Bronze Age, Iron Age and early Roman settlement at Dunmore Road, Abingdon, Oxfordshire

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Archaeological Excavation Report

by Alex Davies

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Summary

Excavations at Dunmore Road, Abingdon, uncovered activity dating between the early–middle Bronze Age and the early Roman period. An early–middle Bronze Age oven was radiocarbon dated and included a regionally significant assemblage of Biconical Urn pottery. Late Bronze Age activity was ephemeral but included one or possibly two cremation burials and a small amount of residual pottery.

The main phase of activity consisted of occupation from the early Iron Age to the early Roman period. The earliest settlement was represented by a series of post-built and ditched roundhouses, pits, a four- and a six-post structure. Middle Iron Age activity was represented primarily by a series of enclosures accompanied by an inhumation burial and several pits. One of the enclosures was recut in the late Iron Age and a larger adjoining enclosure was established during this time. The larger enclosure was recut three times in the early Roman period, which also saw the construction of a probable masonry building that appears to have been entirely robbed. The site was abandoned early in the 2nd century.

A previously unknown Roman road, flanked by ditches *c* 20–28m apart and consisting of up to two layers of metalling, was found extending across the site. Projection of the road alignment connects it northwards to the Roman road between Wantage and Oxford, and southwards to the late Iron Age oppidum and Roman nucleated settlement at Abingdon. No road has previously been found that links Abingdon to the main Roman road network.

Activity ceased in the early 2nd century, around the time of settlement and landscape reorganisation observed more widely in the Abingdon area at this time. The road does not appear to have been refurbished after this time, and the extent to which it continued in use through the later Roman period is unknown.

Medieval furrows crossed the site on the same alignment as the Iron Age and early Roman enclosures and perpendicular to the Roman road. This suggests that although the Iron Age and Roman settlement had ceased as an occupation site, its presence appears to have influenced the subsequent layout and use of the site.

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The fieldwork was managed for Oxford Archaeology by John Boothroyd and directed on site by Mark Dodd. The fieldwork team consisted of Ben Attfield, Rebecca Coombes, Kelly Green, Sam Johansen, Elizabeth Kennard, Adam Moffat, Thomas Oliver, Chris Richardson, Bernadeta Rzadek, Benjamin Slader, Jana Smirinova and Emma Winter. Digital surveying was undertaken by Diana Chard, Caroline Souday and Conan Parsons.

The post-excavation programme was managed by Martyn Allen and supervised by Alex Davies. Thanks are extended to the teams of OA staff that cleaned and packaged the finds under the management of Leigh Allen, processed the environmental remains under the management of Rebecca Nicholson, and prepared the archive under the management of Nicky Scott.

1 INTRODUCTION

1.1 Background

1.1.1 Oxford Archaeology (OA) was commissioned by RPS Group on behalf of David Wilson Homes to undertake an archaeological excavation of the site of a proposed residential development to the north of Dunmore Road in Abingdon, Oxfordshire. The excavation was preceded by a geophysical survey by MOLA (2015) and an evaluation by Cotswold Archaeology (CA 2017).

1.1.2 The work was undertaken in accordance with a condition of Planning Permission (ref: P17/V1336/O). Discussions between RPS Group, Hugh Coddington and Richard Oram (Planning Archaeologists for Oxfordshire County Council) established the level of archaeological mitigation required. Details of how these requirements were mitigated are outlined in the written scheme of investigation (WSI) (OA 2018a).

1.2 Location, geology and topography

1.2.1 The excavation area was centred at SU 49170 98768 and covered *c* 2.48ha (Fig. 1). It lies within the south-western part of the Dunmore Road development site, which extended across *c* 9.5ha. Encompassing a single agricultural field, the development site is bounded to the north-west by the A34, to the south-west by the B4017 Wootton Road, and to the south-east by a recreation ground and Dunmore Road. The River Stert defines the north-eastern side of the development site and joins the River Thames *c* 1.95km south of the site. The site is located on fairly even ground at 64m OD although it has a slight slope from north to south.

1.2.2 The mapped geology of the area is Ampthill Clay Formation and Kimmeridge Clay Formation (mudstone), with the central and southern part of the site recorded as being overlain by the superficial geology of Summertown-Radley gravels and sands (BGS nd). The soil geology exposed during the excavation and the preceding evaluation trenches comprised yellow clays and yellow-orange sands and gravels (CA 2017, 3).

1.3 Archaeological and historical background

Previous work at Dunmore Road

1.3.1 The entirety of the development site was subject to a magnetometer survey, which revealed a series of enclosures adjacent to a blank linear area (discovered in excavation to be the Roman road) in the south-western part of the site (MOLA 2015). A subsequent evaluation comprised 14 trenches, each 1.9m wide, with 13 measuring 50m long and one extending to 100m (ibid.). The trenches were positioned to test several geophysical anomalies and otherwise blank areas. The evaluation revealed a spread of archaeological features that closely aligned with the geophysical anomalies. Alongside the Iron Age and Roman remains discovered were three residual prehistoric worked flints including a Mesolithic flake and a Bronze Age scraper, though no features of early prehistoric date were found.

1.3.2 It was subsequently agreed that the south-western *c* 2.48ha of the site would be subject to open-area excavation. The geophysical anomalies accorded very well with

the archaeological features discovered during the excavation and no additional major features were identified that were not present on the survey. In the northern and eastern part of the development site, one feature of potential archaeological origin was identified. This was a NW–SE aligned ditch that appears to have continued the line of a north-eastern Roman enclosure, and was sampled during the evaluation (CA 2017, 11). Furrows were also observed across the development site.

Neolithic and Bronze Age

1.3.3 A number of Neolithic and early Bronze Age monuments are known in and around Abingdon, around the confluences of the Rivers Stert, Ock and Thames. The early Neolithic Abingdon causewayed enclosure is *c* 2km to the ESE of the site (Avery 1982). The area continued to be of significance from the Neolithic to the middle Bronze Age as shown by the barrow cemetery at the adjacent Barrow Hills (Barclay and Halpin 1999). Neolithic pits and a Beaker burial were found at Spring Road, 1.3km to the south of the site, and a possible long barrow and adjacent ring-ditches have been evaluated a farther 1km to the south-west (OAU 1997). Neolithic and early Bronze Age monuments are known south and south-west of the river Ock (Barclay *et al.* 2003), and ring-ditches have been excavated as Ashville Trading Estate 1.7km to the SSW of the site (Parrington 1978, 24–8) and appear as cropmarks *c* 1km to the south-west of the site (Benson and Miles 1974, 57–8). Neolithic and early Bronze Age activity within 500m of the site is limited to small numbers of residual flints (eg Moore 2005).

1.3.4 Later Bronze Age activity in the Abingdon area is limited. The Barrow Hill cemetery and possibly the Ashville Trading Estate ring-ditches saw a small amount of use in this period (Barclay and Halpin 1999, 167; Parrington 1978, 6–10). A middle Bronze Age enclosure at Corporation Farm, 3km to the south of the site (Shand *et al.* 2003), and elements of a middle Bronze Age field system at Eight Acre Field, 3.5km to the east of the site, saw continued occupation in the late Bronze Age and early Iron Age (Mudd 1995).

Iron Age

1.3.5 Geophysical survey and evaluation west of Wootton Road, immediately to the west of the site, encountered a ditch on a NNW–SSE alignment that contained pottery broadly dated to the late Bronze Age or Iron Age. It has been suggested that this feature was related to the Iron Age settlement at Dunmore Road (CA 2020).

1.3.6 Early and middle Iron Age settlements have been excavated at Ashville Trading Estate/Wyndyke Furlong (Muir and Roberts 1999; Parrington 1978) and Spring Road (Allen and Kamash 2008). In Abingdon town centre, *c* 1.5km to the SSE, a modest early Iron Age settlement expanded into a significant middle Iron Age site that in turn developed into a late Iron Age oppidum, surrounded by two or three large banks and ditches. The main excavations remain unpublished, although interims are available (eg Allen 1990a). A late Iron Age enclosure is known at Barton Court Farm, 2km to the south-east of the site (Miles 1986).

Roman

1.3.7 The late Iron Age oppidum at Abingdon continued into the early Roman period and remained as a considerable, defended, nucleated settlement during this time (Allen 1990a; Brady *et al.* 2007; JMHS 2003; Parrington and Balkwill 1975; Wilson and Wallis 1991). The late Iron Age enclosure at Barton Court Farm developed into a proto-villa in the early Roman period, while early Roman activity was also found at Ashville Trading Estate/Wyndyke Furlong (Muir and Roberts 1999; Parrington 1978). The nucleated settlement at Abingdon and the other sites in the area saw significant reorganisation in the early 2nd century. The oppidum defences were infilled and several more minor sites were abandoned, with others such as at Ashville Trading Estate/Wyndyke Furlong being redeveloped. The character of the middle and late Roman activity at Abingdon town centre is less certain, although masonry buildings and other evidence for high-status activity has been discovered that date during this period (Allen 1990a, 74; JMHS 2003; Booth *et al.* 2007, 39). Middle Roman masonry structures are known at Thornhill Walk, 700m to the south of the site (JMHS 2012), and a farmstead was established at Spring Road during this period (Allen and Kamash 2008). Slightly farther afield, 5.75km to the south-west of the site, lies the religious complex at Marcham/Frilford (Bradford and Goodchild 1939; Kamash *et al.* 2010).

Medieval and post-medieval

1.3.8 Several Anglo-Saxon settlements are known in and around Abingdon (Allen and Kamash 2008, 4), and a large cemetery has been found at Saxton Road, 2.5km to the south of the site (Myres 1968). Abingdon was a monastic centre from the middle Saxon period, and the medieval Benedictine abbey dominated the town until it was dissolved in the 1530s. The Dunmore Road site and its immediate environs appear to have remained as fields in the medieval and post-medieval periods.

1.4 Aims and objectives

1.4.1 The general aims of the excavation were to determine and understand the nature, function and character of the archaeological remains within their cultural and environmental setting.

1.4.2 The specific aims and objectives of the excavation were to:

i. Establish the function and dating of any Iron Age/early Roman features within the mitigation area and any continuity of activity between the late Iron Age and early Roman period;

ii. Establish if there are any structural remains in the area of evaluation trench 2 which found postholes and possible drip gullies;

iii. Consider the wider significance of the Iron Age/early Roman remains within the wider region;

iv. Determine or confirm the approximate date or date range of any other remains, by means of artefactual or other evidence;

v. Generate an accessible and useable archive which will allow future research of the evidence to be undertaken if appropriate;

vi. Disseminate the results of the work in a format and manner proportionate to the significance of the findings.

1.4.3 The programme of archaeological investigation was subsequently conducted with reference to the general research parameters and objectives defined by the Solent-Thames Research Framework (Hey and Hind 2014). Objective 12.2 of this research framework relates to the importance of investigating continuity between late Iron Age and early Roman sites and is thus pertinent to the current excavation.

1.5 Fieldwork methodology

1.5.1 The fieldwork methodology is presented in detail in the WSI following OA's standard approach to excavation and recording (OA 2018a) in line with national guidelines (CIfA 2014a). In brief, *c* 2.48ha was stripped for open-area excavation to investigate the Iron Age/Roman activity discovered during the previous geophysical survey and evaluation trenching (Fig. 2). The topsoil and subsoils were removed by a mechanical digger fitted with toothless ditching bucket under archaeological supervision. Soil was removed until the first archaeological horizon or the natural geology was reached.

1.5.2 A pre-excavation plan showing all revealed features was produced by digital survey. Data-capture for site plans was taken for reproduction at a scale of 1:100, with complex features or areas of complex archaeological remains recorded at greater resolution (for reproduction at 1:10, 1:20, or 1:50 as necessary). All plans were established relative to the Ordnance Survey National Grid and all levels were taken relative to Ordnance Datum. A sufficient sample of the revealed features was investigated by hand to establish their character and date. The level of hand excavation was agreed with Oxfordshire Planning Archaeologists, Hugh Coddington and Richard Oram, during continual on-site monitoring meetings. In most cases the following excavation percentages were followed:

i. Structural features – 100%

ii. Features relating to specialist activity – 100%

iii. Burial contexts (in consultation with OA's Heritage Burials Services and under license from the Ministry of Justice) – 100%

iv. Discrete features not relating to specialist activity – 50%

v. Linear features – 10% or 10m, whichever was greater

1.5.3 All human remains were excavated, cleaned and boxed following the methods described by Brickley and McKinley (2004) and subsequently returned to OA South offices for further examination by OA's in-house specialists.

1.5.4 An environmental sampling strategy was set by Rebecca Nicholson (OA's Environmental Manager), Hugh Coddington and Richard Oram. A total of 40 environmental samples were taken from 36 contexts for the recovery of charred plant remains and cremated human bones. Each sample consisted 40l of material.

1.5.5 All other finds were recovered by hand and bagged by context.

2 STRATIGRAPHY

2.1 Neolithic

2.1.1 A small amount of Neolithic pottery was recovered from five or six contexts. Only one vessel—an early Neolithic Decorated Bowl—was found to be diagnostic, but the rest of the material is probably broadly contemporary. Most of the Neolithic pottery was found residual in later contexts. Four of the contexts were in the Iron Age settlement area in the north of the site, one was in the predominantly eastern, Roman area, and one derived from undated ditch 2265 in the southern part of the site. The phasing of ditch 2265 is discussed below, and this might belong to the early Neolithic. Posthole 2177 in the Iron Age settlement area was not assigned to any structure and did not produce any other dating evidence and might also be early Neolithic, but an Iron Age date is more likely (see *Undated features* below). The early Neolithic evidence suggests that an archaeologically ephemeral settlement and/or midden was present in or near the site.

2.1.2 The small assemblage of residual and dispersed worked flint concentrates on the late Neolithic or early Bronze Age. A very limited earlier element was present. Some of the worked flint may be associated with the early–middle Bronze Age activity, although it is likely that the flint also represents sporadic use of the area in the Neolithic.

2.2 Early–middle Bronze Age

2.2.1 A single feature, 2303, located in the north-western part of the excavation area, dated to the early–middle Bronze Age (Fig. 3). This feature consisted of three associated pits, 1922, 1924 and 1926, the fills of each containing fragments of Biconical Urn pottery. A large oval pit (1924) measuring 2.52m long by 2.42m wide and 0.74m deep, was adjoined by a shallow hollow (1926), 1.95m long and 0.41m deep, to its south (Fig. 4). Pit 1924 had *in situ* burning and reddening of the natural clay (1958) across its base extending partly up the sides (Fig. 5, section 1238; Fig. 6). This was overlain by a grey-black layer (1957) of charcoal, ash and fine carbonised material together with lumps of red burnt clay. The upper fills (1925, 1955 and 1956) extended continuously as layers of charcoal and ash with lenses of burnt clay in adjacent hollow 1926 (1927, 1959–61), which appears to have been an extension of the feature. Environmental samples were taken from fills 1957 and 1956. Both contained single hazelnut shells alongside charcoal and weed seeds including *Vicia/Lathyrus, Fallopia convolvulus* and *Galium aparine*. A radiocarbon date of 1545–1440 cal BC (87% confidence; SUERC-96911; Table 27) was obtained from a charred hazelnut shell in the basal fill (1957).

2.2.2 Given the evidence for heating, charcoal and fired clay, the feature is best interpreted as an 'oven'. An associated pit (1922) measured 0.78m long and 0.68m wide, and was 0.34m deep with two fills, neither containing layers of charcoal or evidence for *in situ* burning (Fig. 5, section 1237). Limestone blocks were found in the upper fill (1923) and the pit may have functioned as a stoking chamber (Fig. 7). Two undated features were located to the south, one of which (1928) cut oven 2303, and these may also have been associated.

2.2.3 Some 95 sherds (2039g) of Biconical Urn pottery were found in the three pits, concentrating in the upper fills but also found in the lower and middle fills. No other

Biconical Urn pottery was found in any other feature at the site. Two sherds of probably intrusive Iron Age pottery were found in upper fill 1923 of pit 1922, suggesting that this feature at least remained as a depression into this period.

2.3 Late Bronze Age

2.3.1 Cremation deposits were discovered in pit 1258 in the north-western part of the site and in pit 1805 *c* 140m to the south-east (Fig. 3). Pit 1258 was 0.68m by 0.50m and 0.08m deep with irregular sides and a flat base (Fig. 5, section 1068). Pit 1805 measured 0.53m by 0.42m and 0.11m deep (Fig. 5, section 1213). It had shallow sides and a flat base and was truncated by a land drain and partially disturbed by a furrow. Pits 1258 and 1805 produced 791.4g and 14.6g of cremated bone respectively, both of adults of unknown sex.

2.3.2 Small amounts of charcoal were present in environmental samples recovered from each pit, along with a few charred grains. One grain from pit 1805 was identified as spelt, and seeds from the pit included *Eleocharis* sp., grass seeds, *Juncus* sp., *Amaranthus* sp., and small Fabaceae.

2.3.3 No pottery or flintwork was found in either of the pits. However, a radiocarbon date of 930–815 cal BC (94% confidence; SUERC-96915) was obtained from a cremated bone sample from pit 1258. The cremation deposit in pit 1805 has not been dated owing to the absence of suitable bone samples. It may have been of a similar date to 1258, or it may have belonged to the late Iron Age or early Roman period since it was adjacent to features of this date.

2.3.4 Sherds from two residual late Bronze Age pots were found in pit 1936 alongside a larger assemblage of early Iron Age pottery, while another late Bronze Age sherd was found in early Roman ditch 2295. The late Bronze Age material is probably broadly contemporary with the date of cremation pit 1258.

2.4 Early Iron Age

2.4.1 Early Iron Age activity was found over much of the north-western part of the site and clearly continued to the south-west (Fig. 8). Two post-built roundhouses and two possible examples comprising semi-circular arcs were discovered along with seven roundhouses defined by penannular ditches. There was a sequence of three or four overlapping houses, perhaps replacements of one another, on the eastern side of the settlement. A four-post structure and a six-post structure were found, as well as two partial enclosures and ten pits. More pits dated only to the Iron Age probably also belonged to the period. A scatter of postholes not assigned to structures was also found across the settlement area.

Post-built roundhouses

2.4.2 Two post-built roundhouses with projecting entrance postholes (2250 and 2251) were discovered (Fig. 9), and these were accompanied by two possible post-built roundhouses (1387 and 2253) each comprising arcs or semi-circles of postholes (Fig. 8; Table 1). Roundhouses 2250 and 2251 were set very close together and are unlikely to have been contemporary.

Roundhouse 2251

2.4.3 Roundhouse 2251 consisted of 18 postholes set in a circle 10m in diameter (Fig. 10). Two pairs of postholes projecting 1.45m and *c* 2.75m to the south-east of the circle defined an entrance. Three of these four postholes were the largest associated with the structure; the four protruding entrance postholes had diameters between 0.63–0.90m (mean 0.74m), and depths of 0.12–0.49m (mean 0.29m). The diameters of the postholes belonging to the outer ring ranged between 0.20–0.69m (mean 0.40m) and their depths between 0.08–0.44m (mean 0.24m). Seven of the postholes contained fills representing postpipes, including two belonging to the porch and four in postholes immediately by the entrance to the house.

2.4.4 The position of the outer wall was not clear. It has been argued that the outer wall of similar houses in the region usually followed the circumferential line of the projecting porch postholes (Davies 2018, 21, 290–1). Outer wall postholes should not be load-bearing and need not be sunk into the natural, although a few of these postholes are often present (ibid.). The position of the outer wall is complicated by the double pair of protruding entrance postholes. Three postholes were found approximately in line with the outer pair, potentially giving an outer wall diameter of *c* 15.5m, but two other postholes were approximately in line with the inner pair of entrance postholes, possibly placing the outer wall diameter at *c* 12.90. The larger diameter would make this house one of the largest of its type in the region. A diameter of *c* 12.90m is still large but more in keeping with more commonly found sizes (eg Davies 2018, 115; Allen *et al*. forthcoming). The inner 10m ring also places the house in the upper size distribution of houses in the region.

2.4.5 Twenty-four smaller postholes were found inside the circuit of the house. These did not form any clear structure, and favoured the central and southern parts of the house. The clustering of these features within the house and a general sparsity of postholes in the area outside of the house suggest that they were associated with it. The internal postholes had diameters between 0.06–0.53m (mean 0.28m) and depths of 0.04–0.27m (mean 0.15m).

2.4.6 Some 90 sherds (886g) of early Iron Age pottery was found in the main structural postholes. Four large body sherds (389g) from the same vessel were found in entrance posthole 1652, and this may have been deliberately placed. The posthole producing the next largest pottery assemblage was 1600 in the southern part of the circuit where 27 sherds (194g) from five vessels were found. The roundhouse assemblage included a bowl with a flaring rim and vertical-sided jars.

Roundhouse 2250

2.4.7 Roundhouse 2250 was immediately north of 2251. It consisted of a circle of 14 postholes with a diameter of 9.20m. One recut, projecting-entrance posthole was found 1.40m to the south-east, although its presumed pairing was in the obscured by roundhouse ditch 2255. There were no postholes that might have belonged to any outer wall, but if the wall followed the circumferential line of the protruding entrance posts the house would have had a diameter of *c* 12m. Two postpipes were present, one from the protruding entrance posthole. The entrance posthole was the largest belonging to the house, measuring 0.43m across and 0.22m deep. The diameters of the other postholes ranged between 0.21–0.37m (mean 0.26m) and 0.04–0.22m deep (mean 0.13m). One of the sherds from the roundhouse had been vitrified.

2.4.8 Only one feature, a posthole in the southern part of the enclosed area, appears to have been internally related to the structure. Five other features in the area of the house might be more likely associated with roundhouse 2255 or middle Iron Age enclosure 2260.

Roundhouses 1387 and 2253

2.4.9 Roundhouses 1387 and 2253 were represented by semi-circular arcs of postholes with respective diameters of *c* 6.50m and *c* 5.20m (Fig. 8). The remaining circuit of 1387 may have been removed by middle Iron Age enclosure 2258 to the south-west and a furrow to the north-west. A furrow also cut across the expected line of postholes belonging to 2253. It is uncertain whether these represented truncated circular houses, or semi-circular structures.

2.4.10 These houses were significantly smaller than the complete circuits belonging to houses 2250 and 2251, but comparably sized houses in the region are known (Davies 2018, 115). Even if they were originally complete circuits of postholes, the different sizes suggest different a function or chronology. They are located away from the larger houses and did not necessarily belong to the same phase of activity.

Penannular ditched roundhouses

2.4.11 Up to seven roundhouses were defined by penannular ditches dating to the early Iron Age (Fig. 8; Table 2). None of the roundhouse gullies survived to their complete extents. Roundhouse 2255 was the only example where both terminals were present. Single terminals belonging to roundhouses 1222, 1223 and 2254 survived demonstrating ESE or south-east entrances. Later features obscured the circuits of all the examples to varying degrees. The often shallow nature of the ditches, with slots in five of the examples showing depths could be as little as between 0.06m and 0.12m, suggests truncation of some of the circuits. With the exception of possible house 2257 it is likely that the ditches were all originally penannular rather than semi-circular, although this cannot be proven. Possible house 2257 was very partially surviving and might instead have been a precursor of middle Iron Age enclosure 2258 (see below).

2.4.12 Roundhouse 2255 had an additional spur ditch (1705), 7m long, protruding from the penannular ditch to the west, creating a partial enclosure to the north. Similar ditched annexes adjacent to roundhouses are known in the region but these usually date to the middle Iron Age (Davies 2018, 184).

2.4.13 Stratigraphic relationships existed between roundhouses 1222 and 1223, with 1222 being later. Roundhouse 2256 was later than early Iron Age enclosure 2268, and roundhouse 2285 cut pit 1758. Roundhouses 2255 and 2285 could not have been contemporary with one another or post-built roundhouses 2251 and 2250, although spatially 2285 may have been extant with 2251. A sequence of four early Iron Age houses is preferred but not demonstratable. No relationships existed between the features. Pottery forms include bowls with flaring rims from houses 2255 and 2256. The assemblages from 1222 and 2255 suggest they are late within the early Iron Age. Early Iron Age forms at roundhouse 1222 include a high-shouldered jar, and at 2254 a shouldered jar and a jar with an expanded rim, but both houses produced globular neckless jars that often date to the middle Iron Age. Comparing pottery fabrics between penannular ditches and post-built roundhouses also suggests that as a group

the early Iron Age penannular ditched roundhouses are later. Sandy fabrics generally replaced shell though the Iron Age in the region. Shell accounted for 78–100% of the pottery fabrics in the post-built roundhouses by weight, compared with 17–56% of the pottery from the early Iron Age penannular ditches. Sand (including sand and limestone) accounted for up to 8% of the fabrics in the post-built roundhouses, and up to 44% (mean 21%) for the penannular ditches.

2.4.14 Internal features were found in most of the penannular ditches, although few can be confidently associated with the houses and often features were found to of a later date. Two unexcavated postholes appear to have been entrance features to roundhouse 2255. The penannular ditch of this house was recut along its southern terminal. Early Iron Age pit 1717 and four unexcavated features were found towards the centre of the house and may have been contemporary with it. Three unexcavated postholes and an early Iron Age pit, 1231, were found in the central area of roundhouse 2256, and the postholes may have had a structural function.

Roundhouse	Phase	Post-ring diameter	Projected wall diameter	Orientation	Notes
1387	EIA	*c* 6.50m	*c* 6.50m	-	Six postholes in arc. Half surviving, obscured by MIA enclosure
2250	EIA	9.20m	*c* 12m	SE	14 postholes in clear circle, one more just inside circuit. Projecting entrance posthole 1.40m beyond inner circuit containing postpipe, other porch posthole prob truncated by RH 2255. Also 1 Neolithic sherd. Not contemporary with RH 2251. One pot sherd vitrified.
2251	EIA	10m	*c* 12.90m or 15.50m	SE	18 postholes in clear circle. Projecting entrance with two pairs of larger postholes 2.75m beyond inner circuit. Up to six postholes possibly related to outer wall. 24 smaller internal postholes (5 sherds/22g), no clear structure. Includes bowl with flaring rim and vertical sided jars. Also 1 Neolithic sherd. Not contemporary with RHs 2250, 2255 or 2285
2253	EIA	*c* 5.20m	*c* 5.20m	-	Eight postholes in arc/semi-circle
2292	MIA	4m	4m	-	Five postholes, obscured by furrow to S. Only possible house. Globular jar

Table 1: Summary of post-built roundhouses

Roundhouse	Phase	Diameter	Orient-ation	Ditch width	Ditch depth	Excavated slots	Notes
1222	EIA	13.60m	ESE?	0.48–0.88 *0.72m*	0.21–0.25m *0.23m*	4	Semi-circle, but ESE terminal appears real. Nine internal postholes, none clearly part of house. Includes high-shouldered and globular neckless jar. Cuts RH 1223.
1223	EIA	16.60m	SE?	0.36–0.66m *0.49m*	0.12–0.21m *0.18m*	4	Semi-circle, but SE terminal appears real. Nine internal postholes, none clearly part of roundhouse. Not contemporary with 4–poster 2298. Cut by RH 1222.
2254	EIA	12.60m	SE?	0.28–0.58m *0.46m*	0.09–0.38m *0.22m*	3	Partially surviving but SE terminal appears real. Recut. Six internal features, none clearly part of house. Includes shouldered jar, expanded rim and globular neckless jar.
2255	EIA	11.50m	SE	0.30–1.12m *0.61m*	0.06–0.56m *0.21m*	6	Recut. Entrance postholes? Spur ditch to W. Four central internal pits possibly contemporary. Not contemporary with RHs 2250, 2251 or 2285. Includes bowl with flaring rim. Slot 1932 contains 57/585g pot.
2256	EIA	*c*12.70m	-	0.31–0.75m *0.58m*	0.08–0.29m *0.15m*	4	Partially surviving, no terminals. Three central postholes and a pit could be contemporary. Includes bowl with flaring rim. Cuts enclosure 2268.
2257	EIA	-	-	0.20–0.40m *0.30m*	0.08–0.09m *0.09m*	1	Very partially surviving, no terminals. Possibly not house but part of enclosure 2258. Recut
2285	EIA	*c*12.40m	-	0.28–0.90m *0.50m*	0.08–0.23m *0.17m*	3	Partially surviving, no terminals. Not contemporary with RHs 2250 or 2255

Table 2: Summary of roundhouses defined by penannular ditches (mean dimensions in italics)

Four- and six-post structures

2.4.15 One four-post structure, 2298, and one six-post structure, 1449, were discovered (Fig. 8). The four-post structure measured 2.60m by 3.15m and was orientated north–south. The postholes were 0.30–0.43m across (mean 0.33m) and 0.27–0.33m deep (mean 0.30m) and each had a single fill. The structure could not have been contemporary with roundhouse 1223 as it overlapped the penannular ditch. The structure was within the circuit of the penannular ditch belonging to roundhouse 1222, but just 0.50m from the edge of the ditch and the two were probably not related to each other.

2.4.16 Six-post structure 1449 was square, with sides measuring *c* 3.50m, and was orientated NW–SE. The postholes were 0.14–0.63m (mean 0.56m) diameter and 0.10–0.22m (mean 0.16m) deep. A large piece of limestone was found at the base of posthole 1431, and this may have been used as a post-pad. The fill of posthole 1419 contained charcoal and an environmental sample produced three cereal grains (two of wheat), as well as glume base fragments and charred seeds including *Sherardia arvensis*, grass seeds and *Vicia/Lathyrus*.

2.4.17 Six-post structures are more common to the late Bronze Age in this region, although early Iron Age six-post structures are known in the Thames Valley at Latton Lands (Powell *et al.* 2009) and St Ann's Heath School (Lambert *et al.* 2013, 36). A rebuilt middle Iron Age example is known locally at Ashville Trading Estate (Parrington 1978, 13–15).

Enclosures

2.4.18 Two partial enclosures, 2268 and 2266, were dated to the early Iron Age (Fig. 8). The eastern part of enclosure 2268 was exposed and consisted of two ditches, the southern of which was curvilinear and continued beyond the excavated area to the west. An entrance gap between the two ditches extended 8m across. The northern ditch was cut and obscured by middle Iron Age and Roman ditches and no western return was observed. A number of early Iron Age features were found inside the enclosure, including roundhouse 2253, although the southern ditch was cut by early Iron Age roundhouse 2256. The terminus of the southern ditch measured 0.8m across and 0.2m deep and had a flat base (Fig. 11, section 1064).

2.4.19 The eastern part of the enclosure 2266 was exposed to the east of enclosure 2268. This consisted of a length of ditch that extended ESE/WNW for *c* 18.50m before turning WSW for *c* 17.50m, then returning back to the WNW for *c* 7m. The enclosure was cut and obscured by later features and no terminals were identified. It may have been an annex to enclosure 2268, but there were no direct stratigraphic relationships. Alternatively, the enclosure may have been a later replacement of 2268 and contemporary with early Iron Age roundhouse 2256.

2.4.20 A linear ditch, 2297, also dated to the early Iron Age and probably formed part of an enclosure (Fig. 9). This was presumably related to the overlapping roundhouses to the east, but it was cut at its northern end and its overall form was obscured by later enclosures 2260 and 2261.

Pits

2.4.21 Twelve pits were dated to the early Iron Age (Figs 8 and 9). Most of these were small with diameters up to *c* 1.50m and depths less than 0.45m. Most contained one fill, except for one with two fills. Six pits were bowl-shaped in profile, with sloping sides, and four were cylindrical with vertical sides. All were circular or oval in plan.

2.4.22 Pits 1037 and 2235 were exceptions, and were located adjacent to each other. Pit 1037 measured 2.05m by 2.44m and was 0.93m deep, and had an approximate volume of 3.28m^3. Pit 2235 was circular with a diameter of 1.92m and depth of 0.94m, and approximate volume of 2.83m^3. These were much larger than the other early Iron Age pits, the third largest having an approximate volume of 0.67m^3. Pits 1037 and 2235 were predominantly undercut (eg Fig. 11, section 1010). They respectively contained five and six fills, but were mostly devoid of finds. The very different sizes and profiles of these pits suggests a different function to the bulk of the features and they are large enough to be grain storage features (cf Hill *et al.* 1983; Lambrick 2009, 274–6; Reynolds 1974).

Postholes

2.4.23 Nine postholes containing early Iron Age pottery and not assignable to a structure were found (fig. 8). It is likely that most of the *c* 52 poorly-dated postholes also not assignable to structures in the Iron Age settlement are early Iron Age.

2.5 Middle Iron Age

2.5.1 The middle Iron Age settlement developed in the same area as the early Iron Age focus, with activity consisting primarily of enclosures in this period (Fig. 12). The early Iron Age enclosures in the southern area were replaced by larger, more rectilinear enclosures, while a series of conjoined enclosures were dug to the north. No clear evidence of middle Iron Age houses was identified and only one possible small post-ring was discovered. A crouched inhumation burial was found in a pit in one of the northern enclosures, while a further 10 pits were also dated to the middle Iron Age.

Roundhouse 2292

2.5.2 Roundhouse 2292 was post-built with a diameter of 4m. Only five postholes survived with remaining features probably truncated by a furrow in the south-eastern part of the circuit. Given this truncation, the designation of the postholes to a roundhouse is not certain. Just 3% of middle Iron Age houses in the Thames Valley are defined only by a post-ring as penannular ditches are overwhelmingly present in this period (Davies 2018, 219–20). At 4m in diameter this would also be the smallest middle Iron Age post-ring known in the Thames Valley, although slightly larger post-rings with diameters between 4.3–4.5m have been found at Gravelly Guy, Building E1 (Lambrick and Allen 2004, fig. 3.12), Noah's Ark Inn/Frilford, Hut Site B (Bradford and Goodchild 1939, 7–8), and Thornhill Farm, Structure 210 (Jennings *et al.* 2004, 26). A single pot sherd from a globular jar was found in one of the postholes.

North-eastern enclosures

2.5.3 The three conjoined enclosures in the north-eastern part of the site were together aligned NW/SE (Fig. 13). The central enclosure, 2259, cut the ditches of enclosures 2258 and 2260, and was itself by late Iron Age enclosure ditch 2261 (see below). It is

uncertain how 2260 chronologically relates to 2258 but they may have been contemporary. Enclosures 2258 and 2259 each had one major recut and other minor recuts, while only minor recuts were found around enclosure 2260.

2.5.4 Pottery fabrics from these enclosures can be compared to see if any pattern is visible that accords with the stratigraphy. Fabric proportions between enclosure 2258 and later enclosure 2259 were very similar, respectively comprising (by weight) 37% and 34% sand (including sand and limestone), 18% and 23% shell, and 42% and 43% limestone. Enclosure 2260 was quite different as sand was the dominant inclusion type, in 85% of the material by weight, with shell at 4% and limestone at 11%. This appears to go against the general regional pattern of sand becoming more prevalent through the Iron Age, although the extent to which sand continued to increase through the middle Iron Age is uncertain. Nevertheless, the much higher percentage of sandy fabrics in enclosure 2260, stratigraphically earlier than 2259, suggests residual early Iron Age material accounts for a significant proportion of the material in enclosures 2258 and 2259. Early Iron Age forms are present in both enclosures.

2.5.5 A dark layer was found compressed into the top fill across numerous parts of enclosure ditches 2258, 2259 and 2260. This masked many of the relationships between the ditches in plan. The date of this possible organic-rich sealing layer was not clear, although no pottery post-dating the Iron Age was found.

Enclosure 2258

2.5.6 Enclosure 2258 measured *c* 31m long and *c* 16.5m wide. The north-western side was rounded, but the south-eastern more squared. The enclosure had a 4m-wide entrance along the south-western side. A single recut was observed around most of the enclosure (Fig. 14, section 1028), whereas three recuts were seen on the north-eastern side. The enclosure was cut on its south-eastern side by enclosure 2259 (Fig. 11, section 1258).

2.5.7 The pottery assemblage from the ditch was quite large, comprising 169 sheds (1985g). This included four early Iron Age forms (three bowls with flaring rims and a jar with an expanded rim). These may all have been residual and three examples were from the recut of the ditch. One of the flaring rims was found in the upper fill (2010, cut 2007) of the original ditch associated with 15 sherds (124g) from a middle Iron Age neckless globular jar. This had internal residue from which a sample gave a radiocarbon date of 360–170 cal BC (95% confidence; SUERC-96909). Four other middle Iron Age ceramic forms were found in the ditch, being two further neckless and two necked globular jars. Three of these were found in the lower fill (1119) of the original ditch cut (Fig. 14, section 1028). This shallow fill produced 51 sherds (660g) that appear to be a deliberate dump, over which another possibly deliberately placed group of animal bones was found in fills 1120 and 1122.

2.5.8 Possible early Iron Age roundhouse 2257 was found in the north-western corner of enclosure 2258 and the boundary ditch closely follows its position, suggesting the two features may be related. A limited number of other features were found in the enclosure, but none could be dated. Posthole alignment 2244 might have created an enclosure in the north-west corner of enclosure 2258, but this was only broadly dated as Iron Age and may not be contemporary.

Enclosure 2260

2.5.9 Enclosure 2260 was *c* 24m long and *c* 18.50m wide. It had two entrances, one to the south that was 3.50m wide, and one to the south-east that was 8.20m wide. No recuts were visible in most interventions into the ditch, except for the north-eastern side where three recuts were seen. The enclosure was cut by the first phase of enclosure 2259 and late Iron Age enclosure 2261 (eg Fig. 14, sections 1210 and 1287). Pottery from the ditch comprised 116 sherds (1636g) and included a globular neckless jar and a slack-sided jar.

2.5.10 Numerous features were discovered inside the enclosure, including two of the early Iron Age roundhouses which obscured any chance of knowing whether many pits and postholes were of the early or middle Iron Age phase. Four middle Iron Age pits were found in the western side of the enclosure, however, including pit 2143 containing inhumation burial 2145 (see below).

Enclosure 2259

2.5.11 The first phase of enclosure 2259 measured *c* 18m long and *c* 15m wide. The enclosure had a major recut along its circuit that was slightly smaller, measuring *c* 15.50m long and *c* 13m wide. The first phase of the enclosure cut enclosures 2258 and 2260 on each side and was cut by late Iron Age enclosure 2261 on the south-eastern side (Fig. 14, sections 1258, 1195 and 1287). Aside from the major recut, two minor cuts were seen across the northern length of the enclosure. The pottery assemblage was modest, comprising 60 sherds (517g), including a residual sherd from a bowl with a flaring rim, as well as three globular jars, one with a neck, and an ovoid jar. Ten unexcavated features, all possibly postholes, were found inside the enclosure.

South-western enclosures

2.5.12 Four enclosure ditches were found in the western part of the Iron Age settlement. The form of the enclosure(s) could not be clearly understood as the majority of the enclosed area was beyond the excavated area to the west.

2.5.13 Ditch 1450 was exposed for 45.50m on a NW–SE alignment. It continued beyond the excavated area to the north-west and was cut by a furrow to the south-east. The ditch may have continued to the south-east, but early Roman ditch 2263 was found to cut it in this area. Given the close alignment of ditches 1450 and 2263 it seems likely that an associated bank/boundary remained visible into the early Roman period.

2.5.14 Ditch 2267 was exposed for 29m and was aligned NE–SW. It continued beyond the excavation area to the south-west. The ditch cut early Iron Age enclosure 2266 and undated ditch 2265, and was cut by middle Iron Age ditch 2264 (Fig. 14, section 1259). The pottery assemblage included three neckless globular jars, a necked jar and a necked globular bowl. It is likely that the ditch formed a large rectilinear enclosure with ditch 1450. An intervention (1095) at the south-western end of ditch 2267 produced seven human cranial fragments belonging to one individual and one probably associated femur from its middle and upper fills. A bone gouge was also found in the same upper fill. These two fills also produced 33 sherds (476g) of pottery and 324 animal bones, a third of the total middle Iron Age bone assemblage. The finds from these two contexts are notable, containing the only middle Iron Age

disarticulated human bone as well as one of two worked bone objects from the period. It is uncertain if this constitutes deliberate deposition, although the quantity of artefacts suggests the processes surrounding deposition for these two contexts differed from the majority of the middle Iron Age fills.

2.5.15 Ditch 2264 was exposed for 32m and was aligned ESE–WNW. It had an entrance 5.80m wide and continued beyond the excavated area to the west. The ditch contained residual sherds from a bowl with a flaring rim, as well as sherds from a slack-sided jar and a handled jar. The ditch cut ditch 2267 and was on a different alignment to ditch 1450. It is on the same alignment as enclosure 2275 to its north, however, and these appear to have been part of a second sub-phase of enclosure system.

2.5.16 Enclosure 2275 consisted of one L-shaped ditch or two perpendicular ditches, the corner of which was not exposed as it lay beyond the excavated area. The exposed N–S length was *c* 21.50m long, cutting ditch 1450 at its northern end, and the E–W length extended for *c* 8.50m. The pottery assemblage includes a globular neckless jar.

Inhumation burial 2145

2.5.17 The only articulated human remains dating to the middle Iron Age was inhumation burial 2145 (Fig. 12). They were placed on the eastern side of shallow, circular pit 2143. The pit measured 1.48m in diameter and 0.15m deep, and was cylindrical in section with a flat base. The pit was located in the western side of enclosure 2260 near three other middle Iron Age pits and an early Iron Age pit, and it cut the penannular ditch of early Iron Age roundhouse 2285 (Fig. 13). A fill covering the burial contained 20 sherds (109g) of pottery, including a rim sherd from a barrel-shaped neckless jar. On top of this fill, a layer of limestone blocks up to *c* 0.40m in length were found covering the central area of the pit, some *c* 1.35m diameter (Fig. 15). The skeleton was that a young adult female (18–25 years) crouched on her left side and orientated with her head to the north and her hands under her face (Fig. 16).

Pits

2.5.18 Eleven pits dated to the middle Iron Age. These were generally very similar to the early Iron Age pits. All but one were small with diameters of less than 1.50m and depths of less than 0.30m. All were circular or oval in plan, seven had bowl-shaped profiles, three were cylindrical and one was undercut.

2.5.19 Pit 1187, located at the northern end of the excavated area, was an exception (Fig. 12). This was much larger, measuring 1.30m by 2.12m and 1m deep, and was cylindrical in profile. The pit had seven fills including several lower greenish clays and a dump of unworked, unburnt limestone in the top of the pit, similar to that found in inhumation pit 2143 (Fig. 17). This is the only middle Iron Age pit that might have comfortably been able to store grain, although its width to depth ratio is not ideal. Pit 1173 was located adjacent to 1187 and produced fragments of middle Iron Age pottery and fired clay.

2.5.20 Internal charred residue from a slack-sided jar with a beaded rim was from pit 2201, adjacent to inhumation pit 2143, was radiocarbon dated to 325–200 cal BC (76% confidence; SUERC-96910). Pit 1499 was located south of enclosure 2259 and contained 23 animal bones, mostly consisting of the articulating forelimb of a sheep or goat, and a necked jar sherd in fabric SALI2. Immediately south of early Iron Age pit

2235 was pit 1019, which had a cylindrical profile and measured 1.16m across and 0.21m deep. An environmental sample from this pit (1000) was very poor in cereal grains but produced a large assemblage of glume bases and fragments of rachis and oat awns, suggesting that it was associated with crop processing.

2.6 Early/Middle Iron Age

2.6.1 All of the significant Iron Age features could be assigned to a subphase. A posthole alignment and a scatter of pits and postholes found across the area of the Iron Age settlement have been phased only to the Iron Age. Many of these features do not have dating evidence, and could belong to other periods. However, apart from the trackway the early Roman activity was spatially separated from the Iron Age settlement and it is likely that most of the features in this section are Iron Age.

Pits

2.6.2 Seventeen poorly dated pits were found in the north-western part of the site in the area of Iron Age settlement. Two contained undiagnostic Iron Age pottery, but the rest did not contain dateable finds and are assumed to be Iron Age features. The sizes of the pits were very similar to most of the dated early and middle Iron Age examples. They were all circular or oval in plan and bowl-shaped in section.

Posthole alignment 2244

2.6.3 A line of six postholes orientated WNW–ESE over 6.15m was found in the north-western part of middle Iron Age enclosure 2258, and a seventh was positioned so it might have created a division within the enclosure measuring *c* 8m by 4m (Fig. 13).

2.7 Late Iron Age

Enclosures 2261 and 2273

2.7.1 Enclosure 2261 was bounded by an L-shaped ditch that cut middle Iron Age enclosures 2261 and 2259, and was directly influenced by their location and alignment (Fig. 18). At the northern end, the enclosure ditch was exposed on a SW–NE alignment for *c* 30m, before turning south-east and extending for *c* 160m. The south-eastern *c* 68m formed the south-western side of enclosure 2273 before turning north-east at the very southern end. Enclosure 2273 measured *c* 69m NW–SE and *c* 53m NE–SW. Its north-eastern boundary was marked by ditch 1814, although any possible north-western side would have been removed by early Roman ditches.

2.7.2 The pottery assemblage from 2261 consisted of 172 sherds (2132g), with about two-thirds deriving from intervention 1789 at the north-western end. The assemblage contains early–middle Iron Age material, no doubt residual from the nearby middle Iron Age enclosures. Three grog-tempered sherds from the upper fill (1793) of the ditch, along with its stratigraphic relationship with earlier features, suggests a late (or later) Iron Age date at this end. However, a radiocarbon date obtained from charred seeds also recovered from this upper fill produced a surprisingly early date of 360–170 cal BC (95% confidence; SUERC-96994) and perhaps indicates that a great deal of mixing and redeposition had occurred in this area. Human skull fragments, probably from an adult female, were found in the upper fill (2148) of intervention 2138 at the

northern corner of the enclosure. At the south-eastern end of the ditch, where it became part of enclosure 2273, a more securely dated late Iron Age pottery assemblage was recovered with the majority being grog-tempered ware, and there was much less residual material in this area.

Pits

2.7.3 Three pits were dated to the late Iron Age. Pits 1009 and 2114 were in the western part of the excavated area, seemingly isolated from one another and other late Iron Age features. They measured *c* 1.72m and 0.94m across and 0.14m and 0.12m deep respectively, and each contained early–middle Iron Age pottery. They are dated to the late Iron Age owing to the presence of a small amount of grog-tempered pottery sherds in each, although it is possible that these were intrusive. Pit 2070 was located 12m north-east of enclosure 2273 and was cut by an early Roman ditch. It measured *c* 1.10m across and 0.94m deep, and its single fill contained three sherds (45g) of late Iron Age pottery.

2.8 Early Roman

2.8.1 Activity in the early Roman period continued to be influenced by and orientated on the layout of the settlement (Fig. 19). Late Iron Age enclosure 2273 was recut at least three times and a road was constructed on a NW–SE alignment perhaps following the route of an earlier trackway that may have been in place during the later Iron Age.

Enclosures 2293, 2294 and 2270

2.8.2 Enclosure 2293 was a direct replacement of late Iron Age enclosure 2273 and covered approximately the same area (Fig. 20). The south-eastern side of the enclosure was not identified, and it is uncertain whether this side was left open, had been recut by enclosure ditch 2295, or lay farther to the south-east. Recuts of ditch 2293 were found on the north-eastern and south-western sides (eg ditch cuts 1363 and 1333; Fig. 21, section 1065).

2.8.3 Enclosure 2294 replaced enclosure 2293, recutting the north-western side (Fig. 22, section 1143). This enclosed a slightly larger area, measuring 70m NE–SW, and *c* 69m NW–SE. The south-eastern side and about half of the south-western side was completely replaced by ditches of enclosure 2295, although a remnant of the south-eastern ditch survived. A recut was seen on the surviving section of the south-western ditch.

2.8.4 Enclosures 2270 and 2295 represent a reconfiguration of the enclosure, which was divided in two with the north-western half comprising an annex (2270) extending to the south-west and in total measuring *c* 80m by 27m, although the north-western side appeared to terminate within the area of the previous enclosure. It was found to cut all the earlier ditches that it came into contact with. The south-eastern half of the enclosure was defined externally by ditch 2295, which measured 63m NE–SW and 34m NW–SE, and which terminated at the eastern end where an entrance is apparent. These enclosure ditches contained the latest-dating pottery in the assemblage, including sherds of 2nd-century samian ware.

2.8.5 A series of ditches were located within the early Roman enclosure and appeared to divide it further. These were aligned NW–SE and NE–SW and were often difficult to place stratigraphically, and in some cases were complicated by the presence of medieval furrows on the same alignment, but most probably relate to the enclosure's latest iteration. Most were fairly straight, although ditch 2272 was a curving feature located in the northern corner. Ditch 2276 was the only one to produce both late Iron Age and early Roman pottery (21 sherds/670g) and presumably dates very early in the Roman period. Ditch 2056 produced an Atrebatic-style, sandy ware dish decorated with a single burnished wavy line. The ditches appear to split the north-western half of the later enclosure approximately in half again, while curvilinear ditches were found in the northern and eastern corners. The internal ditches had widths of 0.18–1.55m (mean 0.78m) and depths of 0.08–0.66m (mean 0.28m) and contained 178 sherds (2942g) of pottery.

2.8.6 Twelve pits containing early Roman pottery were found inside the enclosure, alongside a further eight pits that did not contain dating evidence but were probably contemporary (Fig. 23). All of the pits were broadly circular or oval in plan and bowl-shaped in section. Dumps of limestone blocks were found in pits 1826, 1828 and 1983, while a furrowed handle from a Verulamium-type amphora was recovered from pit 1769 and an environmental sample from 1900 was dominated by cereal glume bases and preserved grass seeds. Pits 1747 and 2058 contained fragments of Roman tile.

Building 2269

2.8.7 The remains of a building were found in the western annexe to enclosure 2270 on the same alignment as the surrounding ditch (Figs 20 and 24). Building 2269 was defined by a rectangular cut measuring 0.50–0.75m wide (mean 0.62m) and 0.15–0.28m deep (mean 0.23m), bounding an internal area of 7.50m by 5.50m. The cut had moderately sloping-to-steep sides and a flat-to-rounded base, which may represent a robber trench rather than the original foundation cut (Fig. 21, section 1261).

2.8.8 Finds from the feature were few, comprising 13 (149g) sherds of pottery, with single fills containing frequent but small pieces of limestone rubble (<0.25m). One pottery sherd dated to *c* AD 1150–1350, perhaps suggesting a date of robbing activity or at least a *terminus post quem*. The cut truncated a metalling layer (2075) that originally related to part of the Roman road to the east (see below). This appears to have been incorporated within annexe 2270 and was perhaps secondarily used as a convenient surface in and around the building.

Roman road

2.8.9 A linear carriageway defined by ditches with the remains of patches of metalling consisting of up to two laid layers was found crossing the site on a NW–SE alignment (Fig. 19). The carriageway was *c* 20–28m wide and was exposed over *c* 150m, continuing beyond the excavation area in both directions. The south-western ditch turned to the SSE in the southern part of the site, where the ditches of the early Roman enclosures may have defined the north-eastern roadside. It is possible that the road either turned here, or open up into a wider area, *c* 50.5m across, next to the settlement.

2.8.10 The north-eastern roadside ditch (2262) had up to four recuts along most of its length (Fig. 21, section 1144). The ditch did not extend into or farther south than enclosure 2270, where it appears to have terminated. Although there were no direct stratigraphic relationships, the earliest cut of ditch 2262 may have been contemporary with enclosures 2293 and/or 2294, and later replaced by the south-western end of enclosure 2270. Ditch 2263 flanked the road to the south-west. This was recut no less than three times along various lengths but not continuously (eg Fig. 21, sections 1011 and 1260). Ditches 2262 and 2263 measured up to 0.55m and 0.88m deep respectively, and both were up to *c* 1.8m across. However, in other areas they were as narrow as 0.43m and 0.24m and just 0.08m and 0.06m deep respectively. This variation is probably due to later truncation, but it is also possible they were dug in different areas when necessary, rather than being originally defined in one go all along their lengths. Early cutting of the ditches probably belongs to the middle of the 1st century AD, owing to the recovery of two sherds of pre-Flavian pottery in ditch 2263.

2.8.11 Five surviving areas of metalled surface were found between the flanking ditches, with one partially external, forming the surface of the road (2075, 2040, 2299, 2300 and 2301). It is possible that most or all of the road area was metalled, although only a small percentage of this has survived truncation and possibly clearance and/or robbing. All the surfaces included a layer of rounded pebbles with overlying silting deposits. A spread of rough limestone pieces was found directly on the pebbles of surface 2299, located about midway along the exposed line of ditch 2263. A spread of limestone pieces was also found between two layers of silting as part of surface 2301 at the southern end of the excavated area (Fig. 22, section 1109; Fig. 25). This succession suggests two metalling phases, the silting deposits representing phases of usage, and these may correspond with the recutting observed along the ditches.

2.8.12 The layer of pebbles comprising surface 2040 expanded into ditch 2263 as a middle fill (2038), suggesting that the surface and the ditch were contemporary with some erosion into the partially silted ditch (Fig. 21, section 1260). A spread of limestone that was part of surface 2299 was found externally on the south-west side of a late recut (1042) of ditch 2263 (Fig. 21, section 1011). This spread might have been related to an entrance or was part of an earlier phase of road alignment prior to the digging of ditch 2263 in this area, since the road became narrower northwards from this area. A layer of trample (1498) was also found overlying this spread. A possible realignment was also evidenced by the construction of enclosure 2270 around surface 2075. The surface may have originally been part of the road, but was later reused in and around building 2269 (see above).

2.8.13 Two wheel ruts were found cutting the layer of limestone of surface 2301 (Fig. 22, section 1109; Fig. 25). These were 0.12m and 0.14m wide and 0.10m deep, and were set 1.30m apart. The line of the ruts followed the same alignment as the road. A layer of silt was found filling the wheel ruts and covering the limestone surface.

2.9 Medieval

2.9.1 Furrows crossed the site on a NE–SW alignment, on exactly the same orientation as the early Roman enclosure in the southern part of the site, as well as being perpendicular to the Roman road and on approximately the same orientation as the northern middle Iron Age enclosures. The same field system alignment is present on

the early OS maps and remains to the present day, shown by the field boundary to the immediate south of the site and retained in Dunmore Road to the south of that. Although there is no direct archaeological evidence between the early Roman period and the later medieval period, some form of land division or orientation is very likely to have persisted following the abandonment of the Roman settlement.

2.9.2 A small amount of medieval pottery (12 sherds/144g) was found, mainly in plough furrows, but also as small intrusive pieces. The largest group was Brill-Boarstall ware dating *c* 1225–1400. An 11g sherd of Kennet Valley B ware dating *c* 1150–1350 was found in context 2019, a fill of the robber trench of building 2269, suggesting a date for the removal of the building's foundations. This may have been part of a wider clearing of the site to allow for arable cultivation. Medieval ploughing may also have impacted on the survival of the road surface.

2.10 Undated

Ditch 2265

2.10.1 Ditch 2265 was found in the southern part of the excavated area. It appeared to form the north-eastern corner of an enclosure, the remainder of which would have lain beyond the excavated area (Fig. 26). The ditch was aligned WNW-ESE for 96m before turning to the south and continuing for 42m. The ditch measured 1.06–3.60m wide (mean 2.24m) and 0.80–1.17m deep (mean 1.01m) and generally had steep sides and a flat base (Fig. 27, section 1288). It contained between one and four fills, with the lowest tending to be quite compact. Charcoal flecking was common in the middle fills, and one (2155) was relatively rich in charcoal, although an environmental sample (1031) did not produce any material that was suitable for further analysis.

2.10.2 The ditch was cut by middle Iron Age ditch 2267 and early Roman ditch 2263, and partially covered by early Roman metalling. Pottery was limited to five sherds (21g) from an early Neolithic Decorated Bowl in lower fill 1293 (ditch cut 1291), with some tiny, undated ceramic fragments in middle fills 2154 and 2155 (ditch cut 2141). A single piece of worked flint was also recovered from the feature.

2.10.3 Phasing of the ditch remains problematic. Stratigraphically the feature belongs to an early part of the middle Iron Age at the latest, and probably before. The orientation is at odds with the NW–SE/NE–SW alignment relating to almost all the Iron Age and Roman features. The only prehistoric feature on a similar alignment was early Iron Age enclosure 2266, *c* 15m to the north of ditch 2265, to which it could be contemporary with. However, if the ditch was an early Iron Age feature, more pottery might be expected. Clearly, an early Neolithic date is possible, as this concords with the stratigraphy and finds, but a ditch of this type is otherwise unusual for that period (see discussion).

Posthole 2177

2.10.4 Posthole 2177 was located in the area of the Roman road, in between the two main Iron Age settlement foci (Fig. 26). The posthole was one of a number of similar undated features in this area, and is likely to be Iron Age in date. It did contain, however, probable early Neolithic sherds, which may or may not be residual finds.

3 ARTEFACTS

3.1 Flint *by Mike Donnelly*

Introduction

3.1.1 The excavation yielded a small assemblage of 42 struck flints and 13 pieces of burnt unworked flint weighing 108g, to which can be added a single flake from the previous evaluation (Table 3). The assemblage contained numerous tools forms but was widely dispersed across the site. The tools may have had a broad date range, but all the diagnostic elements appeared to be of late Neolithic or early Bronze Age date and it is possible that most of the assemblage belongs to these periods. A small number of crude squat flakes were also present in several features, and it may be that some flintwork belonged to a middle–late Bronze Age phase of activity.

Methodology

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

Provenance

3.1.3 The assemblage featured finds from ditch fills, pits and topsoil/subsoil (Table 4). Postholes and one grave (inhumation pit 2143) also contained small amounts of flintwork. Additional flints were found in layers, such as metalled surface 2300 (layer 1224) and trample layer 1498. Nearly all of this material was recovered from features dated to the Iron Age or Roman periods and it is possible that some of the flint could be contemporary with Iron Age activity. However, it is more likely to be residual material from earlier.

Discussion

3.1.4 This small assemblage may have included a limited early-prehistoric element identified through a small number of blade forms, two of which had clear evidence of platform edge abrasion (something that is uncommon after the early Neolithic period) as well as one probable adze sharpening flake that could be Mesolithic in date. Later prehistoric knapping may also be represented by a limited number of pieces and probably relates to the middle–late Bronze Age activity and could conceivably continue into the Iron Age. These periods can yield quite significant volumes of flintwork in Oxfordshire, but the reasons for this variation are unclear and may reflect poorer farmsteads utilising far more flintwork, or it may simply reflect individual preference

or comfort-level working with the material. Two retouched flakes, one from late Iron Age ditch 2261 and another from early Roman roadside ditch 2262, represent the most likely candidates for later prehistoric working.

Category type	Number
Flake	24
Blade	3
Bladelet	0
Blade index	11.11% (3/27)
Irregular waste	2
Adze sharpening flake	1
Sieved chip 10–2mm	1
Core single platform flakes	1
Core multiplatform flakes	1
Core on a flake	1
Scraper thumbnail	1
Knife backed	2
Knife scale-flaked	1
Knife other	1
Retouched flake	2
Retouch other	1
Total	42
Burnt unworked	13/108g
No. burnt (%)	10/42 (23.81%)
No. broken (%)	18/41 (43.90%)
No cores/related debitage (%)	3/41 (7.32%)
No. retouched (%)	8/41 (19.51%)

Table 3: Composition of flint assemblage

Category type	Number	Percentage
Ditches	20	47.62
Ring ditches	1	2.38
Pits	8	19.05
Posthole	3	7.14
Grave fill	1	2.38
Layers	3	7.14
Topsoil/Subsoil	6	14.29
Total	42	[100]

Table 4: The flint assemblage by context type

3.1.5 The bulk of the assemblage is clearly Neolithic or early Bronze Age in date with a probable focus in the later part of the Neolithic–early Bronze Age. Tool forms made up 19.51% of the assemblage, alongside 7.32% of cores. Imbalanced or recovery biased assemblages tend to have similarly high figures for obvious pieces, such as cores and tools, but here the figure for tools is higher suggesting a genuine depositional pattern for this location, something that is also hinted at by the unusually high quality of some of these tools. Many of these finer forms would not be out of place in high-status burials, but their presence here as surface or residual finds may relate more to their deposition in some form of midden or surface spread. The tool and core component is higher than that found at the burial site of Barrow Hills, Radley, where tools accounted for 5.58% and cores for 2.98% of the non-chip assemblage (Bradley 1999).

At Yarnton, in contrast, retouched forms from a largely *in situ*/pit-derived assemblage amounted to 12.3%, while core totals mirrored Barrow Hills at 2.8% (Hey *et al*. 2016).

3.1.6 Several knives were recovered including one very well executed scale-flaked example from the subsoil, where it was recovered alongside a complex retouched artefact that may have represented a handle on a larger piece. A slightly larger but all-over retouched thumbnail or small disc scraper was recovered from the topsoil. Other knives were recovered from middle Iron Age ditch fill 1414 (enclosure 2258), early Roman layer 1498 and early Roman ditch fill 1586 (enclosure 2294). Ditch fill 1414 had a broken example with clear heavy backing along its left edge, while a small fragment of the cutting edge remained. Ditch fill 1586 contained a backed knife, although the backing was natural. The cutting edge was largely intact and revealed quite regular, careful invasive retouch. Layer 1498 also contained a knife fragment with interlocking and heavy invasive ventral and dorsal retouch forming the edge, but the overall form of the piece was unclear. Nearly all of these pieces could be late Neolithic or early Bronze Age in date, and the same could be said for much of the debitage and core forms identified.

3.1.7 Oxfordshire contains several rich concentrations of prehistoric ritual, ceremonial or communal monuments dated to the Neolithic and early Bronze Age including one group just to the east of Dunmore Road at the causewayed enclosure at Abingdon (Case and Whittle 1982) as well as recent discoveries around Thame (Ellis *et al*. forthcoming). The Abingdon causewayed enclosure lies to the west of Barrow Hills, Radley (Barclay and Halpin 1999), while a putative causewayed enclosure has been suggested to the east of Radley based on fieldwalking carried out there by the Abingdon Archaeological Group (Tim Allen pers. com). Such sites are often associated with rich surface spreads or middens such as at Eton (Anderson-Whymark 2013) or around Stonehenge (Harding 1990), and such a monument cluster could account for the early prehistoric activity represented by the flintwork found at Dunmore Road.

3.2 Neolithic and Bronze Age pottery *by Alex Davies*

Introduction

3.2.1 Sherds belonging to the early Neolithic (Decorated Bowl), early–middle Bronze Age (Biconical Urn) and late Bronze Age (Post-Deverel-Rimbury) were discovered. A single early Neolithic vessel from an undated, but possibly early prehistoric, ditch was diagnostic. A handful of other probable early Neolithic sherds are likely to all be residual. The Biconical Urn assemblage is unusual and of regional significance, and it all derived from one radiocarbon-dated 'oven' feature. Sherds from three late Bronze Age vessels were discovered as residual finds. A further highly abraded, 4g sherd from middle Iron Age inhumation pit 2143 could not be dated but is probably Neolithic or Bronze Age.

Methodology

3.2.2 The pottery was recorded following the recommendations of the Prehistoric Ceramics Research Group (PCRG 2010; PCRG *et al.* 2016). Sherds from each context were separated into vessels and details of each vessel was recorded. No cross-context refitting was attempted. The following data was recorded on an Excel spreadsheet

which is available in the archive: fabric, level of abrasion, vessel form, rim form, number of body sherds, number of rim sherds, number of base sherds, weight, decoration, surface treatment (none recorded), rim diameter, wall thickness, estimated vessel equivalent (EVE, or percentage of rim surviving; Orton and Hughes 2013, 210–3), features (eg handles or modifications; none recorded), and presence of carbonised residue (none recorded).

Early Neolithic

3.2.3 Ten Neolithic sherds weighing 61g from five contexts representing up to five vessels were discovered (Table 5). Only one vessel is diagnostic, an early Neolithic Decorated Bowl, although the other sherds are probably from the same type of vessel. The diagnostic vessel derived from undated ditch 2265 (lower fill 1293). These five sherds (21g) include an expanded, T-shaped rim with incised chevron decoration on the rim top (Fig. 28, no. 1). The profile is only partially present but appears to be leading to a round-bodied bowl. The rim diameter is *c* 240mm, with *c* 5% of the rim surviving. This general form can be found amongst the Abingdon causewayed enclosure assemblage (Avery 1982, 66, fig. 17.37, 75, fig. 18.57, 76, fig. 19.63). Although the decoration cannot be matched exactly at the causewayed enclosure, very similar diagonal incised lines on the top of expanded T-shaped rims were common (ibid., 28–9). The fabric contains very coarse, frequent, poorly-sorted shell voids.

3.2.4 Three other contexts produced one or two body sherds in a similar fabric, although quartz sand and glauconitic sand were occasionally present. The material was certainly residual in fills 1623 and 1685 (postholes from respective early Iron Age roundhouses 2251 and 2250). Posthole 2177 containing fill 2178 did not produce any other dating material and could not be assigned to a structure. The feature might be early Neolithic, although this was in the area of Iron Age settlement and is probably also Iron Age.

3.2.5 One 7g rim sherd was found in fill 1800 of early Roman ditch 2293. This is in a fabric containing frequent, coarse, poorly-sorted flint and quartz sand. The sherd is very abraded but is not decorated and is simple in form. The rim diameter is *c* 190mm, and *c* 4% survives. The profile appears to lead to a round-bodied bowl and is assumed to be broadly contemporary with the rest of the Neolithic assemblage. The wall thickness of all these vessels ranged between *c* 11–14mm.

3.2.6 As mentioned above, early Neolithic Decorated Bowl pottery is typically found at causewayed enclosures, but are also present often in small quantities at other monument types (Kenward 1982), in pit deposits (Hey *et al.* 2016, 351), and as residual finds in later features (Davies *et al.* in prep. a). None of the features at Dunmore Road could be confidently assigned to the early Neolithic, and the material presumably derives from an archaeologically ephemeral settlement and/or related midden.

3.2.7 Although the assemblage is small, it compares well with the nearby causewayed enclosure (Avery 1982, 26–35). At both sites, shell fabrics dominated with flint and sand present in much smaller quantities. While some may assign the assemblage to the 'Abingdon style', it is likely that Decorated Bowls are a continuum without clear regional types (Whittle 1977, 85–94; Whittle *et al.* 2011, 762–3). Decorated Bowl ceramics began in south-central England in 3770–3670 cal BC (95% probability) and ended in 3335–3245 (95% probability) (Whittle *et al.* 2011, 766).

Fabric type	No. sherds	No. vessels	Weight (g)
Early Neolithic	10	5	61
Flint (FlQs1)	*1*	*1*	*7*
Shell (Sh1)	*9*	*4*	*54*
Early-middle Bronze Age	95	27	2039
Grog	*73*	*15*	*1294*
Gr3	58	12	971
Gr4	15	3	323
Quartzite (Qt3)	*5*	*3*	*344*
Quartzite and grog	*16*	*8*	*395*
QtGr2	7	5	138
QtGr3	9	3	257
Shell and grog (ShGr2)	*1*	*1*	*6*
Late Bronze Age	10	3	143
Flint (Fl3)	*1*	*1*	*30*
Grog	*9*	*2*	*113*
GrIo2	7	1	100
GrSh2	2	1	13
Neo+BA total	115	35	2243

Table 5: Quantification of Neolithic and Bronze Age pottery

Early–middle Bronze Age

3.2.8 Up to 27 vessels belonged to the Biconical Urn tradition, totalling 95 sherds (2039g) (Table 5). All were from oven feature 2303.

3.2.9 Six fabrics were defined by Jane Timby. These are:

Gr3: Coarse grog. Generally hard fabric with oxidised or brown surfaces with a black core and lumpy surfaces. The matrix contains an ill-sorted, moderate to high frequency of mainly sub-angular to rounded inclusions of argillaceous clay 3–8mm in size with sparse quartz/quartzite and a scatter of rounded clear or opaque quartz less than 1mm.

Gr4: Very coarse grog. As Gr3 but with a lower frequency of coarser grog/clay pellets 13mm across and down to less than 1mm in size. It is difficult to determine whether this is grog, clay pellets or a mixture of both. Also present are rare inclusions of quartz/quartzite 5–6mm and rounded grains of quartz 0.5–1mm.

Qt3: Coarse quartzite. A very hard, generally reduced, coarse textured fabric with a sparse scatter of ill-sorted angular to sub-angular quartz including polycrystalline fragments largely opaque white in colour but some iron-tinged and up to 8mm in size.

QtGr2: Medium quartzite and grog. A rough-textured fabric containing a moderate frequency of finer inclusions of quartz/quartzite up to 4mm in size and rare sub-angular grog/ clay pellets.

QtGr3: Coarse quartzite and grog. As Qt3 with rare grog/clay pellets up to 10mm in size.

ShGr2: Medium shell and grog. A sparse frequency of laminar coarse fossil shell up to 7mm in size and rare sub-angular grog/ clay pellets.

3.2.10 Some 83% of the early–middle Bronze Age pottery by weight contained grog and 36% of the material contained quartzite, both with and without grog. The fabrics were mostly coarse or very coarse.

3.2.11 Six vessels are diagnostic Biconical Urns (Fig. 28, nos 3, 4, 5 and 7). All of these were sherds from the neck, most also preserved rims. These six necks were quite sharply angled inwards. All were broken at or above the shoulder angle, and no refits were present to reconstruct profiles at the shoulder. Some of the vessels were slightly thickened at this location, reminiscent of base of collars in late Collared Urns, although the position of the breaks suggests that that this feature was not as pronounced as in Collared Urns. One of the necks was decorated with incised parallel lines, and one other vessel had a fingernail impression on the angle (Fig. 28, no. 3). A seventh vessel had fingertipping on the angle.

3.2.12 Three other vessels had some form. The neck of one of these was upright, another incurving, and the third slightly incurving (Fig. 28, no. 6). All the rims were plain with no bevelling. Wall thickness ranged between 6–17mm, with a mean of 11mm. The rims of seven vessels could be measured. These had diameters between 16–30cm, with a mean of 25cm. The total EVE is 0.69.

Regional comparisons

3.2.13 The vessels sit typologically between early Bronze Age Collared Urns and middle Bronze Age Deverel-Rimbury. The grog temper, neck angles, probable thickening on the shoulder angle and single instance of incised decoration recalls Collared Urns, whereas the use of quartzite, the upright and slightly incurving neck forms, plain unbevelled rims and fingertip/fingernail decoration is related instead to Deverel-Rimbury.

3.2.14 Biconical Urns are rare in the region. The closest parallels appear to be from City Farm and Long Wittenham (Case *et al.* 1964–5, 73–5, fig. 31.6/1; fig 29.1–3). The City Farm vessel from pit 6/1 has a sharp shoulder angle and fingernail impressions on the shoulder, although the rim is thickened and slightly bevelled (ibid., fig. 31). At Long Wittenham, two of the three vessels have thickened shoulder angles and have plain rims (ibid., figs 1 and 2). Other Biconical Urns are from Yarnton Site 1 pit 1047, Site 3 structure 5716 and Site 5 pit 9039 (Hey *et al.* 2016, 291–2, fig. 9.10, 366–7, fig. 10.18, 439), and Barrow Hills barrow 14 (Barclay and Halpin 1999, fig. 5.9). Along with these clearer Biconical Urns, a looser group of sub-Biconical vessels are known in the region (Lambrick 2010, fig. 20.2–6; Case 1982b, fig. 62.1; Davies *et al.* in prep. a; Barclay and Halpin 1999, fig. 4.54.P53–4). Grog temper dominates the fabrics of these vessels.

3.2.15 Missing from the Dunmore Road assemblage are horseshoe handles that are commonly associated with Biconical Urns, found regionally at Vicarage Field, pit E (Case 1982b, fig. 62.1), Appleford (Barclay 2009, 57), Yarnton Site 5 (Hey *et al*. 2016, fig. 11.38.P168) and the related vessel at Mount Farm, F178 (Lambrick 2010, 30, fig. 20.2).

Deposition

3.2.16 Many of the sites producing Biconical and sub-Biconical Urns in the region are funerary, usually associated both with ring-ditches and cremated remains. The exceptions are Yarnton, Appleford and Slade End Farm, Wallingford. The Dunmore Road assemblage is not associated with funerary features, and it appears more domestic in its composition as the assemblage is comprised of a relatively large number of vessels each represented by a small number of sherds totalling small percentages of each pot. This contrasts to single or small groups of pots deposited complete when associated with funerary activity. The feature that the pottery was found within was probably an oven, which is rare for this date, although pit 9039 and the hearth in tree-throw hole 3870 at Yarnton both contained burnt deposits and large pottery assemblages and were of a similar date (Hey *et al.* 2016, 439, 549–51).

3.2.17 The complete absence of Biconical Urn sherds as residual finds in later pits is notable, as would be expected if material was deposited on the surface in any quantity. The assemblage from the hearth is quite large, but its composition alone as described above does not clearly suggest deliberate deposition. The rarity of this type of pottery in non-funerary contexts might suggest that the assemblage was deliberately deposited, and the unusual nature of the feature might also explain the presence of the material. The construction of feature 2303 within which pyrotechnical activities took place appears to have provided a rare sub-soil receptacle that allowed for the preservation of this style of pottery, although the favoured interpretation is that the assemblage was deliberately deposited.

Dating

3.2.18 A radiocarbon date of 1545–1440 cal BC (87% confidence; SUERC-96911) was taken on a charred hazelnut shell from a basal layer of charcoal and ash (1957) from oven feature 2303 (Fig. 29). This is a late date compared to radiocarbon results associated with funerary Biconical Urn and related vessels in the region. These are from Barrow Hills barrow 12, where a date of 1955–1535 cal BC (95% confidence; OxA-1872; Barclay and Halpin 1999, 99) was obtained, and at Mount Farm F178, a date of 1745–1535 cal BC (95% confidence; OxA-15785; Lambrick 2010, 30) was associated with a sub-Biconical urn. There is, however, a 7% chance that SUERC-96911 falls between 1610–1575 cal BC, possibly more in line with these dates. These dates fall as expected between the main currency of Collared Urns and Deverel-Rimbury, where Biconical Urns should sit.

3.2.19 At Yarnton, the domestic assemblages of Biconical Urn span a longer period. The dates from structure 5716 are problematic but are early, dating to the first half of the second millennium cal BC, perhaps as late as *c* 1800 cal BC (Hey *et al.* 2016, 650). Two dates from pit 1047 show the material was deposited in *c* 1740–1520 cal BC (Hey *et al.* 2016, 652, table 9.6). Two dates from pit 9039 probably fall in the 16th century cal BC (OxA-11511, -11574; Hey *et al.* 2016, table 14.1).

3.2.20 This can be compared to the early Deverel-Rimbury dates from the region. At Yarnton, the substantial assemblage from tree-throw hole 3870 that had been used as a hearth was predominantly Deverel-Rimbury, although contained some biconical forms and the fabrics are similar to the assemblage from Dunmore Road (Hey *et al.* 2016, 549–51, table 14.1). A very similar radiocarbon date to that from Dunmore Road on charred

residue was measured: 1540–1425 cal BC (95% confidence; OxA-12126). The upper fill of pit 25045 at Yarnton contained a Deverel-Rimbury assemblage and two consistent radiocarbon dates of 1530–1410 cal BC (OxA-12721, -12722; Hey *et al.* 2016, 609–10, 655). At Great Western Park, in Area 101, a Deverel-Rimbury assemblage has been radiocarbon dated to begin *2085–1520 cal BC (95% probability)*, probably *1625–1540 cal BC (68% probability)*, and end *1520–1095 cal BC (95% probability),* probably *1595–1330 cal BC (68% probability*; Hayden in prep.). It is very likely that the Biconical Urn assemblage from Dunmore Road is contemporary with this Deverel-Rimbury assemblage, or perhaps later (Fig. 30). There is a 68% probability that the Dunmore Road date belongs 30–250 years after the beginning of the activity at Area 101, and 68% probability that the date belongs 0–195 years before the end of the Area 101 activity. Grog is present in the fabric range at Area 101 and there are examples with incurving rims possibly being related to Biconical Urns (Brown in prep; Davies *et al.* in prep. b).

3.2.21 Overall, while the radiocarbon dates show that Biconical Urns are generally earlier than Deverel-Rimbury, there appears to be some overlap in the styles during the 16th century BC. It is likely that the assemblage from Dunmore Road is contemporary with the use of Deverel-Rimbury in the region, making it notable that no Deverel-Rimbury sherds were found in the deposit. This may either represent different groups using different types of pottery during the transition between the early and middle Bronze Age, or pottery styles being reserved for particular activities.

Late Bronze Age

3.2.22 Ten sherds (140g) from three late Bronze Age vessels were found (Table 5). Two were from early Iron Age pit 1936 and the third from early Roman ditch 2295.

3.2.23 Three fabrics were identified:

Fl3: Flint. Orange to black surfaces. Dense, coarse calcined flint 1–3mm.

GrIo2: Grog and iron oxides. Orange-red surfaces with a black core. A moderate scatter of pale coloured grog/clay pellets and a sparse scatter of rounded, dark orange iron oxides 0.5mm and finer and rare alluvial shell.

GrSh2: Grog and shell. Grog/clay pellets 3–8mm with sparse quartz/quartzite and a scatter of rounded clear or opaque quartz less than 1mm with sparse fossil shell or limestone.

3.2.24 From pit 1936 there is one shouldered jar with an out-turned neck in fabric GrIo2 (Fig. 28, no. 8). The rim diameter is 19cm, with an EVE of 0.11 and wall thickness of 8mm, and limescale is present on the interior. The other vessel from the pit is a jar with an incurving neck (hook-rim jar) in fabric GrSh2 (Fig. 28, no. 9). This has a rim diameter of 15cm and an EVE of 0.05. The vessels are both in grog fabrics which is unusual for the period. For ditch 2295, a single coarse flint-tempered body sherd was found.

3.2.25 All three vessels could be contemporary with the only other visible late Bronze Age activity on the site, the two cremation deposits, one of which is radiocarbon dated to 930–815 cal BC (94% confidence; SUERC-96915). They must be residual as the other pottery from the only fill of pit 1936 was early Iron Age, totalling 23 sherds (343g) and including a vessel with an expanded fingertipped rim and a probable round-bodied

bowl with a flaring rim. Both these forms should belong to the later part of the early Iron Age dating perhaps four or more centuries after the late Bronze Age radiocarbon date from the site (Davies *et al.* in prep. a). This shows that the late Bronze Age vessels cannot be contemporary with the early Iron Age pottery in the pit.

Catalogue of illustrated Neolithic and Bronze Age sherds

Early Neolithic

1. Decorated Bowl. Fabric: very coarse, frequent, poorly-sorted shell voids. Ditch 2265, cut 1291, lower fill 1293.

Early–middle Bronze Age

2. Biconical Urn. Fabric: Qt3. 'Oven' 2303, pit 1924, upper fill 1925.
3. Biconical Urn. Fabric: QtGr3. Fingernail decoration on angle. 'Oven' 2303, pit 1924, upper fill 1925.
4. Biconical Urn. Fabric: Gr3. 'Oven' 2303, pit 1924, upper fill 1925.
5. Biconical Urn. Fabric: Gr4. 'Oven' 2303, pit 1924, upper fill 1925.
6. Biconical Urn. Fabric: Gr4. 'Oven' 2303, pit 1926, upper fill 1927.
7. Biconical Urn. Fabric: Gr3. 'Oven' 2303, pit 1926, lower fill 1961.

Late Bronze Age

8. Shouldered jar with out-turned neck. Fabric: GrIo2. Pit 1936, fill 1937.
9. Jar with incurving neck (hook rim). Fabric: GrSh2. Pit 1936, fill 1937.

3.3 Iron Age, Roman and post-Roman pottery *by Jane Timby*

Introduction

3.3.1 The excavation resulted in the recovery of 3107 sherds of pottery weighing 36.093kg dating to the Iron Age, Roman, medieval and post-medieval periods.

Methodology

3.3.2 The pottery was analysed broadly following recommendations outlined in Barclay *et al*. (2016). Sherds were sorted into fabrics based on the colour, texture and nature of the inclusions present in the clay. For the prehistoric wares the prefixes used follow those recommended by the PCRG (2010) guidelines where the two letters are used to denote the main fabric constituent(s). Known named, or traded, Roman wares are coded using the National Roman fabric reference system (codes in brackets) (Tomber and Dore 1998). Other Roman wares, generally of local origin, are coded more generically following a similar nomenclature according to colour and main fabric characteristics. Fabric descriptions have been kept minimal and are based on the guidelines proposed by Peacock (1977, 29ff). The frequency of inclusions are based on density charts devised by Terry and Chilingar (1955): rare (1–3%); sparse (3–10%); moderate (10–20%); common (20–30%); and, abundant (30–40%). Further details of the defined fabrics and associated forms can be found in the archived pottery report. The sorted sherds were quantified by sherd count and weight. Freshly broken sherds,

where recognised, were counted as single pieces. Rims were additionally coded to general form and measured for the diameters and for the estimation of vessel equivalents (EVE) (Orton *et al*. 1993). Any evidence of use, such as sooting, burning, or calcareous deposits was noted along with any modifications.

Overview of the assemblage

3.3.3 Sherds were recovered from 322 contexts with the quantities ranging from single pieces up to a maximum of 123 sherds from early Roman enclosure ditch 2270 (fill 1518). The assemblage is a particularly difficult one to disentangle. First, there is an extensive range of fabrics with the recurrent use of certain additives to the clays at different times. Such variety is to be expected in the Iron Age and early Roman periods before the standardization of production and as a consequence a high proportion of sherds had to be examined using a x20 microscope in order to be classified. Second, the material was widely dispersed across quite a few contexts, with 79 (23.4%) yielding single sherds and 78% yielding 10 or fewer sherds. Just 13 contexts (3.8%) had in excess of 50 sherds and of these, 10 date to the Roman period. The third issue is that of residuality. It is clear from the early Roman contexts that there are a number of redeposited earlier sherds averaging at around 25–27% of the Roman groups. All these factors have made dating small groups quite provisional, especially where there are no featured sherds present.

Early–middle Iron Age

3.3.4 Pottery dating to the early–middle Iron Age amounts to some 1592 sherds weighing 16.4 kg and with 7.42 EVEs (Table 6). The material has an overall average sherd weight of 10.3g.

Description of fabrics and associated forms

3.3.5 In total, 28 individual fabrics have been defined based on the nature, size and frequency of the inclusions which fall into four broad ware groups: calcareous, grog, flint, and sandy. The calcareous group dominates, accounting for just under 60% (by count) of the group followed by sandy wares which account for 37.5%. The grog and flint categories are very small. The general fabric trends identified from sites in the Upper Thames Valley, moving from the early Iron Age into the middle Iron Age, is for a general decrease in shelly wares and an increase in sandy wares, particular glauconitic sandy wares, or sandy wares with sparse calcareous inclusions. The Dunmore Road assemblage conforms to this general pattern.

3.3.6 The calcareous wares broadly split into two groups: those tempered with limestone, fossil shell and fossiliferous detritus typical of clays from the Jurassic outcrops and those tempered with what mainly appears to be fine shell and rounded calcareous nodules derived from alluvial deposits. The coarse sparse fossil-shell tempered ware (SH1) accounts for 27% of the later prehistoric assemblage and this is most characteristic of the early Iron Age in this area. Featured sherds are sparse but include two finger-tipped rims, two further straight-walled jars, at least two ovoid/hook rim jars, three expanded T-shaped vessels, weak shouldered bipartite jars, shouldered jar with upright necks and one handled jar. There are at least three carinated body sherds

with finger-tip decoration, otherwise vessels are generally plain or display vertical smoothing.

3.3.7 Other Jurassic limestone and fossiliferous wares feature as fine-ware bowls with tapered rims (Fig. 31, no. 3), from either carinated tripartite or rounded bowls, although body sherds were difficult to find, slack-sided ovoid jars (Fig. 31, no. 4) and as round bodied jars. The alluvial limestone wares similarly feature as flared rim bowls, shouldered jars with upright necks, globular bowls (Fig. 31, no. 10) and slack-sided jars (Fig. 31, no. 12), suggesting that the use of these clays dates from the early Iron Age but became more popular in the middle Iron Age.

3.3.8 The sandy wares can also be divided into two basic groups: those with glauconitic sand and those with no obvious glauconite present. The early Iron Age sandy wares include two small haematite-surfaced sherds from pit 1037 and roundhouse ditch 2254. The former piece is from a tripartite bowl. Also of early Iron Age date is a large curved-wall bowl (Fig. 31, no. 5) from one of the roundhouse ditches in a fine sandy ware. Most of the sandy wares, including nearly all the glauconitic wares, feature as middle Iron Age globular or barrel-shaped jars but a few of the more minor fabrics (SA3, SA6, SA8) fabrics appear in typical early Iron Age forms with at least one flared-rim bowl, a bowl with a vertical neck (Fig. 31, no. 6), two ovoid/hook-rim jars and a slacked-sided jar with a beaded rim (Fig. 31, no. 8). Of slightly later date is at least one example of a bowl with tramline decoration (Fig. 31, no. 9) and a squat, tubby vessel with a folded over rim (Fig. 31, no. 11).

3.3.9 The other main fabric present is a sandy ware containing sparse limestone or other calcareous inclusions (fabric SALI) which accounts for 9.42% (count) of the assemblage. There are moderately few featured sherds but these include globular-bodied jars, a handled jar and one jar with finger-tip impressions. Some vessels have a burnished finish.

3.3.10 Decorated sherds are rare and apart from the tramline decorated bowl noted above there is one small sherd from a Roman feature decorated with impressed circles (Fig. 31, no. 14) and a flint-tempered jar with a zone of horizontal tooled lines bordered by rows of impressed dots (Fig. 31, no. 7). At least three contexts produced scratch-marked sherds (ditch 2267, enclosure 2259, and roundhouse 2292). Internal charred residue from two vessels was radiocarbon dated. A date of 325–200 cal BC (76% confidence; SUERC-96910) was obtained from a slack-sided jar with a beaded-rim from pit 2201 (Fig. 31, no. 12), and a date of 360–170 cal BC (95% confidence; SUERC-96909) was obtained from a bead rim jar from upper fill 2010 from ditch 2258, cut 2007.

Modified Iron Age sherds

3.3.11 Three bases have post-firing holes, two in fabric LI1 and both from six-post structures 1449 and one in fabric LI2 from enclosure ditch 2258. The latter has a minimum of three holes, each with a diameter of 5mm, while the two former sherds have a minimum of two holes one of which measures 8mm across. One Iron Age sherd from Roman enclosure ditch 2293 has been fashioned into a spindle whorl of which about half survives.

Evidence of use

3.3.12 Several of the Iron Age sherds show evidence of use in the form of external sooting or internal burnt residues. Four of these are associated with limestone-tempered vessels, eight with sandy wares and five with sandy and limestone-tempered wares. At least three vessels, all in sandy fabrics, have internal calcareous linings from holding or heating water.

Site distribution

3.3.13 Most of the features dated to the early Iron Age yielded very small assemblages and very few diagnostic forms. A few intrusive sherds of Roman and later date were also present highlighting disturbed nature of some of the deposits. Most of the pottery was associated with 13 roundhouse structures; a six-post structure; seven pits, postholes and enclosure ditch 2268 (Table 7). Quantities ranged from single sherds up to a maximum of 84 sherds from roundhouse 2251. The overall average sherd size was just 9.3 g and the total EVE just 1.27. Looking at the assemblage as a whole from these structures, shelly ware, particularly fabric SH1, dominates accounting for 42% of the pottery followed by sandy wares at 23%. The pottery is too unevenly distributed and too lacking in diagnostic material to allow a valid developmental sequence to be determined although stratigraphically not all the roundhouses were in use at the same time.

3.3.14 Much of the middle Iron Age pottery was associated with ditch and pit groups, and six of the larger groups are summarised in Table 8. In contrast to the pottery from the early Iron Age features, the shelly group accounts for just 17% of the pottery, the sandy wares for 41.3% and the limestone wares for 25%. This demonstrates a trend away from the shelly wares of the early Iron Age towards a focus on limestone and shell-tempered wares and sandy fabrics. While globular and barrel-shaped jars dominate, the continued presence of typical early Iron Age forms such as fine-ware flared rim bowls and expanded rim jars suggest that there is quite a high level of residual material present.

3.3.15 Enclosure 2258 yielded one of the larger assemblages of pottery with some 167 sherds, excluding small crumbs. Nearly all the pottery came from a secondary fill with just three small sherds from the primary fill (1015), while animal bones were concentrated in the tertiary fill. No obvious pattern can be discerned in the spectrum of forms and fabrics present or from the condition of the sherds. The 13 rim sherds include several early Iron Age types including three fine-ware flared rim bowls, one coarseware straight-sided vessel with an everted neck and one expanded rim form. More typical of the middle Iron Age are four rims from round-bodied, neckless vessels and two from necked round-bodied vessels. Of the 13 rims present, five are too fragmentary to measure, so this is not a fresh deposit of material. There is one base with post-firing holes and two sherds with internal burnt residue.

3.3.16 Also dating to the middle Iron Age is a crouched inhumation in pit 2143. A total of 21 sherds were recovered from the pit fill with a mixture of shell, limestone and sandy fabrics and one rim from a barrel-shaped neckless jar in glauconitic sandy ware.

Inclusion	Fabric	Description	No.	%	Wt	%	EVE	%
Calcareous	SH1	sparse coarse fossil shell	430	27.01	4659.5	28.3	1.12	15.09
	SH2	fine sparse shell	8	0.50	95	0.6	0.00	0.00
	SH3	clean matrix sparse shell	1	0.06	28	0.2	0.00	0.00
	SALI/SH	sandy with sparse calcareous	8	0.50	58	0.4	0.00	0.00
	LI1	sparse calcareous inclusions	62	3.89	618	3.8	0.35	4.72
	LI2	fine alluvial shell	232	14.57	2551.8	15.5	1.87	25.20
	LI3	dense fine shell/limestone	4	0.25	57	0.3	0.00	0.00
	LI4	oolitic limestone and fossil	2	0.13	72	0.4	0.07	0.94
	LI5	sparse shell/ limestone	5	0.31	73	0.4	0.02	0.27
	LI6	sparse ill sorted calcareous / voids	7	0.44	43	0.3	0.11	1.48
	LIFE	iron rich with sparse limestone	26	1.63	370	2.3	0.00	0.00
	SALI	sandy with sparse calcareous	150	9.42	1371.5	8.3	0.68	9.16
	SA2SH	glauconitic sandy with sparse shell	9	0.57	40.5	0.2	0.00	0.00
Grog	GR5	lumpy' grog/clay pellets	16	1.01	153	0.9	0.07	0.94
	GRLI/SH	grog with limestone/fossil shell	19	1.19	203	1.2	0.00	0.00
Flint	FL2	medium flint-tempered	13	0.82	216	1.3	0.12	1.62
Sandy	SA1	dense granular sandy	62	3.89	1214.5	7.4	0.87	11.73
	SA2	well sorted glauconitic sand	221	13.88	1757	10.7	1.11	14.96
	SA3	ill-sorted quartz sand	155	9.74	1818.3	11.1	0.44	5.93
	SA4	fine sandy ware	10	0.63	199	1.2	0.07	0.94
	SA5	iron-rich sandy	3	0.19	16	0.1	0.00	0.00
	SA6	common well-sorted sand	46	2.89	172	1.0	0.07	0.94
	SA8	black well-sorted sandy	72	4.52	484.5	2.9	0.40	5.39
	SAF	fine sandy	12	0.75	56	0.3	0.00	0.00
	SAFE	iron-rich sandy	6	0.38	36	0.2	0.00	0.00
	SA00	misc. other sandy	7	0.44	33.5	0.2	0.00	0.00
	SAHA	hematite-slipped sandy ware	3	0.19	8	0.0	0.05	0.67
Mixed	SAFELI	iron rich sandy with limestone	3	0.19	34	0.2	0.00	0.00
		Total	1592		16,438		7.42	

Table 6: Early and middle Iron Age pottery by fabric (Wt = weight in g)

	Shell		Limestone		Grog/clay		Sandy		Sand/limestone		Total	
Feature	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**
1387 (RH, post)	3	3	0	0	0	0	0	0	0	0	3	3
2250 (RH, post)	8	103	1	0.5	0	0	0	0	0	0	9	103.
2251 (RH, post)	58	685	15	70.75	14	75.5	6	66.25	0	0	93	897.
2253 (RH, post)	1	63	0	0	0	0	0	0	0	0	1	63
1222 (RH, ditch)	9	85	20	301	2	25	8	68	3	18	42	497
1223 (RH, ditch)	4	19	1	21	0	0	2	18	0	0	7	58
2254 (RH, ditch)	2	33	13	49	5	65	7	25.5	2	19	29	191.
2255 (RH, ditch)	15	336	3	12	1	5	43	255	0	0	64	608
2256 (RH, ditch)	2	25	8	60	0	0	2	4	1	1	13	90
2257 (RH, ditch)	1	8	1	6	1	4	0	0	1	6	4	24
2285 (RH, ditch)	2	13	0	0	0	0	0	0	0	0	2	13
1449 (six-post)	8	49	1	33	0	0	1	0.5	0	0	10	82.5
2266 (enclosure)	31	301	2	39	0	0	0	0	0	0	33	340
2268 (enclosure)	14	242	8	54	5	60	16	82	2	9	45	447
EIA pits	30	238	5	30	5	48	4	16	11	85	55	417
EIA postholes	22	170	2	18	0	0	5	76	0	0	29	264
Total	201	2373	80	694.2	33	282.5	94	611.2	20	138	439	4099

Table 7: Early Iron Age pottery by feature (Wt = weight in g)

	Shell		Limestone		Grog/clay		Flint		Sandy		Sand/limestone		Total	
	No.	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**	**No.**	**Wt**
1450	17	214	9	157	0	0	0	0	5	41	5	44	36	456
2258	33	364	71	839.	3	36	0	0	39	397	28	344	172	1976.5
2259	19	120	17	222	0	0	0	0	23	128	8	47	67	517
2260	8	68	12	182	3	5	0	0	88	1266.5	11	120	122	1592.5
2267	6	51	15	156	1	53	9	187	29	404	0	0	60	851
MIA pits	6	60	16	286	0	0	0	0	33	315	9	93	64	754
Total	89	877	140	1843	7	94	9	187	217	2551.5	61	648	521	6147

Table 8: Middle Iron Age pottery by feature (Wt = weight in g)

Late Iron Age

3.3.17 Evidence for late Iron Age occupation is based on the presence of grog-tempered wares unaccompanied by any Romanised wares. It is difficult to know whether these date exclusively to the late Iron Age or slightly later to the conquest period and shortly after as such wares, particularly large storage vessels, continue to be used well into the Roman period. Similarly, it is not clear how many of the middle Iron Age fabrics and forms continued in use into the late Iron Age. Very few features can be identified matching these criteria. Enclosure 2261 yielded an assemblage of 172 sherds weighing 2131.5g comprising a mixture of typical early–middle Iron Age sherds with shell (residual), sandy, limestone and mixed sandy with limestone pieces. There are just three slightly indeterminate, small grog-tempered sherds present which could be residual early Iron Age pieces. Most of the rims come from necked and neckless bead rimmed middle Iron Age globular jars. The enclosure is a recut of a middle Iron Age enclosure and doubtless contains much residual material. By contrast, enclosure ditches 2273 and 2276 and pits 1009, 2070 and 2114 all contained modest assemblages of classic late Iron Age grog-tempered ware alongside residual earlier material. Ditch 2276 produced just nine sherds of a necked burnished jar and a recessed base. Enclosure 2273 contained sherds of the same vessel in both the primary and secondary fills suggesting rapid back-filling from a single source of material. These features are located away from the focus of middle Iron Age activity and the likelihood of significant residual material is low.

Early Roman

Description of fabrics and forms

3.3.18 The 1st to 2nd centuries AD is perhaps the most prolific in terms of a pottery presence with some 1390 sherds weighing 19 kg and with 16.65 EVEs dating to the late Iron Age-early Roman period (Table 9). The condition of the material is typical of waste material deposited in negative features with an overall average sherd weight of 13.6g. The latest sherds appear to be early–middle 2nd century in date with no later Roman wares present. Most of the assemblage comprised local wares with negligible imports. The latter are represented by just two samian vessels: a base from a South Gaulish decorated bowl Dragendorff 30 (Fig. 32, no. 17) and a Central Gaulish dish, Drag. 18/31, originally with a potter's stamp of which just the first letter [M] … survives. The only potential regional imports present are a sherd from a black, Atrebatic-style, sandy ware dish decorated with a single burnished wavy line from ditch 2056 (fill 2057), and a furrowed handle from a Verulamium-type amphora from pit 1769. There are a few sherds of handmade Savernake-type grog-tempered ware, which may be a development of the local grey grog-tempered tradition or jars traded from the Savernake area in Wiltshire.

3.3.19 The grog-tempered category of wares account for 29.1% (by count) of the total late Iron Age/early Roman assemblage with 'local' early Roman sandy wares contributing a further 26.4%. Defined products of the Oxfordshire industry contribute a further 43.6%. The grog-tempered wares include both hand- and wheel-made vessels and almost exclusively features as jars or jar/bowls with both necked (Fig. 32, no. 15) and neckless, beaded-rim forms. There is one lid-seated jar and several larger storage-type

jars. Jar forms similarly dominate the various sandy wares again as both handmade and wheel-made vessels. Amongst the pre-Flavian local wares are 16 sherds of Abingdon-type butt beaker (Timby *et al*. 1997) thought to represent the products from a local fine-ware industry predating the later Oxfordshire workshops. Many of the local sandy ware fabrics can be mirrored in the contemporary assemblage from Crab Hill, Wantage (Timby forthcoming), also assumed to be early Oxfordshire products predating the more standard wares appearing from the Flavian period onwards. These include a black- or grey-surfaced white sandy ware (BWHSY), a distinct grey, black or oxidised ware with a characteristic pimply surface from sparse well-sorted fine, rounded quartz sand (BWSY5, GY1), and a white-slipped fine oxidised ware (WSOXSY/F).

3.3.20 Dating from the Flavian period to the 2nd century are fabrics more familiar as early products of the Oxfordshire potteries with fine grey wares, grey sandy wares, white wares and a single sherd of a whiteware mortarium. Other forms of note include a ring-necked flagon in a fine oxidised ware (Fig. 32, no. 16). The fine grey wares (OXF FR) comprise a range of jars, as well as examples of poppyhead beaker with lozenge-shaped panels of barbotine dot decoration (Young 1977, form R34), dishes (ibid., type R57), a cup imitating a samian form (ibid., form R62) and a narrow-necked jar or flask (ibid., R15) with a similar example in fine white ware. The oxidised wares include an example of another samian copy, a dish Drag. 18/31 (ibid., form O41). A flagon base from enclosure 2270, slot 1518, in OXF WH has a large central hole possibly made deliberately.

Site distribution

3.3.21 Most of the early Roman assemblage was recovered from the roadside ditches and associated enclosures, rectangular structure 2269 and nine pits. The individual assemblages can be divided into earlier (pre-Flavian) and later (Flavian–2nd century AD) owing to the presence or absence of Oxfordshire products and other related wares likely to date *c* AD 70–200.

3.3.22 On this basis, the earlier phase is represented by trackway ditch 2263, enclosure ditch 2293 and ditch 2276. The assemblages are quite small with 36 sherds of pot from 2263, most of which is residual early–middle Iron Age but with a sherd of early Roman grog-tempered storage jar and a minute piece of Abingdon-type oxidised ware. Eight sherds derived from 2293 and 19 from 2276, 11 of which are grog-tempered and including the cordon-necked bowl (Fig. 32, no. 15).

3.3.23 The remaining ditches (primarily 2262, 2270, 2272, and 2293–5) collectively yielded 78.5% of the pottery from the late Iron Age–early Roman phase and all contained wares dating from, and likely to span, the later 1st–early 2nd century. The only ditch to contain 2nd-century samian and, thus, potentially one of the latest to have been filled is 2295. Similarly, structure 2269 with 15 sherds including two pieces of OXF RE and one Roman shelly ware along with a rim from an early Iron Age flared-rim bowl and a medieval sherd, intimates a later 1st- or early 2nd-century date. The nine early Roman pits, collectively producing some 440 sherds weighing 6400g, also belong to this later phase of activity. Of this amalgamated assemblage, 24% (by count) are grog-tempered wares, 49.3% late prehistoric/early Roman sandy wares, 23% wheel-made Oxfordshire products and around 3.5% redeposited early pieces.

Inclusion	Fabric	Description	No.	%	Wt	%	EVE	%
Grog	GR1	soapy grog-tempered	187	13.45	3556.5	18.8	2.22	13.33
	GR2	sandy grog-tempered	132	9.50	2918.5	15.4	0.67	4.02
	GR3	red-brown wm grog-tempered	19	1.37	96	0.5	0.03	0.18
	GR2LI	sandy grog-tempered with limestone	1	0.07	16	0.1	0.00	0.00
	GRSA	sandy with sparse grog	33	2.37	771	4.1	0.05	0.30
	GYGR1	grey grog/clay pellet-tempered	17	1.22	233	1.2	0.33	1.98
	GYGR2	Savernake-type grog-tempered	16	1.15	704.5	3.7	0.23	1.38
Flint	SAFL	sandy with sparse flint	6	0.43	62	0.3	0.15	0.90
Calcareous	GYSALI	grey sandy with limestone	1	0.07	5	0.0	0.00	0.00
Sandy	BWSY	misc. black sandy wares	15	1.08	93	0.5	0.00	0.00
	BWSY1	well-sorted black sandy wares	48	3.45	466	2.5	0.12	0.72
	BWSY3	slightly micaceous sandy	29	2.09	124	0.7	0.30	1.80
	BWSY4	early Roman sandy wares	32	2.30	654.5	3.5	0.62	3.72
	BWSY5	black pimply sandy ware	50	3.60	448	2.4	0.73	4.38
	BWFSY	fine black sandy	17	1.22	241	1.3	0.49	2.94
	GYMISC	misc. reduced sandy wares	54	3.88	509	2.7	0.28	1.68
	GY1	grey pimply sandy ware	52	3.74	716	3.8	0.83	4.98
	GY2	speckled grey ware	31	2.23	336	1.8	0.36	2.16
	GYF	fine grey ware	12	0.86	54	0.3	0.55	3.30
	OXIDF	fine oxidised ware	11	0.79	336	1.8	1.26	7.57
	OXID	misc. oxidised sandy	11	0.79	71	0.4	0.15	0.90
	WSOX	white-slipped oxidised	2	0.14	155	0.8	0.00	0.00
	WSOXF	white-slipped fine oxidised sandy	2	0.14	19	0.1	0.00	0.00
Imports	LGF SA	South Gaulish samian	1	0.07	17	0.1	0.00	0.00
	LEZ SA 2	Central Gaulish (Lezoux) samian	3	0.22	88	0.5	0.15	0.90
Regional	BWCOSY	coarse sandy black ware? Atrebatic	1	0.07	13	0.1	0.00	0.00
	VER WH	Verulamium white ware	1	0.07	113	0.6	0.00	0.00
Oxfordshire	ABN OX	Abingdon-type oxidised	16	1.15	54	0.3	0.10	0.60
	BSGYSY	black surfaced sandy grey	6	0.43	61	0.3	0.17	1.02

Inclusion	Fabric	Description	No.	%	Wt	%	EVE	%
	BSOXSY	black surfaced oxidised	3	0.22	25	0.1	0.17	1.02
	BWHSY	black surfaced white sandy ware	228	16.40	1774	9.4	1.21	7.27
	OXF FR	Oxon fine grey ware	68	4.89	416	2.2	1.62	9.73
	OXF OXF	Oxon fine oxidised ware	1	0.07	55.0	0.3	0.12	0.72
	OXF RE	Oxon grey ware	237	17.05	3253.8	17.2	2.57	15.44
	OXF RE38	grey sandy wares with grog/pellets	4	0.29	54	0.3	0.10	0.60
	OXF WH	Oxon white ware	39	2.81	293	1.5	0.07	0.42
	OXFWHF	Oxon fine white ware	2	0.14	44	0.2	1.00	6.01
	OXF WHM	Oxfordshire whiteware mortaria	1	0.07	63	0.3	0.00	0.00
	SHELL	Roman shelly ware	1	0.07	6	0.0	0.00	0.00
		Total	1390		18,915		16.65	

Table 9: Late Iron Age and early Roman pottery by fabric

Post-Roman

3.3.24 Twelve contexts contain medieval sherds often accompanied by earlier material. The medieval furrows produced 36 sherds of mixed date of which seven derive from the medieval period, including a sherd of glazed Brill-Boarstall-type jug with applied decoration, dating to *c* 1225–1400. An 11g sherd of Kennet Valley B ware (fabric OXAQ) was found alongside early Roman sherds in fill 2019 of the robber trench of building 2269.

Summary

3.3.25 The excavation yielded a moderately large, but quite complex assemblage covering a wide time span. In the early Iron Age there appears to be a significant increase in activity compared to the Bronze Age with *c* 23% of the contexts containing pottery of this date. In terms of datable contexts there are two peaks: one in the early Iron Age and the other in the early Roman period, although this is not necessarily a reflection of the size of the respective assemblages. It is by no means certain, but there would appear to be broad continuity from the early Iron Age through to the early 2nd century, although evidence for late Iron Age activity is quite sparse possibly reflecting a slight hiatus. The area appears to have been largely abandoned by the mid-2nd century.

3.3.26 In general, the pottery mirrors other assemblages recovered from various parts of Abingdon including the relatively nearby Spring Road cemetery site (Timby 2008) where early Iron Age ceramics were recovered. Middle–later Iron Age and early Roman activity was, however, sparse or absent and the Roman pottery mainly dated to the 2nd century, with a few later Roman wares as well as a marked Saxon presence. Work at the Old Gaol site produced pottery dating from the Beaker period through to the later Roman with a particular emphasis on early–middle Iron Age and early and late Roman phases (Timby 2011). Similarly, work at The Vineyard (Devaney 2008) produced a small amount of later prehistoric and later Roman wares although overall more dominated by medieval sherds. Work at Abingdon west central development produced an assemblage of pottery spanning the later Iron Age through to the later Roman period (Biddulph 2008). Medieval wares were again well represented but no prehistoric wares.

3.3.27 In addition to these sites are the more extensive investigations to the south-west of Dunmore Road at Ashville Trading Estate (Parrington 1978) and Wyndyke Furlong (Muir and Roberts 1999) where the emphasis was very much on a landscape dominated by Bronze Age ring ditches, and Iron Age settlement and field systems with activity extending into the early Roman period. As with Dunmore Road a potential gap in activity was observed in the later Iron Age at Wyndyke Furlong and the area was abandoned by the mid-2nd century AD (Timby 1999). This phenomenon has been noted elsewhere in Abingdon where middle Iron Age forms and decorative schemes appear to continue into the 1st century AD (Allen 1997). By contrast, at Ashville immediately south of Wyndyke, Roman occupation continued into the 4th century and there is clearly a pattern developing across these sites in terms of presence or absence or duration of use.

Description of fabrics and associated forms

Early–middle Iron Age

Grog/clay pellets

CPSH/LI: Grog/clay pellets 3–8mm with sparse quartz/quartzite and a scatter of rounded clear or opaque quartz less than 1mm with sparse fossil shell or limestone.
Forms: Shouldered jar with an upright neck (Fig. 31, no. 2).
Date: EIA

GR4: A very hard, brown ware with a black core and a lumpy surface texture. The iron-rich fabric contains rounded. Orange and black grog / clay pellets (1–2mm); rare alluvial shell and occasional rounded quartz.
Forms: Two jars, one shouldered with an upright neck; the other more barrel-shaped and neckless with a short rim.
Date: Early–?middle Iron Age.

GRLI/SH: A moderately hard, dark brown, smooth ware with a soapy feel containing a sparse to moderate frequency if sub-angular to rounded orange grog/clay pellets 1–2mm in size; sparse fine shell and calcareous matter (?alluvial) and rare rounded quartz sand (0.5–1mm).
Forms: Handmade. No featured sherds.
Date: ?Early Iron Age.

Calcareous

SH1: A fine clay matrix contains a sparse frequency of laminar coarse fossil shell up to 7mm in size and rare rounded quartz sand grains of 0.5 or less in size.
Forms: Expanded rim jars; high shouldered jars; shouldered jars with upright rims; weak shouldered bipartite jars and round-bodied neckless jars.
Date: EIA/MIA

SH2: Finer, sparser fossil shell (up to 2mm).
Forms: No rim sherds. One sherd with a finger depression on the body.
Date: Early–middle Iron Age.

SH3: A clean matrix with a sparse to moderate scatter of ill-sorted fossil shell and limestone.
Form: Single base sherd.
Date: Iron Age.

LI1: A brown ware with a black core containing sparse, coarse, fossil shell and rounded limestone rock up to 4mm and finer. The clay is iron-rich with a scatter of dark brown iron oxides up to 0.5mm.
Forms: Featured sherds include one flared rim bowl; one barrel-shaped jar with a short neck and a base sherd with at least two holes made after firing.
Date: Early–middle Iron Age.

LI2: A black ware with a hard, quite fine fabric containing well-sorted, sparse fine quartz (less than 0.2mm) and a scatter of very fine alluvial shell and small rounded calcareous nodules.

Forms: Everted rim, barrel-shaped, beaded rim and slack-sided jars (Fig. 31, no. 12) and bowls with flared rim examples (Fig. 31, no. 3) and globular forms (Fig. 31, no. 10). One base from 2258 has three post-firing holes drilled after firing. Some vessels have a burnished finish.
Date: Early–middle Iron Age

LI3: Dense very fine shell and limestone (less than 1mm).
Form: No featured sherds.
Date: Early–middle Iron Age.

LI4: Reduced ware containing a sparse scatter of oolitic limestone, rounded fragments of limestone and other fossiliferous debris up to 1mm in size but mainly finer. The matrix also contains a very sparse scatter of rounded quartz (0.5–1mm).
Forms: Represented by a single slack walled vessel with an undifferentiated rim (Fig. 31, no. 4).
Date:?Early–middle Iron Age.

LI5: Fine ware with smooth dark brown to black surfaces. Finely micaceous clay containing a sparse scatter of ill-sorted, rounded quartz sand (0.3–1mm) and rare coarse fragments of fossil shell (up to 3mm).
Forms: Expanded rim jars; flared rim carinated bowls. One base sherd has a minimum of two holes drilled after firing.
Date: Early Iron Age +.

LI6: Red-brown slightly sandy ware with sparse, ill-sorted shell/limestone or voids.
Forms: Possible bowl; straight walled jar and a hook rim jar.
Date: Early Iron Age.

LIFE: Fabric as LI1 with sparse calcareous material up to 2mm in an iron-rich clay containing a scatter of rounded, orange-red iron oxides 1–2mm.
Forms: No featured sherds.
Date: ?Early–middle Iron Age.

SALI/SH: Hard sandy ware with a common frequency of rounded, generally well-sorted quartz sand, rare calcareous inclusions ranging from discrete oolites, limestone and fossil shell (less than 0.5mm), sparse red-brown iron oxides and rare, fine flint.
Forms: Although a large group there are very few featured sherds but these include a vessel with finger-tip decoration around the girth; round bodied neckless jars; one slack-sided vessel and a handle from a jar. One sherd has a scratch-marked finish.
Date: Mainly early Iron Age-middle Iron Age but may continue into the later Iron Age-early Roman period.

SA2SH: As fabric SA2 (glauconitic sand) with sparse coarse fossil shell.
Form: Jar with a simple slightly inward-curved rim.
Date: ?Early Iron Age.

SA2LI: Pale brown surfaces with a dark grey core. The very fine glauconitic sandy matrix contains a sparse scatter of thin alluvial shell and small calcareous nodules ranging from fine up to 1mm.
Form: Single body sherds.
Date: EIA

Sandy
SA1: A heavy, dense sandy ware with a slightly granular appearance. The clay contains a common frequency of well-sorted, rounded clear quartz sand (less than 0.5mm) and rare round white ?calcareous inclusions (0.5mm).
Forms: Handled jar, beaded rim jars, a plain-walled vessel with an undifferentiated rim (Fig. 31, no. 8) and a squat tubby vessel with a folded over rim (Fig. 31, no. 11).
Date: Early–middle Iron Age.

SA2: Generally reduced ware containing a common frequency of glauconitic sand (less than 0.5mm) and rare rounded, calcareous grains (1mm or less).
Forms: Jars with necked, simple rims; expanded rim beaded rims and barrel-shaped jars with short, everted rims. A small body sherd shows impressed ring decoration possibly part of an infilled panel design (Fig. 31, no. 14). Several vessels are burnished.
Date: Middle Iron Age–early Roman.

SA3: Sparse ill-sorted, rounded quartz, clear, opaque and some darker coloured (up to 2mm). Variants include SA3SH with additional sparse fossil shell (up to 3mm) or rare limestone (SA3LI).
Forms: Slack-bodied jars with undifferentiated rims; beaded rim jar and a flared rim bowl. One body sherd has a finger depression and one sherd appears to be scratch-marked.
Date: Early–later Iron Age.

SA4: A brown or black, hard fine, slightly micaceous, sandy ware with rare visible ill-sorted quartz (less than 0.5mm). Occasional fine alluvial shell.
Forms: The only form is a large curved-wall bowl (Fig. 31, no. 5).
Date: Early Iron Age.

SA5: Hard, compact sandy fabric. The paste contains a common frequency of well-sorted, rounded and clear quartz sand (less than 0.2mm), sparse rounded, dark brown iron-rich grains and very rare very fine shell (alluvial?).
Forms: Curved rim jar with an undifferentiated rim.
Date: EIA

SA6: A hard, black sandy textured ware containing a common frequency of moderately well-sorted, rounded quartz sand with occasional grains up to 1mm but mainly 0.5mm and less and some fine white mica.
Forms: A small group represented by just one vessel, an ovoid jar with an undifferentiated rim.
Date: ?Early Iron Age.

SA7: Compact black sandy ware contained a moderate frequency of well-sorted fine quartz less than 0.5mm in size.
Form: Body sherd from a carinated bowl with burnished internal and external surfaces.
Date: EIA

SA8: Hard, black sandy ware with a black or red-brown core and containing a moderate to common frequency of fine, well-sorted, rounded quartz sand, rounded iron oxides but no obvious glauconite present and fine mica. Occasional rare grains of calcareous matter also occasional feature.
Form: Flared rim bowls and one globular bowl with tramline decoration (Fig. 31, no. 9) and barrel shaped neckless jars. A single carinated body sherd might suggest the bowls include flared rim tripartite forms. A single bowl with a round body and flared, finger-tipped rim is also present (Fig. 31, no. 6). The bowls and some of the jar sherds have a burnished finish.
Date: Early–middle Iron Age.

SAFE: An iron-rich, fine sandy micaceous ware containing a moderate to common frequency of fine sand (less than 0.2mm).
Forms: No featured sherds.
Date: Early Iron Age +.

SAFELI: An iron-rich clay with a fine sandy texture with sparse inclusions of alluvial shell.
Forms: No featured sherds.
Date: ?Middle Iron Age.

SAHA: Haematite-slipped fine sandy ware. Represented by just two sherds; one with a fine sandy texture containing a common frequency of well-sorted quartz sand (less than 0.5mm); the other a fine, black sandy ware with rare fine limestone and iron oxides.
Forms: At least one of the sherds comes from a tripartite, angular bowl with a long neck
Date: Early Iron Age.

Flint
FL2: A brown or black ware with a hackly fracture and containing a common frequency of finely crushed, angular, calcined flint (1–2mm and finer) in a moderately clean matrix.
Forms: A round-bodied, decorated jar (Fig. 31, no. 7) with a short rim.
Date: ?Early–middle Iron Age.

Later Iron Age–early Roman
Grog
GR1: Generally reduced black ware with a smooth soapy feel. The matric contains dark-coloured sub-angular grog, rare calcareous inclusions (up to 3–4mm) and very sparse, rounded quartz sand (less than 0.5mm).

Forms: Handmade vessels including necked, cordoned jars/ bowls (Fig. 32, no. 15), simple rim and expanded rim necked jars and large storage jars. The surfaces are often burnished.
Date: LIA–ER.

GR2: Moderately hard, grog-tempered ware with a slightly sandy texture. Various firing colours. The matrix contains a sparse frequency of moderately well-sorted, rounded quartz sand, some iron-stained and a sparse to moderate frequency of grog/ clay pellets up to 3mm.
Forms: Handmade and wheel-turned vessels including jars with beaded rims, simple necked everted rims, storage jars and one with a lid-seating. There is also a single example of a lid.
Date: LIA–ER.

GR2LI: as GR2 but with a sparse scatter of fine calcareous inclusions.
Form: No featured sherds.

GR3: Thinner walled, red-brown with a black core. Sparse rounded-sub-angular grog/clay pellets. Similar to Silchester fabric GR4 (Timby 2000, 235).
Forms: Wheel-made vessels. No featured sherds.
Date: LIA–ER.

GR4: Very hard fired, generally reduced ware with a lumpy surface texture. Iron rich clay with sparse rounded orange and black grog/clay pellets (1–2mm), rare alluvial shell and occasional rounded quartz grains.
Forms: Simple everted rim necked and neckless jars.
Date: LIA–ER.

GYGR: grey grog-tempered ware. Grey ware either with a slightly gritty or powdery feel. The only visible inclusion is a common frequency of dark grey grog/clay pellets up to 2mm in size.
Forms: Wheel-made and handmade jars.
Date: Early Roman.

<u>Flint</u>
SAFL2: Hard sandy ware with a rough feel, reduced or oxidised. The slightly micaceous matrix contains sparse visible, rounded quartz grains (0.5mm and less) and a rare to sparse scatter of angular flint (up to 3mm but mainly less).
Forms: Necked jars.
Date: ?LIA–Roman.

<u>Calcareous</u>
GYSALI: A fine grey sandy ware with sparse limestone inclusions.
Form: A single base sherd with a foot ring.
Date: Early Roman.

Roman

Sandy

BWSY1: Similar to SA8. A black sandy ware with well-sorted, rounded quartz sand, sparse mica and rare iron.
Forms: Wheel-made and handmade vessels including necked jars with expanded rims.
Date: LIA–ER.

BWSY2 = SA2

BWSY3: Black-surfaced ware with a brown or grey core and a slightly laminar fracture. The clay contains some mica and sparse, fine quartz (less than 0.2mm) and rare calcareous grains.
Forms: Wheel-made vessels including a reeded rim bowl; sharply everted rim beaker and a single jar.
Date: Early Roman.

BWSY4: early Roman sandy ware. Generally reduced wares containing a sparse visible scatter of well-sorted quartz sand (0.5–1mm) often protruding from the surface giving a rough texture. At x20 magnification very fine white mica and rare rounded, iron oxides are present.
Forms: Wheel-made, largely closed vessels. No rims.
Date: Early Roman.

BWSY5: A black version of fabric GY1.
Forms: Wheel-made necked and neckless jars.
Date: Early Roman.

BWFSY: Fine, black, sandy ware with a laminar fracture and sandwich red-grey core. Some sherds are micaceous.
Forms: Wheel-made necked jars with simple or expanded rims.
Date: Early Roman.

GY1: Hard grey sandy ware with a pimply surface.
Forms: Wheel-made necked jars including single examples with a triangular and with a bifid rim.
Date: Early Roman.

GY2: Grey 'speckled' sandy ware. Pale grey with a darker exterior. Hard with a sandy, rough texture. The matrix up to 1mm in size contains an ill-sorted range of rounded quartz sand, mainly clear to opaque with a finer background mass and rare sub-angular to rounded black argillaceous inclusions less than 1mm in size.
Forms: Wheel-made necked jar.
Date: Early Roman.

GYF: Fine grey ware with a smooth or fine sandy texture.
Forms: Mainly wheel-made jars forms.
Date: Early Roman.

OXIDF: Fine oxidised ware.
Forms: Forms are limited to one ring-necked flagon; one dish and one flared rim beaker.
Date: Early Roman.

WSOX/WSOXF: White-slipped oxidised sand ware and white-slipped fine oxidised ware.
Forms: Represented by a handle and a base sherd with a foot ring from flagons.
Date: Early Roman.

Imports
South Gaulish samian (LGF SA) (Tomber and Dore 1998, 28).
Form: A single sherd from a decorated bowl Drag. type 30 (Fig. 32, no. 17).
Date: Early Roman.

*Central Gaulish sam*ian (LEZ SA2) (ibid. 32).
Form: A single dish Drag. 18/31 with a broken stamp M […].
Date: Early Roman.

Regional
VER WH: Verulamium-type white ware (ibid., 154).
Form: A single furrowed strap handle.
Date: Early Roman.

Oxfordshire wares
ABN OX: Abingdon-type oxidised ware (cf. Timby *et al*. 1997).
Forms: Beakers including one necked example with an expanded rim and body sherds from butt beakers.
Date: AD 50–100.

BOXSY: black-surfaced oxidised sandy ware.
Forms: One necked jar with an expanded rim.
Date: Early Roman.

BSGYSY: black-slipped grey sandy ware.
Forms: Wheel-made closed vessels.
Date: Early Roman.

BWHSY: black-surfaced white sandy ware.
Forms: Wheel-made necked jars with expanded rims and a single bowl/dish. One base has a hole through the centre and through the lower wall.
Date: Early Roman.

OXF FR: Oxfordshire fine grey ware (Tomber and Dore 1998, 173).
Forms: Dishes (Young 1977, type R57); flask; bowls/cups (ibid. R62); poppyhead beaker (ibid. R34) and necked jars.
Date: Later 1st–2nd century.

OXF OXF: Oxfordshire fine oxidised ware (Young 1977).
Forms: Bowl (Young 1977, type O41).
Date: Early 2nd century.

OXF RE: Oxfordshire grey ware (Young 1977).
Forms: Largely necked jars with simple everted or expanded rims.
Date: Early Roman.

OXF RE38: Oxfordshire grey ware with sparse clay pellets/ grog (Booth 2018, 300).
Forms: Single necked jar.
Date: Early Roman.

OXF WH: Oxfordshire white ware (Tomber and Dore 1998, 175; Young 1977).
Forms: Flask/narrow necked jar (as Young 1977, R15); flagon handle and a single mortarium sherd.
Date: Early Roman.

SHELL: Roman shelly ware.
Forms: Single sherd.
Date: Early Roman.

Catalogue of illustrated Iron Age and Roman sherds

Early–middle Iron Age

1. Jar with an expanded T-shaped rim. Pale orange-brown in colour with a black core. Fabric: SH1. Pit 1936, fill 1937.
2. Shouldered jar with an upright neck. Orange-brown surfaces with a black core. Fabric: CPSH. Pit 2235, fill 2237.
3. Flared rim bowl with smoothed surfaces red-brown to black in colour. Fabric: LI2. Primary fill of ditch 2264, cut 1073, fill 1074.
4. Ovoid jar, black in colour with a brown interior Fabric: LI4. Sooted exterior from use. Primary fill of trackway G2264, [1073] (1074).
5. Large curved-wall bowl with a squared lip. Red-brown burnished exterior and black interior with voids. Fabric: SA4 with sparse calcareous inclusions. Roundhouse 2255, ditch 1932, fill 1933.
6. Bowl with a vertical neck and a finger-pinched rim. Burnished on both the interior and exterior surfaces. Dark brown in colour with a black interior. Fabric: SA8. Posthole 2213, fill 2223.
7. Wide diameter, black globular-shaped jar with a small vertical rim. Decorated with two lines of impressed ovals with lightly scored irregular horizontal lines between. Fabric: FL2. Enclosure ditch 2267, cut 1753, secondary fill 1756.
8. Slack-sided jar with a small beaded rim. Black burnished exterior with a brown interior. Sooted under the rim. Fabric: SA1. Enclosure ditch 2267, cut 1095, primary fill 1096.

9. Small rim sherd from a bowl with a slightly thickened rim. Decorated with incised curvilinear tramlines. Fabric: SA8. Enclosure ditch 2267, cut 1095, tertiary fill 1098.
10. Small globular bowl with a small vertical rim. Black burnished exterior and interior surfaces. Fabric: LI2. Enclosure ditch 2261, cut 1989, secondary fill 1793.
11. Squat tubby vessel with a folded over rim. Dark brown exterior with a black core and interior. The rim is sooted from use. Fabric: SA1. Enclosure ditch 2261, cut 1989, secondary fill 1793.
12. Slack sided jar with a beaded rim. Red-brown to black exterior and black interior. The upper exterior zone is sooted from used and there are traces of charred internal residue that have been radiocarbon dated (SUERC-96910). Fabric: LI2. Pit 2201, fill 2202.
13. Neckless globular jar with a beaded rim. Internal charred residue has been radiocarbon dated (SUERC-96909). Fabric: SALI2. Enclosure ditch 2258, cut 2007, fill 2010.
14. Small handmade body sherd decorated with incompletely impressed ring decoration possible part of an infilled panel design. Fabric: SA2. North roadside ditch 2262, cut 1503, fill 1504. Redeposited in early Roman ditch.

Late Iron Age and early Roman

15. Handmade necked, cordoned bowl with a black burnished exterior. Fabric: GR1. Ditch 2276, cut, 1949, secondary fill 1950.
16. Ring-necked, single handled flagon. Fine, oxidised ware with dark specks of iron oxide. Fabric: OXIDF. Pit 1983, fill 1984.
17. South Gaulish samian bowl Drag. 30. Enclosure ditch 2272, cut 1856, secondary fill 1858.

3.4 Metal finds *by Ian R. Scott*

Introduction

3.4.1 The metal assemblage comprises 10 objects (12 fragments), including seven iron objects and three of copper-alloy. Most of the objects are from phased contexts and are described by context date below.

Middle Iron Age

3.4.2 There are two nails and an awl from middle Iron Age contexts. The iron awl (or graver) from pit 1715 within enclosure 2260 could be contemporary but is more likely to occur in a later Iron Age or Roman context (Fig. 33, no. 1). Similarly, the two nails from ditch 2260 may also be intrusive late Iron Age or early Roman finds.

Late Iron Age

3.4.3 The only object from a later Iron Age context (ditch 2273, cut 1820) is a copper-alloy pin, possibly from a brooch, found with two fragments of cast, flat copper alloy.

Early Roman

3.4.4 Three nails/nail fragments were recovered from ditches 2295 (cut 1334) and 2056 and pit 1769, and a thin copper-alloy strip came from ditch 2293 (cut 1822) (Fig. 33, no. 2). These were all early Roman contexts.

3.4.5 Context 1238, a thin layer overlying surface 2300, produced a nail head, possibly from a horseshoe. This item may be a medieval intrusion.

Post-medieval

3.4.6 A very eroded farthing token of Charles I was recovered from ditch 1294. Although the token is in a poor state, the 'Celtic' harp on its reverse is quite clear and distinctive.

3.5 Fired clay *by Cynthia Poole*

Introduction

3.5.1 A modest assemblage of fired clay amounting to 365 fragments (3892g) was recovered from postholes, pits and ditches of early–middle Bronze Age, Iron Age and early Roman date. The character of the assemblage is consistent with this date range, although most of the fired clay is not intrinsically dateable. A few pieces were found in later features, but these are almost certainly residual originating from the earlier periods. The fired clay assemblage is not very large in any one period and identification of forms and functions has been limited by the degree of preservation. The material is fragmented and quite fragile with a mean fragment weight of 10g. Abrasion was generally moderate to heavy.

Methods

3.5.2 The assemblage has been recorded on an Excel spreadsheet in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). Fabrics were characterised on the basis of macroscopic features supplemented by the use of x20 hand lens for finer constituents.

Fabrics

3.5.3 Four fabric groups were recognized as sandy, sandy-calcareous, calcareous, and glauconitic (Table 10). The sandy group remains fairly constant through all periods. The sandy-calcareous group (Q/LS, Q/Sh) is the dominant fabric during the early Iron Age decreasing in middle Iron Age and early Roman periods. The calcareous group (Ls/Sh) is present through all phases, but only in small quantities in the Iron Age. However, this becomes the dominant fabric in the early Roman period, at which time the glauconitic fabric appeared.

3.5.4 The sandy group, fabric Q, accounted for the greater part of the assemblage and consisted of a fine sandy clay matrix, rarely micaceous, containing a moderate–high density of poorly sorted, well-rounded, medium and coarse quartz sand up to 2mm in size. Occasionally iron oxide was present and some contained only fine sand. Two contained fine voids from burnt-out organic inclusions.

3.5.5 The sandy-calcareous fabric group was similar to the sandy group but additionally contained small amounts of limestone or shell, or in one instance organic inclusions. This occurred in all phases but declined into Roman period when the calcareous fabric

group dominated the assemblage. This fabric contained frequent shell or limestone grit, in some cases with small, well-sorted inclusions usually shell 1–3mm in size, but in others with more mixed and larger shell and limestone grits up to 15mm.

3.5.6 The glauconitic fabric formed the smallest group and is exclusive to the Roman period. It is distinguished by the high density of coarse, black glauconite sand present, combined with quartz sand and grits of fine sandstone or siltstone. The same fabric was used for Roman tile and was prevalent at sites where the Gault and Greensand outcrop in the Didcot and Wantage area.

Fabric	E-MBA		EIA		MIA		ER		Med–PM		Total	
	Nos	Wt/g	Nos	Wt/g	Nos	Wt/g	Nos	Wt/g	Nos	Wt/g	Nos	Wt/g
Sandy	25	86	43	387	11	106	20	340			246	2128
Sandy-calc.			139	947	10	197	36	477	1	8	39	420
Calcareous			1	3	3	156	58	1047	1	21	63	1227
Glauconitic							17	117			17	117
Total	25	86	183	1337	24	459	131	1981	1	8	365	3892

Table 10: Fired clay fabrics quantified in relation to phase

Early–middle Bronze Age

3.5.7 Pit 1924, part of possible oven 2303, produced 25 fragments of fired clay (86g) which comprised several pieces up to 20mm thick, each with one flat moulded surface ranging in finish from even or smooth to rough and worn. Some of these surfaces had been burnt black suggesting that they derive from a hearth floor. These are most likely to be pieces dislodged from the surface of the burnt clay layer 1958 or lining of any superstructure that may have existed.

Early Iron Age

3.5.8 Fired clay (183 fragments, 1337g) comprised structural material, possible portable furniture, and some form of vessels. Nearly all the fired clay in this period was recovered from postholes of roundhouses 2250, 2251 and 2252, and the ring gully of roundhouse 1223.

3.5.9 The structural material was characterized by pieces with wattle impressions, which are likely to derive from oven structures, possibly drying floors rather than walls. Where an exterior surface survived, this was flat and varied from fairly even to roughly moulded, and one had a rough corrugated surface from finger grooves wiped across it. Thicknesses ranged from 10–60mm in one piece, but most averaged 20–35mm. The wattles ranged in diameter between 9–21mm, which is typical for oven daub. Two peaks in wattle, at 12mm and 17mm respectively, may reflect size differences between the smaller rods interwoven around the larger sails or numbers may be skewed by the small number of wattles preserved, as no actual sails could be identified. It is likely that indeterminate fragments with a single moulded surface are mainly structural in origin.

3.5.10 No items could be identified as portable furniture with any certainty. A few pieces have been identified tentatively on the basis of firing pattern and a smooth surface finish. One piece with two slightly convex moulded surfaces forming the face and edge of an object may be part of a triangular brick, but this does not retain any definite diagnostic features to be confirmed.

3.5.11 Sherds from some form of vessel or container were found in postholes 1649 and 1652 of roundhouse 2252. These were made in coarse sandy fabric Q, fired black or light grey on the interior and brown or reddish-brown on the exterior. From posthole 1649, two joining rounded rim sherds formed the edge of an object with a smooth concave interior surface and smooth convex exterior, which is partly covered an extra skim of clay which may be mould wrap. This object measures 12.5mm thick and may have a diameter of *c* 150mm. From posthole 1652 came a piece 19mm thick with two parallel surfaces both fairly smooth and even, which appears to be a body sherd from some form of curving vessel. The second piece is thicker at 29mm, and its form uncertain though it may be a roughly shaped rim of an object or vessel with a thick rim 20mm wide and with a curving concave inner surface and rough flat vertical exterior surface perpendicular to the rim surface. These may be crucibles or fragments of mould gate, but no evidence of use survives and none of the pieces have evidence of vitrification or residue that could support a metallurgical use. Fragments of mould and/or crucible is the best interpretation available, although no other evidence of metalworking appears to be present on the site.

3.5.12 The occurrence of fired clay almost exclusively in roundhouse postholes (in contrast to later periods) provides evidence of behavioural activity, which may relate to deliberate deposition practices noted elsewhere, such as at Houghton Down, Hampshire (Brown 2000, 77), where refired pottery sherds had been placed in earliest Iron Age roundhouse postholes. Fired clay has not been associated with such activity, except for one instance of a heavily fired clay brick and furnace lining placed in postholes of an early Iron Age roundhouse at Winchester (Poole 2009, 298). The early Iron Age fired clay is not especially noteworthy in itself, but the possible crucible/mould fragments provide a connection with the heavily fired artefacts found elsewhere.

Middle Iron Age

3.5.13 The fired clay from this phase (24 fragments, 459g) is similar to that of the preceding phase. This included a small quantity of wattle-supported structure similar to that described above with wattles in the same size range. Another structural fragment had an irregular surface roughly moulded with two finger grooves running across it, and is probably a fragment of oven wall. Some was identified as possibly portable furniture, and included one fragment with part of two surfaces, one smooth and flat, the other rougher, set at right angles, one of which was pierced by a perforation *c* 14mm in diameter and another fragment also retained the groove of a perforation *c* 13–14mm in diameter. These are more convincing fragments of triangular perforated brick, which probably served as oven or hearth furniture. No further metalworking evidence was produced. Most of the fired clay during this phase was discarded in ditches 2258 and 2260 and less frequently in pits 1173 and 2201.

Early Roman

3.5.14 As in the middle Iron Age, the early Roman fired clay (156 fragments, 2067g) was disposed of predominantly in ditch and pit fills together with one piece from a posthole. A small quantity of indeterminate fragments, almost all from sieved samples, are probably the only structural debris, likely scraps of floor and wall lining arising from the raking out of ovens or hearths. A single fragment with a smooth flat face, and at

right angles a slightly rougher convex edge, is the only possible example of a triangular brick.

3.5.15 Apart from these few pieces, the early Roman assemblage consisted almost exclusively of fragments of plates and discs, sometimes referred to as 'cooking plates'. These take the form of flat slabs forming both circular discs and rectangular or polygonal plates. A variety of sizes are implied by the range of thicknesses from 13–15mm up to 40mm, with most around 27–32mm. No overall size could be estimated, the largest piece being only 100mm long, but at other sites sizes range between *c* 150–200mm in diameter, up to at least 400mm and some possibly larger. These were made in sandy and shelly/limestone fabrics, although the latter was dominant and included the only objects made in the glauconitic fabric. They are characterised by one well-finished, smooth surface and an opposite side slightly rougher, which in four instances was coated in cereal straw and chaff impressions. They were often burnt grey or black on one side. Edges included straight vertical or bevelled, and rounded and curving. One piece had two straight edges forming a squared corner and another had a potential thickening to the edge to form a flanged or bulbous edge, although the edge did not survive in its entirety. The fired clay fragments found in a medieval plough furrow are probably scraps of such objects.

3.5.16 These plates form a regular component of Roman fired clay assemblages in the Upper Thames Valley and Oxfordshire and across the South Midlands. The examples from this site are typical of the known range and comparative material is commonplace at Roman sites in the area. Comparable objects have been identified in the region with increasing frequency. The circular discs are more widespread with examples known from Watkins Farm (Allen 1990b, 53), Farmoor (Lambrick and Robinson 1979, 53–4) and Alchester (Booth 2001; Poole 2018a, 172). The rectangular plates have been found at Castle Hill (Booth 2010, 67). Both discs and plates were found at Gill Mill, where the main period of use was during the 2nd and 3rd centuries AD (Poole 2018b, 473–5). At Didcot they occur throughout the Roman period, though quantities decrease during the late Roman phase (Poole forthcoming a).

3.5.17 The examples made in the glauconitic fabric usually occur at sites close to or on outcrops of Gault Clay and Greensand as at Didcot (Poole forthcoming a) and Crab Hill, Wantage (Poole forthcoming b). The character of these objects suggest some at least were made by specialist producers, possibly tilers and the two made in the glauconitic fabric implies that they were manufactured to the south of the site, possibly in the Didcot area some 6–11km distant. In Gloucestershire, similar circular plates appear to have been a specialised product made in Malvernian Ware (Evans *et al.* 2017, 48). However, the focus on the calcareous/shelly fabric for plates at Dunmore Road no doubt reflects non-specialised production using local clay sources from the Ampthill/Kimmeridge Clay Formations underlying the site.

3.5.18 In the early Roman period, the occurrence of plates and discs is not uncommon, but the complete dominance of this form on a site is less usual though not unknown. A fired clay assemblage of Roman date from Devizes, Wiltshire, consisted entirely of plates/discs (Poole 2020). The appearance of this form in this period suggests significant changes in the preparation or method of cooking certain foods introduced in the early Roman period. The function of these discs has not been established, although it has been assumed that they were used in domestic cooking or food

preparation. The presence of burning certainly suggests some were used for cooking in conjunction with ovens or hearths. A recent analysis of similar objects from Worcestershire, referred to as baking plates, have been linked to oven bases and prefabricated ovens (Evans *et al.* 2017), where it is suggested they formed oven floors. In Oxfordshire, evidence for prefabricated ovens is lacking and the plates are rarely associated with structural fired clay. They may have been used solely in conjunction with open hearths placing them in the hot embers to bake breads. Baking in low-status rural households was probably undertaken on the hearth. Various methods are mentioned or described in classical texts, which are discussed by Frayn (1978), who describes the use of leaves or broken tiles to hold loaves laid in the hot embers of the hearth usually constructed at floor level. Roman writers also mention the use of an earthenware pot or *testum* for baking placed inverted over bread or cake placed on leaves or broken tiles on the hearth. The development of clay discs or plates may represent a further step to a more standardised arrangement and, in southern England, may relate to a Roman-introduced baking method associated with new types of bread.

3.5.19 Alongside this material, two fired clay objects in early Roman contexts were identified by Jane Timby while recording the pottery. These include half a spindle-whorl fashioned from a pottery sherd (early Roman enclosure ditch 2293, cut 1440, fill 1661) and a shaped piece of fired clay with a flat base and a curved face not quite regular forming a rough pedestalled base (early Roman pit 1828, fill 1829). The first item was in fabric SA2, was burnished on the exterior face and had a diameter of 54mm; the second item was in a very hard mid-brown/orange-brown fabric with a sandy texture and the clay contained a moderate frequency of well-sorted, rounded quartz (up to 1mm), a rare scatter of limestone (6mm and less) and rare flint.

3.6 Ceramic building material *by Cynthia Poole*

Introduction

3.6.1 A small assemblage of ceramic building material amounting to 17 fragments (1036g) was recovered by hand excavation from ditches, pits, postholes and furrows. The material is all fragmentary, with low–moderate abrasion, and has a low mean fragment weight of 61g. The assemblage has been recorded with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). Fabrics were characterised on the basis of macroscopic features supplemented by the use of x20 hand lens for finer constituents.

Roman tile

3.6.2 The Roman tile (7 fragments, 738g) comprised tegula and plain flat tile fragments of tegula size, all measuring 19–29mm thick. Only one tegula flange survived: it had a rounded profile and measured 26mm wide and over 45mm high. They were made in a variety of orange and reddish-brown fine sandy fabrics containing variable quantities of quartz, mica, iron oxide and calcareous inclusions, all typical of the region. One containing a very high density of glauconite is similar to tile fabrics from Didcot (Poole forthcoming a) and must have been produced from local clays to the south of Abingdon, sourced from the Gault/Greensand interface.

3.6.3 The Roman tile was found in fills 1283 and 1999 of ditch 2295 and pits 1747 and 2058, which were all of early Roman date apart from a small indeterminate scrap in an early Iron Age posthole (1624 from roundhouse 2252), which must be intrusive.

Medieval and post-medieval CBM

3.6.4 The post-Roman CBM (10 fragments, 298g) consisted primarily of flat rectangular roof tile, apart from a couple of fragments of broken brick. One roof tile fragment was pierced by a circular peg hole 11mm in diameter. The roof tile measured 11–15mm thick and was made in orange-red sandy fabrics. The medieval tile was mostly made in a red-orange coarse sandy fabric equivalent to Oxford fabric IIIB apart from one in a finer sandy fabric with cream marl laminations and pellets, that is equivalent to Oxford fabric IVA/B. The post-medieval pieces were made in a red fine sandy clay containing rare small iron oxide or calcareous grits. Three of the roof tiles were found in medieval furrows, but other pieces were found intrusively in early and middle Iron Age and early Roman deposits and may reflect subsidence and compaction of fills with later ploughsoil settling into the top of the features.

Discussion

3.6.5 The CBM assemblage is small and mixed and provides evidence of Roman, medieval and post-medieval activity. The small quantity of Roman tile is unsurprising on an early Roman settlement, as at this period there would have been less opportunity for a rural settlement of this sort to obtain tile for re-use from the refurbishment or rebuilding of more affluent masonry buildings, as became more commonplace in the middle and late Roman periods. The medieval and post-medieval tile no doubt relates to agricultural activity and provides a date for the development of the ridge and furrow during the later medieval and post-medieval period. The number of fragments of later tile found in Iron Age and Roman phased features suggest features silted slowly over a long time span or that there has been mixing from burrowing animals or other bioturbation.

3.7 Worked stone *by Ruth Shaffrey*

3.7.1 Three probable quern fragments are the only worked-stone objects found during the excavation. One fragment with a flat smoothed surface was recovered from the secondary fill of late Iron Age ditch 2261 (cut 1789, fill 1793). This fragment is made from a gritty sandstone from the Lower Greensand, commonly known as Culham Greensand. A second very tiny piece of the same stone type was recovered from early Iron Age roundhouse 2255 (cut 2044, fill 2045). This could also be a quern fragment, although it is too small to be certain.

3.7.2 Culham Greensand is a gritstone that outcrops locally around Culham. Querns of this stone type were not exported over long distances but were widely used in small numbers in the south Oxfordshire region during the Iron Age and Roman periods (Shaffrey and Roe forthcoming). Most Culham Greensand querns recovered from Iron Age features are of saddle quern type, and that is the assumption here. Imported querns were used in the south Oxfordshire region during the Iron Age, including at sites in and around Abingdon (eg Parrington 1978), but the absence of imported querns at Dunmore Road is typical of lower-status sites in the region at that time.

3.7.3 Early Roman ditch 2270 (cut 2002, fill 2003) produced a small fragment of Lodsworth Greensand quern with a dished worn grinding surface, the angle of which suggests that it is from a saddle quern. Lodsworth stone querns began to be manufactured in Sussex during the Neolithic and they were reaching the Thames Valley in small numbers from the Bronze Age. Querns of Lodsworth stone only became common in the south Oxfordshire region during the Roman period, when they were almost exclusively of rotary quern form (Shaffrey and Roe 2011). The fragment found at Dunmore Road could be a residual saddle quern fragment or a reused rotary quern fragment.

Catalogue of querns

1. Quern of Culham Greensand. Fragment with one flat worn surface with possible traces of pecking beneath the smoothing. Weighs 240g. Ctx 1793. Secondary fill of ditch 2261, cut 1789. Late Iron Age.
2. Possible quern of Culham Greensand. Tiny fragment, very reddened from burning. Weighs 22g. Ctx 2045. Secondary fill of roundhouse penannular ditch 2255, cut 2044. Early Iron Age.
3. Quern of Lodsworth stone. Fragment with one worn concave surface. The angle suggests it is from a saddle quern but it is only a small fragment and it could have been reused. Weighs 176g. Ctx 2003. Primary fill of ditch 2270, cut 2002 (ditch around rectangular structure 2269). Early Roman.

3.8 Worked bone *by Leigh Allen*

Introduction

3.8.1 Four worked bone objects were recovered from ditch fills dating from the early Iron Age to the early Roman period. They comprise two points, a gouge and a ferrule. None of the objects are complete.

Early Iron Age

3.8.2 A single point was recovered from secondary fill 1706 of penannular ditch 2255. Broken at the upper end, the point is slender and highly polished along its length. The flattened oval-section shaft ends in a sharp angled tip. It was possibly used as an awl to pierce holes in leather or maybe as a needle.

Middle Iron Age

3.8.3 The upper end of an incomplete gouge fashioned from a sheep/goat tibia was recovered from tertiary fill 1098 of ditch 2267. The implement has been hollowed out, the butt-end has been cut straight across and there is a transverse perforation through it. The shaft shows a fair degree of polish along its length but the utilitarian end of the tool is missing. Gouges are common finds on Iron Age sites and may have been used for a variety of tasks, including weaving and hide dressing. Large numbers of perforated examples were recovered at Glastonbury and All Cannings Cross, and it was thought that the perforations were made to attach wooden hafts (Bulleid and Grey 1917, 420–1; Cunnington 1923, 84–7).

3.8.4 A crudely square-cut object came from fill 1434 of ditch 1450. The object has been partially hollowed out and has rough knife-cut marks on the outer surface. It could be a ferrule or short handle, though it appears to be unfinished.

Early Roman

3.8.5 A roughly cut point was recovered from secondary fill 2234 ditch 2262. Broken at the upper end, the point shows little evidence of use. The shaft and point are not polished, and the tip is roughly cut.

3.9 Slag *by Leigh Allen*

3.9.1 Eight fragments of fuel ash slag weighing 46g were recovered from contexts 1133, 1629, 1793, 2078 and 2079. Fuel ash slag is associated with non-metallurgical processes where high temperatures can be produced such as in ovens, hearths, kilns, furnaces and even when buildings burn down.

4 ENVIRONMENTAL AND OSTEOLOGICAL EVIDENCE

4.1 Animal bone *by Hannah Russ (mammals) and Rebecca Nicholson (fish)*

Introduction

4.1.1 Animal bone recovered from features and deposits dating from the early/middle Bronze Age to the early Roman period were analysed to provide information regarding the nature of livestock and dietary regimes throughout different phases of occupation.

Methods

4.1.2 This analysis has been undertaken in line with published standards and guidelines (Baker and Worley 2019; CIfA 2014b). The animal bones were identified to element, side and to taxon, where possible, using the author's reference collection and relevant identification guides (Hillson 2003; 2005; Johnson 2015; BoneID; Russel Bone Atlas). Quantification of mammal remains used the diagnostic zone method as presented by Dobney and Rielly (1988).

4.1.3 A taphonomic assessment of each fragment was undertaken, recording the presence and absence of butchery (specified as cut, chop and/or saw marks), burning and calcination, any evidence for canid or rodent gnawing), pathology and non-metric traits, and surface preservation. Bone fragments that could be identified to element but not to species were grouped using size-based class or order categories.

4.1.4 Epiphyseal fusion was recorded as fused, fusing or unfused and aged based on Silver (1969). Tooth eruption and wear were recorded using Grant (1982) for cattle, pigs and caprines. Elements that could provide sexing information were also recorded. Measurable elements were measured according to von den Driesch (1976).

Taxonomic representation

4.1.5 Animal bones and teeth recovered from features dating between the early/middle Bronze Age and the early Roman periods totalled 2579 specimens. In total, 2523 fragments were recovered via hand collection, with an additional 56 identifiable fragments recovered from bulk environmental samples (Table 11). The hand-collected remains included horse (*Equus caballus*), cattle (*Bos taurus*), red deer (*Cervus elaphus*), possible roe deer (cf *Capreolus capreolus*), pig (*Sus domesticus*), sheep/goat (*Ovis aries/Capra hircus*) and dog (*Canis familiaris*). Many of the remains could be identified only within size-based clade (ungulate) or class (mammal) groups (56.2%, n=1418).

4.1.6 Sheep/goats are underrepresented in NISP counts vs MNI in most phases (Figs 34 and 35). With the exception of the middle Iron Age, sheep/goat consistently form c 50% of the dietary livestock individuals. Cattle show a broad pattern of increasing presence in terms of MNI, from just over 20% in the early Iron Age to nearly 40% in the early Roman period. Broadly speaking, the economy appears to shift from one that focussed on caprines in the early Iron Age, with cattle and pigs taking a secondary role, to a more balanced economy in the middle Iron Age, followed by a reduction in pig rearing/consumption in the late Iron Age and early Roman periods with a maintenance of the higher sheep/goat pattern.

4.1.7 Dog bones were recovered in small numbers early, middle and late Iron Age and early Roman deposits. These notably included a tibia from a middle Iron Age deposit with cutmarks (see below). Wild animals were represented by two fragments of red deer antler and a likely roe deer humerus, all recovered from early Roman deposits.

4.1.8 A total of 56 fragments of animal bone and teeth were present in samples recovered from 20 contexts. The majority of the remains represented cattle, pig and sheep/goat. One tooth from a pike (*Esox lucius*) was found in the residue of soil sample 1001, taken from the fill of early Iron Age ring gully 1021. Remains of microfauna including *Anura* (frog/toad), voles (*Arvicola*, *Myodes* and/or *Microtus*) and mice (*Mus* and/or *Apodemus*) were also recovered in small numbers from 13 environmental samples (not tabulated—see archive).

Taxon	E/MBA	EIA	MIA	LIA	IA	ER	Total
Horse		27	41	7		37	112
Horse/Cattle						5	5
Cattle	2 (1)	94 (1)	145	26		229 (2)	496 (4)
Red deer						2	2
cf Roe deer						1	1
Pig		49 (3)	46 (2)	15		17 (3)	127 (8)
Sheep		3	1				4
Sheep/Goat	(1)	98 (9)	117 (8)	33 (9)		91 (16)	339 (43)
Dog		1	10	4		4	19
Large ungulate		33	41	11		37	122
Small ungulate		23	43	10	1	17	94
Ungulate			6			2	8
Large mammal	1	133	227	63		197	621
Medium/Large mammal		9	106	17		35	167
Medium mammal	2	123	189	22	5	50	391
Medium/Small mammal		1	7			7	15
Pike						(1)	(1)
Total	7	607	989	217	6	753	2579

Table 11: Summary of hand-collected and sieved animal bones by NISP (sieved remains in parentheses)

Distribution

4.1.9 Most of the vertebrate remains were recovered from ditch fills, with 64.0% of the assemblage (n=1650) being recovered from 110 separate interventions dating between the early Iron Age and the early Roman period (Table 12). A quarter of the assemblage (n=655) came from the fills of 35 pits. Vertebrate remains from early/middle Bronze Age contexts were exclusively from 'oven' 2303. Small assemblages were recovered from 22 early Iron Age postholes, 14 early Iron Age ring gullies, six early and middle Iron Age ring ditches, a middle Iron Age inhumation, three early Roman layers and the fill of an early Roman roadside ditch. While the overall size of the assemblage was moderate, only 11 features contained more than 50 specimens (Table 13). The material from these features formed 44.4% of the overall assemblage from the Site (n=1122).

Pit 1037

4.1.10 Early Iron Age pit 1037 contained remains presenting two trotters and a mandible of a pig aged around 12 months at death. The elements present suggest that this deposit represents the discard of primary butchery waste, supported by cut marks observed on the calcaneum.

Pit 1499

4.1.11 Middle Iron Age pit 1499 contained articulating remains comprising the left forelimb and skull of a sheep/goat aged around 8–10 months at death. The individual was represented by left scapula, humerus, radius and ulna and a fragment of right maxilla. The age was estimated on fusing distal humerus and proximal radius elements. Cut marks indicative of meat removal were observed on the humerus.

Feature type/context	E-MBA	EIA	MIA	LIA	IA	ER	Total	No. features
Ditches		62	890	205		493	1650	110
Pit	7	332	80	12	2	222	655	35
Posthole		140			4		144	23
Ring gully/ditch		73	12				85	20
Layer						26	26	3
Roadside ditch 2263						11	11	1
Inhumation 2143			7				7	1
Total	7	607	989	217	6	752	2578	193

Table 12: Summary of animal bones by period and feature type

Period	Feature	Horse	Horse/Cattle	Cattle	Pig	Sheep	Sheep/Goat	Dog	Non-identified	Total
Early Iron Age	Pit 1023								58	58
	Pit 1037	1		10	17	3	23		86	140
	Posthole 1203			28	1		8		14	51
Middle Iron Age	Ditch 1095			31	6	1	41	3	242	324
	Ditch 1117	1		1	9		3		48	62
	Ditch 2007			4	1		1		45	51
	Ditch 2008	9		16	2		7		36	70
Late Iron Age	Ditch 1789	5		19	3		28		109	164
Early Roman	Ditch 1440		5	22			5		27	59
	Pit 1747	21		8	2		23	1	33	88
	Pit 1983				2		28		25	55
Total		37	5	139	43	4	167	4	723	1122

Table 13: Features with more than 50 animal bone specimens

Taphonomy

4.1.12 Bone surface preservation varied throughout the assemblage but was similar for remains of all periods, with slightly better preservation observed in remains from early Roman deposits. Fragmentation was moderate throughout the assemblage, with some partial bones and teeth recovered and some re-fitting fragments of single specimens.

4.1.13 Evidence for butchery in the form of fine cut marks and more substantial chop marks was recorded on 94 specimens dating to the early, middle and late Iron Age and early Roman phases (Table 14). Cut and chop marks were most frequently recorded on cattle, pig and caprine remains, consistent with an assemblage derived primarily from food waste. None of the remains displayed evidence for processing with a saw, which is consistent with the date and nature of the material.

4.1.14 A small number of specimens may suggest that carcasses were also exploited for raw materials, such as horn in the case of an early Iron Age sheep/goat horncore from ditch 1254 (enclosure 2268), bone in the case of the horse remains from early Iron Age ring ditch 2255 and middle Iron Age ditch 2259 and ring ditch 2264, and red deer antler from early Roman period ditch 2293. Two bones from Early Iron Age deposits had evidence for use wear: a horse metacarpal from the fill of ring gully 2257 had polished surfaces and small flattened areas of wear on the shaft and a caprine tibia shaft from ditch 2297 had wear to the mid-shaft that had gone through to the bone cavity on the dorsal surface, and multiple cut marks on the distal end of the shaft.

Date	Species	Chop	Cut
	Cattle	2	4
	Horse		1
	Pig		1
	Sheep/goat	4	4
Early Iron Age	Unidentified	6	10
	Cattle		9
	Horse		4
	Pig	1	1
	Sheep/goat	1	5
	Dog		1
Middle Iron Age	Unidentified	2	7
	Cattle	1	1
	Sheep/goat		1
Late Iron Age	Large mammal	1	3
	Cattle	3	5
	Pig	1	2
	Sheep/goat	2	2
	Red deer	1	
Early Roman	Unidentified	7	1
		32	62

Table 14: No. of specimens with butchery marks

4.1.15 Evidence for carnivore activity was found on 159 specimens from various phases (Table 15). Rodent gnawing was observed on four specimens, in total, two each from early and middle Iron Age deposits. Gnawing activity provides additional evidence for the

presence of carnivores, likely domestic dogs and/or foxes, and that animal remains/carcasses were accessible to these animals at some point prior to their final deposition. The frequency of specimens with evidence for carnivore gnawing, including 16 that also had cut or chop marks suggest that animal bones were being given to dogs as a source of nutrition.

4.1.16 Thirteen fragments of burnt bone were recorded in the hand-collected material. Burnt bone was also recovered from bulk environmental samples, but none of these represented identifiable specimens. A low frequency of burnt remains may suggest that food waste was rarely discarded into fires or hearths and was not a resource used as fuel at the site.

Period	Rodent gnawing	Carnivore gnawing
Early Iron Age	2	60
Middle Iron Age	2	59
Late Iron Age		12
Early Roman		28
Total	4	159

Table 15: Incidence of gnaw marks by phase (NISP)

Horses

4.1.17 Horse bones were recovered from features dating between the early Iron Age and early Roman periods, and together represent a minimum of nine individuals (Table 16). A minimum of four horses were represented in eight early Iron Age features based on the presence of two right humeri from animals over 15–18 months at death and a radius from a neonate. Horse remains recovered from 12 middle Iron Age features need not represent more than one animal aged over 36–42 months at death. No duplicate elements were recovered, and all the bones had fully fused epiphyses with permanent teeth all in wear. Late Iron Age horse remains represented at least two individuals based on left humerus fragments. All ageable remains were from animals that died at over 15–18 months of age. Horse remains from 10 early Roman features represented a minimum of two individuals based on left pelvis presence. Early Roman horse remains represented animals that died over 13–15 months of age, with at least one surviving to over 36–42 months.

4.1.18 The frequency of horse remains at the site, when considered in terms of number of elements, minimum number of individuals and chronological group, is low. The horse data provides a good example of how specimen counts can be misleading with regards to taxa representation. Both the NISP and element data indicated that horse remains were most frequently recovered from Middle Iron Age and early Roman period contexts, but despite the NISP and element count for the middle Iron Age being the highest, the remains represented a minimum of only one individual; conversely, the lower NISP and element counts for the early Iron Age and late Iron Age periods provided higher minimum number of individual counts.

4.1.19 Once the horse data has been considered in terms of skeletal element representation, and then by chronological period, the quantities fall below what is required to undertake detailed analysis of body-part representation. Cranial and post-cranial

elements are represented in all periods, but each individual is represented by few remains.

Area	Element	EIA	MIA	LIA	ER	Total
Cranial	Mandible		2			2
	Tooth	3	3	1	5	12
Forelimb	Scapula	1	1			2
	Humerus	3		2	1	6
	Radius	2	2		1	5
	Metacarpal	1		1	1	3
Hindlimb	Pelvis	2			2	4
	Femur		2			2
	Tibia		3	1	2	6
	Metatarsal	1	2			3
Feet	Metapodial			1		1
	Metapodial 2/4		3			3
	Phalanx 1		1		1	2
Total		13	19	6	13	51
MNI		4	1	2	2	9

Table 16: Horse skeletal representation: maximum number of elements and minimum number of individuals (MNI)

Cattle

4.1.20 Cattle remains were recovered from features dating between the early/middle Bronze Age and the early Roman periods (Table 17). Site wide, the cattle remains represent a minimum of 15 individuals. One cow was represented in early/middle Bronze Age contexts and was over four years at death, based on epiphyseal fusion of the tibia. Cattle remains from early Iron Age deposits also represented at least three animals, with one surviving to around 24 months and one to 42–48 months of age. Cattle remains from middle Iron Age deposits represented at least four individuals, including a neonate, one aged less than 12–18 months, one 24–30 months and one 42–48 months of age or older.

4.1.21 In the late Iron Age at least two cattle are represented, one 12–18 months of age at death and one over 18 months based on mandibular tooth eruption and wear for right side M2 teeth and a fully fused first phalanx. Early Roman cattle remains represented at least five individuals based on proximal left metatarsals, for which tooth wear and eruption and epiphysis fusion data suggest were all over 12 months in age at death, including one around 27–30 months and two over 27–30 months.

4.1.22 Cattle skeletal elements representing most areas of the body were recovered from deposits of all periods. When considered in terms of maximum number of elements and minimum number of individuals by period overall, the remains represent 15 individuals, a surprisingly small number of animals, especially when compared with horse remains (33 fragments or 15 elements per individual by mean values). The 'completeness' of cattle remains indicated by the high NISP and element counts per individual, and the representation of skeletal elements from all body areas is indicative of a meat economy where whole cattle were brought to the site for

processing/butchery for meat as the primary resource, which could have been part of either settlement-based and/or the wider regional economy and trade.

4.1.23 A cattle metatarsal had anomalous bone growth to lateral surface on anterior and posterior along length of the shaft, but more pronounced in the distal half. The anomalous bone growth had voids that were consistent with blood vessels. A cattle incisor had wear around the 'neck' between the root and the tooth enamel, consistent with that associated with consumption of grasses that make these groves at the base of incisors as the animal pulls the stems.

Area	Element	E/MBA	EIA	MIA	LIA	ER	Total
Cranial	Skull				1	4	5
	Skull and		1			3	4
	Horncore				1	2	3
	Petrosal					1	1
	Maxilla			1	1	5	7
	Premaxilla			1		1	2
	Mandible		5	10	1	16	32
	Tooth	1	9	14	5	20	49
	Axis					1	1
Axial	Sacrum						1
Forelimb	Caudal vertebra					1	1
	Scapula		3	3		3	9
	Humerus			5	1	8	14
	Radius		4	5	1	1	11
	Ulna		1	1		2	4
	Metacarpal		3	4	1	5	13
Hindlimb	Pelvis		2	2		1	5
	Femur		4	6		2	12
	Tibia	2	3	3	1	5	14
	Calcaneum		2	2		3	7
	Astragalus			1	1	1	3
	Tarsal 4				1	1	2
	Metatarsal		4	5	2	10	21
Feet	Metapodial			2			2
	Phalanx 1		1	2	1		4
	Phalanx 2			1			1
Total		3	43	68	18	96	228
MNI		1	3	4	2	5	15

Table 17: Cattle skeletal representation: maximum number of elements and minimum number of individuals (MNI)

Pigs

4.1.24 Remains of pigs were recovered from features dating between the early Iron Age and early Roman periods (Table 18). Site wide, pig remains represented a minimum of ten individuals. Pig remains recovered from early Iron Age pit features represented a minimum of two individuals, with remains consistent with animals aged around 12 months at death, although could have been up to 24 months old. Several of the ageable early Iron Age specimens were recovered from pit 1037 and represented an

associated bone group comprising trotters and mandible of a pig aged around 12 months at death (see above).

4.1.25 Pig remains were recovered from 21 middle Iron Age contexts, representing a minimum of four individuals, including at least two with tooth eruption stages consistent with 2–3 years at death, as well as a young individual no older than 12 months, and a perinate. Pig remains from three late Iron Age ditch fills represented a minimum of one individual and were consistent with an animal aged 2–3 years at death. Pig remains were recovered from 13 early Roman features but need not represent more than one individual aged between 12 and 42 months at death based on epiphyseal fusion.

4.1.26 The number of pig bones are too few to undertake a chronological analysis of body-part representation. Cranial and post-cranial elements are represented in all periods, but each individual is represented by few remains (13 fragments or 10 elements per individual by mean value). Although the element and minimum number of individual values are low, there is a noticeable over-representation of cranial remains in middle Iron Age deposits compared with material from other phases. Sexing data derive from pig canines from two fills (1013 and 1017) of middle Iron Age enclosure 2258, indicating the presence of one female and one male.

Area	Element	EIA	MIA	LIA	ER	Total
Cranial	Skull	3	1		1	5
	Maxilla		3		2	5
	Mandible	8	6	2	1	17
	Tooth	6	14	2	3	25
Forelimb	Scapula	2	2		3	7
	Humerus	1	1		1	3
	Radius		1		3	4
	Ulna	1	1			2
	Metacarpal	1				1
	Metacarpal 2/5	1				1
Hindlimb	Pelvis	1	2	1	1	5
	Femur	3	1			4
	Tibia		1			1
	Fibula	1	2		1	4
	Calcaneum	1				1
	Metatarsal	1				1
	Metatarsal 2/5	1				1
Feet	Metapodial		1	1		2
	Phalanx 1	1	3			4
Axial	Vertebra				1	1
Total		32	39	6	17	94
MNI		4	4	1	1	10

Table 18: Pig skeletal representation: maximum number of elements and minimum number of individuals (MNI)

Sheep/Goats (Caprines)

4.1.27 Caprine bones were recovered from features dating between the early/middle Bronze Age and the early Roman periods (Table 19). Caprine remains represented a minimum of 22 individuals from all phases. One tooth was recovered from an environmental sample recovered from a fill (1955) of early/middle Bronze Age oven 2303. Early Iron Age features contained the remains of at least seven individuals. These were aged based on tooth eruption and wear, representing animals that had died at 2–6 months, two at 6–12 months, four around 2–3 years old and one over 3–4 years. Twenty-six features with fills dated to the middle Iron Age contained caprine remains that represented a minimum of four individuals based on left tibia and right mandible presence. Epiphyseal fusion and tooth eruption and wear indicate caprines aged under 6–10 months (unfused pelvis) to 4–6 years of age (mandibular wear stage G).

4.1.28 Middle Iron Age pit 1499 contained remains comprising the articulating left forelimb and skull of a sheep/goat aged around 8–10 months at death (see above). The individual was represented by left scapula, humerus, radius and ulna and a fragment of right maxilla, and aged based on fusing distal humerus and proximal radius. Three animals were represented in late Iron Age deposits from six features, all of which were over 2–3 years at death based on epiphyseal fusion and tooth eruption and wear. Early Roman deposits from 24 features contained caprine remains that represented a minimum of seven individuals based several left tibiae. These represented animals that had died between 18–24 months to 3–4 years of age at death.

4.1.29 Age-at-death data for caprines can often inform on the type of economy, or primary resource, these animals were kept for, eg meat, dairy or wool. However, the sample size is small, and although meat was clearly exploited it is likely that caprines were kept for multiple products. The overall number of individuals represented fall below what is required to undertake a detailed analysis of skeletal part representation, despite caprines being the most frequently recovered taxa in terms of minimum number of individuals (22). Cranial and post-cranial elements are represented in all periods, with each animal well relatively well represented (18 fragments or 12 elements per individual as mean values). In the early Roman period, post-cranial elements, especial those of the hind limb, occur at a noticeably higher frequency than cranial elements, perhaps suggesting that in this period some primary butchery activities were taking place elsewhere. A sheep skull fragment from upper fill of early Roman pit 1983 had a double horncore (Fig. 36, no. 2).

Area	Element	E/MBA	EIA	MIA	LIA	ER	Total
Cranial	Skull		1			1	2
	Skull and horncore		4	1	1		6
	Horncore		1				1
	Petrosal		1				1
	Premaxilla			1			1
	Maxilla		1	2			3
	Mandible		8	8	4	3	23
	Tooth	1	16	22	16	12	67
	Hyoid					2	2
Forelimb	Scapula		2	4	1	1	8
	Humerus		4	5		2	11
	Radius		9	3	2	3	17

Area	Element	E/MBA	EIA	MIA	LIA	ER	Total
	Ulna			2			2
	Metacarpal		6	5	2	5	18
Hindlimb	Pelvis		1	5	1	2	9
	Femur		3	2		3	8
	Patella			1			1
	Tibia		11	7	3	13	34
	Calcaneum			1		1	2
	Metatarsal		7	5		11	23
Feet	Metapodial		1			1	2
	Phalanx 1		2	1		1	4
	Phalanx 3			2			2
Axial	Rib			6			6
	Caudal vertebra				1		1
	Vertebra					2	2
Total		1	78	83	31	63	256
MNI		1	7	4	3	7	22

Table 19: Sheep/Goat skeletal representation: maximum number of elements and minimum number of individuals (MNI)

Dogs

4.1.30 In total, 19 dog bones representing a minimum of five individuals were identified. Ageing data based on epiphyseal fusion suggested that some very young animals, at least two under one year, were represented. However, tooth eruption and epiphyseal fusion occurs at a much younger age in dogs than in domestic livestock animals, and once a dog is aged over 18 months all elements are fused. Therefore, epiphyseal fusion is less useful in estimating age at death.

4.1.31 A dog tibia from middle Iron Age upper fill of ditch 2259 had multiple cut-marks to the dorsal surface on the distal part of the shaft, and it is suggested that this may represent skinning activity for skin/fur where skeletal elements of the feet were retained as part of the pelt (Fig. 36, no. 1).

4.1.32 A 2nd metatarsal from a puppy aged less than 10 months old was the only dog bone recovered from an upper fill of early Iron Age ditch 1450. Middle Iron Age dog remains were recovered from the fills of five ditches representing a minimum of two individuals, one over 8–10 months old and one at least 13–16 months, based on epiphyseal fusion. Four dog bones from an upper fill of late Iron Age ditch 2273 represented elements of the foot, and may all have been part of a single paw from the same animal. One metapodial was distally unfused, indicating an age at death of less than 8–10 months. Four dog bones were recovered from three early Roman deposits. A fused distal humerus indicates an age at death of over 15 months.

Deer

4.1.33 The only wild mammal remains represented were two refitting fragments of red deer antler, one with a chop mark, and a humerus fragment most likely from a roe deer, all recovered from early Roman period deposits.

Discussion

4.1.34 In the last major review of middle Bronze Age to late Iron Age faunal assemblages from southern Britain, there were very few Iron Age sites located in the Abingdon area (Hambleton 2008). It was recognised that few sites in the Upper Thames Valley contained evidence that represented continuous, or near continuous, occupation throughout the Iron Age, with Gravelly Guy (Lambrick and Allen 2005) and Yarnton (Hey *et al*. 2016) being the exceptions, both located some distance to the north of Dunmore Road. The assemblage from Dunmore Road provides firm evidence that the four main domestic livestock species played important roles in the daily lives of those living in and passing through the area throughout the Iron Age and early Roman periods, and therefore, while the assemblage is relatively small, it represents an important opportunity to further our understanding of animal husbandry and human diet in this area, over the c 1000-year period of activity at the site. The continuation of settlement activity from the late Iron Age into the Roman period has also provided the opportunity to consider further chronological change, especially in the 1st century AD (cf Allen 2017).

4.1.35 During the Iron Age, the Upper Thames region was one in which the economy was unusually dominated by domestic cattle, with caprines playing a smaller role than was typical of the period elsewhere in England (Hambleton 1999, 45). Pigs consistently played a small role in the livestock economy throughout the Iron Age to early Roman period in this region, indicating that pork was consumed less frequently than both beef and lamb/mutton. The consistent small-scale production of pigs, which are represented by all body parts at Dunmore Road, might support an interpretation of household-based rearing, rather than any specialised or centralised husbandry regimes.

4.1.36 Cattle dominant assemblages were recovered at Iron Age and early Roman sites in the vicinity, including Ashville Trading Estate (Wilson 1978), Farmoor (Lambrick and Robinson 1979), Watkins Farm (early Roman only; Wilson and Allison 1990, 59) and Appleford (Kitch 2008, 92). However, more equal representation of cattle and caprines has been noted in the Iron Age, as seen at Barton Court Farm (Miles 1986), Watkins Farm (Wilson and Allison 1990, 59) and Abingdon Cinema (Strid 2007a). The frequency of caprine remains in the early Iron Age to early Roman assemblages from Dunmore Road are, therefore, unusual given the cattle-dominant economy that is typical of this region during these periods (Allen 2017, 92). A caprine-dominated assemblage was also seen in early Roman period deposits at Twickenham House in Abingdon, where 66% of the NISP were caprines, while only 25% were cattle, suggested to represent lower status for those living at the site in comparison with those in the surrounding areas, where more beef was consumed (Wilson and Wallis 1991, 8). While at both sites the data suggest that less beef was being consumed than elsewhere at this time, given the amount of meat that would be available from one animal, the contribution of beef to the diet would still exceed that of lamb/mutton at Dunmore Road, but at Twickenham House the beef to lamb/mutton ration could have been more equal.

4.1.37 While based on a small sample size, and therefore to be considered with some caution, the remains from Dunmore Road and Twickenham House suggest that there is more variation in regional patterns in animal husbandry than previously recognised. This is

an area that requires further research as an increasing number of assemblages are studied and the results made available for analysis.

4.1.38 Horses and dogs formed small but consistent portions of the animal bone assemblage from the early Iron Age to early Roman periods. Evidence for horses at the site is broadly consistent throughout the 1000-year period of activity. There is no evidence to suggest that there were more horses present at Dunmore Road than any other Iron Age or early Roman period site in the area, where they are represented similarly, such as Ashville Trading Estate (Wilson *et al*. 1978, 111), Farmoor (Wilson and Bramwell 1979, 128), Barton Court Farm (Miles 1986, 29; Wilson *et al*. 1986, tables VIII and IX), Watkins Farm (Wilson and Allison 1990, 59), Twickenham House (Wilson and Wallis 1991, 9), Abingdon Cinema (Strid 2007a, 132), Appleford Sidings (Kitch 2008, 92) and Abingdon Road, Drayton (Clarke 2016, 30–1). Horses were an important part of Iron Age and early Roman life, providing, primarily, transportation, but also sometimes meat, skin and bone, with some use as work animals. The cut marks found on horse bones from early and middle Iron Age contexts suggests that horse meat was eaten at Dunmore Road.

4.1.39 Dogs also served as working animals, although they may have also been regarded as pets. A dog tibia recovered from middle Iron Age fill of ditch 1129 displayed clear evidence of cutting with a fine-bladed knife on the anterior surface of the distal end. Cut at this point, it may indicate that the feet were left intact as part of the fur. Dog remains with evidence for skinning have been recovered from Iron Age and Roman period sites across England (eg Dobney *et al*. 1996; Fairnell 2003; Smith 2006; Allen 2018, 110). However, only one example was found in Oxfordshire, recovered from a site at Asthall (Booth *et al*. 1996, 383), located c 23km to the north-west of the Dunmore Road site. The context of this finds was of a later Roman child burial, aged 4–6 years, found alongside two front feet and one hind foot of a dog. The remains at Asthall are interpreted as the child having been wrapped in a dog skin, which had the foot bones intact.

4.1.40 The animal bone evidence from Dunmore Road suggests that wild animals, including deer, smaller mammals, such as hare or rabbit, birds or fish provided minimal to no contribution to the diet at the site. While only one fish bone—a pike tooth—was recovered, the presence of any fish remains dating to the early Iron Age in England is worthy of note as tentative evidence of fishing in a local river or stream. Fish remains are a rare find from inland rural sites dating to this period, and it has been argued that the consumption of fish may have been a taboo (Dobney and Ervynck 2007). The paucity or absence of deer, small mammal, wild birds and fish remains is consistent with those at other sites with Iron Age and early Roman period activity in the vicinity, where evidence for wild resource use was absent or minimal (eg Wilson 1975; Wilson *et al*. 1978, 111; Wilson and Bramwell 1979, 128; Miles 1986, 29; Wilson *et al*. 1986; Wilson and Allison 1990, 59; Wilson and Wallis 1991, 9; Strid 2007a, 132; 2007b, 102; Charles 2008, table 20; Kitch 2008, 92; Clarke 2016, 30–1). Where deer remains have been recovered, they were almost always red deer antler fragments, rather than skeletal remains that might suggest hunting or venison consumption.

4.2 Marine shells *by Rebecca Nicholson*

4.2.1 A small quantity of marine shells was recovered by hand from seven contexts. All the fragments are fossilized except for a fragment of a right valve of European flat oyster (*Ostrea edulis* L.) from early Roman pit fill 2060 and two small fragments also probably of *O. edulis* from early Iron Age pit fill 1039.

4.3 Human skeletal remains *by Mandy Kingdom*

Introduction

4.3.1 The human bone assemblage comprised a single inhumation (skeleton 1245), three deposits of disarticulated cranium and two pits containing unurned cremation deposits. Skeleton 1245 was buried on the base of circular pit 2143 within enclosure 2260. The individual was orientated N–S, with the head in the north, and was lying in a crouched position on their left side. Stratigraphically, the pit truncated early Iron Age roundhouse ditch 2203 and was covered by fill 1244 which contained animal bones and pottery dating the burial to the middle Iron Age.

4.3.2 The disarticulated material, comprising cranial bone fragments from at least two individuals, was recovered from the top fills of middle and late Iron Age ditches. These included fills 1097 and 1098 from middle Iron Age ditch 2267 (cut 1095) towards the south-western end of the excavated area. Material from fill 2148 was recovered from late Iron Age enclosure ditch 2261 (cut 2138) in the north-eastern part of the excavated area.

4.3.3 Cremation pit 1258 contained deposits 1264, 1259 and 1271, and was located in the north-western part of the excavated area. The pit was irregular and sub-oval in shape, measured 0.68m by 0.5m in width with a depth of 0.08m. Possible disturbance was observed at its south end. A radiocarbon date of 930–815 cal BC (94% confidence; SUERC-96915) was obtained from deposit 1259, placing it in the late Bronze Age, despite the prevalence of Iron Age features in this area.

4.3.4 Cremation pit 1805 contained deposits 1806 and 1807, and was located within early Roman enclosure 2270 to the north of building 2269a. The pit was sub-oval in shape measuring 0.53m x 0.42m and was 0.11m deep. The pit had been disturbed by furrowing and had been truncated by a land drain at its north end. The deposits are assumed to be of a similar late Bronze Age date to the deposits in pit 1258, although this is unconfirmed and an early Roman date is possible.

Methodology

Skeleton 1245

4.3.5 Skeleton 1245 was analysed and recorded in accordance with published guidelines (Brickley and McKinley 2004; Mitchell and Brickley 2017). Preservation was recorded with reference to completeness (scored as <25%, 26–50%, 51–75% or 76–100%), degree of fragmentation (scored as low, <25% fragmented; medium, 25–75% fragmented; or high, >75% fragmented) and degree of surface erosion (after McKinley 2004a, 16).

4.3.6 The sex of the skeleton was estimated based on observations of sexually dimorphic traits of the skull and pelvis (Buikstra and Ubelaker 1994). Age was estimated based on the level of dental attrition (Brothwell 1981; Miles 1962) and observation of late-fusing epiphyses (Scheuer and Black 2000). Other methods commonly used for adult age estimation, namely those using the auricular surface (Lovejoy *et al.* 1985) and pubic symphysis (Brooks and Suchey 1990), could not be employed because these areas of the skeleton had not survived or had been damaged post-mortem.

4.3.7 It was possible to calculate the platymeric index (indicator of proximal femur shape) and platycnemic index (indicator of mediolateral flatness of the tibia) (Brothwell 1981). However, stature estimation was not possible due to fragmentation of the long bones.

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

Cremation deposits

4.3.9 The cremation deposits were recovered, processed and analysed in accordance with published guidelines (McKinley 2004b). In the field, the deposits were subject to whole-earth recovery. Those in pit 1805 were assigned two context numbers to distinguish the primary fill from disturbed soil from around the edge of the cut, and pit 1258 was assigned three numbers to distinguish the main concentration of bone from the upper truncated layer and the basal layer (see Table 20). Bones from different fills are together considered to represent one discrete deposit from each pit. Deposit 1259 was excavated in three spits with a combined depth of 0.07m. The remaining deposits were recovered in bulk.

4.3.10 Processing involved wet sieving the deposits by individual sample number, to sort them into >10mm, 10–4mm, 4–2mm and 2–0.5mm sized fractions (Table 21). The >10mm and 10–4mm sieve fractions were fully sorted, separating the burnt bone from the extraneous material (eg stones). For samples 1005 (deposit 1264, pit 1258), 1016 (deposit 1806, pit 1805) and 1017 (deposit 1807 associated with pit 1805), the 4–2mm fractions were also fully sorted. It was not possible to fully sort the 4–2mm fractions from the rest of the samples. Instead, a 20g sample from each of these fractions was sorted and the percentage bone weight calculated. These percentages were then applied to the total weight of the unsorted material to provide more-informed bone weight estimates for each fraction (see Table 22).

4.3.11 The smallest fraction sizes from each sample (2–0.5mm) were not sorted but were rapidly scanned for identifiable skeletal remains and artefacts. Estimations of the proportions of bone present within the 2–0.5mm fractions were made visually (see Table 23). All bone was analysed to record colour, weight and maximum fragment size.

4.3.12 Each sieve fraction was examined for identifiable bone elements and the presence of pyre and/or grave goods. The minimum number of individuals (MNI) present was estimated based on the identification of repeated elements and/or the presence of

juvenile and adult bones in the same deposit. Estimations of age were based on the development stage of tooth roots (AlQahtani 2009), observations of completely fused epiphyses (Scheuer and Black 2000) and, more generally, the overall size/morphology of identified bones. Sex estimation was not possible due to the absence of sexually diagnostic features from all the deposits. The bone fragments were also examined macroscopically for evidence of pathology and trauma. Where this was present, the changes were described and differential diagnoses explored, with reference to standard texts (as above).

Skeleton 2145

4.3.13 The preservation of skeleton 2145 was judged to be good overall, considering completeness, fragmentation and surface preservation together. The skeleton was approximately 95% complete, having all skeletal regions represented. Only the delicate facial bones, cranial bones, pubic symphyses, part of the sacrum and a few epiphyses were absent. There was minor erosion on the surfaces of a few elements, consistent with McKinley's grade 1 (2004a, 16). Most elements were fragmented to some degree, but this was mainly confined to the epiphyses and, therefore, fragmentation was scored as 'medium' overall.

4.3.14 The sex of skeleton 2145 could be estimated from sexually dimorphic features of the skull and two pelvic traits, including the morphology of the sciatic notch and elevation of the auricular surface. These all indicated a female individual, supported by the size of the left glenoid cavity (33.4mm F=<34mm) and the left femoral head (42.4mm F=<43mm) (Bass 2005).

4.3.15 Age estimation was based on dental attrition and the fusion stage of the medial clavicle epiphyses. Although the auricular surface was present, and some striations could be observed, the majority of the surface had suffered post-mortem damage and could not be analysed with confidence. The medial clavicle was fully fused indicating an adult individual >20yrs. Dental attrition was not significant, consistent with 17–25 years and 18–22 years. The individual was assigned to the Young Adult (18–25yrs) age category overall.

4.3.16 Although stature estimation was not possible it was possible to calculate the platymeric and platycnemic indices for skeleton 1245. At 88.5, the platymeric index fell into the category of eurymeria, (index between 85 and 99.9), indicating a rounded rather than flat proximal femur diaphysis (platymeria). The reasons for differences in femoral shape are not clear, but ancestry, mechanical stresses, and mineral or vitamin deficiency have been suggested as potential, influential factors (Brothwell 1981, 89). The tibial platycnemic index was 64.8 and is within the mesocnemic range (63.0–69.9), indicating a rounded proximal tibial diaphysis morphology. Again, the causes for differences in tibial morphology are unknown and various explanations have been put forward, including those relating to pathology and mechanical factors (ibid.).

4.3.17 A number of cranial and post-cranial non-metric traits were observed in skeleton 2145. Non-metric traits are skeletal variants which cause no symptoms and are recorded as present or absent. Some have a strong genetic component in their aetiology and have been used to study relatedness between individuals, whilst others may be influenced by mechanical factors operating on the bones (Mays 1998, 112, 118). Cranially, the

zygomaticofacial foramen was absent from the right zygomatic bone and the right supraorbital notch was bridged creating a supraorbital foramen. Post-cranially, the individual had a left calcaneal double anterior facet, a septal aperture in the right humerus and a right lateral tibial squatting facet. The latter two are most likely to be activity related (Mays 1998, 118; 2008).

4.3.18 The dentition was complete, although most teeth were loose rather than positioned within the sockets. Two thirds of the dentition, predominantly the posterior teeth, had mild to moderate calculus (dental plaque). Five of the molar teeth had caries, of which three were small in size and two were medium. The medium carious lesions were on adjacent left first and second maxillary molars. Carious lesions result from the progressive destruction of dental enamel, dentine and cement by acid produced by acidogenic bacteria in dental plaque (Hillson 1996, 269). In addition, the left mandibular second molar had an ante-mortem chip on the distal occlusal surface.

4.3.19 No pathological lesions were observed on the post-cranial skeleton.

Disarticulated material

4.3.20 A total of seven cranial fragments and one femur fragment were retrieved from fill 1097 of middle Iron Age ditch 2267 (cut 1095) and another cranial fragment was present in upper fill 1098. The cranial fragments from both contexts could be reconstructed, and all of them belonged to the right and left parietal bone of one person. The femur fragment comprised a small section of the anterior mid-diaphysis shaft. It was found with the cranial fragments in fill 1098, so may belong to the same individual, although this cannot be confirmed.

4.3.21 The surface preservation of these bone fragments was excellent. They had a fresh appearance and no modifications (McKinley 2004a, 16). The size and morphology of the fragments and a fully fused and nearly obliterated cranial suture indicated it was from an adult (>18 years). No other demographic information could be ascertained, and no pathology was observed.

4.3.22 Two cranial fragments (right frontal) and two mandibular fragments (left mandibular ramus) were retrieved from late Iron Age fill 2148 of ditch 2261 (cut 2138). The remains comprised two right frontal fragments which fitted together. These were from just superior to the frontozygomatic suture and exhibited the anterior part of the right superior temporal line and the right third of the supraorbital ridge and orbital margin. Also present were two left mandibular ramus fragments that fitted together. The size and morphology of the cranial and mandibular fragments suggested they belong to one individual, although this cannot be confirmed.

4.3.23 The surface preservation of the bones from 2148 was excellent, meaning the bones had a fresh appearance and no modifications (McKinley 2004a, 16). Two sexually dimorphic traits were present, including the right supraorbital ridge and the right orbital margin, and were in keeping with those of a female. However, as no other sexually dimorphic traits were present, sex estimation is tentative. Although the size and morphology of the bones would suggest an adult individual (>18 years), there were no cranial sutures or epiphyses present, so this cannot be confirmed. Only one non-metric trait, the bridging of the supraorbital notch, was noted and no pathology was observed.

Cremation deposits

4.3.24 A summary of the osteological findings, with the data for all samples/spits combined for each deposit is presented in Table 21 with full details available in the archive.

Bone weights

4.3.25 The total bone weights presented above do not include bone from the 2–0.5mm fractions but do include the weight estimates calculated for the 4–2mm fractions (see Tables 22 and 23).

4.3.26 The total weight of the bone from pit 1258 was 791.4g. This is approximately half the expected weight of one individual from a modern cremation (1650g; McKinley 2000, 269) but is within the range that has been reported for archaeologically recovered cremation deposits (600–900g; McKinley 2013, 154). Over 96% (758.5g) of the recovered bone was from the main part of deposit 1259, with just over half of the recovered bone (58%, 462.1g) coming from spit one (sample 1006).

4.3.27 The weight of bone from 1805 was 14.6g, which is significantly below the expected weights noted above.

Fragmentation

4.3.28 The degree of fragmentation of the bone from the deposits is presented in Table 24 and is expressed as the proportional weight of bone from each sieve fraction.

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

4.3.30 The level of fragmentation for both deposits was moderate with the highest proportion of bone weight coming from the 10–4mm fraction for both pit 1258 (339.5g) and pit 1805 (9.8g). It was noted for pit 1258 that the majority of recovered bone came from spit 1 and spit 2 with both spits having similar levels of fragmentation (Table 24).

The largest bone fragment from pit 2158 was a piece of tibia diaphysis measuring 55mm. The largest bone fragment from pit 1805 was a piece of possible long bone diaphysis measuring 18.9mm.

Skeletal representation

4.3.31 As is often seen in archaeological cremation deposits, the proportion of unidentified bone outweighed that of identified bone from both pits. Approximately a third of the bones (34.3%) from 1258 were identifiable to a skeletal region, whilst only a fifth (19.9%) could be identified from 1805. The greatest proportion of identifiable bone from both pits was from the cranium (1258, 44.6% and 1805, 51.7% of identifiable fragments), reflecting the fact that this bone is easier to identify than other bones.

Feature	Deposit	Sample	Description	Soil/deposit type	Deposit depth
1258	1264	1005	Top fill partially overlying main deposit 1259	Light, mid-brown sandy clay with occasional burnt bone and charcoal flecks	0.04m at thickest
	1259	1006	Spit 1 (upper third of main deposit)	Very dark brownish grey sandy clay with frequent charcoal and burnt bone throughout spits	0.07m at thickest
		1040	Spit 2 (middle third of main deposit)		
		1041	Spit 3 (lower third of main deposit)		
	1271	1007	Lower fill at base of pit, interface between main fill and natural	Light and mid brown sandy clay with occasion burnt bone	0.06m at thickest
1805	1806	1016	Primary fill of pit	Mid-dark brownish grey sandy clay with frequent charcoal	0.11m at thickest
	1807	1017	Soil from around pit	Mid reddish sandy clay with occasional charcoal fleck	0.04m at thickest

Table 20: Summary of cremation deposit contexts

Feature (deposit)	>10mm (%total weight)	10–4mm (%total weight)	4–2mm (%total weight)	Total weight	Maximum fragment size	Identified elements	Colour	MNI, age, sex, pathology etc.
1258 (1264/1259 /1271)	274g (34.6%)	339.5g (42.9%)	177.9g (22.5%)	791.4g	55mm (tibia shaft)	Skull vault, mandible, vertebral body & arch, humoral head, radial head, hand and foot phalanges, femur, tibia	White (95%) Grey (5%)	MNI = 1 Sex unknown Adult unspecified (>18 yrs)
1805 (1806/1807)	2.7g (18.5%)	9.8g (67.1%)	2.1g (14.4%)	14.6g	18.9mm (unidentified long bone fragment)	Skull vault, mandibular condyle, vertebral arch	White (50%) Blue/grey (5%) Black (45%)	MNI = 1 Sex unknown Adult unspecified (>18 yrs)

Table 21: Summary of osteological findings: Cremation deposits

Feature (pit) no.	Deposit no.	Sample no.	Total weight of unsorted 4–2mm fraction (A)	Weight of bone in a 20g sample (B)	% bone weight calculated (B/20 x 100) (C)	Est. weight cremated bone in unsorted 4–2mm fraction (C/100 x A)
1258	1259	1006	148.9g	10g	50%	74.5g
		1040	144.6g	13.9g	69.5%	79.7g
		1041	91.6g	1.9g	10.4%	9.2g
	1271	1007	283.4g	1.7g	3%	8.5g

Table 22: Bone weight calculations for the unsorted 4–2mm fractions

Feature	Deposit	Sample	Total weight of unsorted 2–0.5mm fraction	Bone content (high/moderate/low)	Estimated % bone content (by vol.)
1258	1264	1005	243.2g	Very low	1%
	1259	1006	419.4g	Low	20%
		1040	339.5g	Low	30%
		1041	414.8g	Very low	10%
	1271	1007	1197g	Very low	5%
1805	1806	1016	1033.5g	Very low	1–2%
	1807	1017	797.2g	Very low	<1%

Table 23: Estimated bone content in the unsorted 2–0.5mm residues

Feature	Deposit	Sample	>10mm	10–4mm	4–2mm	Total weight /sample	Total weight
1258	1264	1005 (top of fill)	0g (0%)	5.6g (48.7%)	6.0g (52.2%)	11.5g	791.4g
	1259	1006 (spit 1)	36.1g (13.4%)	157.9g (58.8%)	74.5g (27.7%)	268.5g	
		1040 (spit 2)	20.7g (9.9%)	109.3g (52.1%)	79.7g (38%)	209.7g	
		1041 (spit 3)	2.3g (12.4%)	7.1g (38.2%)	9.2g (49.5%)	18.6g	
	1271	1007 (pit base)	0g (0%)	3.0g (26.1%)	8.5g (73.9%)	11.5g	

Table 24: Fragmentation levels from cremation pit 1258 (percentages given are of the total sample weight)

Colour of the cremated bone

4.3.32 The colour of cremated bone reflects the degree of oxidation and is an indication of the efficiency of the cremation, in terms of the quantity of fuel used to build the pyre, the temperature attained in various parts of the pyre, and the length of time over which the cremation was undertaken (McKinley 2004b, 11). Colour may range from brown/orange (unburnt), to black (charred: *c* 300ºC), through hues of blue and grey (incompletely oxidised, up to *c* 600ºC) to white (fully oxidised, >600ºC) (McKinley 2004b).

4.3.33 The burnt bone from pit 1258 was predominantly white in colour (95%). The remainder (5%) was grey and mainly comprised of joint surfaces and distal phalanges. Thickness of soft tissue varies across the body and cremation of the bone beneath cannot commence until the overlying tissues have been removed (McKinley 2013). Therefore, the joint surfaces may have reached a lower temperature than the rest of the body, due to the greater thickness of the overlying soft tissue and the presence of cartilage in these regions. The distal phalanges are unlikely to have reached the required temperature due to their position at the extremities of the body. It is unlikely that a constant temperature would have been maintained across the pyre or throughout the cremation, the peripheries of the pyre being cooler than the central areas (ibid.).

4.3.34 The colour of the bone from pit 1805 was more variable, ranging from approximately 50% being white and fully oxidised (including a mandibular condyle), to approximately 45% being black and only charred (primarily unidentified long bone fragments). Only 5% of the deposit had hues of blue/grey.

Demography

4.3.35 For the present analysis, the deposits within each pit (1264, 1259 and 1271 from pit 1258 and 1806 and 1807 from pit 1805) were combined because the context information indicates they relate to the one cremation deposit each, rather than separate ones. Considering this, and the fact that no repeated elements were observed in the combined deposits from each pit, they are considered to represent a minimum number of one individual each.

4.3.36 As noted above, sex estimation was not possible due to the absence of any sexually diagnostic traits.

4.3.37 Although there were no specific age indicators in either feature, the size and morphology of the identified fragments suggest these were the remains of adults or later adolescents. It was also noted that cranial sutures, observed on fragments from pit 1258, where partially fused but not obliterated, so may suggest that the individual was not elderly. However, as an age indicator, cranial suture closure is notoriously inaccurate, so should not be considered without other age indicators (Cox and Mays 2000, 68). In addition, a proximal metatarsal was fully fused indicating the individual was at least an older adolescent (>15yrs).

Pathology and non-metric traits

4.3.38 No pathology or non-metric traits were observed.

Pyre/grave goods

4.3.39 No pyre or grave goods were observed within the cremation deposits. No staining or residue, indicative of pyre/grave goods was observed on the bone. However, frequent charcoal was observed in both the main cremation deposit (1259) of pit 1258 and in the primary fill (1806) of pit 1805.

Discussion

Unburnt remains

4.3.40 The middle Iron Age skeleton (2145) was generally in good condition and this allowed both the sex (female) and age at death (young adult) of the individual to be determined. However, stature could not be ascertained due to fragmentation. The only pathologies recorded were dental calculus and carious lesions, which were relatively minor and would have probably been associated with diet, more specifically the consumption of carbohydrates (Lieverse 1999). In addition, one tooth had been chipped, probably accidentally, some time prior to death.

4.3.41 Although the disarticulated remains were in a good condition, only a tentative sex (possible female) could be estimated for 2148. Interestingly, both 2148 and skeleton 2154 shared the same non-metric trait—a bridging of the supra-orbital notch—which may indicate some level of relatedness between the individuals, although this observation should be regarded with caution (Mays 1998, 103).

4.3.42 Isolated inhumations, without grave goods, are not an uncommon finding at Iron Age settlements in central and southern England, where simple crouched inhumations were placed in storage pits, shallow graves and ditches (Lambrick 2009; Whimster 1981). Similar contexts have been excavated at Mount Farm, Berinsfield, Dorchester-on-Thames (Lambrick 2010, 76), Abingdon West Central (Brady *et al*. 2007), Spring Road, Abingdon (Allen and Kamash 2008) and Barton Court Farm, Abingdon (Miles 1986).

4.3.43 Disarticulated bones of Iron Age date are commonly found in ditches (ditch termini especially) on settlement sites and typically involve skulls and long bones (Carr and Knüsel 1997). Bones in these contexts possibly represent tokens of remembrance, brought back to the settlement from sites of excarnation, located some distance away (Lambrick 2009). Some examples are reported to show scavenging marks and cut marks, indicating excarnation by exposure, while other examples, including the bones from the present site, lack any modifications such as these, suggesting that other methods were employed instead (Carr and Knüsel 1997; Redfern 2008). According to Madgwick (2008), bones with little or no evidence of excarnation or cut marks may have been defleshed and disarticulated by exposure in a protective environment instead. Alternatively, the remains may simply have been intentionally exhumed once the flesh had decomposed (ibid.). Thus, the disarticulated bones at Dunmore Road are entirely in keeping with Iron Age funerary traditions.

Cremation deposits

4.3.44 The presence of late Bronze Age cremations at the site is in keeping with the period when cremation is the dominant archaeologically visible funerary rite, although these are still rare (Davies 2018, 45). The deposits (1258 and 1805) comprised the remains

of at least one individual each and both were most likely adults or at least older adolescents. No other demographic information could be obtained.

4.3.45 The weight of the bone recovered from deposit 1258 was 791.4g, which is within the expected range (600–900g) for an archaeologically recovered adult cremation burial (McKinley 2013, 154). It is possible that a small amount of material may have been lost due to partial and minor disturbance of the uppermost fill, but there is no evidence of truncation. Therefore, what remains is likely to represent most of a formal adult cremation burial.

4.3.46 Overall, the bone from pit 1258 was white in colour (fully oxidised), indicating that that the body was placed on the pyre in a way as to maintain a good oxygen supply and high temperature (>600°) (ibid., 158). Only a few joint surfaces and distal phalanges were grey in colour indicating that these areas did not reach the temperature required for full oxidization, probably because they were protected by cartilage and other soft tissue and/or because of their position on the pyre, away from the main concentration of the fire.

4.3.47 In comparison, the bone recovered from pit 1805 weighed much less (14.6g) than that from 1258, well below the expected weights that have been reported for modern and archaeological cremations. However, this deposit was not only truncated at its north end by a land drain but had been disturbed by past agricultural activity. Therefore, it is unlikely that the deposit represents all of the material that was originally deposited.

4.3.48 Deposits of low bone weight are a common finding archaeologically and have been termed cremation related deposits (McKinley 2004b, 9) rather than formal cremation burials, to reflect the fact they might represent cenotaph burials, where only a token amount of bone was deposited, or redeposited pyre debris, which generally comprises a mixture of bone fragments and fuel waste (ibid., 10). The fact that the present deposit has been truncated to an unknown degree means that that this interpretation cannot be reached based on its weight alone. However, only 50% of the material from the deposit was white in colour and therefore fully oxidised, whilst the remainder was charred and blackened. The blackened material is unlikely to have received the full intensity of the cremation fire due to its position or duration on the pyre. Along with the small amount of bone present this could suggest that these remains may be part of redeposited pyre debris.

4.4 Charred plant remains *by Sharon Cook*

Introduction

4.4.1 Thirty-eight bulk samples ranging in size between 6–40 litres and representing the range of feature types and phases across the excavated area were processed primarily for the retrieval of charred plant remains, small bones and artefacts. Charcoal from these samples is generally small and fragmented and, in most samples, had broken into thin pieces, a fracture pattern commonly associated with oak (*Quercus* sp.). The charcoal has limited potential to provide information about the exploitation of local wood resources and was not analysed past assessment level (OA 2019).

4.4.2 Following initial assessment, 16 flots were selected for the analysis of charred plant remains from features dating from the early Iron Age to the early Roman period. This

was based on the quantity and quality of the charred remains and to provide some temporal and spatial coverage.

Method

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

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

4.4.5 Cereal grains and the seeds of wild plants were only quantified for items of which more than half was observed, meaning that the cereal and seed counts represent an MNI (minimum number of individuals). Seeds of vetches (*Vicia/Lathyrus*) are the exception in that their easily recognisable structures have enabled fragments to be quantified, although these are always recorded as such. For nutshell fragments the count is for all observed fragments, meaning that these figures are not suitable for calculating MNI. Cereal chaff has been divided into quantifiable remains, ie glume bases and spikelet forks, and non-quantifiable remains, ie fragments. Awns have been semi-quantified by abundance and categorised as 'rare', 'occasional', 'common' or 'abundant'.

Overview of the assemblages

4.4.6 The condition of the charred material was variable with a moderate amount of clinkering and fragmentation in features from across the site. Many samples included a significant quantity of fine modern roots and these formed the majority of the flot volumes for many samples. Charcoal was infrequent in the majority of samples and the fragments were typically <2mm. Occasional vivianite staining hints at a damp environment but there was no evidence in the form of waterlogged plant material to indicate the presence of sustained waterlogging on the site.

4.4.7 Grain and associated crop waste were relatively uncommon for all periods: most samples produced fewer than 30 cereal grains, although glume-base fragments were well represented in a small number of features. Glume bases were in variable condition but, where identifiable, all were consistent with spelt wheat (*Triticum spelta*) with the remainder being too heavily damaged to identify further than glume wheat. Many of the grains were clinkered and fragmented, and those grains listed below as indeterminate were too badly damaged to identify to species despite their general appearance being consistent with wheat. The identified grains are mostly spelt, so it is likely that a significant proportion of the unidentified grain is also spelt wheat. Barley (*Hordeum vulgare*) grains occur in small quantities in all periods, as do oats (*Avena* sp.) which are present in larger amounts. Unfortunately, the lack of oat florets means that it is not possible to confirm if these were cultivated (eg *A. sativa*).

4.4.8 Charred seeds from wild plants are infrequent but fall into three main categories: those which are commonly found as part of arable assemblages, such as cleavers

(*Galium aparine*), vetches (*Vicia/Lathyrus*), docks (*Rumex* sp.) and (*Tripleurospermum* sp.); plants with a preference for damp conditions, such as club rushes (*Eleocharis* sp.), rushes (*Juncus* sp.) and sedges (*Carex* sp.); and plants which are associated with open grassland, such as the fescues and ryegrasses (*Festuca/Lolium*), sheep's sorrel (*Rumex acetosella*) and yellow rattle (*Rhinanthus minor*), the last of these being identified from one seed. The majority of species present, including many of the aforementioned, have a relatively broad habitat tolerance and can frequently be found on disturbed ground and in marginal and waste places.

Early Iron Age

Pit 1936 – Sample 1024

4.4.9 Sample 1024 came from the single fill of pit 1936 (Table 25). Charred material was not abundant and the sample yielded only a small number of cereal grains, most of which are consistent with wheat. The grains were in poor condition and showed none of the distinctive characteristics of emmer wheat (*Triticum dicoccum*), but had a more spelt-like appearance, confirmed by the glume base fragments. Two damaged grains are probably barley.

4.4.10 Glume base fragments formed the bulk of the cereal remains, which may indicate the incorporation of some crop-processing waste. Some of the few uncultivated plant seeds are probably arable weeds, possibly removed from the grain during cereal processing by sieving or hand picking. A single fragment of hazelnut shell (*Corylus avellana*) may represent the harvesting of nuts but as a single fragment could have been an accidental inclusion in firewood.

Penannular ditch samples – Samples 1001, 1002 and 1810

4.4.11 Three samples were analysed from penannular ditches associated with the early Iron Age roundhouses. Sample 1001 from the single fill of the ditch from roundhouse 1222 and sample 1012 from the single fill of the ditch from roundhouse 2255 both contain small quantities of charred plant material. The cereal assemblage in both samples comprises a very small quantity of wheat with a spelt-like appearance and rare oat (*Avena* sp.) and oat/brome (*Avena/Bromus*) grains as well as a small quantity of glume bases and small glume base fragments. One small fragment of rachis in each sample is likely to be barley. Both samples also contain a few small fragments of hazelnut shell.

4.4.12 Seeds of uncultivated plants are infrequent, and most are likely to be from arable weeds. Damp ground is indicated by several spike rush seeds (*Eleocharis* sp.) in sample 1001 and a single sedge seed (*Carex* sp.) in sample 1012.

4.4.13 By contrast, sample 1002, from the single fill of the ditch from roundhouse 2256, has a much richer charred plant and charcoal assemblage. While cereal grain is not abundant, the relatively large quantity of glume bases and fragments may indicate that this structure was near an area used for small-scale crop-processing activities.

4.4.14 Grass seeds dominate the wild plant assemblage and include badly damaged seeds of >4mm, at least some of which may be oat or brome. These, as well as docks, cleavers, fat hen and mayweed, are commonly found as arable weeds and are likely to have been accidentally harvested with the crop.

Pit 1758 – Sample 1012

4.4.15 Sample 1012 is from the single fill of pit 1758 situated slightly to the north west of roundhouse ditch 2255. The sample produced only a small quantity of charred plant remains, mainly cereal grains with no associated chaff and a very small quantity of charred wild plant seeds, most commonly small vetches. A single spike rush seed is also present.

Middle Iron Age

Pits 1019 and 1173 – Samples 1000 and 1004

4.4.16 Samples 1000 and 1004 came from the single fills of pits 1019 and 1173 respectively (Table 25). While these pits were not located near to each other, they appear to have been broadly contemporary. Sample 1000, while poor in cereal grains, produced one of the largest glume base assemblages from the site as well as fragments of rachis and oat awns. Sample 1004 by contrast produced a slightly larger grain component but almost no other crop waste. It is likely that the material deposited within pit 1019 included crop-processing waste while that from pit 1173 came from at least a partially cleaned crop. It may be significant that pit 1019 was near roundhouse 2256, where early Iron Age sample 1002, which also included crop processing waste, was located.

4.4.17 Both samples included small quantities of wild plant seeds and these are mainly from plants typically found in arable fields, especially small vetches which are very common in sample 1000. The cultivation or proximity of damp ground is also indicated by a small quantity of seeds from spike rush and sedge. Sample 1000 also included small grass seeds.

Enclosure ditch 2258 – sample 1038

4.4.18 The small assemblage from sample 1038, from the upper fill of ditch terminus 1016 of enclosure ditch 2258, includes glume bases and their fragments and a small number of oat awn fragments. This suggests that a low level of crop-processing activity was taking place in this area of the site. There are few seeds of wild plants, of types seen in other samples.

Sample No		**1024**	**1001**	**1002**	**1012**	**1019**	**1000**	**1004**	**1038**
Context No		**1937**	**1022**	**1116**	**1759**	**1811**	**1020**	**1174**	**1017**
Feature		**1936**	**1021**	**1115**	**1758**	**1810**	**1019**	**1173**	**1016**
Group		**2282**	**1222**	**2256**	**2277**	**2255**	**2278**	**2278**	**2258**
Description		**Fill of Pit**	**Secondary Fill of Ring Gully Terminus**	**Primary Fill of Ring Gully Terminus**	**Secondary Fill of Pit**	**Secondary Fill of Ring Gully Terminus**	**Primary Fill of Pit**	**Backfill of Pit**	**Secondary Fill of Enclosure Ditch**
Date/Phase		**EIA**	**EIA**	**EIA**	**EIA**	**EIA**	**MIA**	**MIA**	**MIA**
Volume (L)		**40**	**36**	**30**	**40**	**35**	**40**	**36**	**36**
Flot Volume (ml)		**50**	**20**	**30**	**16**	**40**	**50**	**18**	**30**
Charcoal									
	>4mm	**	*	***	*		**	**	**
	4-2mm	****	***	*****	***	**	***	***	****
Cereal grain									
Triticum cf *aestivum*	wheat (free threshing type)								
Triticum sp.	wheat	3	3	10	3	5	2	5	7
cf *Triticum* sp.	probable wheat	2	3	5	1	4		7	5
Hordeum vulgare	hulled barley							1	
cf *Hordeum* sp.	probable barley	2						2	
Avena sp.	oat			5	2	3	1	2	1
Avena/Bromus	oat/brome		1	6	1	2	2	2	1
Cerealia	indeterminate cereal	10	6	25	12	7	11	10	18
Chaff									
Triticum spelta L.	spelt spikelet fork			2					
Triticum spelta L.	spelt glume base	43	8	139		5	49	6	39
Triticum dicoccum/spelta	emmer/spelt glume base	8	3	17			4		8
Triticum dicoccum/spelta	emmer/spelt glume base fragments	261	42	690		66	1075	15	90
cf *Hordeum* sp.	rachis internode		1f			1f	1	1	
Triticum/Hordeum/Secale	rachis fragment			23			6		
Avena sp.	oat awns						**		**
Cerealia	coleoptile								
Cerealia	detached embryos			7		2	3	1	1
Nuts/Fruit etc.									
Corylus avellana	hazelnut shell	1f	2f			3f			
Wild Species									
Vicia/Lathyrus sp. 4-2mm	vetch/vetchling/tare, etc.	1(1/2)	1(1/2)		(1/2) + 1f		1 + 2(1/2)	2	

Sample No		1024	1001	1002	1012	1019	1000	1004	1038
Context No		1937	1022	1116	1759	1811	1020	1174	1017
Feature		1936	1021	1115	1758	1810	1019	1173	1016
Group		2282	1222	2256	2277	2255	2278	2278	2258
Description		Fill of Pit	Secondary Fill of Ring Gully Terminus	Primary Fill of Ring Gully Terminus	Secondary Fill of Pit	Secondary Fill of Ring Gully Terminus	Primary Fill of Pit	Backfill of Pit	Secondary Fill of Enclosure Ditch
Date/Phase		EIA	EIA	EIA	EIA	EIA	MIA	MIA	MIA
Vicia/Lathyrus sp. <2mm	vetch/vetchling/tare, etc.	1(1/2) + 2f	1(1/2)	3(1/2) + 2f	6 + 4(1/2) + 7f	1 + 1(1/2)	9 + 39(1/2) + 15f	3 + 2(1/2)	2 + 1(1/2)
Medicago/Meliotis/Trifolium	medick			1				3	
Medicago/Trifolium/Lotus	medick/clover/trefoils		2	1	2			2	
Urtica dioica L.	common nettle								
Malva sp.	mallow						3		
Thalaspi arvense L.	field penny-cress								
Fallopia sp.	knotweeds								
Rumex sp.	docks (3 sided)		2	5		2	4	2	1
*Rumex acetosella*L.	sheep's sorrel	1			1	1	2		
Caryophyllaceae	pink family	1#							
Stellaria sp.								1#	
Stellaria media (L.) Vill.	common chickweed			1					
Agrostemma githago L.	corncockle								
Chenopodium album L.	fat hen		1	1					3
Montia fontana L.	blinks	1							
Sherardia arvensis L.	field madder								1
Galium aparine L.	cleavers	2		3		1	2	1	
Lithospermum arvense L.	field gromwell							1	
Veronica hederifolia L.	ivy-leaved speedwell					1			
Plantago lanceolata L.	ribwort plantain							1	
Asteraceae	daisy family anthemis/leucanthemum size						2#		
Rhinanthus minor L.	yellow rattle								
Tripleurospermum sp.	mayweeds	1		1			1	2	
Juncus sp.	rushes								
Eleocharis cf *palustris*	common spike-rushes		6		1		8	5	5
Carex sp.	sedges (2 sided)							2	
Carex sp.	sedges					1			

Sample No		**1024**	**1001**	**1002**	**1012**	**1019**	**1000**	**1004**	**1038**
Context No		**1937**	**1022**	**1116**	**1759**	**1811**	**1020**	**1174**	**1017**
Feature		**1936**	**1021**	**1115**	**1758**	**1810**	**1019**	**1173**	**1016**
Group		**2282**	**1222**	**2256**	**2277**	**2255**	**2278**	**2278**	**2258**
Description		**Fill of Pit**	**Secondary Fill of Ring Gully Terminus**	**Primary Fill of Ring Gully Terminus**	**Secondary Fill of Pit**	**Secondary Fill of Ring Gully Terminus**	**Primary Fill of Pit**	**Backfill of Pit**	**Secondary Fill of Enclosure Ditch**
Date/Phase		**EIA**	**EIA**	**EIA**	**EIA**	**EIA**	**MIA**	**MIA**	**MIA**
Carex/Fallopia	sedge/knotweed								
Poaceae	grass seeds (small)	2	3	1	3	2	24	4	1
	cf grass seeds (small)						13#		
Poaceae	grass seeds (medium)			2	3	1	5	3	1
Poaceae	grass seeds (large)			10#		2	1		
Festuca/Lolium	fescues/ryegrasses			3					
Other									
Indeterminate	seed/fruit	4#	2#	1#	2#	3#	10#	4#	1#
cf *Juncus* sp.	seed head								
Poaceae	cf straw fragment								
Poaceae	culm node						1		

Table 25: Summary of EIA and MIA charred plant remains (Key: # item is very damaged; f = fragment only; * fragments rare; ** fragments occasional; ***; fragments common; (1/2) half only present; ? = unclear if charred)

Sample No		1015	1030	1013	1014	1020	1021	1023	1029
Context No		1793	2115	1749	1771	1901	1899	1915	2078
Feature		1789	2114	1747	1769	1900	1897	1913	2072
Group		2260	2280	2281	2281	2281	2272	2276	2295
Description		Upper Fill of Enclosure Ditch	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Ditch	Secondary Fill of Ditch	Secondary Fill of Enclosure Ditch
Date/Phase		LIA	LIA	ER	ER	ER	ER	ER	ER
Volume (L)		34	30	40	38	30	36	40	40
Flot Volume (ml)		16	8	14	10	10	40	26	20
Charcoal									
	>4mm	*	*	**			*	*	
	4-2mm	***	**	***	**	*	***	***	*
Cereal grain									
Triticum cf *aestivum*	wheat (free threshing type)			1					
Triticum sp.	wheat	3		6	7	3	6	6	12
cf *Triticum* sp.	probable wheat	2	2	7	1		7	6	6
Hordeum vulgare	hulled barley	1		3					
cf *Hordeum* sp.	probable barley	1		1				1	
Avena sp.	oat						1	3	1
Avena/Bromus	oat/brome							1	1
Cerealia	indeterminate cereal	4	3	23	8	3		20	10
Chaff									
Triticum spelta L.	spelt spikelet fork			1			3		
Triticum spelta L.	spelt glume base	15	2		8	19	236	20	18
Triticum dicoccum/spelta	emmer/spelt glume base	1		1		2	28	6	3
Triticum dicoccum/spelta	emmer/spelt glume base fragments	96	6	4	212	191	3000+	588	261
cf *Hordeum* sp.	rachis internode						2f	1	1f
Triticum/Hordeum/Secale	rachis fragment						1	3	
Avena sp.	oat awns	*		*	**	*	***	**	***
Cerealia	coleoptile						6 + 7f	6 + 11f	
Cerealia	detached embryos	1		1			5	8	5
Nuts/Fruit etc.									
Corylus avellana	hazelnut shell		1f				1f		1f
Wild Species									

Sample No		1015	1030	1013	1014	1020	1021	1023	1029
Context No		1793	2115	1749	1771	1901	1899	1915	2078
Feature		1789	2114	1747	1769	1900	1897	1913	2072
Group		2260	2280	2281	2281	2281	2272	2276	2295
Description		Upper Fill of Enclosure Ditch	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Pit	Secondary Fill of Ditch	Secondary Fill of Ditch	Secondary Fill of Enclosure Ditch
Date/Phase		LIA	LIA	ER	ER	ER	ER	ER	ER
Vicia/Lathyrus sp. 4-2mm	vetch/vetchling/tare, etc.	3(1/2) + 4f		5		1 + 2f	2 + 18(1/2) + 19f	3 (1/2)	3(1/2)
Vicia/Lathyrus sp. <2mm	vetch/vetchling/tare, etc.	5 + 4(1/2) + 4f		1	1 + 1(1/2)	12 + 12(1/2) + 1f	19 + 92(1/2) + 60	13 + 42(1/2) + 20	10 + 23(1/2) + 9f
Medicago/Meliotis/Trifolium	medick				2		3	2	1
Medicago/Trifolium/Lotus	medick/clover/trefoils		2	1					
Urtica dioica L.	common nettle						1		
Malva sp.	mallows					3			
Thalaspi arvense L.	field penny-cress					1			
Fallopia sp.	knotweeds							1	
Rumex sp.	docks (3 sided)			4	1	5	8	5	
Rumex acetosella L.	sheep's sorrel		1	1			3		
Caryophyllaceae	pink family	2#							
Stellaria sp.									
Stellaria media (L.) Vill.	common chickweed								
Agrostemma githago L.	corncockle			1					
Chenopodium album L.	fat hen			2	1			5	
Montia fontana L.	blinks		1			1	1		
Sherardia arvensis L.	field madder							1	
Galium aparine L.	cleavers		2	1			4	11	
Lithospermum arvense L.	field gromwell								
Veronica hederifolia L.	ivy-leaved speedwell								
Plantago lanceolata L.	ribwort plantain						1		
Asteraceae	daisy family anthemis/leucanthemum size							2#	2#
Rhinanthus minor L.	yellow rattle						1		
Tripleurospermum sp.	mayweeds	1						2	1
Juncus sp.	rushes	1		1	1	12		3	

Sample No		**1015**	**1030**	**1013**	**1014**	**1020**	**1021**	**1023**	**1029**
Context No		**1793**	**2115**	**1749**	**1771**	**1901**	**1899**	**1915**	**2078**
Feature		**1789**	**2114**	**1747**	**1769**	**1900**	**1897**	**1913**	**2072**
Group		**2260**	**2280**	**2281**	**2281**	**2281**	**2272**	**2276**	**2295**
Description		**Upper Fill of Enclosure Ditch**	**Secondary Fill of Pit**	**Secondary Fill of Pit**	**Secondary Fill of Pit**	**Secondary Fill of Pit**	**Secondary Fill of Ditch**	**Secondary Fill of Ditch**	**Secondary Fill of Enclosure Ditch**
Date/Phase		**LIA**	**LIA**	**ER**	**ER**	**ER**	**ER**	**ER**	**ER**
Eleocharis cf *palustris*	common spike-rushes		2		1	4	4		
Carex sp.	sedges (2 sided)	1		1					
Carex sp.	sedges		1	1				3	
Carex/Fallopia	sedge/knotweed			1					
Poaceae	grass seeds (small)	1		1		3	4	4	
	cf grass seeds (small)								
Poaceae	grass seeds (medium)			1	2	7	63#		
Poaceae	grass seeds (large)					1	2		1
Festuca/Lolium	fescues/ryegrasses	1				10	53	2	
Other									
Indeterminate	seed/fruit	1#	1#	1#	1#		4#	4#	3#
cf *Juncus* sp.	seed head						1#		
Poaceae	cf straw fragment							6	
Poaceae	culm node								

Table 26: Summary of LIA and ER charred plant remains (Key: # item is very damaged; f = fragment only; * fragments rare; ** fragments occasional; ***; fragments common; (1/2) half only present; ? = unclear if charred)

Late Iron Age

Enclosure ditch 2261 – sample 1015

4.4.19 Sample 1015 from the upper fill of enclosure ditch 2261, cut 1789, is the richest of the Iron Age samples (Table 26). However, the evidence is similar to that from the earlier periods with small quantities of wheat and, in this case, rare barley grains together with small quantities of glume bases and occasional arable weed seeds (primarily vetches) together with seeds from plants of damp soils.

Pit 2114 – sample 1030

4.4.20 Sample 1030 from pit 2114 contains a small quantity of charred grain, largely unidentifiable and badly damaged, as well as a few glume bases and a small quantity of wild plant seeds of similar types to those described above.

Early Roman

Ditch fills – Samples 1029, 1021 and 1023

4.4.21 The sampled early Roman ditch fills were all situated within the southern enclosure area (Table 26). An extremely large quantity of glume base fragments (at least 3000) came from sample 1021, from the fill of curvilinear ditch 2272 in the northern part of the enclosure. Glume bases are also well represented within the fill of ditch 2276 to the south in the lower half of the enclosure, while sample 1029 from the fill of the southern enclosure ditch included smaller quantities of cereal chaff. All the glume bases that could be identified to species are from spelt. While rachis fragments and oat awns are all present in larger quantities than in samples from the previous periods, this is not accompanied by a corresponding increase in oat or barley grains. Coleoptiles are present for the first time on this site in samples 1021 and 1023, and a single wheat grain from sample 1023 has a distinctive coleoptile scar. All three samples include small quantities of cereal grain, most of which is wheat.

4.4.22 Vetches are well represented within the wild plant taxa, forming the majority of the assemblage. These are mainly <2mm and probably represent the seeds removed after fine sieving. More generally, the range of plants is similar to earlier periods comprising a range of arable weeds, plants of waste and damp places but sample 1021 includes more grass seeds, mainly fescues and ryegrasses and others of similar as well as a single yellow rattle seed (*Rhinanthus minor*). These hint at the possibility of open grassland, possibly meadowland in the vicinity possibly exploited for hay.

Pit fills – Samples 1013, 1014 and 1020

4.4.23 The three pit fills were all located within the more northerly of the two halves of the enclosure. Sample 1013 from pit 1747 is the richest in terms of grain but contains almost no cereal chaff, probably indicating that this is a sample of at least partially cleaned grain although some uncultivated seeds are still present. A single wheat grain is likely to be from a free-threshing variety (*Triticum* cf *aestivum*) and is the only example of this type from the site.

4.4.24 Sample 1020 came from pit 1900 adjacent to the excavated slot for ditch 2272 which produced sample 1021. Despite their proximity, the assemblages are very different with one containing a substantial quantity of glume bases, while the other contains

much less charred material. Whether this is a result of the ditch deposit representing a gradual accumulation of material and the pit a single dumping episode is unclear.

4.4.25 The wild plant seeds are a mixture of arable and damp ground taxa. Sample 1020 also includes grass seeds but in lesser quantity than in sample 1021.

Discussion

4.4.26 Archaeobotanical assemblages for the Iron Age and Roman periods on British rural sites are typically charred and are usually dominated by the by-products of grain de-husking and cleaning, which are deliberately burnt as either fuel or waste (van der Veen 2019, 809). This generally results in assemblages of chaff and weed seeds, with only little grain. The analysed assemblages from Dunmore Road are typical, with occasional cereal grains and larger quantities of chaff occurring within most of the sampled features.

4.4.27 All identifiable glume bases are spelt wheat, and the general shape and size of most grains is appropriate for this identification. Spelt wheat is commonly found in samples from the late Iron Age and Roman periods across the majority of Britain, spelt having largely replaced emmer (*Triticum dicoccum*) during the early to middle Iron Age because of its ability to produce higher yields on poorer fertility soil (Lodwick 2017, 17–18; van der Veen 1992, 145–6). Spelt requires less labour in the form of tillage and manuring (van der Veen and O'Connor 1998, 131–3) and is suitable for less intensive farming.

4.4.28 The assemblage shows no firm evidence of the presence of emmer wheat, either in the form of glume bases or grain. Emmer wheat has a distinctive 'humpbacked' appearance as opposed to the flatter, more-oval shape of spelt and while a large number of grains were too damaged to identify fully, none of those in good condition were identified as emmer.

4.4.29 Spelt had become dominant across the whole Solent-Thames area by the early Iron Age and was present within middle Bronze Age contexts at Yarnton (Lambrick 2014, 127). Rare emmer grains were present within a late Bronze Age context at Castle Hill and an early Iron Age context, although the majority of grain was identified as spelt and it was concluded that this was the main wheat crop cultivated (Smith *et al.* 2010, 94, 194). This pattern appears consistent across Oxfordshire with emmer largely present as single grains within assemblages dominated by spelt.

4.4.30 The Iron Age assemblages from Great Western Park in Didcot (Boardman forthcoming; in prep.) were likewise dominated by spelt and glume wheats that could only be identified as spelt/emmer, with a noticeable decrease in emmer, which was present in larger quantities in the Bronze Age samples and was interpreted as a minor contaminant of the main spelt crop for the Iron Age assemblage.

4.4.31 Vetches and medicks (*Medicago* sp.), present in almost all the analysed samples, are usually associated with poorer quality soils and the presence of common spike rush has been interpreted in Iron Age assemblages from southern and central England as evidence for fields with poor drainage (van der Veen 1992, 104), which would suggest that sedges and mallows may potentially be considered arable weeds from the cultivation of damp soils. Spelt is usually thought to have been an autumn-sown crop

as evidenced by the common finds of cleavers (*Galium aparine*) in charred assemblages (ibid.). The local geology at Dunmore Road, of Ampthill and Kimmeridge Clay, may indicate a lack of drainage in the winter for at least some of the surrounding fields. Slight vivianite staining in many of the samples, combined with the lack of waterlogged seeds, suggests poor drainage and it is likely that the site was seasonally wet. Cultivation of poorly drained arable fields has been noted at several Iron Age and sites in and around Abingdon and appears to have been commonplace (Jones 1979).

4.4.32 It is generally accepted that, in the Iron Age, glumed wheats were stored in the spikelet and processed as and when needed, resulting in a generalised but reasonably low-level distribution of crop-related charred material across areas of occupation, accompanied by seeds from wild plants growing alongside and within the crop (Stevens 2003, 62–3; van der Veen 2019, 809). This pattern of storage and later processing is consistent with the evidence from Dunmore Road and has also been assumed for the Roman period (Stevens 2003, 71; Allen and Lodwick 2017, 149), although an expansion of arable cultivation in many areas and the introduction of possible large-scale or communal processing (shown by the development of corndryers) mean that volumes of chaff are often much greater in Roman features. While free-threshing wheats have been identified in both the Iron Age and Roman periods in Britain they have generally been found to be a minor crop. At Ashville Trading Estate, Abingdon, Jones (1978) identified both emmer wheat and bread/club wheat (*T. aestivum/compactum*) as minor constituents of both the Bronze Age and earlier Iron Age assemblages.

4.4.33 At Dunmore Road there are relatively few cereal grains, but the relative abundance of chaff varies across the site indicating that at least some of deposits may contain the remains of cleaned or partly cleaned cereals. The wild plant seeds are typically weeds of crop and may have may been removed by hand (the larger seeds) or by a final phase of sieving.

4.4.34 Rare barley grains are present in small quantities during all periods, apart from the early Iron Age features where there are fragments of likely barley rachis. Barley is usually considered to be a secondary crop largely because it is less commonly found within prehistoric and Roman assemblages (Lodwick 2017, 18–19). There has been some debate about whether barley was used for food or fodder, but its common occurrence in the British Isles makes it likely that it was sometimes a primary food crop. Barley bran fragments have been recorded in human faecal waste from sites around Hadrian's Wall, for example (ibid.).

4.4.35 Oat in prehistoric and Roman samples is usually interpreted as a crop weed due to the larger proportions of wild to domestic oats present archaeologically (ibid.). As free-threshing crops, oats and barley are less likely to encounter fire during processing which probably leads to an underestimation of their presence in general. While oat and grains which could be either oat or brome are present at Dunmore Road, they are almost universally fragmented, and no floret bases are present to provide confirmation of species and it is therefore not clear whether oats were deliberately cultivated.

4.4.36 An increase of the quantity of charred cereal remains and the presence of germinated grains has been documented from rural sites from central-southern and eastern

England and interpreted as evidence of an increase in the scale of cereal production relating to trade or taxation in the Roman period (van der Veen 2019, 809). While at Dunmore Road the quantity of grain in the early Roman samples is not significantly greater than from earlier periods there is an increase in the amount of chaff present and there is evidence for sprouted grain in the form of coleoptile fragments and scarred grain. This may indicate an increase in the storage of grain on site but the quantities are not large especially when compared with other Roman sites such as Berryfields near Aylesbury in Buckinghamshire (Meen 2019), Grove Airfield (OA 2021) and Crab Hill (Cook forthcoming), both in Oxfordshire, where greater quantities of sprouted grain and coleoptiles were interpreted as likely evidence of malting. These sites however are later in date as the settlement at Dunmore Road appears to have fallen out of use by the middle Roman period.

4.4.37 Grass seeds are consistently present in small quantities, but rare seeds from grassland are insufficient to prove the existence of open grassland or hay meadow in the vicinity. Perhaps more significantly, grass seeds are relatively common in early Roman sample 1021 and this sample also contains considerably more cereal chaff than others from this site. It is possible that the greater quantity of grass seeds reflects expansion in arable farming with previously uncultivated land brought into production. However, most of the grass seeds are from fescue/ryegrass (*Festuca/Lolium* sp.) or of similar type, and the single yellow rattle seed is from a plant strongly associated with hay meadows (Campbell 2017, 144; Rodwell 1992, 57). It is therefore possible that the sample could derive from burning spoiled hay.

4.5 Radiocarbon dating *by Alex Davies*

4.5.1 Five radiocarbon dates were obtained (Table 27; Fig. 29). Sample SUERC-969111 was a charred hazelnut shell from lower fill 1957 of pit 1924 from oven 2303. The fill was a spread of charcoal and ash and represents *in situ* burning. Most of the charcoal was oak and not suitable for dating, but the hazelnut shell was probably incidentally incorporated with the rest of the fuel and very likely contemporary with the use of the feature. The date provides a *terminus post quem* for the assemblage of Biconical Urn pottery in the backfill of the feature, although should be considered as essentially contemporary with the use of the pottery. Fig. 30 compares SUERC-96911 against the start and end boundaries of the settlement in Area 101 at Great Western Park phase 2 which is associated with Deverel-Rimbury pottery.

4.5.2 Sample SUERC-96915 was taken on cremated human bone from cremation deposit 1259. The measured δ13C value of -19.3 (‰) used in the calculation of the result is within the range cited for experimentally calcined bone, which ranged from –16.6 to –28.1‰ (Zazzo *et al*. 2012), suggesting that some carbon exchange from the atmosphere of combustion has taken place during calcination since bone apatite δ13C values vary between –8.8‰ and –15.5‰. Consequently, the 14C age will only reflect the true age of the sample if both the bone and the fuel used in the pyre had the same radiocarbon age, since these experiments have demonstrated the possibility of calcined bone suffering from an ‘old wood’ effect. The charcoal from the cremation deposit was small, poorly preserved and unidentified. The radiocarbon date may therefore have suffered from the ‘old wood’ effect and returned an earlier date than the death of the cremated individual.

4.5.3 Sample SUERC-96910 was obtained on internal carbonised residue on a middle Iron Age slack-sided jar with a beaded rim in pit 2202, fill 2201. Sample SUERC-96909 was taken from internal carbonised residue on a middle Iron Age neckless globular jar from upper fill 2010 of the first cut of enclosure 2258. These dates are contemporary with the final time the vessel was used for cooking. The dates are *termini post quem* for the contexts in which they were found.

4.5.4 Two radiocarbon dates were obtained from the middle and late Iron Age western enclosures. Sample SUERC-96909 is described above; the enclosure it came from, 2258, was recut, which was in turn cut by enclosure 2259. Enclosure 2259 was cut by late Iron Age enclosure 2261. Charred seeds from upper fill 1793 of enclosure 2261, cut 1789, were also radiocarbon dated (SUERC-96994). Both radiocarbon dates calibrate to a very similar range, between the middle of the 4th century cal BC and the early 2nd century cal BC. Statistical modelling helps little in further understanding these dates. The date from the late Iron Age enclosure falls very early in comparison to current understanding of this phase, being no later than *c* 165 cal BC. It is perhaps likely that the dated seeds are redeposited from the middle Iron Age activity. The seeds themselves are small and fragile, and if residual were probably redeposited in a block of soil moved from a nearby feature to backfill the ditch. The sample is not rich enough to be called a dump of material, and it looks very similar in composition to the middle Iron Age samples. The context producing the sample also contained middle Iron Age pottery forms that may or may not have been redeposited.

Lab. no.	Material	Context/Feature	$\Delta^{13}C$ ($^{0}/_{00}$)	RC Age BP	Calibrated Age 95% confidence	Calibrated Age 68% confidence
SUERC-96911	Charred nutshell: *Corylus avellana* frag	<1026> 1957, lower fill of pit 1924, oven 2303	-22.3	3250 ± 26	1545–1440 cal BC (87% confidence) 1610–1575 cal BC (7% confidence) 1560–1555 cal BC (1% confidence)	1535–1495 cal BC (54% confidence) 1475–1460 cal BC (15% confidence)
SUERC-96915	Cremated bone: human (tibia)	<1006>1259, fill of cremation pit 1258	-19.3	2742 ± 26	930–815 cal BC (94% confidence) 970–960 cal BC (2% confidence)	880–835 cal BC (52% confidence) 905–890 cal BC (16% confidence)
SUERC-96910	Charred pot residue/ food crust	2202, fill of pit 2201 Slack sided jar with beaded rim (Fig. 31, no. 12)	-27.3	2222 ± 26	325–200 cal BC (76% confidence) 380–340 cal BC (19% confidence)	310–270 cal BC (25% confidence) 235–205 cal BC (20% confidence) 265–240 cal BC (16% confidence) 360–350 cal BC (8% confidence)
SUERC-96909	Charred pot residue/food crust	2010, upper fill of ditch cut 2007, group 2258 (first cut); neckless globular bead rim jar (284) (Fig. 31, no. 13)	-27.5	2191 ± 26	360–170 cal BC	355–285 cal BC (48% confidence) 230–195 cal BC (21% confidence)
SUERC-96994	Charred seeds: *Vicia/Lathyrus* sp.	<1015> 1793, upper fill of ditch cut 1789, group 2261	-25.0	2187 ± 24	360–240 cal BC (61% confidence) 235–170 cal BC (35% confidence)	355–285 cal BC (47% confidence) 210–195 cal BC (11% confidence) 230–220 cal BC (6% confidence) 185–180 cal BC (4% confidence)

Table 27: Radiocarbon dates

5 DISCUSSION

5.1 Neolithic

5.1.1 The small amount of potential Neolithic flintwork and the small number of early Neolithic pottery sherds indicates that the area was used intermittently and sporadically during this period. Undated ditch 2265 might belong to the Neolithic, although morphologically it does not fit comfortably within any known monument class. The site is in the environs of significant well-known Neolithic ceremonial activity (Avery 1982; Barclay *et al.* 2003; Barclay and Halpin 1999), and unless ditch 2265 is indeed Neolithic, the site appears to have not been part of this ritual landscape.

5.1.2 If the feature is early Neolithic, it would appear to belong to the category of long/elongated enclosures, with local excavated examples at Dorchester (Site VIII; Whittle *et al.* 1992, 148–52) and North Stoke (Case 1982a). However, the enclosure formed by ditch 2265 is at least 42m wide, being larger than all elongated enclosures in Loveday's (1985, 155–6) survey. Ditch 2265 also displays an irregularity not usually present in other examples. The northern length meanders and the southern section is not perpendicular, leading to a form not easily paralleled (ibid., fig. 6.1, 157–9). It should be noted that Site 1a at Dorchester might be comparable in form (Whittle *et al.* 1992, 153–4), but it is likely that this is the terminal of the cursus rather than a long/elongated enclosure (Loveday 1999). Cursuses are known locally and it is possible that this represents a terminal, although again the ditch seems too irregular. No possible cursuses, long mortuary enclosures or related monument, or indeed any corresponding feature, have been observed on cropmark transcripts (eg Barclay *et al.* 2003; Benson and Miles 1974, map 30; Fenner 1994, figs 24–30).

5.2 Early–Middle Bronze Age

5.2.1 One of the more unexpected features at the site was early–middle Bronze Age 'oven' 2303. Exactly how this feature functioned is not known, although *in situ* burning was evident in the main pit, and two subsidiary pits/hollows appear to have been stoking chambers. Hazelnut shells, charcoal and weed seeds were present in two environmental samples, while cereal grain was absent. There was no burnt bone, pottery wasters or burnt stone that might suggest the feature was respectively associated with crop drying, the cremation process, firing pottery, cooking or burnt-mound-related activity. The fired clay from the feature may have been from a hearth floor, although this helps little in its interpretation. The most likely interpretation is that of an oven. The feature may have been used for drying or smoking of foodstuffs that have not left any carbonised remains.

5.2.2 The pottery assemblage from feature 2303 is significant, belonging to the Biconical Urn tradition that falls between the full currencies of the more-common early Bronze Age Collared Urn and middle Bronze Age Deverel-Rimbury styles. Biconical Urn pottery is uncommon in the region, both in funerary and domestic contexts. Domestic Biconical Urn assemblages are otherwise best represented at Yarnton (Hey *et al.* 2016, 291–2, 366–7, 439), with related material also present at Appleford (Barclay 2009) and Slade End Farm, Wallingford (Davies in prep. a). Two deposits with this pottery at Yarnton were also in pits with associated burning: pit 1047 had large quantities of

burnt stone, and pit 9039 had a very large quantity of wood charcoal (Hey *et al.* 2016, 290–1, 439). Of a similar date, although comprising predominately Deverel-Rimbury pottery, tree-throw hole 3870 at Yarnton contained a large deposit of pottery and had *in situ* burning (ibid., 549). There appears to be an association between domestic Biconical Urn and early Deverl-Rimbury pottery deposits and sub-soil features subject to *in situ* burning or containing burnt material.

5.2.3 The Dunmore Road assemblage is of regional importance as it probably more than doubles the known domestic Biconical Urn pottery from the region, and the association between the vessels is also significant. The style belongs to the period just before domestic settlement becomes visible in the middle Bronze Age, instead more associated with the near absence of settlement in early Bronze Age. This is probably the cause of the rarity of Biconical Urn assemblages, similar to the scarcity of domestic Collared Urn. The assemblage from Dunmore Road is rare evidence for the use of the style in a domestic setting, although the nature of the activity at the site is vague. The absence of residual Biconical Urn pottery in later features suggests that the material was not deposited in any quantity, suggesting that the material in feature 2303 was deliberately placed. However, the composition of the assemblage comprising sherds from a large number of vessels with each pot only minimally represented might not support the argument for the material being deliberately deposited.

5.2.4 The associated radiocarbon date, falling in the 16th or early 15th century cal BC, is relatively late compared to other Biconical Urn dates in the region and appears to overlap with the earliest Deverel-Rimbury pottery. The absence of a clear Deverel-Rimbury element, despite the size of the assemblage, is notable suggesting either that different groups were using Biconical Urn and Deverel-Rimbury pottery at the same time, or that the Biconical Urn assemblage was employed for a special activity represented by feature 2303.

5.3 Late Bronze Age

5.3.1 Late Bronze Age activity at the site is extremely ephemeral. One radiocarbon-dated cremation deposit is the only certain feature, with another much smaller cremation deposit also tentatively phased to the period. The only other evidence was sherds from three late Bronze Age pottery vessels found residually in later features. It is uncertain if the cremation deposits were isolated from other late Bronze Age activity, or if a settlement was present on the site that was otherwise archaeologically invisible.

5.3.2 This mirrors late Bronze Age evidence recently excavated elsewhere in the region. A group of three isolated cremation burials was found at Great Western Park phase 2, and this was the only late Bronze Age evidence from the extensive phase 2 excavations (Davies *et al.* in prep. b). An evaluation at Long Oat Lands, Little Wittenham, discovered two cremation deposits, one radiocarbon dated to the late Bronze Age, and associated activity appears to have been found (OA 2018b). At Grove Airfield, the only late Bronze Age evidence was an inhumation burial and one or two perforated clay blocks, and this was within a middle Bronze Age field system (OA 2021). At Crab Hill, a handful of residual late Bronze Age sherds was accompanied by a radiocarbon date on residual charcoal (Allen *et al*. forthcoming). Only a couple of possible late Bronze Age features were identified.

5.3.3 Late Bronze Age settlements are usually archaeologically ephemeral as they were often small and short lived, containing one or two post-built roundhouses, four-post structures, and a small number of pits (Davies 2018, 21–43). They rarely include ditches and are difficult to identify from geophysical survey and evaluation. While some late Bronze Age settlements might be being systematically missed, it does appear that there is a genuine reduction in the archaeological visibility of such sites in the region. The recent extensive excavations at Great Western Park (Davies *et al.* in prep. b; Hayden *et al.* forthcoming) and around Wallingford (Davies *et al.* in prep. a) failed to uncover evidence from the early 1st millennium cal BC, despite significant activity being present from every other prehistoric period. The evidence from Dunmore Road confirms the wider picture of the early 1st millennium cal BC.

5.4 Early–Middle Iron Age

5.4.1 The Iron Age settlement shares numerous similarities with other Iron Age sites in the region, although there are also points of contrast. Like many regional settlements beginning in the early Iron Age, the site is long-lived (Davies 2018, 218), covering most of the Iron Age and continuing into the Roman period.

5.4.2 Two enclosures date to the early Iron Age, although they may be part of the same feature, and possible Neolithic ditch 2256 may alternatively belong to an early Iron Age enclosure. Most of enclosure 2268 extended beyond the excavated area and its size and form cannot be accurately reconstructed, while the geophysical survey did not pick up the remainder of this feature. Enclosure 2266 appears small and may have functioned in a similar way to the middle Iron Age examples discussed below, whereas enclosure 2268 is probably of a size closer to what might be considered a settlement boundary rather than a house enclosure. Similar early Iron Age enclosures in the region are rare as most settlements and houses remained unenclosed. Early Iron Age enclosures are probably or possibly known at Allen's Pit (Bradford 1942), Neptunes Wood (Allen *et al.* 2010, 220), the earliest phase at Groundwell Farm (Gingell 1982), Heyford Road (Cook and Hayden 2000), Chilton Grove North (Taylor and Ford 2004, 1–3), and, in the Kennet Valley, Hartshill Copse (Collard *et al.* 2006, 379–80). Perhaps the best surviving Upper Thames example has recently been excavated at Winterbrook (Davies *et al.* in prep a). Like the Dunmore Road enclosure, most of the above examples are problematic due to limited excavation or exposure, poor dating, or the age of excavation. Where good dating is available, these sites are more likely to belong to the latter part of the early Iron Age, as at Groundwell Farm, Hartshill Copse and Winterbrook, although Allen's Pit should also be early, and these appear to develop into the much-more common middle Iron Age enclosures.

5.4.3 The progression in architectural styles in the region is from substantial post-built roundhouses of the late Bronze Age being steadily replaced in the early Iron Age by houses defined only by surrounding ditches, with this latter style dominating the middle Iron Age (Davies 2018, 218–20). This progression appears to hold at Dunmore Road. The sequence of probably four overlapping roundhouses has no stratigraphic relationships, but the pottery, although limited, from the post-built roundhouses should be earlier than that from the penannular ditches, both in terms of fabric (more shell in the post-built houses) and forms (possible middle Iron Age forms in two of the penannular-ditched roundhouses).

5.4.4 The penannular-ditched roundhouses appear as a group to be later than the post-built roundhouses, although the absence of middle Iron Age penannular ditched roundhouses is surprising given that these are among the most-common Iron Age feature in the region. Settlement certainly continued through the middle Iron Age at the site, and rectilinear enclosures 2258, 2259 and 2260 may be identified as enclosures surrounding houses and adjacent yards even though the houses themselves are not archaeologically attested. Postholes belonging to roundhouses are relatively uncommon in the middle Iron Age, with only 15% of houses of this date in the Thames Valley being furnished with a ring of posts, and a further 11% having a pair of entrance postholes within a penannular ditch (ibid., 220). Without the penannular ditch, such a pair of postholes could never be reconstructed as a roundhouse. By and large, house posts were not dug into the natural in the middle and late Iron Age, while mass-wall techniques may also have been used (Davies 2018, 161; Reynolds 1979, 30). If not surrounded by a penannular ditch, most middle Iron Age houses would be invisible. Penannular ditches are also not strictly functional, not being necessary in other periods. Enclosures 2258, 2259 and 2260 may have been augmented penannular ditches, serving much of the same enclosure function (Davies 2018, 161–97). Their internal areas were respectively 475m^2, 250m^2 and 400m^2.

5.4.5 As well as penannular ditches, numerous related enclosures are known that surround a house as well as another house, subsidiary area, or storage structure (ibid., 184). Nearby examples include ditches 13, 18, 19 *etc.* at Ashville Trading Estate (Parrington 1978, 11–15, fig. 12). There are also numerous settlement enclosures in the middle Iron Age of the Thames Valley, of which the Dunmore Road enclosures 2258, 2259 and 2260 are examples (eg Muir and Roberts 1999, 7, fig. 2.4). These appear to belong to the same category of feature as penannular ditches and ditches that demonstrably enclose a house and a subsidiary area. The pottery assemblages from enclosures 2258 and 2260 were among the largest from any Iron Age feature at the site, suggesting domestic use rather than stock pens. The archaeobotanical evidence from the roundhouses and the enclosures are very similar, suggesting that small-scale crop processing was taking place in or around both feature types and might represent activities of individual households. The succession of early Iron Age houses also appears to have been directly replaced by middle Iron Age enclosure 2260, suggesting the enclosure had a similar domestic use, perhaps used by successive generations at the settlement.

5.4.6 The more open nature of the early Iron Age settlement yields to one more concerned with enclosure and the differentiation of households in the middle Iron Age. The households probably living in enclosures 2258–2260 distinguished from each other with enclosure ditches, and this is also separated from the activity to the south-west. The nature of the activity to the south-west is less clearly defined, but the enclosures may surround more domestic activity beyond the excavated area. A growing concern for distinguishing between houses and households in the middle Iron Age has been previously recognised in the period and interpreted as a shift in identity, ownership and use-rights becoming more centred around the household at the expense of the wider group (Davies 2018, 216).

5.4.7 The burial rites observed, in many ways, follow patterns seen elsewhere in the region. With two or three middle Iron Age and one late Iron Age individual present, only a

minority of the population are represented. The inhumation is orientated to the north, the most common direction in the middle Iron Age in the region, and like many other burials is associated with a probable domestic enclosure (ibid., 178, 201). The disarticulated remains comprise mainly skull bones but also a femur fragment. Skulls, followed by leg and arm bones, are the most frequent disarticulated remains found on Iron Age settlements (ibid., 201). More unusually, the inhumation was covered with a single layer of stones. Subsoil was recorded to overlie the stones and there is no clear evidence that the stones formed a surface cairn.

5.4.8 A four- and a six-post structure were found, both dating to the early Iron Age. These are present on settlements in the region from the middle Bronze Age (eg Knights Farm: Bradley *et al.* 1980, 262) through to the middle Iron Age (eg the settlement outside Castle Hill/Wittenham Clumps: Allen *et al.* 2005, 139). These are commonly assumed to have been grain stores, although direct evidence for this this interpretation has, until recently, been lacking. The very large numbers of early Iron Age four-post structures excavated at Horcott Pit included three that had burnt down, and large quantities of burnt grain were found in the postholes (Hayden *et al.* 2017). Another similar example has also recently been excavated at Slade End Farm (Davies in prep. a), demonstrating the traditional interpretation of these structures as granaries. The presence of these features at the site shows that grain was grown and stored at the site, and the existence of only two suggests that this was undertaken on a domestic level. None dated to the middle Iron Age, although this evidence alone does not suggest any major change in the agricultural practices and economy at the site.

5.4.9 Evidence for site economy suggests that the site practiced mixed farming, probably in terms of local subsistence. Spelt dominated the cultivated assemblage, with weed seeds indicating arable land with some use of poorer soils, and open pasture. While cattle and sheep were found in comparable quantities in the Iron Age, the much larger yields of meat and dairy available from cattle suggests that this animal dominated the pastoral economy. The animal bone assemblage is an important regional contribution as the soils in the Upper Thames are often unfavourable for the survival of bone.

5.5 Late Iron Age

5.5.1 The late Iron Age activity at Dunmore Road should be seen within the wider context of the hinterland of the Abingdon 'oppidum', *c* 1.5km to the SSE. With early Iron Age origins, activity intensified there in the middle Iron Age and saw significant development into a late Iron Age oppidum. This comprised the addition of two or three large ditches and associated banks extending in an arc from the confluence of the River Ock to the north-east around at least a *c* 15 ha area, with the Thames providing its southern boundary. The main excavations remain unpublished, although interims are available (eg Allen 1990a).

5.5.2 The late Iron Age evidence at Dunmore Road provides some evidence of continuity between the middle Iron Age and the early Roman period. A single ditch defined the boundary of enclosure 2261 (a replacement of middle Iron Age enclosure 2260) and enclosure 2273 (replaced by a succession of early Roman enclosures). These late Iron Age enclosures are similar to other examples known at Bicester Fields Farm (Cromarty *et al.* 1999), and nearby at Barton Court Farm (Miles 1986). The general lack of material and small number of archaeological features is not unusual for this period. Houses

with postholes sunk into the ground in an archaeologically visible manner are even rarer than in the middle Iron Age, and penannular ditches were no longer used. The length of time that distinguishable late Iron Age ceramics were present in the region is also limited, restricting the chronology of the period to perhaps little more than a generation (Booth *et al.* 2007, 33).

5.5.3 The radiocarbon date of 365–165 cal BC (95% probability; SUERC-96994) from the upper fill of late Iron Age enclosure 2261 is surprising early. Although the north-western part of the feature (enclosure 2261) had only a very little grog-tempered late Iron Age pottery, the same ditch continued to the south-east as enclosure 2273 which contained a modest assemblage of classic late Iron Age grog-tempered ware. Stratigraphically, ditch 2261 replaced a sequence of middle Iron Age enclosures and 2273 was replaced in the early Roman period. Ditch 2261 certainly contained residual pottery, as well as probably containing middle Iron Age forms contemporary with the ditch that continued into the late Iron Age. About two-thirds of the pottery from 2261 derived from the same intervention that the radiocarbon date came from; none from here was grog-tempered. This included middle Iron Age pot forms that may or may not have been redeposited. It is probable that the radiocarbon-dated seeds were residual from the middle Iron Age activity in the same area. The seeds themselves are small and fragile, and if residual were probably redeposited in a block of soil moved from a nearby feature to backfill the ditch. The sample is not rich enough to be called a dump of material, and it looks very similar in composition to the middle Iron Age samples. Booth (2011, 370) sees the ceramic late Iron Age as beginning late in the Upper Thames, in the 1st century AD, although good radiocarbon dates associated with late Iron Age pottery are severely lacking, and radiocarbon dates associated with middle Iron Age pottery from the region do not currently support such a late position of the transition between these styles (eg Davies *et al.* in prep. a). Further radiocarbon dating of good middle–late Iron Age transitional pottery assemblages in the region is needed.

5.6 Early Roman

5.6.1 The most significant discovery at the site is a previously unknown Roman road. There are four ways in which the road distinguishes itself from the myriad of rural trackways that are found in the upper Thames. These include its notably early date, the presence of metalling, its width, and its position and orientation with regard to the Abingdon defended nucleated settlement and the nearest known Roman road (between Wantage–Frilford–Oxford).

5.6.2 The construction of the road might belong to the early decades of the Roman period, if the few sherds of pre-Flavian pottery in the roadside ditches are contemporary with its initial use. It is possible that the road was built slightly earlier than this, and it is likely that a pre-existing trackway was already in place in the late Iron Age. The roadside ditches were recut multiple times and there is some evidence for two phases of metalling in between. There is no material culture that dates after the early 2nd century at the site, when the settlement enclosure and building 2269 were abandoned. While it is unlikely that the use of the road completely ceased after the early 2nd century, there is no evidence that it was actively maintained after this period, when traffic may have been reduced. Ditched trackways became more common in the countryside from the early 2nd century and their appearance has been argued to

coincide with wide-ranging landscape change during this time (Booth 2011). The period when ditched trackways became a feature of the Upper Thames landscape broadly coincides with the abandonment of settlement at Dunmore Road and the possible reduction in use of the adjacent road. While the nature and causes of this early 2nd-century dislocation are no doubt complex, comprising localised responses to wider political changes (Booth 2011, 6–9; Booth *et al.* 2007, 43–53), the declining use of the road appears to be related to the same landscape reorganisation that led to the establishment of ditched trackways and other new settlements.

5.6.3 Trackway surfaces are almost totally absent in the region and most routes are defined solely by flanking ditches (Booth 2011, 8). Truncation is no doubt a factor against the survival of these, as at Dunmore Road, although this alone does not explain their absence. Examples excavated at Gill Mill provide rare exceptions where a system of middle Roman rural trackways met at a nucleated settlement (Booth and Simmonds 2018). There, the trackways were metalled in areas that extended through the main settlement area, no doubt to accommodate heavy use, but the metalling petered-out beyond the central areas where some at least became more characteristic of the rural routeways found throughout the upper Thames (Booth 2011, 8; Booth and Simmonds 2018, 761–3). This perhaps suggests that traffic was fairly intensive at Dunmore Road from the mid-1st century AD to the early 2nd century, at least.

5.6.4 The road at Dunmore Road shares more characteristics with recently excavated roads in Oxfordshire that are part of the wider major network. At Longford Lane, two phases of the road between Alchester and Dorchester were excavated. The first phase is very early in the Roman period, pre-Flavian, and comprised a 9.5m-wide carriageway with a base layer of gravelly sand and a main metalling of limestone cobbles on which wheel ruts were visible. The carriageway was flanked by ditches of quite different sizes, being 2m and 5m wide, both 0.7m deep, the wider holding flowing water (Simmonds and Lawrence 2018, 21–2). The line of this road was replaced with a more direct route between Alchester and Dorchester late in the 1st century AD. This phase had a carriageway 16–20m wide with patchy metalling comprising limestone gravel and cobbles. This was flanked by ditches 0.4m and 0.6–1.05m deep that were recut in the middle Roman period (Simmonds and Lawrence 2018, 40–1, 46). The route of this road has been more recently traced, extending north of Graven Hill, near Bicester, although this work is currently undergoing post-excavation analysis at the time of writing (OA 2020).

5.6.5 Projecting the road alignment at Dunmore Road, it should lead north-west to meet the NE–SE aligned road between Wantage–Frilford–Oxford. In the opposite direction, the road was observed to turn more SSE and appears likely to have led directly to the Abingdon defended nucleated settlement, which superseded the late Iron Age oppidum. This projected route is closely aligned with the modern route taken by the B4017 (Whitecross/Wootton Road). The nucleated settlement at Abingdon was a significant regional site in the early Roman period and the oppidum defences initially continued in use post-conquest (Allen 1990a; Brady *et al.* 2007; JMHS 2003; Parrington and Balkwill 1975; Wilson and Wallis 1991).

5.6.6 Given the proximity of Dunmore Road and the location of the road to Abingdon, the parochial nature of the pottery assemblage with negligible imports is of note. Other finds were also relatively few and there appears to be little evidence of wealth and

status at the site during the mid-1st to early 2nd century AD. The rectilinear arrangement of the early Roman enclosure does appear to have been quite formally laid out, although with several instances of recutting, and it clearly took its alignment from the pre-existing Iron Age arrangement within the landscape. The existence of a small building, along with pottery and animal bones, does suggest the presence of a modest farmstead, perhaps focussed on mixed small-scale agriculture, but one that did not benefit to any great extent from roadside traffic or wider connections to Abingdon and beyond. Little evidence for the specific function of the small building was recovered, with a domestic purpose within the farmstead likely. Its position projecting into the area of the road carriageway might simply be due to a reuse of the road metalling, but might suggest that the road had already largely fallen out of use in this final phase of the farmstead.

5.6.7 Abingdon witnessed major reorganisation in the early 2nd century when the oppidum ditches were infilled, defences were levelled, and the settlement became less intensive (Allen 1990a, 74; Brady *et al.* 2007, 110; JMHS 2003). However, masonry buildings and other evidence for high-status activity has been discovered that post-date this reorganisation (Booth *et al.* 2007, 39). The absence of a road linking Abingdon to the wider network has been noted, using this as evidence for Abingdon not developing into a 'small town' in the middle and late Roman period (ibid.). While the road at Dunmore Road does now suggest that Abingdon was serviced by the major road network, the absence of any evidence later than the beginning of the 2nd century suggests that its use declined soon after this period, when ditch recuts, road resurfacing or deposition of material culture had ceased. The road cannot be used as strong evidence that Abingdon developed into anything more than a settlement of local significance in the middle and late Roman period. The abandonment of the Dunmore Road enclosure early in the 2nd century also concords with the reorganisation at Abingdon and decline in use of the road.

5.6.8 Other Roman rural sites in the Abingdon area are also saw abandonment, reorganisation or establishment in the early 2nd century. The early Roman proto-villa at Barton Court Farm, 2km to the south-east, developed out of a late Iron Age enclosure. Similar to Dunmore Road, this saw the re-establishment of the late Iron Age enclosure and the construction of a substantial rectangular timber building. The site was abandoned in the early 2nd century, being reoccupied in the later 3rd century (Miles 1986, 4–12). Ashville Trading Estate/Wyndyke Furlong, 1.7km to the SSW, saw apparently continuous development from the early Iron Age to the Roman period. This rural settlement comprised enclosures, trackways, pits and wells, but as at elsewhere around Abingdon saw reorganisation in the early 2nd century when trackways and new field systems were laid out (Parrington 1978; Muir and Roberts 1999). The farmstead at Spring Road, 1.3km to the south of the site, was established in the 2nd century, as was the activity at Thornhill Walk, 700m to the south of the site, that included masonry structures (JMHS 2012).

5.6.9 Overall, there is evidence of continuity and discontinuity in the early part of the early Roman period in the hinterland around Abingdon. The oppidum ditches and intensive late Iron Age settlement make it likely that Abingdon was an important regional centre during the period. The continuity seen by the pattern of settlement at the oppidum through the Roman transition is mirrored at other sites in the surrounding area, such

as the development of settlement enclosures at Dunmore Road and Barton Court Farm which were recut and continued from late Iron Age activity. The Roman transition in the Upper Thames Valley thus appears not only to have been one of minimal archaeological impact on rural settlements (Booth *et al.* 2007, 42–3), but also on those with political and economic significance, at least in and around Abingdon. In a similar manner, the political and economic shifts that must in part be responsible for landscape reorganisation and discontinuity in rural settlement in the early 2nd century also affected nucleated settlements like Abingdon and the sites in its immediate environs, including the use of the road between Abingdon and the rest of the Roman road network.

5.6.10 The mixed, domestic agricultural economy of the Iron Age appears to have continued into the early Roman period. Cattle become more dominant, and the increase in cereal chaff, evidence for sprouted grains, and the quantity of grass seeds (albeit from one sample) might suggest an increase in the scale of cereal production.

5.7 Post-Roman

5.7.1 The only direct evidence for archaeological activity after the beginning of the 2nd century are furrows and a small amount of medieval pottery. One sherd of *c* AD 1150–1350 date was discovered in the robber trench of building 2269, providing at least a *terminus post quem* for this activity. The furrows follow the exact orientation of the late Iron Age and Roman enclosures, being perpendicular to the road. This suggests some continuity in the organisation and layout of the landscape from the 2nd century AD to the later medieval period, even if this was limited to sporadic use of relict field boundaries. It seems unlikely that woodland was allowed to regenerate. Agricultural continuity from the Roman to Saxon period was identified at nearby Barton Court Farm (Booth *et al.* 2007). A similar continuity in landscape alignment established in the middle Iron Age, continuing in Roman field systems, medieval furrows and into a modern field system, road alignment and parish boundary has been found at Great Western Park near Didcot (Davies *et al.* in prep. b), while similar but less clear evidence has also been seen at Slade End Farm and Winterbrook, both in Wallingford (Davies *et al.* in prep. a).

6 PUBLICATION AND ARCHIVING

6.1 Publication

6.1.1 The results of the excavation are described comprehensively in this excavation report, which will be submitted to Oxford County Council HER and disseminated online, being made available for download as a PDF through OA's online library (https://library.oxfordarchaeology.com/7769/).

6.1.2 A synthetic article will also be prepared for publication in the Oxfordshire county archaeological journal, *Oxoniensia*. This will include the salient parts of the excavation report, along with an interpretative discussion, but it may not include some of the more technical elements of the specialist reports and some of the data tables.

6.2 Archiving, retention and disposal

6.2.1 On completion of the reporting stage of the project, the finds and documentation archive will be prepared for deposition in accordance with the methodology set out in the WSI (OA 2018a) and current professional standards (CIfA 2014b; OCC 2020).

6.2.2 Subject to the agreement of the legal landowner, the site archive will be deposited with Oxfordshire Museums Service under accession number OXCMS:2019.1. It is recommended that all artefactual remains be retained in the archive, with the exception of the CBM, for which a sample of diagnostic fragments may be retained, and the unworked and burnt flint and stone.

6.2.3 The animal bone assemblage should be retained in full, while the marine shell can be disposed. All charred plant material extracted and identified from the samples should be retained in the archive. Flots that scored D for potential of both CPR and charcoal could be discarded.

6.2.4 It is recommended that the human remains are retained for direct consideration in relation to any future inhumations, disarticulated human bone or cremation deposits which may be recovered from the surrounding area. The assemblage is currently held at Oxford Archaeology South under Ministry of Justice burial licence 19–0317. This licence is valid until 8 December 2025, by which time the remains must have been reburied. In the event that the remains are not ready for reburial by this time the licence should be deferred by application to the Ministry of Justice.

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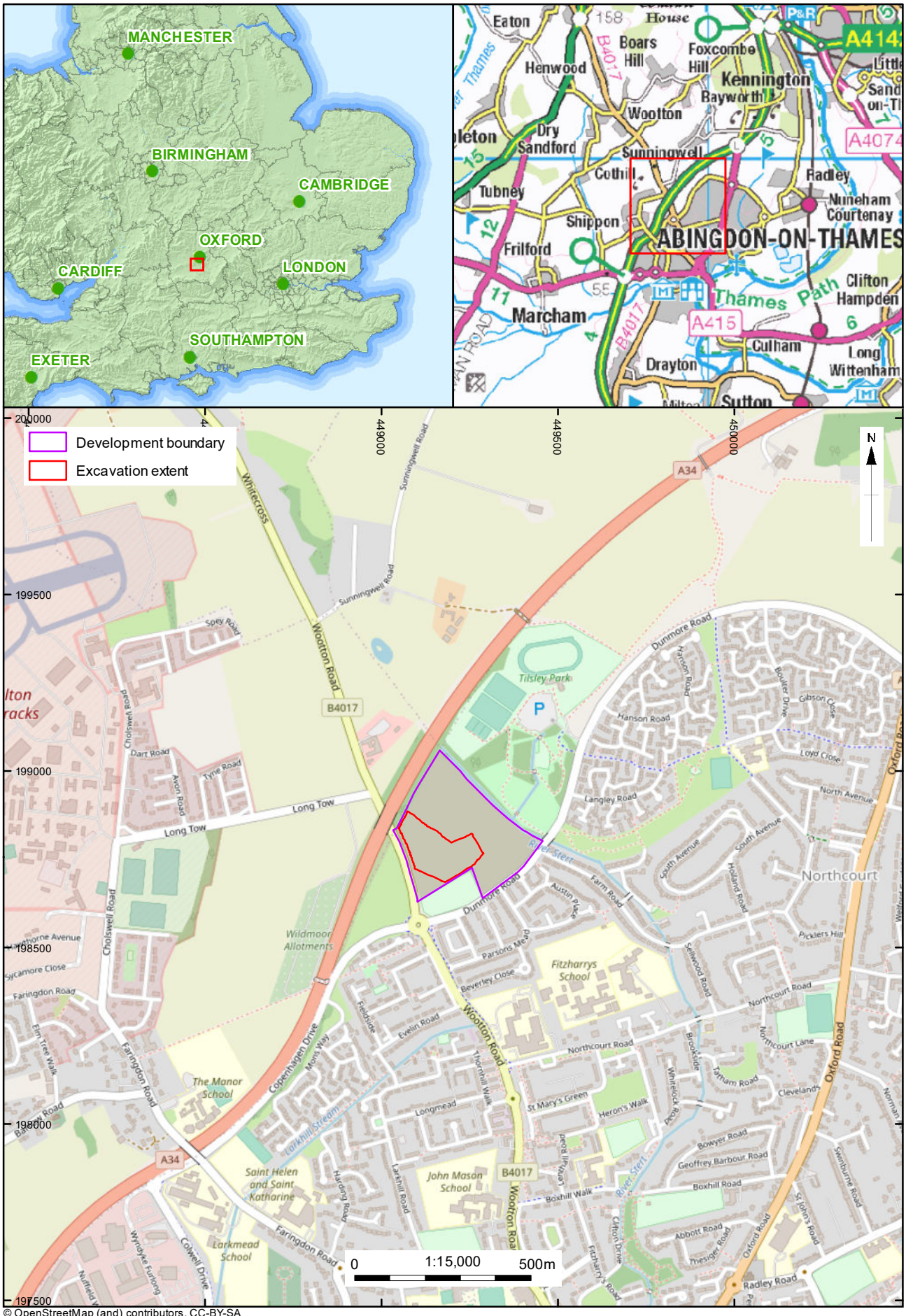

Figure 1: Site location

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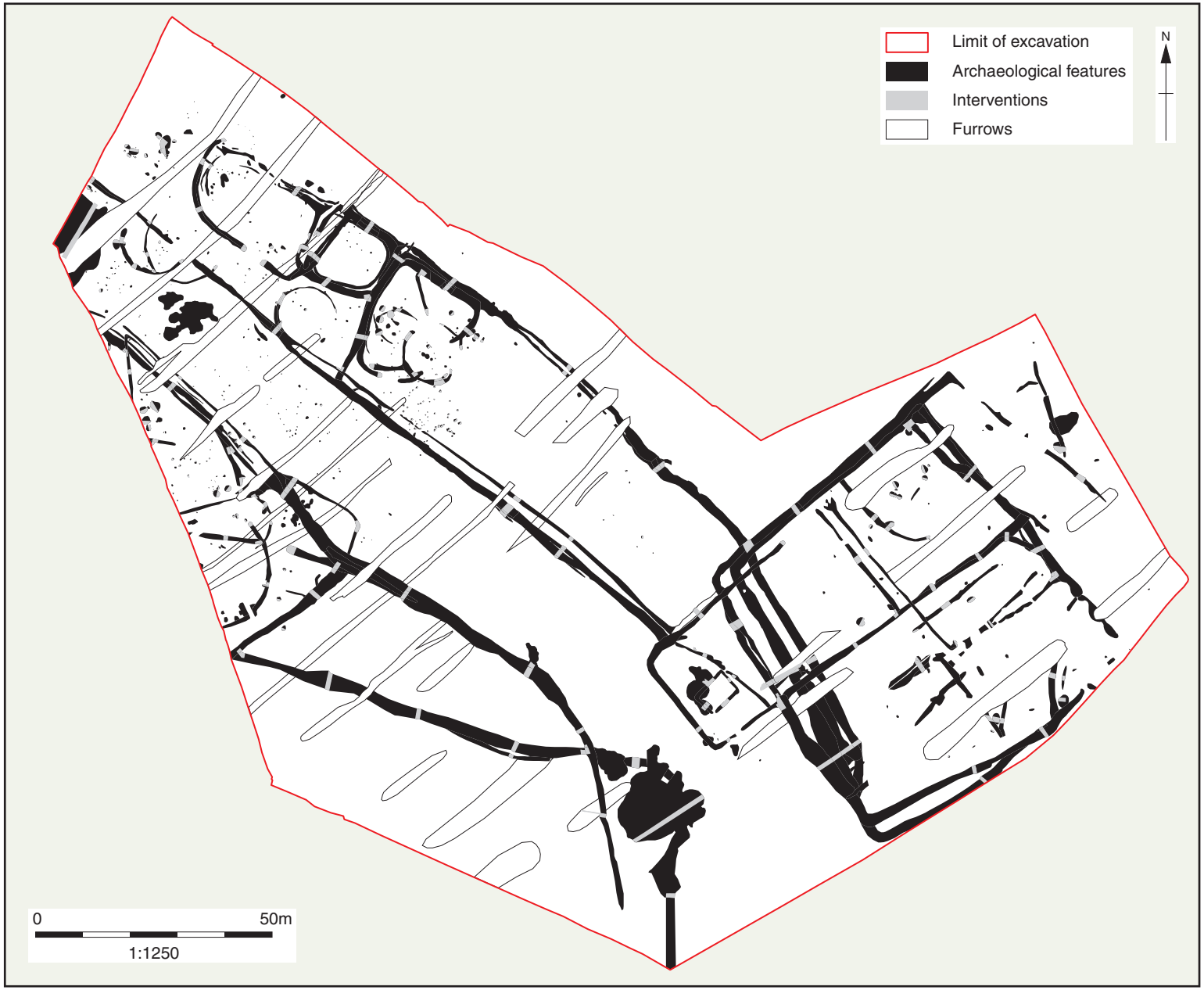

Figure 2: Unphased plan of all features, showing interventions

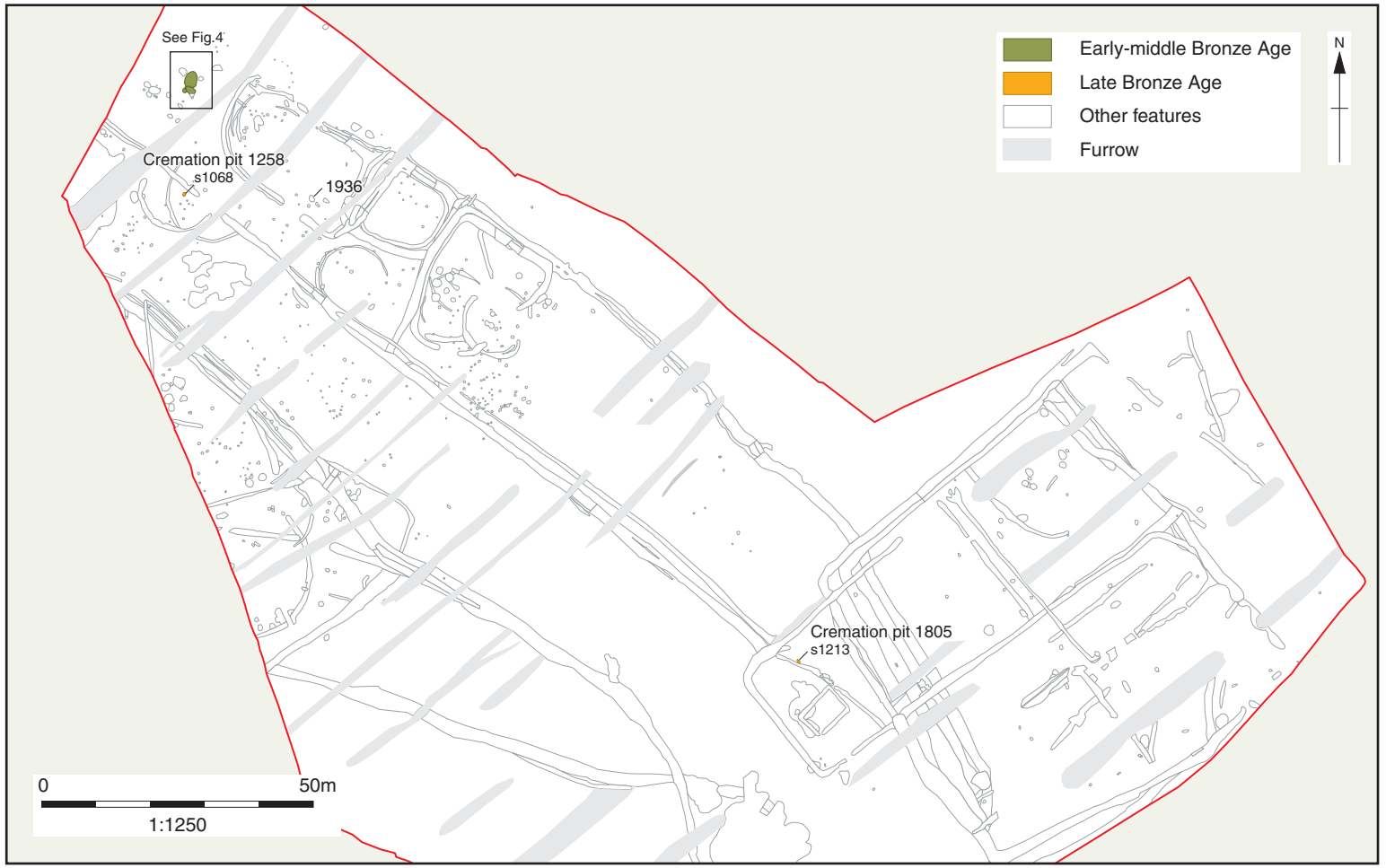

Figure 3: Bronze Age features

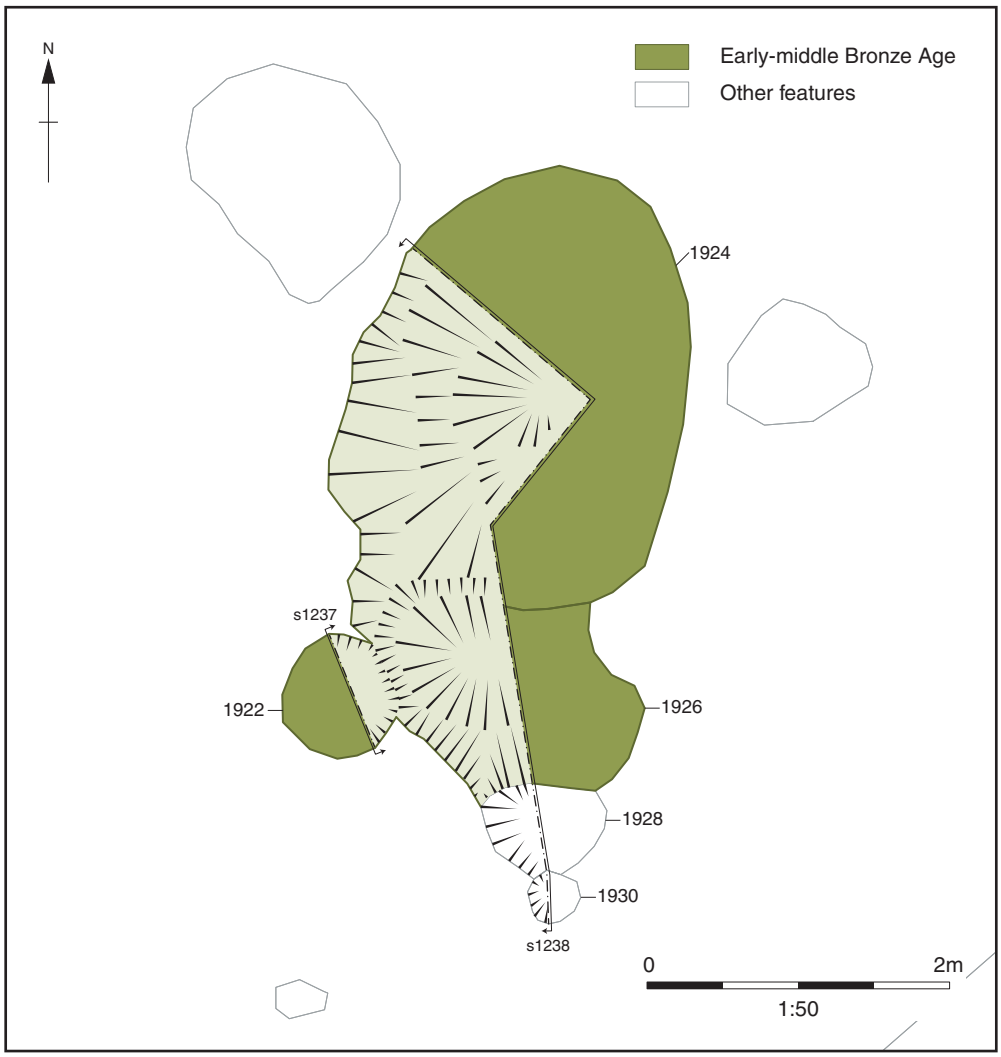

Figure 4: Plan of ‘oven’ 2303

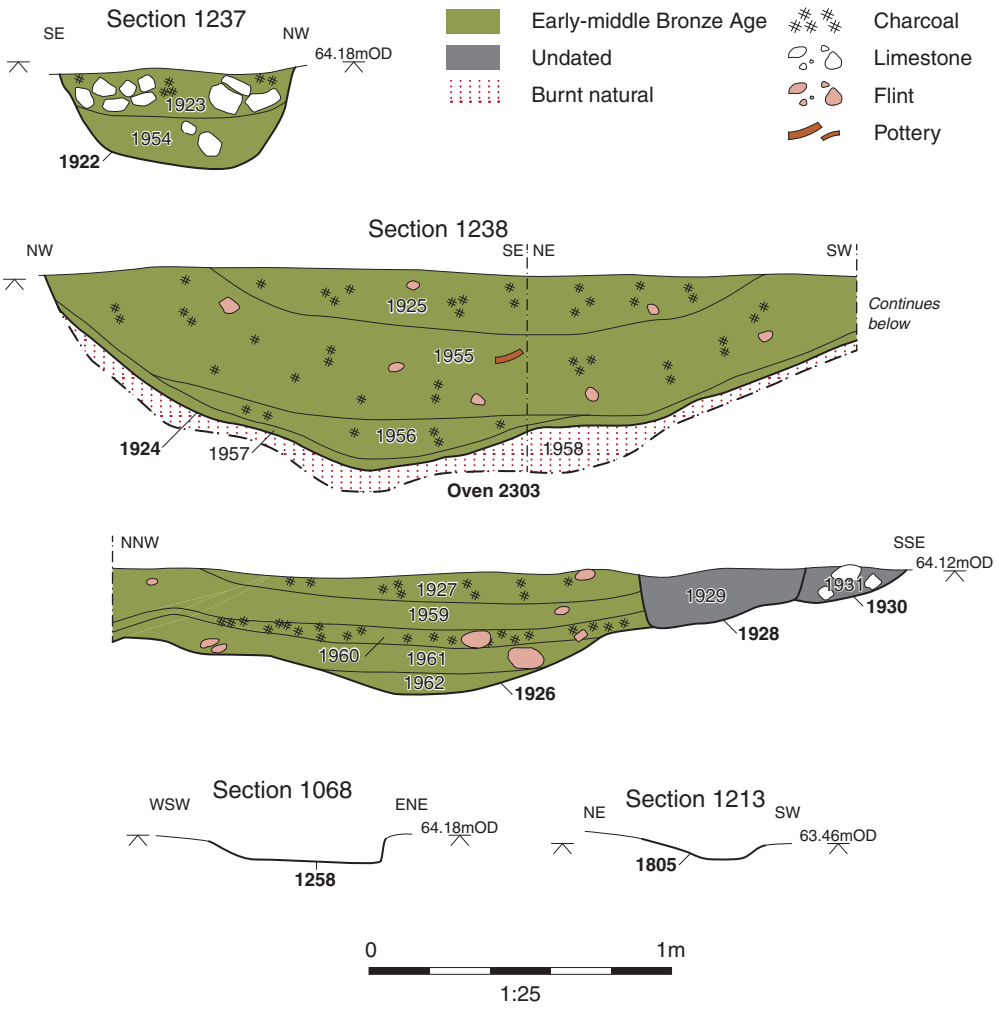

Figure 5: Sections of oven 2303 and cremation pits 1258 and 1805

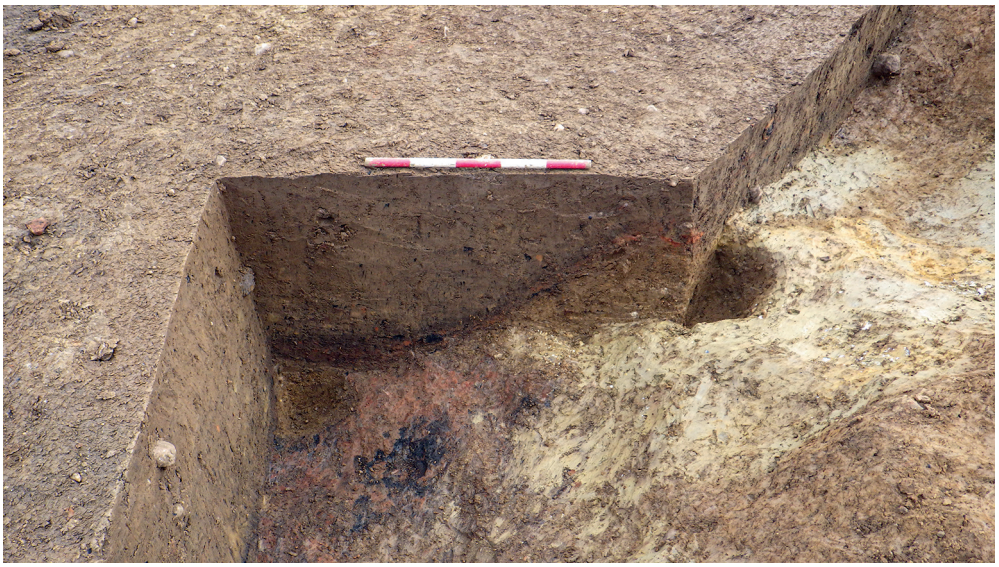

Figure 6: Early-middle Bronze Age ‘oven’ 2303, pit 1924, looking south-east

Figure 7: Early-middle Bronze Age ‘oven’ 2303, stokehole 1922, looking west

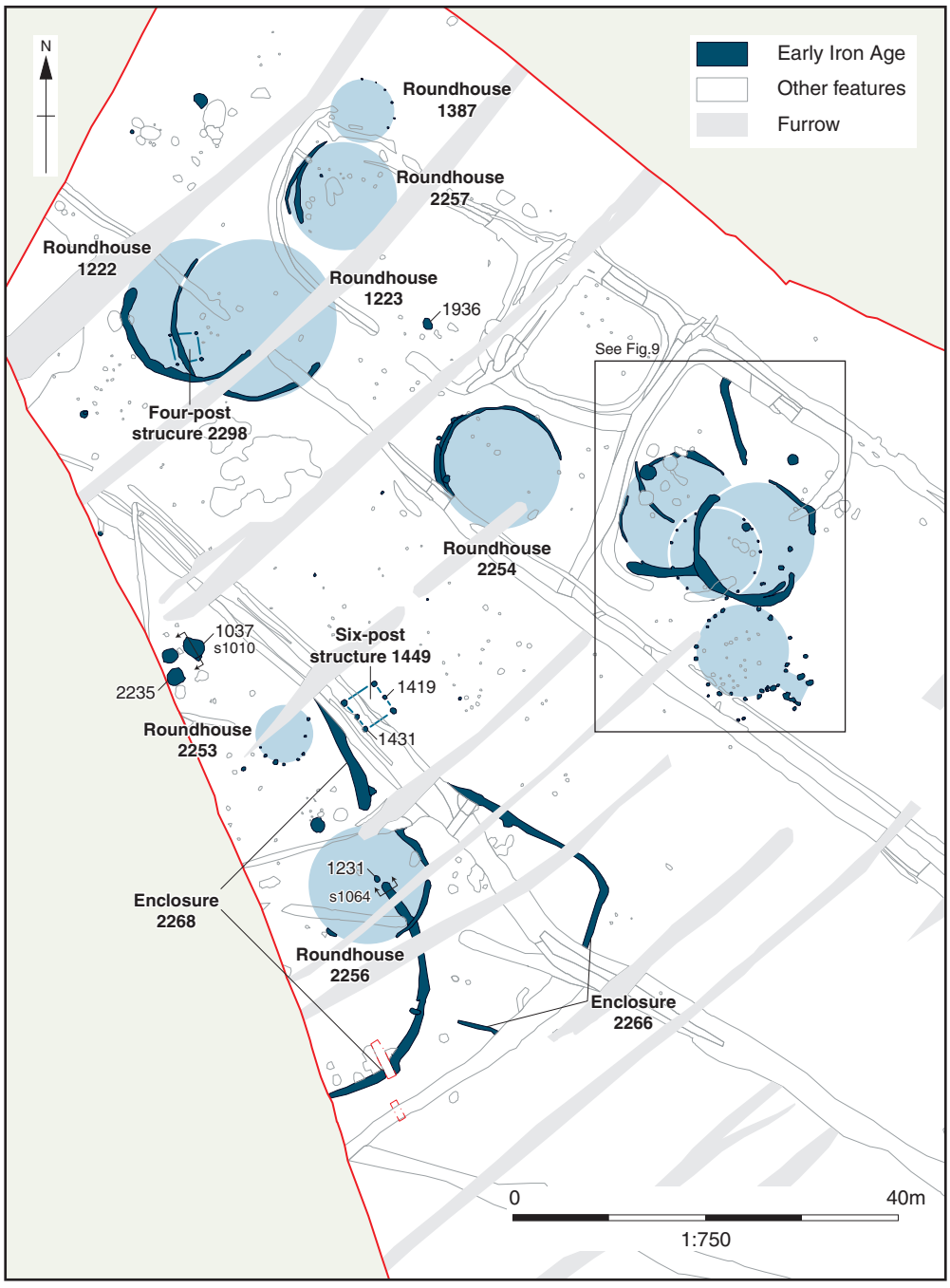

Figure 8: Plan of early Iron Age features

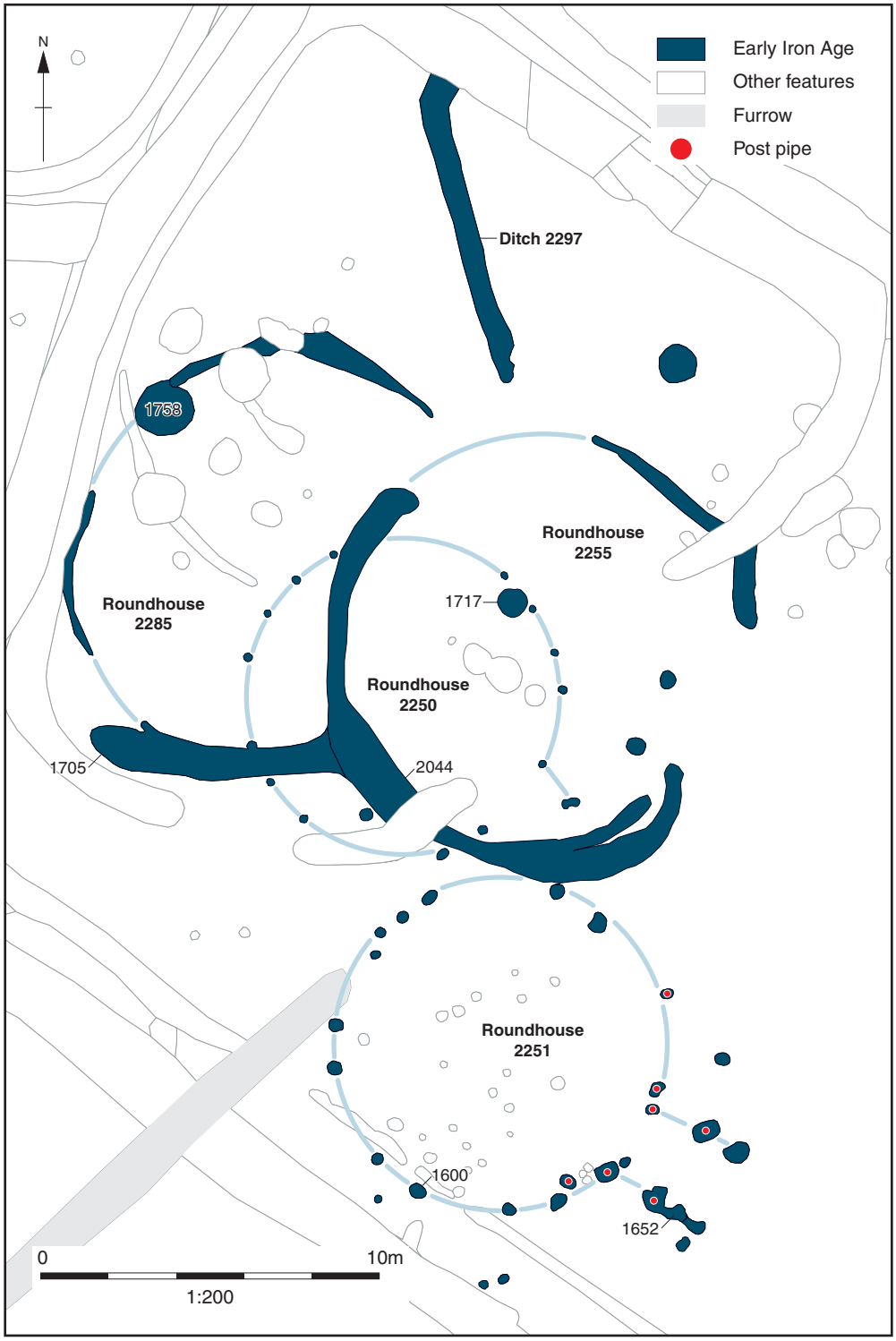

Figure 9: Early Iron Age roundhouses 2250, 2251, 2255 and 2285

Figure 10: Early Iron Age roundhouse 2251, looking north-west

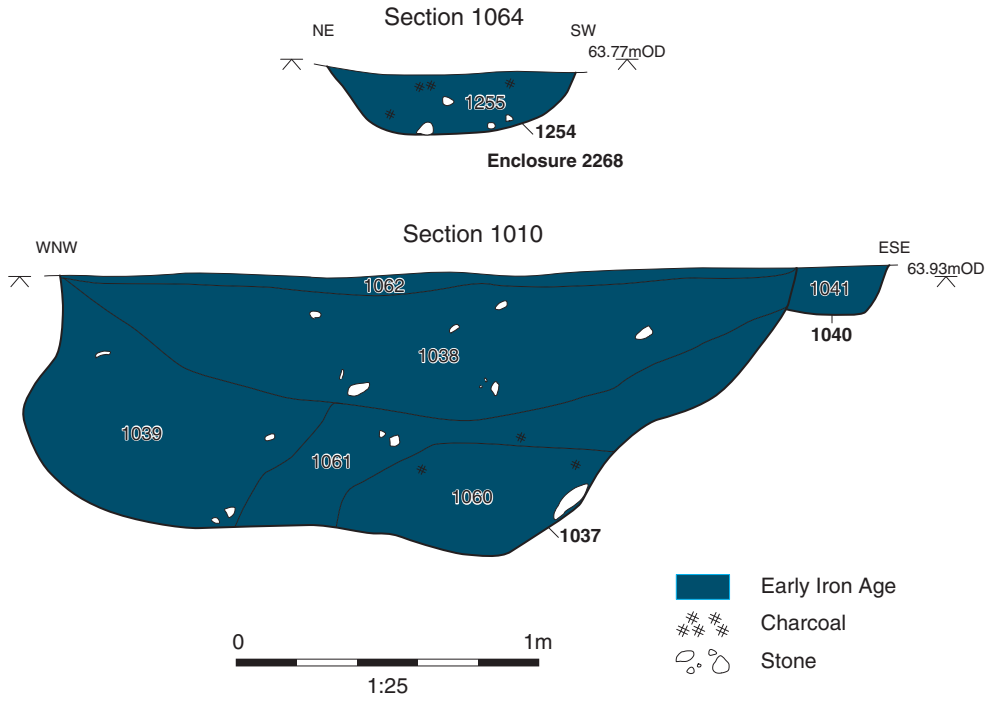

Figure 11: Sections of ditch 1254 (enclosure 2268) and pits 1037 and 1040

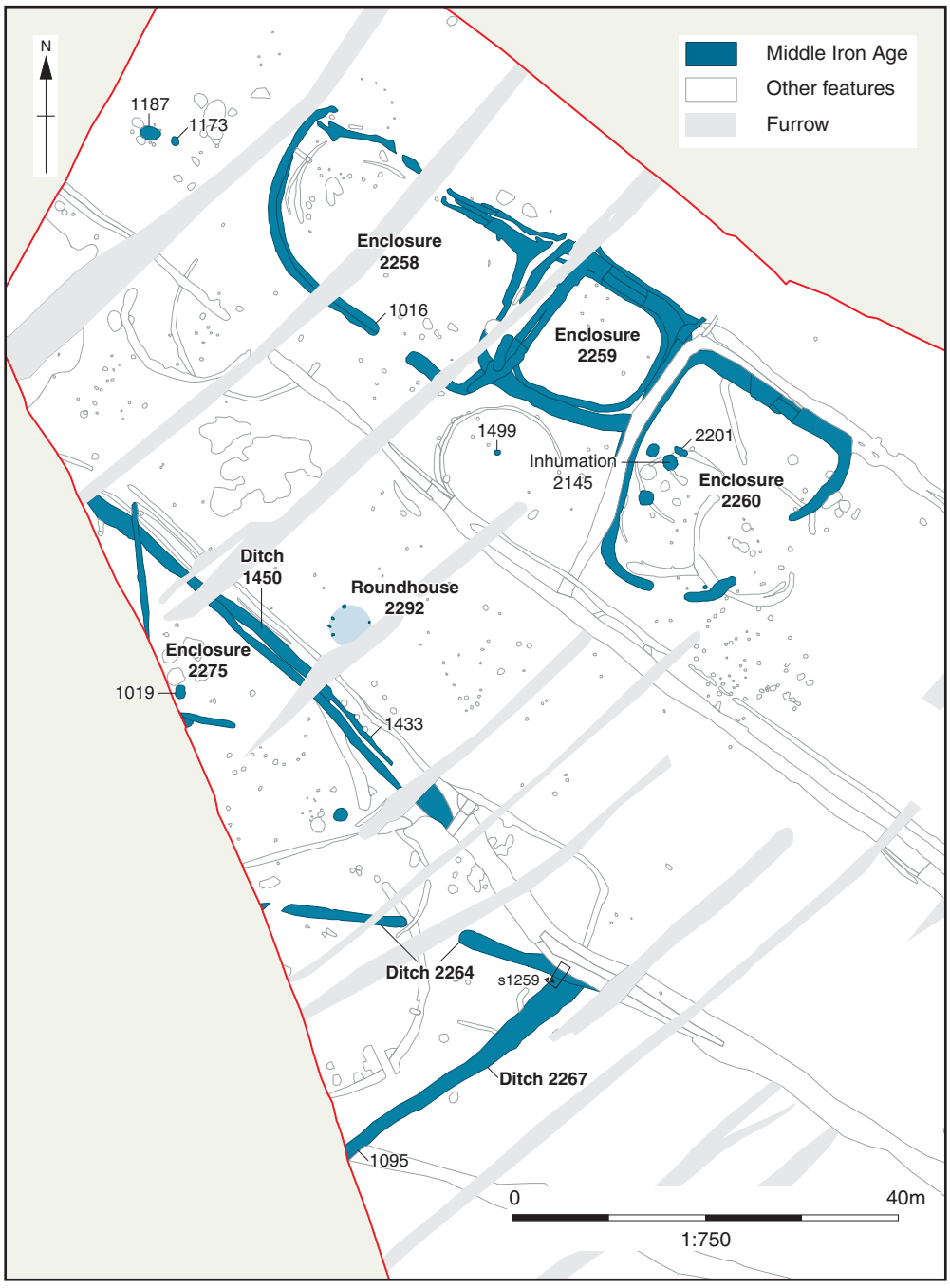

Figure 12: Plan of middle Iron Age features

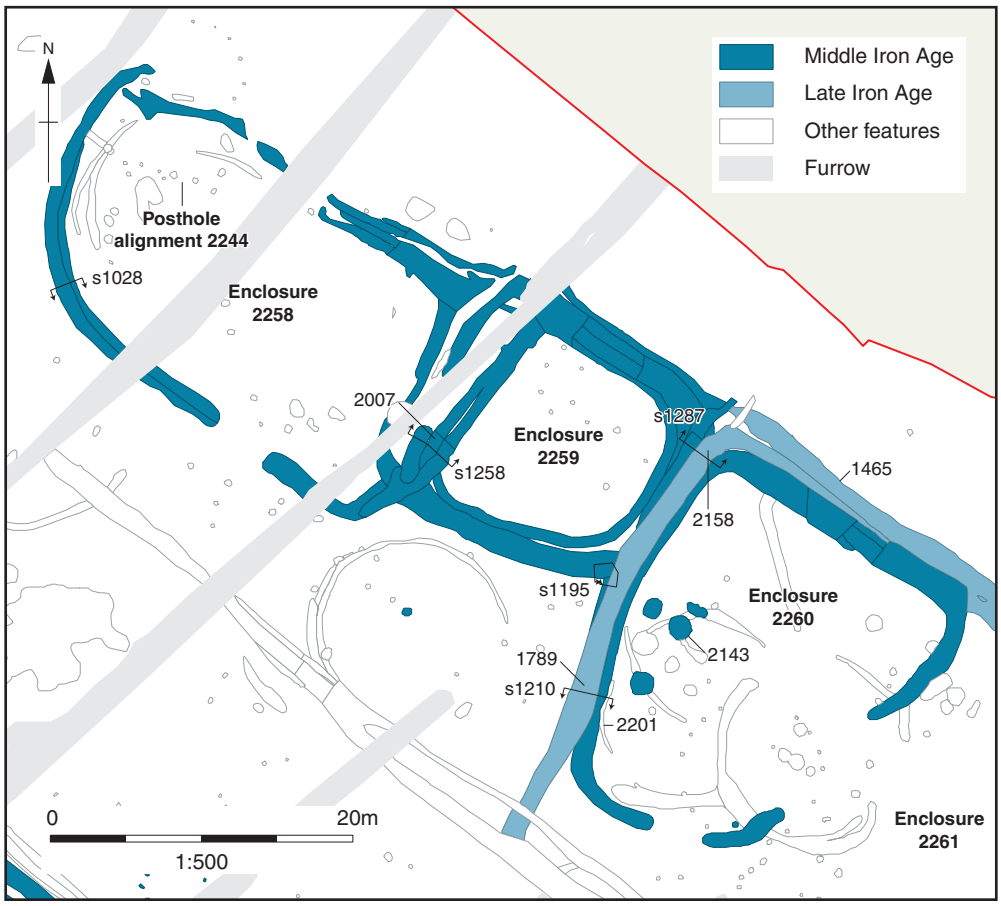

Figure 13: Middle and late Iron Age northern enclosures

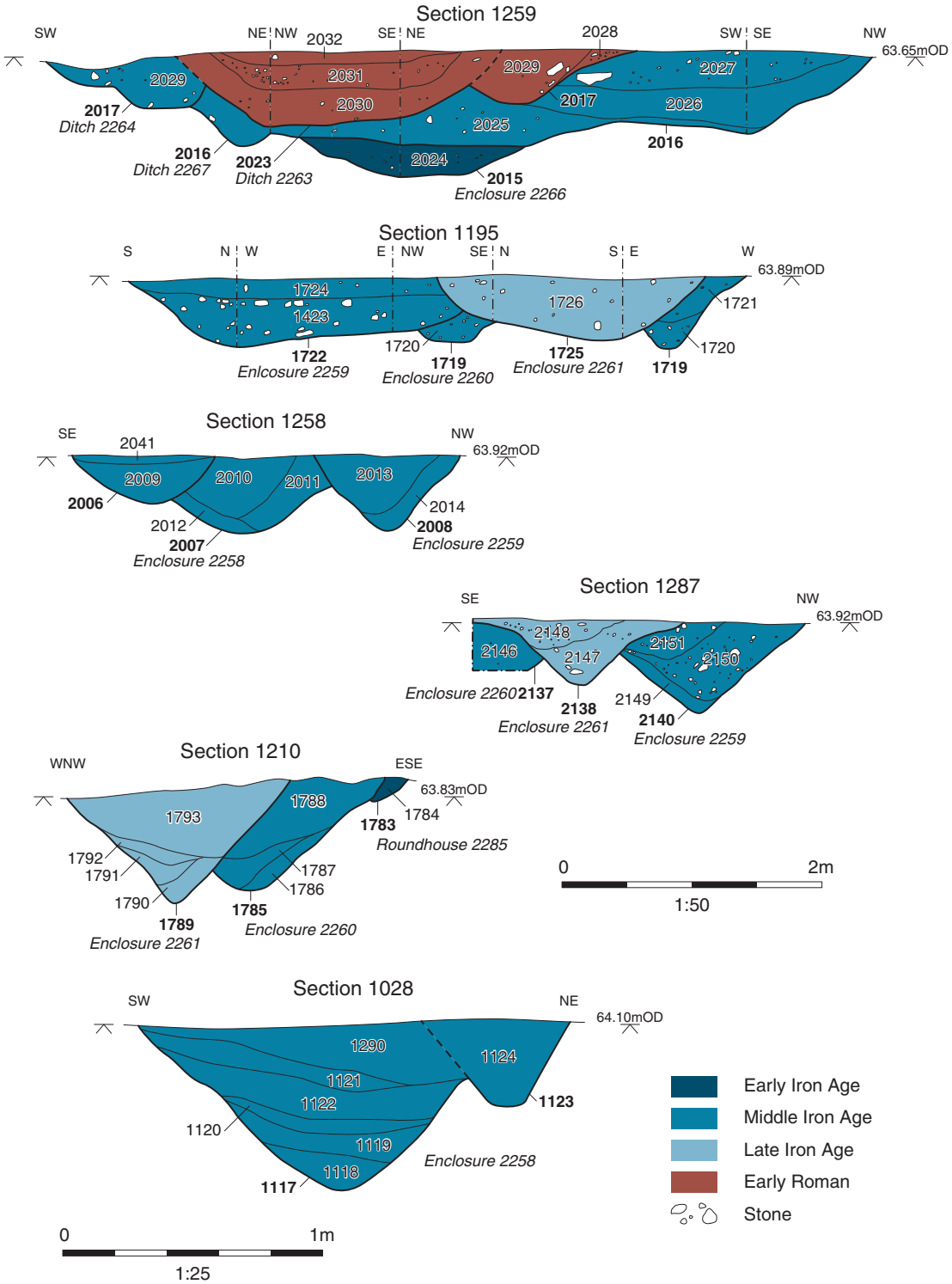

Figure 14: Sections of the middle Iron Age enclosure ditches and their antecedents

Figure 15: Middle Iron Age pit 2143 showing limestone blocks overlying skeleton 2145, looking noth-west

Figure 16: Middle Iron Age pit 2143 showing skeleton 2145, looking north

Figure 17: Middle Iron Age pit 1187 with dump of limestone, looking north

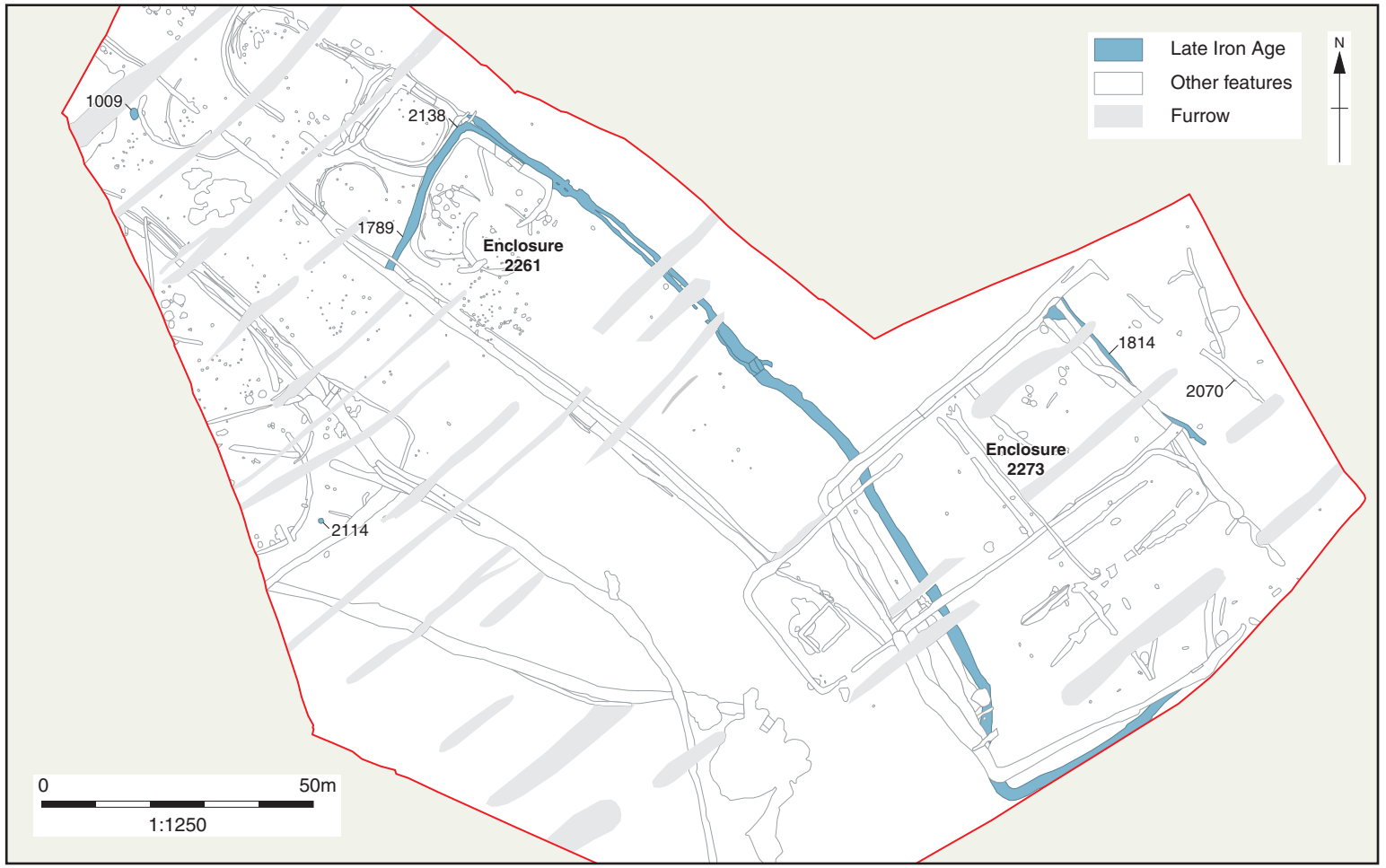

Figure 18: Plan of late Iron Age features

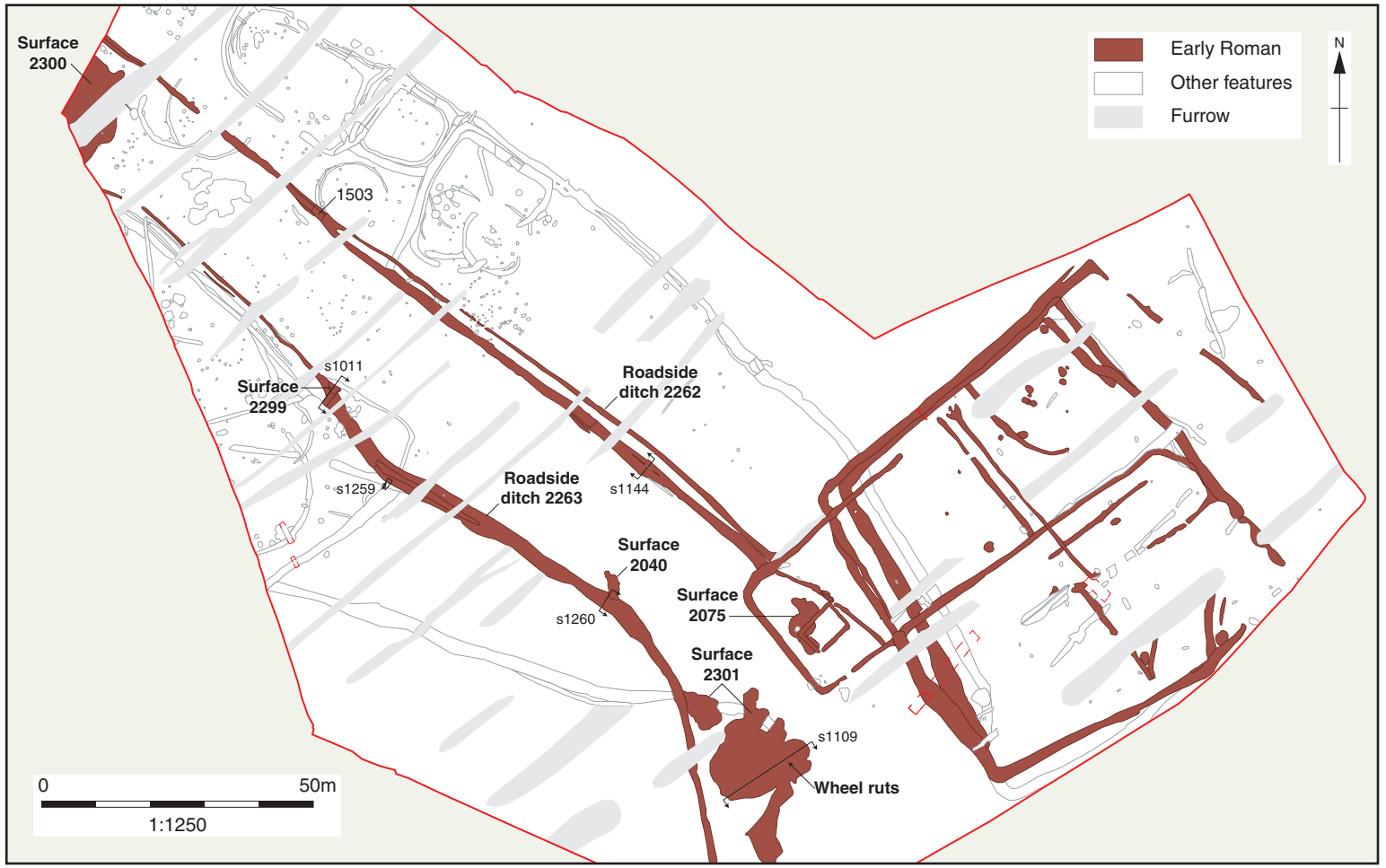

Figure 19: Plan of early Roman features

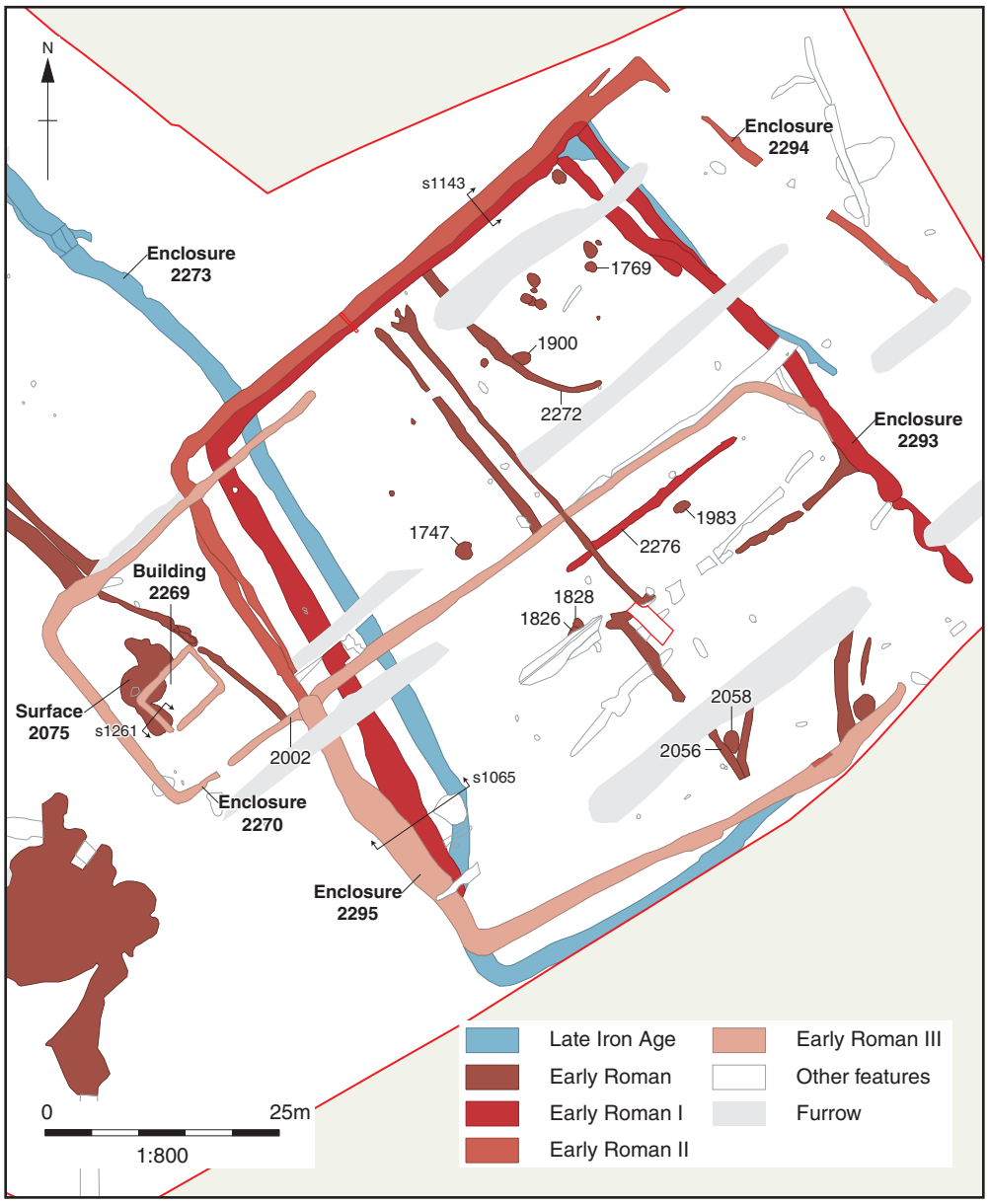

Figure 20: Plan of early Roman enclosures

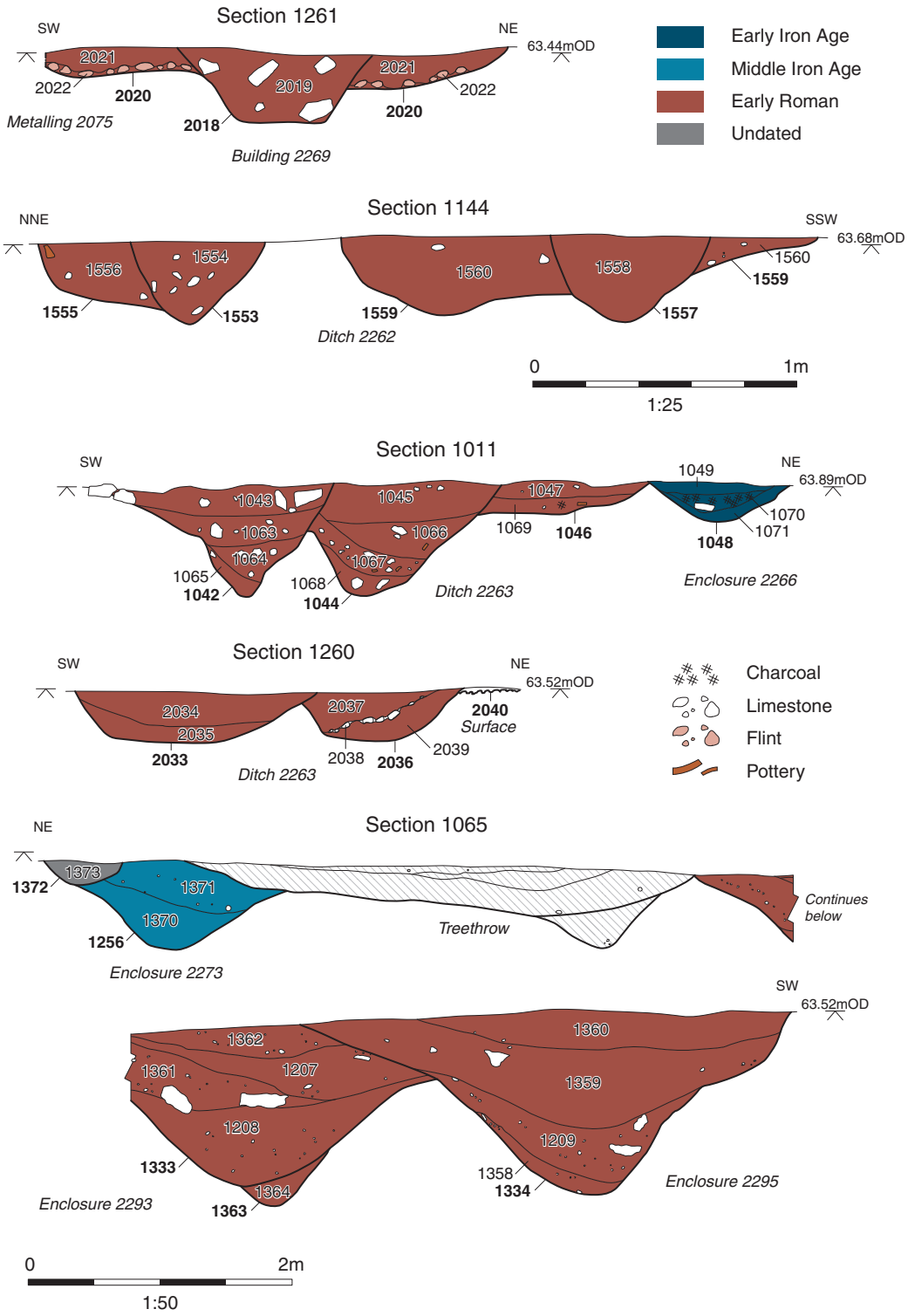

Figure 21: Early Roman sections 1/2

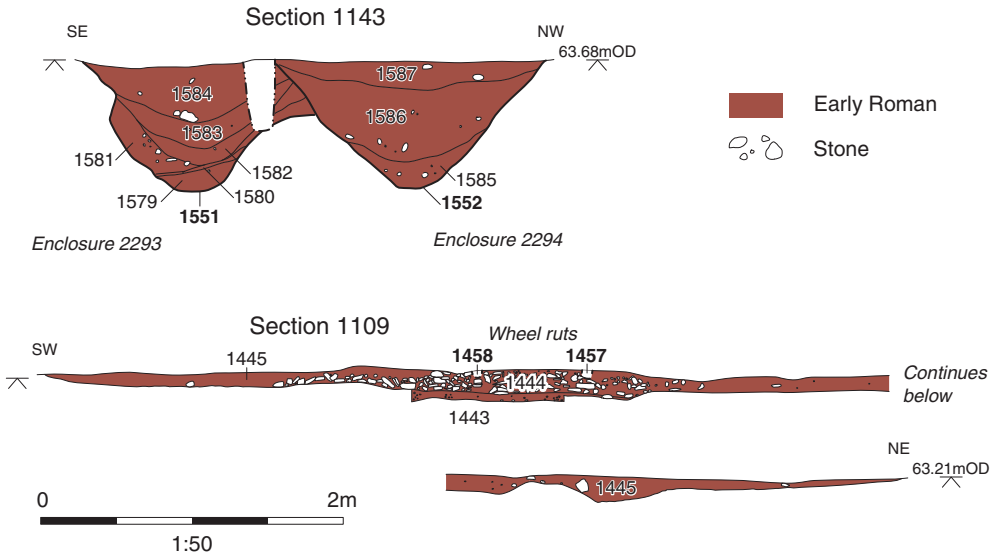

Figure 22: Early Roman sections 2/2

Figure 23: Early Roman pits within the enclosure

Figure 24: Early Roman building 2269, looking north east

Figure 25: Early Roman surface 2301

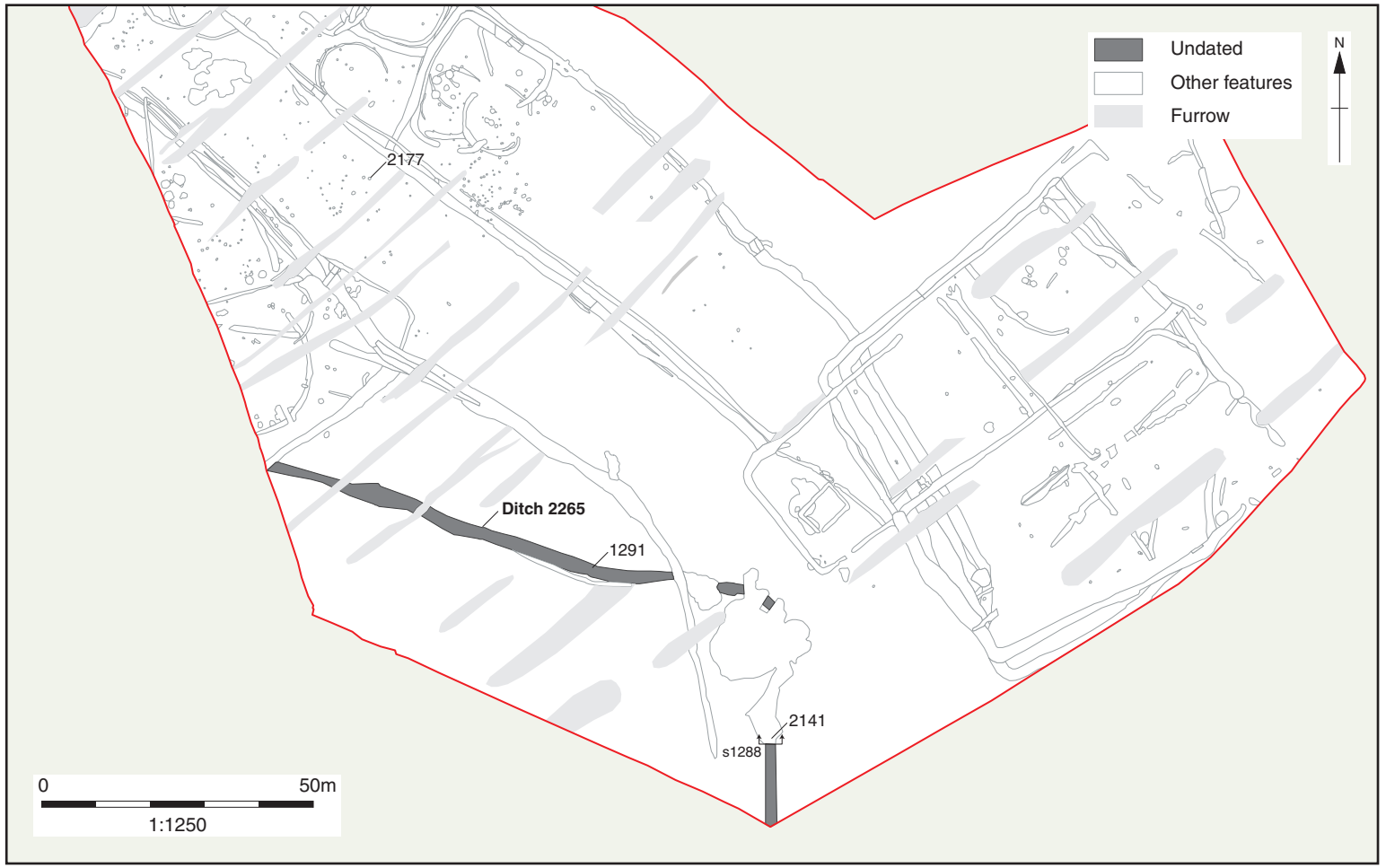

Figure 26: Undated features

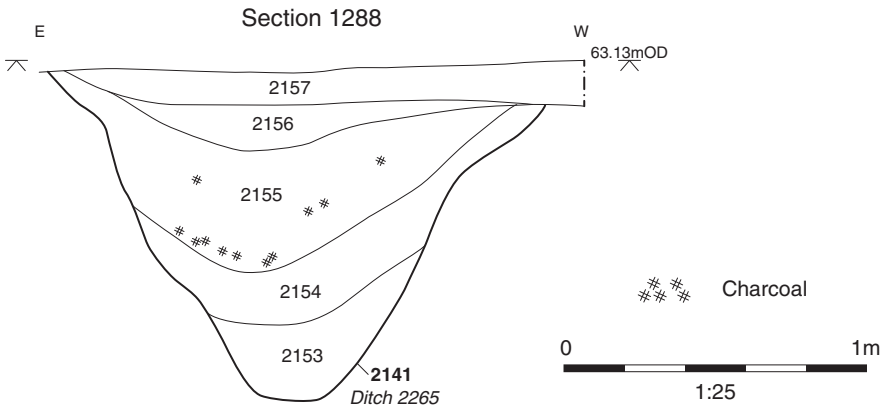

Figure 27: Section across ditch 2265

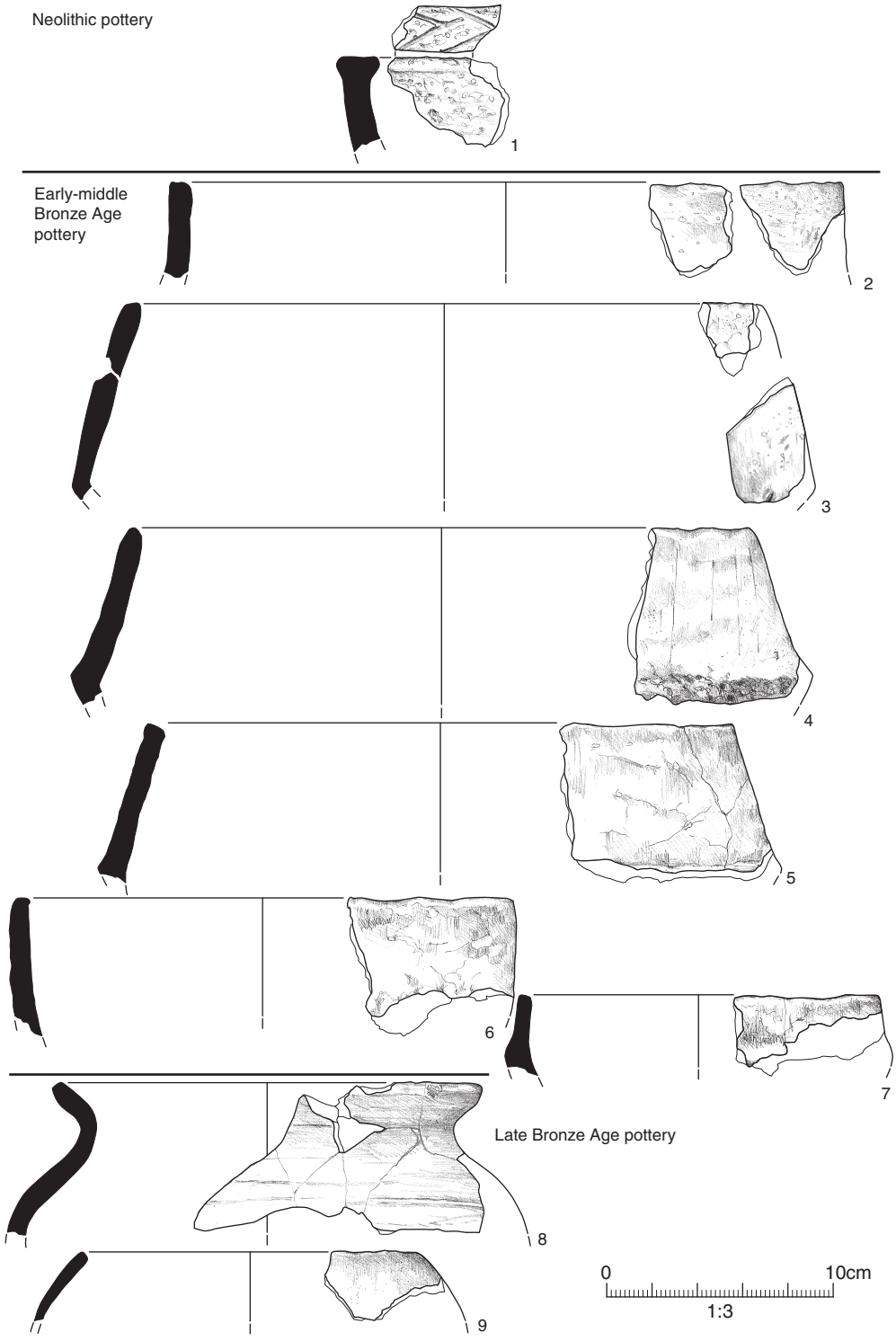

Figure 28: Neolithic and Bronze Age pottery

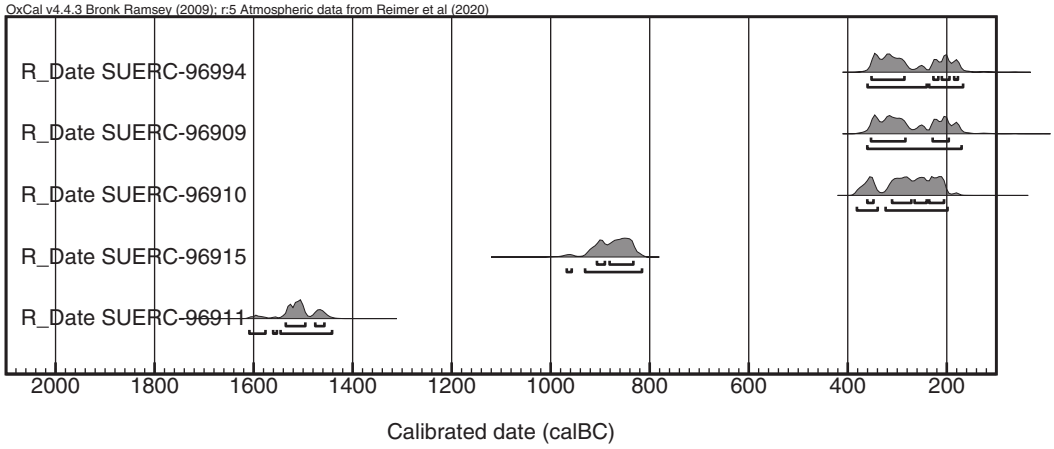

Figure 29: Radiocarbon dates

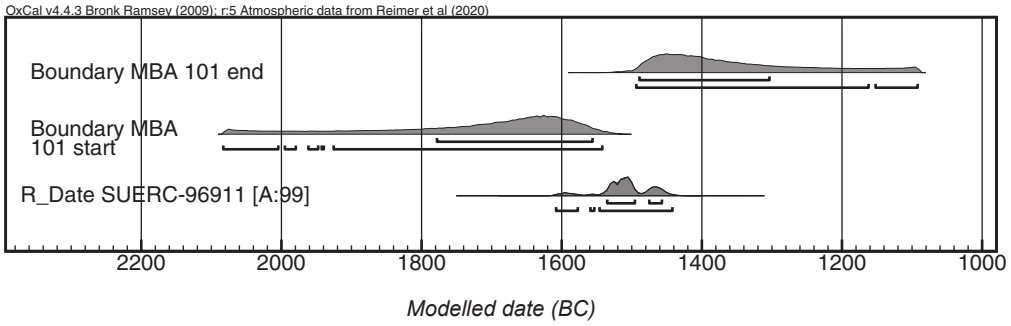

Figure 30: Radiocarbon sample SUERC-96911 (associated with Biconical Urn), compared with the start and end boundaries for the Area 101 settlement at Great Western Park phase 2 (associated with Deverel-Rimbury). After Hayden in prep

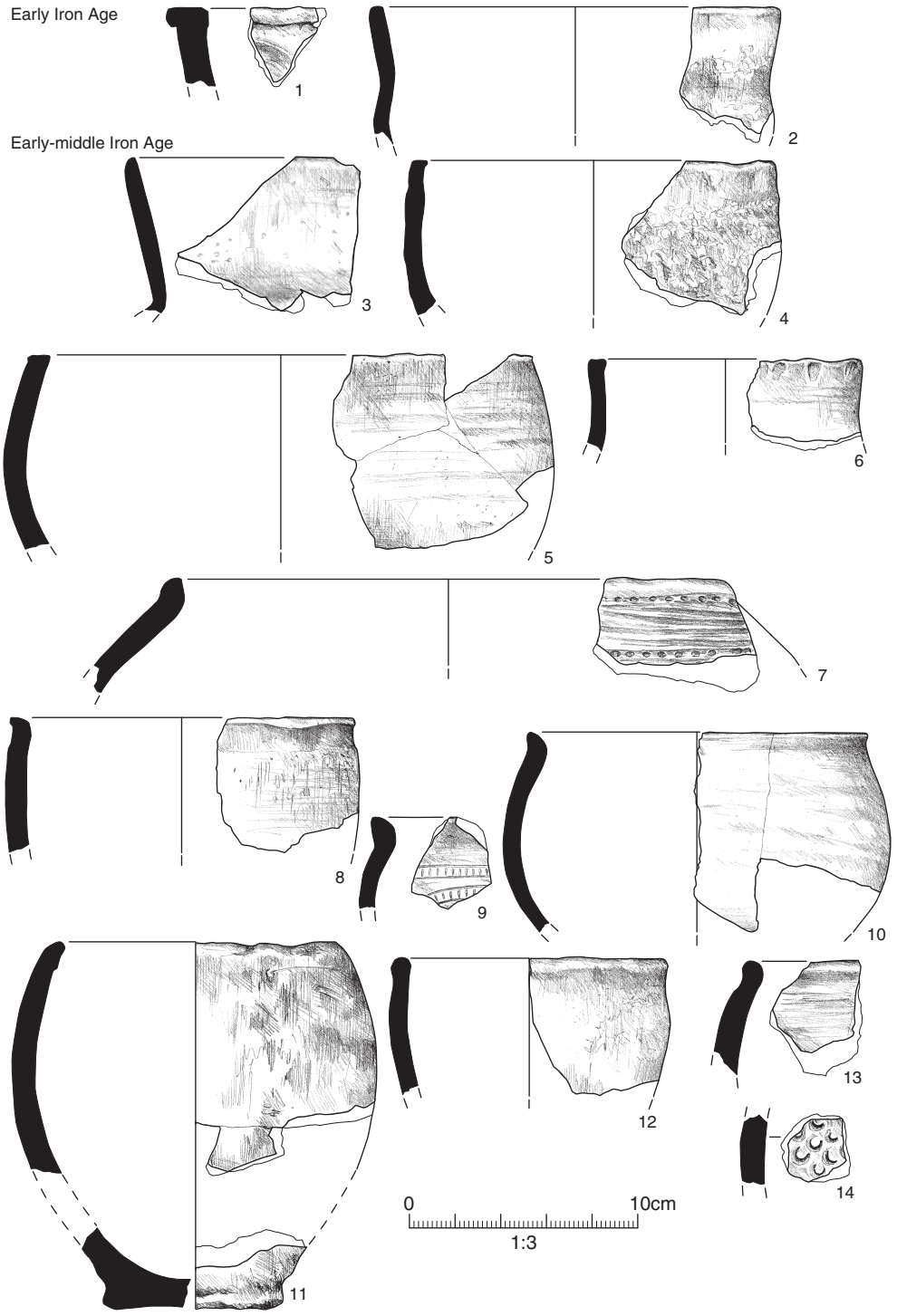

Figure 31: Iron Age pottery

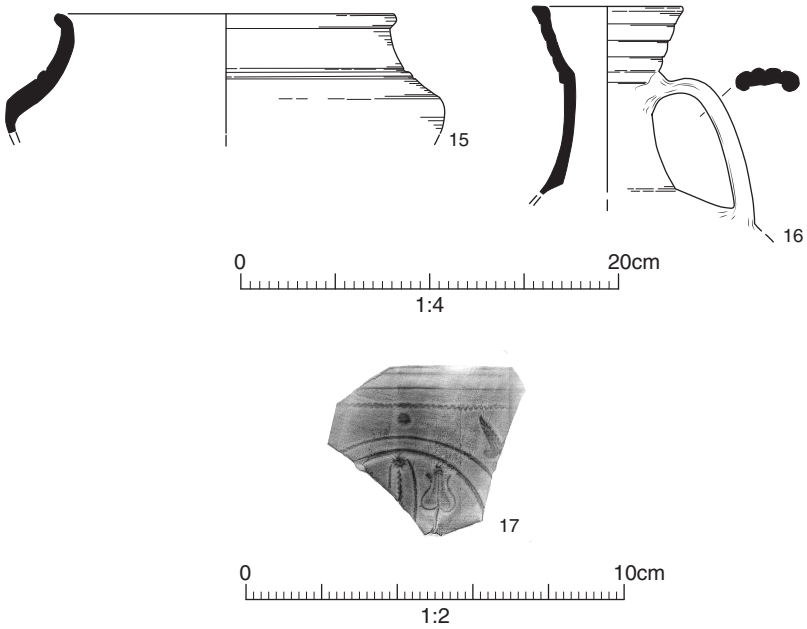

Figure 32: Roman pottery

Figure 33: Awl graver and twisted copper-alloy strip

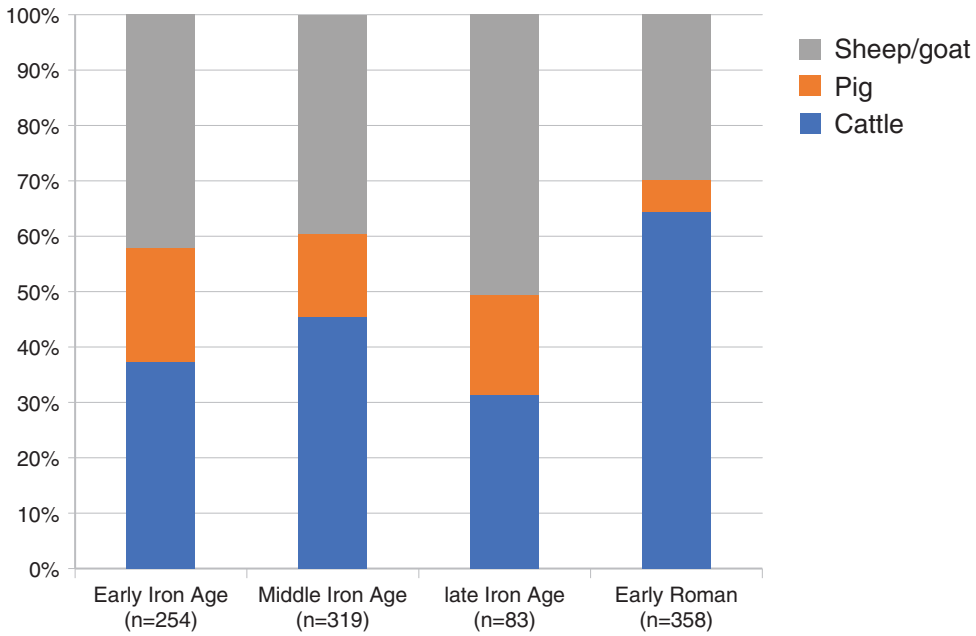

Figure 34: %NISP of the three main livestock taxa

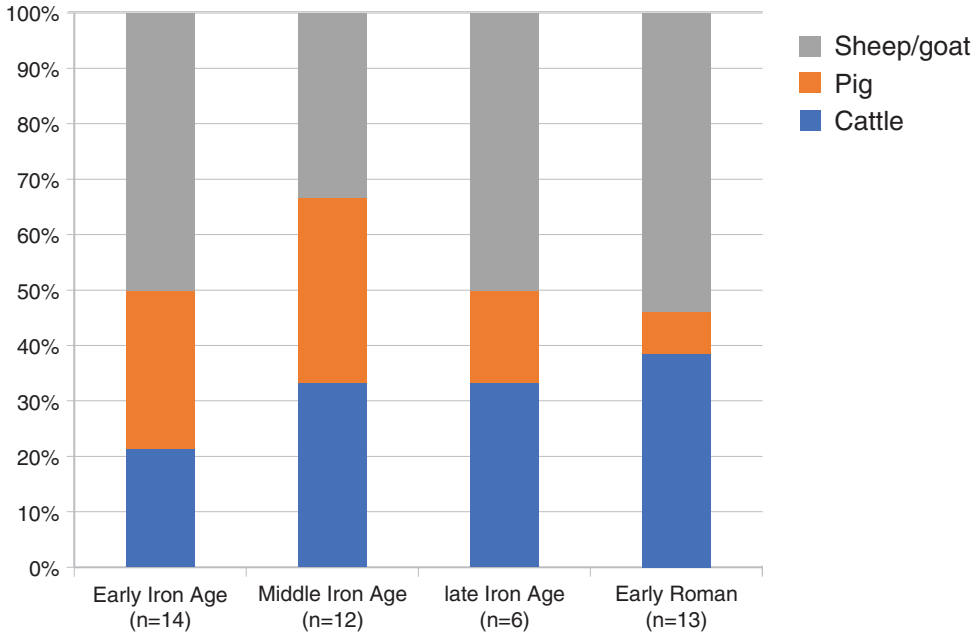

Figure 35: %MNI of the three main livestock taxa

Figure 36: Dog tibia with cut marks and polycerate sheep horncore

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