

3.1.15 Four sherds (3g) of prehistoric pottery were found in ditch 630. Three sherds had no visible temper, and one sherd was sandy. It is likely these are residual.

Catalogue of illustrated vessels (Fig. 10)

1. Early Neolithic, fabric Sh3. Ctx 434, cremation burial 435.
2. Early Neolithic, fabric Sh3. Ctx 478, pit 477.
3. Middle Neolithic, fabric No. Ctx 506, pit 505.
4. Middle Neolithic, fabric No. Ctx 506, pit 505 and ctx 506, pit 511.

3.2 Iron Age and Roman pottery *by Kate Brady*

Introduction

3.2.1 Some 354 sherds of Iron Age and Roman pottery, weighing 3.65kg, were recovered from the excavation. The assemblage was recorded following guidelines set out in *A Standard for Pottery Studies in Archaeology* (PCRG, SGRP, MPRG 2016).

3.2.2 Each context group was sorted into wares, which were assigned codes taken from Oxford Archaeology's guidelines for recording Roman pottery (Booth 2016). Forms were identified by rim and similarly assigned standard OA form codes (expressed as a two-letter code, such as CK for 'cooking pot' type jar, followed by a three-digit rim code, for example JB 110, a plain-rimmed curving-sided dish). Each vessel was quantified by sherd count, weight, number of vessels (MV) based on rim, and estimated vessel equivalent (EVE), which measures the surviving percentage of the circumference of a rim – thus, a complete rim was recorded as 100%, while half a rim was recorded as 50%. In this report, percentages have been converted to fractions of a whole, 100% becoming 1 EVE and 50% becoming 0.5 EVE. Ware codes pertaining to regionally significant fabrics were cross-referenced with the National Roman Fabric Reference Collection (Tomber and Dore 1998). Quantification of forms and fabrics is given in Table 2. A date for deposition, or spot-date, was provided for each context group on the basis of the pottery it contained.

Table 2: Quantification of Roman pottery by fabric

Fabric	Description	No. sherds	Wt (g)	MV	EVE
C Calcareous wares					
C10	Shelly ware	7	16	0	0
C20	Limestone-tempered fabrics	4	86	1	0.1
E Iron Age/early Roman wares					
E30	Coarse sand-tempered fabrics	10	125	1	0.04
E40	Shelly fabrics	45	206	2	0.82
E50	Limestone-tempered fabrics	5	73	1	0.05
E60	Flint-tempered fabrics	2	8	1	0.05
E80	Grog-tempered wares (SOB GT)	137	1086	8	0.59
E810	Grog-and-sand-tempered wares	7	36	0	0
E820	Grog and shell-tempered ware	2	58	1	0.06
O Oxidised wares					
O10	Fine oxidised wares	14	94	1	0.03
O20	Sandy oxidised wares	23	238	0	0
O80	Coarse-tempered oxidised wares	2	41	1	0.12
R Reduced wares					
R10	Fine reduced wares	19	117	2	0.12
R20	Sandy reduced wares	3	91	1	0.16
R30	medium/fine reduced fabrics	78	641	2	0.49

Fabric	Description	No. sherds	Wt (g)	MV	EVE
R90	Coarse-tempered reduced wares	12	362	1	0.36
W White wares					
W10	Fine white wares	2	54	0	0
W20	Sandy white wares	7	146	1	0.26
W21	Oxfordshire whiteware	44	291	1	0.8
Total		**423**	**3769**	**25**	**4.05**

Assemblage composition and supply

Phase 3b (late Iron Age)

3.2.3 Pottery from context groups spot-dated to the late Iron Age and assigned to Phase 3b numbered 69 sherds (114g) and took a 16.3% share of the assemblage by sherd count but just 3% by weight, and therefore represents a small and fragmentary proportion of the assemblage. The phase group consisted solely of E-wares of various fabrics and includes only three vessels identified by rim; a medium-mouthed jar and two rims of uncertain jar/bowl form (includes Fig. 11, no. 1). The jar is in a handmade grog-tempered fabric (E80) with a stubby everted rim, internally thickened. The two jar/bowl rim fragments are of uncertain form, one in grog-tempered fabric E80 and one in flint-tempered fabric E60.

Phase 4 (early Roman period)

3.2.4 Pottery from context groups spot-dated to the early Roman period (*c* AD 43–100) made up the vast majority of the dated groups, numbering 354 sherds (3655g) taking an 83.7% share of the assemblage by sherd count and 97% by weight.

3.2.5 The Phase 4 assemblage consisted entirely of coarsewares, dominated by sandy reduced grog-tempered E-ware fabrics (E80 and E810; R10, R20, R30) and supplemented by smaller amounts of sandy E-wares (E30), shell-tempered E-wares (E40), Romanised sandy oxidised wares (O10, O20) and whitewares, with occasional sherds of limestone-tempered E-wares (E50), coarse Romanised grog-tempered wares (R90, O80), and shell-tempered (C10) and limestone-tempered fabrics (C20). The source of the fabrics is likely to be various, including the Oxford industry which was the dominant producer of Romanised coarsewares in the region in the early Roman period and beyond.

3.2.6 E-ware vessels in the Phase 4 group number seven jars, two bowls, a platter and a jar/bowl of uncertain form. There is a medium-mouthed handmade shell-tempered (E50) jar with an everted rim and a medium-mouthed form with a long, gently curving neck (Thompson form B1-4) in a fine grog-tempered fabric (E80) with a burnished black surface (Fig. 11, no. 2). Another, in grog-and-sand-tempered E-ware E810, is high-shouldered and has a cordon at the base of the neck (Fig. 11, no. 13). There are two coarse grog-tempered storge jars with very similar forms (Fig. 11, nos 7 and 8), but one is lightly finer (Fig. 11, no. 8). There is a storage jar in buff-coloured grog-tempered ware E80 (form C6-1), a lid-seated jar also in buff-coloured grog-tempered

ware (form B1-6; Fig. 11, no. 4) and another lid-seated jar in grog and shell tempered E-ware (Fig. 11, no. 3). There is a handmade grog-and-shell-tempered curving-sided bowl with a bead rim, and a plain-rimmed handmade sand-tempered bowl in fine, burnished fabric (E30) of middle to late Iron Age date, but in a context with post-conquest, Romanised material. The platter (Fig. 11, no. 12; G1, Thomson 1982) is in a grog-tempered fabric (E80) with a plain rim.

3.2.7 The reduced ware vessels include a narrow-mouthed everted-rim necked high-shouldered jar in a sandy fabric (R20) and another in a medium sandy fabric (R30). There are two carinated bowls: one in fine sandy reduced ware (R10; Fig. 11, no. 5) and one in medium sandy reduced ware with diagonal line decoration above the carination (Fig. 11, no. 6). There is also a medium-mouthed jar with a hooked, everted rim in medium sandy fabric R30 (Fig. 11, no. 10) and a beaker with an out-turned rim in fine greyware fabric R10 (Fig. 11, no. 11). A small lid or very small dish/platter, measuring *c* 10cm in diameter, is in fabric R10. Oxidised ware vessels were less numerous. Forms represented by rim include a wide-mouthed jar with a hooked rim in soft grog-tempered storage jar fabric O80 and a butt-beaker (Young form O6; Fig. 11, no. 14). There is a narrow-mouthed jar in Oxfordshire whiteware (form Young W32; Fig. 11, no. 9).

3.2.8 There is no imported material in the assemblage and all the material is likely to have been from fairly local sources, albeit with some continental influence on forms such as the 'Belgic' jars and platters.

Chronology

3.2.9 While the date range of E-wares can span the late Iron Age to early Roman periods, an absence of Romanised wares in some features suggests that this material belongs to the earlier part of this range and therefore the contexts containing only E-wares have been assigned a date up to AD 50. Further, all of the more closely dateable forms suggest a narrower date for the main phase of activity between the end of the 1st century BC and the mid-1st century AD.

3.2.10 Deposition of substantial amounts of E-wares alongside Romanised wares demonstrates that there are features with origins in the early Roman period: boundary/drainage ditches and an enclosure ditch. The early Roman assemblage consists of 39.3% E-wares and 60.7% Romanised coarsewares by sherd count (40.4% and 59.6% by weight respectively), suggesting that the group was deposited well into the post-conquest period. The presence of two vessels (a Young R31 and a Young R38) which both date to after AD 70 demonstrates that activity continued into the late 1st century.

3.2.11 Placing the site chronologically alongside other sites in the vicinity depends on whether the site is part of a larger settlement, alongside the sites to the east and west, or whether it is considered in isolation. The greater part of the enclosure in Area 2 (ditch 334) was excavated at the adjacent East of Bloxham Road site (MOLA 2017); here the pottery assemblage recovered consisted of mainly shelly wares (83%) and

sand-tempered wares of late Iron Age date, whereas the majority of E-wares recovered from the current site are in other fabrics (mainly grog-tempered). Only one grog-tempered sherd was recovered from the MOLA site, suggesting a chronological distinction between the sites, with the large western enclosure (corresponding to ditch 334) almost certainly being earlier in date than the ditches and enclosures in the rest of the site, which probably represent features that were excavated and remodelled in the latest Iron Age and into the latter part of the 1st century AD.

3.2.12 Excavation at Land South of Saltway, to the east of Wykham Park Farm, collected an assemblage of Iron Age pottery with a mixture of shell, sand and quartz tempering, dated broadly to the middle to late Iron Age (Rebecca Trow pers. comm.).

3.2.13 The late Iron Age to early Roman pottery from the Banbury Food Alleviation scheme (Booth 2014) contrasts with the Wykham Park Farm assemblage as, although similar E-wares are present, the assemblage also contains other later prehistoric fabrics of middle Iron Age character, fabrics that are not present in the current assemblage, suggesting that occupation at Wykham Park Farm commenced after the middle Iron Age.

Pottery condition and pattern of deposition

3.2.14 The overall mean sherd weight (weight divided by the number of sherds), which records average fragment size and is therefore a useful proxy for condition, is 8.9g. This is low and indicates a poorly preserved assemblage. This suggests the material may have been discarded and perhaps moved several times before final deposition. This applies even to material that appears to represent single episodes of deposition, such as dumps of material within enclosure ditches such as ditch 670, where the MSW is 10.2g, again perhaps suggesting the material was deposited/middened elsewhere before deposition in these ditches, probably away from the main focus of settlement activity.

Evidence for pottery use

3.2.15 Evidence of use is extremely limited, restricted to a few sherds of grog-tempered ware in ditch 670 (Phase 4) which have exterior surface deposits of soot. A whiteware narrow-mouthed jar is scorched around the rim and on part of the body, but this is likely to be from the kiln firing rather than from use.

Settlement status

3.2.16 The pottery assemblage suggests that the site formed part of a low-status rural settlement and fits well into the pattern for the region, with a standard set of fabrics and forms dominated by jars and bowls and few or no exotic products (Booth 2004). Jars were dominant, accounting for 86% of the assemblage. This is consistent with the tendency for higher proportions of jars the lower the settlement status (Evans 2001), and the earlier the date of the settlement and the greater use of utilitarian vessels over table wares.

3.2.17 Of particular note is the total absence of any fine wares, imports and exotic products, both from this site and the earlier excavated sites to the east and west, probably part of the same wider settlement. This suggests very limited access to non-essential products such as wine and olive oil, and no evidenced use of table wares which would suggest adoption of Roman dining practices, although the small size of the assemblage necessitates caution in this interpretation.

Catalogue of illustrated pottery (Fig. 11)

1. Plain rim jar/bowl, grog-tempered E-ware (E80). Ctx 534, ditch 533, Phase 3b.
2. Medium-mouthed jar in shell-tempered E-ware (E50). Ctx 568, ditch 670, Phase 4.
3. Lid-seated jar, grog and shell-tempered E-ware (E820). Ctx 617, ditch 670, Phase 4.
4. Lid-seated jar, grog-tempered E-ware (E80). Ctx 584, ditch 670, Phase 4.
5. Carinated bowl, fine sandy reduced ware (R10). Ctx 588, ditch 670, Phase 4.
6. Carinated bowl with decoration, medium sandy reduced ware (R30). Ctx 588, ditch 670, Phase 4.
7. Medium-mouthed jar, coarse sand and grog tempered ware (R90). Ctx 588, ditch 670, Phase 4.
8. Medium-mouthed jar, coarse sand and grog-tempered ware (R90). Ctx 588, ditch 670, Phase 4.
9. Medium-mouthed jar, Oxfordshire sandy white ware (W21). Ctx 588, ditch 670, Phase 4.
10. Medium-mouthed jar, medium sandy reduced ware (R30). Ctx 604, ditch 670, Phase 4.
11. Beaker with everted rim, fine sandy reduced ware (R10). Ctx 604, ditch 670, Phase 4.
12. Curving-sided platter, fine grog-tempered E-ware (E80). Ctx 604, ditch 670, Phase 4.
13. Necked high-shouldered jar, sand-tempered ware (R20). Ctx 661, ditch 660, Phase 4.
14. Butt-beaker, fine oxidised ware (O10). Ctx 643, ditch 638, Phase 4.

3.3 Worked flint *by Michael Donnelly*

Introduction

3.3.1 A small assemblage of struck flint was recovered, totalling 73 flints; no burnt unworked material was recovered. The flintwork included a large assemblage recovered from a middle Neolithic pit, and many of the residual finds from across the site suggest that this period may have accounted for much of the flintwork. This included many of the tools, such as a leaf-shaped arrowhead from ditch 760, as well as axe-working flakes and two end-of-blade scrapers found in other ditches. The assemblage tended to be quite fresh, suggesting that much of it was close to *in situ* if not actually in its primary

context. It was tool heavy (18%) with more typical levels of cores and related debris (2%), and with a significant blade component (21.21%) typifying the late Mesolithic or early to middle Neolithic periods.

Methodology

3.3.2 The artefacts (Table 3) were catalogued according to OA's standard system of broad artefact/debitage type (Anderson-Whymark 2013; Bradley 1999), general condition noted, and dating was attempted where possible. Additional information on condition (rolled, abraded, fresh and degree of cortication) and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (eg Bamford 1985, 72–7; Healy 1988, 48–9; Bradley 1999). Technological attribute analysis was initially undertaken and included the recording of butt and termination type (Inizan *et al*. 1999), flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982) and the presence of platform edge abrasion.

Table 3: Summary of the flint assemblage

Category type	Pit 507	Remainder	Total
Flake	15		26
Blade			3
Bladelet	2		4
Blade index	11.76% (2/17)		21.21% (7/33)
Irregular waste	2	2	4
Chip		2	2
Sieved chips (10–2mm)	22	1	23
Axe-thinning flake		1	1
Core multiplatform flakes	1		1
Arrowhead, leaf-shaped		1	1
Scraper, end	1	3	4
Scraper, side and end	1		1
Microdenticulate	1		1
Denticulate		1	1
Retouched blade	1		1
Total	46	27	73
No. burnt (%)	10.87% (5/46)	3.70% (1/27)	8.22% (6/73)
No. broken (%)	33.33% (8/24)	57.69% (15/26)	46% (23/50)
No cores/related debitage (%)	4.17% (1/24)	0%	2% (1/50)
No. retouched (%)	16.67% (4/24)	19.23% (5/26)	18% (9/50)

Distribution

3.3.3 The flints were recovered from a range of features, with ditches (27%), postholes (3%), a furrow and topsoil all containing flint (1% each), but the bulk originated in pits (67%), with pit 507 accounting for nearly all of this (63%) and pits 477 and 505 containing small amounts of material.

3.3.4 The lithics were recovered from a total of 22 contexts, though since 46 pieces came from one pit, the remaining 27 flints were recovered from 21 contexts, indicating a highly dispersed assemblage, with the next largest group totalling just three pieces from ditch 760.

Raw materials and condition

3.3.5 The assemblage was entirely comprised of flint, but this material occurred with varied cortical conditions indicating a range of sources. However, the range was still limited, consisting of typical chalk cortex in either fresh (7 pieces) or weathered condition (7), thin abraded chalk cortex typical of North Downs sources (6) and a single example displaying a thermal or recorticated surface.

3.3.6 Pit 507 had a fresh *in situ* assemblage with a clear dominance of fresh (16) or lightly damaged (4) pieces and just one piece that had moderate edge damage. No other assemblage was large enough to be examined in this manner, but the remainder of the assemblage was clearly in worse condition than that from pit 507. This group had a dominance of lightly damaged (12) pieces over fresh (8) and moderately damaged flints (4). This remainder would not be considered as being in poor condition but could

easily be seen to represent near *in situ* material or material from surface or sub-surface horizons that had been gradually incorporated into later features through silting events or more rapidly during backfilling.

Pit 507

3.3.7 Pit 507 comprised the sole significant assemblage recovered from the site and was greatly increased in size by soil sampling, which accounted for 41 of the 46 flints (89%). This contrasts with neighbouring pit 505, which was also sampled but produced only one flint.

3.3.8 Pit 507 contained 15 flakes and two bladelets for a blade index of 11.76% (2/17). It contained four tools (16.7%), comprising two broken flake scrapers, a mesial segment of a retouched inner blade and a complete microdenticulate on an inner blade with heavy signs of use including plant-processing/harvesting gloss. One complex cubic flake core was also present and there were 22 sieved chips and two larger fragments of irregular waste. Breakage was low at 33.3% (8/24) but was noticeably higher amongst tools at 75%, while 10.9% were burnt. These figures for breakage and burning were respectively far lower and higher than the remainder of the assemblage, suggesting some degree of selectivity for the contents of the pit.

Other contexts

3.3.9 Pit 505 contained a single sieved chip while pit 477 had an end-scraper on an inner blade and a proximal segment of an inner flake. Pit 477 contained early Neolithic pottery and it is interesting that its scraper utilised a blade blank rather than a flake one.

3.3.10 Ditch 760 contained the butt end of a broken leaf-shaped arrowhead of Ogival 3B or 4B form (Green 1980) alongside a piece of irregular waste. The arrowhead was quite crudely retouched, suggesting a piece designed for use, in contrast to some of the more complex examples found in burials.

3.3.11 Enclosure 675 yielded an end-scraper on an inner flake and a distal trimming flake. Ditch 485 contained three flakes with low levels of edge damage, two of which were snapped. Unfortunately, these pieces are not diagnostic.

3.3.12 Pits/postholes 415 and 417 each contained flint, with a small chip in 417 and a broken denticulate in 415. Their recovery here might simply indicate the heightened care with which such features are usually examined, leading to increased flint recovery, or it might suggest a flint-using and probably domestic focus given the presence of the tool.

3.3.13 Ditch 334 yielded a single axe-thinning flake in good condition. While it is possible this could date to the Mesolithic period, given the frequency here of Neolithic material a Neolithic date would appear most likely.

Discussion

3.3.14 This assemblage can be seen as containing two main elements; namely its pit assemblages and associated material found as residual finds in later features. There

are no pieces in the assemblage that would not belong in the early or middle Neolithic, although many Neolithic artefact concentrations continue in use into the late Neolithic and early Bronze Age. Genuine diagnostic artefacts are rare with just one example here in the broken leaf-shaped arrowhead from ditch 760, and while these are often seen as casual losses it is perhaps more likely that this piece may represent a manufacturing accident. There are several other pieces of probable Neolithic date found as residual contexts, such as several scrapers and an axe-thinning flake, and these suggest an area of largely domestic flint knapping, most likely associated with surface spreads of flint and pottery, some of which has made its way into later features.

3.3.15 The pits represent the main contemporary flint-bearing features. This included early Neolithic pit 477, with a very minimal assemblage, while middle Neolithic pits 505 and 507 formed a pair, something that is commonly seen on Neolithic sites including many examples in Oxfordshire. It has been theorised that these often form rich and poor examples (Anderson-Whymark 2013), and while there are issues with this theory in general and perhaps also here in terms of overall numbers, there is a clear disparity between the flintwork in this pair of pits. A large and complex assemblage occurred in pit 507, while pit 505 contained just one sieved chip, presumably an accidental component rather than reflecting any intent, perhaps even suggesting that the pit was not intended to contain any flint.

3.3.16 There are some aspects of pit 507 that might indicate a selected or structured deposit. Firstly, the tools recovered include three broken examples compared to a far lower level of breakage in the flake and bladelet blanks recovered, and secondly the material in the pit is very fresh and may have been buried very soon after knapping rather than having been selected from a surface midden or spread. However, it is perhaps more likely for tools to be broken given that they were made to be used, which was certainly the case for the retouched blade and microdenticulate recovered, and the pattern in breakage may simply reflect this.

3.3.17 Excavation at Banbury Flood Alleviation Scheme identified numerous middle Neolithic pits, including several pairs, as well as isolated examples (Simmonds 2014). These contained a wide range of assemblages from rich to poor with tools tending to be common at around 15% and cores also relatively common at 4.1%. Here, though, the flints tended to be in slightly worse condition, suggesting that they were probably left on a surface midden for some time prior to burial. These pits also showed great variety within their pairs. Examples include the pair 358 and 387, with a far larger flint assemblage in the former and a far higher incidence of burning in the latter. Pits 2022 and 2034 had large but very unequal flint assemblages (143 and 73 pieces respectively), with the former having a wider range of tools while the later seemed to include a more specialised group including four near-identical scrapers. Finally, pits 2065 and 2067 had very similar and quite poor assemblages of flint and other finds.

3.3.18 At Winterbrook, Wallingford, three middle Neolithic pits were identified that included a pair with remarkable similarities to Wykham Park Farm (Donnelly forthcoming). Here pits 1032 and 1034 were found to contain three and 93 flints respectively. Pit 1032

contained limited amounts of debitage while 1034 was tool-rich (9.3%) with mixed forms, had low levels of cores (1.8%), a relatively low level of fine knapping waste (40% compared to 48% in pit 507) and a very similar blade index of 14.29%.

3.3.19 At Yarnton (Hey *et al*. 2016) numerous middle Neolithic pits were investigated including one very rich pair (3207 and 3700). This richness was largely in finds other than flint, with both having similar sized assemblages of 24 and 34 flints respectively; however, pit 3700 contained ten tools in a range of forms while 3207 had just two, both of which were microdenticulates.

Conclusion

3.3.20 The assemblage from Wykham Park Farm appears to represent a limited surface spread or midden of early Neolithic material, including many tool forms, and a limited pit-digging component, followed by the excavation of a pair of pits in the middle Neolithic period. After this there was very limited flint use on site.

3.4 Metalwork *by Anni Byard*

3.4.1 A total of four iron objects weighing 98g were recovered from four contexts across two phases.

Roman

3.4.2 Two iron objects were recovered from features of this phase. The first was recovered from enclosure ditch 670 and is a flat, slightly curved bar with one tapering end but of equal thickness, ruling out a knife blade. The function of this fragmentary object is uncertain.

3.4.3 Ditch 670 also produced a large, incomplete joiner's dog or staple, used to join (for example) wooden boards together. The staple has squared (broken) shanks and a wide rectangular plate. The staple is quite large, measuring 74mm in width, which suggests it was for a relatively substantial wooden construction.

Post-medieval

3.4.4 A small, incomplete nail shank was recovered from a furrow. Most likely of post-medieval date, nails are ubiquitous finds on sites of Roman and later date.

3.4.5 A large nail with a sub-oval head and small section of the shank was intrusive within the fill of enclosure ditch 334. The shank of the nail is broadly rectangular but only survives to a length of *c* 24mm. The head is domed in profile, in plan appearing sub-oval with irregular edges. It is a heavy timber/structural nail of post-medieval date.

Discussion

3.4.6 The small iron assemblage from Wykham Park indicates general background activity comprising objects used in woodwork/carpentry of both Roman and post-medieval date. That all finds were recovered from ditches indicates that their primary role had been fulfilled and they were probably lost or disposed of into the ditches.

3.5 Fired clay *by John Cotter*

Introduction and methodology

3.5.1 A total of 13 pieces of fired clay weighing 136g were recovered from eight contexts. All the fired clay was catalogued at a fairly basic level and spot-dates were provided for each context. Each context group was quantified by fragment count and weight and recorded on a spreadsheet, which also recorded details of fabric characteristics, colour, condition, occasional measurements and possible interpretation. The pieces represent a mixture of material from sieved samples and hand-excavated contexts.

Description

3.5.2 The material is in a very fragmentary and abraded condition and mostly small in size. No more than three pieces were recovered from any context. Two main fabrics were identified. The first is a soft porous brown or grey fabric with some organic inclusions, some rounded limestone (possibly ooliths?), coarse dark red-brown ironstone and/or clay pellets. The other fabric (typified by the fragment of cylindrical object described below) is a fine homogeneous pink-buff to light orange-brown colour with abundant fine mica and very few organic inclusions.

3.5.3 Eight pieces occur in the soft porous grey-brown fabric. These are mostly small shapeless lumps but a few are flattish and retain traces of their original surface. The site stratigraphy and phasing suggest these are probably of prehistoric date. Four small pieces of this occurred in middle Neolithic pit 507 (fills 511 and 512). One piece occurred in an early Roman (Phase 4) context and the other pieces are from undated pits.

3.5.4 Five pieces occur in the finer oxidised micaceous fabric. These form a discrete group from early Roman enclosure ditch 670 and an early Roman date is therefore very likely for this fabric. The pieces are all in this fabric. A small, rounded fragment from fill 595 may be from a small spherical object with a diameter of *c* 30–40mm – perhaps something like a spindle-whorl or a clay bead. A piece from fill 573 may be from a something like a flattened rod-like object or bar, or just possibly part of a metal-casting mould for an object with a concave surface. The largest piece (604) weighs 52g and is the only piece of fired clay from its context, associated with pottery of *c* AD 50–100. Close inspection (including microscopic) showed that it is probably too finely textured and underfired to be ceramic building material. The piece is very weathered but has part of a curved outer surface, suggesting that it represents a wedge- or segment-like fragment from something like a column pedestal or near-cylindrical object, with a diameter of *c* 160mm (of which 12% of the circumference survives). The outer surface is itself slightly concave in the 'vertical' plane so the 'pedestal' may have been slightly tapered or 'waisted'. It could, however, equally come from something like the rounded lip, or jamb, of an opening in the wall of a structure (eg an oven of some sort). The surviving wedge-like fragment is sub-triangular in plan, measuring 65mm wide across the base of the triangle (the curved outer surface) and 44mm thick (or high) to the apex of the triangle and a maximum of 28mm thick. It has a light pink-buff or pink-

brown colour throughout with very fine, barely noticeable, swirls of light brown clay – these swirl in parallel with one of the markedly concave broken sides of the 'triangle' which may be remnants of a (large?) aperture formed while the clay was still plastic (or perhaps moulded around a large off-centre wooden stick in the core?). The fabric is quite soft and remarkably smooth, like a fine terracotta, with very few inclusions visible to the naked eye except fine mica, and sparse rounded iron-rich inclusions (up to 3mm across). Under the microscope brown and white flakes of mica are unusually abundant. The matrix also contains abundant very fine, silt-sized quartz and sparse coarser grains of quartz up to 0.2mm across. It contains no noticeable organic inclusions. There are no signs of scorching, although it does appear to have been fired at a low temperature, comparable to soft brick.

3.6 Ceramic building material *by John Cotter*

3.6.1 Two pieces of post-Roman CBM weighing 116g were recovered from the same context (a medieval/post-medieval furrow). Given the small quantity present, this has not been separately catalogued but is fully described below.

Description

3.6.2 Abraded edge fragments from two separate handmade flat roof tiles (peg tile?). The smaller and later-looking piece has a fairly neatly squared edge (15–16mm thick). It has a light orange-brown core with light brown surfaces/margins. The fabric matrix is fine and smooth with moderate-abundant well-sorted, fine-medium quartz sand, rounded to sub-angular, clear and milky. It has a few, slightly coarser, rounded inclusions of dark red-brown ironstone, light brown clay pellets and sparse calcareous inclusion plus some fine mica. The underside is slightly sanded. An early post-medieval date for this piece seems likely – perhaps 16th to 18th century. The larger piece of tile (88g) has a brighter orange-red/brown colour throughout. It has exactly the same range of inclusions as the previous tile (including the distinctive brown clay pellets) but has a much coarser/grittier and denser texture packed with clear and milky quartz grains – mostly under *c* 0.8mm across. Rare, rounded grits of milky quartz and ironstone up to 4mm also present. It is more abraded (possibly plough-damaged?) and has a sub-squared edge (14mm thick) becoming thicker towards the centre of the tile (max. 17mm). Almost certainly medieval – perhaps 14th to early 16th century.

3.7 Post-Roman pottery *by John Cotter*

3.7.1 A total of three sherds of pottery weighing 90g were recovered from three contexts. All of this is post-medieval and in fabrics commonly found in the Banbury area by this date. Given the small quantity present, this has not been separately catalogued but is fully described below. Fabric codes referred to are those of the Museum of London (MOLA 2014).

3.7.2 Context 410. Spot-date: *c* 1650–1825 (possibly within *c* 1700–1800). Description: One sherd (weight 74g). Midlands 'blackware' (BLACK), or Staffordshire-type red-slipped coarseware (STRSB COAR). From a wide bowl/pancheon with a downturned flanged

rim. Fine buff fabric with a glossy black glaze internally over a dark brown slip. In fresh condition but chipped.

3.7.3 Context 501. Spot-date: *c* 1780–1900 (possibly 19th century). Description: One sherd (weight 10g). English stoneware (ENGS). Body sherd from the shoulder of a spirits flagon. Grey fabric with a brown salt glaze externally.

3.7.4 Context 745. Spot-date: *c* 1806–1900. Description: one sherd (weight 6g). Staffordshire-type refined whiteware (REFW). Wall sherd from a dish or bowl.

3.8 Clay tobacco pipe *by John Cotter*

3.8.1 A single piece of tobacco pipe was recovered and is fully described below.

3.8.2 Unstratified, Area 6. Spot-date: Late 18th–19th century. Description: One piece (weight 4g). A slender stem fragment with a fairly narrow stem bore diameter of 2mm. Dead straight. Length 59mm. Burnished. Burnt/blackened but otherwise in fresh condition.

3.9 Burnt stone *by Ruth Shaffrey*

3.9.1 A total of 36 small fragments of burnt sandstone and finely shelly limestone weighing 867g were recovered. Small quantities of burnt stone were recovered from Neolithic tree-throw hole 728 and five late Iron Age and early Roman contexts. It is all heavily reddened and degraded suggesting exposure to prolonged high temperatures and burnt stone from unphased features provides further evidence of this.

4 ENVIRONMENTAL AND OSTEOLOGICAL EVIDENCE AND RADIOCARBON DATING

4.1 Human skeletal remains *by Mandy Kingdom*

Introduction and provenance

4.1.1 The human bone assemblage comprised nine unurned cremation deposits from six earth-cut pits of middle Neolithic, late Neolithic and middle Bronze Age date (256, 303, 433, 436, 443 and 507: Table 4), a single early Iron Age inhumation burial (skeleton 464), and one fragment of disarticulated bone from the fill (617) of early Roman enclosure ditch 670.

Table 4: Summary of cremation deposit contexts

Date	Feature	Deposit	Sample	Description	Soil/deposit type	Deposit depth
Middle Neolithic	**507**	511	1	Spit 1 (upper quarter of secondary deposit)	Firm compact brown clayey silt with sparse charcoal flecks	0.34m
			4	Spit 2 (2nd quarter of secondary deposit)		
			5	Spit 3 (3rd quarter of secondary deposit)		
			6	Spit 4 (lowest quarter of secondary deposit)		
		512	7	Spit 1 (upper half of primary fill)	Firm compacted mid reddish brown clayey silt with moderate to frequent charcoal	0.13m
			8	Spit 2 (lower half of primary fill)		
Late Neolithic	**255**	258	12	Spit 1 (upper third of main deposit)	Charcoal rich, soft dark brownish grey clayey silt overlain by subsoil.	0.03m
			13	Spit 2 (2nd third of main deposit)		0.03m
			16	Spit 3 (lower third of main deposit		0.04m
		257	20	Disturbed bone associated with deposit 258		
Late Neolithic	**255/305**	257	11	Cleaning layer of area around pits 255 and 305	Soft brownish grey clayey silt	
			14	Cleaning layer from around pit 255 and above 305		
Late Neolithic	**305**	259	17	Spit 1 (upper most quarter of deposit)	Soft brownish dark grey clayey silt	0.03m
			18	Spit 2 (2nd quarter of deposit)		0.03m
			19	Spit 3 (3rd quarter of deposit)		0.03m

			21	Spit 4 (lowest quarter of deposit)		0.05m
Middle Bronze Age	**435**	434	22	Main primary fill	Dark grey/reddish brown clayey silt with charcoal	0.15m
Middle Bronze Age	**438**	437	24	Surface cleaning of pit	Soft blackish reddish brown clayey silt	0.09m
			25	Fill of shallow pit		
Middle Bronze Age	**446**	445	29	Spit 1 (upper third of deposit)	Soft dark blackish grey silt with charcoal	0.09m
			30	Spit 2 (mid third of deposit)		
			31	Spit 3 (lower third of deposit)		
			26	Surface cleaning layer		/
		447	27	Soil from around urn (444)	Soft reddish brown clayey silt	>0.05m

Methodology

Cremation deposits

4.1.2 The cremation deposits were recovered, processed and analysed in accordance with published guidelines (McKinley 2004b). In the field, pits 255, 305 and 507 were subject to whole-earth recovery by excavation in spits. The remaining unurned deposits were recovered in bulk. The contents of pit 446 were block-lifted and excavated in spits in the laboratory.

4.1.3 Processing involved wet sieving the deposits, to sort them into >10mm, 10–4mm, 4–2mm and 2–0.5mm sized fractions. The >10mm, 10–4mm and 4–2mm sieve fractions were then fully sorted by hand to separate the burnt bone from the extraneous material (eg stones). This is with the exception of the 4–2mm fractions from sample 22 (deposit 434) and sample 25 (deposit 437), which were not fully sorted but instead a 20g sample was sorted from each and the percentage bone weight calculated. These percentages were then applied to the total weight of the unsorted material to provide more informed bone weight estimates for each fraction (see Table 6).

4.1.4 The smallest fraction sizes from each sample (2–0.5mm) were not sorted but were rapidly scanned for identifiable skeletal remains and artefacts. Estimations of the proportions of bone present within these fractions were made visually. This was not possible for pit 507 due to the absence of bone from these fractions (see Table 7).

4.1.5 All bone was analysed to record colour, weight and maximum fragment size. In addition, each sieve fraction was examined for identifiable bone elements and the presence of pyre and/or grave goods. The minimum number of individuals (MNI) present was estimated based on the identification of repeated elements and/or the presence of juvenile and adult bones in the same deposit. Estimations of age were based on the developmental stage of tooth roots (AlQahtani 2009), observations of completely fused epiphyses (Scheuer and Black 2000) and, more generally, the overall

size/morphology of identified bones. Sex estimation was not possible due to the absence of suitable sexually diagnostic features in all the deposits. The bone fragments were also examined macroscopically for evidence of pathology and trauma and, where present, lesions were described and differential diagnoses explored, with reference to standard text (as above).

Skeleton 464 and disarticulated bone

4.1.6 The material was analysed in accordance with published guidelines (Brickley and McKinley 2004; Mitchell and Brickley 2017). Preservation was recorded with reference to completeness, degree of fragmentation (scored as low = <25% fragmented; medium = 25–75% fragmented; or high = >75% fragmented) and degree of surface erosion (after McKinley 2004a, 16).

4.1.7 It was not possible to estimate the sex of the skeleton due to the absence of the sexually diagnostic traits of the skull and pelvis (Buikstra and Ubelaker 1994). Age was estimated from the stage of epiphyseal fusion only (Scheuer and Black 2000). Other methods commonly used for adult age estimation, namely the auricular surface (Lovejoy *et al*. 1985), pubic symphysis (Brooks and Suchey 1990), and dental attrition (Brothwell 1981; Miles 1962) could not be employed due to non-survival of these areas.

4.1.8 It was possible to calculate the platycnemic index for the skeleton (indicator of mediolateral flatness of the tibia; Brothwell 1981). However, stature estimation was not possible due to fragmentation of the long bones.

4.1.9 Non-metric traits or minor anomalies of skeletal anatomy that may be genetically or environmentally induced (Mays 2021) were scored as present or absent after Berry and Berry (1967) and Finnegan (1978). All bones were examined macroscopically for evidence of pathology and trauma. Where present, lesions were described and differential diagnoses, explored with reference to standard texts (for example Aufderheide and Rodríguez-Martin 1998; Ortner 2003; Roberts and Connell 2004).

Results

Neolithic cremation burials

4.1.10 A summary of the osteological findings from the Neolithic burials is presented in Table 5, with full details available in the archive (the data for all samples/spits have been combined here for each deposit).

Table 5: Summary of osteological findings, Neolithic cremation burials

Feature	>10mm (% of total weight)	10–4mm (% of total weight)	4–2mm (% of total weight)	Total weight	Maximum fragment size	Identified elements	Colour	MNI, age, sex, pathology etc
507	-	6.4g (70.3%)	2.7g (29.7%)	9.1g	15.8mm (cranial vault fragment)	Cranial vault	White (98%) Grey (2%)	MNI = 1 Sex unknown possible sub-adult, but fragments are too small to confirm
255	0.6g (3.3%)	8.4g (46.4%)	9.1g (50.3%)	18.1g	17mm (cranial vault fragment)	Cranial vault, vertebral arch and rib	White (99%) Grey (1%)	MNI = 1 Sex unknown possible sub-adult, but fragments are too small to confirm
305	9.8g (30.2%)	11.5g (35.5%)	11.1g (34.3%)	32.4g	30.6mm (humerus diaphysis fragment)	Cranial vault, humerus shaft	White (98%) Grey (2%)	MNI = 1 Sex unknown possible sub-adult, but fragments are too small to confirm
255/305	-	5.3g (46.9%)	6.0g (53.1%)	11.3g	5.1mm (unid. fragment)	cranial vault	White (99%) Grey (1%)	As above

Bone weights

4.1.11 The total bone weights are presented in Table 5. These do not include bone from the 2-0.5mm fractions (see 'Methods' above and Table 6).

Table 6: Estimated bone content in the unsorted 2–0.5mm residues of the Neolithic cremation burials

Feature	Deposit	Sample	Total weight of unsorted 2–0.5mm fraction	Bone content (high/moderate/low)	Estimated % bone content (by volume)
507	511/512	1–4/7–8	Not available for analysis		
255	258	12	842.5g	Very low	1%
		13	154g	Very low	<5%
		16	127.5g	Very low	<5%
	257	20	531.1g	Very low	1%
305	259	17	739.8g	Very low	1%
		18	324.1g	Very low	1%

Feature	Deposit	Sample	Total weight of unsorted 2–0.5mm fraction	Bone content (high/moderate/low)	Estimated % bone content (by volume)
		19	432.2g	Very low	<1%
		21	505.4g	Very low	<1%
255/305	257	11	548.9g	Very low	1%
		14	943.1g	Very low	1%

4.1.12 The total weight of bone from the Neolithic pits was significantly below the weight expected from a modern cremation (1650g, McKinley 2000, 269) and the range reported from archaeologically recovered cremation deposits (600–900g, McKinley 2013, 154).

Fragmentation

4.1.13 There are many factors which may affect the extent of bone fragmentation in a cremation deposit. Some may occur as a result of excavation and processing, although it is assumed that the impact of this is fairly uniform across all deposits (McKinley 1994). Other factors are the cremation process itself, as a result of heat-related cracking and fissuring; the collection of the bone from the pyre following cremation; any handling/manipulation of the bone prior to burial; the type of burial (i.e. urned versus unurned); the burial and backfilling processes; and any post-burial disturbance or truncation (ibid).

4.1.14 The level of fragmentation for all the deposits was moderate to high. This is because, in the case of the deposits from pits 305 and 507, the greatest weight of bone came from the 10–4mm sieve fraction. For the deposits from pit 255, the greatest weight of bone was from the 4–2mm fraction (Table 5). It was noted that for pit 305 most of the recovered bone (14.9g) came from the third of four spits and, of this, 8.1g was from the >10mm fraction.

4.1.15 The largest bone fragment was part of a humerus diaphysis (30.6mm) from pit 305.

Skeletal representation

4.1.16 As is often seen in archaeological cremation deposits, the proportion of unidentified bone outweighed the identified bone. Approximately a third of the bone from pit 255 (31.5%), pit 305 (28.4%) and pit 507 (28.6%) could be identified to a skeletal region. The greatest proportion of identifiable bone from all features except pit 305 was cranium (66.7% of identifiable fragments from pit 255 and 100% from pit 507), reflecting the fact that this bone is easier to identify than other bones. From pit 305, 88% of identifiable bone was one fragment of humerus diaphysis that made up 25% of the total bone weight from the deposit.

Colour of the cremated bone

4.1.17 The colour of cremated bone reflects the degree of oxidation and is therefore an indication of the efficiency of the cremation, in terms of the quantity of fuel used to

build the pyre, the temperature attained in various parts of the pyre, and the length of time over which the cremation was undertaken (McKinley 2004b, 11). Colour may range from brown/orange (unburnt), to black (charred: *c* 300°C), through hues of blue and grey (incompletely oxidised, up to *c* 600°C) to white (fully oxidised, >600°C) (ibid.).

4.1.18 The burnt bone from all features was predominantly white in colour. The remaining 1–2% was grey and mainly comprised tinges of grey on the internal surfaces of long bone fragments. The thickness of soft tissue varies across the body and the cremation of the bone beneath it cannot commence until it has been removed, as a consequence of which the internal surfaces of some elements where soft tissue was thicker may not have reached the same temperature as the external surfaces (McKinley 2013).

Minimum number of individuals

4.1.19 Each features appears to have contained the remains of a single individual, as no repeated elements were observed.

Demography

4.1.20 As noted above (see Methods), confident sex estimation was not possible for any of the deposits due to the absence of any sexually diagnostic traits.

4.1.21 There were no specific age indicators in any of the features present. The size and thickness of the identified cranial vault fragments from the three pits (255, 305 and 507) suggested these were possibly sub-adults.

Pathology and non-metric traits

4.1.22 No pathology or non-metric traits were observed.

Bronze Age cremation burials

4.1.23 A summary of the osteological findings from the Bronze Age cremation deposits is presented in Table 7. With full details available in the archive (the data for all samples/spits have been combined here for each deposit)

Bone weights

4.1.24 The total bone weights are presented in Table 8. These do not include bone from the 2-0.5mm fractions but do include the weight estimates calculated for the 4-2mm fractions (see 'Methods' above and Tables 8 and 9).

Table 7: Summary of osteological findings, Bronze Age cremation burials

Feature	>10mm (% of total weight)	10-4mm (% of total weight)	4-2mm (% of total weight)	Total weight	Maximum fragment size	Identified elements	Colour	MNI, age, sex, pathology etc
435	102.4g (22.6%)	208.0g (45.8%)	143.3g (31.6%)	453.7g	54.8mm (radius diaphysis fragment)	Cranial vault, tooth roots, upper limb diaphysis, partial radial head, proximal and distal hand phalanges	White (95%) Grey (5%)	MNI = 1 Tentative Female Adult/late adolescent unspecified (>16 yrs)
438	-	<0.1g (2.4%)	4.1g (97.6%)	4.2g	8.3mm (cranial vault fragment)	Cranial vault and partial tooth root	White (99%) Grey (1%)	MNI = 1 Sex unknown Fragments too small to confirm adult or sub-adult, tooth root has completed apex >9 years
446	-	3.1g (56.4%)	2.4g (43.6%)	5.5g	14.4mm (cranial vault fragment)	Cranial vault	White (98%) Grey (2%)	MNI = 1 Sex unknown fragments too small to state if adult or sub-adult remains

Table 8: Bone weight calculations for the unsorted 4–2mm fractions of the Bronze Age cremation burials

Feature	Deposit	Sample	Total weight of unsorted 4–2mm fraction	Weight of bone in 20g sample	% bone weight	Estimated weight of cremated bone in unsorted 4–2mm fraction
435	434	22	1052.5g	2.7g	13.5%	142.1g
438	437	25	413.5g	0.2g	1%	4.1g

Table 9: Estimated bone content in the unsorted 2–0.5mm residues of the Bronze Age cremation burials

Feature	Deposit	Sample	Total weight of unsorted 2–0.5mm fraction	Bone content (high/moderate/low)	Estimated % bone content by volume
435	434	22	1209g	low	5%
		23	447.7g	Very low	<1%
438	437	25	528g	Very low	<1%
446	445	29	35.8g	Very low	1%
		30	27.9g	Very low	1%
		31	34.8g	Very low	<1%
		26	760.2g	Very low	<1%
	447	27	476.5g	Very low	<1%

4.1.25 The total weight of the bone from pit 435 was 453.7g. This is less than a third of the expected weight of one individual from a modern cremation (1650g, McKinley 2000, 269) and below the range that has been reported from archaeologically recovered cremation deposits (600-900g, McKinley 2013, 154). This was, however, the greatest amount of burnt bone recovered from the excavation.

4.1.26 The weights of the bone deposits from the other pits were significantly below the expected weights noted above (see Table 7).

Fragmentation

4.1.27 As for the Neolithic cremations, the level of fragmentation was moderate to high. This is because, in the case of all deposits from pits 435 and 446, the greatest weight of bone came from the 10–4mm sieve fraction. For the deposits from pit 438, the greatest weight of bone was from the 4–2mm fraction (Table 7).

4.1.28 The largest bone fragment was part of a radius diaphysis (54.8mm, from pit 435). The largest bone fragments from the remaining features ranged from 8.3–14.4mm and were cranial vault fragments.

Skeletal representation

4.1.29 Approximately one-third of the bones from pit 435 (32.2%) could be identified to a skeletal region, whilst less than 10% could be identified to skeletal region from pits 438 (2.6%) and 446 (9.1%). The greatest proportion of identifiable bone from all features was cranium (435, 64.2%; 438, 100% and 446, 100% of identifiable fragments).

Colour of the cremated bone

4.1.30 As with the Neolithic cremation deposits the burnt bone from the Bronze Age features was predominantly white in colour ranging from 95–99%. The remaining 1–5% was grey and also comprised tinges of grey on the internal surfaces of long bone fragments.

Minimum Number of Individuals (MNI)

4.1.31 Each features appears to have contained the remains of a single individual, as no repeated elements were observed.

Demography

4.1.32 As noted above (see Methods), confident sex estimation was not possible for any of the deposits due to the absence of any sexually diagnostic traits.

4.1.33 There were no specific age indicators in any of the features present. The size and morphology of the identified fragments from pit 435 including a fused radial head, suggesting these were adult or later adolescent remains (>16 years). Due to fragmentation, it was not possible to confirm whether the remains from pits 438 and 446 were adult or sub-adult. However, the presence of a tooth root with a completed apex from pit 438 would indicate an individual >9 years.

Pathology and non-metric traits

4.1.34 No pathology or non-metric traits were observed.

Iron Age inhumation burial

4.1.35 Skeleton 464 was approximately 60% complete. Most skeletal regions were represented, although most of the skull, vertebrae and feet were absent. There was moderate and patchy erosion on the surfaces of most elements consistent with McKinley's grade 2 (2004a, 16). Most elements were fragmented, consistent with a 'high' fragmentation score. Considering these observations together, the skeletal preservation of the skeleton was judged to be fair overall.

4.1.36 All surviving epiphyses indicated that the skeleton was a late adolescent/adult. It was not possible to assign the skeleton to a more precise age range based on this indicator alone.

4.1.37 Based on measurements of the tibia shaft, the platycnemic index (the ratio of the anteroposterior diameter to its lateral diameter) was 80.19, which is within the eurycnemic range (>70, Brothwell 1981, 89) and refers to a narrow, flat diaphyseal morphology. The reasons for differences in tibial shape are not clear, but ancestry, mechanical stresses and mineral or vitamin deficiency have all been suggested as possible factors (ibid.), with the eurycnemic range being more commonly found during this period.

4.1.38 One cranial and a few post-cranial non-metric traits were observed. Non-metric traits are skeletal variants which cause no symptoms and are recorded as present or absent (Mays 2021, 167). Some have a strong genetic component in their aetiology and have been used to study relatedness between individuals, whilst others may be influenced by mechanical factors operating on the bones (Mays 2021, 166). In the present skeleton, a small parietal foramen was observed on the posterior aspect of the left parietal bone. Post-cranially, the individual had an Allen's fossa on the left femur, a lateral talar extension on the right talus bone and a septal aperture in the left humerus. Allen's fossa is most likely caused by biomechanical stress and activity, by grinding of zona orbicularis, and the hip muscles (Göhring 2021). In addition, septal apertures are more common in left humeri and in females. The lesion may be associated with hypermobility of the elbow joint in some populations (Mays 2008; Mays 2021, 166).

4.1.39 Non-specific bone inflammation in the form of healed periosteal new bone was present on the left femur and both tibiae. Non-specific periosteal new bone such as this is identified on dry bone as fine pitting, striations or plaque-like new bone formation on the bone surface (Roberts and Manchester 1995, 129–30). It is caused by inflammation of the overlying soft tissue and is generally linked to infection but may also occur in response to other conditions, including metabolic disease, neoplastic disease and trauma (Ortner 2003, 88). Periostitis is an extremely common finding in most archaeological populations and the tibia is often cited as the most frequently affected bone because its proximity to the skin makes it more susceptible to recurrent minor trauma (Roberts and Manchester 1995, 130).

Early Roman disarticulated bone

4.1.40 The fragment of disarticulated bone recovered from enclosure ditch 670 comprised a single section (approximately 20%) of the left tibia shaft. The surface preservation of the bone was good, consistent with grade 1 of McKinley's grading system (2004a, 16). The size and morphology of the fragment would suggest a late adolescent/adult individual. There was no evidence of pathology, and no additional demographic information could be ascertained.

Discussion

Neolithic cremation burials

4.1.41 The partial remains of at least one individual was recovered from each of three Neolithic pits. All three possibly contained sub-adults, although this could not be confirmed.

4.1.42 The weights of bone recovered were below the range of 600–900g which has been reported for archaeologically recovered adult cremation burials (McKinley 2013, 154). The features had been heavily truncated prior to excavation and therefore it is unlikely the excavated deposits represent all the material that had originally been deposited. Deposits with low bone weights are a common finding archaeologically and have been termed cremation-related deposits rather than formal cremation burials, to reflect the fact they might represent cenotaph burials, where only a token amount of bone was deposited (McKinley 2004b, 9–10), or redeposited pyre debris, which generally comprises a mixture of bone fragments and fuel waste (ibid., 10). It is not possible to say whether this interpretation applies to the present contexts, because they had been truncated.

4.1.43 Overall, the bone from the pits was white in colour (fully oxidized), indicating that the bodies had been placed on the pyre in such a way as to maintain a good oxygen supply and high temperature (>600°; McKinley 2013, 158). Only a few internal surfaces were tinged with grey, suggesting that these areas had not reached the temperature required for full oxidization because they were more protected by soft tissue and thicker cortical bone than other areas.

4.1.44 In southern Britain, a number of excavated Neolithic burnt human remains are associated with monuments such as henges or penannular ring ditches, although isolated deposits are also known (Willis 2019). They are often positioned within close proximity to other features or pits and may contain additional items such as pottery, animal bone and/or charcoal (ibid.).

Bronze Age cremation burials

4.1.45 The partial remains of at least one individual was recovered from the Bronze Age pits, with one being a possible older adolescent/young adult. It was not possible to determine the age of the other individuals.

4.1.46 As with the Neolithic deposits, the weight of the bone recovered from each feature was below the expected range noted above, and significantly so in the cases of pits 438 and 446, at 4.2g and 5.5g respectively.

4.1.47 The bone from all the Bronze Age pits was also mainly white in colour with only a few tinges of grey to the internal surfaces indicating that the majority of bone was fully oxidized and had undergone an efficient cremation.

4.1.48 Cremation appears to have become the dominant funerary practice during the middle Bronze Age (Caswell and Roberts 2018). Cremation deposits such as these have been found in isolation or dispersed around fields or settlements within the Thames Valley region (Lambrick with Robinson 2009, 306).

Iron Age inhumation burial

4.1.49 Early Iron Age skeleton 464 was in a fair condition but highly fragmented. This has limited the amount of demographic and pathological information available. The skeleton could only be recorded as an unsexed adult of unknown stature. The only observed pathology was healed periosteal new bone on the lower limbs, which referred to inflammation of the overlying soft tissue as a result of non-specific infection or mild trauma that had occurred at some point during their life. The appearance of the lesions indicated that the individual had recovered sufficiently for the healing process to have nearly completed prior to death.

4.1.50 Isolated inhumations without grave goods are not an uncommon finding in settlement contexts from Iron Age sites in central and southern England, where simple crouched/flexed inhumations were placed in storage pits, shallow graves and ditches (Lambrick with Robinson 2009; Whimster 1981).

Early Roman disarticulated bone

4.1.51 Disarticulated human remains are often encountered in the archaeological record. While not as common in the Roman period as in prehistoric features, remains are occasionally recovered from non-funerary contexts (Pearce 2013, 146).

4.2 Animal bone *by Adrienne Powell*

Introduction and methodology

4.2.1 A small assemblage was recovered from prehistoric, Roman and post-medieval features, comprising 518 hand-retrieved fragments and a further 105 fragments from the environmental samples. All fragments from the hand-retrieved material and identifiable fragments from the samples were recorded using the diagnostic zone protocol of Serjeantson (1996), with conjoining fragments counted as one. Specimens were identified using the author's skeletal reference collection and standard texts (Boessneck 1969; Cohen and Serjeantson 1996). Ribs and vertebrae other than atlas and axis were identified to size category only. Tooth wear was recorded using the wear codes of Grant (1982) and measurements were taken according to von den Driesch (1976), Davis (1992) and Levine (1982). Gnaw marks were categorised as carnivore (probably dog) or rodent. Butchery marks and pathologies were noted and described where present.

The assemblage

4.2.2 The material was in good condition and 25% of the hand-retrieved bone was identifiable. None of the middle Neolithic bone, from pit 505, could be identified, and only a few fragments from the medieval/post-medieval furrows. The largest samples were from the late Iron Age and early Roman features, almost entirely ditch contexts, and this discussion focuses on these two groups but in neither case do the quantities permit detailed or reliable interpretation of past husbandry. Both groups show a high degree of carnivore gnawing, especially the Iron Age material (Table 10), although the intensity is variable. Butchery marks were seen much more commonly in the Roman material, which may be related to the period's typically greater frequency of chop marks in comparison to knife cuts.

4.2.3 The late Iron Age group is dominated by cattle bones (Table 11) and at least two individuals are present. All areas of the carcass are represented, and the material includes an articulating right radius and ulna. Six bones retained state of epiphyseal fusion information, of which only one, a first phalanx, was unfused and hence from an animal younger than 15 months (Getty 1975). Two other specimens, a left femur and tibia, were small and porous and would have come from a young, possibly neonatal animal. One pelvic fragment was female. Equid bones are the next most frequent and include an unfused distal tibia epiphysis, which would have come from an animal younger than two years, and a maxillary cheek tooth, probably M1 or M2, which gave an age estimate derived from the crown height of 11–15½ years (Levine 1982). The elongated protocone of this tooth suggests it came from a horse (*Equus caballus*) rather than a donkey (*Equus asinus*; Davis 1980). A pelvis fragment was from a female. Other taxa are only represented by one or two specimens. Measurements on the two dog bones, a radius shaft (SD = 14.4mm) and a maxillary fragment (length of molar row = 19.5mm, length of carnassial = 19.4mm), are comparable with large modern breeds (Grieve 2012). The bird bone is a fragment of galliforme carpometacarpus,

probably domestic fowl (*Gallus gallus*). The single specimen in the assemblage from a wild animal, a red deer (*Cervus elaphus*) calcaneum, is also the only Iron Age bone with butchery evidence, having knife marks on the lateral surface consistent with disarticulation.

4.2.4 In the early Roman group, cattle bones are again the most frequent, although only just, and this is principally due to the presence of eleven cranial fragments from fill 604 of enclosure ditch 670, which could be from the same individual. At least two individuals were present whereas at least three individuals were present in the sheep/goat remains. In both species all areas of the carcass are represented, the sheep/goat material including an articulating first and second phalanx pair, and all bones retaining fusion information (n = 13) are fused. One sheep/goat mandible with the M2 in wear but M3 unerupted would have come from an animal which died in its second year. There are no ageable cattle mandibular tooth rows but the cranial remains from ditch fill 604 included a maxillary toothrow, P2–M2, in which all the teeth were well worn and would have come from a mature adult. Evidence of butchery is present on nine of the cattle bones and includes skinning marks on a mandible and first phalanx, disarticulation near the joints on limb bones by both knife cut and chopping, and a premaxilla which has been chopped through transversely near the oral end, indicating removal of the nose and incisive part of the mandible, if that had been in articulation with the skull at the time. A large mammal hyoid, probably cattle, shows cut marks suggesting removal of the tongue. Two of the sheep/goat specimens, both female pelves, showed butchery marks. One cattle pelvis fragment was sexed as female.

4.2.5 The small sample of early Roman pig bones includes more evidence of juvenile animals than the cattle or sheep/goat bones: three out of four bones with fusion information are unfused. One of these is a proximal radius which articulates with an ulna, both of which probably belong with the unfused humerus from the same context and would have come from an animal younger than a year old, as would the third unfused specimen, a second phalanx. In addition, there is an unworn M2 and a mandible fragment with the M2 in early wear; which would have come from animals 7–14 months and 21–27 months old at death, respectively (Hambleton 1999). The three ageable equid bones were all fused but an unworn M3 must have come from a young animal of 2–4½ years old and a worn P2 gave an age estimate, from the crown height, of 9¾–1 ¼ years (Levine 1982). The dog remains include a distal humerus with greatest breadth measurement of 26.0mm, which is comparable with a modern small breed such as a Jack Russell terrier (Grieve 2012).

4.2.6 The single bird bone is a domestic fowl or pheasant (*Phasianus colchicus*) proximal tarsometatarsus.

Discussion

4.2.7 The prevalence of the bones of cattle in comparison to sheep/goat and pig, especially in the late Iron Age material, contrasts with the small assemblage recovered from the

adjacent site of Bloxham Road (Gordon 2015). However, the small sample size does not permit definite interpretation of the species proportions or age profiles.

Table 10: Taphonomic modification (% NISP)

Phase	Carnivore gnawed		Rodent gnawed		Burnt		Butchered	
	n	%	n	%	n	%	n	%
Late Iron Age	19	54.3	0		4	2.9	1	2.9
Early Roman	29	37.2	3	3.8	7	2.2	12	15.4

Table 11: Summary of animal bone assemblage

Taxon	Phase						Total
	Middle Neolithic	Late Iron Age	Early Roman		Post-medieval	Unphased	
			Hand-collected	Sieved			
Cattle		24	34		8	2	68
Sheep/goat			16	5	1		22
Sheep			3	5			8
Pig		1	8	1		2	12
Equid		5	6			1	12
Dog		2	4				6
Red deer		1					1
Large mammal		1	6				7
Bird		1	1				2
Total identified	0	35	78	11	9	5	138
Unidentified	19	101	242		5	13	380
Total	19	136	320	11	14	18	518

4.3 Charred plant remains *by Sharon Cook*

Introduction

4.3.1 Thirty-two bulk soil samples, representing the range of feature types and phases across the excavated areas, were processed by water flotation. Sample volume was 25–40L of whole earth for the bulk samples from all the targeted features apart from one large pit (507), which was excavated in spits, the resulting samples being between 8L and 40L. The cremations were also excavated in spits with these samples varying between 1L and 24L.

4.3.2 Following assessment of all the flots it was determined that there was little potential for further analysis of charred plant remains from the Neolithic and Bronze Age features, although the small quantity of charcoal from the cremations has been identified (Meen below) and the assessment results are summarised below.

4.3.3 Two flots from the late Iron Age and early Roman periods, samples 10 and 28, were selected for analysis based on the quantity and quality of the charred remains.

Methodology

4.3.4 The bulk samples were processed in their entirety using a modified Siraf-type water flotation machine to 250µm (flot) and 500µm mesh (residue). The residue fractions were sorted by eye and all bone and artefacts removed while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains.

4.3.5 Identifications were carried out using standard morphological criteria for the cereals (Jacomet 2006) and with reference to the *Digital seed atlas of the Netherlands* (Cappers and Bekker 2013; Cappers *et al*. 2012) for identification of wild plant remains, as well as comparison with modern reference material. Classification and nomenclature of plant material follows Stace (2010).

4.3.6 Quantification of remains is as follows: cereal grains and the seeds of wild plants were only quantified for items of which more than half was present, so these counts may be used to reach a minimum number of individuals (MNI). Seeds of vetches (*Vicia*/*Lathyrus*) were the exception because their easily recognisable structure enabled fragments to be identified: where <50% of an item was present the counts were noted as fragments in the tabulated data.

4.3.7 Cereal chaff has been divided into quantifiable remains, ie glume bases and spikelet forks, and non-quantifiable remains, ie fragments. Awns were calculated by abundance only, with this categorised as rare, occasional, common and abundant. Confirmation on the grass identifications was provided by Ruth Pelling.

The assemblages

Neolithic and Bronze Age features

4.3.8 Very few identifiable plant remains apart from charcoal and hazelnut (*Corylus avellana*) shell were present in the Neolithic and Bronze Age features. Hazelnut shell fragments are common in several samples from middle Neolithic pits 505 and 507, but otherwise there are only a few very abraded indeterminate cereal grain fragments, a single small vetch (*Vicia*/*Lathyrus*) and a single cleavers (*Galium aparine*) seed. A single fragment of false oat grass tuber (*Arrhenatherum elatius*) from Bronze Age cremation 435 (sample 22) may indicate the burning of turf or the use of grasses as tinder (Roehrs *et al*. 2012, 4–12) but there is no other material within the samples to corroborate this interpretation.

Late Iron Age and Roman features

4.3.9 While the samples from the Neolithic features produced few plant remains, those from the late Iron Age and early Roman periods contained a larger quantity of identifiable material, and two have been fully recorded. Even in these samples, however, many of the seeds and cereal grains are in poor condition, with grains frequently clinkered and fragmented, especially in sample 10, where fragments of grain comprise the majority of the flot. Many of the wild plant seeds are also damaged, probably due to partial combustion, with dock seeds (*Rumex* sp.) in particular appearing puffy and distorted

making further identification extremely problematic. Other seeds show evidence of crushing or have some external abrasion and/or fragmentation. While some grass seeds (Poaceae) have survived well, larger examples are clinkered and fragmented making distinctions between oat (*Avena* sp.) and larger grass seeds such as brome (*Bromus* sp.) impossible in most cases. These have therefore been quantified as large Poaceae in Table 12. Cereal chaff in both analysed samples is fragmentary and much cannot be identified beyond glume wheat (cf *Triticum dicoccum*/*spelta*).

Late Iron Age penannular gully 495

4.3.10 The analysed sample (28) originates within the southern section of the gully. While the flot contains charred plant remains, most are small (less than 2mm) fragments of charred cereal grain, most of which is unquantifiable due to the degree of fragmentation. While the remains include both grains and glume bases, these are highly fragmented, preventing conclusive identification, although they are most likely to be spelt (*Triticum spelta*).

4.3.11 The very few wild plants include small-seeded vetch(es), poppy (*Papaver* sp.), cleavers, eyebright/bartsia (*Euphrasia*/*Odontites*) and chickweed (*Stellaria media*), mostly plants that are frequently found in and around arable fields.

Early Roman enclosure ditch 670

4.3.12 Ditch 670 is a small enclosure (Enclosure 2) within Area 5. The analysed sample (10) originates within the south-eastern corner of the enclosure. This flot is much richer in charred plant remains than sample 28, although the remains are also mostly clinkered and fragmented. The identifiable grain is dominated by glume wheat (*Triticum dicoccum*/*spelta*), although there are also a small number of possible barley grains (*Hordeum* sp.), and small fragments of barley rachis confirm the presence of barley, although all remains are too fragmentary to identify further. Unlike sample 28, some of the glume bases are relatively intact and while many fragments are only identifiable as emmer/spelt, those fragments that are in good condition are from spelt. A few grains of oats (*Avena* sp.) are also present but without the diagnostic floret base it is not possible to determinate whether this is cultivated (*Avena sativa*) or wild (*Avena fatua*) oats.

4.3.13 A wider range of wild plant seeds are present than in sample 28 and while some plants are represented by only a few seeds, dock, eyebright/bartsia and grass seeds are common.

Discussion

4.3.14 The small assemblage of charred plant remains from sample 28 from the late Iron Age penannular gully is mostly cereal waste, primarily grain. The poor condition of the seeds and grain may indicate the material has been abraded due to movement from its place of origin, for example hearth debris swept from a floor and subsequently exposed to the elements in a midden, later spread onto the fields, or windblown from an area of primary cereal processing activity. Given the small quantity it would seem

likely that this represents domestic waste even though the point of origin and taphonomic history is uncertain.

4.3.15 By contrast the assemblage from sample 10 from the early Roman enclosure includes a greater quantity of grain and cereal chaff as well as a wild plant assemblage dominated by docks (*Rumex* sp.), eyebright/bartsia, (*Euphrasia*/*Odontites*) and grasses (Poaceae), the latter overwhelmingly fescue/ryegrasses (*Festuca*/*Lolium*) and meadow-grasses (*Poa*/*Pheum*). While docks in general have a wide range of ecological tolerances but are frequently present within rough ground and field margins, sheep's sorrel (*Rumex acetosella*) is more typical of short grassland (Stace 2010, 446) while eyebright/bartsia, and ribwort plaintain (*Plantago lanceolata*) are also plants generally associated with grassland.

4.3.16 The presence of so many grass seeds (40.9% of the wild seeds) may be significant. Fescues and rye grasses are a common constituent of most hay meadows and contain several species commonly utilised as animal fodder, so the grass seeds may derive from hay, perhaps used as fodder. This interpretation is, however, not conclusive due to the lack of some important indicator species. There was, for example, no indication of the tall dicotyledons such as great burnet (*Sanguisorba officianalis*) or meadowsweet (*Filipendula ulmaria*) which are often found in hay meadows, or of clover (*Trifolium* spp.) yellow rattle (*Rhianthus* sp.) or oxeye daisy (*Leucanthemum vulgare*), which are also typical of ungrazed or lightly grazed alluvial grassland in the Upper Thames Valley (Robinson 2007). Most of the remaining seeds in the sample come from plants which have wide ecological tolerances although generally found in cultivated or waste ground (Stace 2010).

4.3.17 It is alternatively possible that this seed assemblage derived from previously uncultivated grassland brought into use for the cultivation of grain crops. For several seasons afterwards this would be expected to result in a crop heavily interspersed with plants which previously grew on the land and seeds from those plants may then have been accidentally harvested with the crop and the seeds discarded during crop processing (winnowing and sieving).

4.3.18 Elsewhere, it has been suggested that an abundance of grass seeds indicates land that has been periodically left fallow for grazing to increase fertility of the soil (Allen and Lodwick 2017, 46). It is not clear if this method of increasing yields extended as far as the British Isles in the Roman period, although it has been suggested that the presence of small-seeded grasses, clover-type herbs (clover, medick, trefoil) and small-seeded vetches or tares indicates the use of a grass fallow, since they occur far too commonly to indicate recent ploughing up of pasture on every site (Carruthers and Hunter Dowse 2019). At least some of these species are present within the assemblage from sample 10, especially the small-seeded grasses, although many of these species are resilient and are found in a wide range of environments.

4.3.19 In support of the hay meadow hypothesis, it is likely that the small enclosure in Area 5 was used for livestock, strengthening the possibility that the plant remains originated in animal fodder, possibly burnt nearby due to spoilage. It is unclear whether the cereal

remains derive from a different activity or were from ears included either accidentally or deliberately with the hay. Columella (1941, 173), writing in the 1st century AD, recommended feeding barley to cattle together with vetches (*Vicia/Lathyrus*), which are also present within the assemblage. However, he also recommended leaving the ground fallow between wheat crops (ibid., 145).

4.3.20 The previous investigation of part of the settlement enclosure adjacent to the north-western limit of the excavation area (MOLA 2017) produced sparse and abraded charred plant assemblages from features dating to the late Iron Age (Fryer 2017, 35–8). There is some similarity within these assemblages and the current samples regarding the crop types present and the small number of cleavers (*Galium aparine*), scentless mayweed (*Tripleurospermum inodorum*), common chickweed (*Stellaria media*) and knotweeds (*Fallopia*/*Polygonum*), as well as in the fragmentary nature of the assemblages.

4.3.21 The similarity in species, condition and low abundance of many of the wild plant seeds and cereal remains may indicate that they form a part of a general background level of detritus (settlement waste, probably midden material) spread across the site during the late Iron Age and early Roman periods, with the material settling in open ditches and becoming incorporated within the fills as they begin to silt up. However, the abundant grass seeds and other wild plant seeds in sample 10 are in better condition and appear only in significant quantities within this single feature which may indicate a more local origin for this material.

Conclusion

4.3.22 All but one of the samples taken from across the excavation contained sparse charred plant material. Neolithic and Bronze Age features contained little beyond charcoal, hazelnut shell and very occasional unidentifiable cereal grain.

4.3.23 The small quantities of wheat and barley together with a small number of damaged seeds found in the later Iron Age and Roman samples are likely to form part of the generalised background material common in the vicinity of settlement sites throughout the late Iron Age and early Roman periods.

4.3.24 Sample 10 from the fill of early Roman ditch 670 was the exception. Part of a probable livestock enclosure, this sample produced a more abundant and better preserved assemblage, rich in grass and other wild plant seeds. This deposit may represent the remains of animal fodder, possibly burned due to spoilage.

Table 12: Summary of charred plant remains

Sample no.		**10**	**28**
Feature no.		**670**	**495**
Description		**Ditch fill**	**Ditch fill**
Date		**ER**	**LIA**
Phase		**4**	**3b**
Volume (L)		**40**	**40**
Flot volume (ml)		**14**	**5**
Proportion of flot sorted		**100%**	**100%**
Charcoal	>4mm	6	0
	4–2mm	16	2
Cereal grain			
Triticum sp.	wheat	8#	5#
cf *Triticum* sp.	probable wheat	12#	5#
cf *Hordeum vulgare*	probable barley	6#	
Avena sp.	oat	4#	
Cerealia	indeterminate cereal	35#	9#
Chaff			
Triticum spelta	spelt spikelet fork	1#	
Triticum spelta	spelt glume base	43#	
Triticum dicoccum/spelta	emmer/spelt glume base	13#	
Triticum dicoccum/spelta	emmer/spelt glume base fragments	302#	7#
Hordeum sp.	rachis baseal node	2#	
Triticum/Hordeum	rachis fragment	7#	2#
Triticum/Hordeum	awns		*
Avena sp.	oat awns	*	
Cerealia	coleoptile	1 + 2f	
Cerealia	detached embryos	1	
Wild species			
Papaver sp.	poppy		1
Vicia/Lathyrus sp. 2–4mm	vetch/vetchling/tare, etc	1 + 3($^1/_2$) + 4f	
Vicia/Lathyrus sp. <2 mm	vetch/vetchling/tare, etc	6 + 9($^1/_2$) + 2f	1 + 2($^1/_2$)
cf *Medicago* sp.	cf medick	2#	
Fallopia/Polygonum	knotweeds	1	
Rumex sp.	docks (3 sided)	49#	
cf *Rumex acetosella* L.	cf sheep's sorrel	5#	

Sample no.		10	28
Feature no.		**670**	**495**
Stellaria media (L.) Vill.	common chickweed	1	1
Silene sp.	campions	18#	
Chenopodium album L.	fat hen	1	
Montia fontana L.	blinks	1	
Galium aparine L.	cleavers	9	1f
Plantago lanceolata L.	ribwort plantain	1	
Euphrasia/Odontites	eyebright/bartsias	92	1
Tripleurospermum inodorum (L.) Sch. Bip.	scentless mayweed	3#	
Valerianella dentata Mill	narrow-fruited cornsalad	1	
Carex sp.	sedges (3-sided)	2	
Poaceae	grass seeds (small)	7	
Poaceae	grass seeds (medium)	37#	1#
Poaceae	grass seeds (large)	21#	
Festuca/Lolium	fescues/ryegrasses	53	
Poa annua/Pheum	annual meadow-grass/cat's tail	29	
Poa angustifolia/nemoralis	meadowgrass	1	
Other			
Indeterminate	seed/fruit	14#	
Raphanus raphanistrum	capsule/fruitlet	3f	

Key: # item is very damaged; f = fragment only; * fragments rare; ** fragments occasional; *** fragments common; ($^1/_2$) half only present; s = silicified; ? = unclear if charred

4.4 Charcoal *by Julia Meen*

4.4.1 Wood charcoal was recovered from three prehistoric cremation-related features. Radiocarbon determinations, undertaken on the cremated bone itself, showed that features 255 and 305 date to the late Neolithic period, while cremation 435 is middle Bronze Age. Wood taxa identifications were made on the basis of diagnostic anatomical characteristics with the aim of ascertaining which wood fuels were used in the cremation pyres. Charcoal from features 305 and 435 is highly fragmentary but species identification was attempted on all recovered charcoal of sufficient size (greater than 2mm in diameter) while for feature 255, 25 pieces of charcoal were identified from each of the four spits excavated through the feature (so 100 fragments in all). Each item of charcoal was fractured on the transverse, radial and tangential sections, as required, and examined at up to x400 magnification using a Brunel SPBD400 Metallurgical microscope. Identifications were made following Hather (2016) and Schweingruber (1990) and are shown in Table 13.

4.4.2 Only 17 identifiable charcoal pieces in total were recovered from the four excavated spits of feature 305. The majority of these came from the uppermost spit and are oak

(*Quercus* sp.), although a little hazel (*Corylus avellana*) and ash (*Fraxinus excelsior*) charcoal is present in the samples from the lower spits. Charcoal is more abundant in feature 255 but is similarly dominated by oak. Charcoal from middle Bronze Age cremation 435 is mostly fragmentary and only nine pieces were identifiable; these consisted of oak, hazel, ash and *Prunus* sp. (blackthorn/cherry type).

4.4.3 While it appears that similar wood taxa were utilised in all three cremations, with such small assemblages any interpretations must be tentative and consequently it is not possible to infer any significant pattern in the range of wood taxa utilised in the two periods represented.

Table 13: Wood charcoal identifications from prehistoric cremations

	Date	**Late Neolithic**								**Bronze Age**
	Feature	**305**				**255**				**435**
	Context no.	**259**				**258**			**257**	**434**
	Sample no.	**17**	**18**	**19**	**21**	**12**	**13**	**16**	**20**	**22**
	Charcoal >2mm	**10**	**1**	**3**	**4**	***c* 100**	***c* 50**	***c* 100**	***c* 50**	**9**
Quercus sp.	oak	10	1			25	21	25	24	5
Corylus avellana	hazel				2				1	1
cf *Corylus avellana*	cf hazel				1					1
Prunus sp.	blackthorn/cherry									2 (r)
Fraxinus excelsior	ash			1			4			
cf *Fraxinus excelsior*	cf ash			1						
Ring Porous				1						
Diffuse Porous					1					

4.5 Radiocarbon dating *by Andrew Simmonds*

4.5.1 A sample of charred hazelnut shell from pit 507 and samples of human bone from inhumation burial 464 and cremation burials 303, 435 and 446 were submitted for radiocarbon dating at the Scottish Universities Environmental Research Centre, East Kilbride. The radiocarbon ages were calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4 (Bronk Ramsey 2009) and the IntCAL20 atmospheric calibration curve and have been rounded out following Mook (1986).

Table 14: Summary of radiocarbon results

Lab ref.	**Context**	**Feature**	**Material**	**$\Delta^{13}C$ ($^0/_{00}$)**	**Radiocarbon age (BP)**	**Calibrated date (95% confidence)**
SUERC-102331	512	Pit 507	Charred hazelnut shell	-23.6	4446 ± 24	3340–2930 cal BC
SUERC-102232	464	Inhumation burial 472	L femur	-20.4	2392 ± 18	540–400 cal BC
SUERC-102233	259	Cremation burial 303	Cremated bone	-25.6	4298 ± 21	3010–2880 cal BC
SUERC-102234	445	Cremation burial 446	Cremated bone	-23.4	2988 ± 24	1370–1120 cal BC

Lab ref.	Context	Feature	Material	$\Delta^{13}C$ ($^{0}/_{00}$)	Radiocarbon age (BP)	Calibrated date (95% confidence)
SUERC-102238	434	Cremation burial 435	Cremated bone (longbone shaft)	-21.8	3001 ± 24	1380–1120 cal BC

5 DISCUSSION

5.1.1 The excavation uncovered evidence for activity over a very long time period, extending from the early Neolithic period until the early Roman period. The earlier episodes were evidently small-scale and intermittent, and often included a funerary element, and in some instances were probably associated with the proximity of the Wykham Farm causewayed enclosure. Evidence for occupation, as opposed to occasional visits or specialised funerary activity, did not occur until the late Iron Age, when there was a brief burst of domestic and agricultural activity that extended into the late 1st century AD.

5.1.2 A particular peculiarity of this site was the identification of features by geophysical survey or cropmark evidence that could not be confirmed by excavation. These features included three supposed ring ditches in the central and western parts of the development area, an extensive curvilinear feature in the central area and a ditched trackway at the south-eastern end (Fig. 12). The features were specifically targeted during the trial-trench evaluation, but no features were identified and the geophysical results were attributed to variations in the geological substrate, although no clear explanation could be found for the circular anomalies that had been interpreted as possible ring ditches (CA 2013, 8, 10). During the excavation it was hoped that the opening of larger areas in the form of Excavation Areas 1 and 3 at the location of the possible ring ditches and the southern part of Area 5b at the location of the possible trackway would provide a better opportunity to identify these features, but neither archaeological remains nor geological variations were observed. It therefore remains uncertain whether the anomalies were caused by geological variations or were archaeological features that had been completely ploughed away.

5.2 The Neolithic pits and the Wykham Farm causewayed enclosure (Fig. 12)

5.2.1 Significant advances have been made in recent years in the understanding of the Neolithic period of the Banbury area, most notably as a result of the discovery of the causewayed enclosure in 1996 and the excavation of a substantial settlement represented by 35 pits at the Flood Alleviation Scheme (Simmonds 2014), as well as numerous smaller sites. The identification of the north end of the causewayed enclosure by the geophysical survey undertaken for the Wykham Park Farm development (WA 2012), confirmed by limited excavation during the trial-trench evaluation (CA 2013), represents a particularly important discovery. This was one of only 69 causewayed enclosures that were identified by a nationwide survey in 2001 (Oswald *et al*. 2001, 2), and may have been significant in providing the context for subsequent prehistoric activity at the site. The enclosure had originally been recorded as a cropmark feature during the exceptionally dry summer of 1996 (Featherstone and Bewley 2000, 20 and plate 4), but only part of the southern end of the ditch circuit was visible at that time, comprising four segments of ditch that curved across the end of a narrow arable field beside Wykham Farm. The alignment suggested that the enclosure

continued beneath buildings associated with the farm and into surrounding paddocks in which cropmarks had not formed. Enclosures of this sort represent the earliest form of monumental enclosure in the British Isles, intended for large-scale communal gatherings. They are commonly located in relation to watercourses, and in this instance the monument clearly references the Sor Brook to the south, toward which the ground here slopes down, rather than the River Cherwell, which is not visible from this location. Such a preference for a tributary rather than the main river can be seen at several other sites and is evidenced elsewhere in Oxfordshire by the unexcavated enclosure beside the Langford Brook, south of Langford (Palmer 1976). Neither the western nor the eastern sides of the ditch circuit at Wykham Farm have been identified, the former perhaps being masked by an extant hedgerow. However, the apparently sinuous line followed by the northern part, and the rather more sharply curved line followed by the southern section, suggests that the enclosure may have had a somewhat irregular shape and measured 280m from north to south and more than 120m wide. Alternatively, it is possible that the shape of the north side indicates the presence of an entrance, since these were often associated with a flattening or in- or out-curving of the ditch circuit, as is most clearly demonstrated by the famous site at Haddenham, Cambridgeshire (Oswald *et al*. 2001, 49). The proximity of the stream may indicate that the enclosure did not possess a complete ditch circuit but was instead completed on the east side by the stream; indeed, little more than a third of known enclosures can be shown to have had a complete ditch circuit (Oswald *et al*. 2001, 61), and many evidently utilised natural features such as watercourses, including examples in Oxfordshire at Abingdon, Broadwell and Buckland (Avery 1982, fig. 3; Oswald *et al*. 2001, fig. 5.17; ibid., fig. 4.17). The geophysical survey suggested that pits may be situated within the enclosure, but they remain undated and their association with the enclosure uncertain, the only features in this area that were uncovered by the evaluation trenches being a cluster of post-medieval pits (CA 2013, 1).

5.2.2 The enclosure ditch was targeted by two trenches during the trial-trench evaluation; in one trench it was found to be 1.1m wide and 0.53m deep, recut along its southern edge by a broader, shallower ditch that measured 2.5m wide by 0.3m deep, and in the other it comprised a single ditch 3.5m wide, which was excavated to a depth of 0.5m without reaching the base (CA 2013, 10). The ditch fills were sterile and devoid of artefacts and thus provided no indication of the date of the feature, but such monuments are typically associated with Decorated Bowl pottery and have been dated by a programme of modelled radiocarbon dates to *c* 3750–3300 cal BC (Whittle *et al*. 2011, 683).

5.2.3 The Neolithic pits that were excavated at Wykham Park Farm all lay outside the enclosure, between 200m and 600m from the ditch circuit, as did the two pits that were excavated immediately west of Wykham Farm during a watching brief on the Banbury Booster pipeline (JMHS 2005a). These features and the possible barrows indicated by cropmark evidence are probably the result of ceremonial and funerary activity that was deliberately located around the enclosure, both during and long after

the enclosure was constructed and initially used. Enclosures often became the focus for later activity, resulting in the development of a dense palimpsest of subsequent monuments and related features including henges, barrows and burials, as is evidenced by the complexes at the Abingdon and Eynsham enclosures (Avery 1982; Simmonds and Thacker forthcoming). Subsequent activity at the Wykham Farm enclosure appears to have been less substantial than at those sites, resulting in a far smaller number of associated monuments, limited to a few pits and ring ditches. A particularly noteworthy structure was represented by the large ring ditch at the neighbouring South of Saltway site, which, at 45m wide, is rather large for a barrow ditch and may therefore have formed some other form of ceremonial monument. It is less certain whether the Neolithic enclosure was still a factor in the use of the landscape by the middle Bronze Age, when the group of three pits containing cremation-related deposits were dug, although the possibility of continuity of activity at such sites or a renewed focus on them is suggested by the instances of cremation cemeteries of this date excavated at enclosures at Briar Hill, Northamptonshire, and St Osyth, Essex (Bamford 1985; Germany 2007).

5.2.4 Of the features excavated at Wykham Park Farm, only pit 477 is likely to have been contemporary with the construction and original use of the enclosure. The early Neolithic date of this pit was indicated by a rim sherd from a Plain Bowl vessel, whose currency is dated to *c* 3970–3715 to 3375–3095 cal BC (Whittle *et al*. 2011, 762). This was apparently an isolated feature and was extremely shallow with a depth of only 0.08m, perhaps due to truncation by more recent ploughing. The fill of the pit, containing an admixture of burnt stone and charcoal inclusions as well as a flint end-scraper and flake, is consistent with the suggestion that such pits were deliberately backfilled with material sourced from a secondary location such as a midden (Hey 2011, 244), perhaps to mark the end of an episode of occupation. Other evidence for activity during this period was provided by sherds of early Neolithic pottery from middle Bronze Age pit 435 and the otherwise undated tree-throw hole 728.

5.2.5 Activity during the later part of the Neolithic period was represented by pits 505 and 507, dated by sherds of Mortlake Ware and a radiocarbon date of 3340–2930 cal BC, and pits 255 and 305, the latter of which was dated by radiocarbon to 3010–2880 cal BC. Pits 255 and 305 were somewhat ambiguous features situated within a natural hollow and may have originally formed part of a single pit, an interpretation that is given some credence by the identification of the cremated remains in each pit as those of a possible subadult, perhaps representing the same individual. Pits 505 and 507, on the other hand, were clearly defined as separate features, although only 0.4m apart. That these pits were an associated pair is indicated by the presence of sherds certainly from the same vessel in both features. The apparent pairing of such pits has been discussed in some detail by Lamdin-Whymark (2008, 109–14), and pairs sharing refitting sherds have been excavated at Taplow Mill, Buckinghamshire, and Lake End Road West, Berkshire (Barclay and Garwood 2011, 375). Although the distribution of pottery in pits 505 and 507 exhibited no patterning, the flint was heavily biased toward pit 507, which accounted for 46 of the 73 flints from the excavation whereas pit 505

contained only a single chip, and furthermore this material was in notably fresh condition, with the exception of two damaged scrapers and a microdenticulate that had seen considerable use. This suggests that there may have been some deliberate selection of the material that was placed in the pits, with debris from a recent episode of flint-knapping being buried in pit 507 but flint apparently excluded from pit 505. It is possible that corresponding selection of the pottery had been obscured by the partial survival of the features due to plough-truncation and the continuation of pit 507 into the unexcavated ground beyond the boundary of the development area, although it is equally plausible that more than one source of material is represented and that the inclusion of the sherds (and perhaps the damaged flint tools) was less structured or even incidental.

5.2.6 The small quantity of cremated human bone in each pit represents a rare occurrence of human remains from a period when formal burials are relatively scarce, between the abandonment of causewayed enclosures and the appearance of Beaker burials from *c* 2400 BC. Such small deposits are infrequently encountered as inclusions within pits: at Yarnton Site 7, pits 3207 and 3700 similarly formed a closely adjacent pair and each contained 1g of cremated human bone, as well as a total of 3138g of Mortlake Ware sherds from at least 33 vessels, most of which was accounted for by pit 3207 and included sherds from one large vessel that had been carefully placed around the edge of the pit (Hey *et al*. 2016, 479–89). Elsewhere at Yarnton, pits 9002 and 9007, which were situated next to an early Neolithic enclosure, respectively contained 22 and 21g of cremated bone, the former also including a similar deliberate arrangement of sherds to pit 3207, this time of the Fengate sub-style and with the sherds placed alternately inwards and outwards (ibid., 423–9). Notwithstanding the general scarceness of burials during this period, there are a small number of cremation cemeteries from this period, notably a small group at Imperial College Sports Ground, Hillingdon, and several groups at Dorchester-on-Thames (Barclay *et al*. 2009; Powell *et al*. 2015; Atkinson *et al*. 1951; Whittle *et al*. 2009, 195), and it seems likely that cremation was the predominant funerary rite, albeit not usually followed by deposition in a formal setting that is archaeologically recognizable (Barclay *et al*. 2009, 8).

5.3 Middle Bronze Age cremations

5.3.1 The group of three middle Bronze Age pits containing cremation-related deposits are typical of funerary activity during this period. Only pit 435 contained a quantity of bone (453.7g) that was comparable to the remains that would be expected from a complete cremated individual, with pits 438 and 446 yielding less than 10g between them. Although all three features had evidently been truncated by more recent ploughing, as a result of which some material must have been lost, this should have affected them equally and cannot account for the vastly different bone weights. It seems more likely, therefore, that the contrasting quantities recovered represent a genuine difference in the amount of material deposited in the features; indeed, a recent survey of all excavated middle Bronze Age cremation burials in Britain

concluded that burial of only a token amount of bone was the predominant practice, with only 26% of burials weighing more than 500g and 43% weighing less than 100g (Caswell and Roberts 2018, 11). A similar instance was recorded at Ells Lane, Bloxham, a little over 2.5km south-west of Wykham Park Farm, where a lone pit radiocarbon dated to 1410–1285 cal BC at 95.4% confidence contained only 23g of cremated bone (Ford 2009, 119). McKinley (1997, 137) has discussed the important distinction between burial of cremated bone and deposits of pyre debris, the latter category referring to the totality of remains from the cremation. Experimental pyres have demonstrated that after the burning of the pyre the remains of the cremated individual remain in position on top of the charred debris of the fuelwood and can easily be separated by hand with minimal charcoal inclusion (ibid., 134), and thus the pyre produces two clearly distinct types of material that can potentially be used as a resource in subsequent depositional practices. Such deposits can be distinguished in excavation by their contrasting signatures, formal burials of cremated remains comprising bone with little charcoal whereas deposits of pyre debris are composed primarily of charcoal but often including a small proportion of bone, and the contrast is perhaps demonstrated by the differences between pit 435 and the other two.

5.3.2 No evidence for a settlement associated with the burials has been identified, the nearest excavated settlements lying *c* 3km away in the north part of Banbury at Hennef Way (Allen 1989; JMHS 2005b) and East of Southam Road (WA 2015). However, Caswell and Roberts' survey demonstrated that in fact few middle Bronze Age cemeteries are located in close proximity to contemporary settlements (Caswell and Roberts 2018, 16), and also that more than half of cremation burial groups comprise less than five features (ibid., 4). In most instances the small number of burials indicates that it is more likely that they represent the remains of individuals who were singled out for exceptional treatment rather than the graves of a whole community, and this would appear to be the case at Wykham Park Farm.

5.4 Early Iron Age burial

5.4.1 The radiocarbon date of 540–400 cal BC obtained for inhumation burial 472 places it near the end of the early Iron Age, a period that was not represented by any other features or finds, either at Wykham Park Farm or the adjacent excavations at East of Bloxham Road and South of Saltway. It would appear, then, that like the middle Bronze Age cremations, the burial was situated at some remove from contemporary settlement. A small assemblage of shell-tempered middle Iron Age pottery was recovered from the evaluation at South of Saltway, but these sherds are likely to date from the end of the date range for such material, associated with occupation that was characterised as 'middle to late Iron Age', some centuries later than the date indicated by the radiocarbon assay.

5.4.2 The form of the burial, interred in a crouched position lying on one side, is typical of inhumation burials throughout the Iron Age, although funerary practices varied and encompassed a range of rites, many of which evidently did not focus on a 'formal' burial of an intact individual within a deliberately dug grave, as we would understand

it. Human remains are common on Iron Age sites but typically comprise disarticulated skeletal elements or burials within disused storage pits and other settlement features or boundary ditches rather than discrete graves. Indeed, it has been estimated that complete burials may account for no more than 25% of deposits of human remains in the Upper Thames Valley (Lambrick 2009, 313). These practices are often interpreted as indicating rites that included deliberate reduction of the corpse by means of excarnation or secondary burial, or retention of token parts of the body (Carr and Knüsel 1997; Madgwick 2008). While such deposits need not suggest that the treatment of these individuals was in any way casual, and the remains may have been deposited with a due level of formality, they clearly represent distinctly different practices to the grave at Wykham Park Farm. Formal inhumation cemeteries do not appear to have been a feature of the funerary traditions of most communities in Oxfordshire, although occasional instances have been found, including sites at Yarnton, Berrick Salome and Spring Road Cemetery, Abingdon (Hey *et al*. 2011, 60–2 and 180–8; Wilson 2008, 70–1; Allen and Kamash 2008, 16–18 and 77–8). The reasons why different individuals were treated differently, or why practices varied between communities, are unclear, not least because the rarity of associated grave goods makes estimation of status problematic. All of these various practices, however, appear to have formed elements of the 'normative' funerary rites of Iron Age communities.

5.5 Late Iron Age and early Roman settlement and agriculture (Fig. 13)

5.5.1 There appears to have been a hiatus of several centuries after the interment of burial 472 during the 6th or 5th century before the appearance of a series of enclosures during the late Iron Age. The new features form part of a wider re-organisation of the landscape, including ditched boundaries, settlement and further enclosures, which has now been recorded across a large contiguous area encompassing the adjacent excavations at East of Bloxham Road and South of Saltway. Occupation in the interim was certainly not absent from the wide locality, however, as middle Iron Age settlements have been excavated to the south-west at Bloxham and within the Cherwell Valley at the Flood Alleviation Scheme (Ford 2009; Simmonds 2014).

5.5.2 The features represent a series of apparently discrete elements – the enclosed settlement excavated at East of Bloxham Road/Area 2; the conjoined roundhouse gully and enclosure in Area 4; Enclosure 2 in Area 5a and the field system represented by Enclosures 3 and 4; and perhaps the undated trackway and boundaries in Area 6, as well as the boundary and enclosures at South of Saltway. The morphological variety indicated is striking, although interpretation is hindered by the small quantities of artefactual material recovered, which shed only limited light on the range of associated activities. The latter factor also makes assigning a relative chronology problematic, as does the spatial separation of the various features, as a result of which useful stratigraphic sequences are all but absent. There was some limited evidence from the pottery that the enclosure at East of Bloxham Road/Area 2 was earlier than the rest of the features at Wykham Park Farm, as the assemblage from the former was entirely shell-tempered and lacked any use of grog. Nevertheless, these features were

unequivocally of late Iron Age date, the East of Bloxham Road/Area 2 enclosure being assigned to the 1st century BC (Chapman 2017, 27) and the other enclosures at Wykham Park Farm to between the end of that century and the mid-1st century AD. At the later end of the chronological sequence, the field system in Area 5 was the only element that extended from the Iron Age into the Roman period and the adjacent Enclosure 2 was entirely post-conquest. The linearity of the arrangement of the enclosures is notable and is a phenomenon that has been noted regarding small clusters of Iron Age settlements at several sites in the Thames Valley, including examples at Shorncote/Cotswold Community, Slade Farm Bicester, Thrupp, Port Meadow and Claydon Pike (Lambrick with Robinson 2009, 112). In most instances the precise chronological relationship between the individual settlement elements cannot be established, and only at Claydon Pike, within the Cotswold Water Park south of Cirencester, was a succession comparable to the instance at Wykham Park Farm demonstrated, comprising a middle Iron Age settlement of perhaps two or three houses that shifted progressively eastward across three gravel islands in the Thames floodplain (Miles *et al*. 2007, 59–61, 365–7). The enclosures at Wykham Park Farm appear to be arranged alongside the Salt Way, and it has been speculated that the route may have prehistoric origins, but there is no convincing evidence for this, and it is more likely that, as the name suggests, it owes its origins to the network of tracks established during the early medieval period to distribute salt from Droitwich, in this instance to the royal manor at Princes Risborough, Buckinghamshire (Blair 1994, 84–6). The association is therefore most likely coincidental.

5.5.3 The putatively early East of Bloxham Road/Area 2 enclosure lies at the eastern edge of the distribution of similar settlements with rectilinear enclosure ditches that are characteristic of the Severn-Cotswold region during the second half of the first millennium BC (Hingley 1984; Moore 2006, 45–52). Radiocarbon results from a number of comparable examples indicate that the form was current from the 4th century BC to the very end of the Iron Age (ibid., 24–6), so the ceramic evidence from this enclosure places it toward the end of the sequence. The excavation of Area 2 added the eastern boundary to the plan of the rest of the settlement that had been recorded at East of Bloxham Road and confirmed that it was fairly regular and rectangular in shape, measuring 55 x 40m. The enclosure ditch was a substantial barrier, 2.9–5.0m wide and 1.56–1.86m deep, and although no entrance was identified it is possible that it lay near the north-east corner, within an unexcavated strip beneath an existing hedgerow. Indeed, the apparent curving of the north end of the ditch on the eastern side may indicate a terminus, but this was not certain as it continued beyond the edge of the excavated area and was partly obscured by a medieval/post-medieval furrow. The small size of the enclosure, amounting to 0.22ha, places it at the lower end of the most common size for such enclosures (0.2–0.3ha), suggesting that it represents the home of a single household, as might be expected from the presence of the single roundhouse (ibid., 61).

5.5.4 The features in Area 4 appear to represent a settlement of the form described by Lambrick as ‘house, pen and paddock’ settlements (Lambrick with Robinson 2009,

109–15). The basic components of such settlements were typically a roundhouse and between one and four attached pens and enclosures, which may have been used to corral livestock, or served as working or storage areas (ibid., 111). Such sites were most commonly situated on the gravel terraces of the Thames or on gravel islands within the floodplain, where they were safe from flooding, and the Area 4 settlement has a strikingly close morphological similarity to the DUGM Area 10 settlement at Gill Mill Quarry and Enclosure Group 3 on the floodplain itself at Farmoor (Lambrick and Wallis 2018; Lambrick and Robinson 1979, 25). Each site comprised a roundhouse gully that was adjoined by a rectangular enclosure. The enclosures were of closely comparable size, the enclosure at Wykham Park Farm measuring 18.2 x 14m and those at Gill Mill and Farmoor measuring 22 x 13.5m and 17 x 14m respectively, and the ditches were considerably larger than the gullies that defined the associated roundhouse, suggesting that their function required a more substantial barrier. Maintenance of this barrier was evidently important, as indicated by the digging of successive ditch circuits at Wykham Park Farm, recutting of the ditch at Gill Mill, albeit in this instance on the same alignment as the original feature, and possible evidence for recutting identified at the terminals of the ditch at Farmoor. This contrasts with the treatment of the roundhouse gullies, which were not recut despite their lesser depth presumably making them more susceptible to silting up. At none of the sites was there evidence for direct access between the roundhouse and enclosure, the entrances to the roundhouses at Wykham Park Farm and Farmoor presumably corresponding with breaks in the surrounding gully that faced away from the associated enclosure, while the enclosures at Gill Mill and Farmoor were both provided with entrances at or close to a corner – no entrance was identified at Wykham Park Farm. Exceptional conditions of preservation at Farmoor preserved evidence for the environment and use of Enclosure Group 3 and two similar settlements: aquatic molluscs from ditch fills indicated they were subject to periodic flooding from the adjacent River Thames that would have rendered year-round occupation impossible, and the absence of some common perennial weed species suggested that each farmstead was used for no more than about five years, leading the excavators to argue that they represented short-lived settlements that were used during the spring and summer by groups minding herds that grazed on the meadows beside the river. Similar evidence was not preserved at Wykham Park Farm or Gill Mill, and Wykham is situated on higher ground rather than the floodplain, but the closely similar forms of the settlements suggests that they may have functioned in similar ways, most likely related to an emphasis on pastoralism. The Farmoor and Gill Mill settlements were both associated exclusively with middle Iron Age ceramics, whereas the pottery from the Wykham Park Farm enclosure was certainly late Iron Age, indicating that this form of settlement may be a tradition that was longer-lived than was recognised from the previous examples.

5.5.5 In contrast to the discrete enclosures in the other excavation areas, the boundaries in Area 5 formed a pair of adjacent and somewhat larger enclosures that are likely to be neighbouring fields. They are most likely to have functioned as part of a larger complex, and since no similar enclosures were identified to the south they may

represent the southern limit of a field system that continued to the north, beneath Salt Way and potentially into the playing fields of Wykham Park Academy beyond. This was the only component of the Iron Age landscape that exhibited continuity into the Roman period, when Enclosure 2 was constructed adjacent to the west. The enclosure was recut repeatedly, suggesting some longevity of use, and it was most likely a livestock enclosure; charred plant remains included evidence for grassland and possibly for the use of hay as fodder. Cultivation of cereals was indicated by small quantities of wheat and barley grains, and the enclosure produced the largest pottery assemblage from the excavation (3.4kg), suggesting that domestic occupation lay in the vicinity. No direct evidence was found for the associated settlement, which may therefore have lain beyond the limits of the development, but it appeared that the enclosure ditch was used as a convenient receptacle in which to deposit the resultant refuse.

5.5.6 The ditches in Area 6 were separated from the field system in Area 5 by the shallow valley of a stream that formed the boundary between the historic parishes of Banbury and Bodicote but may have formed part of a corresponding system on the facing slope. No dating evidence was found, but the features were evidently earlier than the medieval/post-medieval ridge-and-furrow cultivation that overlay them and a Roman date would fit the trackway, as Booth (2011) has demonstrated that such features, defined by a pair of flanking ditches, were a ubiquitous element of the Roman landscape from the later 1st century but rarely take so visible a form earlier. The geophysical survey traced the trackway for a distance of *c* 180m, extending toward a convergence with the stream, where presumably a ford was located (Fig. 13). Other possible trackways have been suggested from the geophysical evidence, including one that extends north-west from the excavated track to pass through Area 5, but excavation and evaluation trenching was unable to locate them, and the features must either have been completely ploughed away or perhaps represent variations in the underlying geology rather than archaeological in origin.

Wykham Park Farm and the wider landscape

5.5.7 It is not entirely clear whether the various elements represent successive settlements or overlapped chronologically as part of the exploitation of the same landscape, although, as discussed above, the pottery does provide some evidence for a succession, with the East of Bloxham Road/Area 2 enclosure being earliest and only the features in Area 5 (and possibly Area 6) continuing into the Roman period. This indicates that the individual foci were each in use for only a short period of time, and this is consistent with their small size, limited range of features, and lack of structural development. They appear to represent the homesteads of single households, occupied for at most one or two generations, and perhaps considerably less. Settlement of this date in the Cherwell Valley appears to have been preferentially located on higher ground such as the spur between the Cherwell and the Sor Brook where Wykham Park Farm was situated, rather than on the base of the valley itself, which is relatively narrow and comprises alluvium over Oxford Clay, producing

relatively intractable and poorly drained soils. Evidence for precisely how the landscape was exploited was very limited, as the animal bone assemblage was too small to facilitate interpretation of husbandry practices and charred plant remains occurred in only small quantities. Poor survival of animal bones and environmental evidence is characteristic of the Liassic clay around Banbury and the northern part of the Cherwell Valley (Simmonds 2014, 151). All that can be said of the Wykham Park Farm settlements is that the usual range of domesticated livestock was present in both the late Iron Age and early Roman periods (although sheep were absent from Iron Age contexts at Wykham Park Farm, they were present at East of Bloxham Road), and that wheat and possibly barley were consumed. The quantity of charred wheat grains from Iron Age features at both Wykham Park Farm and East of Bloxham Road was so small that they could represent material imported from elsewhere rather than indicating cultivation at the settlement. The evidence for growing of wheat was better for the Roman period, when a larger charred grain assemblage was recovered from enclosure ditch 670. It is possible that the Iron Age enclosures represent the pastoral component of a farmstead with a domestic and arable focus located at the enclosures at South of Saltway, where a total of 246 pits were found, the majority being large, vertical-sided storage pits interpreted as grain silos that had been subsequently reused for disposal of domestic refuse (R. Trow pers. comm.). The associated pottery included a variety of shell-, sand- and quartz-tempered fabrics that indicate a longer chronology than was represented by any one enclosure at Wykham Park Farm and perhaps spans the entire sequence. Such an arrangement would represent a pragmatic use of the landscape, since the settlement at South of Saltway is situated on Marlstone, which gives rise to free-draining, fertile soils, whereas the enclosures at Wykham Park Farm lie on mudstone, which produces poorly drained soils suitable mainly for grassland (Cranfield n.d.). The settlement adjoined an extensive, somewhat sinuous boundary ditch, which may have marked the boundary between the pasture and arable land, since the silos were all to the east. The geophysical survey indicated that the ditch continued to the south beyond the area investigated, into the neighbouring allotment gardens, and its limit to the north was not established as it extended beneath the hedgeline that divided the two developments. A second such boundary may have been represented by an anomaly of similar form and alignment that was identified by the geophysical survey results a little over 500m to the west, between Areas 1 and 3, and which continued to the south as a cropmark between the development and Wykham Lane (Fig. 13). Trial-trenching failed to confirm the western ditch, and as with the putative trackways it is possible that the geophysical anomaly was geological rather than archaeological in origin, but if it was indeed an archaeological feature then the two boundaries would have extended downslope toward the Sor Brook on roughly parallel alignments and divided the hillside into blocks.

5.5.8 The episode of Iron Age activity was clearly short-lived, extending at most from the 1st century BC to the latter part of the 1st century AD. Sherds from a Young R31 beaker and a Young R38 necked bowl recovered from Enclosure 2 and a second necked bowl from ditch 660 demonstrate that activity here continued after *c* AD 70, but none of

the sherds need date after the end of the 1st century. The chronology of the abandonment of the site provides no evidence as to its cause; it appears to have continued beyond the disruptions caused by the Boudican revolt but ended before the widespread episode of settlement abandonment and reorganization that affected the region after *c* 120 (Henig and Booth 2000, 106–8; Booth *et al*, 2007, 43–52) and may perhaps be attributed to some localised social or economic cause for which there is no other evidence.

6 PUBLICATION AND ARCHIVING

6.1 Publication

6.1.1 This report will be submitted to Oxfordshire HER and will be made available for download as a pdf via the OA online library (https://library.thehumanjourney.net/).

6.1.2 A synthetic publication report of up to 10,000 words will be prepared for publication in the county journal, *Oxoniensia*. The publication report will include the key results of the analysis of the stratigraphy, finds and environmental evidence, along with a synthetic discussion, but it may omit some data tables and some of the more technical aspects of the specialist contributions that are presented in the full report.

6.2 Archiving, retention and disposal

6.2.1 The site archive will be deposited with Oxfordshire County Museums Service under accession number OXCMS2019.126. The digital archive will be deposited with ADS.

6.2.2 The finds assemblage for deposition will include:

- the prehistoric and Roman pottery;
- the ceramic building material;
- the worked flint;
- the joiner's dog and iron bar;
- the fired clay;
- the charred plant remains flots plus any extracted seeds/charcoal from them.

6.2.3 Material that can be disposed of will comprise:

- the post-Roman pottery;
- the post-medieval nails;
- the clay tobacco pipe;
- the burnt stone;
- the animal bone;
- the charred plant remains flots that had no potential for analysis.

6.2.4 The human remains are held under Ministry of Justice burial licence 20-0007, which is valid until 27 January 2025.

7 BIBLIOGRAPHY

Allen, M, and Lodwick, L, 2017 Agricultural strategies in Roman Britain, in *The rural economy of Roman Britain* (M Allen, L Lodwick, T Brindle, M Fulford and A Smith), Britannia Monograph Series **30**, 142–77

Allen, T G, 1989 Archaeological discoveries on the Banbury East-West Link Road, *Oxoniensia* **54**, 25–44

Allen, T G, and Kamash, Z, 2008 *Saved from the grave: Neolithic to Saxon discoveries at Spring Road Municipal Cemetery, Abingdon, Oxfordshire, 1990–2000*, Oxford Archaeology Thames Valley Landscape Monograph **28**, Oxford

AlQahtani, S, 2009 *Atlas of tooth development and eruption*, Queen Mary University of London, Queen Mary and Westfield College, Barts and the London School of Medicine and Dentistry, London

Anderson-Whymark, H, 2015 The flint, in *Opening the wood, making the land: the archaeology of a Middle Thames landscape. The Eton College Rowing Land Project and the Maidenhead, Windsor and Eton Flood Alleviation Scheme. Volume 1: Mesolithic to early Bronze Age* (T Allen, A Barclay, A M Cromarty, H Anderson-Whymark, A Parker and M Robinson), Oxford Archaeology Thames Valley Landscapes Monograph **38**, Oxford

ARS, 2014 An archaeological evaluation at land south of The Saltway, Banbury, Oxfordshire, Archaeological Research Services, https://doi.org/10.5284/1041171

Atkinson, R J C, Piggott, C M, and Sandars, N K, 1951 *Excavations at Dorchester, Oxon*, Department of Antiquities, Ashmolean Museum, Oxford

Aufderheide, A C, and Rodríguez-Martin, C, 1998 *The Cambridge encyclopedia of human paleopathology*, Cambridge University Press, Cambridge

Avery, M, 1982 The Neolithic causewayed enclosure, Abingdon, in *Settlement patterns in the Oxford region: excavations at the Abingdon causewayed enclosure and other sites* (H J Case and A W R Whittle), Council for British Archaeology Research Report **44**, Oxford, 10–50

Bamford, H M, 1985 *Briar Hill. Excavations 1974–1978*, Northamptonshire Development Corporation Archaeological Monograph **3**, Northampton

Barclay, A, Beavan, N, Bradley, P, Chaffey, G, Challinor, D, McKinley, J I, Powell, A, and Marshall, P, 2009 New evidence for mid–late Neolithic burial from the Colne Valley, West London, *PAST* **63**, 4–8

Barclay, A, and Garwood, P, 2011 Acts of ritualized deposition in pits, tree-throw holes and middens, in *The Thames through time: the archaeology of the gravel terraces of the Upper and Middle Thames, early prehistory to 1500 BC* (A Morigi, D Schreve, M White, G Hey, P Garwood, A Barclay, P Bradley and M Robinson), Oxford Archaeology Thames Valley Landscapes Monograph **32**, Oxford

Berry, A C, and Berry, A J, 1967 Epigenetic variation in the human cranium, *J Anatomy* **101**, 361–79

BGS, n.d. *Geology of Britain viewer*, British Geological Survey, http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Blair, J, 1994 *Anglo-Saxon Oxfordshire*, Sutton, Stroud

Boessneck, J A, 1969 Osteological differences between sheep (Ovis aries Linné) and goat (Capra hircus Linné), in *Science in Archaeology* (eds D R Brothwell and E S Higgs), 331–58, Thames and Hudson, London

Bond, J, 1980 Bloxham, Oxfordshire: village survey, *CBA Group 9 Newsletter* **10**, 103–23

Booth, P, 2004 Quantifying status: some pottery data from the Upper Thames Valley, *J Roman Pottery Stud* **11**, 39–52

Booth, P, 2011 Romano-British trackways in the Upper Thames Valley, *Oxoniensia* **76**, 1–13

Booth, P, 2014 Late Iron Age and Roman pottery, in Simmonds 2014, 93–107

Booth, P, 2016 Oxford Archaeology Roman pottery recording system: an introduction, unpublished document, updated November 2016

Booth, P, Dodd, A, Robinson, M, and Smith, A, 2007 *The Thames through time: the archaeology of the Upper and Middle Thames. The early historical period: AD 1–1000*, Oxford Archaeology Thames Valley Landscapes Monograph **27**, Oxford

Booth, P, and Simmonds, A, 2018 *Gill Mill: later prehistoric landscape and a Roman nucleated settlement in the lower Windrush Valley at Gill Mill, near Witney, Oxfordshire*, Oxford Archaeology Thames Valley Landscapes Monograph **42**, Oxford

Bradley, P, 1999 The worked flint, in *Excavations at Barrow Hills, Radley, Oxfordshire. Volume 1: the Neolithic and Bronze Age monument complex* (A Barclay and C Halpin), Oxford Archaeology Thames Valley Landscapes Monograph **11**, 211–27

Brickley, M, and McKinley, J I (eds), 2004 *Guidelines to the standards for recording human remains*, IFA Paper No. **7**, British Association for Biological Anthropology and Osteoarcheology and the Institute of Field Archaeologists

Bronk Ramsey, C, 2009 Bayesian analysis of Radiocarbon dates, *Radiocarbon* **51(1)**, 337–60

Brooks, S T, and Suchey, J M, 1990 Skeletal age determination based on the os pubis: a comparison of the Ascádi-Nemeskéri and Suchey-Brooks methods, *Human Evolution* **5**, 227–38

Brothwell, D, 1981 *Digging up bones*, Oxford University Press, Oxford

Brown, L, 2014 Neolithic and Bronze Age pottery, in Simmonds 2014, 81–93

Buikstra, J E, and Uberlaker, D H, 1994 *Standards for data collection from human skeletal remains*, Arkansas Archaeological Survey Research Series **44**

CA, 2013 Wykham Park Farm Banbury Oxfordshire: archaeological evaluation, Cotswold Archaeology, https://doi.org/10.5284/1051183

CA, 2015 Wykham Park Farm Banbury Oxfordshire: archaeological evaluation (phase II), Cotswold Archaeology, https://legacy-reports.cotswoldarchaeology.co.uk/content/uploads/2015/03/Wykham-Pk-Fm-Phase-II-evaluation-report-15037-DRAFT.pdf

CA, 2016 Wykham Park Farm Banbury Oxfordshire: environmental statement, Cotswold Archaeology report 16112

Cappers, R T J, Bekker, R M, and Jans, J E A, 2012 *Digital seed atlas of the Netherlands*, 2nd edn, Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands

Cappers, R T J, and Bekker, R M, 2013 *A manual for the identification of plant seeds and fruit*, Groningen Archaeological Studies **23**, Barkhuis Publishing, Eelde

Carr, G, and Knüsel, C, 1997 The ritual framework of excarnation by exposure as the mortuary practice of the early/middle Iron Age of central southern Britain, in *Reconstructing Iron Age societies* (eds A Gwilt and C Haselgrove), Oxbow Books, Oxford, 167–73

Carruthers, W, and Hunter Dowse, K, 2019 *A review of macroscopic plant remains from the midland counties*, Historic England, https://historicengland.org.uk/research/results/reports/47-2019

Caswell, E, and Roberts, B, 2018 Reassessing community cemeteries: cremation burials in Britain during the middle Bronze Age (c. 1600–1150 cal BC), *Proc Prehist Soc* **84**, 329–57

Chapman, A, 2017 The Iron Age pottery, in MOLA 2017, 27–9

CIfA, 2014 *Standard and guidance for archaeological excavation*, Chartered Institute for Archaeologists, Reading

Cohen, A, and Serjeantson, D, 1996 *A manual for the identification of bird bones from archaeological sites*, Archetype Publications, London

Columella, 1941 *On agriculture, volume I: books 1–4* (trans. H Boyd Ash), Loeb Classical Library **361**, Harvard University Press, Cambridge, MA

Cranfield, n.d. *Soilscapes*, Cranfield Soil and Agrifood Institute, http://www.landis.org.uk/soilscapes/

Crossley, A (ed.), 1972 *A history of the county of Oxford: volume 10, Banbury Hundred*, Victoria County History, London

Crutchley, S, Taylor, M, and Hornbrook, I, 1988 Wykham shrunken Mediaeval village, *SMA* **18**, 112–15

Davis, S J M, 1980 Late Pleistocene and Holocene equid remains from Israel, *Zoological J Linnean Soc* **70**, 289–312

Davis, S J M, 1992 A rapid method for recording information about mammal bones from archaeological sites, AML Research Report 19/92

Donnelly, M, forthcoming, Worked flint, in Prehistoric Wallingfordxc: excavations at Slade End Farm and Winterbrook, Wallingford, Oxfordshire (A Davies, L Webley, C Champness and G Thacker), Oxford Archaeology Thames Valley Landscapes Monograph

EDP, 2019 Wykham Park Farm, Oxfordshire: written scheme of investigation and method statement for archaeological preservation, EDP report edp5378_r001d

Evans, J, 2001 Material approaches to the identification of different Romano-British site types, in *Britons and Romans: advancing an archaeological agenda*, CBA Res Rep **125**, York, (eds S James and M Millett), 26–35

Featherstone, R, and Bewley, B, 2000 Recent aerial reconnaissance in North Oxfordshire, *Oxoniensia* **65**, 13–26

Finnegan, M, 1978 Non-metric variation of the infracranial skeleton, *J Anatomy* **125**, 23–37

Ford, S, 2009 Middle Iron Age occupation at Ells Lane, Bloxham, Banbury, Oxfordshire, *Oxoniensia* **74**, 113–25

Fryer, V, 2017 Plant macrofossils, in MOLA 2017, 35–9

Garrow, D, Beadsmoore, E, and Knight, M, 2005 Pit clusters and the temporality of occupation. An earlier Neolithic pit site at Kilverstone, Thetford, Norfolk, *Proc Prehist Soc* **71**, 139–57

Germany, M, 2007 *Neolithic and Bronze Age monuments and middle Iron Age settlement at Lodge Farm, St Osyth, Essex*, East Anglian Archaeology **117**, Chelmsford

Getty, R, 1975 *Sisson and Grossman's the anatomy of the domestic animals*, Saunders, Philadelphia

Gordon, R, 2015 The animal bone, in MOLA 2015, 33–4

Göhring, A, 2021 Allen's fossa – an attempt to dissolve the confusion of different nonmetric variants on the anterior femoral neck, *Int J Osteoarchaeol* **31(4)**, 513–22

Grant, A, 1982 The use of tooth wear as a guide to the age of domestic ungulates, in Wilson *et al*. 1982, 91–108

Green, H S, 1980 *The flint arrowheads of the British Isles: a detailed study of material from England and Wales with comparanda from Scotland and Ireland*, BAR Brit. Ser. **75**, Oxford

Grieve, A L, 2012 The human-dog relationship in early medieval England and Ireland (c. AD 400–1250), unpubl. PhD thesis, Univ. Southampton

Hambleton, E, 1999 *Animal husbandry regimes in Iron Age Britain: a comparative study of faunal assemblages from British Iron Age sites*, BAR Brit. Ser. **282**, Oxford

Harding, P, 1990 The worked flint, in *The Stonehenge environs project* (ed. J C Richards), London, English Heritage

Healy, F, 1988 *The Anglo-Saxon cemetery at Spong Hill, North Elmham, Part VI: occupation during the seventh to second millennia BC*, East Anglian Archaeological Reports **38**, Gressenhall

Henig, M, and Booth, P, 2000 *Roman Oxfordshire*, Sutton, Stroud

Hey, G, with Robinson, M, 2011 Neolithic communities in the Thames Valley: the creation of new worlds, in *The Thames through time: the archaeology of the Upper and Middle Thames. Early prehistory to 1500 BC* (A Morigi, D Shreve, M White, G Hey, P Garwood, M Robinson, A Barclay and P Bradley), Oxford archaeology Thames Valley Landscapes Monograph **32**, Oxford, 221–60

Hey, G, Bell, C, Dennis, C, and Robinson, M, 2016 *Yarnton: Neolithic and Bronze Age settlement and landscape*, Oxford Archaeology Thames Valley Landscapes **39**, Oxford

Hey, G, Booth, P, and Timby, J, 2011 *Yarnton: Iron Age and Romano-British settlement and landscape. Results of excavations 1990–98*, Oxford Archaeology Thames Valley Landscapes **35**, Oxford

Hey, G, and Hind, J (eds), 2014 *Solent-Thames research framework: resource assessments and research agendas*, Oxford Wessex Monograph **6**, Oxford

Hingley, R, 1984 Towards a social analysis in archaeology: Celtic society in the Iron Age of the Upper Thames Valley, in *Aspects of the Iron Age in central southern Britain* (B Cunliffe and D Miles, eds), Oxford University Committee for Archaeology Monograph **2**, Oxford, 72–88

Inizan, M-L, Reduron-Ballinger, M, Roche, H, and Tixier, J, 1999 *Technology and terminology of knapped stone*, Cercle de Recherches et d'Etudes Préhistoriques, CNRS, Nanterre

Jacomet, S, 2006 *Identification of cereal remains from archaeological sites*, 2nd edn, Archaeobotany Lab, IPAS, Basel University

JMHS, 2005a An archaeological watching brief on Banbury Booster 876F, Oxfordshire, John Moore Heritage Services, https://doi.org/10.5284/1019016

JMHS, 2005b An archaeological excavation in advance of the dualling of Hennef Way (A422), Banbury, Oxfordshire, John Moore Heritage Services unpublished client report

Knight, W F J, 1938 A Romano-British site at Bloxham, Oxon., *Oxoniensia* **3**, 41–56

Lambrick, G, with 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 Archaeology Thames Valley Landscapes Monograph **29**, Oxford

Lambrick, G, and Robinson, M, 1979 *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire*, CBA Res Rep **32**, London

Lambrick, G, and Wallis, J, 2018 Settlement at DUGM Area 10, in Booth and Simmonds 2018, 24–8

Lamdin-Whymark, H, 2008 *The residue of ritualised action: Neolithic deposition practices in the Middle Thames Valley*, BAR Brit. Ser. **466**, Oxford

Levine, M A, 1982 The use of crown height measurements and tooth eruption sequences to age horse teeth, in Wilson *et al*. 1982, 223–50

Lovejoy, C O, Meindl, R S, Pryzbeck, T R, and Mensforth, R P, 1985 Chronological metamorphosis of the auricular surface of the ilium: a new method for the determination of age at death, *American J Phys Anthropol* **68**, 15–28

McKinley, J I, 1994 Bone fragment size in British cremation burials and its implications for pyre technology and ritual, *J Archaeol Sci* **21**, 339–42

McKinley, J I, 1997 Bronze Age 'barrows' and funerary rites and rituals of cremation, *Proc Prehist Soc* **63**, 129–45

McKinley, J I, 2004a Compiling a skeletal inventory: disarticulated and co-mingled remains, in M Brickley and J I McKinley (eds) 2004, 14–17

McKinley, J I 2004b Compiling a skeletal inventory: cremated human bone, in Brickley and McKinley 2004, 9–13

McKinley, J I, 2013 Cremation: excavation and analysis, in *The Oxford handbook of the archaeology of death and burial* (eds S Tarlow and L Nilsson Stutz), 147–72, Oxford University Press, Oxford

McKinley, J I, 2000 Cremation burials, in, *The eastern cemetery of Roman London. Excavations 1983–1990* (B Barber and D Bowsher), MoLAS Monograph **4**, 264–77

Madgwick, R, 2008 Patterns in the modification of animal and human bones in Iron Age Wessex: revisiting the excarnation debate, in *Changing perspectives on the first millennium BC: proceedings of the Iron Age Research Student Seminar 2006* (eds O Davis, N Sharples and K Waddington), Oxbow Books, Oxford, 99–118

Margary, I D, 1967 *Roman roads in Britain*, John Baker, London

Marshall, P D, and Cook, G, 2010 Radiocarbon results, in Archaeological excavations at Bolton Hill Quarry, Pembrokeshire, Archaeological Research Solutions, http://archaeologicalresearchservices.com/Bolton%20Hill%20Excavation%20Report%20v6.pdf

Mays, S, 2008 Septal aperture of the humerus in a mediaeval human skeletal population, *American J Phys Anthropol* **136**, 432–40

Mays, S, 2021 *The archaeology of human bones*, 3rd edn, Routledge, Abingdon

Miles, A E W, 1962 Assessment of the ages of a population of Anglo-Saxons from their dentitions, *Proc Royal Soc Medicine* **55**, 881–6

Miles, D, Palmer, S, Smith, A< and Edgeley Long, G, 2007 *Iron Age and Roman settlement in the Upper Thames Valley: excavations at Claydon Pike and other sites within the Cotswold Water Park*, Oxford Archaeology Thames Valley Landscapes Monograph **26**, Oxford

Mitchell, P D, and Brickley, M (eds), 2017 *Updated guidelines to the standards for recording human remains*, Chartered Institute for Archaeologists and BABAO

MOLA, 2014 *London medieval and post-medieval pottery codes*, Museum of London Archaeology, http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes

MOLA, 2017 Archaeological excavation of land to the east of Bloxham Road, Banbury, Oxfordshire, Museum of London Archaeology, https://doi.org/10.5284/1056809

Mook, W G, 1986 Business meeting: recommendations/resolutions adopted by the Twelfth International Radiocarbon Conference, *Radiocarbon* **28**, 799

Moore, T, 2006 *Iron Age Societies in the Svern-Cotswolds: developing narratives of social landscape change*, BAR Brit Ser **421**, Oxford

OA, 2012 Salt Way, Banbury: heritage assessment, Oxford Archaeology, https://library.oxfordarchaeology.com/6243/

OA, 2018 Broughton Roman Villa, Broughton Castle Estate, Oxfordshire: archaeological evaluation report, Oxford Archaeology

OA, 2019 Wykham Park Farm, Banbury, Oxfordshire: written scheme of investigation addendum for archaeological excavation, Oxford Archaeology unpublished report

OA, 2020 Wykham Park Farm, Banbury, Oxfordshire: archaeological evaluation report, Oxford Archaeology, https://library.oxfordarchaeology.com/doc/6025

Onhuma, K, and Bergman, C A, 1982 Experimental studies in the determination of flake mode, Bull Inst Archaeol London **19**, 161–71

Ortner, D J, 2003 *Identification of pathological conditions in human skeletal remains*, Academic Press, London and San Diego

Orton, C, and Hughes, M, 2013 *Pottery in archaeology*, 2nd edn, Cambridge University Press, Cambridge

Palmer, R, 1976 Interrupted ditch enclosures in Britain: the use of aerial photography for comparative studies, *Proc Prehist Soc* **41**, 161–86

PCRG, 2010 *The study of prehistoric pottery: general policies and guidelines for analysis and publication*, 3rd edn, Prehistoric Ceramics Research Group Occasional Papers **1** and **2**

PCRG, SGRP and MPRG, 2016 *A standard for pottery studies in archaeology*, Prehistoric Ceramics Research Group, Study Group for Roman Pottery and Medieval Pottery Research Group

Pearce, J., 2013, *Contextual archaeology of burial practice: case studies from Roman Britain*, BAR Brit. Ser. **588**, Archaeopress, Oxford

Powell, A B, Barclay, A J, Mepham, L, and Stevens, C J, 2015 *Imperial College Sports Ground and RMS Land, Harlington: the development of prehistoric and later communities in the Colne Valley and on the Heathrow Terrace*, Wessex Archaeology, Salisbury

Raymond, F, 2005 Neolithic pottery, in JMHS 2005, 10–14

Roberts, C, and Connell, B, 2004 Guidance on recording paleopathology, in Brickley and McKinley 2004, 34–9

Roberts, C, Manchester, K, 2010 *The archaeology of disease*, 3rd edn, Cornell University Press, Ithaca, NY

Robinson, M, 2007 The paleoecology of alluvial hay meadows in the Upper Thames Valley, *Fritillary* **5**, 47–57

Roehrs, H, Klooss, S, and Kirleis, W, 2013 Evaluating prehistoric finds of *Arrhenatherum elatius* var. *bulbosum* in north-western and central Europe with an emphasis on the first Neolithic finds in northern Germany, *Archaeol Anthropol Sci* **5**, 5–15

Salzman, L F (ed.), 1939 *A history of the county of Oxford: volume 1*, Victoria County History, London

Scheuer, L, and Black, S, 2000 *Developmental juvenile osteology*, Elsevier Academic Press, Oxford

Serjeantson, D, 1996 The animal bones, in *Runnymede Bridge Research Excavations, Volume 2, refuse and disposal at Area 16 East Runnymede* (eds S Needham and T Spence), 194–233, British Museum Press, London

Simmonds, A, 2014 *The Archaeology of Banbury Flood Alleviation Scheme, Oxfordshire*, Oxford Archaeology Monograph **21**, Oxford

Simmonds, A, and Thacker, G, forthcoming Neolithic pits, earliest Iron Age and Anglo-Saxon settlement and other features at Polar Technology, Eynsham, *Oxoniensia*

Stace, C, 2010 *New flora of the British Isles*, 3rd edn, Cambridge University Press, Cambridge

Thompson, I, 1982 *Grog-tempered 'Belgic' pottery of south-eastern England*, BAR Brit. Ser. **108**, Oxford

Tomber, R, and Dore, J, 1998 *The National Roman Fabric Reference Collection: a handbook*, MoLAS Monograph **1**, London

von den Driesch, A, 1976 *A guide to the measurement of animal bones from archaeological sites*, Peabody Museum Bulletin **1**, Cambridge, MA

WA, 2012 Geophysical survey of land at Wykham Park, Banbury, Oxfordshire, Wardell Armstrong report CP10352

WA, 2013 Wykham Park Farm, Oxfordshire: environmental statement, Wardell Armstrong report WM10671

WA, 2015 Land east of Southam Road, Banbury, Oxfordshire: post-excavation assessment and updated project design, Wessex Archaeology

Whimster, R, 1981 *Burial practices in Iron Age Britain*, BAR Brit. Ser. **90**, Oxford

Whittle, A, Atkinson, R J C, Chambers, R, and Thomas, N, 1992 Excavations in the Neolithic and Bronze Age complex at Dorchester-on-Thames, Oxfordshire, 1947–1952 and 1981, *Proc Prehist Soc* **58**, 143–201

Whittle, A, Bayliss, A, and Healy, F, 2011 *Gathering time: dating the early Neolithic enclosures of southern Britain and Ireland*, Oxbow Books, Oxford

Wilkinson, D (ed.), 1992 OAU fieldwork manual, Oxford Archaeology unpublished

Willis, C, 2020 Stonehenge and middle to late Neolithic cremation rites in mainland Britain (*c* 3500–2500 BC), PhD thesis, University College London, https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.807885

Wilson, B, Grigson, C, and Payne, S, 1982 *Ageing and sexing animal bones from archaeological sites*, BAR Brit. Ser. **109**, Oxford

Wilson, T, 2008 *A narrow view across the Upper Thames Valley in later prehistoric and Roman times: archaeological excavations along the Chalgrove to East Ilsley gas pipeline*, Archaeopress, Oxford

Young, C J, 2000 *The Roman pottery industry of the Oxford region*, BAR Brit. Ser. **43**, Oxford

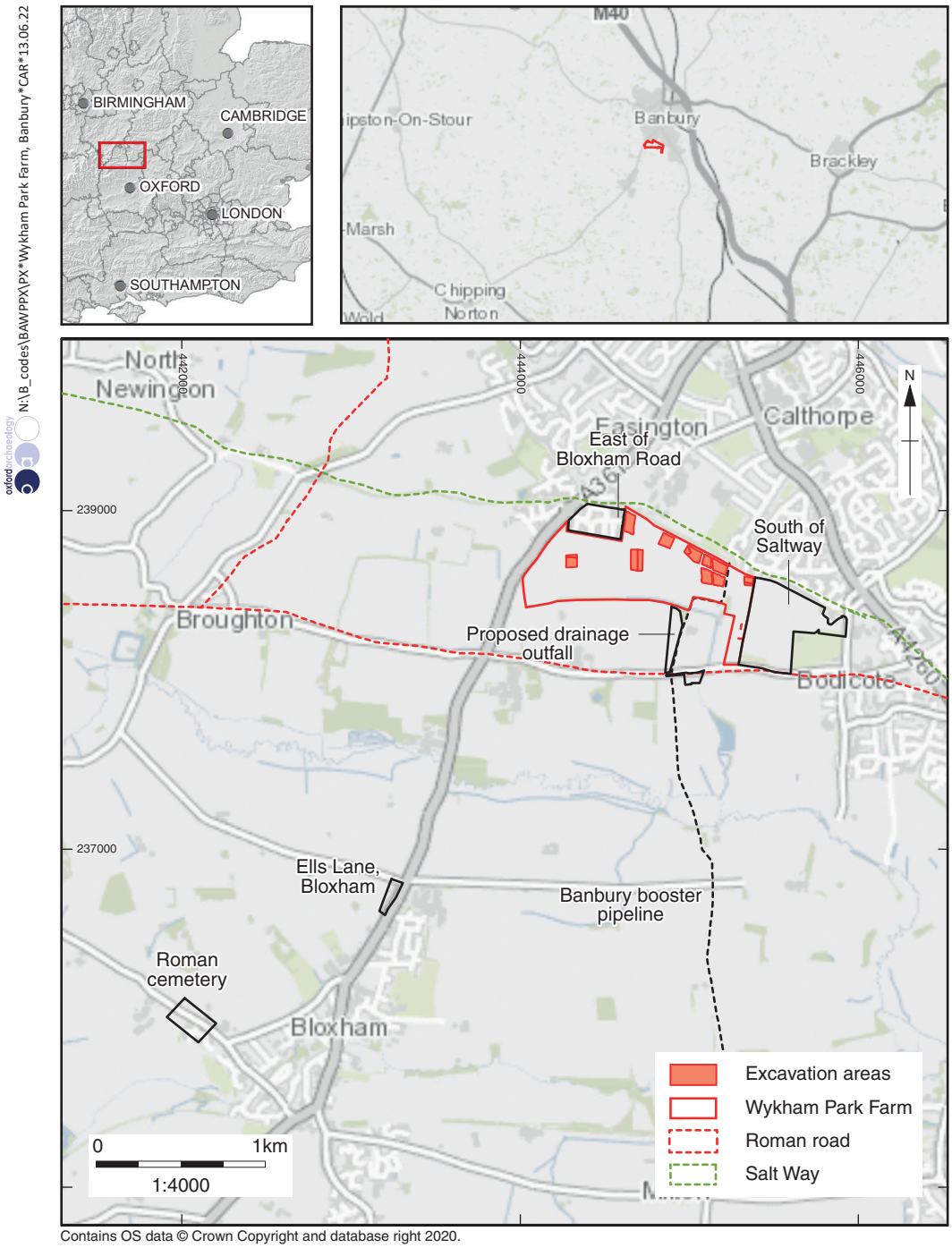

Figure 1: Site locations

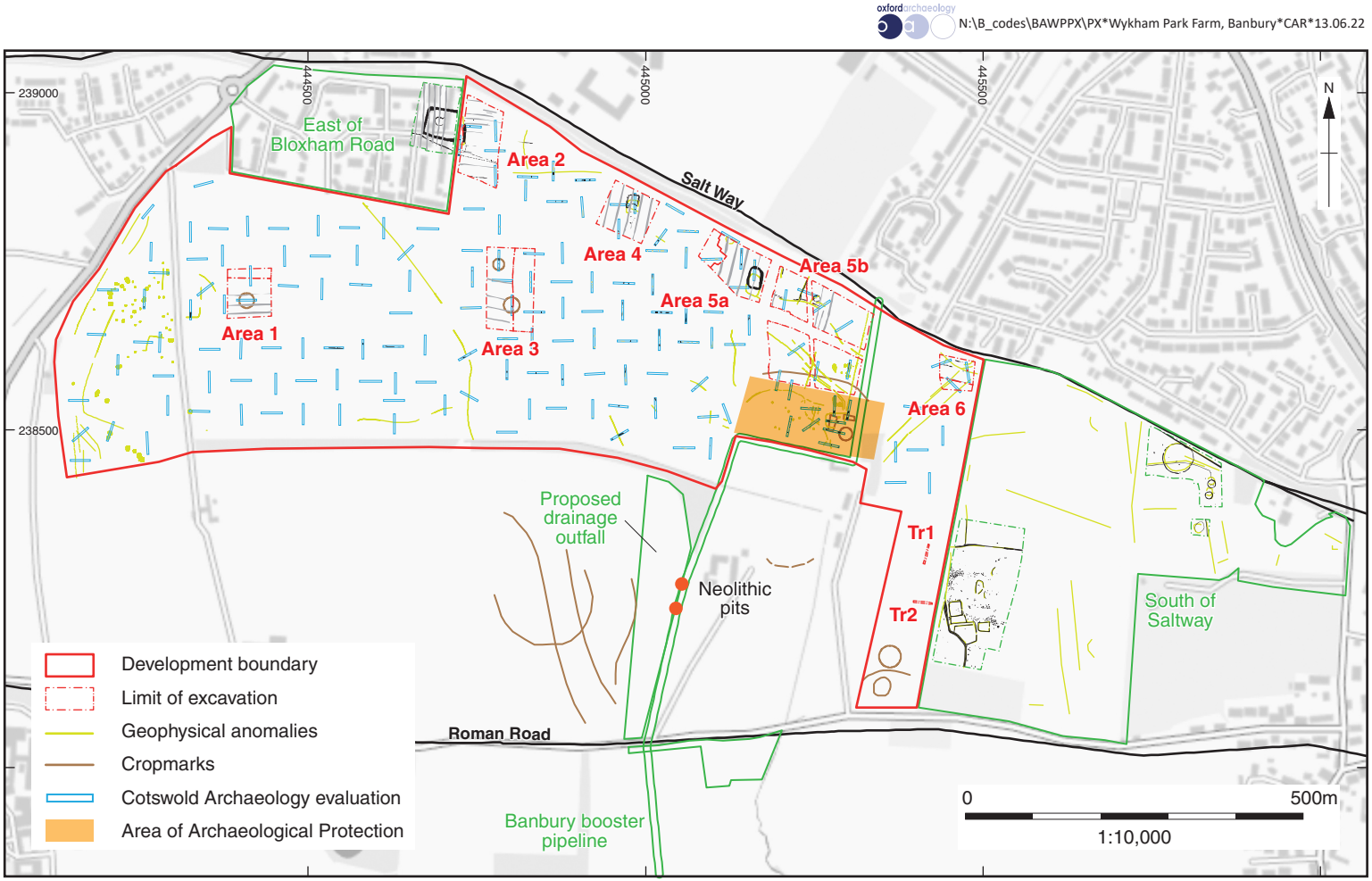

Figure 2: The archaeology of Wykham Park Farm and the surrounding area

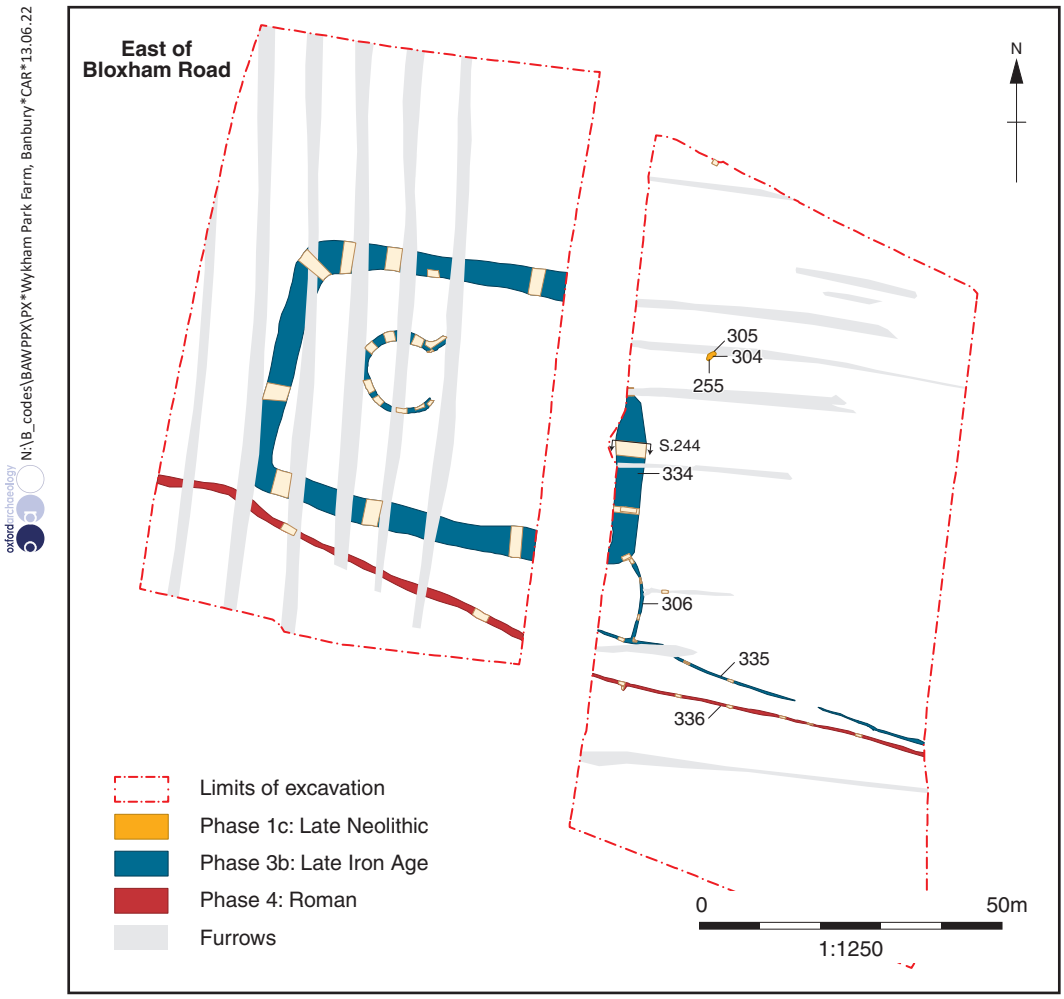

Figure 3: Area 2 phase plan

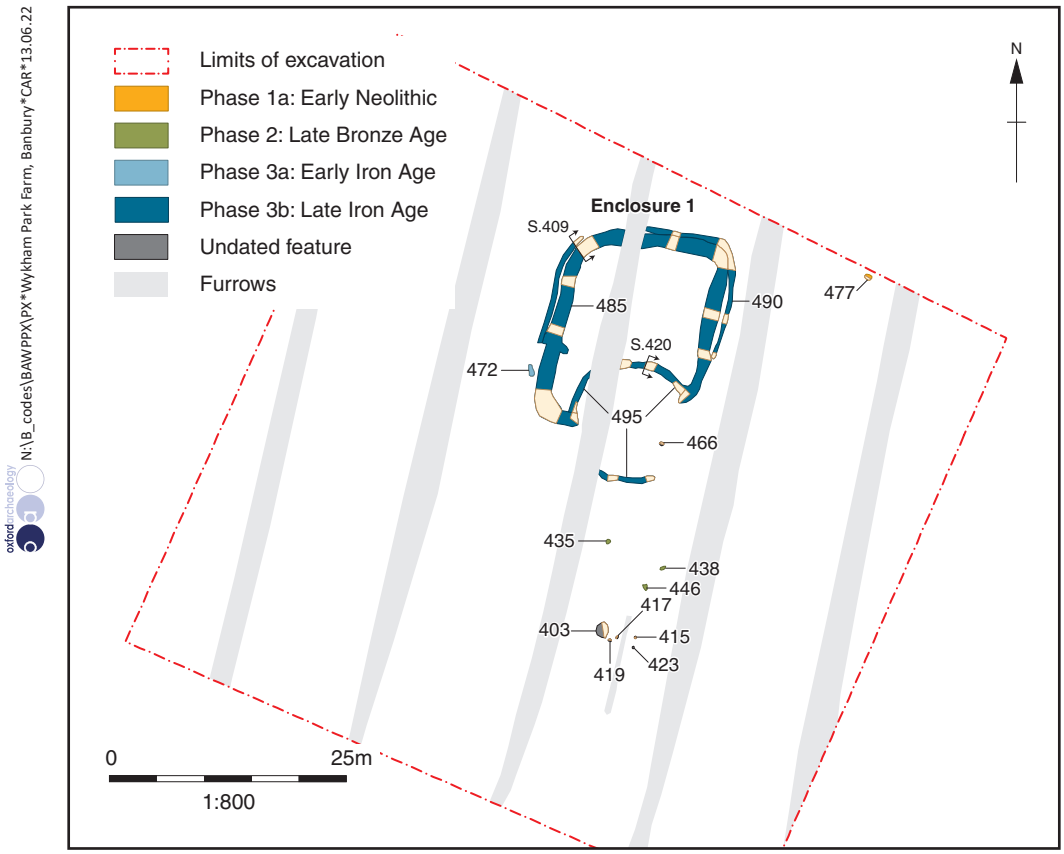

Figure 4: Area 4 Phase plan

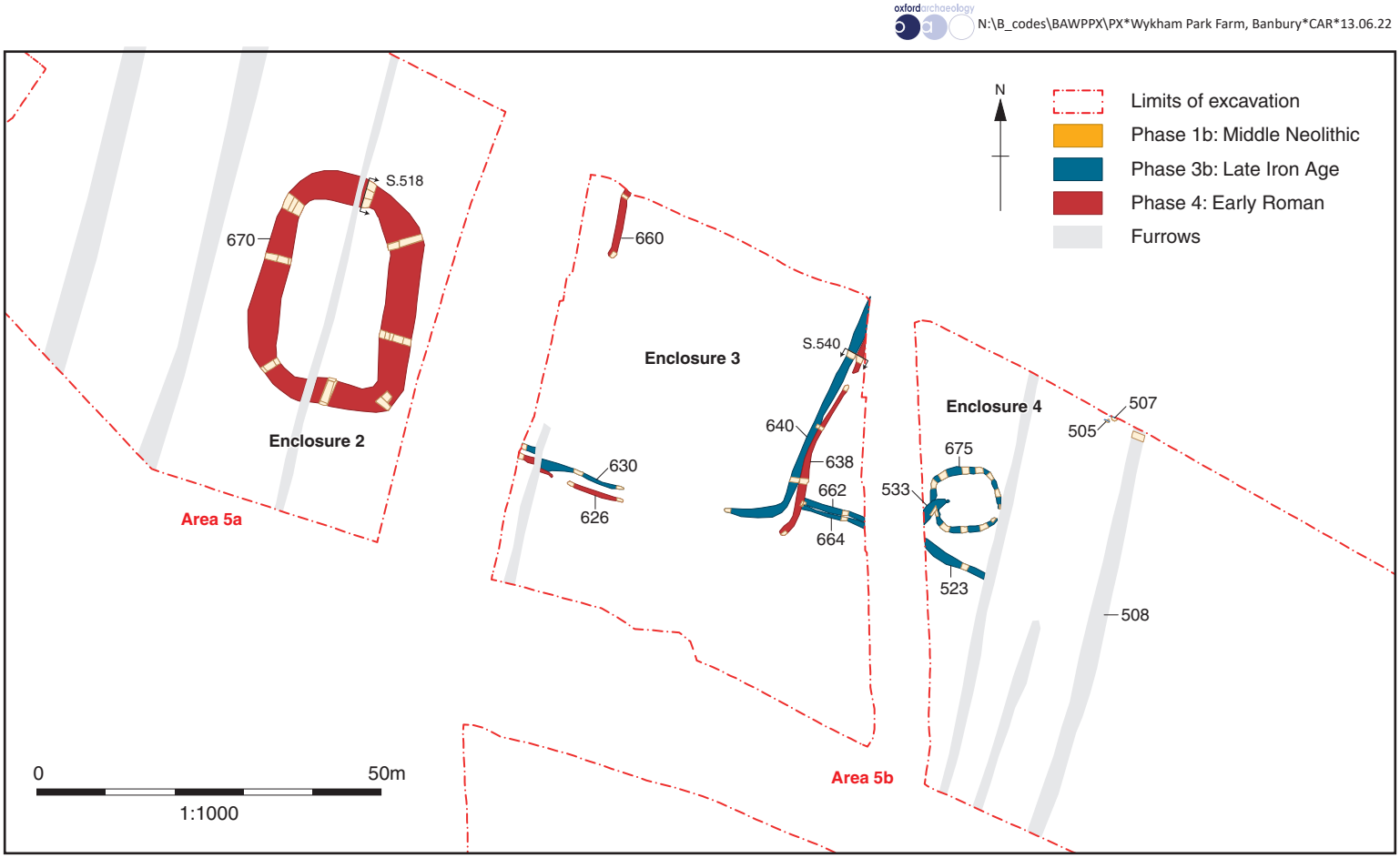

Figure 5: Area 5a, 5, 5b Phase plan

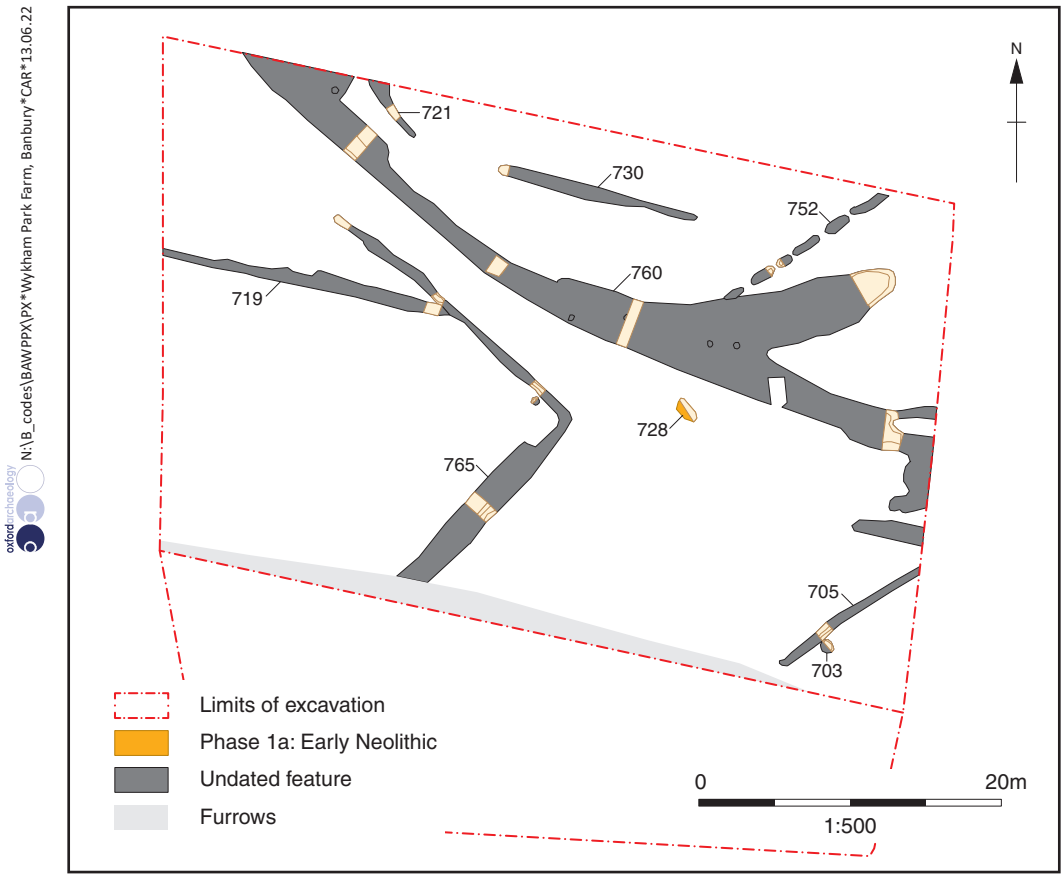

Figure 6: Area 6 Phase plan

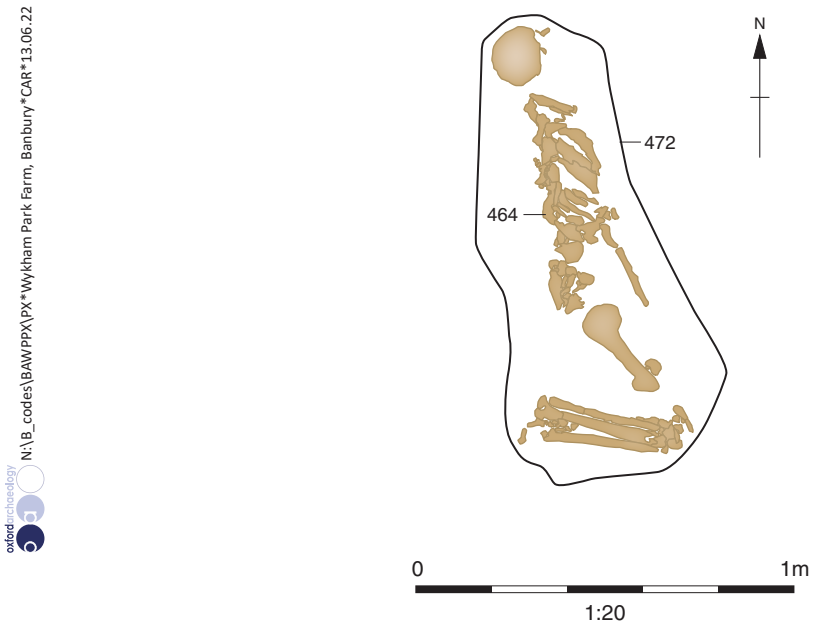

Figure 7: Inhumation burial 472

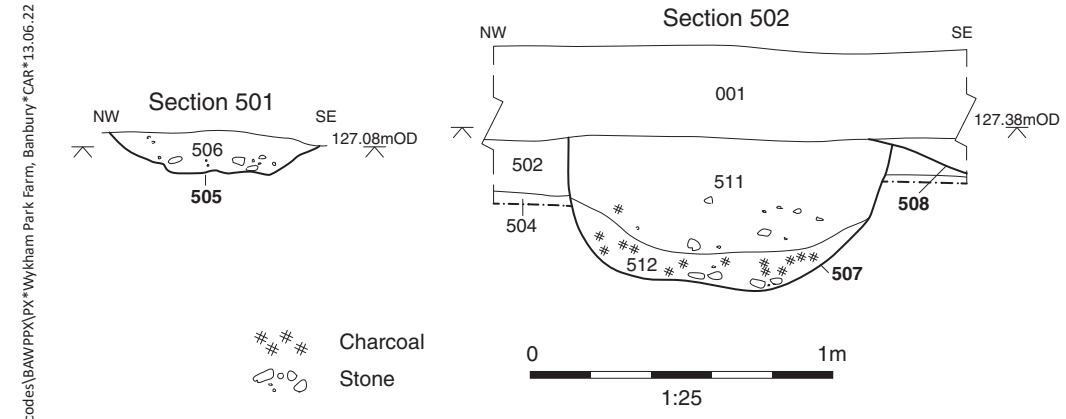

Figure 8: Sections through Neolithic pits 505 and 507

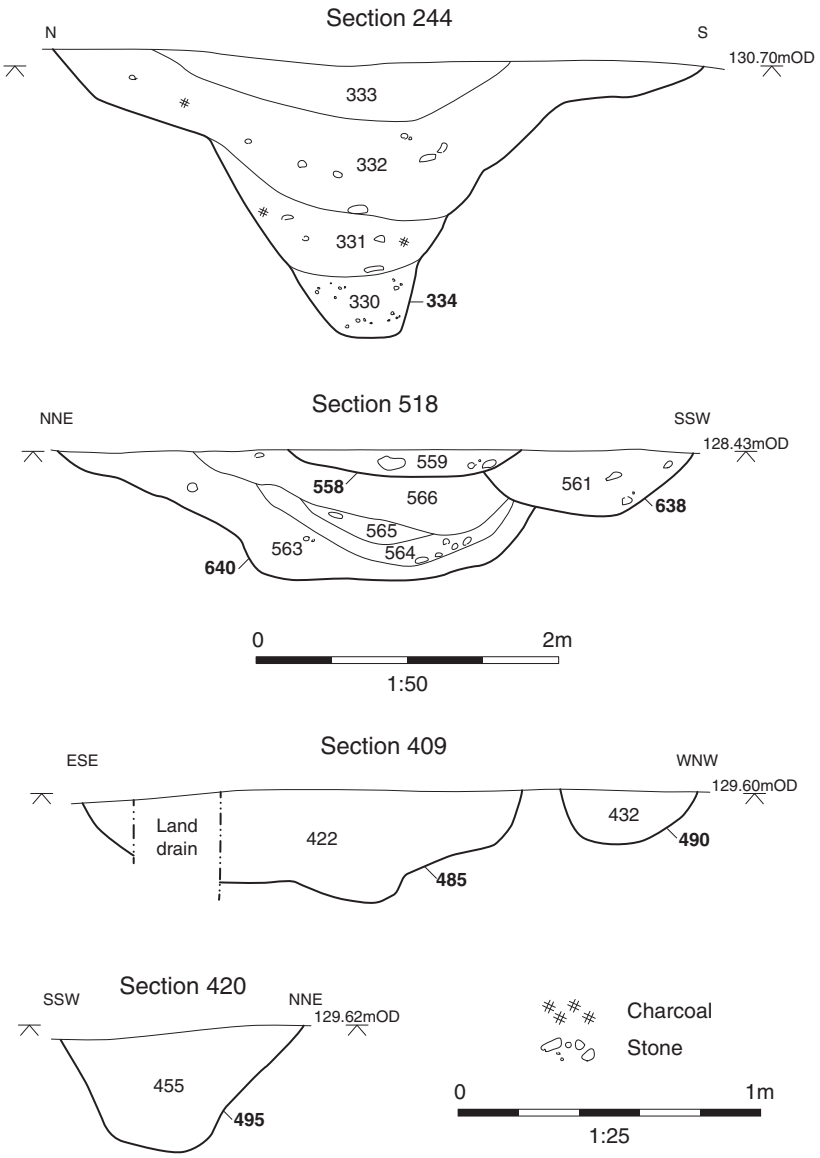

Figure 9: Sections though late Iron Age and early Roman enclosure ditches

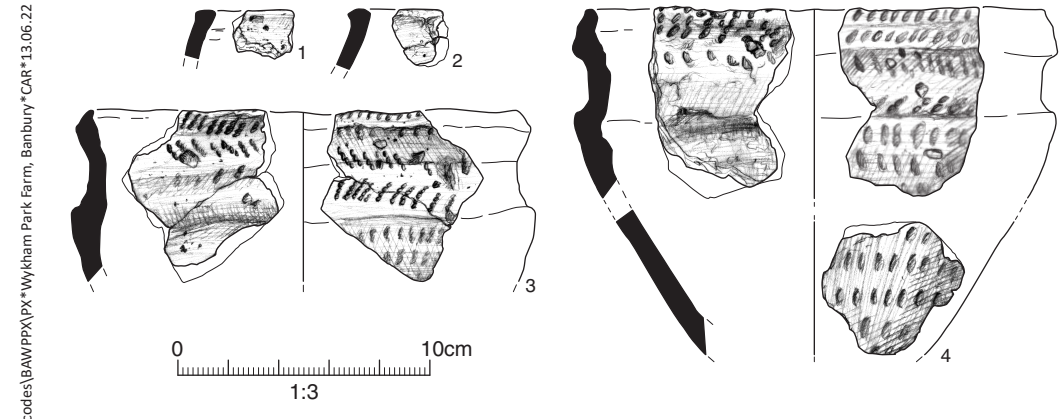

Figure 10: Prehistoric pottery

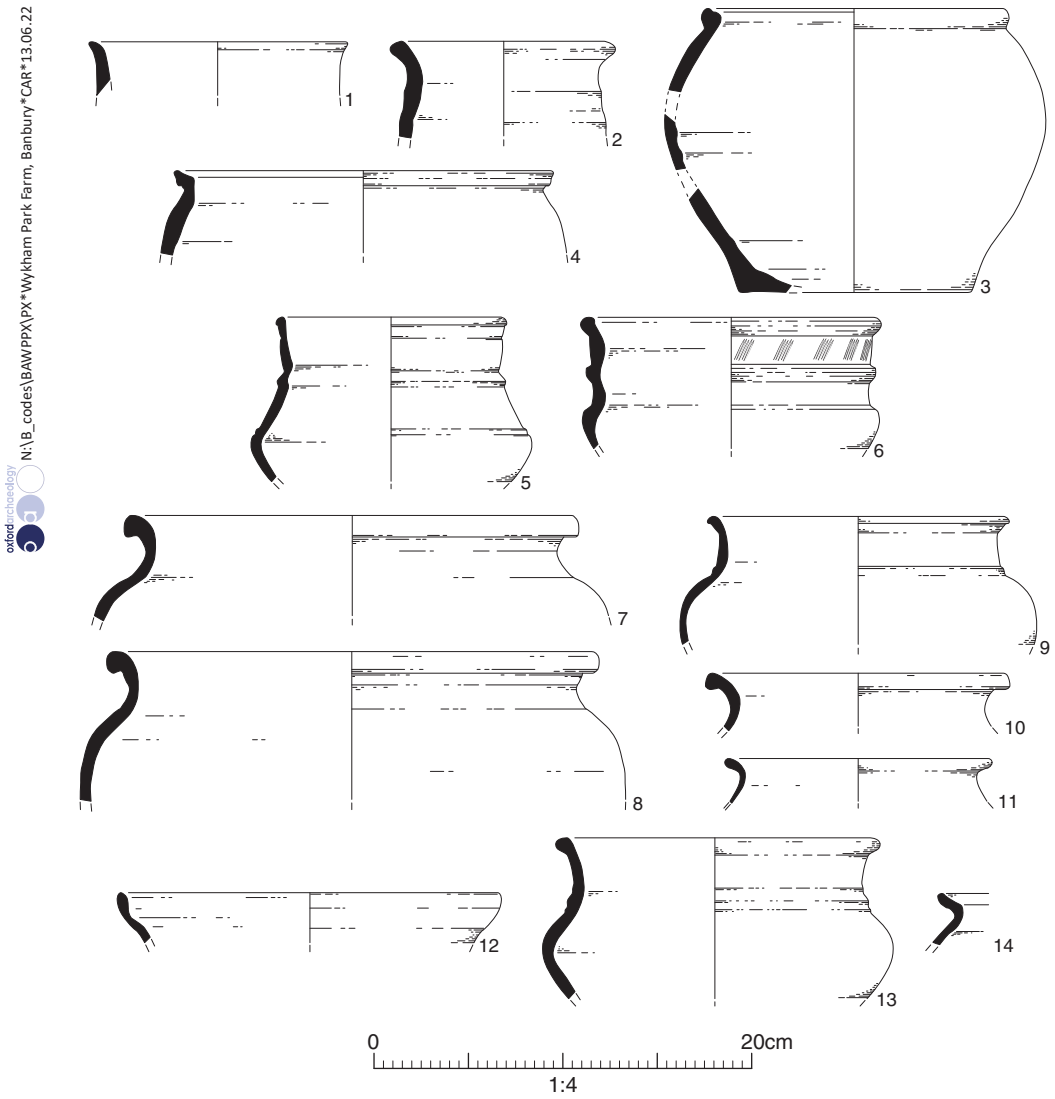

Figure 11: Late Iron Age and Roman pottery

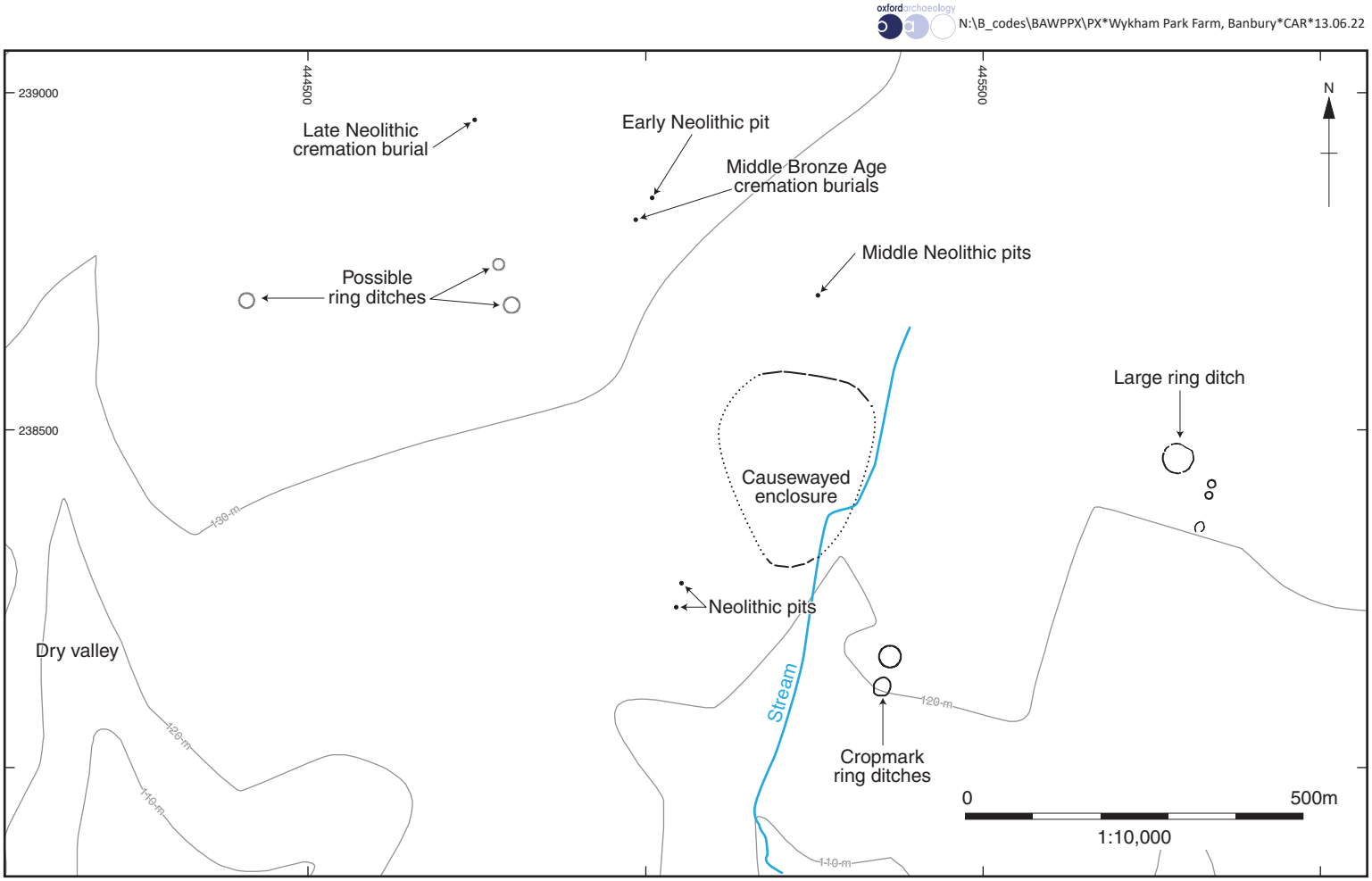

Figure 12: Neolithic and Bronze Age features in the vicinity of Wykham Park Farm

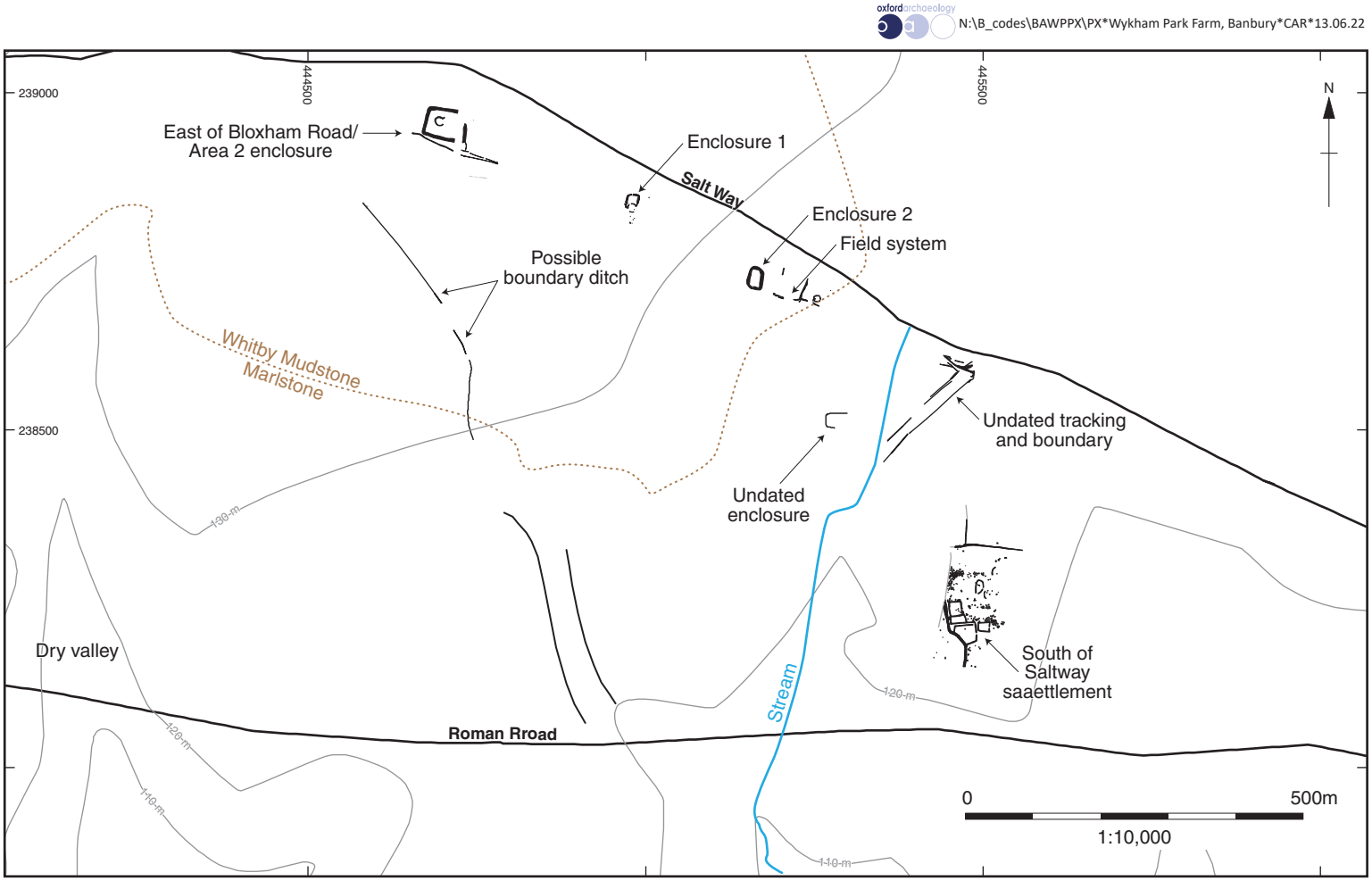

Figure 13: Late Iron Age and Roman features in the vicinity of Wykham Park Farm

Plate 1: Middle Neolithic pit 507, view to north-east (scale 1m)

Plate 2: Middle Neolithic pit 505, view to north-east (scale 1m)

Plate 3: Late Neolithic cremation burial 255, pre-excavation, view to north-west (scale 1m)

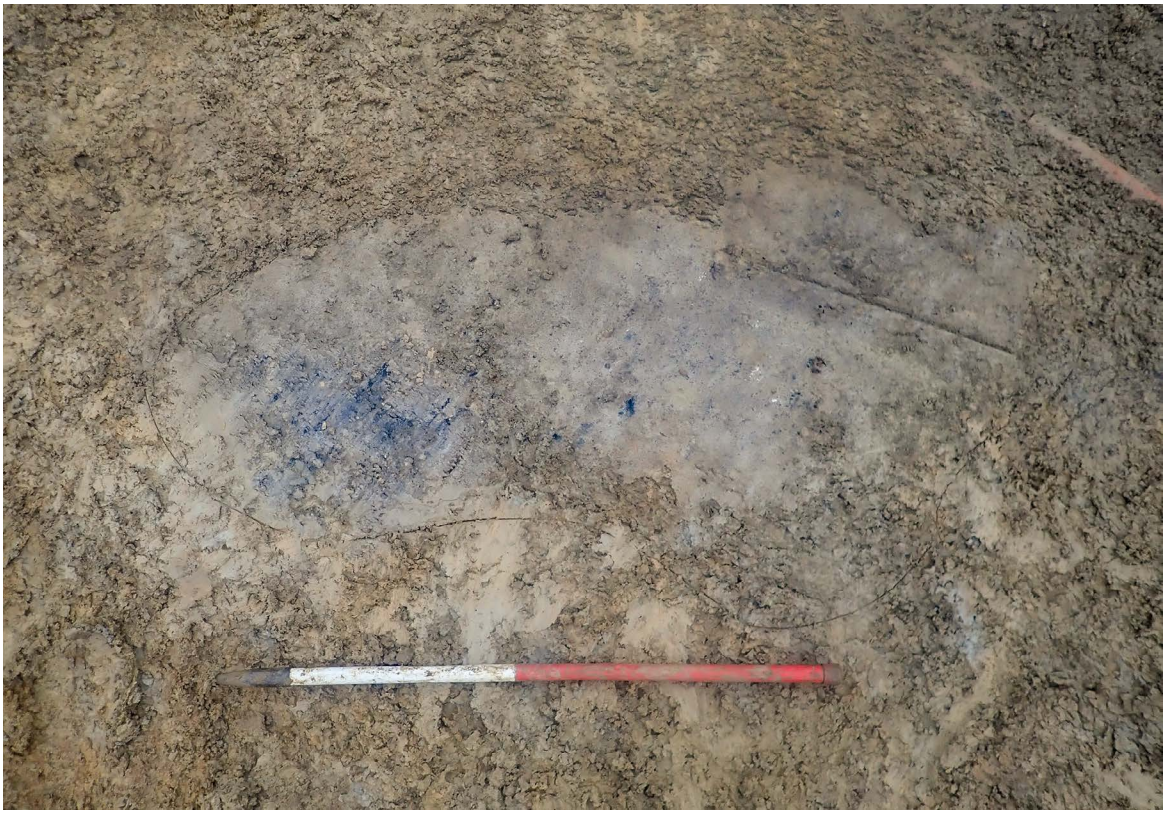

Plate 4: Late Neolithic cremation burial 255, pre-excavation, close-up view to north-west (scale 1m)

Plate 5: Middle Bronze Age cremation burial 435 (scale 0.5m)

Plate 6: Early Iron Age inhumation burial 472, view to west (scale 0.3m)

Plate 7: Section through late Iron Age enclosure ditch 334, view to north-east (scale 1m)

Plate 8: Section through early Roman enclosure ditch 670, view to north-west (scale 1m)

Head Office/Registered Office/
OA South

Janus House
Osney Mead
Oxford OX2 0ES

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

OA North

Mill 3
Moor Lane
Lancaster LA1 1QD

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

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
e: oaeast@oxfordarchaeology.com
w:http://oxfordarchaeology.com