

A Bronze Age pit deposit and round barrows near Wootton, Northampton

by

ANDY CHAPMAN and SIMON CARLYLE

with contributions from

Dana Challinor and Harriet Anne Jacklin

SUMMARY

An archaeological evaluation was carried out by Northamptonshire Archaeology on 180 hectares of open farmland to the north-east, east and south-east of Wootton, Northampton. Areas of archaeological remains had been identified from aerial photographs and geophysical survey, and these and the intervening areas were examined and characterised through the excavation of 306 trial trenches.

This report focuses on the features of certain or likely Bronze Age date. At the northern end of the site, on the Hunsbury ridge, there are two or possibly three ring ditches, probably the remains of Bronze Age round barrows, one of which had been previously investigated. There was also a dispersed pattern of field or enclosure ditches of possible Iron Age date.

On the lower slopes to the north of Wootton Brook there was a single pit, radiocarbon dated to the Early Bronze Age, containing a deposit of dark charcoal-rich soil, with a small amount of cremated bone, at least partly cattle bone, three flint arrowheads and a scraper. This pit joins the growing corpus of Neolithic and Bronze Age pits in the region located in recent years as chance finds during the investigation of extensive development sites. In the same area there was also an Iron Age ring ditch and several late Iron Age ditches.

At the southern end of the site, on a low prominence south of Wootton Brook, a middle/late Iron Age settlement comprised a sub-rectangular enclosure as well as subsidiary enclosures and pits. An isolated ring ditch in this area may be either a Bronze Age ring ditch or part of the Iron Age complex.

INTRODUCTION

Between October 2007 and January 2008, an archaeological evaluation was carried out by Northamptonshire Archaeology on 180ha of farmland lying to the north-east, east and south-east of Wootton, Northampton (site centred on NGR SP 775 565; Fig 1). The work was commissioned by CgMs Consulting, acting on behalf of the Wootton Consortium. This area, the Southern Development Area (SDA), forms part of the Local Development Framework for South Northamptonshire Council.

The evaluation had been preceded by a desk-based assessment (Darton and Chadwick 2007) and geophysical survey (Butler 2008). The programme of archaeological work was carried out in accordance with *Planning Policy Guidance: Archaeology and Planning (PPG16)*, section 30, and the relevant policies outlined in the Northamptonshire Structure Plan 1996-2016 (adopted March 2001), and in accordance with a Written Scheme of Investigation prepared by CgMs Consulting (Dawson 2007).

The evaluation comprised the excavation of 306 trial trenches, typically 50m long by 2m wide, a total of 15,350 linear metres of trench taking in a total area of 3.07ha, 1.7% of the total site area.

ACKNOWLEDGEMENTS

The project managers were Michael Dawson for CgMs Consulting and Anthony Maull and Adam Yates for Northamptonshire Archaeology. The geophysical survey was directed by Adrian Butler. The trial trench evaluation was directed by Simon Carlyle and supervised by Emma Rae and Tim Upson-Smith. The client report for the project was compiled by Simon Carlyle (2008), with illustrations by Jacqueline Harding and Pat Walsh. The client report will be available from the Northamptonshire Historic Environment Record and online through the Archaeology Data Service (ADS). The archive, comprising the finds, site records and all material associated with the project, will be held by Northamptonshire Archaeology until a suitable repository becomes available. This report on the Bronze Age pit deposit and the Bronze Age round barrows has been compiled by Andy Chapman using material extracted from the client report (Carlyle 2008) along with some additional information and interpretation.

TOPOGRAPHY AND GEOLOGY

The proposed development area is bounded by Brackmills Business Park to the north, by the village of Hardingstone to the north-west, the residential estates of Wootton to the west and Grange Park to the south-west, and farmland to the east (Fig 1).

The southern half of the area, to the south of Newport Pagnell Road (B526), comprises gently sloping ground on either side of Wootton Brook (Fig 2). The brook rises near Piddington, approximately eight miles south-east

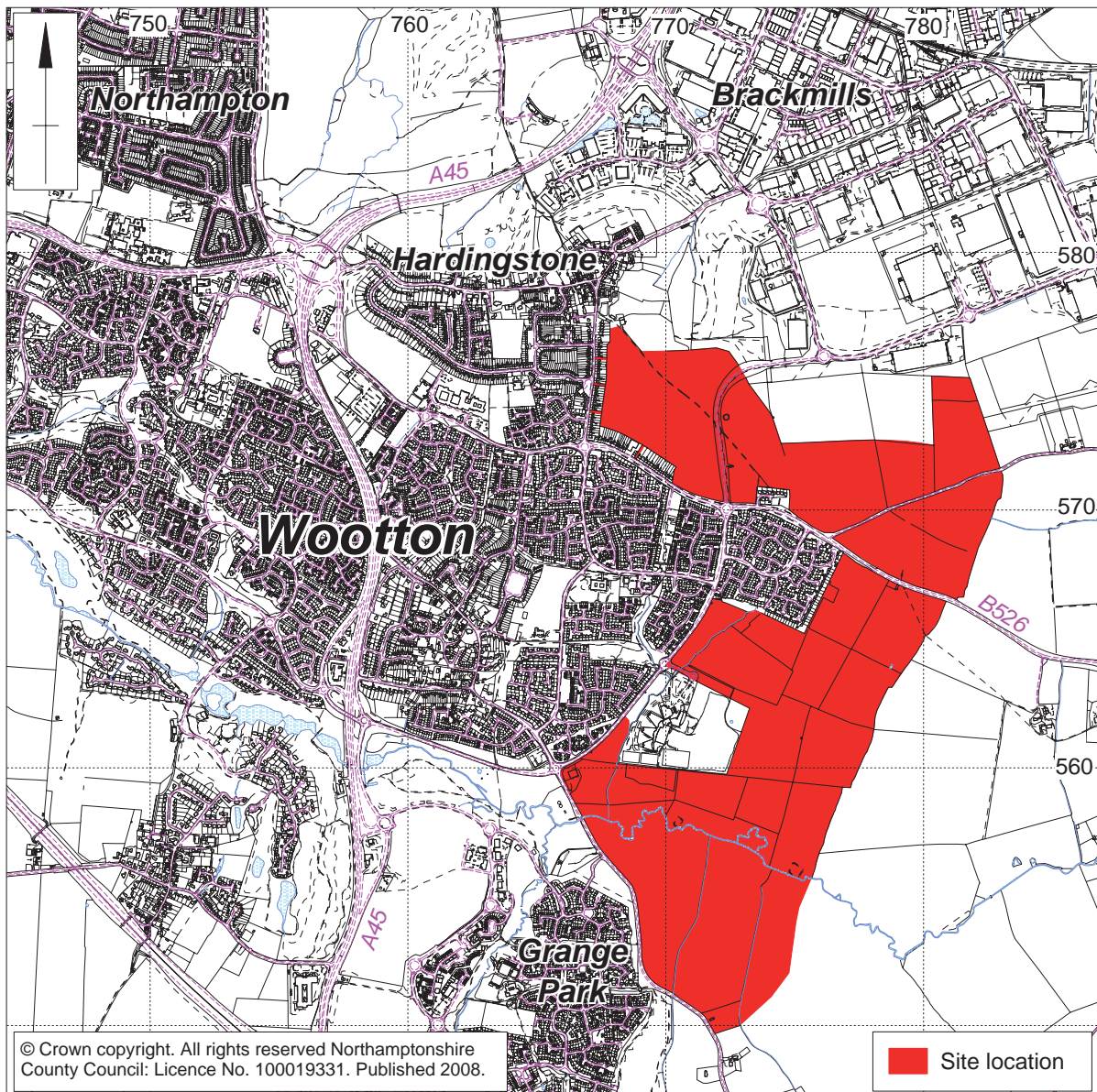
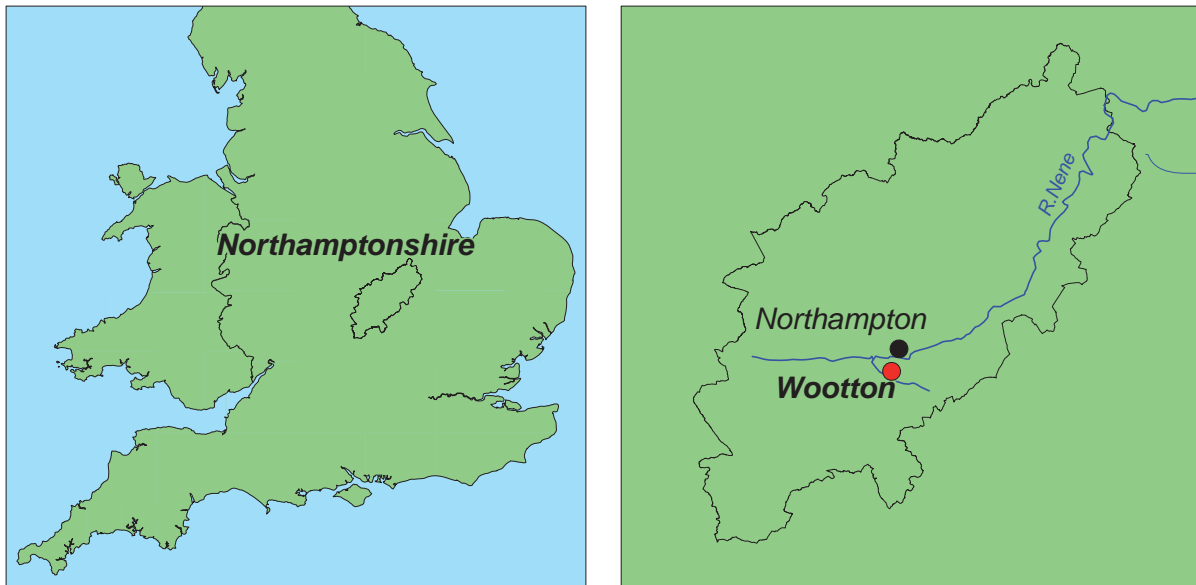


Fig 1 Site location

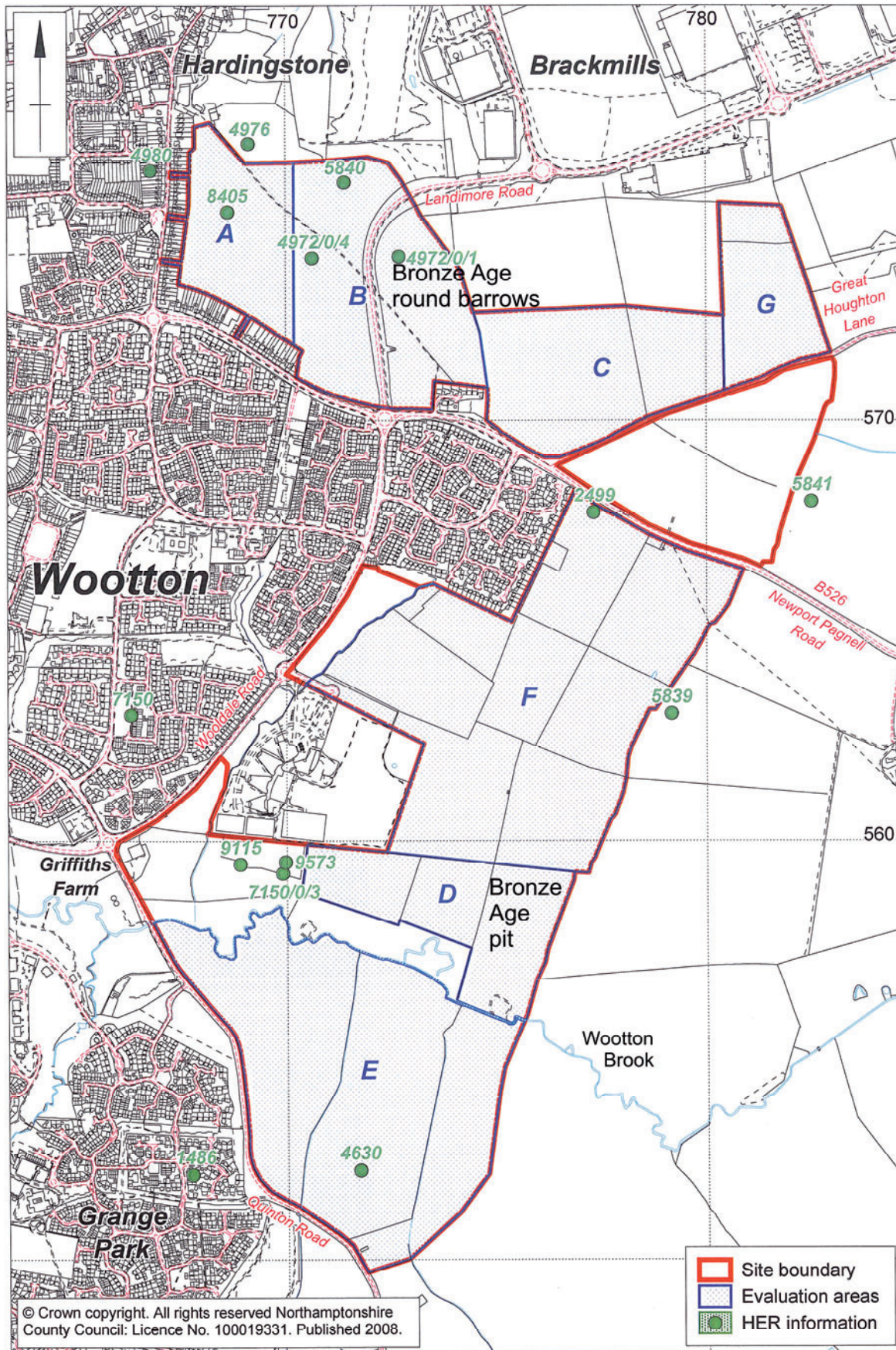


Fig 2 Location of the Bronze Age features

of Northampton, and flows north-westwards, to join the River Nene west of Northampton. To the north of the Newport Pagnell Road the ground rises gradually to Hunsbury Ridge, which forms the watershed between the River Nene and Wootton Brook and offers commanding views of the Nene Valley to the north and north-east. The ground is gently undulating and rises to a relatively flat plateau to the east of Hardingstone.

The geology of the area comprises Lower and Middle Jurassic rocks of the Upper Lias and Great Oolite series. To the north of Wootton Brook there is an extensive cover of Boulder Clay over Great Oolitic limestone and Upper Lias Clay (BGS 1979). There are exposures of ironstone to the north-east, which have been quarried in the past. Localized deposits of glacial gravel occur close to the brook, at the base of the northern slopes. The floodplain of the brook is occupied by alluvial deposits. To the south of Wootton Brook, Boulder Clay overlies Upper Lias Clay, with deposits of alluvial sand at the edge of the floodplain.

ARCHAEOLOGICAL BACKGROUND

The archaeological and historical background of the proposed development area was detailed in an archaeological desk-based assessment prepared by CgMs Consulting (Darton and Chadwick 2007). The majority of the sites identified dated to the Bronze Age, Iron Age and Roman periods (Fig 2).

Within the study area there were no records relating to settlement or activity prior to the Bronze Age, although worked flint dating from the late Mesolithic to Middle Bronze Age periods was collected during a fieldwalking survey immediately to the south-west of the study area at Grange Park, where sites of Iron Age, Roman and Saxon date were subject to excavation prior to development (HER 1486; Jones *et al* 2006).

On the ridge of high ground at the northern end of the site, Hunsbury Ridge, there were a number of crop-marks, including at least two possible ring ditches of potential Bronze Age date and possible enclosure ditches (HER 4972/0/1 and HER 4972/0/4). These have been investigated by geophysical survey and archaeological trial trenching (Wessex 1996), and one of the ring ditches (HER 4972/0/1, Chapman 2003) was investigated during the construction of the Brackmills Link Road (Landimore Road), as discussed in more detail below. This work also indicated that the pattern of sinuous features interpreted as possible enclosures were at least largely of geological origin.

There are extensive areas of Iron Age settlement in the southern part of the study area (HER 4630) and areas of Iron Age settlement have been excavated at Grange Park to the south-west (HER 1486; Jones *et al* 2006). To the west of the study area, there is a small Roman villa beneath the Wootton Fields development (HER 7150 and in the grounds of the Caroline Chisholm School, to the east of Wooldale Road (HER 7150/0/3; Chapman *et al* 2005).

A BRONZE AGE BARROW GROUP

The northern end of the evaluation area (Fig 2, Area B)

included the known and investigated ring ditch, Barrow 1, and provided an opportunity to examine a wider area in order to ascertain whether Barrow 1 was a solitary monument or part of the larger group (Fig 3).

These fields lay on the south-facing slope of the Hunsbury Ridge, with the ground descending from 107m to 101m aOD at the Newport Pagnell Road.

The natural substrate was very variable across the area, and even within single trenches, comprising light to mid orangey-brown silty sand with patches of ironstone pebbles, reddish brown gritty silty sand and mid yellowish-orange silty clay, and there were occasional outcrops of laminated ironstone bedrock.

The subsoil was mid brown clayey silt with occasional to moderate ironstone and flint pebbles, between 0.1-0.4m thick. The topsoil was generally 0.3m thick and consisted of mid greyish-brown organic slightly clayey silt with occasional to moderate ironstone and flint pebbles.

THE KNOWN ROUND BARROW, BARROW 1

The presence of at least one Early Bronze Age round barrow on the summit of the Hunsbury Ridge had been demonstrated by previous archaeological work (Chapman 2003). Aerial photography had suggested that there might be two or three round barrows in this area, but geophysical survey in 2000, on this difficult and complex geology, could only confirm one of these. Subsequent trial trenching located this single ring ditch, which was 20m in diameter with a V-shaped ditch, 2.5m wide and up to 1.2m deep (Fig 3, Barrow 1: Atkins 1999). A mass of oak charcoal from the ditch, perhaps from a single timber, gave a radiocarbon date of 1685-1525 Cal BC (68% confidence, 3330+/-60BP, Beta-132789), placing the monument within the later part of the Early Bronze Age. Further trial trenches failed to locate the other possible ring ditches identified from the aerial photographs.

In advance of the construction of the Brackmills Link Road, Landimore Road, in 2002, the road line at this location was stripped under archaeological control, revealing an area lying to the immediate west of the ring ditch (Stevens and Chapman 2002). In this area there was a single truncated unurned cremation burial, a satellite burial, lying 27m from the barrow itself. Oak charcoal from the pyre debris gave a radiocarbon date in the Middle Bronze Age, 1270-1020 Cal BC (68% confidence, 2940+/-70 BP, Beta-175255).

A BRONZE AGE RING DITCH, BARROW 2

Trenches 28 and 29 were positioned over a well defined circular geophysical anomaly, 20-21m in diameter and lying 200m to the west of Barrow 1 (Fig 3: Butler 2008, fig 3). Towards the northern end of Trench 28, ditch 2803 was 1.5m wide and 0.34m deep, with very eroded edges where it cut into clayey natural (Fig 4, S. 3). To the south ditch 2805 was steep-sided and flat bottomed, 1.15m wide and 0.48m deep, cutting into solid ironstone bedrock (Fig 4, S. 4). The ditch fills, 2802 and 2804, were homogeneous, with a lack of definable stratification, as

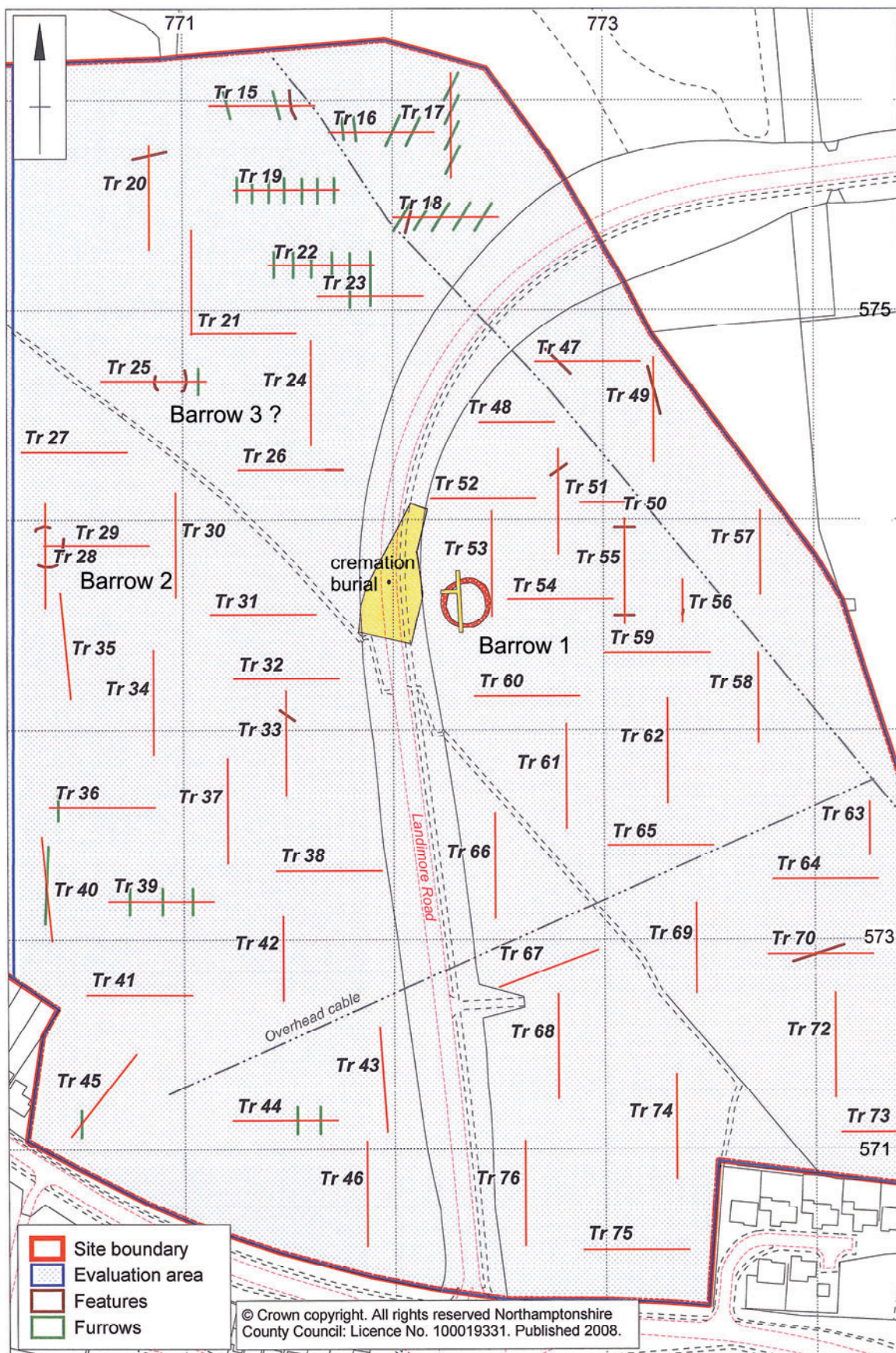


Fig 3 Area B, showing Bronze Age round barrows

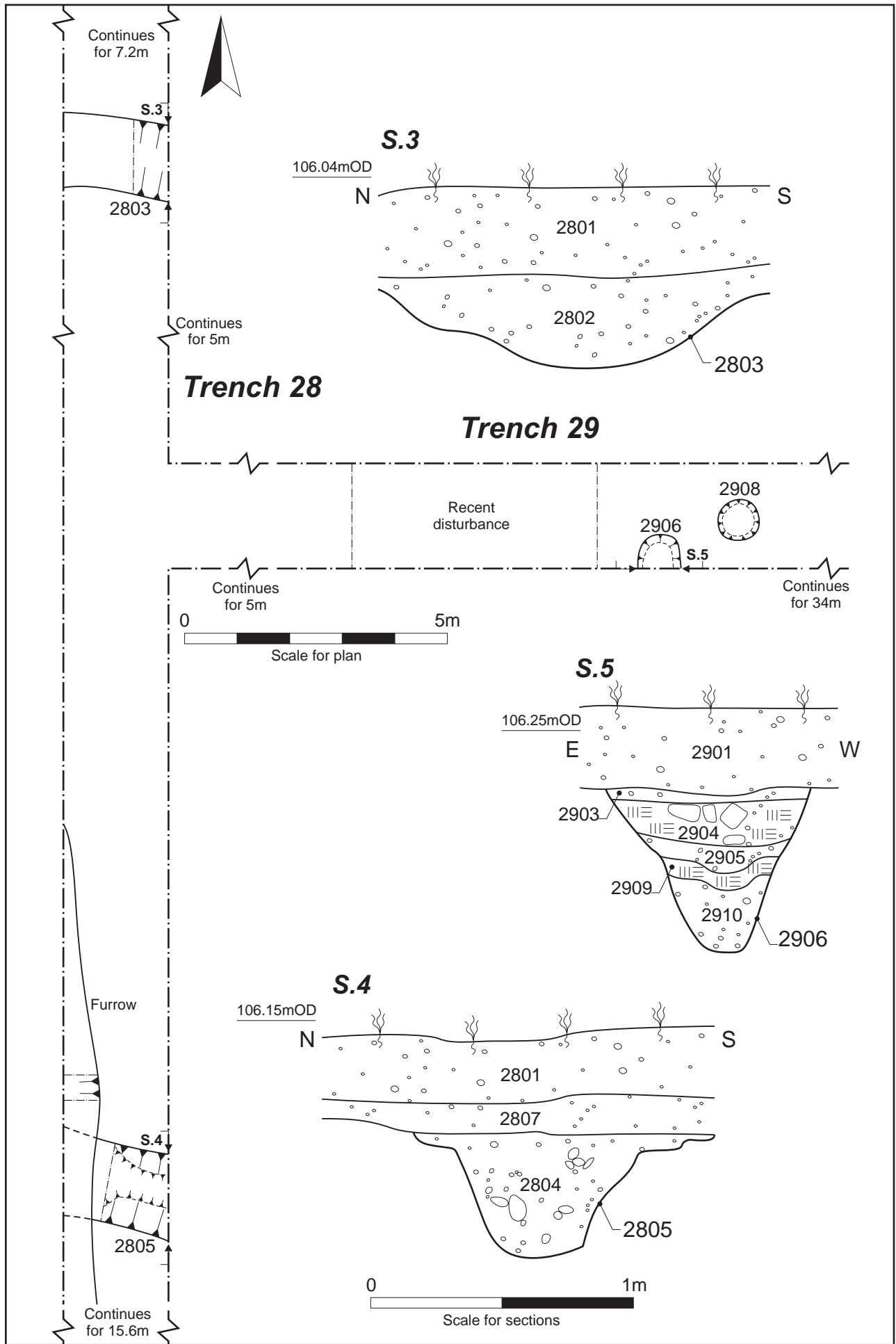


Fig 4 Round barrow 2 in trenches 28 and 29

a result of slow silting and clayey soils; a single sherd of pottery was recovered from fill 2804. To the east, in trench 29, the ditch had been lost to a more recent linear feature.

Two pits lay to the immediate east of the ring ditch. Pit 2906 was steep-sided, with a narrow concave base, 0.8m in diameter and 0.6m deep (Fig 4, S. 5). The primary fill of dark brown slightly sandy silt with moderate ironstone pebbles, 2010, produced seven sherds of pottery. Above this there were well-stratified layers of firm light bluish-grey clay, 2909; mid brown sandy silt, 2905; a mixed deposit of mid brown sandy silt and mid yellowish-brown silty clay, containing a number of rounded burnt cobbles, 2904; and an upper fill of mid orangey-brown sandy silt, 2903.

Pit 2908 was 0.8m in diameter by 0.23m deep, with a fill of mid brown sandy silt, 2907, containing moderate pebbles and small, rounded cobbles, most of which had been burnt, and a single sherd of pottery.

THE POTTERY FROM TRENCHES 28 AND 29 by Andy Chapman

There is a small assemblage of eight body sherds from features in trenches 28 and 29: one sherd from the fill of ditch 2805; one sherd from the fill of pit 2908; and seven sherds from the fill of pit 2906. These are all in a soft fabric with a grey core and inner surface and a brown, oxidised external surface. They all contain voids,

probably a result of leached shell inclusions. The dating of these sherds is problematic, as they retain no diagnostic features. However, as they have lost all their inclusions to leaching, unlike the Iron Age pottery from elsewhere on the site, a Bronze Age date can be tentatively suggested.

A POSSIBLE BRONZE AGE RING DITCH, BARROW 3

In trench 25, 170m to the north-west of Barrow 1 and 100m to the north-east of Barrow 2, there were two shallow ditches, each 1.4m wide and 0.20m deep (Fig 3). The western ditch had a fill of angular and sub-angular ironstone pebbles and cobbles in a dark greyish-brown clayey silt matrix, while the eastern ditch was filled with light brown sandy silt. These two ditches might be the truncated remains of a small Bronze Age ring ditch, c12m in diameter, but the absence of any dating evidence leaves this uncertain.

A BRONZE AGE PIT DEPOSIT

THE BRONZE AGE PIT IN TRENCH 156

In Area D, to the immediate north of the Wootton Brook (Fig 2), a large pit was found at the eastern end of trench 156 (Fig 5). Only the northern end of the pit was visible, but excavation led to the recovery of cremated bone, believed at the time to be human, and a flint arrowhead. Following consultation with Michael Dawson of CgMs

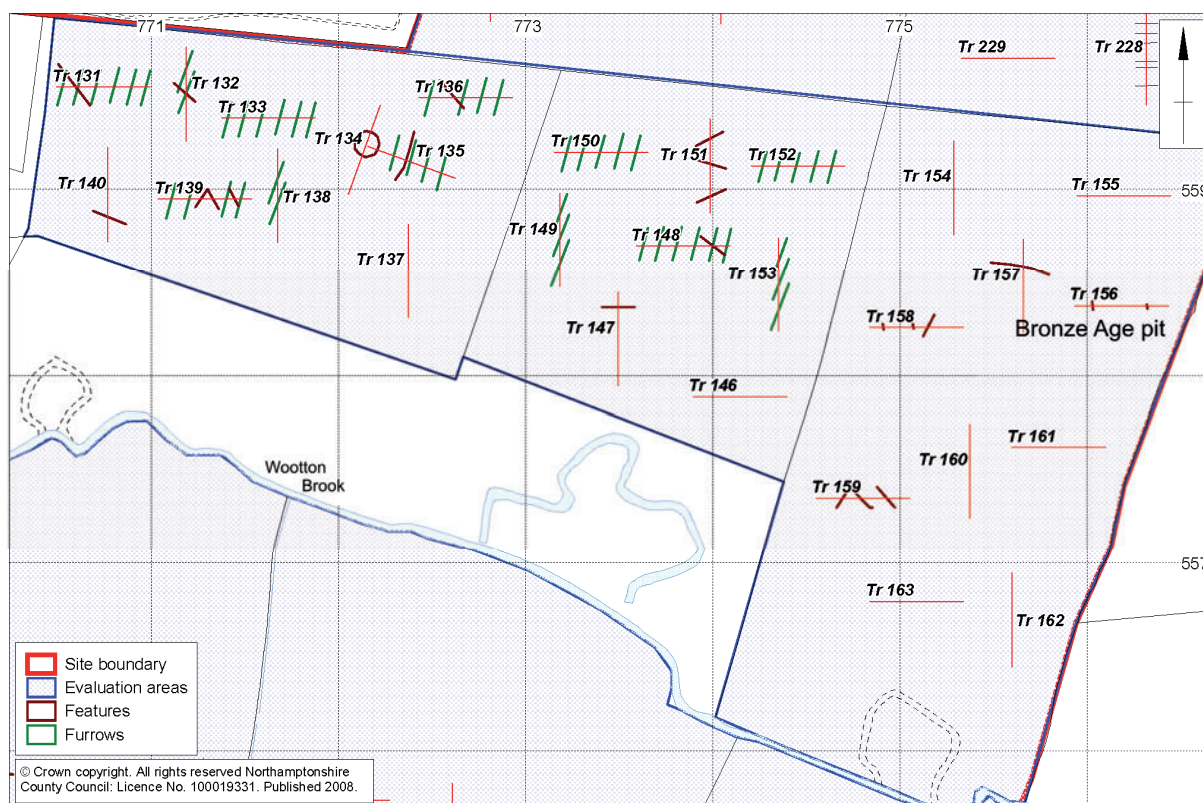


Fig 5 Area D, showing the Bronze Age pit

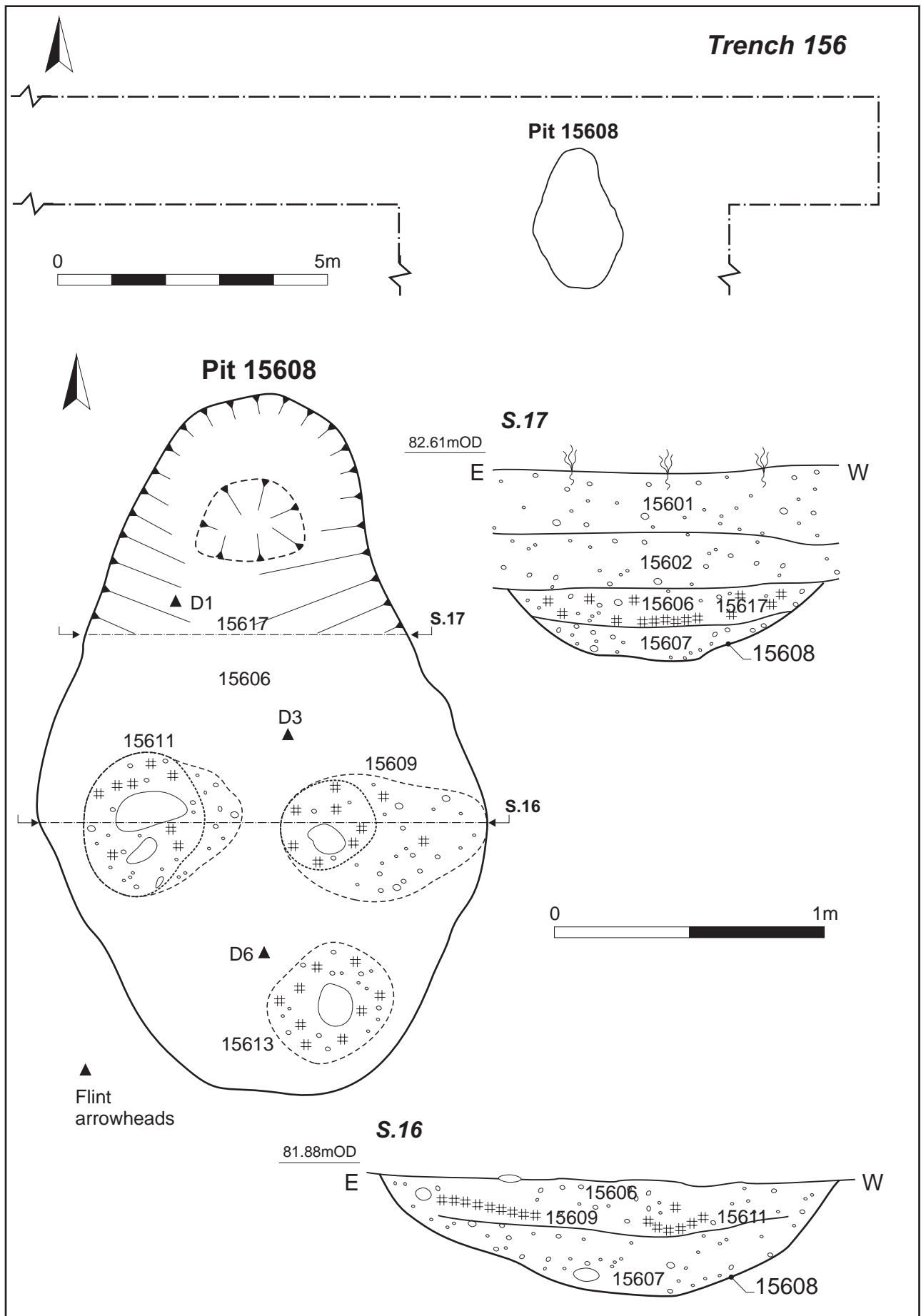


Fig 6 The Bronze Age pit, 15608



Fig 7 The Bronze Age pit, looking south, showing the dark soil layer in section

Consulting, the trench was extended to reveal the entire pit and the surrounding area for a distance of up to 3m, so that the pit deposit could be fully excavated and to establish whether the feature was part of a larger group or monument. The full extent of the pit was established but no other features were located.

The pear-shaped pit was 2.6m long, up to 1.7m wide and up to 0.44m deep, with a bowl-shaped profile (Fig 6, Sections 16 and 17 and Fig 7). The primary fill, 15607, comprised mid brown gritty sandy silt, up to 0.20m thick, containing no deposited materials.

The interpretation of the upper deposits was confused during excavation. The appearance at the exposed surface of three small patches of darker soils, 15609, 15611 and 15613, containing charcoal fragments, some burnt bone and small, flat cobbles, suggested that this material was in three small pits, and an attempt was made to excavate these as separate features (Fig 8). However, below the surface it was seen that the darker soils were more extensive. The deposition really comprised an extensive layer of dark grey sandy silts, up to 0.12m thick, containing comminuted charcoal and some burnt bone, 15617, as shown in section (Fig 6, S17 and Fig 7). Within this layer there were at least three localised concentrations, 15609,

15611 and 15613, which were darker still, perhaps as individual piles of material (Fig 8).

Four flint implements, three arrowheads and a scraper, lay within the general layer near the surface, indicating that there were added towards the end of the process of soil deposition.

The wood charcoals from these deposits show a range of species. Maloideae (hawthorn, apple, service etc) forms 40% of the charcoal, oak 30% and *Prunus spinosa* (blackthorn) 18%. There is also a small amount of alder/hazel, 1%, and also some alder, 2%. Alder wood does not burn effectively so its presence may be accidental or perhaps even as part of a wooden object.

The 81g of cremated bone was degraded, providing few diagnostic fragments, but the presence of some cattle bone suggests that this was not debris from a human cremation burial.

Above the dark soil layer, there was an upper fill of brown sandy silt, 15606, that was similar in character to the primary fill. The extent to which the darker deposited layer was visible at the exposed surface illustrates the extent to which the ground level has been truncated by later agriculture.



Fig 8 The Bronze Age pit, looking east, showing concentrations of charcoal and bone

WORKED FLINT
by Andy Chapman

Ten pieces of flint was recovered from the entire evaluation. Six of these are miscellaneous pieces residual within later feature fills. There are four undiagnostic flakes, a blade with grey-blue surface patination and edge damage, and a broken end/side scraper, which had been worked on a blade 25mm wide. The surviving end and edge were uniformly worn smooth, indicating that this piece had prolonged use.

A group of four worked flints: two barbed-and-tanged

arrowheads, a tanged arrowhead and a discoidal scraper, came from the Early Bronze Age pit.

The smaller barbed-and-tanged arrowhead, D1, is of elongated triangular form, 37mm long by 19mm wide and 4mm thick (Fig 9). It is neatly worked in a stony, pale grey opaque flint with broad pressure flaking over both surfaces. The end of the tang is missing, and was evidently once longer than the barbs.

The other barbed-and-tanged arrowhead, D6, is a large, heart-shaped example, 62mm long by 34mm wide and 6mm thick (Fig 9). The end of the elongated tang and one barb

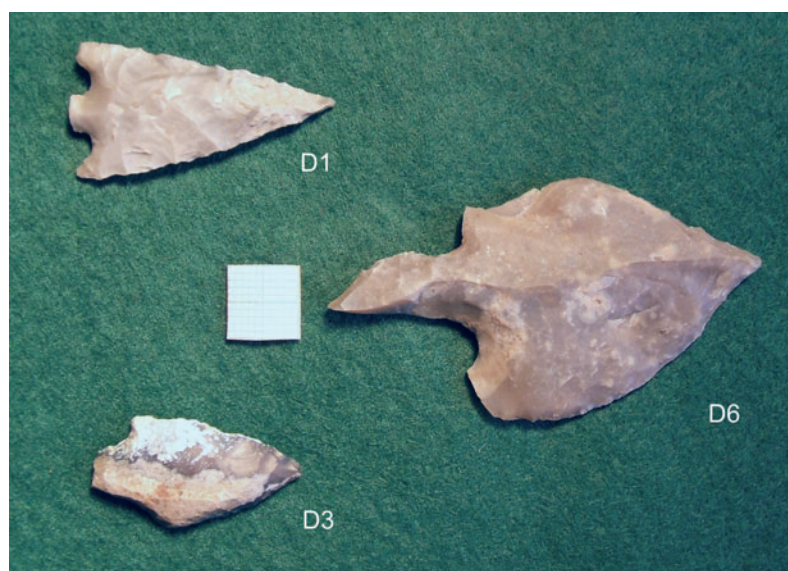


Fig 9 The flint arrowheads (Scale 10mm)

are missing. The piece has been shaped very roughly, with marginal retouch on the sides and within the notches.

The tanged arrowhead, D3, is 30mm long, 17mm wide and 4mm thick, although the tang is broken (Fig 9). It is worked on a cortical flake, and has been heat damaged. The edges have marginal retouch on both sides while the tang has marginal retouch on one side only.

The discoidal scraper, D2, is worked on a cortical flake, 38mm in diameter, and half the circumference has abrupt retouch.

THE CREMATED BONE
by *Harriet Anne Jacklin*

Only 81g of cremated bone was recovered. The bone is typically white, with occasional patches of pale blue-grey, indicating that it had been burnt at the same temperatures as achieved in an efficient cremation pyre. None of the fragments are more than 12mm long and often much less, but the larger bone elements in fill 15611 are diagnostic animal bone, probably fragments of cattle skull. Two larger fragments of long bone are deemed, after careful consideration, not to be human in origin due to the width of the cortex and the estimated circumference of the surviving bone, which again suggests a larger animal, perhaps cattle. There is therefore, no diagnostic human bone, although it is possible that human bone could be present within the undiagnostic material.

Table 1: quantification of cremated bone and charcoal from the Bronze Age pit

Fill	Bone weight (g)	Charcoal (g)
15617	37	
15609	8	--
15611	35	4
15613	1	2
Total	81	6

WOOD CHARCOAL FROM THE BRONZE AGE PIT
by *Dana Challinor*

Two samples from charcoal-rich fills, 15611 and 15613, of the Bronze Age pit were analysed. The samples were not large, 4g and 2g respectively, but the majority of the charcoal was >4mm in size, although all of the >2mm charcoal was identified. Identifications were made with reference to Schweingruber (1990), Hather (2000) and modern reference material. Classification and nomenclature follow Stace (1997).

The condition of the charcoal was not conducive to determining anatomical characteristics, as much of it was heavily infused with sediment. Four taxa were positively identified; *Quercus* sp. (oak), *Alnus glutinosa* (alder), *Prunus spinosa* (blackthorn) and Maloideae (hawthorn, apple, service etc). The taxonomic level of identification varies according to the biogeography and anatomy of the taxa. The single fragment of *Alnus/Corylus* was too small to allow examination of the perforation plates and could not be distinguished. Several of the Maloideae pieces and

almost all of the *Prunus spinosa* came from small, but incomplete, roundwood fragments. The indeterminate fragments are likely to represent additional specimens of taxa positively identified in the sample.

Table 2: Results of the charcoal analysis for the Bronze Age pit

Fill Species/ (common names)	15611 (fragments)	1513 (fragments)	Totals
<i>Quercus</i> sp. (oak)	9	24	33 (30%)
<i>Alnus glutinosa</i> Gaertn. (alder)	2	-	2 (2%)
<i>Alnus/Corylus</i> (alder/hazel)	-	1	1 (1%)
<i>Prunus spinosa</i> L. (blackthorn)	14r	6r	20 (18%)
Maloideae (Hawthorn, apple, pear, service etc)	24r	20r	44 (40%)
Indeterminate	5	5	10 (9%)
Total	54	56	110

r = roundwood

The two samples were similar in character, with *Quercus* (oak), *Prunus spinosa* (blackthorn) and Maloideae (hawthorn type), but the quantities varied a little. Oak, for example, is under 20% in fill 15611, but nearly 50% in 15613 (Fig 10). However, the significance of this difference, if any, is difficult to gauge as the overall quantities are low.

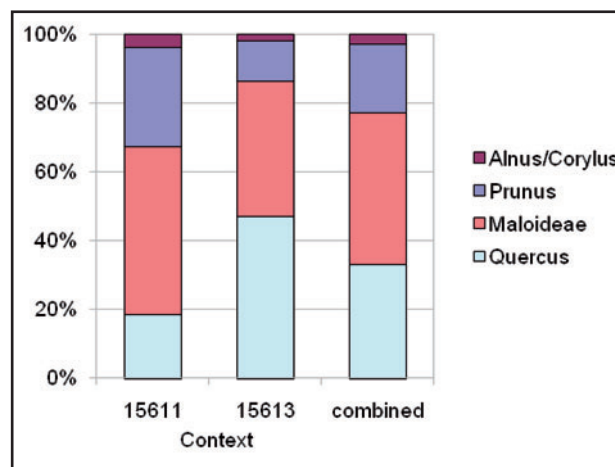


Fig 10 Taxonomic composition of the charcoal (%), based on fragment count

Since the *Prunus* charcoal came almost exclusively from small branchwood, it is likely that this was used for kindling. This species has been recovered as charcoal from cremation burials of similar date, and is often assumed to be part of the brushwood infilling of pyre structures or used as kindling (Challinor forthcoming). However, the larger quantities of Maloideae do not suggest mere kindling, since this species represents 44% of the charcoal. *Alnus glutinosa* (alder) is rarely found

in cremation burial deposits as the wood does not burn effectively (Edlin 1949) so its presence may be accidental or perhaps as part of a wooden object.

The diversity of the assemblages from this deposit are notably different from the trend observed at contemporary cremation burials, where a single species dominates, usually oak (Thomson 1999, Challinor 2009), but in pit deposits it is usual to find more mixed wood species.

RADIOCARBON DETERMINATIONS

A small quantity of charcoal (hawthorn/apple and blackthorn) recovered from two of the bone and charcoal deposits within the larger pit were submitted to Beta Analytic Inc, Miami, Florida, USA to obtain radiocarbon dates for the deposits (Table 3).

The two radiocarbon dates indicate that the separate deposits were of contemporary deposition, with the pit belonging to the very end of the Early Bronze Age, probably between 1525 and 1450 Cal BC (68% confidence).

DISCUSSION

The Wootton Consortium evaluation has confirmed the presence of a second round barrow and the possibility of a third smaller barrow on the Hunsbury Ridge between Wootton and the Brackmills Business Park. According to the English Heritage monument class definitions (available online at: <http://www.eng-h.gov.uk/mpp/mcd/rbc.htm>) a group needs to contain at least five barrows

to be regarded as a barrow cemetery. The barrows at Wootton must therefore be regarded as a group that never developed into a full cemetery, perhaps suggesting a fairly short period of active barrow building. The radiocarbon dates from the partly excavated barrow (Chapman 2003) suggests that they belong to the later part of the Early Bronze Age, c 1700-1500 BC). The two definite barrows are both around 20m in diameter, while the possible third barrow is small, at c 12m diameter. A single satellite cremation burial indicates a later episode of respect in the middle Bronze Age, between 1300 and 1000 BC, but this does not imply continuity of respect and usage.

In the later Early Bronze Age cremation was the preferred burial rite, with the remains interred in pits, often within urns, below or within the barrow mound. It is therefore possible that some burial deposits might still survive but, given the truncation of the ground level by centuries of ploughing, it is quite possible that all remains of burial deposits in shallow pits have been lost, leaving only the barrow ditches as possibly containing related material.

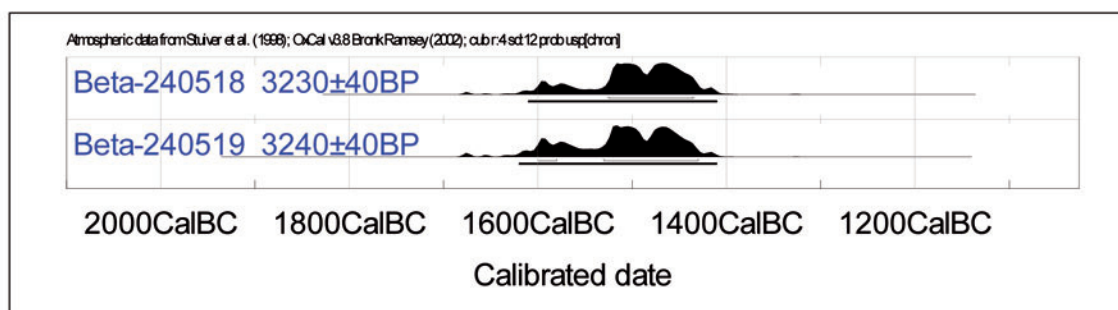
The large, shallow pit, radiocarbon dated to the end of the Early Bronze Age, contained three flint arrowheads and some cremated cattle bone within a layer of dark, charcoal-rich soils. It makes a small contribution to the number of known Neolithic and Bronze Age pits at sites where the pits provide the only evidence for activity in these periods.

The number of known pits has been growing rapidly since the 1990s as a result of commercial archaeology providing unprecedented opportunities to examine

Table 3 Radiocarbon determinations

Laboratory & Sample No.	Pit fill	Sample details	dC13	Conventional Radiocarbon Age BP	Cal BC 68% confidence 95% confidence
Beta-240518 NWC07/5	15611	Wood charcoal, <i>Maloideae</i> (hawthorn, apple etc)	-25.3	3230 +/-40	1530-1440 1610-1420
Beta-240519 NWC07/8	15613	Wood charcoal, <i>Prunus Spinosa</i> (blackthorn)	-24.8	3240 +/-40	1610-1440 1620-1430
Combined date				3235 +/- 28	1525-1450 1610-1430

Laboratory: Beta Analytic Inc, Miami, Florida, USA
 Calibration: Ox Cal v3.10 Bronk Ramsey (2005)



extensive tracts of land, such as the 180 hectares at Wootton, through evaluation and particularly open area excavation. They are typically chance discoveries whilst excavating sites of later date, particularly Iron Age and Roman settlements, which often involve opening areas of several hectares.

The pit at Wootton is a little unusual in that no pottery was recovered. Characteristically, late Neolithic and Bronze Age pits produce pottery assemblages, typically comprising small number of sherds from multiple vessels, accompanied by a variety of other materials (Garrow 2006). A group of three Late Neolithic pits at Biggleswade, Bedfordshire contained Peterborough ware pottery and a little charcoal and some hazel nut shells (Chapman 2011). A single Early Bronze Age pit at Bluntisham, Cambridgeshire produced rusticated Beaker pottery, disarticulated human and animal bone, including part of an aurochs, hazelnut shell and even some carbonised mistletoe (Burrow and Mudd 2010). Pits at Fenstanton, Cambridgeshire over several centuries of activity produced Neolithic Grooved ware and decorated and rusticated Beakers, along with some flint debitage and scrapers, and charcoal-rich soils (Chapman *et al* 2005).

These single or small clusters of pits are interpreted as denoting short-term episodes of settlement, or at least occupation, with the houses leaving no below-ground traces. The materials within the pits can therefore be regarded as domestic debris, perhaps buried when the site was abandoned. However, as there would have been no practical necessity to bury such debris as burnt soils, a few pieces of animal bone, some flint implements and parts of pottery vessels, it is clear that the act of burial had more to it than mere garbage disposal. It has been broadly characterised as 'the burial of token pieces of domestic material (artefacts and ecofacts) in earth rituals that may have been designed to ensure the fecundity of the earth and her resources' (Gibson 2005).

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