

Wintringham Park, Site 4i: Iron Age Settlement and Roman Fields

Post-Excavation Assessment and Updated Project Design

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Prepared by: Pat Moan (Project Officer)
Checked by: Tom Phillips (Senior Project Manager)
Edited by: Alice Lyons (PX Project Manager (acting))
Approved for Issue by: Paul Spoerry (Regional Manager)
Signature:



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OA South
Janus House
Osney Mead
Oxford
OX2 0ES

t. +44 (0)1865 263 800

OA East
15 Trafalgar Way
Bar Hill
Cambridge
CB23 8SG

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

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Post-Excavation Assessment and Updated Project Design

By Pat Moan BA ACIfA

With contributions by: David Brown BA, Rachel Fosberry ACIfA, Hayley Foster PhD, Ted Levermore BA, Denis Sami PhD, Stephen Wadeson, Charlotte Walton BA MPhil MCIfA

Contents

List of Figures	vii
List of Plates	vii
Summary	ix
Acknowledgements	x
1 INTRODUCTION.....	1
1.1 Background	1
1.2 Geology and topography	1
1.3 Archaeological background	1
1.4 Original research aims and objectives.....	3
1.5 Fieldwork methodology.....	5
1.6 Project scope.....	5
2 FACTUAL DATA: STRATIGRAPHY.....	6
2.1 Stratigraphic and Structural Data.....	6
2.2 Period 1: Middle Bronze Age (c. 1600 – 1200BC).....	6
2.3 Period 2: Middle Iron Age (c. 350 – 100BC)	6
2.4 Period 3: Late Iron Age (c. 100BC – AD43)	9
2.5 Period 4: Romano-British (c. AD43 – 410AD)	10
2.6 Period 5: Medieval (AD1066 – 1500)	10
3 FACTUAL DATA: ARTEFACTS.....	12
3.1 Finds Quantification	12
3.2 Metalwork.....	12
3.3 Prehistoric Pottery	12
3.4 Romano-British Pottery	12
3.5 Ceramic Building Material	12
3.6 Fired Clay	12
3.7 Metalworking Waste	13
3.8 Worked Stone	13
4 FACTUAL DATA: ENVIRONMENTAL EVIDENCE	14

4.1	Environmental Quantification.....	14
4.2	Animal bone	14
4.3	Environmental Samples.....	14
5	STATEMENT OF POTENTIAL	15
5.1	Stratigraphy.....	15
5.2	Metalwork.....	15
5.3	Prehistoric Pottery	15
5.4	Romano-British Pottery.....	15
5.5	Ceramic Building Material	15
5.6	Fired Clay	15
5.7	Metalworking Waste	15
5.8	Worked Stone	15
5.9	Animal Bone.....	16
5.10	Environmental.....	16
5.11	Overall potential.....	16
6	UPDATED PROJECT DESIGN.....	17
6.1	Revised research aims	17
6.2	Interfaces.....	17
6.3	Methods statement.....	17
6.4	Publication and dissemination of results	18
6.5	Retention and disposal of finds and environmental evidence.....	19
6.6	Ownership and archive.....	19
7	RESOURCES AND PROGRAMMING.....	20
7.1	Project team structure	20
7.2	Task list and programme	20
APPENDIX A	ARTEFACT ASSESSMENTS	21
A.1	Small Finds	21
A.2	Iron Age Pottery.....	23
A.3	Romano-British Pottery	28
A.4	Ceramic Building Material	29
A.5	Fired Clay	30
A.6	Metalworking Waste	33
A.7	Worked Stone	33
APPENDIX B	ENVIRONMENTAL ASSESSMENTS	34
B.1	Faunal Remains.....	34
B.2	Charred plant remains.....	40
APPENDIX C	RISK LOG	43

APPENDIX D	HEALTH AND SAFETY POLICY	44
APPENDIX E	BIBLIOGRAPHY	45

List of Figures

- Fig. 1 Site location
Fig. 2 Multi-phase plan
Fig. 3 Selected Sections

List of Plates

- Plate 1 Panoramic Photo of Site 4i fully stripped, looking north-west
Plate 2 Drone survey photograph of the stripped area
Plate 3 Middle to Late Iron Age Ditch **4016** and Middle Iron Age Ring-ditch **4058** to the east.
Plate 4 Middle Iron Age Waterhole **4127**, looking south-east. Note metalling in foreground.
Plate 5 Slot in Middle Iron Age Ring-ditch **4058**, looking south-west

Summary

Between 9th October and 28th November, Oxford Archaeology East (OAE) undertook an open area excavation on land south of Cambridge Road, St Neots (TL 19959 60224). This excavation was the first phase of required archaeological mitigation for the planned housing development at Wintringham Park, a parcel of land c. 162 hectares in size. This site forms one of six areas identified as requiring excavation and was one of the smallest measuring a total of 2.07ha.

A relatively low density of archaeological deposits and features were found within the area once stripped, with a continuation in the activity seen to the north during the Loves Farm excavation extending into the area. The earliest activity evident was part of a field system tentatively dated to the Middle Bronze Age. This was then followed by the main focus of activity, during the Middle Iron Age period, with a long running, sinuous, boundary being cut during the Middle Iron Age that was also observed running through the Loves Farm excavation to the north. Three ring-ditches, one of which was almost monumental in size, were also dug during the period, interpreted as roundhouse enclosures, along with a partially ditched sub-rectangular enclosure and other 'organically formed' boundary ditches.

The main, sinuous, boundary ditch was recut during the Late Iron Age at least once, although the roundhouses would appear to be out of use by this period.

Some Roman activity was revealed in the form of boundary ditches, presumably forming fields extending off the known Roman road to the north. An odd pair of parallel ditches were also recorded, forming part of this field system, although their form was quite odd and function unclear, possibly being as mundane as a boundary recut, but seemed too well aligned with each other for this to be the case.

The final phase of activity within the area was a shallow east to west boundary ditch phased to the medieval period which was thought to represent a trackway-side ditch for the medieval antecedent of Cambridge Road, along with a slightly later medieval hollow way with surviving metalling and truncated furrows of the same date.

Finds recovered include just over 9kg of pottery, the vast majority of which is of Middle Iron Age date, 1.3kg of fired clay, and 78g of slag. A total of 10.7kg of faunal remains was also retrieved, whilst the environmental results were very poor, with few charred plant remains being recovered, quite probably due to the poor soil conditions, although some preservation by waterlogging was observed in the deeper features.

Acknowledgements

The work was commissioned by Urban and Civic, following a brief designed by Andy Thomas of the Cambridge County Council Historic Environment Team, who also monitored and visited the site. The project is managed by Tom Phillips, Senior Project Manager and the fieldwork was directed by the author with the assistance of Emily Abrehart, Ro Booth, Lexi Dawson and Tom Houghton. A metal detector survey was undertaken by Stephen Critchley and a drone photogrammetry survey by Lindsey Kemp. Machine excavation was undertaken by Breheny Civil Engineering. Report figures were created by Charlotte Walton and David Brown. Editing was undertaken by Alice Lyons.

1 INTRODUCTION

1.1 Background

- 1.1.1 This archaeological excavation was undertaken on behalf of Urban and Civic, on land directly south of Cambridge Road, St Neots, Cambridgeshire (TL 19959 60224, Fig. 1, Plates 1 & 2). The Wintringham Park housing development consists of approximately 260 hectares of arable farmland on the eastern outskirts of St Neots. Previous phases of archaeological work include non-intrusive surveys (aerial photography, Palmer 200, and geophysical survey, Masters, 2009) and a phase of evaluation trenching (Phillips 2008). This evaluation defined four distinct areas of archaeological potential along with two smaller 'satellite' areas where further work was required prior to development taking place. This excavation is the first of these phases and constituted a 1.98ha open area strip targeting peripheral settlement activity and field systems identified during the evaluation (identified as Site 4i in the Written Scheme of Investigation: Macaulay & Phillips 2017).
- 1.1.2 The work was undertaken in accordance with a Brief issued by Andy Thomas (2017) of the Cambridgeshire County Council Historic Environment Team, supplemented by a Written Scheme of Investigation (Macaulay & Phillips 2017) prepared by OAE and approved by Andy Thomas. This assessment has been conducted in accordance with the principles identified in Historic England's guidance documents *Management of Research Projects in the Historic Environment*, specifically *The MoRPHE Project Manager's Guide (2006)* and *PPN3 Archaeological Excavation (2008)*.

1.2 Geology and topography

- 1.2.1 The excavation area is situated on a slight plateau at approximately 27mOD between two gently sloping hills, one located to the north, at Loves Farm and the other located directly south (the location of Site 4, Phillips & Macaulay fig. 1). A (now extinct) watercourse feeding the River Great Ouse was located 250m north and another, known as Hen Brook is located 1200m south, which bisects the development area.
- 1.2.2 The excavation area was bounded to its east by agricultural fields, west by a farm track, to the north by Cambridge road and the southern limit was open field extending for c. 600m. Generally, the surrounding landscape and its wide, expansive, views gives the impression of openness and a distinct lack of cover from the elements (Plate 1).
- 1.2.3 The bedrock geology is recorded as Oxford Clay mudstone, overlain by superficial deposits of Oadby member diamicton, a form of boulder clay (BGS: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>; accessed 06/04/18).

1.3 Archaeological background

- 1.3.1 Significant and detailed archaeological and historical backgrounds have been compiled for previous phases of work at Wintringham Park (Oetgen 2006, Phillips 2008). The below is an updated and revised summary, and relevant CHER numbers, cropmarks and previous works can be found on Fig. 1.

Prehistoric

- 1.3.2 Evidence of ritual and settlement activity ranging in date from the Mesolithic to the Iron Age have been identified within the locality, much of which was found on the alluvial flood plain of the Ouse Valley. Within the previous decade further evidence on the heavier clay uplands of western Cambridgeshire have been coming to light.
- 1.3.3 Excavations prior to construction of the St Neots bypass in 1983-4, approximately 2.5km south-west of Site 4i and close to the River Great Ouse, uncovered Mesolithic and Neolithic flint working sites and a Bronze Age ring-ditch with associated features (CHER10198a). To the north of this, at Eynesbury, further excavations by Wessex archaeology revealed a prehistoric ritual complex including two cursus enclosures, a hengiform ring-ditch, a long barrow and numerous pits with placed deposits (MCB17706, CHER00381)

Iron Age & Roman

- 1.3.4 The local landscape, despite its heavy clay geology, appears to be densely settled during the Mid/Late Iron Age and Roman periods as evidenced by the results of the significant excavations directly north of Wintringham Park at Loves Farm (ECB2482 & 3) as well as the evaluations of Wintringham Park itself (Phillips 2008); a high density of Iron Age and Romano-British settlement remains were discovered at Loves Farm (Fig. 1), whilst the evaluation of Wintringham uncovered evidence for significantly sized Iron Age and Romano-British settlements situated on the higher ground south of Site 4i.
- 1.3.5 The excavations at Eynesbury also revealed evidence for Roman activity (MCB17706), with field boundaries, enclosures and droveys dating to the period. Other Romano-British evidence includes limited evidence of a villa, close to the river where a room with hypocaust was uncovered along with Late Romano-British pottery (CHER00396a; not illustrated). Approximately 0.5km from the excavation, evaluation also found evidence of early Roman enclosures, at Longsands College (MCB17381).
- 1.3.6 Further Roman activity is recorded on the Cambridgeshire HER that is located within the Wintringham Park development area itself. Part of a Roman metalled surface and fragments of pottery were found approximately 1200m south-east of the Site 4i (CHER02388) whilst a further metalled trackway, along with a coin of Claudius and a shallow pit were found during the digging of field ditches within the development area (CHER 00618), also located within development area and within the area of dense Romano-British cropmarks identified during evaluation of the development. Directly west of the, a corner of a rectangular earthwork is recorded (CHER00617) as surviving during the 1960s, measuring "215ft by 390ft". Surface finds from the field survey of it recovered 2nd to 4th century AD pottery and a pewter disc.

Anglo-Saxon to medieval

- 1.3.7 The early and middle Saxon period saw a gradual shift of settlement from the higher claylands to lower areas closer to the river. At Love's Farm to the north there was limited evidence of Early Saxons settling on the site (MCB2483) and at Eynesbury to the south-west seven sunken-featured buildings and associated features were recorded (Ellis 2004; CHER MCB17706)

- 1.3.8 Other Saxon finds and features closer to the river include a number of Anglo-Saxon sunken feature buildings (MCB17762), found during gravel quarrying between 1929 and 1932. Other evidence within the town itself comes from the site of the later priory. Under the south end of the kitchen range a ditch was discovered orientated east to west. A few sherds of black micaceous pottery along with a 7th-century *sceatta* (Saxon coin) were retrieved from an undisturbed section of the ditch (Tebbutt 1966; CHER 00548B). Directly south, a Saxon cemetery containing many inhumations was also found, along the north side of Market Square close to the later St Neots Priory (Tebbutt 1956; CHER 00551).
- 1.3.9 The priory (CHER 00548) was first established in the 10th century and the town received its charter in 1113AD. Manor houses established at Eynesbury and Eaton Socon are mentioned in Domesday Book.

Previous Archaeological Works

- 1.3.10 Between August 2008 and July 2009, OAE were commissioned to carry out a geophysical survey, fieldwalking and evaluation trenching (ECB 3024) across the entire site. These investigations identified scattered evidence of land use during the Early Neolithic (c. 3500 BC) with intense use of the site between the later Iron Age (c. 500 BC-AD43) and the end of the Roman Period in the 5th century AD. No remains of the Bronze Age (c. 2000-800BC) or earlier Iron Age (c. 750-500BC) were noted. Traces of later medieval ridge and furrow systems are present across much of the site and have, along with modern ploughing, resulted in the variable truncation and damage of the earlier deposits across the entire development area.

1.4 Original research aims and objectives

- 1.4.1 A number of research objectives were identified after evaluation that the excavations at Wintringham Park will be aiming to further. These were set out in the Brief for Archaeological Investigation (Thomas 2017) and further aims were also identified and included in the Written Scheme of Investigation (Macaulay & Phillips 2017). All of these aims are not applicable to Site 4i and are instead aims for the Wintringham Park project as a whole. Those that are applicable are produced below and further aims identified after assessment are found in Section 6.
- 1.4.2 The overall aim of the Wintringham Park investigation as a whole is to preserve by record the archaeological evidence contained within the footprint of the development area, prior to damage by development, and investigate the origins, date, development, phasing, spatial organisation, character, function, status, and significance of the remains revealed, and place these in their local, regional and national archaeological context.
- 1.4.3 This excavation takes place within, and will contribute to the goals of Regional Research Frameworks relevant to this area:
- Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3)

- Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8)
- Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24)

1.4.4 The main research priorities identified that are applicable to Site 4i are produced below, by period.

Early Prehistoric

1.4.5 To investigate the presence or absence of prehistoric remains which pre-date the Iron Age. Pre-Iron Age evidence was scarce in the evaluation (one Neolithic pit in the Northern Zone, one possible Neolithic pit in the Central Zone), and at Love's Farm to the north. The larger scale excavations at Wintringham will help determine whether more extensive Neolithic or Bronze Age remains exist.

Iron Age

1.4.6 To investigate the character and morphology of Late Iron Age settlement and associated activity with reference to its origins and development, and with reference to the development of settlement on the clay hinterlands of the River Great Ouse.

1.4.7 To develop an understanding of the economy of the Iron Age settlements, through analysis of recovered artefacts and ecofacts.

1.4.8 The development and nature of the agrarian economy.

1.4.9 To contribute to an understanding of Late Iron Age ceramic sequences in Cambridgeshire.

Romano-British

1.4.10 To investigate the impact of Romanisation on the landscape with reference to the reorganisation of existing patterns of settlement and agriculture.

All Periods

1.4.11 To examine the environmental setting for all periods of settlement and related land use, including evidence for the human interaction with and impact on the local environment.

1.4.12 The investigation should consider how the topography of the site has influenced the pattern of prehistoric and Roman land use.

1.5 Fieldwork methodology

- 1.5.1 This phase of mitigation was carried out in accordance with a Brief produced by Andy Thomas (2017) and supplemented by a Written Scheme of Investigation produced by OAE (Macaulay & Phillips 2017). All work was conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Excavation* (2014a).
- 1.5.2 Machine excavation was undertaken by two 360° type excavators and two back-tip articulated haul trucks using a 2.1m wide bladed ditching bucket. Stripping was supervised by a suitably qualified and experienced archaeologist.
- 1.5.3 Spoil, features and exposed surface was scanned with a metal detector. All metal objects were retained for inspection, other than those which were clearly modern.
- 1.5.4 All archaeological features/deposits were recorded using OAE's pro-forma sheets. Feature locations, section and findspots were recorded by a Leica Smartnet GPS and digital photographs were taken of all relevant features and deposits. A drone survey (Plate 2) was undertaken of the entire excavation area, producing a hi-resolution digital image of the stripped area.
- 1.5.5 All discrete features were half sectioned and interventions were placed across all linear features to ensure their form and function was understood.
- 1.5.6 Environmental samples were taken from contexts deemed to have potential for preserved ecofactual remains, either by waterlogging or charring. A general strategy of ensuring an even quantity of samples were taken from a range of features across the excavation was employed to ensure a high possibility of gaining data that could aid in interpretation for past land use and environmental history.
- 1.5.7 Site conditions were generally overcast, with some periods of rain. Ground conditions were generally good however, with limited standing water after rain. The soils infilling features were found to be extremely indurated, particularly lower down in the larger features, causing recovery of finds with damage (e.g. animal bone and prehistoric pottery) to be quite difficult.

1.6 Project scope

- 1.6.1 This assessment deals with the excavation results from Site 4i only. Results of the evaluation of the area are not included, but will be integrated into any archive report produced. Publication of this area will be undertaken in conjunction with the rest of the areas to be excavated as part of the Wintringham Park project, for which a later publication proposal will be produced; thus, no proposed publication output will be outlined in this document. Similarly, this site will be combined with the results Sites 4 and 4iv (when excavated) to form one large archive report.

2 FACTUAL DATA: STRATIGRAPHY

2.1 Stratigraphic and Structural Data

The Excavation Record

- 2.1.1 All hand written records have been collated and checked for internal consistency, then transcribed onto a Microsoft Access database. Contexts have been initially phased dependent on finds recovered from them and their stratigraphic relationships. Site plans have been produced using AutoCAD and Adobe Illustrator.
- 2.1.2 The following stratigraphic records were created:

Record type	Number
Context Register	10
Context Sheet	392
Section Register	2
Site Objects Register	1
Photograph Register	6
Environmental Register	5

Table 1: Excavation Records Quantification

Range, Variety and Condition

- 2.1.3 Features revealed within the area were boundary ditches, enclosure ditches, ring-ditches, a waterhole, pits, postholes, a trackway and furrows. The majority of features survived well due to their depth, although shallower features such as furrows and one ring-ditch showed evidence for truncation due to modern agriculture, indicating shallower features and the upper tertiary fills of deeper features would have been lost to ploughing. Subsoil cover was variable, with the eastern half of the area having a thinner subsoil layer (0.1m) than the west (0.15m to 0.2m).

2.2 Period 1: Middle Bronze Age (c. 1600 – 1200BC)

- 2.2.1 Three small segments of ditch on a broadly north to south alignment have tentatively been phased to the Middle Bronze Age period, due to their significantly different fills to later features and their stratigraphic relationships. These three segments (**4320**, **4103**, **4239**) extended for 56m through the centre of the excavation area. The northern-most section was truncated by Iron Age boundary ditch **4016**. The fills were much paler and more leached relative to later features on site and are thought to form part of a relict field system in use prior to the Iron Age field system developed along the same rough orientation. The three segments were 0.84m to 1.2m wide and 0.27m to 0.5m deep with U-shaped profiles, infilled with mid greyish brown silty clays with few inclusions apart from small stones.

2.3 Period 2: Middle Iron Age (c. 350 – 100BC)

- 2.3.1 The majority of evidence for Middle Iron Age activity was seen in the form of ditches forming field systems and enclosures, along with three ring-ditches/enclosures for structures.

Field Systems

Boundary 4016

- 2.3.2 A long lived, sinuous, boundary ran through the western half of the area, which had its origins in the Middle Iron Age. The ditch (**4016**) was on a broadly north-north-east to south-south-west alignment, although it had a significant 'kink' within it near the northern end (Fig. 2, Plate 3), where it would appear to be going around something that is not visible in the archaeological record. This ditch had a complex stratigraphic history, with multiple recuts noted along its length. Two of these cuts (**4330** and **4332**) terminated as they reached ring-ditch **4083**, indicating the boundary stopped at this feature during the Middle Iron Age. A total of 249g of Middle Iron Age pottery was recovered from the ditch and its recuts along with 286g of animal bone, 41g of fired clay and 78g of metalworking waste.

Other boundaries

- 2.3.3 A pair of truncated boundary ditch (**4085** & **4091**) were located to the west of the kink in boundary ditch **4016**, and were on a broadly north to south/east to west axis measuring 0.33m to 0.85m wide and 0.1m to 0.24m deep. A total of 129g of Middle Iron Age pottery was recovered from the mid yellowish brown silty clay fill in the terminus of ditch **4085**. These ditches possibly represent part of a shallow field system extending through the area which has not survived truncation from agriculture.

Enclosures and associated features

- 2.3.4 In the eastern half of the excavation were three ditches forming enclosures. The northern-most (**4164**) was curvilinear in plan, entering the excavation are just east of ring-ditch **4058** on a north-west to south-east alignment, before gradually turning to run east-north-east to west-south-west and exiting the excavation near the north-eastern limit of excavation. An 8g sherd of Romano-British pottery, 8g of fired clay and 15g of animal bone was recovered from the ditch's mid greyish brown ditch fills.
- 2.3.5 To the south of this ditch was a pair of ditches forming a large sub-rectangular enclosure with an internal area of 3454sqm (ditches **4024** and **4231**). The eastern and western arms of the enclosure were not ditched, and presumably formed by a feature such as a hedgerow. The northern ditch of the two (**4024**) consisted of three sides of the enclosure; the ditches were variable in size, between 0.6m and 2.1m wide and 0.22m to 0.95m deep, with the eastern side of the enclosure being the shallowest of the three sides. The western arm of the enclosure (**4272**; Fig. 3, S.554) had a large dump of burnt quartzite stone (**4275**), 0.25m thick, and charcoal-rich silty clays (**4276**), 0.25m thick, within its upper half. Finds were limited from the ditches, with 256g of animal bone being recovered from the fills along with a Roman coin (SF200) and fragment of a copper finger ring (SF205) from the uppermost fill. The southern ditch forming this enclosure's southern boundary (**4231**) extended for 38m on a west-north-west to east-south-west alignment, measuring 1.15m to 1.62m wide and 0.42m to 0.64m deep with a near V-cut profile. Against, finds were scarce with only 6g of Middle Iron Age pottery and 42g of animal bone being recovered.
- 2.3.6 This enclosure's northern arm was truncated by a pit (**4014**) and a large watering hole (**4127**: described below). Sub-circular pit **4014** was 1.5m in diameter and 0.65m deep

with a U-shaped profile, backfilled with dark grey silty clays from which 16 fragments of animal bone was recovered.

- 2.3.7 Within the internal confines of the enclosure, located quite centrally, was the remains of a feature interpreted as an oven (**4047**), although it could be another form of craft/industrial feature. This feature was sub-circular in plan, 1m in diameter and 0.3m deep with a wide U-shaped profile, backfilled with charcoal-rich silty clays, and redeposited heat-affected natural clay. A total of 41g of Middle Iron Age pottery and 258g of fired clay was recovered from the feature.

Waterhole 4127

- 2.3.8 Cutting enclosure **4024** at the north-western corner was a large sub-circular waterhole (**4127**, Fig. 3, S.551, Plate 4) measuring 5.8m in diameter and 2.26m deep. The feature had a gently sloping western edge that extended a further 2.4m westward from the main waterhole. A layer of cobbling (4134) was pressed into the natural clays within this gentle slope, providing better access down to the deeper portion of the feature. This deeper part of the feature had moderately sloping sides to begin, before changing to a near vertical edge approximately 1.3m below the machine level, before levelling off sharply to form a flat base.
- 2.3.9 Generally, the fills were alluvial in nature, formed by gradual water lain deposition. The fills ranged in colour from a mid brownish grey to greyish brown silty clay, with occasional lenses of chalk, charcoal or stone inclusions. A large assemblage of pottery was recovered from the lower alluvial fills, with 1,125g of Middle Iron Age pottery being recovered, with 354g of this coming from one fill near the top of the waterhole (4250). The other find assemblages were 3.038kg of animal bone and 74g of fired clay. Unfortunately, environmental samples from the waterhole had poor results, with no surviving charred cereal grains and only a few waterlogged weed seeds such as duckweed along with some ostracods.
- 2.3.10 The uppermost fill of the waterhole was the darkest (4252) and contained a small, mixed assemblage of material: 4g of bone, a post-medieval copper button (SF 201) and 135g of post-medieval ceramic building material, suggesting it is tertiary in nature and may represent the final levelling of the large feature's earthwork during the medieval/post-medieval periods, or the remains of a furrow that truncated the top of the waterhole.

Ring-ditches and associated features

- 2.3.11 A total of three ring-ditches were revealed within the stripped area, all located within the central to western half of the area. Of the three, only one was what would be termed a typical ring-ditch (**4063**), whilst the other two (**4058** and **4083**) had quite unique characteristics.
- 2.3.12 *Ring-ditch 4058*
- 2.3.13 The northern-most of the three features, ring-ditch **4058** was curvilinear in plan, 14m in diameter with an internal area of approximately 150sqm. The ditch itself was of significant, near monumental size (Fig. 3, S.525, Plate 5), measuring 1.8 to 2.65m wide and 0.9m to 1.2m deep with a V-shaped, near palisade-like, profile. The fills were a mid to dark greyish brown silty clay, with dumps of material noted in the north-eastern

terminus which consisted of a dark greyish brown silty clay, which contained the vast majority of pottery and animal bone. In total, 2957g of Middle Iron Age pottery was recovered from the feature, along with 3407g of animal bone and 650g of fired clay.

Ring-ditch 4063

2.3.14 To the south-west of ring-ditch **4058** was the remains of another ring-ditch (**4063**), this time of a more 'usual' size, measuring 10.4m in diameter, with an internal area of approximately 93sqm. This feature was truncated, with the eastern half of the ditch not surviving and the western half masked by a post-medieval furrow. The ditch measured 0.5m to 1.4m wide and 0.2m to 0.48m deep with a U-shaped profile. The mid to dark brownish grey silty clay fill contained 1130g of Middle Iron Age pottery, 16g of fired clay and 534g of animal bone.

2.3.15 Internal features were rare, although two postholes (**4160** and **4225**) were found directly east of the surviving ditch. Other possible associated features were found to the south in the form of two pits backfilled with large burnt stones (**4229** and **4227**). These pits were 0.65m and 0.7m in diameter and 0.14m and 0.27m deep, respectively. The mid brown silty clay fills were packed with large burnt stones, making up c. 80% of the fill.

Ring-ditch 4083

2.3.16 Approximately 30m to the south-west was ring-ditch **4083** which measured 17m in diameter, with an internal area of approximately 276sqm. The ring-ditch was not as sub-circular in plan as the other two, with the eastern arm of the enclosure formed by a relatively straight section of ditch which then turned sharply before terminating: initially its form was suggestive of a stock enclosure, but the quantity of pottery from the ditch (the most from any single feature on the site) would clearly indicate the enclosure was for occupation rather than part of a pastoral regime. The fills were a mid grey to yellowish brown silty clay which contained 3121g of Middle Iron Age pottery, 210g of fired clay and 2338g of animal bone.

2.4 Period 3: Late Iron Age (c. 100BC – AD43)

Continuation of boundaries

2.4.1 No definitive evidence for a Late Iron Age continuation of occupation was revealed within the excavation area, with the three ring-ditches being out of use by the Late Iron Age. The main boundary through the site, however, was recut during this period, truncating over the top of infilled ring-ditch **4083**'s eastern arm and continuing southwards out of the excavation area. No Late Iron Age pottery was recovered from the ditch, although with little Late Iron Age activity within the area, it can be expected that limited material of the period would be recovered, with instead earlier phases of material being reworked into the fills of the later ditch.

2.5 Period 4: Romano-British (c. AD43 – 410AD)

Field Systems

- 2.5.1 Evidence of Romano-British activity was seen in the form of boundary ditches transecting the site, forming parts of a field system, presumably extending off of the road revealed at Loves Farm (Fig. 1).
- 2.5.2 Starting with the southern-most, a pair of parallel ditches were revealed extending for 80m on a north-west to south-east alignment (**4037** & **4039**). These ditches most probably originally continued across the whole area of excavation, but were extremely truncated in the western half and did not survive at the machined level. These ditches were 0.4m and 0.45m wide and 0.17m and 0.13m deep, respectively and their mid greyish brown silty clay fills contained two sherds of abraded Roman pottery.
- 2.5.3 To the east was another pair of ditches (**4000** and **4002**) running perpendicular to the previous ditches. These ditches extended through the southern corner of the area for 30m on a north-north-east to south-south-west alignment and measured 0.65m and 0.56m wide and 0.16m and 0.16m deep, respectively. The mid greyish brown fills contained no finds, but a Roman date would appear most probable due to their form and alignment.
- 2.5.4 Within the north-east corner of the area was a further pair of ditches forming part of a Romano-British field system (**4008** and **4155**). The former was on a north-west to south-east alignment and extended for 32m, measuring 0.45m wide and 0.8m wide with a U-shaped profile and contained no finds. The latter was located 23m to the west, also on a north-west to south-east alignment, before turning to run approximately east to west, extending to the eastern limit of excavation (although part of it was truncated away just past enclosure **4024**). The ditch measured 0.61m to 1.02m wide and 0.19m to 0.41m deep with a U-shaped profile. Again, no finds were recovered from the ditch. Despite this lack of dating the form of the ditches, and their stratigraphic relationships with other features would indicate a Roman date.
- 2.5.5 Between these two ditches was an odd length of ditch, or a sub-rectangular pit (**4012**) measuring 5.8m long, 0.75m wide and 0.33m deep with a U-shaped profile. Little interpretive information could be discerned from the mid greyish brown silty fill, which contained a single sherd of probable Roman pottery and a small assemblage of animal bone (10g).
- 2.5.6 Finally, within the north-west corner of the area was the terminus of a larger ditch (**4110**) on a roughly north-north-east to south-south-west alignment. The ditch measured 3.89m wide and 0.54m deep with a wide, flat bottomed U-profile. The light to mid yellowish brown alluvial fills contained 7g of residual Middle Iron Age pottery 5g of 1st to 4th-century pottery and a 21g sherd of pre-Flavian (pre-69AD) samian pottery identified as part of a Drag. 15/17 platter.

2.6 Period 5: Medieval (AD1066 – 1500)

- 2.6.1 During the medieval period, furrows on a north-north-west to south-south-east alignment along with a parallel hollow-way/trackway were thought to be in-use. The dating of these features is tentative, with only lava quern and a single sherd of

greyware being recovered from the trackway, and the furrows may well be slightly later than the track, due to the clinker noted in the backfill.

- 2.6.2 The earliest medieval feature was seen in the form of an east to west ditch located near the northern limit of excavation, which truncated the Middle Iron Age ring-ditch (4083), but was truncated by the furrows. This ditch (4093) was very truncated, surviving for a depth of between 0.1m and 0.22m. The feature was 0.8m to 1.1m wide and infilled with a mid yellowish brown silty clay that contained no finds. The function of the feature was unclear, and may represent a track-side ditch for a medieval descendant to the Roman road found to the north at Loves Farm.
- 2.6.3 Cutting this ditch was a trackway (4381) on a north-north-west to south-south-east alignment. The preservation was variable, with it surviving better near the northern half of the excavation area, where it was 6m wide. Near the southern limit of excavation, the truncated track way measured only 3m in width before tapering off as it exited the area. The track survived to a maximum depth of 0.17m, the lowest fill (4382) was a layer of metalling formed by small sub-rounded stones, in turn overlain by a mid yellowish brown silty clay (4383). The only finds recovered from this trackway was the small assemblage of lava stone (43g) and a single sherd of greyware pottery that could be Roman or medieval in date.
- 2.6.4 The surviving furrows within the area were on the same alignment as this trackway, although they had been truncated significantly by modern agriculture, with most only surviving in the north-eastern half of the area. The surviving furrows were between 1m and 3m wide and up to 0.07m deep, infilled with mid yellowish brown silty clays that contained regular clinker and chalk inclusions.

3 FACTUAL DATA: ARTEFACTS

3.1 Finds Quantification

3.1.1 All finds were washed, quantified and bagged or boxed. Total quantities of the main finds categories are tabulated below (totals in kg unless otherwise stated).

Pottery	CBM	Fired Clay	Metalwork (quant.)	Metalwork Waste	Animal Bone	Stone (lava)
9.048	0.084	1.316	8	0.078	10.72	0.043

Table 2: Finds Quantification

3.2 Metalwork

3.2.1 A total of five copper-alloy, three iron, one lead and one worked bone object were recovered from the excavation. The majority were of post-medieval date and recovered from the topsoil/subsoil or furrows by metal detector. One was a Roman coin (AD260-296) and was recovered from the uppermost fill of ditch cut **4208** (enclosure ditch **4024**).

3.3 Prehistoric Pottery

3.3.1 A total of 9048g (1964 sherds) of pottery were recovered. The assemblage was of the Middle Iron Age ceramic tradition of handmade, shell or sand fabric, vessels with occasional scoring and fingertip impressions found. No Late Iron Age pottery was recovered, indicating activity within the area had ceased by the 1st century BC.

3.4 Romano-British Pottery

3.4.1 A very small assemblage (10 sherds; 75g) of Romano-British pottery was recovered from the area, principally from the Roman field system ditches identified transecting the area, along with some intrusive sherds in earlier features. The largest fragment was a sherd of a samian pottery from ditch **4110**, identified as being part of a Drag. 15/17 platter.

3.5 Ceramic Building Material

3.5.1 A small assemblage (nine fragments) of Ceramic Building Material was recovered from the excavation, generally from the top of earlier features. Limited diagnostic information was within the assemblage, although the majority appears to be post-medieval in date.

3.6 Fired Clay

3.6.1 A total of 236 fragments of fired clay were recovered during excavation, of which 144 fragments had some structural shape, although none were particularly diagnostic. Some fragments may have originated from large fired clay weights (*i.e.* loom weights), although that is difficult to suggest with confidence.

3.7 Metalworking Waste

- 3.7.1 A single fragment (78g) of metalworking waste (slag) was recovered from ditch **4016**. The fragment is undiagnostic and could range in date from the Iron Age to post-medieval periods.

3.8 Worked Stone

- 3.8.1 A 43g assemblage of lava stone was recovered from the infilling of trackway **4381**, and represents abraded fragments of a querns stone that could date from the Roman period onwards.

4 FACTUAL DATA: ENVIRONMENTAL EVIDENCE

4.1 Environmental Quantification

- 4.1.1 Environmental samples were taken from features across the area, with focus given to features with identified potential for ecofacts (*e.g.* waterlogging or charring evidence), whilst an effort was made to ensure a good spread of samples were taken from a wide selection of features. Some samples from the waterhole have been retained in case pollen analysis is required during analysis work.

Sample Type	Pit	Ditch	Ring-ditch	Waterhole	Posthole	Total
Bulk	9	19	10	5	2	45

Table 3: Environmental Samples Quantification

4.2 Animal bone

- 4.2.1 A relatively small assemblage of 178 identifiable fragments of animal bone were recovered from the excavation and was an assemblage dominated by cattle remains, with small amounts of sheep/goat, pig, horse and dog being recovered. The high percentage of cattle remains is unusual for Iron Age sites in the region as sheep tend to dominate assemblages during this period. The types of fragments present would suggest that this may have been a primary butchery sites as ditches contained a high proportion of cranial and foot elements, perhaps suggesting joints of meat were taken elsewhere.

4.3 Environmental Samples

- 4.3.1 A total of 45 environmental samples were taken from Site 4i. Preservation of charred plant remains was found to be very poor, most probably due to the heavy clay geology. Charred remains, when they were found, were in such poor condition identification was often difficult. A small fragment of hazelnut was recovered from ditch **4041** (ring-ditch **4058**) and a charred berry from ditch **42472** (enclosure **4024**). Some evidence of waterlogging was seen in the deeper deposits (waterhole **4127**) which contained some duckweed seeds and ostracods.

5 STATEMENT OF POTENTIAL

5.1 Stratigraphy

- 5.1.1 Many of the features, such as ring-ditch **4058** and **4083**, survived well, with a good depth to their fills. Many features held limited potential however, due to a lack of placed deposits or dumps of material, with most fills appearing to have been formed through alluvial actions. Some dumps of material were noted within the ring-ditches however, with finds assemblages that will aid in dating the formation of the infilling.
- 5.1.2 There was limited stratigraphic relationships across the site, although the complexity of recuts in Boundary **4016** shows a longevity to the boundary, and further analysis may be able to further the phasing.

5.2 Metalwork

- 5.2.1 The metalwork has very little potential for furthering the sites past landscape use, with most finds being intrusive in the top of earlier features or found unstratified in the topsoil.

5.3 Prehistoric Pottery

- 5.3.1 The assemblage of Middle Iron Age pottery recovered from the excavation holds good potential for furthering understanding of the site narrative and of the local region's Iron Age pottery tradition, with locally produced handmade pots dominating the assemblage, a long-lived form of pottery that had currency from 350 BC through to after the Roman conquest.

5.4 Romano-British Pottery

- 5.4.1 The small assemblage of Romano-British pottery recovered from the area is of very limited archaeological potential, due to its small and abraded nature.

5.5 Ceramic Building Material

- 5.5.1 The Ceramic Building Material is of limited archaeological potential, being recovered from furrows or as an intrusive object in earlier features.

5.6 Fired Clay

- 5.6.1 The Fired Clay assemblage is of little potential, due to few diagnostic pieces being within the assemblage.

5.7 Metalworking Waste

- 5.7.1 The single fragment of slag recovered from ditch **4016** is of little archaeological potential, due to its longevity in the record and likelihood of intrusiveness.

5.8 Worked Stone

- 5.8.1 The worked stone has very limited potential, apart from aiding in dating the trackway feature it come from.

5.9 Animal Bone

- 5.9.1 The faunal remains have some potential for aiding in the past land use narrative, and the proportion of cattle versus sheep (with cattle dominated the assemblage) is something that is unusual for the period.

5.10 Environmental

- 5.10.1 Environmental remains were extremely poorly preserved, with few charred plant remains surviving, most probably due to the poor preservation quality of the heavy clay geology. Due to the assemblage being so fragmentary and abraded, it has little to no archaeological potential.

5.11 Overall potential

- 5.11.1 Generally, the stratigraphic and artefactual evidence from Site 4i has limited potential when looked at individually, although it is probable that when it is combined with later phases of mitigation from Wintringham Park, the cattle and pottery assemblage will form a substantial part of the evidence from the project.

6 UPDATED PROJECT DESIGN

6.1 Revised research aims

6.1.1 Following the excavation of Site 4i, the original research aims are still identified as being pertinent to the project. A small number of site specific research aims were also further identified and stated below:

- Can a function be derived for the three ring-ditches within the area, particularly ring-ditch **4058**, which consisted of a near monumental in size ditch.
- The 'kink' within boundary **4016** is intriguing – what other comparable boundaries can be found and can a reason for the kink be identified?
- Can any documentary sources be identified for the medieval trackway leading through the site – is it on any historic maps?
- Can comparison between pottery assemblages elucidate whether the settlement activity found within the area is associated with the Loves Farm settlement, or the Wintringham Park Site 4 settlement?

6.2 Interfaces

6.2.1 Analysis work for the site will be undertaken principally by the author and Tom Phillips. Liz Popescu will oversee post-excavation and publication works for the duration of the project. Email communication will be used to keep interested parties (the Client and CCC HET) informed on progress of the further work.

6.3 Methods statement

Stratigraphic

6.3.1 Context, finds and environmental data has been transcribed into an MS Access database to allow for analysis of the data. Any further specialist information from analysis will be integrated to aid interpretation and the completing of a more detailed phasing of the site.

Illustration

6.3.2 Archive and publication figures will be created using AutoCAD, QGIS and Adobe Illustrator. Finds recommended for illustration will be hand drawn or photographed as appropriate.

Documentary Research

6.3.3 Relevant documentary research will be undertaken where appropriate. Previous phases of work for this project and Loves Farm will be referred to and reassessed for relevant information. Relevant comparable sites (both local and national) from published and grey literature sources will be consulted.

Metalwork

6.3.4 No further work is required. The Assessment report can be used for archive.

Prehistoric Pottery

6.3.5 Further fabric analysis is required to identify the material and compare it to the Loves Farm and other local assemblages, sherds will also be selected for illustration. This will enable an archive report, placing the assemblage within its regional context, to be written. This work should be undertaken once the further mitigation phases are completed so the Iron Age pottery assemblage can be analysed as a whole.

Romano-British Pottery

6.3.6 No further work is required. The Assessment report can be used for archive.

Ceramic Building Material

6.3.7 No further work is required. The Assessment report can be used for archive.

Fired Clay

6.3.8 No further work is required. The Assessment report can be used for archive.

Worked Stone

6.3.9 No further work is required. The Assessment report can be used for archive.

Faunal Remains

6.3.10 Recording of the assemblage should be completed (measurements of all bones) and an archive suitable report be produced placing the assemblage within its local and regional context.

Environmental Samples

6.3.11 No further work is required. The Assessment report can be used for archive.

6.4 Publication and dissemination of results

6.4.1 An archive report will be produced for Site 4i, forming part of a larger report that details the results of associated sites from future phases of Wintringham Park (*i.e.* Sites 4 and 4iv, Fig. 1).

6.4.2 The Wintringham Park excavations will be published as a whole once all mitigation works are completed. A separate document detailing the proposed publication and required further publication work will be produced once mitigation is complete.

6.5 Retention and disposal of finds and environmental evidence

6.5.1 All finds will be kept until all mitigation works are completed, enabling the Wintringham Park assemblages to be analysed as a whole. Retention of finds will be commented on in the separate document detailing publication work.

6.6 Ownership and archive

6.6.1 All artefactual material recovered will be held in storage by OA East and ownership of all such archaeological finds will be given over to the relevant authority to facilitate future study and ensure proper preservation of all objects. Separate ownership arrangements may be negotiated, although it is OA Ltd's policy, in line with accepted practice, to keep site archives (paper and artefactual) together wherever possible. A Transfer of Ownership form will be compiled by the project manager to be completed prior to deposition.

7 RESOURCES AND PROGRAMMING

7.1 Project team structure

7.1.1 The project team is set out in the table below:

Name	Organisation	Role
Tom Phillips (TP)	OAE	Senior Project Manager
Pat Moan (PM)	OAE	Project Officer
Liz Popescu (LP)	OAE	PX Project Manager
Charlotte Walton (CW)	OAE	Illustrator
Hayley Foster (HF)	OAE	Faunal Remains Specialist
Matt Brudenell (MB)	OAE	Prehistoric Pottery Specialist
Kat Hamilton (KH)	OAE	Archives Supervisor

7.2 Task list and programme

7.2.1 A task list for stratigraphic and artefact analysis is presented below. Tasks associated with the archive report and publication production will be produced once the further mitigation works for Sites 4 and 4iv are concluded.

Task no.	Description	Performed by	Days
1	Project management	TP	2
2	Team meetings	PM/TP/LP	1
3	Contact with relevant staff and specialists, distribution of relevant information and materials	PM	1
4	Integrate further artefact data to database	PM	0.5
5	Analyse stratigraphic data and update any phasing	PM	2
6	Update database to reflect changes	PM	1
7	Produce stratigraphic narrative for Site 4i	PM	4
8	Prepare archive figures for Site 4i	CW	2
9	Illustration/photography of finds	CW	2
10	Documentary research	PM/TP	2
11	Analysis of Iron Age pottery	PM/MB	3
12	Recording of faunal remains	HF	2
13	Production of finds archive reports	PM/HF	3
14	Selection of Iron Age pottery for illustration	PM	0.5
15	Compile paper archive for Site 4i	KH	1
16	Archive digital photographs	KH	1
17	Compile paper & artefact archive	KH	1.5
18	Transferral of Ownership	TP	0.5

APPENDIX A ARTEFACT ASSESSMENTS

A.1 Small Finds

By Denis Sami

Factual Data

- A.1.1 The metal assemblage consists of five copper-alloy artefacts, three iron finds and one lead object. The finds assemblage also includes a fragment of worked bone. They can be divided into dressing accessories (button SF 201; buckle SF 202; finger ring SF 205), economy and commerce (coin SF 200; weight SF 204) and building activity (nail SF 207), horseshoeing (nails SF 206) and crafting (worked bone SF 208). Artefacts were recovered from topsoil, furrows and the top fill of an Iron Age ditch.
- A.1.2 The assemblage is poorly preserved, iron artefacts are heavily rusted and encrusted, while copper-alloy and lead objects present oxidation. Roman coin SF200 is badly corroded, nonetheless it is possible to broadly identify the period of emission dating to the second half of the 3rd century AD.
- A.1.3 The remaining metalwork artefacts are all of post-medieval date. Finger ring SF205 is made from a plain strip of copper-alloy narrowing at the extremes, while SF 203 is an unidentified object originally most likely nailed to a wood surface. Finally, two horseshoe nails (SF 206) and the long nail (SF 207) were also recovered, that are thought to be of the post-medieval period, although nail forms of long lived and could be earlier.

Methods Statement

- A.1.4 The PAS data base has been used as main reference for finger ring SF 205 (ESS-CF6E30), and weight SF 204 (SUR-CE67A9). Manning (1989) has been used as reference for the iron work.
- A.1.5 The below catalogue is organised by SF number. Measurements such as length (L), width (W), thickness (Th), diameter (Diam.), height (H) and weight (Wt) together with the description of the objects, the context and feature of provenience, as well as a suggested chronology are provided in the catalogue.

SF	Context	Feature	Desc	Description	Date
200	4210	4024	Fill of ditch	An incomplete somewhat worn, radiate, Reece periods 13-14. O: Bust, diad. dr. R: Illegible Diam.: 17.1 mm Tk: 1.4 mm Wt: 1.6 g	AD 260-296
201	4252	4127	Upper fill of Waterhole (may be furrow?)	Incomplete button. Circular in shape with domed front and convex rear. It is not decorated and the loop is missing. Diam: 17.1; H: 6 mm; Wt: 2.3 g	Post-medieval

SF	Context	Feature	Desc	Description	Date
202	99999		Topsoil	Incomplete rectangular slightly D shaped in cross-section buckle. Part of the iron pin is still attached to the central pin-bar. On the flat side the frame is decorated with intervals of horizontal and vertical lines. L: 25.7 mm; W: 33.5 mm; Tk: 2.7 mm; Wt: 7.6 g	Post-medieval
203	99999		Topsoil	Incomplete slightly square thin foil with central oval hole (4 x 2.5 mm). L: 20.4 mm; W: 19.7 mm; Tk: 0.7; Wt: 1.5	Post-medieval
205	4383	4381	Fill of ditch	A complete, but misshapen undecorated finger ring made with a narrowing band of metal. W: 21.6 mm; H: 7.8 mm; Tk: 0.8 mm; Wt: 1.9 g	Post-medieval

Table 4: Copper-alloy objects

SF	Context	Feature	Desc	Description	Date
206	4065	4063	Fill of ditch terminus	Two incomplete horseshoe nails	Post-medieval
207	4222	4058	Fill of ditch	Complete nail with straight tapering stem with square cross-section. L: 94 mm; W: 10 mm	Post-medieval

Table 5: Iron artefacts catalogue.

SF	Context	Feature	Desc	Description	Date
204	4383	4381	Fill of trackway	Complete sub-circular weight with D shape cross-section. There is a sub-square hole (5x6 mm) passing through the weight. Diam: 27 mm; H: 11 mm; Wt: 43.8 g	Med?

Table 6: Lead catalogue.

SF	Context	Feature	Desc	Description	Date
208	4081	4058	Fill of ditch terminus	Incomplete terminal part of animal bone showing heavy wear on all sides. L: 53 mm; W: 18 mm	

Table 7: Worked bone catalogue

Statement of Potential

A.1.6 The assemblage has a limited archaeological potential. The finds were generally unstratified (from topsoil) or from furrows/the very top of features, not allowing for further interpretive value.

A.2 Iron Age Pottery

By Pat Moan

Introduction & Methodology

- A.2.1 A total of 1964 sherds (9048g) of Iron Age pottery was recovered from the excavation of Site 4i at Wintringham Park. The assemblage has a low mean sherd weight (MSW) of 4.61g and was recovered from 83 contexts relating to 60 interventions excavated through ring-ditches, boundary and enclosure ditches, pits, postholes and a waterhole. The assemblage was identified as belonging to the Middle Iron Age ceramic tradition of hand-made vessels with weak shoulders and often with externally scored surfaces, dating to *c.* 350/300BC to 100BC.
- A.2.2 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2011). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group. Sherd type was recorded, along with technology (wheel-made or handmade), evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue, and were assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds retained portions of the rim and shoulder, the vessel was also categorised by form. The Middle Iron Age-type forms were codified using the series developed by JD Hill (Hill and Horne 2003, 174; Hill and Braddock 2006, 155-156).

Assessment

- A.2.3 The assemblage comprises 1964 sherds of pottery in the Middle Iron Age ceramic tradition, with a very low MSW of 4.61g; an indication of pre-depositional history. The fabric series is comparable to many other assemblage of the period (*e.g.* Loves Farm, Percival forthcoming), with (fossil) shell predominating the fabric groups (47.81%), followed by sand fabrics (30.8%), with the remaining being a mix of chalk or organic matter within a sandy clay matrix, often with smaller amounts of shell (21.39%); all fabrics indicate a locally produced pottery made from nearby sources of clay (Table 8).

Fabric Group	Sherds	Wt. (g)	% by weight
chalk & sand	331	1393	15.40
chalk & veg	68	290	3.21
grog	15	34	0.38
sand	564	2623	28.99
sand and veg	58	164	1.81
shell	745	3958	43.74
shell with clay pellets	77	368	4.07
organic	106	218	2.41
Total	1964	9048	100

Table 8: Pottery assemblage by fabric

- A.2.4 Sources for this clay can be found throughout the landscape; sandy fabrics most probably derive from alluvial clays, found just west at the River Ouse, whilst chalky and shelly fabrics were most probably obtained from the Oxford clays and glacial tills.
- A.2.5 Decoration of vessels was relatively rare, with 54 sherds in total being recorded. Out of these, 16 of sandy fabrics were scored, whilst 32 sherds of shell fabric were, along with 4 sherds with fingertip impressions and a further two with light cabling. Scoring was found on the external body of the vessels and fingertip impressions and cabling were confined to rim-tops (Table 9). Scoring is a style of decoration found throughout south-west Cambridgeshire, west of the Ouse, and is related to the East Midlands Scored Ware (Elsdon 1991). The quantity of scored pottery is comparable to that amount found during the evaluation of Wintringham Park (7%, Percival 2008), the Loves Farm excavation (6.4%, Percival, forthcoming) and Little Paxton (10%, Hancocks 2003, fig. 7.9).
- A.2.6 The minimum number of vessels (MNV) is low, with only 63 rim or base-sherds being found within the assemblage. Whilst low, this ratio is one often repeated across sites of the period in the region (*e.g.* Love Farm, Percival forthcoming and Barleycroft Farm, Brudenell 2016). Vessel forms were difficult to identify due to the low sherd size and limited amount of the assemblage which could be refit. Those that were identified conform in style to the weak shouldered and upright neck jars that often form large parts of Middle Iron Age assemblages (Table 10).

Fabric Group	Decoration	No.	Wt. (g)	% of total by wt.
sand	Scored	15	210	2.32
sand and veg	Scored	1	8	0.09
shell	Fingertip impressions	4	56	0.62
	light cabling	2	14	0.15
	Scored	32	392	4.33
Total		54	680	7.52

Table 9: Decoration by fabric group

Context	Feature	Form	Rim %	Rim type	Rim dia	Class	No refits	No	Wt (g)
4033	4058	Hill E	14	FRE	22	Jar	7	7	130
4045	4058	Hill A	32	FD	12	Jar	2	4	107
4073	4063	Hill A	7	LEI			2	2	21
4311	4083	Hill B	16	FRE	8	Jar		1	58
Total								14	316

Table 10: Forms identified within assemblage (after Hill & Braddock 2006)

- A.2.7 Quantification and distribution of the assemblage indicates clear occupation within the area, expectedly concentrated around the three ring-ditches within the central part of the area (features **4058**, **4063** and **4083**, Table 11). After these three features, the next largest assemblage was recovered from the waterhole (**4127**). Very little material was recovered from the enclosure or boundary ditches within the excavation area. This distribution pattern is typical for the period, with pottery being deposited in midden-like spreads near to occupation, the results of which ended in material infilling into nearby features. No placed deposits were found within any of the features, and

the low mean shard weight would suggest a long pre-depositional history, ending in smaller, abraded sherds of pottery being deposited within the features.

Feature number	Feature Type	No.	Wt. (g)	% by wt
4083	Ring-ditch	596	3121	34.49
4058	Ring-ditch	610	2957	32.68
4063	Ring-ditch	304	1130	12.49
4127	Waterhole	205	1087	12.01
N/A	Discrete features	188	476	5.26
4016	Boundary Ditch	54	254	2.81
4164	Enclosure Ditch	1	11	0.12
4110	Ditch	1	6	0.07
4231	Enclosure Ditch	5	6	0.07
Total		1964	9048	100

Table 11: Pottery by feature

A.2.8 In summary, the assemblage shows characteristics typical of the Middle Iron Age ceramic tradition, with locally produced pots (made from locally sourced clays), dominated by fossil shell temper, and scoring of the outside of some vessels. The lack of later styles of vessel suggests the activity within the area is constricted to the Middle Iron Age, despite this style of Middle Iron Age hand-made pottery having currency into the Late Iron Age period.

Statement of Potential

A.2.9 In isolation, this relatively small assemblage of quite abraded Middle Iron Age pottery has limited potential outside of phasing the site's archaeological narrative. However, the further mitigation work that is to take place within Wintringham Park will clearly add to this Iron Age pottery assemblage. Once this further work is undertaken, these large assemblages, when looked at in conjunction (along with the results from Loves Farm: Percival, forthcoming) will have significant potential to aid in contributing to an understanding of the Iron Age ceramic sequence, an aim highlighted in the project's current research objectives.

Recommendations for Further Work

A.2.10 Further analysis of fabrics should be undertaken to form a fabric sequence by fabric type as well as group. Comparison to local sites, such as Loves Farm and Little Paxton Quarry should be undertaken and an archive suitable report should be written, placing the assemblage within its local and regional context. A catalogue of sherds requiring illustration should also be compiled.

A.2.11 This further work should be completed once the assemblage has been included with any Iron Age pottery assemblages recovered from other phases of mitigation, particularly the excavation of Site 4 to the south, where evaluation indicated the presence of a significant Iron Age settlement.

A.2.12 Due to the assemblage's relative importance regarding further analysis once all mitigation work has taken place, none of the material should be discarded until full

analysis of all Iron Age pottery from further phases of the Wintringham Park project is undertaken.

Catalogue of Pottery by Context

Context	Cut	Feature Number	Feature Type	Sherds (no)	Wt (g)	MSW
4005	4004	0	pit	13	28	2.15
4018	4016	4016	ditch	1	3	3.00
4019	4016	4016	ditch	2	10	5.00
4032	4031	4058	ditch	38	151	3.97
4033	4031	4058	ditch	13	163	12.54
4034	4031	4058	ditch	11	73	6.64
4036	4035	0	pit	11	38	3.45
4042	4041	4058	ditch	1	1	1.00
4044	4041	4058	ditch	5	35	7.00
4045	4041	4058	ditch	178	1068	6.00
4046	4041	4058	ditch	17	101	5.94
4049	4047	0	pit	11	25	2.27
4061	4058	4058	ditch	2	1	0.50
4065	4063	4063	ditch terminus	16	70	4.38
4070	4068	4063	ditch	61	309	5.07
4073	4071	4063	ditch recut	72	165	2.29
4075	4074	0	ditch	16	25	1.56
4077	4076	4063	ditch	8	21	2.63
4079	4078	4058	ditch terminus	2	3	1.50
4081	4078	4058	ditch terminus	2	9	4.50
4082	4078	4058	ditch terminus	106	363	3.42
4084	4083	4083	ditch	17	57	3.35
4098	4097	4058	ditch	2	12	6.00
4102	4101	4063	ditch	10	23	2.30
4112	4110	4110	ditch	1	6	6.00
4116	4115	4058	ditch	67	214	3.19
4118	4115	4058	ditch	24	55	2.29
4120	4119	4063	ditch	13	73	5.62
4122	4121	4083	ditch	6	16	2.67
4124	4123	4063	ditch	31	60	1.94
4131	4127	4127	watering hole	1	19	19.00
4132	4127	4127	watering hole	37	112	3.03
4133	4127	4127	watering hole	77	445	5.78
4136	4135	4083	ditch	3	138	46.00
4137	4135	4083	ditch	14	114	8.14
4142	4140	0	pit	4	22	5.50
4144	4143	0	pit	8	10	1.25
4148	4147	4058	ditch terminus	3	18	6.00
4149	4147	4058	ditch terminus	11	63	5.73
4159	4157	0	pit	8	7	0.88
4165	4164	4164	ditch	1	11	11.00
4193	4191	4063	ring-ditch	56	270	4.82
4195	4194	4063	ring-ditch	27	116	4.30
4197	4196	4063	ditch terminus	4	14	3.50
4199	4198	4063	ditch terminus	6	9	1.50
4221	4217	4058	ditch	8	52	6.50

Context	Cut	Feature Number	Feature Type	Sherds (no)	Wt (g)	MSW
4222	4217	4058	ditch	13	28	2.15
4226	4225	0	post hole	2	1	0.50
4236	4234	4231	ditch	5	6	1.20
4245	4243	4127	watering hole	8	40	5.00
4248	4243	4127	watering hole	2	25	12.50
4250	4243	4127	watering hole	80	446	5.58
4259	4257	4083	ditch	8	17	2.13
4264	4261	0	pit	46	123	2.67
4267	4265	4016	ditch	1	3	3.00
4270	4268	4016	ditch	1	12	12.00
4279	4277	0	ditch	4	7	1.75
4283	4282	0	ditch	2	3	1.50
4284	4282	0	ditch	4	2	0.50
4286	4285	0	bioturbation	7	39	5.57
4287	4285	0	bioturbation	34	101	2.97
4292	4290	4016	ditch	5	17	3.40
4294	4293	0	pit	12	31	2.58
4304	4302	4083	ditch	16	58	3.63
4309	4308	4083	ditch	105	492	4.69
4310	4308	4083	ditch	261	1235	4.73
4311	4308	4083	ditch	11	119	10.82
4315	4314	4016	ditch	6	10	1.67
4317	4316	0	ditch	3	10	3.33
4323	4322	4016	ditch	9	50	5.56
4324	4322	4016	ditch	4	36	9.00
4326	4325	4016	ditch	4	14	3.50
4327	4325	4016	ditch	15	37	2.47
4335	4334	4016	ditch	6	62	10.33
4337	4336	0	pit	3	4	1.33
4343	4341	4083	ditch	3	17	5.67
4348	4346	4058	ring-ditch	19	293	15.42
4350	4349	4058	ring-ditch	76	163	2.14
4354	4352	4058	ring-ditch	4	8	2.00
4359	4358	4058	ring-ditch	7	42	6.00
4366	4364	4058	ring-ditch	1	41	41.00
4373	4371	4083	ditch	10	73	7.30
4390	4308	4083	ditch	142	785	5.53
Total				1964	9048	4.61

A.3 Romano-British Pottery

By Pat Moan

Introduction and Methodology

- A.3.1 A total of nine sherds (71g) of abraded Romano-British pottery along with a single sherd (4g) of not closely dateable pottery (either Roman or medieval) was recovered from the excavation of Site 4i.
- A.3.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gramme. The data was inputted into an excel spreadsheet and the results are shown in Table 12.

Results

- A.3.3 As can be seen from the quantification data, the assemblage is small, abraded and most was intrusive in Iron Age features, possibly being deposited due to the practice of manuring that would have taken place on the heavy clay soils during the Roman period. The most distinguishable sherd was that of a samian platter, identified as part of a Drag. 15/17 platter dating to the early 1st century AD (Stephen Wadeson, pers. comm.). The remaining sherds are all sandy hard fired greywares. The high mica content of the small sherd from trackway 4381 may suggest a medieval date.

Context	Cut	Feature	Type	Sherds	Wt. (g)	Spot date	Notes
4038	4037	4037	ditch	1	4	1-4C	
4040	4039	4039	ditch	1	1	1-4C	
4049	4047		pit	2	15	1-4C	
4053	4052	4012	pit	1	4	2-4C?	
4111	4110	4110	ditch	1	21	1st C	samian Drag. 15/17 platter, pre-Flavian
4112	4110	4110	ditch	1	4	1-4C	
4180	4178	4164	ditch	1	8	1-4C	
4222	4217	4058	ditch	1	12	1-4C	
4224	4223		pit	1	2	1-4C	
4383	4381	4381	trackway	1	4	NCD	med?
Total				11	75		

Table 12: Romano-British pottery quantification

Statement of Potential

- A.3.4 The assemblage is abraded and fragmentary and provides little to no archaeological information. The assemblage should be looked at in conjunction with any other Roman pottery recovered from the Wintringham Park evaluation, although it is expected this assemblage will add little to quality of overall data. No further work is required.

A.4 Ceramic Building Material

By Ted Levermore

Methodology

7.2.1 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Fabrics were examined using a x20 hand lens and were described by main inclusions present. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. Table 13 summarises the assemblage.

Assessment

A.4.1 A total of nine fragments (83g) of Ceramic Building Material (CBM) were recovered from Site 4i. The material was collected from features in the Middle Iron Age phase. All the fragments were heavily abraded and, in many cases, totally undiagnostic which suggests that this CBM was intrusive to these features. No firm dates could be applied to this material, but it is likely that most of it is post-medieval. A fragment of probable Roman tile was collected from an upper fill of watering hole **4243 (4127)**. There are no conclusions that can be drawn from this material as it represents little more than intrusive background noise within the agricultural landscape.

Context	Cut	Feature	Phase	Form	Descr.	Date	Count	Weight (g)
4133	4127	Watering Hole	MIA	Tile	?Peg	?Pmed	1	5
4149	4147	Ditch	MIA	Tile?	Frag	-	1	6
4149	4147	Ditch	MIA	undiag	undiag	-	1	3
4205	4204	Ditch	MIA	Tile	Frag	-	2	15
4252	4243	Waterhole/furrow	MIA	Tile	Frag	?Pmed	1	12
4252	4243	Waterhole/furrow	MIA			?Roman	1	18
4252	4243	Waterhole/furrow	MIA	Tile?	Frag	?Pmed	1	16
4252	4243	Waterhole/furrow	MIA	undiag	undiag	-	1	8
Grand Total							9	83

Table 13: Ceramic Building Material catalogue

Statement of Potential

A.4.2 The assemblage is abraded and fragmentary and provides little to no archaeological information. No further analysis is required.

A.5 Fired Clay

By Ted Levermore

Introduction and Methodology

- A.5.1 The Site 4i excavation produced a small assemblage of fired clay (236 fragments, 1585g). It was recovered from Middle Iron Age features. No diagnostic objects were recovered but there were many fragments that exhibited flattened surfaces (148, 1187g). The rest of the assemblage was made up of amorphous pieces (88, 398g). The assemblage is largely uninformative due to the lack of recognisable forms. This material can only be used to point to domestic or light industrial activity at or near this site. This report will characterise the assemblage.
- A.5.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Fabrics were examined using a x20 hand lens and were described by main inclusions present. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive. A summary of the catalogue can be found in Table 14.

Phase	Fragment type	Count	Weight (g)
MIA	Amorphous	71	320
	Structural	137	1135
	Total	208	1455
LIA	Amorphous	5	16
	Structural	4	24
	Total	9	40
"0"	Amorphous	12	62
	Structural	7	28
	Total	19	90
Grand Total		236	1585

Table 14: Fired Clay Fragment type by period

Assessment

Fabrics

- A.5.3 The assemblage was made up of six fabrics which are grouped broadly in two; silty or fine sandy clays with various inclusions. For the silt clays, there were varying densities of quartz, calcareous pellets and/or flint and the sandy clays had either few to no inclusions or quartz, grit and stone inclusions to varying densities. The lack of sorting or obviously added temper suggests these clays were from local sources and saw little to no paste preparation. With the lack of objects in this assemblage, it is unclear whether the clays were chosen for specific purposes. The assemblage is too small and abraded to identify any patterns in distribution either across the site or between phases.

Assemblage

- A.5.4 The structural portion of the assemblage comprised fragments with flattened or smoothed surfaces, evidence of hand-forming (i.e. rounded corners, finger

impressions) and a single fragment with a rod impression. There were no diagnostic objects although some fragments were considerably larger than others and suggest that may have come from weights or clay structures. The amorphous portion of this assemblage was widespread and found amongst the structural fragments. They did not differ in fabric and should be considered as part of the same material as above.

A.5.5 Most of the assemblage was collected from Middle Iron Age features (Table 15; 208/1455g). A total of 19 pieces (90g) were collected from currently unphased features. There are no dateable objects amongst this assemblage but the similarities in fabrics mean that it may be possible to loosely associate the unphased features with the Iron Age. The low volume of material for the Late Iron Age phase could represent move away from this site, in terms of domestic or light industrial activity, after the Middle Iron Age. The whole assemblage was very abraded therefore there is little use in discussing individual fragments or features.

Statement of Potential

A.5.6 This assemblage is uninformative without any diagnostic objects. This assemblage has little to no archaeological potential aside from indicating domestic or light industrial activity took place near the site.

A.5.7 The assemblage has been fully assessed and described. No further work is required.

Context	Cut	Feature	Phase	Frag type	Structural type	Abrasion	Count	Weight (g)
4032	4031	Ditch	MIA	a	-	severe	3	12
4042	4041	Enclosure	MIA	a	-	severe	3	11
4045	4041	Ditch	MIA	a	-	moderate	2	9
4045	4041	Ditch	MIA	s	fs	moderate	6	16
4046	4041	Ditch	MIA	s	hf/fs	moderate	22	122
4048	4047	Pit	MIA	a	-	severe	11	78
4049	4047	Pit	MIA	a	-	moderate	2	7
4049	4047	Pit	MIA	s	hf/fs	severe	27	174
4065	4063	Ditch	MIA	s	fs	moderate	2	7
4081	4078	Ditch	MIA	s	fs	severe	3	4
4082	4078	Ditch	MIA	s	fs	moderate	8	34
4099	4097	Ditch	MIA	a	-	severe	1	4
4099	4097	Ditch	MIA	s	hf	severe	13	316
4130	4127	Watering Hole	MIA	s	hf/fs	slight	6	159
4132	4127	Watering Hole	MIA	a	-	severe	1	4
4133	4127	Watering Hole	MIA	a	-	moderate	3	14
4137	4135	Ditch	MIA	a	-	moderate	1	7
4142	4140	Pit	0	a	-	severe	3	36
4144	4143	Pit	0	s	fs	moderate	3	12
4148	4147	Ditch	MIA	a	-	severe	11	27
4149	4147	Ditch	MIA	a	-	moderate	1	7

Context	Cut	Feature	Phase	Frag type	Structural type	Abrasion	Count	Weight (g)
4149	4147	Ditch	MIA	s	fs	severe	6	18
4159	4157	Pit	0	a	-	severe	2	3
4182	4181	Ditch	MIA	a	-	severe	5	8
4193	4191	Ring-ditch	MIA	a	-	severe	2	5
4205	4204	Ditch	MIA	s	fs	moderate	1	4
4220	4217	Ditch	MIA	a	-	moderate	8	30
4221	4217	Ditch	MIA	s	fs	moderate	6	28
4226	4225	Post Hole	0	a	-	severe	4	15
4250	4243	Watering Hole	MIA	a	-	severe	5	55
4252	4243	Watering Hole	MIA	s	hf	slight	1	80
4271	4268	Ditch	LIA	a	-	severe	2	8
4284	4282	Ditch	0	s	fs	severe	2	8
4287	4285	Bioturbation	0	s	fs	moderate	2	8
4292	4290	Ditch	LIA	a	-	severe	1	3
4300	4299	Post Hole	0	a	-	severe	3	8
4309	4308	Ditch	MIA	a	-	moderate	3	9
4309	4308	Ditch	MIA	a		severe	2	14
4309	4308	Ditch	MIA		w	slight	2	10
4310	4308	Ditch	MIA	s	fs	slight	17	70
4310	4308	Ditch	MIA		hf/fs	moderate	14	65
4311	4308	Ditch	MIA	s	hf/fs	moderate	1	20
4326	4325	Ditch	LIA	a	-	severe	2	5
4327	4325	Ditch	LIA	s	fs	severe	4	24
4359	4358	Ring-ditch	MIA	a	-	moderate	5	12
4373	4371	Ditch	MIA	a	-	severe	1	2
4390	4308	Ditch	MIA	a	-	moderate	1	5
4390	4308	Ditch	MIA	s	fs	moderate	2	8
Grand Total							236	1585

Table 15: Summary fired clay catalogue (a=amorphous, s=structural, fs=flattened surfaces, hf=hand-formed, w=wattle/rod impression)

A.6 Metalworking Waste

- A.6.1 A total of 78g of metalworking waste (1 fragment of slag) was recovered from the top of Middle to Late Iron Age boundary ditch **4016**. The slag is undiagnostic and undateable; it could be of any date ranging from the Iron Age through to post-medieval period.
- A.6.2 The assemblage has limited archaeological potential. No further work is required.

A.7 Worked Stone

- A.7.1 A total of 43g of heavily abraded lava stone was recovered from the infilling of trackway **4381**. The assemblage represents fragments of a quern stone, although no other information can be derived from it.
- A.7.2 The assemblage has very limited archaeological potential. No further work is required.

APPENDIX B ENVIRONMENTAL ASSESSMENTS

B.1 Faunal Remains

By Hayley Foster

Introduction and Methodology

- B.1.1 This animal bone assessment details the analysis of the animal bone recovered from Wintringham Park, St Neots. The material dates to the Iron Age with material coming from features dating to the Middle Iron Age phases. The assemblage was small in size and material recovered from hand-collection and from environmental samples. The number of recordable fragments totalled 178 and the species represented include cattle (*Bos taurus*), sheep (*Ovis aries*), sheep/goat (*Ovis/Capra*), pig (*Sus scrofa*), horse (*Equus sp.*) and dog (*Canis familiaris*). The weight of the faunal assemblage totalled 11kg and the weight of the identified faunal remains totalled 5.7kg. Remains derived mainly from ditches, ring-ditches and watering holes.
- B.1.2 The method used to quantify this assemblage is based on that used for Knowth by McCormick and Murray (2007) which was modified from Albarella and Davis (1996).
- B.1.3 Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) and Cohen & Serjeantson (1996) were used where needed for identification purposes.

Assessment

- B.1.4 The faunal remains from Wintringham mainly came from the Middle Iron Age phase, with 166 fragments deriving from this phase. Five fragments belonged to the Late Iron Age phase and 7 fragments were from unphased contexts. Cattle overwhelmingly dominated the assemblage, with 102 fragments from the Middle Iron Age assemblage, followed by horse remains being the second most common species. Environmental samples only consist of cattle teeth and sheep/goat remains.

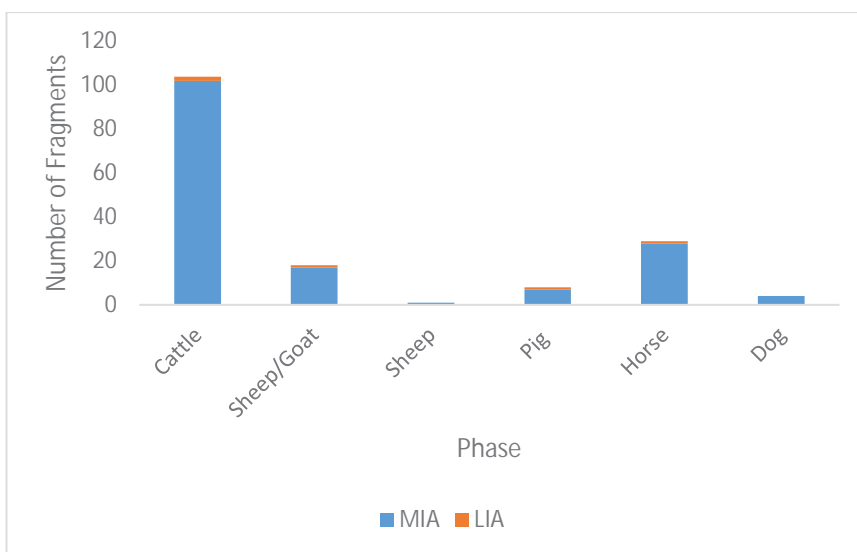


Chart 1: Number of identifiable faunal fragments from Wintringham

- B.1.5 The assemblage was in moderate condition with a small amount of material exhibiting signs of erosion and/or weathering. Fragmentation overall was relatively high.
- B.1.6 There was only one piece of evidence of burning on an unidentifiable fragment from watering hole **4127**, exhibiting patches of calcination. Canine gnawing is visible on several long bones from ditch **4041**, ring-ditches **4349**, **4355** and watering hole **4127**. Marks consist of tooth puncture marks and gnawing marks on proximal and distal epiphyses. The only presence of dog remains are loose maxillary teeth from ditch **4115** and ditch **4147**. Butchery marks were rare in the assemblage with only two examples seen on cattle remains; a tibia with cut marks on the posterior upper shaft from ditch **4041** and a mandible with cuts on the ascending ramus, below the mandibular hinge.
- B.1.7 There appears to be a slight bias in terms of skeletal element distribution for the main domestic species. For cattle there is a higher frequency of forelimbs opposed to rear limbs. Horse remains comprised mainly of head and feet elements, whereas pig remains were all cranial elements. Sheep/goat is similarly dominated by cranial and forelimb elements. This evidence indicates that much of the faunal assemblage is likely primary butchery waste discarded in the ditches and watering holes.
- B.1.8 Ageing data gathered from 5 mandibles indicates the presence on cattle between 40 months to over 50 months at death, according to Higham MWS. Two pig mandibles were aged indicating an animal of 12-14 months (ditch **4217**) and an animal 23-25 months (ditch **4135**) of age at death. For sheep/goat there was no tooth wear data and only one unfused distal radius epiphysis indicating a specimen less than 36-42 months of age at death. There were no neonate or young animals recovered, perhaps suggesting animals were not bred onsite. While the ageing data is minimal, the data suggests that animals were exploited more food meat rather than for secondary products.
- B.1.9 The small faunal assemblage does not allow for significant interpretations to be made regarding husbandry practices. However, the high percentage of cattle remains is unusual for Iron Age sites in the region as sheep tend to dominate assemblages during this period. The types of fragments present would suggest that this may have been a primary butchery sites as ditches contained a high proportion of cranial and foot elements, perhaps suggesting joints of meat were taken elsewhere. The butchery evidence is somewhat consistent with this scenario as cut marks to the ramus of the mandible indicate skinning or removal of the tongue. Likewise cut marks to this tibia are likely skinning or ligament removal as lower limb yields very little in terms of meat value.

Statement of Potential

- B.1.10 The faunal assemblage from Wintringham is small and fragmentary, however the high frequency of cattle remains versus sheep/goat is somewhat unusual for the period. Comparing species abundance, age of slaughter and percentages of element survival, with neighbouring sites would be of interest to see whether this assemblage is particularly unique in the ways animals were exploited in regard to diet and husbandry.

Further Work

B.1.11 Full recording of the assemblage should be complete (measurements *etc.*) and an archive report compiled placing the assemblage within its regional context.

B.1.12 It would be recommended that the remains from securely phased contexts be retained and the small amount of remains that were unphased/unstratified be considered for discard.

Context	Phase	Species	Element
4018	LIA	Cattle	Loose Mandibular M12
4019	LIA	Sheep/Goat	Loose Mandibular M3
4032	MIA	Cattle	Loose Mandibular M12
4032	MIA	Cattle	Loose Mandibular M12
4032	MIA	Cattle	Radius
4033	MIA	Cattle	Humerus
4034	MIA	Cattle	Humerus
4034	MIA	Cattle	Radius
4042	MIA	Sheep/Goat	Loose Mandibular dP4
4042	MIA	Sheep/Goat	Loose Mandibular M12
4042	MIA	Sheep/Goat	Loose Tooth
4042	MIA	Sheep/Goat	Pelvis
4044	MIA	Cattle	Metatarsal
4044	MIA	Cattle	Humerus
4044	MIA	Cattle	Scapula
4045	MIA	Sheep/Goat	Radius
4045	MIA	Cattle	Pelvis
4045	MIA	Sheep/Goat	Loose Mandibular M12
4045	MIA	Sheep/Goat	Loose Mandibular dP4
4045	MIA	Sheep/Goat	Loose Mandibular M12
4045	MIA	Cattle	Radius
4046	MIA	Cattle	Tibia
4057	MIA	Cattle	Loose Mandibular M12
4058	MIA	Sheep/Goat	Loose Tooth
4058	MIA	Cattle	Radius
4065	MIA	Cattle	Scapula
4065	MIA	Cattle	Loose Mandibular M3
4065	MIA	Cattle	Loose Mandibular M12
4065	MIA	Cattle	Loose Mandibular M12
4065	MIA	Cattle	Loose Mandibular M3
4065	MIA	Cattle	Loose Mandibular M12
4065	MIA	Cattle	Loose Mandibular premolar
4065	MIA	Horse	Metatarsal
4070	MIA	Pig	Mandible
4079	MIA	Cattle	Scapula
4082	MIA	Cattle	Horn Core
4082	MIA	Cattle	Tibia
4082	MIA	Cattle	Scapula
4098	MIA	Cattle	Loose Mandibular M12
4098	MIA	Cattle	Loose Mandibular M12
4099	MIA	Cattle	Radius
4100	MIA	Cattle	Tibia
4102	MIA	Sheep/Goat	Loose Tooth
4118	MIA	Dog	Loose Tooth
4118	MIA	Dog	Loose Tooth
4118	MIA	Dog	Loose Tooth
4120	MIA	Pig	Mandible
4122	MIA	Cattle	Scapula
4129	MIA	Cattle	Loose Mandibular M3
4129	MIA	Cattle	Loose Mandibular Premolar
4132	MIA	Cattle	Mandible
4132	MIA	Cattle	Loose Mandibular M12
4132	MIA	Cattle	Loose Mandibular M12
4132	MIA	Cattle	Loose Mandibular Premolar
4132	MIA	Cattle	Humerus

Context	Phase	Species	Element
4132	MIA	Cattle	Humerus
4133	MIA	Cattle	Loose Mandibular M12
4133	MIA	Cattle	Loose Mandibular M12
4133	MIA	Cattle	Metatarsal
4133	MIA	Pig	Mandible
4133	MIA	Pig	Cranium
4133	MIA	Horse	First Phalanx
4133	MIA	Horse	First Phalanx
4133	MIA	Cattle	Loose Tooth
4133	MIA	Sheep	Radius
4133	MIA	Sheep/Goat	Loose Mandibular M12
4133	MIA	Cattle	Loose Mandibular M12
4137	MIA	Cattle	Radius
4137	MIA	Cattle	Loose Mandibular M12
4137	MIA	Cattle	Humerus
4144	?	Sheep/Goat	First Phalanx
4148	MIA	Cattle	Scapula
4148	MIA	Sheep/Goat	Radius
4148	MIA	Cattle	Femur
4148	MIA	Sheep/Goat	Pelvis
4149	MIA	Dog	Loose Tooth
4152	?	Cattle	Horn Core
4152	?	Horse	Metatarsal
4182	MIA	Cattle	First Phalanx
4193	MIA	Cattle	Mandible
4213	MIA	Cattle	Loose Mandibular M12
4218	MIA	Cattle	Scapula
4221	MIA	Pig	Loose Mandibular Incisor
4221	MIA	Cattle	Loose Mandibular M12
4221	MIA	Cattle	Metatarsal
4221	MIA	Cattle	Ulna
4221	MIA	Pig	Loose Mandibular Canine
4221	MIA	Sheep/Goat	Loose Mandibular M12
4221	MIA	Cattle	Scapula
4221	MIA	Cattle	Tibia
4221	MIA	Pig	Mandible
4222	MIA	Cattle	Scapula
4245	MIA	Cattle	Humerus
4245	MIA	Cattle	pelvis
4245	MIA	Cattle	Loose Mandibular M12
4245	MIA	Cattle	Calcaneus
4247	MIA	Cattle	Loose Mandibular Premolar
4248	MIA	Cattle	Mandible
4248	MIA	Cattle	Radius
4248	MIA	Cattle	Radius
4250	MIA	Cattle	Humerus
4250	MIA	Cattle	Horn Core
4250	MIA	Cattle	Loose Tooth
4250	MIA	Cattle	Loose Tooth
4250	MIA	Cattle	Loose Tooth
4250	MIA	Cattle	Tibia
4250	MIA	Cattle	Ulna
4250	MIA	Cattle	Femur
4250	MIA	Cattle	pelvis
4250	MIA	Cattle	Calcaneus
4250	MIA	Cattle	Loose Mandibular M3
4250	MIA	Horse	Loose Mandibular Premolar
4250	MIA	Cattle	Loose Tooth
4250	MIA	Cattle	Loose Tooth
4251	MIA	Cattle	Humerus
4251	MIA	Cattle	Humerus
4251	MIA	Cattle	Scapula
4259	MIA	Horse	Mandible
4259	MIA	Horse	Radius
4259	MIA	Horse	Loose Mandibular Premolar

Context	Phase	Species	Element
4263	?	Cattle	Metatarsal
4274	MIA	Cattle	Loose Mandibular M3
4274	MIA	Cattle	Loose Mandibular M12
4274	MIA	Cattle	Loose Mandibular M12
4279	?	Cattle	Radius
4284	?	Cattle	Scapula
4284	?	Cattle	Loose Mandibular M12
4292	LIA	Cattle	Loose Mandibular M12
4309	MIA	Cattle	Loose Mandibular M12
4309	MIA	Cattle	Mandible
4309	MIA	Horse	Loose Tooth
4309	MIA	Horse	Loose Tooth
4309	MIA	Horse	Loose Tooth
4309	MIA	Horse	Loose Tooth
4309	MIA	Cattle	Radius
4310	MIA	Cattle	Loose Tooth
4310	MIA	Cattle	Loose Tooth
4310	MIA	Cattle	Loose Tooth
4310	MIA	Sheep/Goat	Loose Tooth
4310	MIA	Cattle	LMT
4310	MIA	Cattle	Loose Tooth
4310	MIA	Cattle	Loose Tooth
4310	MIA	Cattle	Loose Tooth
4310	MIA	Cattle	Mandible
4310	MIA	Cattle	Radius
4310	MIA	Horse	Loose Tooth
4310	MIA	Horse	Loose Tooth
4311	MIA	Cattle	Radius
4311	MIA	Cattle	Loose Tooth
4311	MIA	Sheep/Goat	Loose Mandibular M12
4311	MIA	Horse	Loose Mandibular Premolar
4324	LIA	Horse	Loose Mandibular Incisor
4327	LIA	Pig	Loose Mandibular Canine
4329	MIA	Horse	Loose Tooth
4329	MIA	Horse	Loose Tooth
4329	MIA	Horse	Loose Tooth
4329	MIA	Horse	Loose Tooth
4329	MIA	Horse	Loose Tooth
4329	MIA	Horse	Loose Mandibular Incisor
4329	MIA	Horse	Loose Mandibular Incisor
4329	MIA	Cattle	Astragalus
4343	MIA	Horse	Loose Tooth
4350	MIA	Sheep/Goat	Radius
4356	MIA	Cattle	Radius
4366	MIA	Horse	Loose Mandibular M12
4366	MIA	Horse	Loose Mandibular M3
4366	MIA	Horse	Loose Mandibular M12
4366	MIA	Horse	Loose Mandibular Premolar
4370	MIA	Cattle	Radius
4390	MIA	Horse	Cranium
4390	MIA	Horse	Cranium

Table 16: Catalogue of Faunal remains from Wintringham Site 4i (Hand Collection)

Context	Phase	Species	Element
4073	MIA	Cattle	Loose Tooth
4367	MIA	Cattle	Loose Mandibular M12
4213	MIA	Sheep/Goat	Loose Mandibular Incisor
4213	MIA	Sheep/Goat	Loose Mandibular Incisor
4213	MIA	Sheep/Goat	Loose Mandibular Canine
4045	MIA	Sheep/Goat	Femur
4045	MIA	Sheep/Goat	Astragalus

Table 17: Catalogue of Faunal remains from Wintringham Site 4i (Environmental Samples)

B.2 Charred plant remains

By Rachel Fosberry

Introduction and Methodology

- B.2.1 Forty-five bulk samples were taken from features within the excavated area of the site (4i) that relate to Iron Age settlement and a Roman field system. Previous sampling during the evaluation of this area suggested poor preservation of plant remains.
- B.2.2 The purpose of this assessment is to determine whether plant remains are present, their mode of preservation and whether they are of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.
- B.2.3 The samples were processed by tank flotation using modified Siraff-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.
- B.2.4 A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds.
- B.2.5 The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 18. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers et al. 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

- B.2.6 For the purpose of this assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

= 1-5, ## = 6-25 specimens

- B.2.7 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Assessment

- B.2.8 Samples were predominantly taken from Middle Iron Age deposits. Preservation of plant remains is extremely poor, most likely due to the heavy clay soils that are not conducive to preservation due to freeze/thaw action. Single indeterminate charred grains were recovered from ditches **4041**, **4192** and **4334** but cannot be considered as significant. Similarly, single charred grains were recovered from undated pit **4140** and **4261**. A small fragment of charred hazelnut (*Corylus avellana*) shell from ditch **4041**

and a charred berry from ditch **4272** are more likely to be contemporary (Middle Iron Age). Charcoal volumes are also low (less than 10ml per sample).

B.2.9 Evidence of waterlogging was noted in several of the deeper deposits in the form of seeds of duckweed (*Lemna* sp.) and ostracods (small bivalve crustaceans) but other waterlogged plant material has not survived.

B.2.10 Mollusc shells are reasonably well preserved and are present in most of the samples but the density and diversity are generally low.

B.2.11 An unidentified object was noted in fill 4027 of ditch **4026**. Roughly spherical and measuring 1.2mm in diameter, the object has a grey, vesicular internal structure resembling fuel ash slag. The outer surface is coated in an orange stain.

B.2.12 The single sample from Romano British ditch **4176** contains sparse charcoal only.

Context No.	Feature No.	Sample No.	Feature Type	Phase	% context sampled	Volume processed (l)	Flot Volume (ml)	Cereals	Waterlogged remains	Molluscs	Charcoal <2mm	Charcoal > 2mm
4027	4026	2	Ditch	0	<10	7	10	0	0	+	+	0
4142	4140	10	Pit	0	50	8	15	#	0	+	+++	0
4144	4143	11	Pit	0	50	8	5	0	0	+	0	0
4159	4157	12	Pit/post hole	0	50	8	10	0	0	+	++	0
4166	4164	13	Ditch	0	<5	18	10	0	0	0	+	0
4228	4227	44	Ditch	0	50	10	5	0	0	0	++	0
4264	4261	23	Pit	0	50	20	50	#	#	+	+++	0
4377	4376	36	Pit	0	25	20	25	0	0	0	+	0
4048	4047	4	Pit	MIA	50	9	1	0	0	+	0	0
4049	4047	5	Pit	MIA	50	16	30	0	0	+	+++	+
4015	4014	1	Pit	MIA	<10	16	20	0	0	+	+	0
4032	4031	6	Ditch	MIA	<10	19	5	0	0	+	++	0
4045	4041	3	Ditch	MIA	<10	17	50	#	#	0	+++	++
4073	4071	7	Pit	MIA	20	16	20	0	0	+	++	+
4090	4089	39	Ditch	MIA	<10	19	15	0	0	+	0	0
4122	4121	8	Ditch	MIA	<5	18	10	0	#	+++	0	0
4129	4127	9	Water hole	MIA	<5	17	20	0	0	+	+	0
4185	4184	42	Ditch	MIA	<10	19	1	0	0	+	0	0
4193	4192	14	Ditch	MIA	<5	16	50	#	0	++	+++	+
4195	4194	15	Ditch	MIA	<5	9	5	0	0	+	0	0
4201	4200	16	Ditch	MIA	<5	16	5	0	0	0	+	0
4213	4211	17	Ditch	MIA	<5	20	10	0	0	+	+	0
4222	4217	18	Ditch	MIA	<10	17	10	0	0	+	+	0
4220	4217	19	Ditch	MIA	50	8	2	0	0	0	0	0
4235	4234	45	Ditch	MIA	<10	10	1	0	#	0	0	0
4245	4243	20	Watering hole	MIA	<10	18	10	0	0	+	+	0

Context No.	Feature No.	Sample No.	Feature Type	Phase	% context sampled	Volume processed (l)	Flot Volume (ml)	Cereals	Waterlogged remains	Molluscs	Charcoal <2mm	Charcoal > 2mm
4251	4243	21	Watering hole	MIA	<10	16	20	0	#	+	0	0
4367	4243	37	Watering hole	MIA	<10	11	15	0	##	+	++	0
4370	4243	38	Watering hole	MIA	<10	11	10	0	#	+	++	0
4258	4257	22	Ditch	MIA	20	18	20	0	##	+	++	0
4275	4272	25	Ditch	MIA	10	18	10	0	0	+	+++	0
4276	4272	26	Ditch	MIA	<5	18	50	0	0	+	++	0
4275	4272	34	Ditch	MIA	<10	17	25	0	#	0	+++	0
4200	4299	27	Post hole	MIA	50	7	5	0	0	+	++	0
4210	4308	29	Ditch	MIA	<50	14	25	0	#	++	+	0
4245	4344	41	Ditch	MIA	<10	18	20	0	0	+	++	0
4359	4358	35	Ring-ditch	MIA	<10	15	5	0	#	0	+	0
4271	4268	24	Ditch	LIA	<5	17	5	0	0	+	+	0
4281	4280	40	Ditch	LIA	<10	20	20	0	0	++	+	0
4292	4290	28	Ditch	LIA	<10	18	40	0	0	+	++	0
4315	4314	30	Ditch	LIA	<5	19	50	0	#	+++	+++	0
4324	4322	33	Ditch	LIA	<10	8	20	0	0	+	++	0
4327	4325	32	Ditch	LIA	<10	18	40	0	0	++	+++	0
4335	4334	31	Ditch	LIA	<5	18	5	#	0	+++	++	0
4177	4176	43	Ditch	RB	<10	10	5	0	0	+	0	0

Table 18: Environmental Samples taken from Site 4i

Statement of Potential

- B.2.13 The environmental samples from Site 4i indicate that preservation of plant remains is extremely poor despite the recovery of pottery and animal bone. This is in contrast to the more densely occupied areas further north at Loves Farm and to the south as seen during the Wintringham evaluation.
- B.2.14 The assemblage does not have any potential for analysis. Approximately 15L of soil has been retained from watering hole **4243** and ditch **4308** and could be considered for pollen assessment.
- B.2.15 The flots will be retained in the project archive. It is suggested that a smaller sub-sample of the two remaining samples (21 and 29) are retained for possible future pollen assessment and the remainder soil be discarded.

APPENDIX C RISK LOG

C.1.1 The table below lists potential risks for the PX analysis work. This table will be added to during analysis if further risks are identified.

No.	Description	Probability	Impact	Countermeasures	Estimated time/costs	Owner	Date updated
1	Specialists unable to deliver analysis report due to over running work programmes/ ill health/other problems	Medium	Variable	OA has access to a large pool of specialist knowledge (internal and external) which can be used if necessary	Variable		
2	Non-delivery of full report due to field work pressures/ management pressure on co-authors	Medium	Medium-high	Liaise with OA management team	Variable		

APPENDIX D HEALTH AND SAFETY POLICY

D.1.1 All OAE post-excavation work will be carried out under relevant Health and Safety legislation, including the Health and Safety at Work Act (1974). A copy of the Health and Safety Policy can be supplied. The nature of the work means that the requirements of the following legislation are particularly relevant:

- Workplace (Health, Safety and Welfare) Regulations 1992 – offices and finds processing areas.
- Manual Handling Operations Regulations (1992) – transport: bulk finds and samples
- Health and Safety (Display Screen Equipment) Regulations (1992) – use of computers for word-processing and database work.
- COSHH (1988) – finds conservation and environmental processing/analysis.

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OASIS Report Form

Project Details

OASIS Number	oxfordar3-313781			
Project Name	Site 4i, Wintringham Park, St Neots			
Project Dates (fieldwork)	Start	09-10-2017	Finish	28-11-2017
Previous Work (by OA East)	Yes		Future Work	Yes

Project Reference Codes

Site Code	STRWIN17	Planning App. No.	N/A
HER No.	ECB5250	Related HER/OASIS No.	ECB3024

Type of Project/Techniques Used

Prompt

Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input checked="" type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input type="checkbox"/> Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Ditch	Iron Age -800 to 43	pottery	Iron Age -800 to 43
Ditch	Roman 43 to 410	animal bone	Iron Age -800 to 43
roundhouse	Iron Age -800 to 43	slag	Iron Age -800 to 43

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	Huntingdonshire	Wintringham Park St Neots PE19 6SN	
Parish	St Neots Rural		
HER	Cambridgeshire		
Study Area	2ha	National Grid Reference	TL 19059 60224

Project Originators

Organisation	OA EAST
Project Brief Originator	Andy Thomas
Project Design Originator	Tom Phillips
Project Manager	Tom Phillips
Supervisor	Pat Moan

Project Archives

Physical Archive	Digital Archive	Paper Archive
Cambs County Store	OA East	Cambs County Store
ECB5250	STRWIN17	ECB5250

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
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	<input type="checkbox"/> Survey

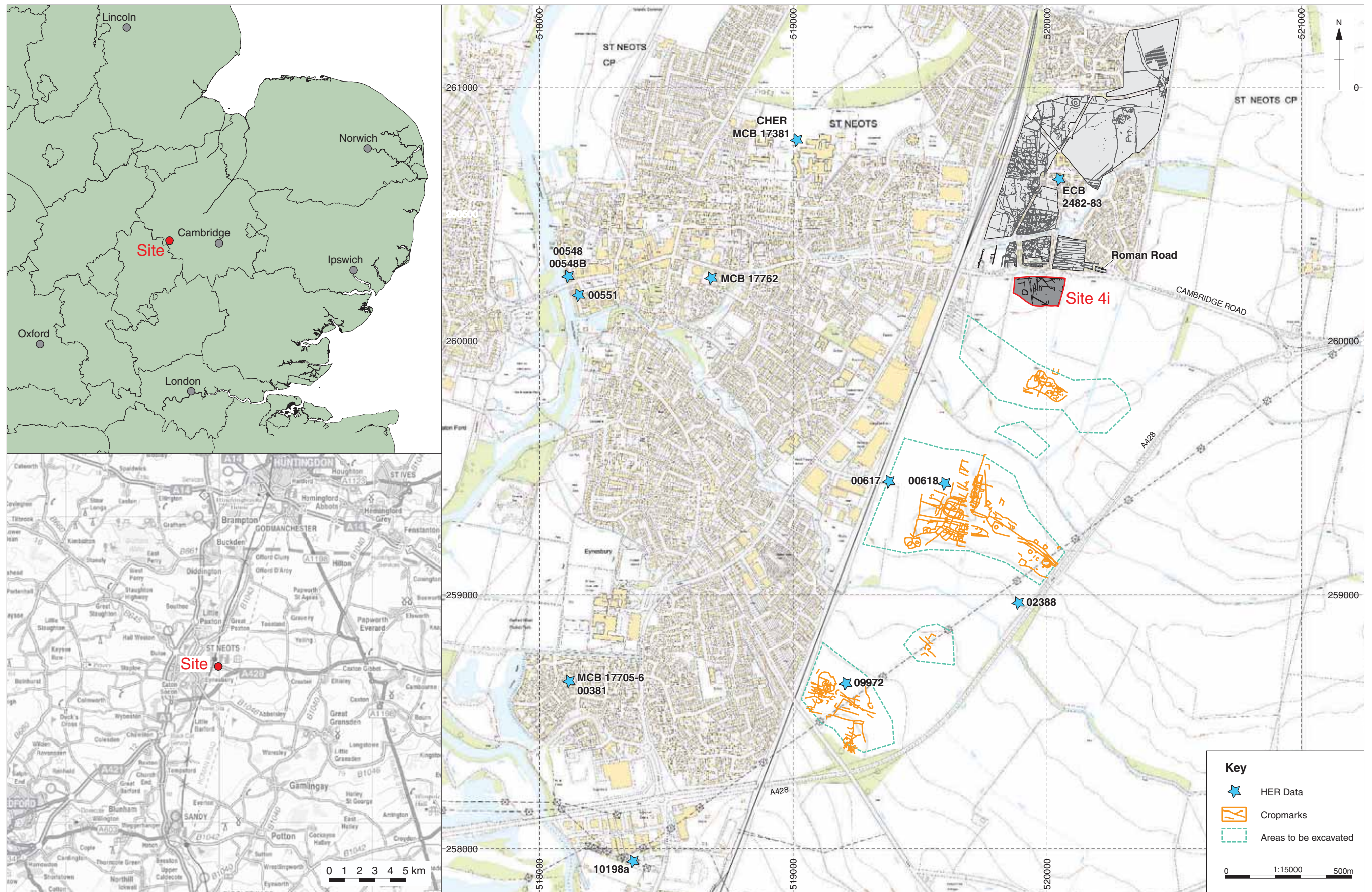


Figure 1: Site location

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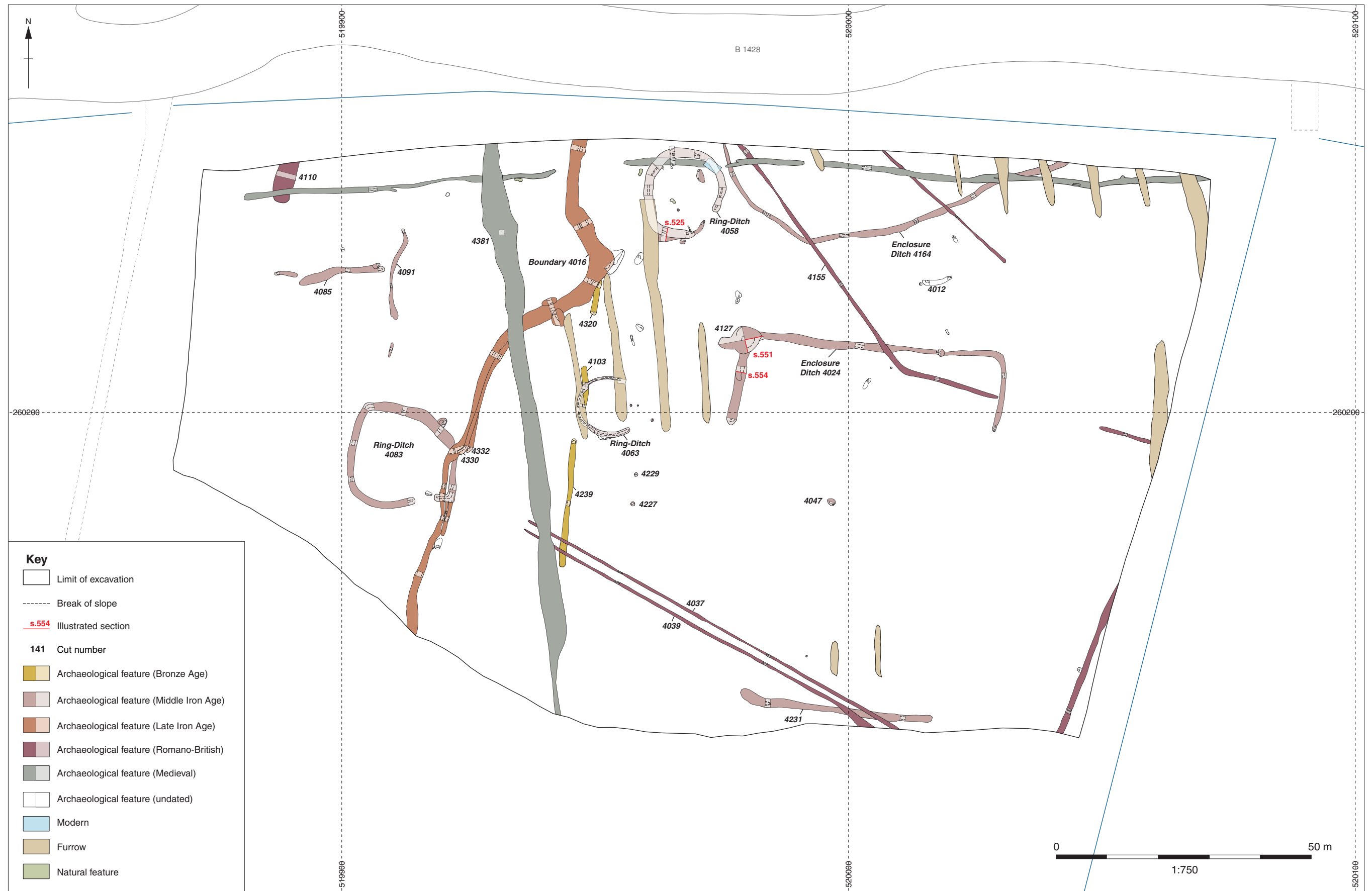


Figure 2: Multi-phase plan

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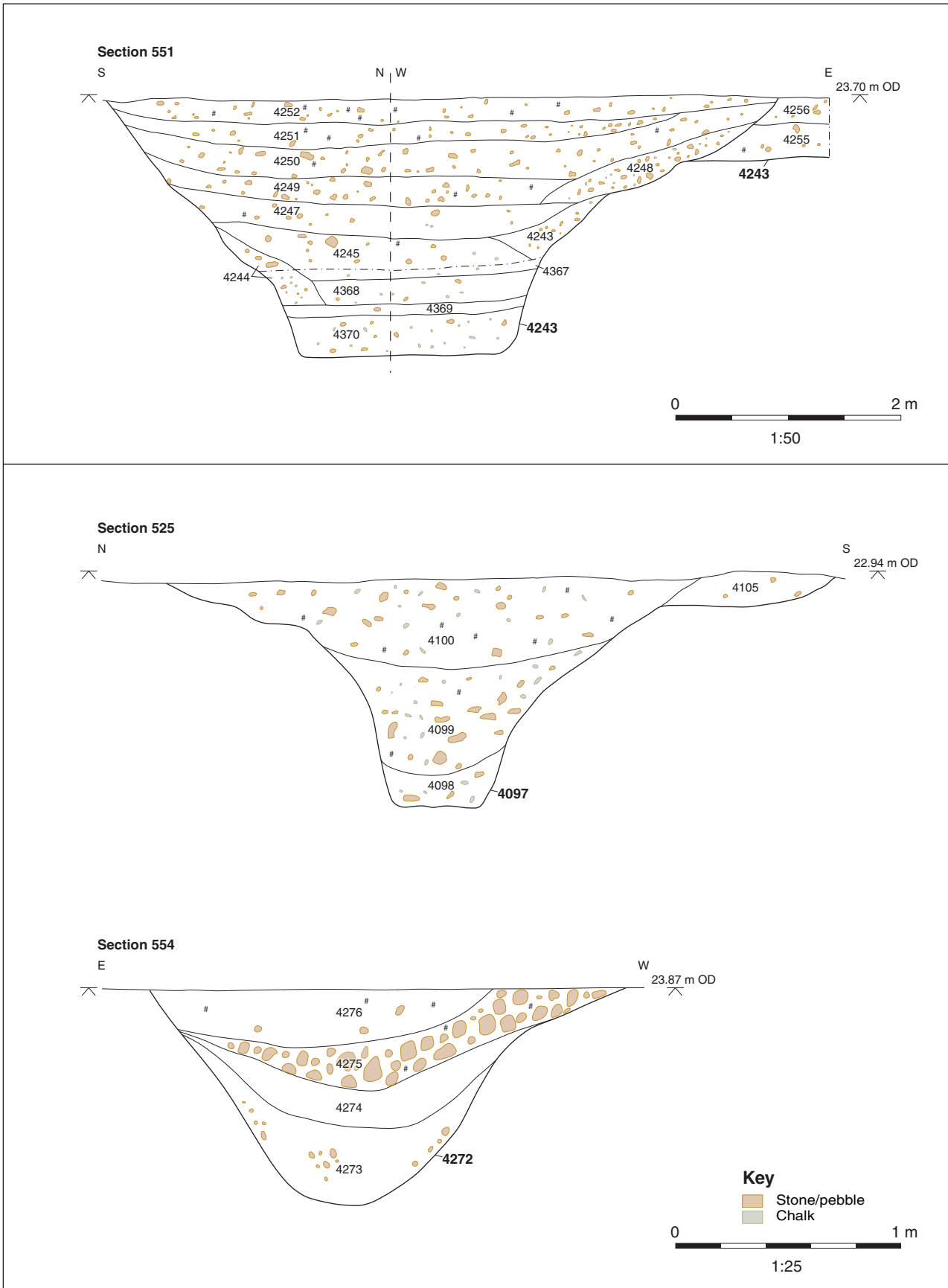


Figure 3: Selected sections



Plate 1: Panoramic Photo of Site 4i fully stripped, looking north-west



Plate 2: Drone survey photograph of the stripped area



Plate 3: Middle to Late Iron Age Ditch **4016** and Period 2 Ring Ditch **4058** to the east



Plate 4: Middle Iron Age Waterhole **4127**, looking south-east. Note metallurgy in foreground



Plate 5: Slot in Middle Iron Age Ring Ditch **4058**, looking south-west



**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](mailto: 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](mailto: oaeast@oxfordarchaeology.com)
w: <http://oxfordarchaeology.com>



Director: Gill Hey, BA PhD FSA MCIfA
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