

M4 Smart Motorway (Junctions 3–12), Berkshire and Buckinghamshire Archaeological Evaluation, Excavation and Watching Brief Report

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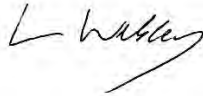


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M4 Smart Motorway (Junctions 3–12), Berkshire and Buckinghamshire

Archaeological Evaluation, Excavation and Watching Brief Report

By Alex Davies with Leo Webley

With contributions from Edward Biddulph, Anni Byard, Michael Donnelly, Denise Druce, Mandy Kingdom, Adrienne Powell, Ruth Shaffrey and Kirsty Smith

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Summary

Archaeological work during the M4 Junction 3–12 Smart Motorway scheme included a series of watching briefs, five evaluations and two excavations. The watching briefs and three of the evaluations did not uncover archaeological finds or features, but discoveries during the evaluations at Compound 3 (Hurst) and Compound 8 (Datchet), both in Berkshire, led to area excavation of these sites.

At Compound 3, a multi-phased middle Iron Age settlement enclosure was discovered that included 10 roundhouses, 21 pits and other features. One of the roundhouses had complex entrance features and an internal post-ring. A complete quern stone is the most exceptional find on the site.

The sequence at Compound 8 began with a middle Bronze Age waterhole that contained a partially dismembered cattle burial. The waterhole was recut and large Deverel-Rimbury pottery sherds were placed in the lowest fill, which were found alongside late Bronze Age pottery. Most of the features on the site dated to the late Bronze Age, including a long rectangular structure (a possible longhouse) measuring 11m by 4m. Postholes and beamslots associated with the rectangular structure contained burnt flint. Five radiocarbon dates were taken from the structure, and three further dates were obtained from late Bronze Age features. The radiocarbon dates all returned very similar results, suggesting a probably short-lived settlement dating to the decades around c 1000 cal BC. Other late Bronze Age features included a series of waterholes, a possible roundhouse, a possible enclosure, a cremation deposit, and a series of pits including one containing a large quantity of burnt flint that may have been the remains of a burnt mound. A probable recut Roman trackway was discovered that might be related to the system known nearby at Agar's Plough. One of the recuts contained early/middle Anglo-Saxon pottery suggesting the feature remained open into this period.

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1 INTRODUCTION

1.1 Background

1.1.1 Oxford Archaeology (OA) were commissioned by Balfour Beatty Vinci JV (BBV) to undertake archaeological work as part of the M4 Motorway (Junctions 3 to 12) (Smart Motorway) Development Consent Order 2016. Prior to the work, the Environmental Statement considered cultural heritage (HA 2015), and further archaeological and historic background was detailed in another report (CH2M Arcadis 2017).

1.1.2 The archaeological work comprised a series of watching briefs as part of carriageway and structure improvements, as well as five evaluations in advance of the construction of temporary compounds, two of which progressed to excavation, within or adjacent to the corridor of the M4. The scope of works was agreed between the local planning authorities and CH2M Arcadis, working on behalf of Highways England (CH2M Arcadis 2017). A written scheme of investigation (WSI) was designed to implement the watching briefs, with different documents for West Berkshire (OA 2019a), East Berkshire (OA 2018a, with an addendum: OA 2019b) and Buckinghamshire (OA 2019c). Three more WSIs were designed for the evaluations, for Compound 3 (which included a watching brief area; OA 2018b), Compound 4 (OA 2018c) and Compounds 7, 8 and 9 (OA 2019d). These detail the works and the methodology employed. The fieldwork took place in stages between December 2018 and July 2020.

1.1.3 In summary, the watching briefs either did not uncover any archaeological finds or features or did not reach undisturbed levels. Evaluations at Compounds 4, 7 and 9 also did not uncover archaeological finds or features. Discoveries were made in evaluations and watching briefs at Compound 3 and 8, and both were taken forward to excavation. The excavation methodology for Compound 8 is detailed in a further WSI (OA 2019e). The excavation methodology for Compound 3 followed that from the watching brief. This present report primarily describes and discusses the Compound 3 and 8 excavations, as well as summarising the watching briefs and other evaluations.

1.2 Aims and objectives

1.2.1 The aims and objectives of the excavations were to mitigate the impacts of the construction work and to determine the extent, date, character, condition, significance and quality of any archaeological remains that were present within the area of the proposed compounds. For the evaluation work, the results were used to inform further mitigation should it be required.

1.2.2 The specific aims and objectives of the evaluations were:

- i. To determine the presence or absence of any archaeological remains which may survive.
- ii. To determine or confirm the approximate extent of any surviving remains.
- iii. To determine the date range of any surviving remains by artefactual or other means.
- iv. To determine the condition and state of preservation of any remains.

- v. To determine the degree of complexity of any surviving horizontal or vertical stratigraphy.
- vi. To assess the associations and implications of any remains encountered with reference to the historic landscape.
- vii. To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence might survive.
- viii. To determine the implications of any remains with reference to economy, status, utility and social action.
- ix. To determine or confirm the likely range, quality and quantity of the artefactual evidence present.
- x. To make the record publicly accessible through a report (a public document) and a project archive deposited with a public institution.

1.2.3 The specific aims and objectives of the excavations were:

- i. To determine the general nature of any remains present.
- ii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
- iii. To contextualise the results within the local and regional landscape, and to assess the implications of any discoveries for our current understanding of the development of the area.
- iv. To produce a report on the results of the excavation.

1.3 Fieldwork methodology

1.3.1 All works were undertaken within the guidance of the Chartered Institute for Archaeologists (2014a; 2014b; 2014c) and local and national planning policies.

Evaluations

1.3.2 Detail of the evaluation methodology can be found in the WSIs (OA 2018b; 2019d). Site-specific methodology was as follows:

- The trenches were be laid out using a GPS with sub-25mm accuracy, except where minor adjustments were required due to ground conditions or site obstructions.
- The trenches were excavated using an appropriately powered mechanical excavator fitted with a toothless bucket under supervision of a competent archaeologist.
- Trenches were excavated in accordance with the Principal Contractor's safe systems of works. OA staff adhered to all health and safety requirements of the contractor.
- Machining continued in spits (no greater than 200mm) down to the top of the undisturbed natural geology or the first archaeological horizon depending

upon which was encountered first. Once archaeological deposits were exposed, further excavation proceeded by hand and with the appropriate use of machine as agreed with the Archaeology Officer.

- The exposed surface was sufficiently cleaned to establish the presence/absence of archaeological remains. A sample of each feature or deposit type, for example pits, postholes, and ditches, was excavated and recorded. In the event of the identification of an exceptional number and complexity of archaeological deposits, sample excavation was more limited with the aim to be minimally intrusive.
- Excavation was sufficient to resolve the principal aims of the evaluation. Upon agreement with the Archaeology Officer, the trenches were backfilled.

Watching briefs

1.3.3 The site-specific methodology for the watching briefs were as follows:

- An attending archaeologist accompanied each mechanical excavator engaged in ground reduction work.
- If archaeological deposits were observed the attending archaeologist exposed their extent within the area of groundworks and assessed their significance (low/medium/high).
- Significant features were hand cleaned and sample excavated.
- Excavation was undertaken in accordance with OA's standard approach to excavation and recording as detailed in the WSIs (OA 2018a; 2018b; 2019a; 2019b; 2019c; 2019d).
- Provision was allowed for the retrieval of environmental samples.

Excavations

1.3.4 The excavations were undertaken in accordance with OA's standard approach as detailed in the WSIs (OA 2018b; 2019d).

1.3.5 The topsoil and subsoil were removed by a 360° tracked excavator with a toothless bucket under direct archaeological supervision to the natural or first archaeological horizon, whichever was encountered first. Hand excavation then proceeded, which included a 50% sample by volume of pits and postholes, with linear features subject to a smaller appropriate sample. More complex features such as those associated with funerary activity were subject to 100% hand excavation.

2 STRATIGRAPHY

2.1 Watching briefs

2.1.1 Watching briefs were undertaken in West Berkshire, East Berkshire and Buckinghamshire. The watching briefs either did not uncover any archaeological finds or features or did not reach undisturbed levels.

2.1.2 The locations of the watching briefs are shown on Figures 1–4. Tables 1–3 detail these works.

Name	Location	Parish	Result
WBA 1 (Compound 2)	SU 65334 71659	Holybrook	No archaeological finds or features
WBA 2	SU 65646 71141	Holybrook/ Theale	No impact on undisturbed ground
WBA 3	SU 66207 70660	Burghfield	No impact on undisturbed ground
WBA 4	SU 66587 70337	Burghfield	No impact on undisturbed ground
WBA 5	SU 67717 69739	Burghfield	No impact on undisturbed ground
WBA 6	SU 68526 69562	Burghfield	No impact on undisturbed ground
WBA 7	SU 69460 69521	Burghfield	No impact on undisturbed ground

Table 1: Watching briefs in West Berkshire (see Fig. 1)

Name	Location	Parish	Result
WBA 1	SU 7031 6926	Shinfield	No impact on undisturbed ground
WBA 2	SU 7135 6879	Reading	No impact on undisturbed ground
WBA 3	SU 7733 7010	Winnersh	No impact on undisturbed ground
WBA 4	SU 8350 7364	Waltham St Lawrence	No impact on undisturbed ground
WBA 5	SU 8784 7799	Bray	No impact on disturbed ground
WBA 6	SU 8942 7860	Bray	No archaeological finds or features
WBA 7	SU 9062 7895	Bray	No impact on undisturbed ground
WBA 8	SU 9115 7937	Bray	No archaeological finds or features
WBA 9	SU 9394 7986	Slough	No archaeological finds or features
WBA 10	SU 9500 7951	Slough	No archaeological finds or features
WBA 11	SU 9666 7904	Slough	No impact on undisturbed ground
WBA 12	SU 9793 7883	Slough	No archaeological finds or features
WBA 13	SU 9815 7857	Datchet	No archaeological finds or features
WBA 14	SU 9910 7749	Datchet	No archaeological finds or features
WBA 15	TQ 0381 7830	Colnbrook with Poyle	No archaeological finds or features

Table 2: Watching briefs in East Berkshire (see Figs 2–3)

Name	Location	Parish	Result
WBA 1	SU 91442 79597	Dorney	No archaeological finds or features
WBA 2	SU 91798 79757	Dorney	No archaeological finds or features
WBA 3	SU 91957 79799	Dorney	No impact on undisturbed ground
WBA 4	SU 92470 79927	Dorney	No impact on undisturbed ground

Table 3: Watching briefs in Buckinghamshire (see Fig. 4)

2.2 Evaluations at Compounds 4, 7 and 9

Compound 4

2.2.1 The Compound 4 evaluation lay in Winnersh and St Nicholas Hurst parishes, Berkshire, and was located within the slip roads joining the A329(M) and the M4 at SU 79700 70868 (Fig. 2). The evaluation area consisted of four areas of scrubland with a combined area of c 5ha, of which 4.5ha was subject to evaluation. Seventeen trenches were opened, each 20–30m long and 1.8m wide (Fig. 6). No archaeological finds or features were discovered. The stratigraphy was either topsoil covering subsoil on natural, or topsoil covering redeposited natural from landscaping associated with the M4.

Compound 7

2.2.2 The Compound 7 evaluation was bisected by the boundary between Eton parish and Slough, Berkshire, and was located in an area of scrubland immediately to the south of the Jubilee River at SU 96142 78876 (Fig. 5). The area was a single field measuring c 4.5ha, of which 1.4ha was subject to evaluation. Four 1.8m-wide trenches were excavated; three of these were each 30m long, while the fourth (Trench 2) was divided into two 6m-long sections. Two test-pits each measuring c. 2m by 2m were also excavated (Fig. 7). No archaeological finds or features were discovered, with dumps of modern material and layers of redeposited material present under the topsoil. The area had also been truncated by a previous compound associated with M4 construction works.

Compound 9

2.2.3 The Compound 9 evaluation was located in Colnbrook with Poyle parish, Berkshire, at TQ 01951 77755 (Fig. 5). The site was a single arable field measuring approximately 2.7ha. Eight trenches were excavated, seven measuring 33–50m in length and one comprising two short lengths of 2m and 5m (Fig. 8). The trenches were 1.8m wide. No archaeological finds or features were discovered. Topsoil was found to overlay natural or land fill.

2.3 Compound 3, Hurst: introduction

2.3.1 The Compound 3 excavation centred on SU 8127 7230 in the parish of St Nicholas Hurst, Berkshire (Fig. 2), and lay within a single arable field. The bedrock geology is London Clay. Superficial deposits are not recorded in the excavation area, but sand and gravel river terrace material are known to the south of the site beyond the M4 (BGS nd.). The natural encountered during the archaeological work was clay with patches of silty gravel. The site lies towards the bottom of a gentle north-facing slope lying at 42–3m OD. The River Loddon lies c 3.5km to the west and drains into the Thames c 7km NNW of the site.

2.3.2 Archaeological work in the immediate environs of the site has been limited. An evaluation c 750m to the south of the site uncovered a single undated posthole (FA 2006), and another c 900m to the east did not uncover any significant archaeological activity (Pine 2000). Building recording and excavation c 450m to the south of the site found late Mesolithic to early Bronze Age flint flakes and an undated posthole and ditch (Yeates 2015). Roman pottery and other material were found fieldwalking c 900m to the south-east of the site. The area was then excavated but no archaeological features were discovered (Ford 1987; 1993). The East Berkshire Archaeological Survey recovered worked flint, Roman and medieval material elsewhere in the environs of the site, although no finds are recorded within the

development boundary (Ford 1987). A linear cropmark, possibly a driveway or enclosure, has been identified c 900m to the north of the site (Ford 1987).

2.4 Compound 3, Hurst: evaluation and watching brief

2.4.1 The evaluation of Compound 3 comprised the excavation of 64 trenches measuring 50m by 1.8m in a single triangular-shaped arable field measuring c 17.2ha, representing a 4% sample (Fig. 9).

2.4.2 Archaeological features were found in nine trenches. Single features were found in Trenches 32, 33, 46, 52, 56 and 61. A spread was found in Trench 8 measuring 9.70m wide and contained tile dating to the post-medieval and modern periods. An undated pit measuring 1.32m wide and 0.45m deep with a single charcoal-rich fill was found in Trench 32. A ditch aligned north–south was found in Trench 33. This corresponds to a field boundary on late 19th century maps and contained a nail. An undated ditch aligned north-east/south-west was found in Trench 61. Trench 56 produced a possible hearth measuring 1.48m by 1.37m and 0.20m deep. The pit had evidence for *in situ* burning and had three charcoal-rich ashy fills. This was undated, and the western part of the trench was expanded a further 17.50m by 10.50m around the hearth and no additional features were discovered. The features in Trenches 46 and 52 were undated tree-throw holes.

2.4.3 A curvilinear ditch and a linear ditch were found in Trench 39, and a recut curvilinear ditch was found in Trench 28 to the immediate north. These were not dated in the evaluation, and the area around these trenches were opened for excavation.

2.4.4 A watching brief was also maintained during improvement works to an existing access track from the south-west corner of the site to the A321, 720m to the west. No archaeological finds or features were discovered.

2.5 Compound 3, Hurst: excavation

2.5.1 An area of 80m by 65m was opened entered around Trenches 39 and 28 (Fig. 10). The excavation area was surrounded by blank evaluation trenches and it is thought that all significant archaeological features within the site were exposed. All the dated archaeological features belong to the middle Iron Age except for a single post-medieval ditch.

Middle Iron Age

2.5.2 Three stratigraphic middle Iron Age phases could be identified: MIA I, MIA II and MIA III. The earliest stratigraphic phase, MIA I, was an open settlement to which at least three roundhouses could be assigned. The second stratigraphic phase, MIA II, comprised a square enclosure measuring 48m east-west by c 53m north-south, probably with an eastern entrance defined by a pair of antenna ditches. The final stratigraphic phase, MIA III, recut the MIA II enclosure ditch and changed its entranceway. Seven roundhouses were found inside the enclosure, although none could be stratigraphically assigned to a subphase. Most of the roundhouses were defined only by the penannular gullies that surrounded the buildings, though in a few cases elements of the structures themselves survived.

Enclosure ditches

2.5.3 The first enclosure ditch, 10508, replaced the open settlement which was focused to the west of the enclosure. Ditch 10508 was almost entirely truncated by its recut, 10055, and

it is assumed that ditch 10508 was originally present along much of the length of ditch 10055 (Fig. 11, s.3915, 3928). The enclosure was open on the northern side, although entrances were present elsewhere, suggesting a different, archaeologically invisible boundary such as a hedge or fence completed the enclosure along this side. Ditch 10508 was mainly visible along the southern part of the enclosure on a length that was not recut by 10055 as this was left open for an entrance in this later phase. The ditch was visible in four interventions and was 0.44–1m wide (mean 0.65m) and 0.20–0.58m deep (mean 0.33m). The shape of the ditch varied, with one intervention being V-shaped while the lower portion had vertical sides and a flat base. A single 1g sherd of pottery was found.

2.5.4 The enclosure defined by ditch 10508 had an entrance on the eastern side 3.50m wide. ‘Antenna’ ditches flanked the entrance outside of the enclosure, creating a funnel into the settlement. These ditches were c 14m in length, both having additional ditch sections at their far end. The southern ditch, 10509, was c 0.80m wide and c 0.20m deep and produced one 4g sherd of pottery; the northern ditch, 10510, was c 0.63m wide and c 0.18m deep and contained one 1g sherd of pottery. Directly inside the enclosure, two entrance features were found, consisting of posthole 10353, which measured 0.40m wide and 0.24m deep, and ditch 10361, that was 0.80m wide, 2.70m long and 0.27m deep. The posthole was presumably part of a gate, although the function of the ditch is less certain but must be related to the gate or similar structure. Ditch 10508 also appears to have had a second, 5m-wide, east-facing entrance, 18m to the north of the entrance with the antenna ditches.

2.5.5 Ditch 10055 replaced ditch 10508. Ditch 10055 was explored in 17 interventions and was 0.65–2.30m wide (mean 1.15m) and 0.24–1.02m deep (mean 0.52m), generally with a U-shaped profile (Fig. 11, s.3915, 3928, 3971). One of the fills on the western side, 3943, was rich in charcoal. This later phase blocked the entrance with the antenna ditches, instead having a southern entrance 8.50m wide. Two postholes, 3909 and 3913, cut ditch 10508 on the western part of the southern entrance and presumably relate to gates or similar entrance structures. Posthole 3909 was rich in charcoal. These were both 0.74m wide, with posthole 3909 just 0.08m deep, and 3913 0.38m deep. The enclosure also appeared to have an eastern entrance. Some 252 sherds (798g) of pottery were found in the ditch.

Roundhouse 10501

2.5.6 Roundhouse 10501 was complex with many more surviving archaeological features than the other houses (Fig. 12). The penannular ditch had three phases. Stratigraphically the earliest is the ditch that is spatially in the middle. This was cut by the outer ditch that was of similar proportions to the earliest ditch and the inner ditch that was slighter in both its proportions and diameter. There were no direct stratigraphic relationships between the inner and outer ditch, but the entrance arrangement suggests the inner ditch is later. Given the slighter nature of the inner ditch it is possible that this was a slot-trench to hold a wall rather than a ditch surrounding the house, but the sloping profile of the feature does not support this. The entrance posthole arrangement also suggests that the inner and outer ditch are not contemporary, meaning the inner ditch could not have served to hold the wall of a house surrounded by the outer ditch.

2.5.7 The entrance features consisted of four large postholes, two on the southern side (10205 and 10202; Fig. 11, s.3978, 3796) and two on the northern side (10147 and 10141; Fig. 11, s.3969). These had diameters of 0.43–0.98m and depths of 0.42–0.54m. Two further

smaller postholes were found on the southern side, 10200 and 10227, three others on the northern side, 10143, 10145 and 10149, and two more postholes or hollows in the entrance itself, 10153 and 10155. On both the southern and northern side, the large postholes intercut suggesting two pairs that were replaced, although on the northern side the large postholes intercut with two of the smaller postholes suggesting more frequent renewal on the northern side. These two smaller features were less obviously postholes, as they had sloping sides, but these profiles could perhaps have been created when the posts were removed. Posthole 10227 cut outer ditch intervention 10221, suggesting that this was contemporary with the inner ditch. If so, this posthole would have lain outside of the penannular ditch. Paired entrance posts are a feature of many middle Iron Age houses, although the large size and complexity of these are unusual.

2.5.8 Excluding the entrance features, 44 postholes were found inside the penannular ditches. Fifteen of these create a convincing circle 8.10m in diameter and it is likely that these represent the internal roof-supporting posts of the roundhouse. This circle sits off-centre within the ditch, being 1.55m from the inner edge of the ditch in the south-eastern part of the house but 4.30m from the edge of the ditch to the north-west. The post-ring is more central to the smaller inner ditch, although this is still positioned closer to the entrance than the back of the house. This would mean that the eaves would not sit directly above the ditch meaning that the ditch would not catch rainwater from the roof. This non-concentric relationship between post-circles and penannular ditches has been recognised before in the Thames Valley (Davies 2018, 169), and suggests that the interpretation of these simply as drainage features is not appropriate (*ibid.*, 161–97). The remaining 19 internal postholes do not form any clear pattern. They are mainly within the post-circle but there are some outside of it. None of the postholes have postpipes. All but two had single fills, and these other two had two fills. Two of the smaller postholes at the back of the structure may have been burnt *in situ*, but otherwise only one other posthole is recorded as being rich in charcoal and there is no other indication that the house burnt down. However, four of the five pits within the house contained charcoal-rich fills. This may be direct occupation waste from the roundhouse. The pits are dealt with separately below.

2.5.9 Ditch 10513 created a spur 9m long coming off the northern side of the roundhouse. This had two phases, both of which appear to have been contemporary with the first roundhouse ditch phase. The second phase of ditch 10513 was cut by the second phase of the roundhouse ditch. Ditch 10513 was 1.04–2.24m wide and 0.18–0.48m deep. Seven posthole and four pits were found c 4m to the east of the ditch, and the ditch may have partially enclosed these features to create subsidiary area for the roundhouse. Similar enclosures that surround a house and a small adjacent area are a feature of the middle Iron Age in the area (Davies 2018, 184).

Other roundhouses

2.5.10 The remaining nine roundhouses were much simpler than roundhouse 10501 with little evidence for their construction or specific use. They are summarised by Table 4.

2.5.11 Roundhouses 10125, 10034 and 10086 have been phased to the earliest stratigraphic phase, MIA I, as they lay outside of the enclosure, and the enclosure ditch cut roundhouse 10034. A significant length of occupation within MIA I in this area is implied by the fact that roundhouse 10086 was cut by 10034, and that the ditch of roundhouse 10125 was recut.

Roundhouses 10125 and 10086 both had paired entrance posts, with those of 10125 set slightly back from the ditch circuit but the pair belonging to 10086 in line with the circuit. Some 17% of middle Iron Age houses in the Upper and Middle Thames Valley have a pair of entrance posts, with 11% of houses being defined solely by entrance posts and a ditch (Davies 2018, 219–20), like roundhouse 10125 and 10086. There are three pairs of entrance postholes within roundhouse 10125, and it may be that the inner and outer pair were contemporary to form a double pair of entrance postholes, as seen at Gravelly Guy, Oxfordshire (Enclosure A4, Building T, and Enclosure A2, phase 2, Building E3; Lambrick and Allen 2004), and Warrens Field, Claydon Pike, Gloucestershire (Structure 9; Miles *et al.* 2007), with the middle pair belonging to the other phase of the house also shown by the ditch recut.

2.5.12 Roundhouse 10500 also had two phases, the earlier oriented to the south-east. The later phase changed orientation, but it is uncertain to which direction.

2.5.13 Roundhouses 10379–83 might represent the sequential replacement of one or two houses. The only stratigraphic relationship observed was that roundhouses 10381 and 10383 cut roundhouse 10382, but on spatial grounds roundhouses 10379, 10380, 10381 and 10382 could not have been contemporary, suggesting at least four house phases. One or more may be contemporary with each of the three stratigraphic phases, but none were directly stratigraphically related to the enclosure. The eastern circuit of roundhouse 10380 was lost but its projection falls just 0.90m from the eastern length of the enclosure ditch, leaving very little space for the house if there was an associated bank within the enclosure ditch, suggesting this house might belong to the early unenclosed MIA I phase. Much of the penannular ditches belonging to roundhouses 10379 and 10381 also did not survive, although western entrances could be suggested as terminals were excavated on the surviving sections. It is possible that these ditches had two entrances, others in the lost eastern sections.

Roundhouse	Diameter	Orientation	Ditch width	Ditch depth	Pottery	Excavated slots	Notes
10034	15m	NE	0.29-0.62m <i>0.41m</i>	0.06-0.26m <i>0.14m</i>	16/25g	10	MIA I. Cuts roundhouse 10086, cut by ditch 10055. Three pits and three postholes, none obviously structural. Two charcoal-rich ditch fills, none terminals. All single fills
10086	c 7m	E	0.31-0.50m <i>0.40m</i>	0.10-0.12m <i>0.11m</i>	2/18g	2	MIA I. Cut by roundhouse 10034. Southern part of ditch missing. Pair of entrance postholes, one other internal pit. All single ditch fills
10125	14m	E	0.18-0.52m <i>0.35m</i>	0.05-0.19m <i>0.12m</i>	14/41g	6	MIA I. Two phases. Three pairs of postholes inside entrance. Nine other postholes inside house, none obviously structural. Three charcoal-rich ditch fills, all terminals. Most single fills
10379	8.5m	W	0.55-0.65 <i>0.60m</i>	0.10-0.26m <i>0.18m</i>	2/5g	2	Two fills of one intervention charcoal rich. Eastern and part of western section not surviving. One single fill, one with two fills
10380	12m	SE	0.38-0.45m <i>0.42m</i>	0.04-0.14m <i>0.09m</i>	-	2	Two possible internal postholes, and pit, none obviously structural. Single fills
10381	8m	W	0.20-0.45m <i>0.29m</i>	0.11-0.25m <i>0.16m</i>	22/44g	5	Cuts roundhouse 10382. Two charcoal-rich ditch fills. Recut in one intervention. Lost eastern circuit. One possible internal pit. All but one single fill
10382	10.50m	NE	0.34-0.70m <i>0.47m</i>	0.16-0.33m <i>0.20m</i>	99/640g	7	Cut by roundhouses 10381 and 10383. One possible internal pit. Two charcoal-rich ditch fills. All but one single fill
10383	12.50m	E	0.34-0.61m <i>0.45m</i>	0.11-0.25m <i>0.17m</i>	46/114g	6	Cuts 10382. Entrance posthole. All but one single fill
10500	11m	Early phase SE	0.22-0.80m <i>0.54m</i>	0.14-0.61m <i>0.33m</i>	67/630g	5	Two phases, earlier phase SE entrance, later phase unknown entrance. Cut by pit. Two internal postholes, none obviously structural. All but one single fill
10501	Ditch: 12.50m, 16m House: 8m	SE	I: 0.20-0.92m <i>0.64m</i> II: 0.34-0.92m <i>0.64m</i> III: 0.20-0.85m <i>0.47m</i>	0.12-0.51m <i>0.33m</i> 0.06-0.48m <i>0.24m</i> 0.12-0.51m <i>0.29m</i>	23/296g	9	Three phases of ditch. Internal post-built roundhouse. Complex entrance features. Spur ditch 10513. Five internal pits and 44 additional postholes

Table 4: Roundhouses at Compound 3

Pits

2.5.14 Some 21 pits were excavated: five within roundhouse 10501, two in 10506, one in roundhouse 10086, one in roundhouse 10381 or 10382 and 12 not within any of the roundhouse penannular ditches. The pits varied in length from 0.42–1.40m and in depth from 0.08–0.49m (Graph 1). There is no discernible difference between sizes of pits inside and outside roundhouses. Thirteen of the pits were bowl-shaped in profile with sloping sides and concave or flat bases, and eight were cylindrical with vertical sides and flat bases. All but three pits were circular or oval in plan. The three exceptions were subrectangular; two of these were with pits with cylindrical-shaped profiles, one bowl-shaped profile. There is no relationship between the shape of pits and their location within or outside roundhouses. Seventeen of the pits had single fills, four had two fills, pit 10282 had three fills and pit 10351 had five fills.

2.5.15 Pit 10282 lay in the centre of the enclosure rather than within a roundhouse. The pit was 1.10m diameter and 0.20m deep with sloping sides and a flat base. It had a layer of charcoal across its base, on top of which an ashy deposit was found, sealed by a layer of redeposited natural. The pit may have been a hearth with possible *in situ* burning.

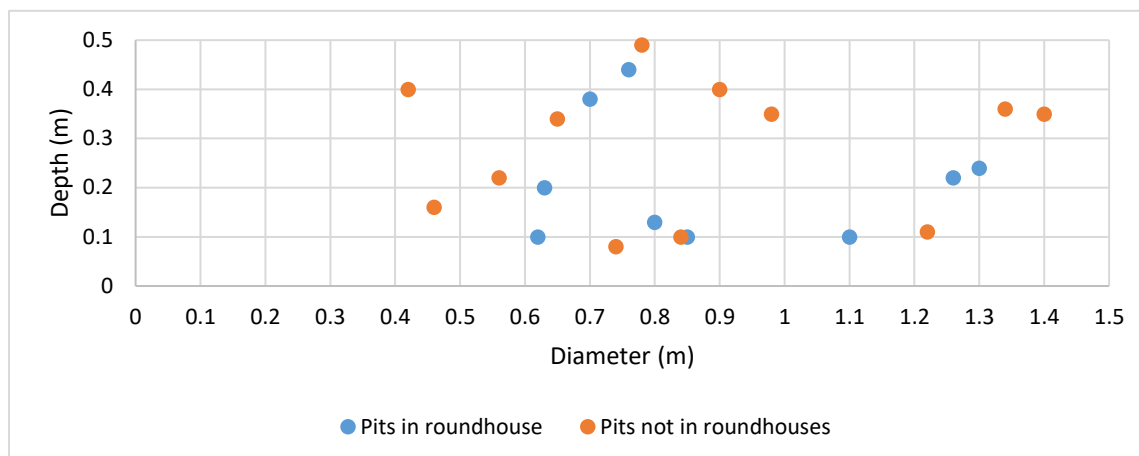
2.5.16 Pit 10351 was in the circuit of roundhouses 10381 and 10382, and possibly contemporary with one of them. It was c 0.76m diameter and 0.44m deep with vertical sides and a flat base. Its five fills comprised a basal layer of redeposited natural, followed in turn by a very dark layer rich in charcoal; a lighter silty layer with a dump of ash and charcoal; and another lighter layer. The pit did not display *in situ* burning, and instead probably contained the deposit of waste from a fire.

2.5.17 In total, eight pits were recorded in the field as having charcoal-rich fills, six of which lay inside roundhouses, including examples inside roundhouses 10086, 10501 and 10381 or 10382. Two-thirds of the pits inside roundhouses had charcoal-rich fills compared with 17% of those not within houses. There thus appears to be a relationship between pits with charcoal-rich fills and roundhouses, perhaps suggesting that these pits contained deposits of hearth waste from the houses.

2.5.18 A large, complete saddle quern was found at the base of pit 10087, with its grinding side facing upwards (Plate 1). The pit measured 1.28m by 0.56m and was 0.22m deep. It was one of only two pits that was subrectangular in plan with vertical sides and a flat base. The quern, also subrectangular, was placed perpendicular to the alignment of the pit. Pit 10087 cut another pit and was cut by a posthole. The rarity of complete Iron Age querns suggests that this may have been a placed deposit.

Post-medieval

2.5.19 A single feature, ditch 10519, was dated to a period other than the middle Iron Age. This ditch cut enclosure 10055 and roundhouse 10500. A coin dated 1799 was found in the southern part of the ditch, along with a piece of clay tobacco pipe stem. The ditch is on the same alignment as the field system shown on late 19th century Ordnance Survey maps and is likely to be a boundary related to this system.



Graph 1: Pit sizes, Compound 3

2.6 Compound 8, Datchet: introduction

2.6.1 The Compound 8 excavation area was centred on SU 9806 7860 and lay within a single field in the parish of Datchet, Berkshire (Fig. 5). The site is bounded by the M4 to the east and the B376 to the west. The Jubilee River, a recent artificial channel of the Thames, runs 200m to the west of the site, with the closest point of the Thames itself 750m to the south-west. The site lies on a geological boundary, with London Clay bedrock recorded in the eastern part of the site, and Lambeth Group clay silt and sand in the west. Additionally, Shepperton Gravel deposits are recorded over most of the site, with a deposit of alluvium belonging to a palaeochannel of the Thames running NW–SE over the north-eastern part of the site (BGS nd.). A distinct band of concreted, dark reddish brown manganese-rich gravel (0.6–1m wide) found during the excavation may relate to this geological feature running east–west that might represent a spring line. Bronze Age and Roman features appear also to relate to this possible spring. The site is flat, lying at c 18.40m aOD.

2.6.2 The site lies between areas of significant landscape investigations. The Eton College Rowing Course and Flood Alleviation Scheme is to the west, with the Agar’s Plough site just c 300m to the south-west of the site (Allen *et al.* forthcoming 2013; Foreman *et al.* 2002). The quarry sites of Riding Court Farm (WA nd. a) is c 1.2km to the south-east, and Kingsmead Quarry is c 4.5km to the south-east (Chaffey and Brook 2012; Chaffey and Barclay 2013; WA nd. b). These complement further large area excavations further to the east, for example at Heathrow T5 (Framework Archaeology 2010), Imperial Sports Ground and RMC Land (Powell *et al.* 2015), Hengrove Farm (Poulton *et al.* 2017) and Home Farm (Hayman 2018). These major excavations, alongside many smaller investigations, have revealed that this stretch of the Middle Thames gravels was extensively utilised in the Neolithic and Bronze Age, with frequent discoveries of pits and monuments dating to the Neolithic and early Bronze Age, succeeded in many areas by regularly divided field system boundaries interspersed with waterholes of middle Bronze Age date. Late Bronze Age activity is frequently present but is usually less extensive, and it is often more difficult to identify and interpret site function and settlement patterns than for the middle Bronze Age. The extensive field systems of the middle Bronze Age appear to contract with far fewer field ditches being demonstrably created or used in the late Bronze Age. The major communal island midden site at Runnymede is c 7.8km to the south-west of the site (Needham 1991; Needham and Spence 1996). Also within this landscape, major deposits of metalwork were made into the Thames during the late Bronze

Age, with particular concentrations between Taplow and Runnymede including the river adjacent to the site (Davies 2018, map 3.3).

2.6.3 The abundance of Neolithic and Bronze Age evidence is not matched during the early Iron Age, when the area must have been more sparsely occupied, although early Iron Age activity is known from the Eton and Flood Alleviation Scheme work (Allen *et al.* forthcoming). Settlement density in the area appears to pick up in the middle Iron Age. Enclosed sites appear particularly common in the area (Old Way Lane: Ford 2003; Wood Lane: Entwistle *et al.* 2003; Eton: Allen *et al.* forthcoming), although unenclosed sites are also present (Eton: Allen *et al.* forthcoming).

2.6.4 Excavation and geophysical survey at Agar's Plough, c 300m to the south-west of the site, revealed a series of enclosures aligned east–west over an area at least 400m long (Allen *et al.* forthcoming). This appears to primarily date to the late Iron Age/early Roman period although activity is also recorded from the late Roman period. It may be related to short lengths of parallel lines seen as cropmarks c 400m to the south-west of the site (CH2M Arcadis 2017, 16). Other Roman enclosures are known c 3km to the south of the site (Martin 2010).

2.6.5 A significant middle Anglo-Saxon site was found nearby during the Eton College Rowing Course and Flood Alleviation Scheme excavations, interpreted as a meeting site at the Thames on the boundary between Mercia and Wessex (Foreman *et al.* 2002). The important middle and late Anglo-Saxon settlement at Windsor is also nearby.

2.7 Compound 8, Datchet: evaluation and watching brief

2.7.1 Nine trenches were opened, each measuring 33–50m long and 1.8m wide, in a single field of c 2.1ha (Fig. 13). This equates to just under a 4% sample as one of the planned trenches could not be excavated due to services. Archaeological features were found in Trenches 6, 9, 10, 11, 13 and 14.

2.7.2 In Trench 6, three undated pits and a ditch were found. A single 8g sherd of Roman pottery was found in the ditch, but the feature was on the same NE–SW alignment as the post-medieval field system making dating uncertain.

2.7.3 In Trench 9, four ditches aligned E–W and two pits were found. A 6g sherd of middle/late Bronze Age pottery and animal bone were found in ditch 900004, and a 9g sherd of similar date in pit 900016. Two pieces of burnt flint (10g) were found in one of the other ditches.

2.7.4 In Trench 10, a sterile feature was found. It was uncertain if this was a pit or ditch terminus.

2.7.5 In Trench 11, three postholes, a pit and a ditch aligned E–W were found. Two sherds of pottery were found in the ditch, a 37g sherd dating to the Bronze Age and a 5g medieval sherd (dating c 1200–1500), alongside animal bone.

2.7.6 In Trench 13, a pit and an E–W ditch were found. No finds were recovered.

2.7.7 In Trench 14, two intercutting pits were found. Thirty sherds (243g) of late Bronze Age pottery were found across the two pits, as well as a flint flake.

2.7.8 A watching brief was also maintained along the western edge of the site. This comprised two N–S linear areas, 73m and 19m long respectively and both c 0.60m wide. Three sterile ditches were found, all continuations of features seen in Trench 9.

2.8 Compound 8, Datchet: excavation

2.8.1 Based on the results of the evaluation, an area of 0.72ha was opened in the south-eastern part of the site encompassing the area covered by Trenches 8, 10, 11, 12, 13 and 14 (Fig. 13). Most of the features could be dated to the late Bronze Age, with excavations revealing a settlement containing a putative roundhouse, four-post structures, waterholes, pits including a group that might be related to a burnt mound, and a rectangular structure of proportions more appropriate to a longhouse than a storage structure. Only one feature, a recut waterhole containing a cattle burial, was dated with certainty to the middle Bronze Age. Some late Bronze Age pottery was associated in this feature, suggesting it belongs to the period of the ceramic transition between the middle and late Bronze Age. Many of the waterholes and deeper features were not bottomed due to the level of impact. Roman features included a pair of parallel multi-phased ditches that may be stream management features and appear to have been recut in the early–middle Anglo-Saxon period. The later agricultural use of the site is represented by field boundaries dating to the medieval, post-medieval and modern periods, and a medieval furrow.

Research aims

2.8.2 Following the results of the evaluation, the potential research aims identified in advance of the excavation, referencing the Solent-Thames Research Framework for the Historic Environment (Hey and Hind 2014), were:

- i. To establish whether any artefacts recovered have the potential to refine our understanding of late Bronze Age/early Iron Age chronology.
- ii. Does the site provide evidence for changes in farming and organisation of the landscape?
- iii. Does the site provide evidence for the development of permanent settlements or changes from enclosed to unenclosed?
- iv. Does the site provide evidence for the social organisation of the late prehistoric period?
- v. Is there evidence for the development of construction techniques of roundhouses?

Middle Bronze Age

2.8.3 The only feature securely dated to the middle Bronze Age was a probable waterhole that had been recut (Fig. 14). The length and width of the early cut, 2167, was uncertain as the upper profile was entirely truncated by the later cut, 2162, which measured 2m by 1.30m and was oval in plan with steep sides (Fig. 17, s.2036). The feature was excavated to the depth of 1.16m and was not bottomed. The lowest exposed fill, 2276, was at least 0.20m thick. It comprised a grey silt and contained four sherds (9g) of undiagnostic flint-tempered pottery and small quantities of burnt flint. The next fill, 2168, was a grey clay silt with manganese staining and contained a cattle burial (Plate 2). The individual, possibly a bull aged 12–18

months and at prime age for slaughtering for meat, was partially dismembered with only the lumbar vertebrae and left radius and ulna clearly articulated in the ground. The forelimbs were at one end of the feature, and the skull on top. The hindlimbs had been removed. The only clear evidence of butchery was from the removal of the skull, although the friable condition of the bone made cut marks less recognisable. Pig bones were also found. This might be the remains of a feast, although why so much useable meat was deposited is uncertain. Samples of bone failed radiocarbon dating due to insufficient collagen.

2.8.4 The early, deeper feature was cut by 2162. This was 0.80m deep, cutting to the depth of the cattle burial. Its lower fill, 2165, produced two large sherds (1048g) of a middle Bronze Age Deverel-Rimbury Bucket Urn, as well as a sherd (30g) probably from a shouldered jar of late Bronze Age type. The upper fill produced four (22g) sherds of pottery including a vessel with an incurving neck again suggestive of the late Bronze Age. This recut appears to belong to the period when Deverel-Rimbury was being succeeded by post Deverel-Rimbury ceramics. Small quantities of burnt flint were also recovered.

2.8.5 The only other certain middle Bronze Age material culture was the base of a Deverel-Rimbury pot (1070g) found between the natural and subsoil during the stripping of the site. This was not found within any recognisable feature, 16m to the south of feature 2167/2162. A handful of other probable and possible middle Bronze Age sherds were found in other features, associated with late Bronze Age material.

Late Bronze Age

2.8.6 Most features on the site dated to the late Bronze Age. These include a long rectangular structure, a possible roundhouse, two four-post structures, two possible waterholes and a sequence of intercutting waterholes, a possible enclosure, an intercutting pit group, and 10 further pits, one containing cremated remains. A possible truncated and dispersed burnt mound has also been identified. A further 24 pits and two postholes that contained no datable finds have been tentatively assigned to the late Bronze Age.

Rectangular structure 2244

2.8.7 The most significant discovery at the site was a rectangular structure, possibly identifiable as a longhouse, probably dating to the decades around c 1000 cal BC (Fig. 15; Plates 3–4). The structure appeared to be largely single-phased with the main structural elements measuring 11m by c 3.30m. Peripheral postholes and a possible wall-slot suggest the total size of the house was 11m by c 4m.

2.8.8 The main structural elements are four pairs of features, mostly beamslots, running perpendicular to the structure. There are a further seven postholes within or very close to the area covered by footprint of the main features, and a probable recut beamslot parallel to the structure within c 0.80m of the main footprint.

Main structural features

2.8.9 At either end of the house the clearest pairs of beamslots were found (2249 and 2245 on the western side; 2308 and 2311 on the eastern side). Two other beamslots were found in the house (2283 and 2295) with 2283 paired with two postholes (2279 and 2281), and 2295 paired with a very shallow possible beamslot (2298) that was replaced by two postholes (2302, 2300). Excluding 2298, the beamslots were 1.02–1.25m long, 0.22–0.40m wide and

0.06–0.20m deep. The shallowest were those inside the house rather than those at the edges, with 2283 being 0.06m deep and 2295 being 0.12m deep. The beamslots had vertical sides and flat bases (Fig. 16, s.2055, 2057, 2069, 2072, 2073), suitable for taking squared horizontal timbers. Beamslot 2283 was paired with postholes in the expected position of a paired beamslot, with these features presumably having a similar function. Possible beamslot 2298 was just 0.04m deep and was replaced by two postholes, being cut by 2302 and immediately adjacent to 2300 (Fig. 16, s.2070). The inner edges of the paired beamslots and related features were 0.80–1.20m apart, with the pairs of beamslots being 2.50–4.50m apart. The four postholes described here were 0.38–0.43m in diameter and 0.05–0.14m deep. Postholes 2280 and 2302 had near-vertical sides and a flat base, whereas 2300 and 2281 had sloping sides with small concave bases.

Other postholes and features

2.8.10 Seven other postholes were excavated within or immediately next to the footprint of the main structural elements. Feature 2247 was probably not related.

2.8.11 Postholes 2285, 2305 and 2334 ran just beyond the projected line of the outer edge of the structural beamslots. Postholes 2287, 2289 and 2292 formed a triangle in the centre of the house. These six postholes were 0.24–0.32m diameter and 0.06–0.19m deep. Most had near-vertical sides and a flat base, with 2285 and 2334 having more sloping sides and smaller concave bases.

2.8.12 Feature 2247 lay between beamslots 2245 and 2249 at the western edge of the structure, but despite this seemingly meaningful position the feature appears not to be related to the house. It is of a different, scoop-like profile, and its fill was more similar to areas of root disturbance. Unlike the rest of the features relating to the house it did not contain burnt flint (see below). Feature 2247 may be bioturbation.

2.8.13 A probable recut wall-slot or ditch running parallel to the house was found on its southern side, consisting of 2313, 2315 and 2317 (Fig. 16, s.2074). This is distinguished from the internal beamslots as it appears to have held a wall rather than being an internal structural feature. Feature 2315 was cut by both 2313 and 2317, with 2317 in turn cut by Roman ditch 2418. These features may have belonged to multi-phased Roman ditch 2418, but the presence of burnt flint in the fills suggest they were part of the rectangular structure, and the features were to the north of the line of the Roman ditch. The features were c 0.35m wide, c 0.15m deep, and c 2.50m long and had flat bases but a less regular square section than the internal beamslots.

Fills and finds

2.8.14 Strikingly, all of the beamslots, postholes and wall-slots ascribed to the building contained burnt flint (except shallow beamslot 2298 that was replaced by postholes and appears to not have been a structural feature). The burnt flint also had a distinct stratigraphic pattern. Three of the main beamslots had single fills, and three had two fills; six of the postholes had single fills, and four had two fills; and the recut parallel wall-slot or ditch had single fills. Burnt flint was found in all the single fills and upper fills, but in none of the lower fills. This suggests that the burnt flint derived from the house, with the lower fills belonging to its construction, and upper and single fills relating to the use and/or abandonment filling of the voids. The lower fills also tended to have the appearance of redeposited natural which

also suggests the material was used as packing in the construction of the house. The burnt flint appears to have been concentrated in the western part of the building, with features 2245, 2249, 2279 and 2283 containing the highest concentrations of the material. The bulk sample from beamslot 2245 contained c 1250 pieces weighing 2575g and that from posthole 2279 contained 161 pieces weighing 504g. In the eastern part of the building, beamslot 2295 contained 140 pieces weighing 382g and beamslot 2308 contained 145 pieces weighing 84g. These are from samples from the features, and the total quantities present must have been higher. This can be compared to pit 2065 some 75m to the west of the rectangular structure, where c 13kg of burnt flint was recovered from the sample. The material in pit 2065 is suggested to be the remains of a burnt mound. The quantities of burnt flint from the rectangular structure are therefore much less and may have derived from domestic activities associated with the house, although deposition of industrial waste or burnt mound material is also a possibility.

2.8.15 Bulk samples were taken from beamslots 2245, 2295 and 2308, and posthole 2279. Charcoal was noted in the field in about half of the features associated with the structure. In the bulk samples, mainly oak charcoal was present, although the species in beamslot 2245, also containing a large amount of burnt flint, were more varied. Posthole 2279 produced a single charred cereal grain, and the larger charcoal fragments in beamslot 2295 had fired clay adhering to them, which may have been from structural wood and adhering daub, although it is uncertain if this was from the rectangular structure itself. Smaller fragments of fired clay were present in other bulk samples, and a possible 'loomweight' fragment was found in posthole 2287, although this cannot be used as evidence for weaving in the house.

2.8.16 Material culture from the rectangular structure was otherwise limited. Pottery was restricted to three featureless body sherds, two (13g) from the only fill of posthole 2287 and one (24g) from the upper fill of beamslot 2295.

Radiocarbon dating

2.8.17 The radiocarbon dating is described in more detail below (see Table 22). In summary, five radiocarbon dates from short-lived charcoal were obtained from the structure, this charcoal representing the only high-quality datable material recovered. Two were from lower fills of beamslots 2295 and 2308, two from the only fill of beamslot 2245, and one from the only fill of posthole 2279. The samples therefore include those from a range of features and contexts that should belong to the construction, use and abandonment of the house, and relatively evenly distributed throughout the period of the use of the structure. Three further late Bronze Age radiocarbon dates from the site compliment those from the house. The radiocarbon dates were all very similar and suggest that the rectangular structure was occupied for a limited period probably in the decades around 1000 cal BC. The house is broadly contemporary with the other two dated late Bronze Age features, cremation pit 2057 and intercutting pits 2423.

Cremation pit 2057

2.8.18 Pit 2057 was circular, measuring 0.53m in diameter and 0.10m deep. Its northern side was gently sloping, the rest nearly vertical, and had an uneven base (Fig. 17, s.2077). Its single fill, 2058, was a soft dark grey sandy silt with gravel, charcoal and cremated bone. The deposit was excavated in two spits, retrieving 280.1g of cremated bone from probably a single adult. The pit had clearly been truncated by later agricultural activity. The only finds were some

burnt flint, and a radiocarbon date probably belonging to the later 11th or 10th century cal BC was obtained (SUERC-97882; Table 22). The associated charcoal was dominated by oak with probable wild cherry also present.

Possible roundhouse

2.8.19 A putative roundhouse, 2420, was found in the western part of the site, consisting of a semi-circle of four postholes with a projected diameter of c 11m. The western third of the circuit was beyond the excavated area. The roundhouse could not have been contemporary with enclosure ditch 2426, and the line of the house just overlapped waterhole 2119. This may have obscured a posthole in the north-western part of the circuit. No finds were recovered.

Four-post structures

2.8.20 Two putative four-post structures were identified, though in both cases only three postholes survived. Structure 2414 was in the western part of the site and the postholes were 2–2.20m apart. Structure 2424 was in the eastern part of the site and its postholes were 1.10–1.20m apart. None of the features produced finds.

Probable waterholes

2.8.21 Three groups of features dated to the late Bronze Age are probably waterholes.

2.8.22 A sequence of three intercutting waterholes and a pit was found near to the rectangular structure. A quarter section was excavated. The waterholes, 2336, 2351 and 2342, each had a large number of fills suggestive of silting over time, whereas the pit, 2357, had two fills, although it was shallower (Fig. 17, s.2076). The earliest cut, 2336, was 1.10m deep and its width at the surface was not known as it was truncated. This was cut by 2351 and 2342; there was no direct relationship these two cuts. Cut 2342 was c 2.85m wide and 1.10m deep; cut 2351 was c 3.40m wide and was not bottomed, but presumably had a similar depth. Some 39 sherds (324g) of pottery were found across the stratigraphic sequence. None was clearly diagnostic. Some 1038g of fired clay was found in the last fill in the sequence in pit 2357, but this was all undiagnostic.

2.8.23 Feature 2119 was partially exposed on the western edge of the excavation area. Its longest exposed length was 3.70m and it was excavated to a depth of 0.76m without being bottomed. The feature cut ditch 2426 and the exposed section contained five fills suggesting the feature silted up. Seven sherds (162g) of pottery were found in the penultimate fill.

2.8.24 Feature 2254 was 4.15m long and up to 6m wide, although not consistently this wide around the feature. It was 0.96m deep, and just c 3.50m to the west of the rectangular structure. The feature contained three fills with the top and bottom fill producing a total of 54 sherds (466g), mostly from the uppermost fill.

Possible enclosure

2.8.25 A possible partial enclosure was found consisting of four ditches. The enclosure was not a regular rectilinear shape and not especially well dated, and the ditches may not have been contemporary. Ditch 2426 was aligned east–west and was dated by its earlier relationship to late Bronze Age waterhole 2119. Its possible western continuation was observed at the southern end of evaluation Trench 9 (Fig. 13). Ditch 2422 was adjacent and aligned WNW–ESE and produced two sherds (3g) of pottery. Ditch 2425 was 10m to the east.

Roman ditch 2418 obscured the gap between 2422 and 2425 and cut ditch 2425. Ditch 2425 was L-shaped and aligned WNW–ESE and NNE–SSW and did not produce any material culture. Ditch 2421 was on an NNE–SSW alignment, 7m to the south of ditch 2425 and following its line, and produced three sherds (5g) of pottery. A short length of ditch continuing beyond the excavated area, 2109, ran parallel to ditch 2426, 2.5m to its south.

2.8.26 The possible enclosure could not have been contemporary with waterhole 2119 or putative roundhouse 2420, but it enclosed middle Bronze Age waterhole 2167/2162 and four-post structure 2414. None of the pottery was diagnostic, and it is possible the enclosure is middle Bronze Age, broadly contemporary with waterhole 2167/2162 and earlier than the main late Bronze Age activity.

Burnt mound?

2.8.27 Three pits might have preserved the remains of a burnt mound. This includes two adjacent pits, 2065 and 2063, and pit 2150, 15m to the east. Pits 2065 and 2063 were cut by Roman ditch 2418 making their form, size, contents and relationship uncertain. The northern edge of pit 2065 was present, with the pit measuring 1.44m wide and at least 0.44m long. It was subrectangular with a sloping upper profile (the lower profile was truncated by the ditch) and a single fill approximately half filled with burnt flint. Some c 5500 pieces of burnt flint weighing nearly 13kg were recovered although more was certainly originally present. Pit 2063 was to the immediate east and was entirely under the Roman ditch. This was circular and c 0.55m deep with the upper half removed by the ditch, and 0.60m diameter where present. The single fill contained small quantities of burnt flint, animal bone, and a single sherd of late Bronze Age pottery. Charcoal was not recorded from these two pits, and there was no evidence for *in situ* burning. Pit 2150 had evidence for *in situ* burning and had a single fill rich in charcoal (mostly oak) and ashy material, with some burnt flint and 25 pieces (52g) of amorphous fired clay. The feature was subrectangular and measured 0.71m by 0.59m and 0.13m deep.

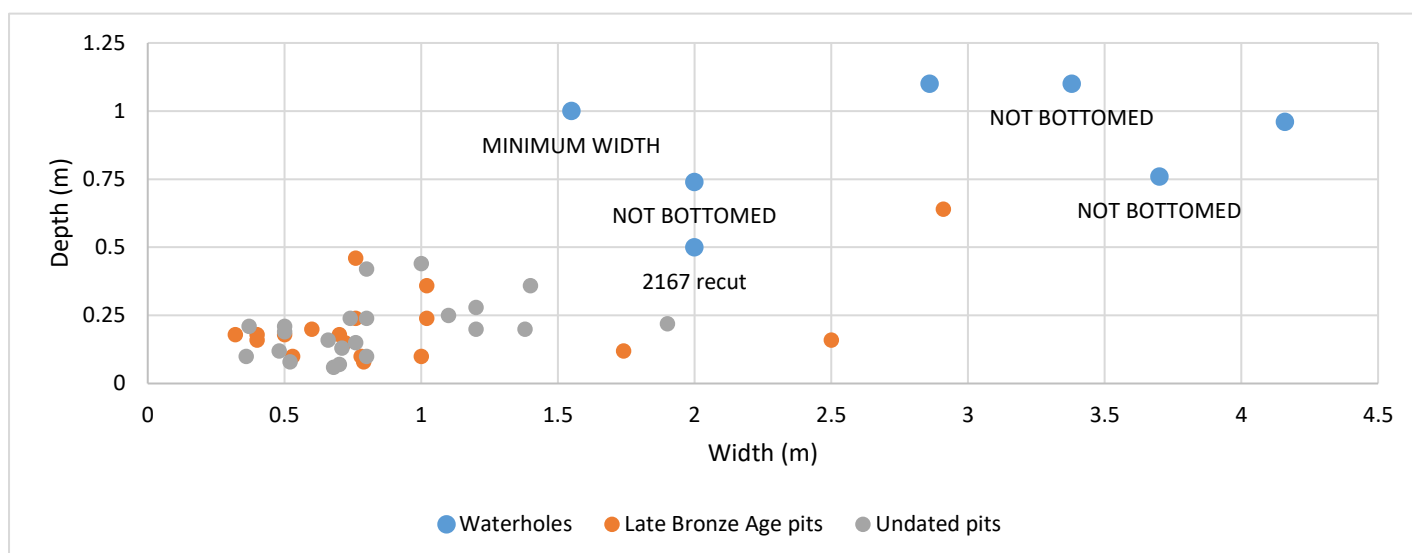
2.8.28 The large amount of burnt flint from pit 2065 suggests activity beyond domestic use, and the most likely explanation is that this is from a burnt mound which was not otherwise preserved. The shape of the pit and the fact that it was near a potential water source (a deposit of manganese-rich gravel was nearby, see above) might support this interpretation. Pit 2150 may have been related, although it was not immediately adjacent. The other concentration of burnt flint, inside features associated with the long rectangular structure, was c 75m to the east of pits 2065 and 2063 and cannot easily be related to the same activity.

Pits

2.8.29 Intercutting pit group 2423 was found in the southern part of the site. It consisted of four pits over an area of 2.85m by 2.30m (Fig. 17, s. 2001). The pits were between 0.40–1.02m wide and 0.10–0.36m deep (Graph 2). Two of the pits had two fills and two had one fill. One of the fills was rich in charcoal. Some 36 sherds (359g) of pottery were recovered and two radiocarbon dates were obtained that centre on the 10th century cal BC (Table 22).

2.8.30 Nine other pits could be dated to the late Bronze Age by pottery. Pit 2236 was large, 2.90m diameter and 0.64m deep with two fills, but did not appear to be a waterhole, and produced 26 sherds (221g) of pottery across both its fills. Other pits were 0.32–0.78m in diameter and 0.10–0.46m deep. All but one had single fills, the exception having two fills.

2.8.31 A further 22 pits and two postholes are undated but tentatively assigned to the late Bronze Age as features of other dates were limited to ditches and a waterhole, implying most of the undated features were late Bronze Age. The pits were 0.36–1.90m wide (mean 0.84m) and 0.06–0.44m deep (mean 0.20m). Twenty pits had single fills and four had two fills. Two of the pits, 2150 and 2189, had charcoal-rich fills, the latter containing a single fragment of hammerscale suggesting the pit is later or that the fragment is intrusive. No other evidence for metalworking from any period was found.



Graph 2: Sizes of pits and waterholes at Compound 8

Roman

Ditch 2418 and 2419

2.8.32 Ditches 2418 and 2419 ran parallel, c 6m apart, on an east–west alignment before diverging in the eastern part of the site (Fig. 18). Southern ditch 2418 was 0.25–1.60m wide and 0.12–0.80m deep. The ditch cut late Bronze Age features and was recut up to six times (Fig. 16, s.2074), with this recutting more frequent in east where it widened. The ditch contained a sherd (23g) of early Roman pottery from the western part of the ditch that was not recut, and a sherd (47g) of Roman pottery from the eastern part of the ditch in one of the later recuts. The northern ditch, 2419, was 0.40–1.90m wide and 0.10–0.47m deep and was recut up to three times (Fig. 17, s.2009). It also cut late Bronze Age features and contained five sherds (54g) of Roman pottery across two slots, in an early and late cut. A sherd (13g) of early–middle Anglo-Saxon pottery was also found in the late cut, 2072, that produced Roman pottery. This ditch recut may have belonged to the early–middle Anglo-Saxon period, or the ditch may have been left open into this period.

2.8.33 The probable western continuations of ditches 2418 and 2419 were encountered in evaluation Trench 9 and the watching brief area (Fig. 13). The interventions into the ditches in these areas produced no datable finds other than a small sherd of later Bronze Age pottery from ditch 900004, which was presumably residual.

2.8.34 Ditches 2418 and 2419 also produced some 36 sherds (207g) of late Bronze Age material. Most of this was from later recuts from stratigraphically similar positions to the

demonstrable Roman material, although three sherds (14g) were in early cuts. It is very likely the late Bronze Age material is all residual. A 4g sherd of medieval pottery in ditch 2418 is probably intrusive.

2.8.35 The ditches ran parallel to an east–west band of band of concreted, dark reddish brown manganese-rich gravel, 0.6–1m wide, found between the ditches, possibly related to a spring deposit. A NW–SE deposit of alluvium, a palaeochannel of the Thames, is recorded running over the site (BGS nd.). Ditch 2418 and 2419 may be management features related to an associated spring. Alternatively, they may form a trackway or driveway. No other features relating to a Roman field system were discovered. The ditches are, however, on the same alignment as a late Iron Age/Roman enclosure system known at Agar’s Plough, c 300m to the south-west, and are presumably related (Fig. 27).

Ditch 2412

2.8.36 Ditch 2412 crossed the north-western end of the site on a NE–SW alignment. The ditch was 0.38–0.80m wide and 0.32–0.42m deep and showed evidence for a recut. The only datable find was a Roman pottery sherd dating to the 1st–2nd century AD from fill 2086. The ditch may represent a field boundary or part of an enclosure attached to the Roman trackway or water management ditches to the south, though it follows a differing alignment.

Early–middle Anglo-Saxon

2.8.37 As noted above, a single sherd (13g) of early–middle Anglo-Saxon pottery was found, in a recut of ditch 2419. The recut may be of this later period, perhaps continuing the function of the putative management of the spring into the Anglo-Saxon period.

Medieval and post-medieval

2.8.38 As noted above, a sherd (4g) of medieval pottery was intrusive in Roman ditch 2418. A rectangular pit, 2107, measuring 2m by 0.80m and 0.20m deep contained a fragment of medieval or post-medieval tile.

2.8.39 Ditches on NE–SW and NW–SE alignments at the northern and western edges of the site correspond to a field boundary depicted on the Datchet enclosure map, dating from 1833 but surveyed around 1810. The boundary separated a newly enclosed field to the south-east from an area to the north-west labelled as ‘The Mirk’, the latter being an area of ‘old enclosure’ unaffected by the changes of the 1833 enclosure (<https://datchethistory.org.uk/historical-maps/enclosure-map-1833/>). This boundary continued to be shown on Ordnance Survey maps into the 20th century. The ditches in question were left unexcavated. Furrows were found crossing the site on a similar NE–SW alignment to the ditches; one produced fragments of medieval or post-medieval ceramic building material.

3 FINDS AND ENVIRONMENTAL EVIDENCE FROM COMPOUND 3

3.1 Flint *by Michael Donnelly*

3.1.1 A very small amount of burnt unworked flint was recovered from Compound 3 .

3.2 Prehistoric pottery *by Alex Davies*

Introduction

3.2.1 Some 696 sherds (3019g) of prehistoric pottery were discovered at Compound 3, from up to 102 vessels across 65 contexts (Table 5). All contexts producing pottery and all prehistoric pottery dated to the middle Iron Age.

Methodology

3.2.2 The pottery was recorded broadly following the recommendations of the Prehistoric Ceramics Research Group (PCRG 2010; PCRG *et al.* 2016). Sherds from each context were separated into vessels, and details of each vessel were recorded. No cross-context refitting was attempted, and vessel quantities in this report are maximum figures as it is very likely that sherds from the same vessels were found in multiple contexts. 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, rim diameter, estimated vessel equivalent (EVE, or percentage of rim surviving; Orton and Hughes 2013, 210–3), features (eg handles or modifications), and presence of carbonised residue. Further details in fabric and vessel form are given below.

3.2.3 The two main fabric inclusions were recorded using a letter code based on those recommended by the PCRG (2010). The grade of each fabric was recorded using numbers 1 to 4, with 1 being the very fine and 4 very coarse. The following fabric codes were used:

Fl:	Flint
Gr:	Grog
Io:	Iron oxides
Md:	Mudstone
Qg:	Glaucanitic sand (can also include quartz sand)
Qs:	Quartz sand
Qt:	Quartzite
Ve:	Vegetal (grass/chaff)

Fabrics

3.2.4 All the material contained sand, almost all quartz sand. A single sherd contained just glauconitic sand, with 15 sherds in a fabric with glauconitic sand and flint. Most of the material only contained sand in the fabric, with iron oxides in approximately a quarter of the material, and flint in c 8% of the assemblage.

3.2.5 Three stratigraphic phases were identified on the site: MIA I, MIA II and MIA III. Contexts phased to MIA I totalled 55 sherds (160g), with MIA II producing just 7 sherds (23g) and MIA III 264 sherds (832g). Changes in fabrics can be tracked through the sequence, although the small quantities limit the interpretative significance of these changes. By weight, fabrics containing just sand increased from 69% of the material in MIA I to 84% in MIA III (the sample from MIA II is too small to be informative). These replaced fabrics with sand and iron oxides which comprised 23% of the material in MIA I compared with 1% in MIA III. Fabrics containing flint and sand increased through the sequence, but this is less clear. These fabrics composed 8% of the MIA I material and 15% of the MIA III assemblage. The fabric changes are less clear when sherd counts rather than weight are compared.

	Sherds		Weight		Vessels	
Sand	522	75%	1619	54%	72	71%
Qs2	441	63%	1332	44%	60	59%
Qs1	75	11%	275	9%	10	10%
Qg2	1	<0.5%	5	<0.5%	1	1%
QsMd2	5	1%	7	<0.5%	1	1%
Sand+Iron Oxides	120	17%	1166	39%	20	20%
loQs2	78	11%	865	29%	7	7%
Qslo2	36	5%	282	9%	12	12%
Qslo1	6	1%	19	1%	1	1%
Flint+Sand	54	8%	234	8%	10	10%
FIQs2	28	4%	163	5%	5	5%
QsFI2	11	2%	49	2%	4	4%
FIQg2	15	2%	22	1%	1	1%
Total	696		3019		102	

Table 5: Prehistoric pottery from Compound 3 (middle Iron Age)

Forms

3.2.6 All the forms are typical middle Iron Age types. A single high-shouldered jar (type 241; EVE=0.12; Fig. 20.4; another possible example is illustrated as Fig. 20.5) was discovered, a form that can be associated with both early and middle Iron Age assemblages (see below), suggesting the form crossed over both periods. The example here might then be relatively early in the middle Iron Age, and is in an iron oxide fabric (Qslo2) that also appears to have an earlier focus. There are six slack-sided vessels, three in fabric Qs2 and one each in fabrics loQs2, Qslo2 and Qs1 (type 282; EVE=0.39; Fig. 20.1, 2, 3; eg Allen 1990, figs 20.6, 21.25, 22.10, 23.16, 24.4). Three round-bodied vessels without necks were found, one each in fabrics loQs2, QsFI2 and Qs2 (type 284; EVE = 0.09; eg Allen 1990, figs 20.16 24.1, 24.11, 25.1), and a single round-bodied vessel with an upright neck, in fabric Qs2 was present (type 280; rim missing; eg Allen 1990, fig. 22.5). The only form in a context that was assigned a subphase was form 282 in MIA III.

3.2.7 Simple rims dominate, with 16 (70%) examples, including on two forms 282 and one form 241. Four bead rims were found, one each on forms 282 and 284. A single incurving, flattened rim (on form 282) and an expanded rim were found.

3.2.8 The rim diameters of seven of the vessels with a recognisable form could be measured. The diameters of form 282 range from 13–18cm. The single measurable forms 284 and 241 are 20cm in diameter.

Decoration, surface treatment and carbonised residue

3.2.9 Just two vessels are decorated, both without clear form. One has fingertip impressions on its body, the other has an incised line below a bead rim. Surface treatment was restricted to seven examples of light burnishing, all on vessels without clear form except one on a form 282.

3.2.10 Just one vessel had internal carbonised residue showing the pot had been used for cooking. There is not enough residue for radiocarbon dating. This was on a vessel without clear form.

Deposition

3.2.11 There was no clear indication of purposeful deposition of pottery and no substantially complete vessels were present. Just two of the pots were recorded as freshly broken, with two-thirds moderately abraded and one-third heavily abraded. The cut with the most material was intervention 10197 of roundhouse 10382 comprising 604g (75 sherds, 4 vessels). The second largest assemblage was cut 10037 of roundhouse 10500 comprising 309g (26 sherds, 5 vessels), and the third largest was cut 3933 of enclosure ditch 10055, containing 211g (25 sherds, 1 vessel).

Discussion

3.2.12 The assemblage comprises a limited number of standard forms. It is possible that it belongs to the earlier part of the middle Iron Age, due to the presence of a high-shouldered jar and the absence of saucepan pots. High-shouldered jars are found both in otherwise early Iron Age assemblages (eg St Helen's Avenue, Benson: Timby 2003, fig. 11.28; Alfred's Castle: Brown 2013, nos. 41, 49) and middle Iron Age groups (Grazeley Road, Three Mile Cross: Ford *et al.* 2013, fig. 2.10.29, 31; RAF Staff College, Bracknell: Raymond 2013, fig. 7.8–9), suggesting the form belongs to the end of the early Iron Age and early part of the middle Iron Age.

3.2.13 There are no saucepan pots, a form which may belong to the later part of the middle Iron Age. Saucepan pots comprised 20% of the forms at Thames Valley Park, Reading (Mepham 1997, 50). This site should have a later focus as it began in the middle Iron Age and continued through the late Iron Age and Roman period. Some 40% of the material by weight at Thames Valley Park was flint tempered (Mepham 1997, 49), suggesting flint tempering is a later middle Iron Age indicator, also hinted at by the changes in flint quantities over the stratigraphic sequence at Compound 3. The move from sand to flint tempering through the middle Iron Age is recognised to the south in Hampshire (Danebury: Cunliffe 1984, 248; Brighton Hill South: Rees 1995; Old Down Farm: Davies 1981), and this may be part of the same process. However, local fabric changes are complicated as flint tempering was quite common at Grazeley Road (Timby 2013, 50) and Matthewsgreen Farm (Timby 2017, 49), and both sites should belong to the earlier part of the middle Iron Age based on radiocarbon dates and pot forms. A high-shouldered jar that should belong to the early part of the middle Iron Age was tempered with flint at RAF Staff College (Raymond 2013, 13, fig. 7.9). The diminishing

of fabrics containing iron oxide through the middle Iron Age might also be seen at other sites as the fabrics in the assemblage at Grazeley Road comprised 36% iron oxide (Timby 2013, 50) and similar fabrics were reported with much less frequency at Thames Valley Park.

3.2.14 The Compound 3 assemblages and those mentioned above have a very limited decorated element and can be contrasted to the highly decorated assemblage at nearby Denton's Pit (Piggott and Seaby 1937). It is uncertain why this contrast is present, although details about the site are lacking.

Illustration catalogue (Fig. 20)

1. Slack-sided vessel (type 282); Fabric: Qs2; Roundhouse ditch 10500, cut 10035, fill 10036
2. Slack-sided vessel (type 282); Fabric: loQs2; Roundhouse ditch 10500, cut 10037, fill 10038
3. Slack-sided vessel (type 282); Fabric: Qs2; Pit 10145 inside roundhouse 10501, upper fill 10146
4. High-shouldered jar (type 241); Fabric: Qslo2; Roundhouse ditch 10382, cut 10197, fill 10199
5. Possible high-shouldered jar (type 241) or globular vessel with upright neck; Fabric: loQs2; Roundhouse ditch 10086, cut 10043, fill 10044

3.3 Worked stone by Ruth Shaffrey

Introduction

3.3.1 Seven pieces of stone were retained and submitted for analysis, all from Compound 3. These were analysed for signs of use-wear or working and a description of them is given in Table 6.

3.3.2 Very small quantities of burnt stone were recovered from three contexts, but a large saddle quern is the only stone artefact. It was recovered from the lowest fill (10088) of pit 10087 where it had been placed with its grinding surface facing upwards (Plate 1). It is a large piece of stone, roughly formed into a slab shape and with a grinding surface that is dished lengthwise (Fig. 21). One half of the grinding surface is weathered and degraded but the other half is smoothed through use. The base is crudely flat and slightly worn in places, perhaps as a result of movement during use. The quern is made of a fine to medium-grained Greensand. Querns are not especially common finds in this area, but a Greensand saddle quern was also found in a middle Iron Age feature at Matthewsgreen Farm 3km to the south (Ford 2015, 10) and more widely at Blewburton Hill 30km to the north-west (Collins 1947, 21). There are also examples from Bronze Age features at Green Park (Roe 2004, 95). Some of the Greensand querns from the region can be assigned a provenance (for example, Lodsworth in Sussex or Culham in Oxfordshire), but many (including this example) do not contain any clear lithological identifiers like fossils or the cherty swirls of the Lodsworth Greensand. This lack of identifying characteristics make it difficult to assign a provenance, but Greensand does not outcrop in the local area and the quern must therefore be imported. Much of the Greensand of southern

England is too soft to have been suitable for quern production but a small number of harder outcrops were identified in the Wessex area (Cutler 2012), and it is possible that similar appropriate rocks could have been found in the Farnham area or South Downs, some 30km to the south.

3.3.3 Complete saddle querns are very unusual finds from middle Iron Age features in south-eastern England, but examples have been recorded, for example, at Alfred's Castle, Didcot, Mingies Ditch and Yarnton in Oxfordshire (Anderson-Whymark 2000, 125; Shaffrey in prep.; Allen and Robinson 1993, table T1; Roe 1996, 56; 2011). With the exception of the example from Didcot (which was in a ditch), these were all recovered from middle Iron Age pits, and at Mingies Ditch four saddle querns/rubbers were found in a single pit. This preference for the placement of complete querns or rubbers (their upper stones) in pits rather than ditches was also observed in a study of querns from Iron Age sites in the south-west region (Watts 2104). Watts found only two complete rubbers from Iron Age ditches compared to 17 saddle querns or rubbers in pits, out of a total of 633 querns in the region from Iron Age features (Watts 2014, 116). Some may represent the safe storage of a quern, for example in an otherwise clean pit within or close to a roundhouse, but most of these should be viewed as placed deposits.

Illustration catalogue (Fig. 21)

Saddle quern. Greensand. Large slab shaped stone. Roughly flat base, slightly worn in places. The grinding surface is smoothed from use except at one end where it is degraded and pitted at one end as a result of weathering; it is flat across the width and dished lengthwise. Measures 520 by 320 by 110mm thick. Greensand. Pit fill 10088 (SF 2). Middle Iron Age.

Ctx	No.	Function	Notes	Weight (g)	Lithology
10199	1	Burnt	Blackened	20	Limestone
10008	4	Burnt	Heat shattered	8	Flint
10189	1	Burnt	Reddened	69	Ironstone
10088 (SF 2)	1	Saddle quern			Greensand

Table 6: Worked and burnt stone

3.4 Fired clay by Alex Davies

3.4.1 The fired clay comprises 109 pieces (1157g) from 18 contexts, all dating to the middle Iron Age. This included those certainly from 'loomweights', and other undiagnostic pieces.

'Loomweights'

3.4.2 Four contexts produced diagnostic pieces: 10273 of pit 10271 inside roundhouse 10501; 10192 from settlement enclosure 10055; fill 10189 of terminal 10188 of roundhouse 10501; and cut 3907 of roundhouse ditch 10500. These total 12 fragments of triangular perforated 'loomweights' datable to the Iron Age, weighing 845g.

3.4.3 The most substantially surviving 'loomweight' weighs 475g and is from roundhouse 10500. Approximately a quarter of this 'loomweight' is present including one corner and

perforation. The surface of the corner has a moulded dished impression directly above the perforation. There is no sign of wear around the perforation, and the breaks appear fresh. One dimension is surviving, the thickness, which is 75mm. The 'loomweight' is made in a medium sandy fabric that contained occasional poorly sorted pieces of unburnt flint and limestone or chalk, no doubt incidentally occurring as natural inclusions in the clay. All the 'loomweight' fragments are of the same fabric. The outer surface is orange and the core is grey.

3.4.4 The second most substantially surviving piece is from enclosure 10055 and weighs 183g and is also a corner, but more abraded and partial. While the fabric is very similar, the firing is different to that from roundhouse 10500 and they appear to be from different objects.

3.4.5 The pieces from the remaining contexts are fragments with very little form. These are both associated with roundhouse 10501 and may have been from the same object, although there is no positive evidence for this. Both contexts were rich in charcoal. Overall, it is likely that the remains of three or four triangular perforated 'loomweights' were discovered. Other possible 'loomweight' fragments were within the undiagnostic pieces.

Undiagnostic pieces

3.4.6 Fifteen contexts produced 97 pieces of undiagnostic fired clay weighing 312g from 14 contexts. All are in sandy fabrics. Most have no surface or impressions, although pieces from four contexts have possible moulded surfaces that may be from wattle marks or 'loomweight' perforations. Seven of the contexts were recorded as being rich in charcoal, although no fired clay was recovered from possible hearth 10282, or pit 10351 that dumped debris from a fire. Little certain can be said about the undiagnostic pieces, but presumably they derived from domestic pyrotechnical activities like cooking and some may be from ovens, although a 9g piece was found in association with probable iron smithing slag in context 10038, cut 10037 of roundhouse 10500.

Discussion

3.4.7 The fired clay assemblage is typical of Iron Age settlements as both triangular 'loomweights' and amorphous, undiagnostic pieces are ubiquitous on early and middle Iron Age sites. Although perforated triangular objects are usually assumed to be loomweights, this has been criticised as direct evidence for this function is lacking with the objects instead commonly associated with debris from ovens or other pyrotechnical activity, and occasionally found inside ovens, leading to the suggestion they are pieces of oven furniture (Poole 1995; 2000). Evidence from Compound 3 does not significantly add to this debate, although two of the four contexts that produced 'loomweight' fragments were rich in charcoal (pit 10271 and ditch 10188 of roundhouse 10501), and wear was not present on the single complete and unabraded perforation.

3.5 Ceramic building material by Kirsty Smith

3.5.1 A very small quantity of ceramic building material (CBM) was recovered from spread 802 in evaluation Trench 8. The material is poorly preserved, consisting of small, moderately to heavily abraded fragments, with no complete dimensions surviving except for thickness. The assemblage has been fully recorded on an Excel spreadsheet in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). Fabrics were characterised with the aid of x20 hand lens.

3.5.2 The CBM from context 802 included two fragments of flat roof tile and three fragments of peg tile. The flat tile was made from a brownish red fine sandy micaceous fabric and the fragments were 14mm and 15mm thick. These flat tiles dates from the late 15th to 17th century. The peg tile was made from an orange-red fabric, and one had a circular nail hole 10mm in diameter. These tiles were 11–13mm thick and date from the late 19th to 20th century.

3.6 Metalwork by *Anni Byard*

3.6.1 All the metalwork came from the evaluation trenching. The excavation phases did not recover any metalwork. The metalwork comprises one object of iron and one of copper alloy. The finds are of medieval to post-medieval/modern date and might be intrusive in their contexts (Table 7).

3.6.2 Eight pieces of iron from a corroded and fragmentary U-shaped staple were recovered from the fill of a modern ditch in Trench 33 (context 3303). The staple is of medieval to modern date.

3.6.3 A copper alloy halfpenny of George III was recovered from the fill of a post-medieval ditch in Trench 39 (context 3906), later seen in excavation and grouped as 10519. The coin is of the third issue, dating to 1799.

3.6.4 The staple could have had a variety of uses in domestic or agricultural settings while the coin is probably a random loss. The assemblage probably represents deposition through general agricultural activities such as manuring and cultivation.

Trench	Context	SF Number	Material	Count	Weight (g)	Object	Date	Description
3	3303		Fe	1	12.5	Staple	Med-mod?	Corroded and fragmentary U-shaped staple in 8 pieces
39	3906	1	Cu alloy	1	11.1	Coin	PM	Corroded halfpenny of George III, third issue 1799

Table 7: Summary of metalwork (Compound 3)

3.7 Slag by *Alex Davies*

3.7.1 A small amount of slag was found in middle Iron Age contexts. Two pieces (18g) were found in fill 10023 of cut 10022 in enclosure ditch 10055 in environmental sample 10 found alongside oak charcoal. Another piece (2g) was found in fill 10038 of cut 10037 in roundhouse ditch 10500 in environmental sample 11, found alongside mainly oak charcoal but also that of other species. The slag appears to be from iron smithing. Such small quantities suggests that this may represent a single short episode of iron working.

3.8 Animal bone by *Adrienne Powell*

Methodology

3.8.1 All fragments were identified to element and species, with the aid of the osteological collection held by Oxford Archaeology and recorded using a diagnostic zone protocol following

Serjeantson (1996) and Worley (Strid 2012). Toothwear was recorded using the wear codes of Grant (1982) and measurements were taken according to von den Driesch (1976) and Davis (1992). Gnawmarks were categorised as carnivore (probably dog) or rodent. Butchery marks and pathologies were noted and described; there was no burnt material present.

3.8.2 The excavation produced only a small amount of bone, totalling 111 hand retrieved fragments of which only four were identifiable, with a further two identifiable fragments recovered from environmental samples (Table 8). All of this material was recovered from middle Iron Age contexts. The material was poorly preserved with much of the unidentified bone consisting of large mammal tooth and mandible fragments. Burnt bone was comparatively frequent, at 14%, and consisted of calcined fragments.

3.8.3 The identifiable material comprises a sheep/goat maxillary premolar and metapodial condyle; a pig humerus fragment with a knife cut near the olecranon fossa, characteristic of dismembering; and two equid mandibular cheek teeth, probably adjoining P₃ and P₄. At least two more equid cheek teeth were present in the same context, 10370 of roundhouse ditch 10381, but were too brittle and splintered to enable identification. Crown height measurements on the equid teeth yielded age estimates (Levine 1982) of four to nine years, prime working age for a horse.

Taxon	Ditch		Penannular Ditch	Pit
	Hand	Sieved		
Equid			2	
Sheep/goat		2		
Pig				1
Medium mammal			1	
Unidentified	74		32	1
Total	74	2	35	2

Table 8: Species representation (NISP), Compound 3

3.9 Archaeobotanical remains *by Denise Druce*

Introduction

3.9.1 The bulk samples were first assessed for the presence of archaeobotanical material. Limited charred plant remains were present, but samples were analysed on the basis of their charcoal.

Methodology

3.9.2 In line with professional guidelines (EH 2011), 40-litre samples, or 100% of a fill if less than this, were taken. Sample processing followed standard procedures whereby the flots were caught in a 250µm aperture sieve and air dried. The residues of the floated samples were washed through 4mm, 2mm, and 500µm aperture meshes, which were also air dried. Dried flots and residues were scanned using a stereo microscope and any plant material, including fruits, seeds, charcoal and wood fragments, was recorded. Other remains, such as bone, insects, small artefacts, ceramic building material (cbm), industrial/metal waste and coal/heat-affected vesicular material (havm), were also noted. The presence of modern roots, earthworm eggs and modern seeds was also noted to ascertain the likelihood of any contamination. Remains were quantified on a scale of + to ++++ where + is rare (one to five

items); ++ is frequent (6 to 50 items); +++ is common (51–100 items); and ++++ is abundant (greater than 100 items). The assessment results were recorded on a pro forma, which will be kept with the site archive.

3.9.3 Charcoal fragments over 2mm in size were provisionally scanned using a Leica MZ6 binocular microscope at up to x40 magnification to assess preservation and taxa diversity. Provisional identification and classification were made with reference to Hather (2000). For the assessment, anatomically similar alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) were not separated. Nor were blackthorn-type (*Prunus* sp.) fragments, which includes sloe/blackthorn (*Prunus spinosa*), wild cherry (*P. avium*), bird cherry (*P. padus*) and wild plum (*P. domestica*). Hawthorn-type (Maloideae), which includes hawthorn (*Crataegus* sp.), apple (*Malus sylvestris*), rowan (*Sorbus aucuparia*), common whitebeam (*S. aria*) and wild service tree (*S. torminalis*), cannot be separated anatomically. Nor can willow (*Salix* sp.) and poplar (*Populus* sp.).

3.9.4 Charcoal from samples selected for full analysis was initially sorted into groups based on the features visible in transverse section. Representative fragments of each group were then fractured to reveal both radial and tangential sections, which were examined under a Meiji incident-light microscope at up to x400 magnification. Where possible, charcoal fragments were examined to assess the presence of tyloses and/or growth ring curvature to establish the maturity and morphology of the wood (Dufraisse *et al.* 2017).

Results

3.9.5 Sixteen bulk samples from middle Iron Age contexts were processed and assessed for the presence of archaeobotanical material. Following the assessment, eight of the samples were selected for further analysis of the charcoal. Although a paucity of other material meant that no other analyses were warranted, the selected samples were subjected to a more thorough scan for charred plant remains.

Assessment results

3.9.6 The results of the archaeobotanical assessment are presented in Table 9. Preservation was through charring, and although all the samples contained abundant charcoal, quantities of other charred remains were extremely small, being limited to occasional charred wheat (*Triticum* sp.) grains and a weed seed in roundhouse 10500, ditch cut 10037, and rare hazel (*Corylus avellana*) nutshell fragments in enclosure ditch 10055, cut 10007, and roundhouse 10501, ditch cut 10188.

3.9.7 Charcoal preservation was quite mixed, but most of the samples contained common to abundant identifiable (>2mm in size) fragments. The size of the charcoal assemblage from enclosure ditch 3941 was notably large, measuring 1750ml in volume. The assessment showed that most of the features, including enclosure ditch 10055, cut 3941, were dominated by oak (*Quercus* sp.) charcoal. Varying quantities of other taxa, including ash (*Fraxinus excelsior*), alder/hazel, field maple (*Acer campestre*), hawthorn-type and blackthorn-type were also recorded. Roundhouse 10382, ditch cut 10197, and pit 10249 in roundhouse 10501 were notable for having slightly more mixed charcoal assemblages, and relatively less oak.

3.9.8 In the likelihood that further taxa could be recovered, it was felt that further analysis of the charcoal from a selection of the samples was warranted to provide a better

understanding of woodland diversity and selection. Alongside this, the maturity and morphology of the wood was also investigated (Dufraisse *et al.* 2017) to determine the age/part of the trees being utilised.

3.9.9 Other remains were rare and included comminuted fragments of fired clay and/or sediment, perhaps from hearth linings and/or scorched floor surfaces. Fragments of heat-affected vesicular material (havm), likely to be heavily fired oak charcoal, were recorded in roundhouse 10379, ditch cut 3969, and roundhouse 10382, ditch cut 3972.

Charcoal analysis

3.9.10 To retrieve data from as wide a range of features as possible, the eight samples selected for further charcoal analysis included ditch fills from four of the roundhouses (10034, 10500, 10125 and 10382), two from cuts of enclosure ditch 10055 (3941 and 10022), and two pits (10045 and 10145), from inside roundhouses 10086 and 10501 respectively. The results of the charcoal analyses are presented in Table 10. The taxonomic level of identification varied according to fragment size, state of preservation, and/or observed genera/family. Seven wood types, including three to species level, were recorded.

3.9.11 In addition to the taxa identified during the assessment (oak, ash, alder/hazel, field maple, hawthorn-type, and blackthorn-type) further analysis confirmed the presence of rare fragments of hazel and willow/poplar. Other than the notably larger charcoal assemblage from enclosure ditch cut 3941, which comprised purely oak heartwood, and roundhouse 10382 ditch cut 10197, which contained a mixed assemblage dominated by both oak and field maple, all these taxa were secondary to a main component of oak. In addition to heartwood, much of the oak and ash charcoal represented small branch wood, likely to have originated from hearths. The only exception to this was the large deposit of pure oak heartwood from enclosure ditch cut 3941, which may represent the remains of burnt structural timber and/or a discreet dump of oak fuelwood.

Charred plant remains analysis

3.9.12 None of the samples were selected for analysis based on the presence of charred plant remains as such remains were very limited. However, charred plant remains from samples analysed based on their charcoal content can be further commented on. Very few charred plant remains other than charcoal were recovered from the analysed samples, and these were limited to just one feature, roundhouse 10500, ditch cut 10037. In addition to rare cereal grains, including two of wheat (*Triticum* sp.), the deposit (10038) produced a single charred seed of the grassland ruderal, common sorrel (*Rumex acetosa*), and a single barley (*Hordeum vulgare*) rachis fragment. The only material remains recovered from the features were frequent comminuted fragments of daub or fired clay, possibly representing structural material or hearth linings. Such remains were particularly abundant in pit 10145, from within roundhouse 10501.

Discussion

3.9.13 Environmental data (molluscs, insects and pollen) from Buckinghamshire and the Middle Thames Valley indicate that extensive clearance for agriculture had taken place in the region by the middle/late Iron Age, and that many areas had started to witness this trend by

the late Bronze Age or even earlier (Kidd 2007). Indeed, a synthesis of archaeobotanical evidence from many later prehistoric sites in the region indicate an increase in cereal cultivation during this period, which is interpreted as representing an intensification in a mixed-arable economy (Campbell and Straker forthcoming).

3.9.14 An almost complete lack of cereal remains was surprising, especially given the large size of the settlement. This paucity may be explained by differential preservation, whereby only charcoal fragments survived, but the recovery of a single barley rachis fragment from one of the roundhouse ditches does indicate preservation of small delicate remains was viable. We know, from the recovery of a whole quern stone from the base of pit 10087, that the processing of cereals was likely to have been carried out somewhere, and that this activity may have held some symbolical significance. It could be argued that the inhabitants of the site may have kept their domestic spaces particularly clean, but this does not account for the unique abundance of charcoal recovered from most of the features. The absence of charred plant remains, including cereals, at other middle Iron Age sites in the area, such as Brimpton and Wokingham, has been attributed to an economy based on pastoralism, rather than cereal cultivation (Robinson 1999; Ford 2017). Even allowing for cereal-based products arriving at the site ready-milled, however, more charred edible remains in the form of casual losses might be expected if food preparation was being carried out at the sites.

3.9.15 Charcoal evidence from both Bronze Age and Iron Age sites in the region show a dominance of oak (including wood from mature trees), with varying quantities of scrub/hedgerow taxa, including hawthorn and blackthorn-type, hazel and field maple (Boardman 2015). The charcoal evidence from this site is no exception, the only discernible difference being the increase in the amount of oak branch wood being used. This may reflect a decrease in the amount of mature oak available in the area, necessitating more careful selection of wood dependent on use (ie trunk wood being reserved for structural timber), though this is tentative based on the current dataset.

Conclusion

3.9.16 The paucity of charred plant remains from the middle Iron Age settlement is surprising. It mirrors similarly unfruitful sites in the area, which are perhaps located on soils more suited to a pastoralism rather than arable. Indeed, the present site is situated on London Clay, which, prior to later advances in agricultural proficiency, may have been less conducive to cereal cultivation. Even so, the near-complete lack of any form of charred food remains from the site is an enigma, especially as the site produced a complete quern. With regards to other environmental indicators, the site has produced charcoal assemblages consistent with other later prehistoric domestic sites in the area, which show a similar dominance of oak, with varying quantities of scrub and/or hedgerow species. The evidence points to a consistency in fuelwood use, and although agricultural expansion would have inevitably led to large areas of clearance with associated field boundaries, mature oak woodland persisted.

Sample No.	Ctx	Cut	Feature type	Group	Group Comment	Phase	Sample size (l)	Flot size (ml)	CPR	HAVM	Fired clay	Fired sediment	Charcoal <2 mm	Charcoal >2 mm	Charcoal comments
*2	3904	3903	Ring ditch	10034	Roundhouse	Middle Iron Age	20	50					++++	++++	Mostly <i>Quercus</i> sp.
*4	3943	3941	Ditch	10055	Rectangular enclosure, phase 2	Middle Iron Age	20	1750			++		++++	++++	Mostly <i>Quercus</i> sp.
5	3954	3953	Posthole	10515		Middle Iron Age	30	15			++		+++	++	Includes <i>Quercus</i> sp. and cf <i>Acer campestre</i>
6	3971	3969	Ring ditch	10379	Roundhouse	Middle Iron Age	40	60		+++ possibly heavily fired charcoal			++++	+++	Poorly preserved. Includes <i>Quercus</i> sp. and diffuse porous
7	3973	3972	Ring ditch terminus	10382	Roundhouse	Middle Iron Age	40	30		++	+++		++++	+++	Poorly preserved. Looks like mostly <i>Quercus</i> sp.
8	3988	3985	Ring ditch	10501	Roundhouse	Middle Iron Age	40	10					+++	+++	Poorly preserved. Looks like mostly <i>Quercus</i> sp. with rare diffuse porous
9	10017	10016	Ditch	10501	Roundhouse	Middle Iron Age	40	25			+		++++	+++	Mostly <i>Quercus</i> sp., rare diffuse porous
*10	10023	10022	Ditch	10055	Rectangular enclosure, phase 2	Middle Iron Age	40	60			++		++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous including Maloideae
*11	10038	10037	Ring ditch	10500	Roundhouse	Middle Iron Age	40	160	+ <i>Triticum</i> sp., <i>Rumex</i> sp.				++++	++++	Mostly <i>Quercus</i> sp.
*12	10046	10045	Pit	10507	Inside roundhouse 10086	Middle Iron Age	20	150			++		++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous including Maloideae
13	10008	10007	Ditch	10055	Rectangular enclosure, phase 2	Middle Iron Age	20	170	+ <i>Corylus avellana</i> nut shell fragment		++		++++	++++	<i>Quercus</i> sp. and diffuse porous. Highly vitrified and encrusted with fired clay

Sample No.	Ctx	Cut	Feature type	Group	Group Comment	Phase	Sample size (l)	Flot size (ml)	CPR	HAVM	Fired clay	Fired sediment	Charcoal <2 mm	Charcoal >2 mm	Charcoal comments
14	10088	10087	Pit (with large saddle quern)	10512		Middle Iron Age	20	50				++	++++	+++	Mostly <i>Quercus</i> sp.
15	10106	10104	Penannular ditch	10125	Roundhouse	Middle Iron Age	40	220			++		++++	++++	Mostly <i>Quercus</i> sp., frequent diffuse porous. Lots encrusted with fired clay
*16	10146	10145	Pit	10503	Inside roundhouse 10501	Middle Iron Age	40	60			++++		++++	+++	Mostly <i>Quercus</i> sp., with <i>Fraxinus excelsior</i> and <i>Alnus/Corylus</i> round wood
*17	10158	10157	Penannular ditch	10125	Roundhouse	Middle Iron Age	10	25			++	++	++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous including cf <i>Prunus</i> sp.
18	10189	10188	Ditch	10501	Roundhouse	Middle Iron Age	40	80	+ <i>Corylus avellana</i> nut shell fragment		+	+	++++	+++	Poorly preserved. Mostly <i>Quercus</i> sp., including round wood. Rare diffuse porous including Maloideae round wood
*19	10199	10197	Penannular ditch (contained abundant pot)	10382	Roundhouse	Middle Iron Age	40	120			++		++++	++++	Mixed charcoal, includes <i>Acer campestre</i> and <i>Quercus</i> sp.
20	10250	10249	Pit	10503	Inside roundhouse 10501	Middle Iron Age	40	60		+	++		++++	++++	Poorly preserved. Mixed <i>Quercus</i> sp. and diffuse porous wood, including <i>Prunus</i> sp. and Maloideae

Table 9: Archaeobotanical assessment results, Compound 3. Quantifications are based on a scale of + to ++++ where + = <6 items, ++ = 6-25, +++ = 26-100, and ++++ = >100 items. HAVM = heat affected vesicular material. * = sample subjected to further analysis (see Table 10).

Sample No.		2	4	10	11	12	16	17	19
Context		3904	3943	10023	10038	10046	10146	10158	10250
Feature		Penannular ditch 3903, grp 10034	Enclosure ditch 3941, grp 10055	Enclosure ditch 10022, grp 10055	Penannular ditch 10037, grp 10500	Pit 10045 inside roundhouse 10086, grp 10507	Pit 10145 inside roundhouse 10501, grp 10503	Penannular ditch 10157, grp 10125	Penannular ditch 10197, grp 10382
Sample vol L									
Flot vol (ml)		50	1750	60	160	150	60	25	120
>4mm charcoal analysed		100%	3.125%	50%	12.5%	25%	100%	100%	50%
>2mm charcoal analysed		-	3.125%	-	12.5%	-	25%	-	-
<i>Acer campestre</i>	field maple				4	1			21
<i>Alnus glutinosa</i> or <i>Corylus avellana</i>	alder/hazel				3		2		
<i>Corylus avellana</i>	hazel						2		
<i>Fraxinus excelsior</i>	ash			1	6sr	2r	10sr		6
Maloideae	hawthorn-type	7		3	3	2	4	7	13
<i>Prunus</i> sp.	blackthorn-type	5			6	2	8		2
<i>Quercus</i> sp.	oak	84hr	113h	59hr	129hr	63hr	140hr	63sr	38hr
cf <i>Salix</i> sp./ <i>Populus</i> sp.	willow/poplar				2				3
Indeterminate diffuse porous wood		1		5	7	2	3	2	18
Indeterminate		4	3	5	4	4	11	16	9
No of fragments analysed		91	116	73	164	76	169	72	110
Charred cereals					<i>Triticum</i> sp. x 2, indeterminate cereals x2, <i>Hordeum</i> sp. rachis				
Other charred plant remains					<i>Rumex acetosa</i> seed x1				
Daub/fired clay			++	++		++	++++	++	++

Table 10: Results of the charcoal analyses from selected features from Compound 3. Charcoal figures are actual counts where h = abundant heartwood, r = abundant round wood. Other remains are quantified on a scale of abundance, where + = <5 items, ++ = 6-25, +++ = 26-100, and ++++ = >100 items

4 FINDS AND ENVIRONMENTAL EVIDENCE FROM COMPOUND 8

4.1 Flint by Michael Donnelly

Introduction

4.1.1 The excavations yielded a very small assemblage of 43 struck flints and a very large amount of burnt unworked flint totalling 7871 fragments weighing 18.6kg. The struck flint was dispersed around many contexts including the subsoil and showed no clear concentrations.

Methodology

4.1.2 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 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.

The assemblage

4.1.3 The assemblage was dominated by flakes but only a few were typical of later prehistoric assemblages while a crested bladelet, retouched blade and three other blade forms were clear indications of an earlier phase of activity (Table 11). The one core recovered was a complex flake core while two of the three tools recovered were formed on flakes, but one of these, an end scraper, was formed on a core rejuvenation flake and was likely to be early in date, as was the retouched blade. The burnt unworked material included small fragments widely dispersed across the site but included several very large concentrations in postholes, pits, waterholes and structural elements from building 2244 including postholes and beamslots.

4.1.4 The flints were mostly fresh (35.5%) or lightly edge damaged (51.6%) with a few moderately damaged examples (12.9%). Cortication was generally light (77.4%); five pieces had moderate cortication (16.1%), and one each displayed heavy or no cortication (3.2%). The assemblage is likely to include a mix of residual material alongside small amounts of potentially contemporary flintwork.

Discussion

4.1.5 There were several elements of the assemblage that indicated an early prehistoric component was present here. The blade forms indicate early prehistoric knapping as do the crested blade, retouched blade and retouched core rejuvenation flake. Several flakes had soft-hammer bulbs and were also likely to be early in date. The early prehistoric forms were recovered from features securely dated to the middle Bronze Age or Romano-British periods. There is no way of telling which early period or periods these early pieces originated from as

none were period specific. However, given the rarity of late Glacial and early Mesolithic material a late Mesolithic or early Neolithic date would probably be most realistic.

CATEGORY TYPE	Total
Flake	23
Blade	3
Bladelet	0
Blade index	11.54% (3/26)
Irregular waste	2
Sieved chip	10
Core multiplatform flakes	1
Crested blade	1
Scraper end	1
Retouched flake	1
Retouched blade	1
Total	43

Burnt unworked flint	7871 / 18609g
No. burnt (%)	6.06% (2/33)
No. broken (%)	27.27% (9/33)
No. cores/related debitage	6.06% (2/33)
No. retouched	6.06% (2/33)

Table 11: Flint assemblage from Compound 8

4.1.6 Only one flake in the assemblage typified later prehistoric knapping strategies with its hard-hammer bulb, step termination and wide plain platform. However, given that much of the archaeology dated to the middle-late Bronze Age, many of the other pieces of flake debitage could also belong in this period as could the core.

4.1.7 As well as a general background scatter of burnt unworked flint, there were several marked concentrations of this material. The exact volume contained in these features was unknown but bulk samples that were taken yielded very significant amounts suggesting that in some instances this material was very prevalent. Pit 2065, sole fill 2066 yielded approximately 5500 pieces weighing 12,960g, beamslot 2245, fill 2246 had 1250 pieces weighing 2575g, beamslot 2296, fill 2295 had 140 fragments (382g) while waterhole 2167 fill 2168 had 84 fragments (259g). In every instance, the features were dated to the middle or late Bronze Age and the volume of material suggests something more intensive than basic domestic activities. The most probable source of such quantities might have been a burnt mound or spread of such material, but it is not clear why this would be recycled into a beamslot or make up the bulk of the fill of a pit. Perhaps it was deemed suitable as a base for structural supports. Other industrial activities might have also produced the quantity of material we see but such processes would often also generate other types of industrial waste which was absent from here. Large-scale cereal processing/drying might have also resulted in large quantities of burnt flint being present.

4.2 Prehistoric pottery by Alex Davies

Introduction

4.2.1 Some 274 sherds (4309g) of prehistoric pottery were discovered, from up to 67 vessels across 68 contexts, of which 14 contexts were later with the pottery being residual (Table 12). This included one residual probable early Bronze Age sherd. Sherds probably from only two or three middle Bronze Age vessels were found, although this comprised half the assemblage by weight. The majority of the sherds and vessels are late Bronze Age.

4.2.2 Established changes in fabrics between the middle and late Bronze Age are recognisable at the site, although forms and fabrics of late Bronze Age type were found in waterhole 2167/2162, the only middle Bronze Age feature, in association with middle Bronze Age pottery. Some overlap between the middle and late Bronze Age material is likely, with some of the material phased as late Bronze Age probably being current during the middle Bronze Age. This transition is discussed below.

4.2.3 The methodology follows that used at Compound 3, above.

	Sherds		Weight		Vessels	
Early Bronze Age	1		37		1	
Grog (GrFI3)	1	100%	37	100%	1	100%
Middle Bronze Age	32		2174		3	
Flint (FI4)	32	100%	2174	100%	3	100%
Late Bronze Age	241		2098		63	
Flint	220	91%	1811	86%	55	87%
FI1 (MBA?)	8	3%	17	1%	5	8%
FI2	173	72%	1388	66%	39	62%
FI3	37	15%	393	19%	10	16%
FIGr2	2	1%	13	1%	1	2%
Flint+Sand	4	2%	29	1%	3	5%
FIQg2	1	<0.5%	2	<0.5%	1	2%
FIQs2	3	1%	27	1%	2	3%
Grog (Gr2)	1	<0.5%	8	<0.5%	1	2%
Quartzite (QtQs2)	1	<0.5%	29	1%	1	2%
Sand	15	6%	221	11%	3	5%
Qs2	3	1%	30	1%	2	3%
QsVe2	12	5%	191	9%	1	2%
Total	274		4309		67	

Table 12: Prehistoric pottery from Compound 8. Percentages are by total of period assemblage

Early Bronze Age

4.2.4 A single 37g sherd of early Bronze Age pottery was found, in the evaluation in a ditch in evaluation Trench 11. It is an undecorated body sherd in fabric GrFI3 and has a slight angle or shoulder possibly from a Collared Urn.

Middle Bronze Age

4.2.5 Sherds from just two or three middle Bronze Age vessels were found, but account for half of the assemblage by weight (2174g). Two large, freshly broken joining rim sherds of a Deverel-Rimbury Bucket Urn (1048g) were found in fill 2165 at the bottom of feature 2162 that cut waterhole 2167 (Fig. 22.1). The vessel is in coarse fabric Fl4, has a rim diameter of 42cm and a fingertipped cordon, a line of fingertipping on the rim top and a line of perforations below the rim made from the outside that do not go all the way through the vessel wall. Some 12% of the rim circumference is present, although more than this amount of the vessel is represented.

4.2.6 The other clear middle Bronze Age vessel is also in fabric Fl4. This is the base with a diameter of c 32cm weighing 1070g which fragmented into 26 sherds. This was found between the natural and subsoil during the stripping of the site not within any recognisable feature, 16m to the south of feature 2167/2162.

4.2.7 Four sherds (56g) of Fl4 were found in the upper fill of waterhole 2119 in association with late Bronze Age material. It is uncertain if they are residual.

4.2.8 Four sherds (9g) were found in feature 2167 stratigraphically below the large Deverel-Rimbury sherds, including two in fine fabric Fl1 that would be appropriate for a Globular Urn, although no other indication that these belonged to such vessels were apparent. The other two sherds are in late Bronze Age fabric Fl2.

Late Bronze Age

4.2.9 Some 241 sherds (2098g) of late Bronze Age pottery were found from 63 contexts.

4.2.10 About 90% of the material is in fabrics containing just flint, with smaller amounts containing flint and grog, flint and quartz sand, and flint and glauconitic sand. Eighteen sherds do not contain any flint, instead having grog, sand, quartzite and sand, or sand and organic matter as their fabric. Of these vessels not containing flint most are formless body sherds, although the vessel in fabric QsVe2 is a shouldered jar, and that in GrFl3 is probably also a shouldered jar.

4.2.11 The most common fabric is medium-grade Fl2, comprising about two-thirds of the late Bronze Age assemblage. This is distinguishable from middle Bronze Age fabrics as it is typically coarser than Globular Urns (not clearly present at the site) yet finer than Bucket Urns (found at the site in fabric Fl4). Fabric Fl2 also tended to be thin-walled and well-fired, particularly characteristic of the late Bronze Age. Smaller amounts of fine fabric Fl1 are all undiagnostic body sherds but some might belong to middle Bronze Age Globular Urns, especially as three sherds were found in middle Bronze Age feature 2167/2162, with the other five in late Bronze Age features. Fabric Fl3, the second most popular fabric, is coarser than Fl2 and the two different late Bronze Age forms are made from it.

4.2.12 Just two different forms are identifiable. There are five ovoid vessels with incurving necks/rims (hook rim jars; Fig. 23.4, 6, 9-10), and five shouldered jars which, where present, usually have out-curving rims (Fig. 22.3, 22.7). Both forms are found in fabrics Fl2 and Fl3, with a shouldered jar also in QsVe2. The rim diameters of four of the ovoid vessels can be measured, and these are 18, 19, 20 and 22cm. The diameter of one shouldered jar can be measured, and this is 28cm. The EVE for ovoid vessels is 0.26, and just 0.05 for shouldered jars.

4.2.13 Five vessels have internal charred residue, none substantial enough for radiocarbon dating. Two are on shouldered jars, the others on formless body sherds.

4.2.14 Six of the vessels are lightly burnished, all in minority fabrics, FI1, FIGr2, FIQs2, Qs2 and QtQs2. Vessels in the main fabrics, FI2 and FI3, are not afforded this surface treatment. A fingertipped applied cordon, possibly on a shoulder, was found, and vertical smoothing marks on another body sherd. A line of perforations is present below the rim of a vessel with an incurving neck/rim. These perforations went both completely and only partly through the wall. Another vessel of the same form has a hole beneath the rim.

4.2.15 Seven of the vessels are decorated, three with fingertip impressions on the shoulder or body, three with similar impressions on the rim top, and one with a fingertipped cordon. A body sherd in fabric FI2 has an unusual, incised checkerboard decoration (Fig. 23.5).

Key contexts

Waterhole 2167/2162

4.2.16 This was the only feature dated to the middle Bronze Age. The earlier cut, 2167, produced four undiagnostic sherds (9g) of pottery, both from fill 2168 and associated with the articulated cattle burial. These are two sherds each in fabrics FI1 and FI2. Fabric FI1 is appropriate for middle Bronze Age Globular Urns, although there are no other indications that this belonged to a Globular Urn. The other two sherds are in fabric FI2 which is otherwise late Bronze Age. Feature 2162 cut 2167 to the level of the cattle burial. The lower fill, 2165, produced two very large sherds of Deverel-Rimbury Bucket Urn that must have been placed (Fig. 22.1), alongside a 30g sherd possibly belonging to a shouldered jar with a fingertipped shoulder in fabric FI2 (Fig. 22.2). If it is a shouldered jar, the form and fabric of this should be late Bronze Age, suggesting the deposit dates to the period of the transition between middle and late Bronze Age styles. Upper fill 2163 produced a late Bronze Age ovoid vessel (Fig. 23.9) and a fingertipped rim top in fabric FI2, and two small sherds each in fabrics FI1 and FI2.

Rectangular structure 2244

4.2.17 The rectangular structure produced just three undiagnostic body sherds of pottery. A 24g sherd in fabric FI2 was found in the upper fill of beamslot 2295, and two sherds (13g) in fabric FIGr2 was in the only fill of posthole 2287.

Pit group 2423

4.2.18 The group of four small intercutting pits produced up to 10 vessels across 36 sherds (359g), including a shouldered jar (Fig. 22.3), an out-turned rim, and a fingertipped cordon. Two radiocarbon dates were obtained, probably belonging to the first half of the 10th century cal BC (Table 22).

Discussion

4.2.19 The assemblage is modest but is useful largely because of its associations and radiocarbon dates. This falls into two elements: the material from waterhole 2167/2162 and that from the rest of the site. The sherds in fabric FI2 associated with the cattle burial in 2167 are of limited use, but the later feature 2162 produced large Deverel-Rimbury sherds that cannot be residual, alongside a possible shouldered jar that might typologically be late Bronze Age, with an ovoid jar in the fill above, also typologically late Bronze Age. This might be a

snapshot of the transition between Deverel-Rimbury and post-Deverel-Rimbury. Shouldered jars might be more typically later in the late Bronze Age sequence (see below), but can occur earlier, for example at Tinney's Lane, Dorset (Tyler and Woodward 2013a, Type 5), dated to the later 12th to 11th century cal BC, albeit in a minor capacity. Unfortunately, a radiocarbon date could not be obtained for this association, but the dates elsewhere on the site suggest late Bronze Age activity began at the end of the 11th century cal BC. The absence otherwise of diagnostic middle Bronze Age material suggests that feature 2167/2162 belonged to a period before the activity sampled by the radiocarbon dates, although the presence of some pottery consistent with the remainder of the assemblage might suggest there was not a significant gap between the pottery deposition in 2167/2162 and the radiocarbon dates. A date somewhere in the 11th century or perhaps earlier might then be appropriate, although it should be stressed that no independent dating is available for this association. An 11th century date would overlap with late Bronze Age assemblages (eg Huntsman's Quarry, Worcestershire: Jackson 2015; Tinney's Lane: Best *et al.* 2013; Eynsham Abbey, Oxfordshire: Barclay *et al.* 2001).

4.2.20 Understanding of the end date of Deverel-Rimbury is not well understood. At Heathrow T5, the field system associated with Deverel-Rimbury pottery ended in the 11th or 10th century cal BC, probably *1060-960 cal BC (68% probability; Healey et al. 2010, 22)*. This is very similar to Bestwall Quarry, Dorset, where radiocarbon dates suggest Deverel-Rimbury also ended in the 11th or 10th century cal BC, possibly overlapping with late Bronze Age pottery for one or two generations (Woodward 2009, 265-6). Modelling dates from southern Wessex gave a similar span, probably ending before the middle of the 10th century cal BC (Woodard 2009, 266). Although not as well dated, the suggestion from Compound 8 that the transition between Deverel-Rimbury and post-Deverel-Rimbury was in the 11th century accords with this wider picture.

4.2.21 Apart from waterhole 2167/2162, the rest of the pottery dates more comfortably to the late Bronze Age. Eight late Bronze Age radiocarbon dates were obtained, five from rectangular structure 2244 that produced a small undiagnostic pottery assemblage, one from aceramic cremation pit 2057, and two from pit group 2423 that contained a representative sample of the wider late Bronze Age pottery assemblage. The radiocarbon dates fall in a tight range, with a Bayesian model suggesting that late Bronze Age activity was probably restricted to the decades either side of 1000 cal BC, probably focusing on the early 10th century cal BC. The restricted chronology of the activity as suggested by the radiocarbon dates accords with models of late Bronze Age settlement that see many sites as short lived, perhaps single generational (Brück 2007; Davies 2018, 25-43), suggesting that the pottery assemblage could be regarded as essentially 'closed', representing a broadly contemporary group. The presence of just two different pot forms might support this, although it is complicated by the middle Bronze Age presence demonstrating either a more extended period of use or more than one use of the site in the later Bronze Age.

4.2.22 The late Bronze Age assemblage can be readily compared with dated assemblages in the Thames Valley and beyond. This information derives from a wider study of late Bronze Age pottery by the author (Davies in prep.). Ovoid jars are understood to be more common in the early part of the late Bronze Age, usually being the most popular form in assemblages radiocarbon dated to before c 1000 cal BC (Huntsman's Quarry: Woodward and Jackson 2015; Eynsham Abbey: Barclay 2001, form V2; Reading Business Park/Green Park Area 3000A: Hall

1992; Morris 2004, Types R11+R12; Tinney's Lane: Tyler and Woodward 2013a, Types 3+4), as well as those radiocarbon dated to the 10th century cal BC (Hartshill Copse: Morris 2006, 386–7; Tremough, Cornwall: Quinnell 2015, fig. 3.4.10–13, 18; Scarcewater, Cornwall, dating c 1050–950 cal BC: Quinnell 2010, 107, fig. 53.25). The form appears to fall from favour during the later 10th century cal BC, being replaced by a wider variety of forms of which the shouldered jar (usually with an out-turned rim) plays a major part. This can be seen for example at sites radiocarbon dated to the later 10th or 9th century (Bestwall Quarry settlements 2+3: Woodward 2009; Runnymede, Surrey: Longley 1991; Needham 1996), and those with Ewart Park associations (Caesar's Camp, Greater London: Grimes and Close-Brooks 1993; Mucking North Ring, Essex, also with radiocarbon dates that could belong in the 9th century: Barrett and Bond 1988). This accords well with the chronological position of the Compound 8 assemblage, probably belonging largely to the early 10th century cal BC when ovoid jars were being replaced by shouldered jars and prior to new forms largely of the 9th century cal BC.

Illustration catalogue (Figs 22–3)

1. Bucket Urn (MBA); Fabric: FI4; Feature 2162, bottom fill 2165
2. Possible shoulder jar; Fabric: FI2; Feature 2162, bottom fill 2165
3. Shouldered jar; Fabric: FI2; Pit group 2423, pit 1400005, upper fill 140003, vessel (v)166
4. Ovoid jar; Fabric: FI2; Pit 2042, lower fill 2043, v4
5. Sherd decorated with checkerboard pattern; Fabric: FI2; posthole 2050, fill 2051, v.6
6. Ovoid jar, hole beneath rim; Fabric: FI2; Roman ditch 2419, cut 2069, fill 2070, v17
7. Shouldered jar; Fabric: QsVe2; Pit 2094, fill 2095, v22
8. Ovoid jar; Fabric: FI2; Waterhole 2119, upper fill 2123, v28
9. Ovoid jar; Fabric: FI2; Feature 2162, upper fill 2163, v30
10. Ovoid jar; Fabric: FI3; Roman ditch 2418, cut 2252, fill 2253, v39

4.3 Roman and post-Roman pottery by Edward Biddulph

4.3.1 Eleven sherds of Roman or post-Roman pottery were recovered from the evaluation and excavations (Table 13).

4.3.2 Ditch 2418, phased to the Roman period, contained two sherds (contexts 2068 and 2261), which included a jar rim in reduced ware (R30) that was dated to the mid-1st to mid-2nd century AD. A similar date can be given to a sherd of Alice Holt/Surrey ware (fabric R39) collected from Roman ditch 2412 (context 2086). A sherd of sandy oxidised ware (O20) from Trench 6, ditch 600003 (context 600004) may be residual, as this feature could be post-medieval in date.

4.3.3 Ditch 2619, phased to the Roman period, contained a sherd of chaff-tempered ware (Z15) dating to the early/middle Anglo-Saxon period; sherds of Roman-period reduced ware (R30) found with it must be residual. The presence of chaff-tempered pottery is consistent with Anglo-Saxon assemblages in the region; it can be noted, for example, that chaff-

tempered pottery was predominant in Anglo-Saxon assemblages from the Maidenhead, Windsor and Eton Flood Alleviation Scheme and the Eton College Rowing Course project (Blinkhorn 2002). A sherd of pottery from Trench 11, ditch 1100012 (context 1100013), phased to the medieval period, is tentatively identified as a quartz-tempered ware from the production site at Camley Gardens near Henley and dates to the 13th–15th century, probably in this case the earlier part of the range (J Cotter pers. comm.).

4.3.4 Though small, the assemblage points to Roman and Anglo-Saxon activity in the vicinity of the site. The scrappy nature of the assemblage, as suggested by the absence of large groups, the paucity of rims or other diagnostic elements, and presence of residual pottery, suggests that pottery deposition was incidental to the filling of the features, for example through agricultural processes.

Context (Group)	Fabric	No. sherds	Weight (g)	Form	Date
2068 (2418)	Medium sandy reduced ware (R30)	1	23	Medium-mouthed jar rim (10% present)	c AD 43–150
2070 (2418)	Medium sandy reduced ware (R30)	1	3		c AD 43–410
2073 (2619)	Medium sandy reduced ware (R30)	4	51		c AD 410–850
	Chaff-tempered ware (Z15)	1	13	Body sherd, jar or bowl	
2086 (2412)	Alice Holt/ Surrey ware (R39)	1	9		c AD 43–160
2261 (2418)	Sandy oxidised ware (O20)	1	47	Jar base	c AD 43–410
600004 (600003)	Sandy oxidised ware (O20)	1	8		c AD 43–410
1100013 (1100012)	Coarse quartz-tempered ware (Z20), possibly Camley Gardens	1	4		c 1200–1500
Total		11	158		

Table 13: Roman and post-Roman pottery from Compound 8

4.4 Fired clay by Alex Davies

4.4.1 The fired clay comprises 80 pieces weighing 1276g. This is all amorphous, except a possible pyramidal ‘loomweight’ from rectangular structure 2244. All the fired clay is from late Bronze Age contexts, except an undiagnostic 10g piece from Roman ditch 2418.

4.4.2 A 108g fragment was recovered from posthole 2287 of rectangular structure 2244, measuring 64 x 55mm and 48mm thick. This had one face that was raised in the centre (probably a result of being poorly formed) but was broken along each of its sides and the reverse. No clear perforation was present, although it appears to be from an object rather than a structural fragment or from an oven or hearth. Given the late Bronze Age context it is most likely from a pyramidal ‘loomweight’. The fabric is sandy with some rare large pieces of chalk, quartzite and unburnt flint, and the piece is orange in colour. The posthole, like all features associated with structure 2244, contained burnt flint, and charcoal is also noted from the fill. The charcoal from a related feature, beamslot 2295, was noted to be heavily encrusted

with fired clay fragments suggesting both the fired clay and charcoal were part of a burnt structure, although it is uncertain if this related to the possible 'loomweight'.

4.4.3 A large collection of 44 pieces (1038g) came from the upper fill of pit 2357 that cut a series of waterholes. The largest piece measures 100 x 55mm and 55mm thick. Some of the pieces show surviving surfaces, but there is very little indication of what the fired clay originated from. Fabric was similar to that of the possible 'loomweight' from the rectangular structure.

4.4.4 The other late Bronze Age fired clay totalled 34 pieces (120g) and was from four contexts: only fill 2035 from intercutting pit group 2423, middle fill 2120 from waterhole 2119, only fill 2151 from charcoal-rich pit 2150 that might be related to the possible burnt mound, and sole fill 2075 of pit 2074. This material is amorphous, some has some surface and some with possible finger marks. All are in sandy fabrics and primarily of orange colour, except that from 2150 which is black. The fired clay from 2150 did not have any surface or finger marks.

Discussion

4.4.5 The fired clay assemblage is difficult to interpret as none of the material was clearly diagnostic. The only possible recognisable object was a 'loomweight' from a posthole belonging to rectangular structure 2244. The function of these objects is not firmly established and even if it was more clearly identifiable its presence is not evidence for weaving within the structure as the object may be hearth or kiln furniture (Poole 1995; 2000; Tyler and Woodward 2013b, 53–4).

4.5 Ceramic building material by Kirsty Smith

4.5.1 A very small quantity of ceramic building material (CBM) was recovered. This was from furrow 2049 and rectangular pit 2107 (fill 2108). The material is poorly preserved, consisting of small, moderately to heavily abraded fragments, with no complete dimensions surviving except for thickness. The CBM is medieval/post-medieval in date. This was recorded following the methodology set out for Compound 3.

4.5.2 A medieval/post-medieval flat tile fragment was found in context 2108, pit 2107. This was made from a pinkish red-orange sandy fabric, containing moderate–frequent medium–coarse quartz sand. The fragment contained occasional small red iron oxide inclusions less than 1mm long, calcareous inclusions less than 0.1mm long and occasional tiny specks of mica less than 0.1mm long. The top and bottom surface of the tile was intact, but no edges survived. The fragment was 11mm thick.

4.5.3 The two indeterminate fragments of probable medieval/post-medieval date from furrow 2049 were also made from a pinkish red-orange sandy fabric containing moderate–frequent medium–coarse quartz sand. These fragments also contained calcareous inclusions less than 0.1mm long and occasional tiny specks of mica less than 0.1mm long but had no red iron oxide inclusions. One of the fragments had a slight curve to it so it is possible it formed part of a ridge tile. The larger fragment was 6mm thick.

4.6 Human bone by Mandy Kingdom

Introduction and provenance

4.6.1 The human bone retrieved from the excavation consisted of a single unurned cremation deposit (2058) from pit 2057. The pit had been truncated in the recent past by agricultural activity and was overlain by modern plough soil 2032. A radiocarbon sample on bone from deposit 2058 (sample 2024) produced a late Bronze Age date of 1110–920 cal BC (SUERC-97882; Table 22).

Methodology

4.6.2 The cremation deposit was recovered, processed and analysed in accordance with published guidelines (McKinley 2004). In the field, the deposit was subject to whole earth recovery and excavated in two spits (Table 14) with a maximum depth of 0.16m at its north end.

4.6.3 Processing involved wet sieving each sample individually, to sort them into >10mm, 10–4mm, 4–2mm and 2–0.5mm sized fractions. The >10mm and 10–4mm sieve fractions were fully sorted, separating the burnt bone from the extraneous material such as stones. Due to the amount of bone present it was not viable to fully sort the 4–2mm fractions. Instead, a 100g 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 (Table 16). No material was recovered from the 2–0.5mm sieve fractions and the residues were discarded.

4.6.4 All bone was analysed to record colour, weight and maximum fragment size. 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 in the deposit. The bone fragments were also examined macroscopically for evidence of pathology and trauma.

Results

4.6.5 A summary of the osteological findings with the data for both samples/spits combined is presented in Table 15, with full details available in the archive.

Bone weights

4.6.6 The total weight of the bone was 280.1g (including the weights estimated for the 4–2mm sieve fractions; Table 16). This is well below the expected weight of one individual from a modern cremation (1650g: McKinley 2000, 269) and approximately a third to a half of the weight reported from archaeologically recovered cremation deposits (600–900g: McKinley 2013, 154). Nearly 65% (181.8g) was recovered from spit one (sample 2024).

Fragmentation

4.6.7 The degree of fragmentation of the deposit is presented in Table 17 and is expressed as the proportional weight of bone from each sieve fraction.

4.6.8 The deposit was highly fragmented. The highest proportion of bone weight was from the 4–2mm fraction (52.2%) followed by the 10–4mm fraction (43.7%). The largest bone fragment from pit 2057 was a cranial vault fragment measuring 24.3mm.

4.6.9 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 (urned versus unurned); the burial and backfilling processes; and any post-burial disturbance or truncation (ibid.).

Skeletal representation

4.6.10 As is often seen in archaeological cremation deposits, the proportion of unidentified bone outweighed that of identified bone from both samples. Due to the high fragmentation noted above only 10% of the remains were identifiable to a skeletal region. The greatest proportion of identifiable bone from both samples was cranial vault (9.4%), reflecting the fact that even with small fragments the bone from this region is easier to identify than other areas.

Colour of the cremated bone

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

4.6.12 The burnt bone from pit 2057 was predominantly white in colour (95%). The remainder (5%) was grey and mainly comprised unidentified joint surfaces. Thickness of soft tissue varies across the body and cremation of the bone beneath cannot commence until the overlying tissue has been removed (McKinley 2013).

Demography

4.6.13 No repeated elements were observed and therefore the deposit is considered to represent a MNI of one individual. As noted above, sex estimation was not possible due to the absence of any sexually diagnostic traits.

4.6.14 Although there were no specific age indicators in either sample, the thickness of the cranial vault fragments and the morphology of the remaining fragments including fragments of joint surfaces would suggest these were adult or later adolescent remains.

Pathology and non-metric traits

4.6.15 No pathology or non-metric traits were observed.

Pyre/grave goods

4.6.16 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, charcoal was observed within the trabecular structure of bone fragments, suggesting they had been

surrounded by a charcoal-rich environment. There was also frequent charcoal observed in both sample 4–2mm residues.

Discussion

4.6.17 Cremation appears to have been the dominant funerary practice throughout the middle Bronze Age and into the late Bronze Age (Brück 2017). The isolated late Bronze Age cremation pit (2057) contained the partial remains of at least one adult or older adolescent individual. Other observations (eg demographic and pathological) were precluded by the low bone weight and highly fragmented nature of the bone.

4.6.18 The bone weight (280.1g) was well below that expected (600–900g) for an archaeologically recovered adult cremation burial (McKinley 2013, 154). Archaeological deposits of cremated bone with low weights are a common finding and are not limited to any time period. Such deposits have been termed cremation-related deposits, rather than formal cremation burials, to reflect the fact they might represent cenotaph burials, where only a token amount of bone was deposited, or redeposited pyre debris, which generally comprises a mixture of bone fragments and fuel waste (McKinley 2004, 10). The present deposit included frequent charcoal, so may represent redeposited pyre debris. However, because of the truncation/disturbance by past agricultural activity, it is impossible to say how much of the deposit has been lost as a result and how representative the excavated material is of the original deposit.

4.6.19 The overall white colour of the bone indicates that the body was placed on the pyre in such a way as to maintain a good oxygen supply and high temperature (>600°) (McKinley 2013, 158) during the cremation. Only a few joint surfaces were grey in colour suggesting that these areas were less exposed to the heat, probably as a result of the thickness of soft tissue and cartilage and/or how they were positioned on the pyre.

Feature	Ctx	Sample no.	Description	Soil/deposit type	Deposit depth
2057	2058	2024	Spit 1 (upper 0.05m of deposit)	Dark grey sandy silt with frequent charcoal and burnt bone throughout spits	0.16m at thickest
		2025	Spit 2 (lower half of deposit 0.05-0.16m)		

Table 14: Summary of cremation deposit

Ctx (sample no.)	>10mm (% of total weight)	10-4mm (% of total weight)	4-2mm (% of total weight)	Total weight	Maximum fragment size	Identified elements	Colour	MNI, age, sex, pathology etc.
2058 (2024/2025)	11.7g (4.2%)	122.3g (43.7%)	146.1g (52.2%)	280.1g	24.3mm	Cranial vault, vertebral	White (95%) Grey (5%)	MNI = 1 Sex unknown

			Est.		(cranial vault fragment)	arch, rib, radial shaft,		Adult unspecified (>18 yrs)
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Table 15: Summary of osteological findings

Sample no.	Total weight of unsorted 4-2mm fraction (A)	Weight of bone in a 100g sample (B)	% bone weight calculated (B/20 x 100) (C)	Estimated weight of cremated bone in unsorted 4-2mm fraction (C/100 x A)
2024	358.1g	27.3g	27.3%	97.8g
2025	927.9g	5.2g	5.2%	48.3g

Table 16: Bone weight calculations for the unsorted 4–2mm fractions

Sample no.	>10mm (% of total sample weight)	10-4mm (% of total sample weight)	4-2mm (% of total sample weight)	Total weight per sample	Total weight
2024 (spit 1)	6.4g (3.5%)	77.6g (42.7%)	97.8g (53.8%)	181.8g	280.1g
2025 (spit 2)	5.3g (5.4%)	44.7g (45.5%)	48.3g (49.1%)	98.3g	

Table 17: Fragmentation levels from deposit 2058

4.7 Animal bone by Adrienne Powell

4.7.1 The faunal assemblage amounted to 1016 fragments of hand-retrieved bone and a further 17 identifiable fragments extracted from the environmental samples (Table 18). All but three fragments, from the Roman ditches, were recovered from middle to late Bronze Age features, and mainly from the middle Bronze Age waterhole 2167. The methodology follows that described for Compound 3.

4.7.2 The bone is friable and brittle with 90% of the specimens showing fresh breakages. This has inflated the proportion of unidentifiable fragments in the assemblage since although attempts were made to refit broken specimens, few clear conjoins could be made. Bone surfaces tend to be powdery, often flaking and in some cases there is little or none of the original cortical surface left. This has probably affected the survival and recognition of modifications such as butchery marks.

Species	Middle Bronze Age		Late Bronze Age	Late Bronze Age?	Roman	Total
	Hand	Sieved				

Cattle	265	1	7	4	1	278
Sheep/goat				1	1	2
Pig	1	14		1		16
Equid				1		1
Red deer				1		1
Medium mammal	1	1				2
Small rodent		1				1
Unidentified	599		68	64	1	732
Total	866	17	75	72	3	1033

Table 18: Species representation (NISP), Compound 8

Waterhole 2167

4.7.3 This feature produced the only sizeable group, with 96% of the identifiable bone (Table 19). The contents are predominantly cattle remains and comprise a fragmented but largely complete skull; left and right mandibles; complete left forelimb from scapula to phalanges, right forelimb from scapula to proximal carpal row; cervical vertebrae from atlas to sixth cervical; seven thoracic vertebrae, including the twelfth and thirteenth; all six lumbar vertebrae and the first sacral vertebra; nine each left and right ribs and two sternbrae.

4.7.4 Only the lumbar vertebrae and the left radius and ulna were clearly in articulation in the ground (Plate 2); the dismembered forelimbs had been deposited at one end of the feature, the axial elements adjacent and the skull situated on top. Butchery evidence occurred in the form of two transverse cutmarks on the right occipital condyle; the striated and relatively U-shaped profile of the cuts suggests the responsible blade may not have been very sharp. Slightly more ambiguous marks are present on the internal dorsal surface of the articulating cranial facet of the atlas, parallel and extending inwards from the lateral edge. These are relatively wide and shallow and could possibly be rodent gnawmarks. However, the cutmarks present on the corresponding condyle reinforce the interpretation of these specimens as butchery marks, both indicating the removal of the head. It is likely that the post-depositional processes which rendered the bone surface friable resulted in the cutmarks becoming less recognisable. Only one example of carnivore gnawing was noted; in conjunction with the presence of body parts still in articulation, this suggests rapid burial while some soft tissue remained.

4.7.5 Although the remains are largely disarticulated, the evidence supports the presence of a single individual. The left forelimb elements distal to the scapula readily articulate, the right forelimb elements are less complete and only the radius, ulnar and accessory carpals can be shown to articulate. The proximal radii are fused and the distal humeri are partially fused suggesting an age of around 12–18 months (Silver 1969). The upper end of this range is consistent with the age suggested by both mandibles, which show the M2 in early wear at wear stage 'b' and hence would have come from an animal between 18–30 months old (Halstead 1985). Measurements would not usually be taken on immature bones but in this case it was necessary, in order to investigate whether left and right elements could plausibly be from the same animal. The available measurements do in fact confirm this likelihood (Table 19). Finally, both scapulae exhibit similar sub-chondral lesions in the middle of the glenoid: the left bears a small deep pit 1.7mm in diameter whilst the right shows a more developed case with two such pits joined by a deep narrow cleft. These are typical of osteochondrosis

which although of unclear aetiology, is often seen in younger animals going through a rapid growth phase. The right horn core, which was the more complete, is almost straight and has an oval basal cross section. The shape could indicate a male (Grigson 1976; 1982) but in view of the youth of the individual this is a conclusion which should remain tentative.

Element	Side	Measurement			
		Basal circ.	Greatest basal diam.	Least basal diam.	Length of outer curve
Horncore					
	Right	111	40.7	30.6	63
Mandible		Length of premolar row	Height of mandible in front of M ₁	Height of mandible in front of P ₂	
	Left	71.6	46.3	28.9	
	Right			28.9	
Scapula		SLC			
	Left	37.3			
	Right	37.2			
Humerus		BT	HT	HTC	
	Left	65.5	38.5	28.1	
	Right	65.6	39.7	28.6	

Table 19: Measurements of cattle skeleton, Compound 8

4.7.6 In addition to the cattle remains, a small number of pig bones were present. These comprise fragments of left and right articulating mandibles, in which the dp4 was in wear and the M1 showed enamel wear only, suggesting an animal probably around seven months old, and an unfused first phalanx which could have come from the same animal. The medium mammal specimens are ribs from a young animal which likewise could be from the pig. It is possible that more of this animal could have been deposited originally and that the burial environment which has left the larger and robust cattle bones friable has destroyed the more fragile pig bones, leaving little but the mandible and teeth which are the most resistant to attrition.

Late Bronze Age

4.7.7 The late Bronze Age pits and waterholes produced seven identifiable fragments, all cattle and mainly hindlimb elements except for two mandible fragments. One of the latter, consisting of the diastema and symphysis only, came from a particularly large animal, raising the question of this being a specimen of aurochs (*Bos primigenius*). However, the fragment was not sufficient to enable any standard measurements to be taken for comparison with contemporary animals and the possibility that this is a relatively large domestic animal cannot be excluded.

4.7.8 The remainder of the material has evidence for a range of ages in the animals present: a right metatarsal shaft has the porous texture characteristic of young animals although it was not small enough to be considered neonatal; a fused distal tibia and distal femur would have come from animals older than two and a half and four years, respectively (Silver 1969); a

mandible with a worn but crown-damaged M3 had both M1 and M2 in advanced wear (stage 'l') would have probably come from an old adult (Halstead 1985).

4.7.9 Three specimens showed dog gnawmarks.

Late Bronze Age?

4.7.10 Only eight identifiable fragments were recovered from the pits and waterholes of this phase, of which half were cattle. These include a distal humerus shaft, a fused proximal radius, a radius fused both proximally and distally and a metatarsal shaft fragment. The sheep/goat specimen is an M1 or M2 and the pig specimen is a fragment of mandible. In addition to the main domestic mammals, there is a single equid incisor, in wear and showing a pit on the cementum of the infundibulum which is probably caries; and a red deer (*Cervus elaphus*) distal humerus. Measurements on the latter (BT= 56.2mm, HT=41.0mm, HTC=29.9mm) suggest a large individual. Few comparative data are available as red deer is usually represented in prehistoric assemblages by antler and waste bones rather than prime meat elements. However, this specimen is comparable with the largest specimen reported from the Neolithic assemblage at Durrington Walls, Wiltshire (Harcourt 1971); it is probably from a mature stag.

Roman

4.7.11 The two specimens from the Roman ditch fills comprised a fragment of cattle mandible from a subadult individual, the dp4 close to being shed and the M2 at wear stage 'd'; and a shaft splinter from a sheep/goat radius.

Discussion

4.7.12 The assemblage is not large enough to allow meaningful statements about animal husbandry, especially since it is likely that the burial environment may have adversely affected the survival of the smaller bones of sheep/goat and pigs and of any immature animals.

4.7.13 The group from the middle Bronze Age waterhole is the most interesting feature of the assemblage. Partial or complete cattle skeletons comprise the most frequent type of associated bone group deposited in the middle Bronze Age (Davies in press; Morris 2011) and multiple burials have been excavated at the nearby sites of Kingsmead Quarry, Horton and Riding Court Farm, Datchet (Lorrain Higbee pers. comm.; Chaffey and Barclay 2013). The range in age and completeness of the animals deposited highlights variability in practice even within the same assemblage although none appear to have been butchered, dismembered and then deposited as a unit like this specimen.

4.7.14 The cattle remains came from a young animal, just at prime age for slaughtering for meat, and the deposition of its butchered, incomplete skeleton in conjunction with bones from a young pig may represent the residue of a small feasting event. The absence of the hindquarters, which would have represented a sizeable proportion of the meat yield from the carcass, is noteworthy. The immature nature of both animals allows speculation about the time of year of the event. A spring birth for the possible bull would suggest a late autumn or early winter slaughtering. However, recent isotopic work has suggested that seasonally unrestricted birth seasons in at least some herds were present by the early Bronze Age (Towers *et al.* 2011). The presence of the immature pig does support a late autumn/early winter timing: although pigs can breed twice a year, there is no clear evidence for this occurring before the Roman period (Ervynck and Dobney 2002).

4.8 Archaeobotanical remains by Denise Druce

Introduction

4.8.1 The bulk samples were first assessed for the presence of archaeobotanical material. Limited charred plant remains were present, but samples were analysed on the basis of their charcoal. The methodology was as described for Compound 3 above.

4.8.2 Twenty-four bulk samples were processed and assessed for the presence of archaeobotanical material. Following assessment, six of the samples were selected for further charcoal analysis to provide information on woodland resources and wood and fuel use during the late Bronze Age. Selection was based on the abundance and preservation of the material, and the significance of the feature from which the sample came.

Assessment results

4.8.3 The results of the archaeobotanical assessment are presented in Table 20. Preservation was through charring, and although nearly all the samples contained at least some charcoal, levels of other charred remains were extremely small, being limited to the occasional charred cereal grain and weed seed, a single fragment of barley (*Hordeum* sp.) chaff and rare culm fragments from wild grasses (Poaceae). Two of the features, pit 2063 and posthole 2279 from rectangular structure 2244, produced single wheat (*Triticum* sp.) grains, with characteristics consistent with a free-threshing variety such as bread wheat (*T. aestivum*). Although positively identified bread wheat-type cereals have been recovered from a few sites in southern England (Campbell and Straker forthcoming), the low numbers at this site, coupled with the recovery of possible oat (*Avena* sp.), which became a widespread crop during the medieval/post-medieval period (Greig 1991; Carruthers and Hunter Dowse 2019), suggests some of the charred plant remains may be intrusive.

4.8.4 All the samples contained charcoal, but larger assemblages with common to abundant identifiable (>2mm in size) fragments were limited to several pits (2098, 2150 and 2189), cremation pit 2057 and structural elements of rectangular structure 2244. Levels of charcoal were particularly low in the deposits from waterhole 2167/2162 and Roman trackway ditch 2419, which suggests little settlement debris accumulated in these features. A rapid assessment of identifiable charcoal suggests oak (*Quercus* sp.) dominated most of the samples, coupled with varying amounts of other taxa, including hawthorn-type (Maloideae), blackthorn-type (*Prunus*-type) and alder/hazel (*Alnus glutinosa/Corylus avellana*). The recovery of a single fragment of beech (*Fagus sylvatica*) from beamslot 2308 of the rectangular structure is notable and suggests its presence locally. Charcoal evidence from several sites in southern Britain suggests beech did not become an important tree in the region until the medieval period (Druce 2011), but small quantities of prehistoric beech have been recovered at several sites, including Perry Oaks (Challinor 2006), Heathrow Terminal 5 (Challinor 2010) and the M1 in Hertfordshire (Druce 2012).

4.8.5 Other remains included rare bone fragments in pit 2063 and waterhole 2167, the latter containing the articulated cattle remains, and frequent calcined bone fragments in cremation pit 2057. A single fragment of hammerscale was recovered from pit 2189 tentatively dated to the late Bronze Age although the feature did not produce any datable material. Many of the samples contained comminuted fired clay fragments, possibly from hearth/oven linings,

which was particularly prevalent in Roman ditch 2418, cut 2252. It is possible that this material, along with the comminuted coal and havm fragments, represents modern intrusive soil debris.

Charcoal analysis

4.8.6 The six samples selected for further charcoal analysis comprised deposits from three of the structural features from rectangular structure 2244, a charcoal-rich pit (2098) and the two spit samples from cremation pit 2057, all of which have been dated to the late Bronze Age. The results are presented in Table 21. The taxonomic level of identification varied according to fragment size, state of preservation, and/or observed genera/family. Seven wood types, including three to species level, were recorded.

4.8.7 The analysis data shows that two of the rectangular structure features (posthole 2279 and beamslot 2295), pit 2098 and cremation pit 2058 were dominated by oak wood charcoal. Many of the larger charcoal fragments from beamslot 2295 were heavily encrusted with fired clay/daub fragments, which may indicate its presence here as burnt structural wood. Beamslot 2245 produced a much more mixed charcoal assemblage dominated by non-oak wood. Although much of this charcoal could not be identified to species due to poor preservation, a mix of taxa, consistent with types recorded during assessment, was recorded. This included hawthorn-type, blackthorn-type (including positively identified blackthorn), and rare willow/poplar. Hazel, as opposed to alder, was positively identified. It is unclear why this feature contained a markedly different charcoal assemblage but the deposit contained a very large amount of burnt flint (Fig. 16, s.2055). It is possible the material originates from a specific activity being carried out in the structure, or at least that the burnt flint and charcoal had a functional association.

4.8.8 Poor preservation in the other samples hampered the ability of assessing wood maturity, but where observation was possible the oak charcoal comprised heartwood from mature trees. This was especially true in pit 2098. Late Bronze Age cremation pit 2057 was also dominated by oak charcoal, with a notable number of blackthorn-type, identified as probable wild cherry (*Prunus avium*), recorded in spit 2. This may be significant in the context of pyre wood, in that wild cherry is reputed to have a pleasant aroma when burnt (Edlin 1949).

Discussion

4.8.9 A synthesis of archaeobotanical evidence from many middle and late Bronze Age sites in the region, including the Thames Valley, indicates an increase in cereal cultivation during this period, which is interpreted as representing an intensification in a mixed-arable economy (Campbell and Straker forthcoming). Given this, the lack of charred cereal remains from this site is notable, and although their paucity may be explained by poor preservation, it may also indicate that little in the way of domestic activity concerned with food preparation or cooking took place at the site. It could be argued, of course, that the inhabitants of the site may have kept their living quarters particularly clean, but even then more cereal remains might be expected if food preparation was taking place.

4.8.10 Campbell (1992) suggested that a similar paucity of charred cereal remains from the late Bronze Age site at Reading Business Park site may be due to the site only being occupied on a seasonal basis. This site also comprised a complex of pits, ditches and waterholes. Many

of the deeper pits from this site produced waterlogged remains, including abundant seeds and pods of cultivated flax (*Linum usitatissimum*), which indicates flax cultivation and retting, perhaps during the summer months (Campbell 1992). Campbell stresses, however, that the effects of repeated wetting and drying of the deposits may have caused differential preservation (Campbell and Straker forthcoming), and waterlogged deposits were not present at Compound 8.

4.8.11 Environmental data (molluscs, insect and pollen) from Buckinghamshire and the Middle Thames Valley indicate that extensive clearance had taken place in the region by the middle/late Iron Age, and that many areas had started to witness this trend by the late Bronze Age or even earlier (Kidd 2007). Indeed, molluscan evidence from late Bronze Age deposits at four sites in the Middle Thames Valley indicate predominantly open, grassland landscapes (Robinson 1992). This is somewhat at odds with the charcoal evidence from similarly dated sites in the region, including Compound 8, which show a prevalence for the use of oak (including wood from mature trees), with varying quantities of hawthorn and blackthorn-type, and some hazel and field maple (Boardman 2015). It is conceivable, therefore, that areas of extant mature woodland persisted; the presence of types common to open woodland or woodland edges being consistent with areas of clearance and/or hedgerows.

4.8.12 The dominance of oak wood in cremation pit 2057 is consistent with Bronze Age cremations in the Oxfordshire region, such as Barrow Hills (Thompson 1999), Finmere Quarry (Pelling 2010) and Gravelly Guy (Gale 2004), and from further afield including north-west Kent (Druce 2011). It has been proposed that a single tree or shrub may have been selected for the bulk of the pyre construction (Thompson 1999). On this occasion, the oak appears to have been supplemented by wild cherry wood, which may have served the dual purpose of both packing and incense. Further afield, although oak-dominated Bronze Age cremations in southern Britain appear to be the most common up to date, other species, such as ash and, more recently, hawthorn-type, have also been recorded (Challinor 2009).

Conclusion

4.8.13 Although the paucity of charred plant remains other than charcoal may be due to biases in preservation, the evidence may indicate that little in the way of domestic activity concerned with cereal preparation took place at the site. It is possible that the site was used for another sort of activity, and/or was only occupied during specific months of the year, as suggested for the late Bronze Age site at Reading Business Park. However, the absence of other forms of preservation such as waterlogging, and lack of diagnostic material remains, means that the site has offered little evidence with regards to its function. With regards to other environmental indicators, the site has produced a range of wood charcoal consistent with other late Bronze Age sites in the region, which show a preference for oak wood for both domestic and funerary activities. The presence of a relatively high number of wild cherry charcoal fragments in cremation pit 2057 may indicate the purposeful selection of this aromatic wood for the pyre. Although much of the present environmental evidence from the region indicates a predominantly open, grassland landscape during the late Bronze Age, it is likely that areas of mature woodland persisted, with scrub and hedgerow species supplementing oak wood, for both fuel and construction.

Sample No.	Fill	Cut	Feature type	Group	Phase	Sample size (l)	Flot size (ml)	CPR	Bone fragments	Calcined bone fragments	Coal/havm	Fired clay	Hammer-scale	Charcoal <2 mm	Charcoal >2 mm	Charcoal comments
2001	2037	2036	Pit	2423	LBA	10	30	+ indeterminate cereal grain fragments, glume fragment, indeterminate seed						++++	+	<i>Quercus</i> sp.
2002	2051	2050	Posthole		LBA	10	30							++++	++	<i>Quercus</i> sp.
2003	2064	2063	Pit		LBA	20	30	+ <i>Triticum</i> sp., cf <i>Avena</i> sp.	+		++	+		++++	++	<i>Quercus</i> sp. and diffuse porous (poorly preserved)
2004	2066	2065	Pit		LBA?	40	20				+			+++	+	Poorly preserved, includes cf <i>Maloideae</i>
*2005	2099	2098	Pit		LBA	40	320				+	+		++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous including <i>Maloideae</i>
2006	2151	2150	Pit		LBA?	10	270	+ small culm fragments			++	++		++++	++++	Mostly <i>Quercus</i> sp.
2007	2165	2162	Waterhole?	2415	MBA	40	20				+	++		+++	+	Poorly preserved, includes <i>Quercus</i> sp.
2008	2153	2152	Ditch (part of Roman trackway)	2419	Roman	20	10				+	++		+		
2009	2188	2189	Pit		M/LBA?	10	50						+	++++	++++	Mostly diffuse porous, includes <i>Alnus/Corylus</i> and <i>Prunus</i> sp.
*2010	2246	2245	Beamslot (longhouse)	2244	LBA	10	20				+	++		++++	+++	Poorly preserved, <i>Quercus</i> sp., diffuse porous including <i>Prunus</i> sp.
2011	2168	2167	Waterhole?		MBA	10	<5		+		+			++	+	Includes <i>Alnus/Corylus</i>
2012	2168	2167	Waterhole?		MBA	10	<5		+		+			+++		

Sample No.	Fill	Cut	Feature type	Group	Phase	Sample size (l)	Flot size (ml)	CPR	Bone fragments	Calcined bone fragments	Coal/havm	Fired clay	Hammer-scale	Charcoal <2 mm	Charcoal >2 mm	Charcoal comments
2013	2168	2167	Waterhole?		MBA	20	<5		+		+			++		
2014	2274	2236	Pit		LBA	40	20					+		++	++	Poorly preserved, includes <i>Prunus</i> sp. and <i>Quercus</i> / <i>Fraxinus</i> sp.
2015	2261	2260	Ditch (trackway)	2418	Roman	40	10					+		+	+	<i>Quercus</i> sp. and <i>Prunus</i> sp.
2016	2259	2258	Ditch (trackway)	2418	Roman	40	10				+	+		+		
2017	2253	2252	Ditch (trackway)	2418	Roman	40	10				+	+++		++		
2018	2268	2266	Ditch (trackway)	2418	Roman	20	<5				+	+		+		
*2021	2280	2279	Posthole (Rect str)	2244	LBA	10	20	+ <i>Triticum</i> sp. (possibly free-threshing)			++	+		+++	+++	Poorly preserved, includes <i>Quercus</i> sp. and rare diffuse porous including cf Maloideae
*2022	2296	2295	Beamslot (Rect str)	2244	LBA	10	50	+ <i>Carex</i> sp., cf <i>Fumaria</i> sp.						++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous
2023	2309	2308	Beamslot (Rect str)	2244	LBA	10	15				+			+++	++	Poorly preserved, includes rare <i>Fagus sylvatica</i>
*2024	2058	2057	Cremation pit, spit 1		LBA	20	700			++	+			++++	++++	Mostly <i>Quercus</i> sp.
*2025	2058	2057	Cremation pit, spit 2		LBA	20	350			++				++++	++++	Mostly <i>Quercus</i> sp., rare diffuse porous including Maloideae round wood
600000	600008	600007	Pit		LBA?	20	5				+			+		

Table 20: Archaeobotanical assessment results, Compound 8. Quantifications are based on a scale of + to ++++ where + = <6 items, ++ = 6-25, +++ = 26-100, and ++++ = >100 items. * = sample subjected to further analysis (see Table 21).

Sample No		2005	2010	2021	2022	2024	2025
Context No		2099	2246	2280	2296	2058	2058
Feature		Pit 2098	Beamslot 2245 (Rectangular str 2244)	Posthole 2279 (Rectangular str 2244)	Beamslot 2295 (Rectangular str 2244)	Cremation pit 2057, spit 1	Cremation pit 2057, spit 2
Date		Late BA	Late BA	Late BA	Late BA	Late BA	Late BA
Sample vol (l)		40	10	10	10	20	20
Flot vol (ml)		320	20	20	50	700	350
>4mm charcoal analysed		12.5%	100%	100%	100%	50%	100%
>2mm charcoal analysed		6.25%	100%	100%	25%	1.5%	6.25%
Notes			Deposit contained 30% burnt flint		Possibly structural. Larger fragments encrusted with daub/fired clay		
<i>Cf Corylus avellana</i>	hazel		5	1			
Maloideae	hawthorn-type		3	11	2		
<i>Cf Prunus avium</i>	wild cherry					3	19r
<i>Cf Prunus spinosa</i>	blackthorn		3				
<i>Prunus</i> sp.	blackthorn-type	1	3	1			
<i>Quercus</i> sp.	oak	105h	5h	45	138	144	54
<i>Cf Salix/Populus</i> sp.			1		1		
Indeterminate diffuse porous wood			60				
Indeterminate fragments		3	13	12	1		
No of fragments analysed		109	91	69	141	147	73
Other remains							
Charred cereals				<i>Triticum</i> sp. (cf free-threshing)			
Other charred plant remains					<i>Fumaria</i> sp. x1, <i>Carex</i> sp. x 4, Poaceae culm fragments x2		
Calcined bone fragments						++	++
Daub/fired clay fragments		+	++	+	++		

Table 21: Results of the charcoal analyses from selected features, Compound 8. Charcoal figures are actual counts where h = abundant heartwood, r = abundant round wood. Other remains are quantified on a scale of abundance, where + = <5 items, ++ = 6-25, +++ = 26-100, and ++++ = >100 items

4.9 Radiocarbon dating *by Alex Davies*

4.9.1 The dating strategy focused on the chronology of rectangular structure 2244, incorporating other features of known or suspected late Bronze Age date (Table 22). All high-quality datable material retrieved from the rectangular structure was selected, and Bayesian modelling has been undertaken to narrow the date range and estimate the span of time over which the house and settlement was in use (Fig. 24). Oxcal v.4.4.4 was used.

4.9.2 Five samples from short-lived charcoal were submitted from rectangular structure 2244. These were from the lower fills of beamslots 2295 (SUERC-98184) and 2308 (SUERC-98185), as well as two samples from the only fill of beamslot 2245 (SUERC-98189; SUERC-99321), and one from the only fill of posthole 2279 (SUERC-99322). The samples cover a range of features and contexts. The stratigraphic distribution of burnt flint within the features suggests that the lower fills belong to the construction, and upper and only fills to the use and abandonment of the structure. The samples should therefore be relatively evenly distributed throughout the period of the use of the structure. The archaeological evidence suggests that the structure belongs to a single, continuous phase of use.

4.9.3 The three other radiocarbon results are from unurned cremation deposit 2058 (SUERC-97882), and two from pit 2036 in group 2423 (SUERC-99323; SUERC-99324)

4.9.4 The two results from beamslot 2245 are statistically consistent, shown by a chi-squared test ($T'=0.8$, $df=1$, 5% 3.8). Indeed, all the dates from the rectangular structure are statistically consistent ($T'=4.1$, $df=4$, 5% 9.5) indicating that they could all be broadly contemporary and that none are residual or intrusive to a meaningful degree. Away from the house, the two samples from pit 2036 are also consistent ($T'=0.0$, $df=1$, 5% 3.8), as are all eight dates from the site ($T'=10.6$, $df=7$, 5% 14.1).

4.9.5 A Bayesian model was built placing all the samples in a single phase of activity. Those from the rectangular structure were also assigned a phase within this. The model has good overall agreement ($A_{model}=101.9$). It suggests that the late Bronze Age activity at Compound 8 began *1090–935 cal BC (95% probability)*, probably *1050–980 cal BC (68% probability)*, and ended *1005–880 cal BC (95% probability)*, probably *985–915 cal BC (68% probability)*. The number of samples may be too low for an accurate measurement of the span, but the model suggests that the activity spanned *0–185 years (95% probability)*, probably *0–90 years (68% probability)*. The probability distribution is skewed to zero, possibly suggesting the span is at the beginning of this range (Fig. 25).

4.9.6 The model suggests that the rectangular structure began *1050–910 cal BC (95% probability)*, probably *1010–940 cal BC (68% probability)*, and ended *1050–910 cal BC (95% probability)*, probably *1010–940 cal BC (68% probability)*. The model estimates that the rectangular structure had a span of *0–135 years (95% probability)*, probably *0–65 years (68% probability)*. The probability distribution is skewed to zero, possibly suggesting the span is at the beginning of this range (Fig. 26).

Lab. no.	Material	Context/ Feature	$\Delta^{13}\text{C}$ (‰)	Radiocarbon Age BP	Calibrated Age 95% confidence	Calibrated Age 68% confidence	Posterior Density Estimate 95% probability	Posterior Density Estimate 68% probability
SUERC-97882	Cremated bone: human	Pit 2057 Fill 2058 Sample 2024	-22.0	2843 ± 29	1110-915 cal BC	1050-930 cal BC	1040-925 cal BC	1015-935 cal BC
SUERC-98184	Charcoal: cf <i>Salix</i> / <i>Populus</i>	Longhouse 2244 Beamslot 2295 Lower fill 2296 Sample 2022	-25.2	2802 ± 28	1045-845 cal BC	1000-915 cal BC	1015-920 cal BC	1005-950 cal BC
SUERC-98185	Charcoal: cf <i>Maloideae</i>	Longhouse 2244 Beamslot 2308 Lower fill 2309 Sample 2023	-26.8	2851 ± 28	1115-925 cal BC	1055-930 cal BC	1040-925 cal BC	1015-935 cal BC
SUERC-98189	Charcoal: <i>Prunus</i> sp.	Longhouse 2244 Beamslot 2245 Only fill 2246 Sample 2010	-25.1	2823 ± 28	1055-900 cal BC	1010-930 cal BC	1025-920 cal BC	1010-940 cal BC
SUERC-99321	Charcoal: cf <i>Salix</i> / <i>Populus</i>	Longhouse 2244 Beamslot 2245 Only fill 2246 Sample 2010	-23.7	2856 ± 25	1115-930 cal BC	1055-935 cal BC	1040-930 cal BC	1020-935 cal BC
SUERC-99322	Charcoal: cf <i>Corylus</i>	Longhouse 2244 Posthole 2279 Only fill 2080 Sample 2021	-26.4	2869 ± 25	1125-930 cal BC	1110-1000 cal BC	1050-930 cal BC	1025-935 cal BC
SUERC-99323	Charcoal: <i>Prunus</i> sp.	Pit group 2423 Pit 2036 Only fill 2037 Sample 2001	-23.5	2788 ± 24	1010-840 cal BC	985-900 cal BC	1015-915 cal BC	1005-950 cal BC
SUERC-99324	Charred grain: <i>Triticum</i> sp.	Pit group 2423 Pit 2036 Only fill 2037 Sample 2001	-24.6	2785 ± 20	1010-835 cal BC	990-900 cal BC	1015-915 cal BC	1005-950 cal BC

Table 22: Radiocarbon dates

5 DISCUSSION

5.1 Compound 3, Hurst

5.1.1 The excavations revealed a small middle Iron Age settlement that was unenclosed in its initial phase and subsequently incorporated a sub-square enclosure measuring c 0.25ha. The east-facing entrance of the enclosure was embellished with ‘antenna’ ditches that served to funnel the movement of people and/or livestock. Though the remains of several roundhouses were uncovered, it is possible that no more than two or three of these were in use at any one time. The surrounding evaluation did not uncover contemporary features, and it is likely that the entirety of the settlement has been uncovered. The quantities of finds recovered were fairly low, which may suggest that occupation of the settlement was not particularly intensive or long-lived, though it is also possible that waste was deposited in surface middens, perhaps beyond the excavated area. The sparse quantities of cereal remains and animal bones recovered provide little insight into the economic base of the settlement, though a saddle quern demonstrates that grain processing took place. Fragments of fired clay ‘loomweights’ suggest that weaving was carried out, though such objects have also been interpreted as items of hearth or oven furniture.

5.1.2 A number of middle Iron Age sites in area, especially around the River Loddon and its tributaries the rivers Blackwater and Whitewater, c 10km to the south-west of the site, have produced evidence of iron smelting, and the area was evidently a centre for iron production (Davies 2018, 205–9; eg Matthewsgreen Farm: Ford 2017; Grazeley Road: Ford *et al.* 2013; Sadler’s End, Sindlesham: Lewis *et al.* 2013). No such evidence was found at Compound 3, with a very small amount of possible smithing slag being the only evidence for metallurgy.

5.1.3 Middle Iron Age settlement in the region includes both enclosed and unenclosed sites. Enclosed sites include Thames Valley Park (Smith and Barnes 1997); Larkwhistle Farm, Brimpton (Hardy and Cropper 1999); Old Way Lane, Slough (Ford 2003); Wood Lane, Slough (Entwistle *et al.* 2003); and Eton Rowing Course Area 16 (Allen *et al.* forthcoming). Thames Valley Park and Larkwhistle Farm are very similar in size, form and orientation to Compound 3, all enclosing 0.23–0.25ha with dominant east-facing entrances. Two roundhouses were found within the Larkwhistle Farm enclosure, with one straddling an entrance. A four-post structure was found outside, suggesting an earlier unenclosed phase of settlement. At Thames Valley Park no clear houses were seen although a four-post structure, pits and postholes were discovered. This site began in the middle Iron Age and continued to the middle Roman period. Excavation only sampled the edge of the Old Way Lane enclosure and little is known about it, although it had a similar alignment to Compound 3 with at least one side similar in size. The Wood Lane and Eton Rowing Course Area 16 enclosures are larger at c 0.40–0.45ha. Neither contained clear houses, but pits and postholes were found in both, and four- and six-post structures at Eton. Although settlement evidence in the form of houses is not present in all of these enclosures, other features suggest the enclosures were for settlement rather than for animals, as at Compound 3.

5.2 Compound 8, Datchet

Later Bronze Age

Rectangular structure 2277

5.2.1 The most striking late Bronze Age feature is the rectangular structure, or possible longhouse, 2277. Its possible reconstruction is first discussed, followed by an assessment of later Bronze Age rectangular structures in the region, possible longhouses in Britain, and a comparison of these to developments on the continent.

5.2.2 Despite the features belonging to 2244 appearing to be largely contemporary, the reconstruction of the building is not straightforward, not helped by the rarity of similar structures dating to the late Bronze Age (see below). None of the other possible longhouses have beamslots, with the main structural elements instead being formed from posts and postholes. Beamslots may be distinguished from wall-slots with the former being load-bearing, and the latter probably simply holding the lower part of the wall with the weight being supported by postholes. Wall-slot trenches are known in the region in the late Bronze Age around roundhouses (eg Weston Wood structure 1: Russell 1989, 6), but they are rare and do not appear to have the retaining structural function of beamslots.

5.2.3 We need to look elsewhere for both the regular use of slots and rectangular structures. Early Neolithic longhouses in Britain often include superficially similar rectangular features around the houses, interpreted as holding the external wall or internal partitions (eg Horton, Berkshire: Barclay *et al.* 2012; Symonds 2014; White Horse Stone, Kent: Hayden and Stafford 2006, 25–65; Lismore Fields A, Derbyshire: Garton 1991; Davies 2009; Yarnbury, North Yorkshire: Gibson 2017). However, these trenches appear to have essentially been wall-slots as they are accompanied by postholes that should have taken at least most of the weight of the roof. The beamslots of rectangular structure 2244 differ significantly as they are perpendicular to the main wall, and are short and discontinuous, yet must have been the main supports for the superstructure due to their regular positioning and the lack of otherwise appropriately located postholes. An exception is feature 2317/2315/2313, which might be the remains of a wall-slot. It seems unlikely that simply a series of planks on top of beams in the slots would be structurally sound enough to take the weight of the roof without significant supports from vertical posts. The beamslots may then have functioned in a less straightforward manner.

5.2.4 The square-sectioned beamslots of structure 2244 are of the right shape to have taken horizontal timbers. Vertical timbers taking the weight of the roof could have been morticed into the horizontals in the beamslots, although unless the beams had an additional function it is uncertain why postholes were not simply used instead. It may be that the timbers in each pair of beamslots held a plank on the same alignment as the beamslots, on which further planks were attached perpendicular to these running along the length of the house providing a raised floor. Vertical timbers could also be morticed into the beamslots to support the roof and walls. While there is no direct evidence for the interpretation of a raised floor, it does explain the unusual position, size and orientation of the beamslots. The near total absence of material culture, except burnt flint, from the features associated with the house might support the interpretation of a raised floor, as broken pottery, bone and other waste might not have been as susceptible to working their way into voids created as the posts rotted during the life of the house if the floor was raised and separated from the postholes (Mytum and Meek 2020, 77–8; Reynolds 1995). However, a lack of material can be found at late Bronze Age houses in the region (eg the possible roundhouse at Compound 8; Prospect Park: Andrews and Crockett 1996, 18). Equally, the absence of a preserved floor does not provide evidence either way.

Roundhouses are generally thought to have had earth floors and these very rarely survive truncation.

5.2.5 It remains uncertain why postholes and not beamslots were paired with 2283 and 2295. A pair of short posts in holes 2297 and 2281 could have the same function as that suggested for the beamslots, with a plank being laid on a beam in 2283 and short posts in 2297 and 2281. How the shallow beamslot 2298 functioned, apparently being replaced by posthole 2302 but possibly contemporary with posthole 2300, is less clear. The three internal postholes 2292, 2287 and 2289 were positioned in a triangle in the centre of the structure. Following the interpretation of a raised floor, these could have held short posts and supported the floor, shoring up perhaps after initial construction. Alternatively, the central cell may have been at ground level with the three postholes being load-bearing, and steps up to the other cells with raised floors.

5.2.6 Postholes 2305, 2334 and 2285 lay in line with the outer edge of the beamslots, and presumably were posts associated with the wall. As these posts are typically non-loadbearing they do not need to be sunk into the natural and be archaeologically visible, although they might provide additional support for the eaves. Possible beamslot or wall-slot 2317/2315/2313 is slightly removed from the outer edge of the main beamslots, 0.30–0.75m outside of this. If this was the position of the wall all the way around the structure, it is uncertain why only a short length was preserved, especially one potentially recut twice. This might instead be this line of a lean-to or porch on the south-western side of the house.

Rectangular structures in the late Bronze Age – size and interpretation

5.2.7 While four-post and six-post structures, probably both used for storage, are often found on later Bronze Age sites, larger rectangular features as convincing as 2277 are much rarer. From the Upper and Middle Thames Valley, six-post structures are known from various late Bronze Age sites (Cotswold Community/Shorncote Quarry: Hearne and Adams 1999, 53; Hearne and Heaton 1994, 32; settlement under Grim's Ditch: Cromarty *et al.* 2006, 163; Reading Business Park/Green Park: Brossler *et al.* 2004, 28–9; Moore and Jennings 1992, 27, 39–40; Weston Wood: Russell 1989, 7; Heathrow T5: Framework Archaeology 2010, 202). These are 1.30–5.50m long and 1.10–3.50m wide with areas that are covered by postholes of 2.60–12.50m². The largest six-post structures are 3.50m by 3.50m (Moore and Jennings 1992, 27) and 5m by 2.50m (Hearne and Adams 1999). There are a smaller number of more complex but comparable structures from Cotswold Community/Shorncote Quarry with up to ten posts (Hearne and Adams 1999; Hearne and Heaton 1994, 32) with areas of 8.40–12.25m². The largest of these six-post and more complex rectangular structures have areas equal to only the very smallest late Bronze Age roundhouses in the region (Davies 2018, 24), as a roundhouse with a diameter of 4m has an area of 12.50m². These are best seen as rectangular storage or subsidiary structures rather than houses.

5.2.8 Better examples of possible longhouses rather than storage or subsidiary structures need to be sought from further afield. The closest is one possible example from Weston Wood, Albury, c 31km to the south of the site. Here, a rectangular area that had been levelled into the hillside measuring c 8m by 5m with lumps of carstone defining two of the edges. There were no associated postholes but four hearths and a pit lay within (Russell 1989, 7). Two post-built roundhouses were also found and the area was identified by the excavator as a 'working floor' (Harding 1964, 14), but it may represent a structure without deeply sunk postholes.

5.2.9 More certain post-built rectangular structures that are of more appropriate 'longhouse' size from southern Britain dating to the middle Bronze Age to earliest Iron Age include Barleycroft Farm (Evans and Knight 2000, 97–100; late Bronze Age?), Down Farm (Barrett *et al.* 1991, 198–200; middle Bronze Age), Lofts Farm (Brown 1988, 259–60; late Bronze Age), and Easton Lane (Fasham *et al.* 1989, 36–40; middle Bronze Age). These are summarised on Table 23.

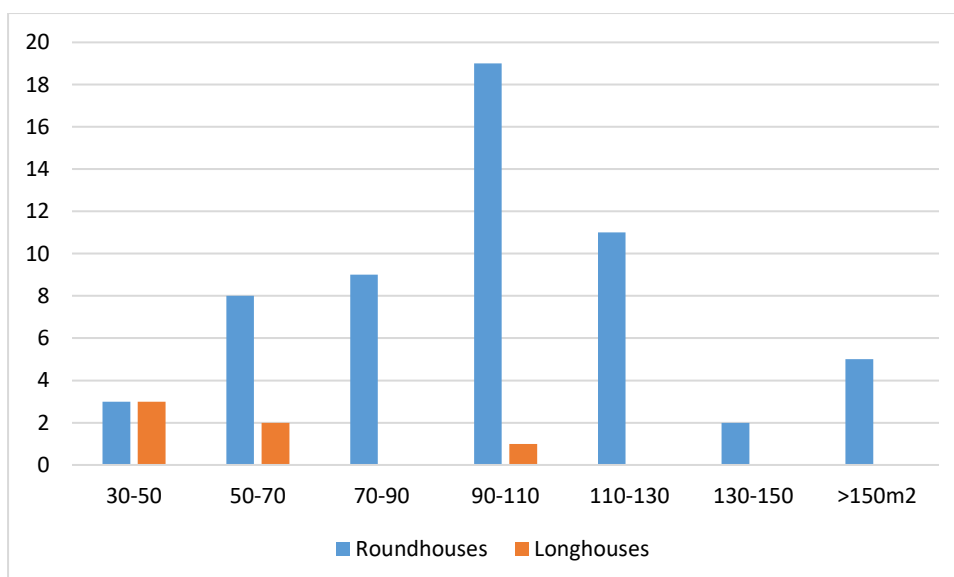
Site	Name	Length (m)	Width (m)	Area (m ²)	Notes	Reference
Lofts Farm, Essex	Structure 2	15.5	2	31	LBA. Two lines of postholes, wall possibly beyond	Brown 1988, 259-60
Weston Wood, Surrey	F56	8	5	40	LBA. Rectangular terraced area, no postholes. Internal hearths. Might be 'working area'	Russell 1989, 7; Harding 1964, 14
Compound 8, Datchet	Structure 2244	11	4	44	LBA. Perpendicular beamslots. Ephemeral wall line	This report
Easton Lane, Hampshire	MS 4010	11.5	4.5	51.75	MBA. Fairly regular rectangle of postholes, with rounded end. Two lines of internal postholes 1.5m apart. Internal postholes structural, external wall line?	Fasham <i>et al.</i> 1989, 36-40
Down Farm, Dorset	Structure F	18	3.5	63	MBA. Three parallel rows of postholes may have supported a plan wall	Barrett <i>et al.</i> 1991, 198-200
Barleycroft, Cambridgeshire	Longhouse	16.5	5.5	90.75	LBA?. Regular rectangle and three lines of internal postholes. Four aisled building with walls defined?	Evans and Knight 2000, 97-100

Table 23: Later Bronze Age long rectangular structures in southern Britain

5.2.10 The largest six-post and related structures mentioned above have an area of 12.50m², the five possible longhouses have areas of 31–90.5m². The Compound 8 house has an area of 44m². These size ranges can be compared against roundhouses of the period. In estimating size, there is a significant problem in the interpretation of the position of the wall. Non-load-bearing elements of timber structures do not need to have earth-fast posts or wall-slots, with the central structural elements of both circular and rectangular structures, where present, much more likely than the outer walls to be archaeologically visible (Guilbert 1981; Mytum and Meek 2020, 17; Reynolds 1995). This is seen in roundhouses of the period, especially those with paired entrance posts external to the main ring ('porches'). Such roundhouses are often best reconstructed as having an otherwise archaeologically invisible or ephemeral wall in line with these outer entrance posts, substantially increasing the floor plan of the houses compared with the structural inner ring (Davies 2018, 289–92; Guilbert 1981). The Compound 8 'longhouse' appears to retain ephemeral evidence of the wall in the three postholes and possible wall-slot, although the wall may still have been beyond this. The two rows of postholes forming the Lofts Farm rectangular structure were spaced only 2m apart, suggesting that if this was a longhouse the walls were beyond this, although there are site-specific

problems with this interpretation (Brown 1988, 260). The diminutive area of the Lofts Farm structure might significantly underrepresent the putative living space perhaps by a factor of three, if the walls were each 2m from the structural elements in the manner of the three-aisled longhouses of Northern Europe (Bradley *et al.* 2016, 175–7). The Easton Lane and Barleycroft houses both appear to show the position of the walls as they respectively have two and three lines of internal postholes. The position of the postholes at Down Farm led to the interpretation that they supported a plank wall (Barrett *et al.* 1991, 198).

5.2.11 Remembering the problems of the Lofts Farm structure, we can compare the size of the six possible longhouses against a sample of late Bronze Age roundhouses from the Upper and Middle Thames Valley. Due to the problems discussed above in reconstructing the line of the wall, only roundhouses with protruding entrance posts and/or outer wall lines in the form of outer rings or slot-trenches are shown in Graph 3. It assumes the line of the wall follows these entrance posts or wall lines rather than the inner structural ring. Houses without entrance posts have been excluded as it is very difficult to estimate the line of the wall. These houses tend to be smaller (Davies 2018, 24), meaning the sample in Graph 3 biases for larger structures. The sample size of 57 houses includes about half of the known late Bronze Age houses in the region listed in Davies (2018).



Graph 3: Sizes of late Bronze Age roundhouses from the upper and middle Thames Valley with external entrance post, outer wall lines and/or double post ring, compared against ‘longhouses’ (m²)

5.2.12 Although the sample of the British ‘longhouses’ is small, they are generally below average compared to the roundhouses with protruding entrance posts. Even the largest, Barleycroft, is around the average size of these roundhouses. The Compound 8 structure is about the same size as the three smallest of the roundhouse group. As discussed above, the ‘longhouses’ are distinct from even the largest storage structures and do not form a size continuum with them. The longhouses are a distinct but diverse group of structures, but they were not designed to create larger living spaces or as particularly monumental forms of architecture that might have social implications, if these were ‘chief’s’ houses or built primarily as a form of display, for example.

Rectangular buildings on the Continent

5.2.13 The longhouse is the primary architectural style of the later Bronze Age and pre-Roman Iron Age of the North European Plain (Low Countries, northern Germany and southern Scandinavia). These often clearly incorporated space for the stalling of livestock as well as areas for human habitation (Bradley *et al.* 2016, 175–82, 216–24). The aisled longhouses of the middle Bronze Age often reached monumental proportions (mean of c 20m long and 6m wide, or areas of c 120m², with examples over 30m long and up to 7.5m wide: Arnoldussen 2008, 218–9; Bradley *et al.* 2016, 180–1). These, however, declined greatly in size in the late Bronze Age (Arnoldussen 2008, 222–9). It is tempting to suggest direct influence from northern Europe for these structures in Britain, but this may be misplaced. Other than their rectangular form, it is difficult to see similarities in terms of plan or construction between the British ‘longhouses’ and the aisled longhouses of northern Europe. Furthermore, metalwork and ceramic evidence suggest that the Continental contacts of southern Britain during the late Bronze Age were focussed more on northern France than on the North European Plain (Brandherm and Moskal-del Hoyo 2014; Burgess 1968) with very few late Bronze Age metal imports from the primary longhouse-using areas found in the Middle Thames Valley, and just a handful of British objects in the Low Countries (Davies 2018, 64–5; Fontijn 2009).

5.2.14 Rectangular or square post-built structures are present at many late Bronze Age settlements in northern France. In many cases these are small and may represent granaries or storage structures rather than dwelling houses. At some settlements in maritime north-west France, such small rectangular structures are found alongside larger roundhouses similar to those from Britain (eg Bradley *et al.* 2016, fig. 6.4). Other sites, however, have larger, post-built, rectangular buildings of varying forms that are likely to have been houses. Examples include two buildings, 14.5 and 23.5m long, from an enclosure site dating to around the late Bronze Age/early Iron Age transition at Villiers-sur-Seine, Ile-de-France (Peake *et al.* 2009). Further afield, a late Bronze Age settlement at Sainte-Croix-en-Plaine, Alsace, included numerous rectangular buildings, mainly of two-aisled construction and widely ranging in size from 12–250m² (Fleischer *et al.* 2017). Again, none of these buildings provide a close parallel for the form of the structure from Compound 8, but it is possible that in general terms the construction of ‘longhouses’ in southern Britain during the late Bronze Age was informed by the knowledge that rectangular houses were used on the near Continent.

Burnt flint

5.2.15 Finds within the building were limited, although burnt flint was present in nearly all of the features, in upper and single fills, suggesting it was deposited during the occupation and/or abandonment of the building. Similar material was not reported with frequency from other adjacent features, both late Bronze Age and of other dates, suggesting that the production and/or deposition of burnt flint was specifically related to the structure. The presence of two potential adjacent waterholes and a nearby palaeochannel might suggest that the burnt flint was associated with burnt mound activities. No upstanding burnt mound was discovered, although pits possibly relating to a burnt mound were found c 75m to the west of the structure. The material may have derived from this, although its distance and lack of concentrations of burnt flint in features between these would suggest that if the material did derive from the putative burnt mound to the west, then it was purposeful deposited in the beamslots and postholes. This could be explained by burnt flint being packed into voids created by rotting posts during the life of the house to stabilise the structure (see Mytum and

Meek 2020, 77–8; Reynolds 1995). Alternatively, the material may have been generated by cooking or the heating of water in a domestic setting, and purposefully or incidentally deposited in the features during the use of the house or after abandonment. Flint would have been available from the underlying gravel and the chalk outcrop nearby at Windsor.

Waterholes

5.2.16 A series of waterholes were discovered. These are common features on later Bronze Age sites in the region (Eton: Allen *et al.* forthcoming; Kingsmead Quarry: Wainwright and Bayliss 2015; Heathrow T5: Framework Archaeology 2010) and were especially associated with middle Bronze Age field systems. The distinction between pits and waterholes in this instance was not straightforward. Some of the features distinguished as waterholes had fills showing silting over time (2336, 2351, 2342, 2199), a common feature of waterholes, although not all of these did (2167/2162, 2254). Some of the waterholes could not be bottomed, but nevertheless the waterholes as a group did appear to be wider and deeper than the pits suggesting these had a different function (Graph 2).

5.2.17 A deposit of alluvium from a palaeochannel is mapped running NE–SW over the north-eastern part of the site. The waterholes, especially those in the north-eastern part of the site, might have been dug to manage this potentially wetter area, possibly being a spring, rather than being sunk below the water table to provide water for animals and people.

5.2.18 The most notable find from these features was a partially articulated cattle burial deposited along with pig bones in middle Bronze Age waterhole 2167. Cattle burials have been found at some other middle Bronze Age sites in the Middle and Upper Thames Valley, including two sites at Wallingford, Oxfordshire (Bradley and Armitage 2002; Davies *et al.* forthcoming).

Possible burnt mound

5.2.19 Pit 2065 contained a significant amount of burnt flint suggesting this was the remains of activity beyond domestic cooking. A number of late Bronze Age burnt mounds in the middle Thames have been found within or very close to settlements (Reading Business Park/Green Park Area 3100/3000B: Brossler *et al.* 2004; Anslow's Cottages: Butterworth and Lobb 1992; Heathrow T5 Farmstead 11: Framework Archaeology 2010, 204), although they can be located away from obvious settlement evidence (Turnpike School: Pine 2010). The example at Compound 8 was identified by one pit containing large quantities of burnt flint. An adjacent pit may be related, but a nearby feature that had been burnt *in situ* containing a charcoal-rich fill supports the interpretation of a burnt mound. It is assumed that any upstanding burnt mound has been truncated. The possible burnt mound at Heathrow T5 Farmstead 11 also did not preserve an upstanding mound but was recognised by a pit containing almost 10kg of burnt flint adjacent to a small pit with *in situ* burning and another pit with burnt flint (Framework Archaeology 2010, 204). Although not dated, these were near to a late Bronze Age settlement and cremation burials. At Ridgeway School, most of the burnt mound material was in a series of intercutting pits rather than as a surface mound (Ford 2017, 3–10). This appears to have been close to a settlement and has similar radiocarbon dates to Compound 8. A pit beneath an upstanding middle Bronze Age burnt mound at Jennett's Park was filled with burnt flint that was indistinguishable from the mound itself (Simmonds *et al.* 2009, 8). A later Bronze Age upstanding burnt mound at Duffield House was adjacent to a rectangular pit again filled with burnt flint that was the same as in the mound itself (Hardy 1999, 1–3). If these

upstanding burnt mounds had been entirely truncated, they would have left similar evidence to that at Compound 8.

Dating

5.2.20 The eight radiocarbon dates obtained have been modelled and suggest that the activity was of limited duration. While the number of dates limits the accuracy of the estimation of the span of activity, with the model suggesting the settlement probably lasted *0–90 years (68% probability)*, the probability distribution is skewed towards the beginning of this range, suggesting that a restricted chronology is most likely. The settlement could have lasted around a generation or two. The stratigraphic evidence shows that some late Bronze Age features were not contemporary: the putative roundhouse, waterhole 2119 and ditch 2426 could not have been contemporary, and it is possible that the ditch and associated enclosure was earlier, perhaps being part of the middle Bronze Age activity associated with waterhole 2167/2162. An intercutting pit group was found, although this need not represent a long period of activity. Of longer duration was the sequence of three intercutting waterholes and a pit, with the waterholes having fill patterns suggesting silting over time. It may be that the earlier feature is middle Bronze Age, with the earlier cut at least perhaps predating the late Bronze Age settlement. The silting of the feature before it was recut suggests episodic use, and it was perhaps part of a slightly earlier agricultural use of the site.

Comparisons with other sites

5.2.21 The apparently short-lived nature of the site may seem at odds with the model of later Bronze Age settlement in the middle Thames Valley as being set within permanent field systems. However, the extent that field systems were used in the late Bronze Age, both newly constructed and the continuation of those laid out in the middle Bronze Age, is far from clear. Even when fixed field systems were used during the later Bronze Age, the possibility of shifting short-lived settlements within these remains. Detail on middle Bronze Age settlement in the region is lacking as surprisingly few houses are known within the field systems that are so ubiquitous in the region. When they do occur, houses tend to be singular and are not suggestive of long-lived settlement (Imperial Sports Ground/RMC Land: Powell *et al.* 2015; Weir Bank Stud Farm: Barnes and Cleal 1995; Eton: Allen *et al.* forthcoming). Clusters of postholes where no roundhouses are evident give a similar short-lived impression (Heathrow T5, Settlement 1: Framework Archaeology 2010, 180–1). Late Bronze Age houses are more common with increasingly visible settlement during this period, but again the impression is, like at Compound 8, of short-lived settlement with few overlapping features (Eton: Allen *et al.* forthcoming; Heathrow T5, Settlement 10: Framework Archaeology 2010, 202–3; Home Farm: Hayman 2018, 10–13; Prospect Park and Hurst Park: Andrews and Crockett 1996, 16–21, 64–9). While the Compound 8 settlement was not within an obvious field system, a general model for short-lived, perhaps single-generational settlements in the later Bronze Age, associated with field systems or not, appears to be appropriate (Brück 1999; 2007).

5.2.22 The Compound 8 settlement appears to conform to the majority of better-preserved late Bronze Age settlements in the Upper and Middle Thames Valley, comprising a small group of houses, four- or six-post structures, pits and waterhole(s) that does not appear to have been in existence for a significant period of time (Davies 2018, 21–43). Burnt mounds are occasionally found associated with settlements (see above). The possible longhouse is an addition to a settlement which otherwise does not stand out within the region.

5.2.23 Excavations at Agar's Plough, part of the Maidenhead, Windsor and Eton Flood Alleviation Scheme, c 300m to the south-west of the site uncovered limited later Bronze Age activity (Allen *et al.* forthcoming). Two pits were found dating to the late Bronze Age, with two radiocarbon dates that might overlap with the Compound 8 dates, but may be earlier. This shows nearby activity; while settlement was not clearly demonstrated, the excavations were limited in scale.

5.2.24 The Compound 8 settlement is adjacent to a stretch of the Thames that has produced a concentration of late Bronze Age metalwork (Davies 2018, maps 3.2–3). The settlement can essentially be correlated with the Wilburton metalwork phase, probably broadly contemporary with the transitional Blackmoor and Broadward hoard groups between Wilburton and Ewart Park proper (Needham *et al.* 1997). A focus on martial equipment common for hoards and items of this period is found with the nearby metalwork. A group of spearheads has been found in the Thames at Datchet, including one with a lunate opening with Wilburton attribution (Lawrence 1929, 74); four others are of broadly late Bronze Age date, and another of similar type was found on land in the parish (Ehrenberg 1977, nos 44, 49–52). Another group of items were found in the Thames at Windsor that includes a sword, two spearheads and a ferrule of Wilburton date (Colquhoun and Burgess 1988, no. 193; Davies 2018, 51; Ehrenberg 1977, nos 33, 145; National Bronze Implement Index), as well as a sickle and four more spearheads that might date to the period (Ehrenberg 1977, nos 60, 142; Fox 1939, no. 7; Pryor 1980, 11–12). Another possible Wilburton period spearhead was found at Eton (Ehrenberg 1977, no. 60). Other Ewart Park objects have been found, probably dating after the abandonment of the settlement (Davies 2018, map 3.3). The Thames appears to have been a draw for surrounding communities to deposit metalwork in the river, and it seems unlikely that the large amounts of items in the middle Thames belonged solely to those living near its banks. This is the metalwork context within which the settlement belongs to, although the usual absence of metalwork or metalworking debris or defensive enclosures that might relate to the seemingly violent period that the metalwork conveys makes connecting the settlement to metalwork deposits very difficult.

Roman

5.2.25 The Roman evidence included to two parallel, recut ditches running east–west but diverging in the eastern part of the excavation area. These may have defined a trackway, or possibly a water management system relating to the putative nearby stream. A further linear ditch may have been a field boundary or part of an enclosure attached to the northern side of the enclosure. Dating evidence from these features was limited, but included pottery dating to the 1st–2nd centuries AD. At Agar's Plough c 300m to the south-west of the site, an extensive system of enclosures is known that follows a similar east–west alignment to the Compound 8 trackway (Allen *et al.* forthcoming; Fig. 27). This dates primarily to the late Iron Age/early Roman period, with late Roman activity also represented. The Compound 8 ditches may thus have been a peripheral part of the Agar's Plough complex and may also have functioned to manage the possible nearby stream.

6 PUBLICATION AND ARCHIVING

6.1 Publication

6.1.1 The results of the fieldwork are described comprehensively in this report, which will be submitted to the relevant HERs and disseminated online, being made available for download as a PDF through OA's online library (<http://eprints.oxfordarchaeology.com/>).

6.1.2 Two shorter publication reports of no more than 15,000 words each will also be produced, focusing on the excavations at Compound 3 and Compound 8 respectively. These will summarise the key results of each excavation but will omit some detail and data tables. The publication report on Compound 3 will be submitted to the *Berkshire Archaeological Journal*. The publication report on Compound 8 will be submitted to *Records of Buckinghamshire*, as the site historically fell within Buckinghamshire, and other prehistoric sites in the local area have been published in this journal.

6.2 Archiving, retention and disposal

Archive deposition

6.2.1 As the fieldwork crossed several council areas and museum collecting districts, the approach taken to archive deposition will be subject to negotiation. However, current plans are as follows:

6.2.2 The archive for the Buckinghamshire watching briefs WBA 1–4 will be offered to Buckinghamshire County Museum under the accession code AYBCM:2019.10.

6.2.3 The archive for the West Berkshire watching briefs WBA 1–7 will be offered to West Berkshire Museum under the accession code NEBYM:2019.2.

6.2.4 The archive for the East Berkshire watching brief WBA 2 will be offered to Reading Museum; the accession code will be confirmed when the archive is accepted.

6.2.5 There is currently no receiving museum for East Berkshire watching briefs WBA 1 and WBA 3–15 or Compounds 3–4 and 7–9. The archives for these sites will remain at Oxford Archaeology, Janus House, Oxford, until a suitable location for deposition is available.

6.2.6 In addition, digital data relating to all of the fieldwork will be submitted to the Archaeological Data Service.

Retention and disposal of finds

6.2.7 The pottery, worked flint, fired clay, human bone and animal bone has potential for future analysis and should all be retained. The quern stone from Compound 3 is the only stone that requires retention. The slag from Compound 8 should be retained, but the material logged as slag from Compound 8 is natural and can be discarded. All of the metalwork, CBM, clay tobacco pipe and unworked burnt flint can be considered for disposal.

6.2.8 The human remains are currently held at Oxford Archaeology under Ministry of Justice burial licence 19-0204. This licence is valid until 18 August 2024, 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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APPENDIX A SITE SUMMARY DETAILS

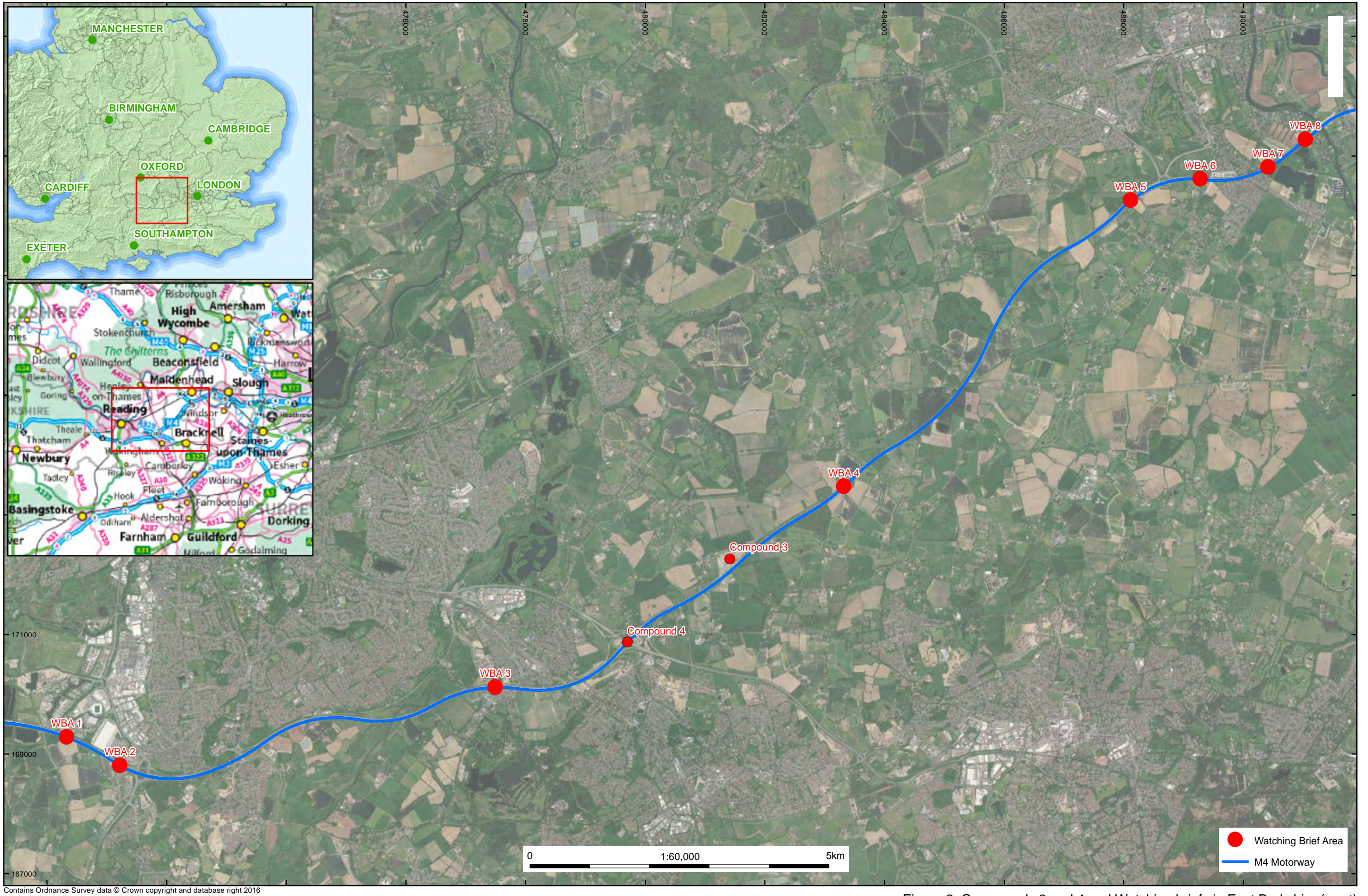
Site name:	M4 Smart Motorway (Junctions 3–12), Berkshire and Buckinghamshire
Site code:	M4SM18
Grid reference	Various (linear scheme)
Type:	Evaluation, watching brief and excavation
Date and duration:	December 2018 to July 2020
Area of site	Various
Location of archive:	See section 6 above.
Summary of results:	<p>Archaeological work during the M4 Junction 3–12 Smart Motorway scheme included a series of watching briefs, five evaluations and two excavations. The watching briefs and three of the evaluations did not uncover archaeological finds or features, but discoveries during the evaluations at Compound 3 (Hurst) and Compound 8 (Datchet), both in Berkshire, led to area excavation of these sites.</p> <p>At Compound 3, a multi-phased middle Iron Age settlement enclosure was discovered that included 10 roundhouses, 21 pits and other features. One of the roundhouses had complex entrance features and an internal post-ring. A complete quern stone is the most exceptional find on the site.</p> <p>The sequence at Compound 8 began with a middle Bronze Age waterhole that contained a partially dismembered cattle burial. The waterhole was recut and large Deverel-Rimbury pottery sherds were placed in the lowest fill, which were found alongside late Bronze Age pottery. Most of the features on the site dated to the late Bronze Age, including a long rectangular structure (a possible longhouse) measuring 11m by 4m. Postholes and beamslots associated with the rectangular structure contained burnt flint. Five radiocarbon dates were taken from the structure, and three further dates were obtained from late Bronze Age features. The radiocarbon dates all returned very similar results, suggesting a probably short-lived settlement dating to the decades around c 1000 cal BC. Other late Bronze Age features included a series of waterholes, a possible roundhouse, a possible enclosure, a cremation deposit, and a series of pits including one containing a large quantity of burnt flint that may have been the remains of a burnt mound. A probable recut Roman trackway was discovered that might be related to the system known nearby at Agar's Plough. One of the recuts contained early/middle Anglo-Saxon pottery suggesting the feature remained open into this period.</p>



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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

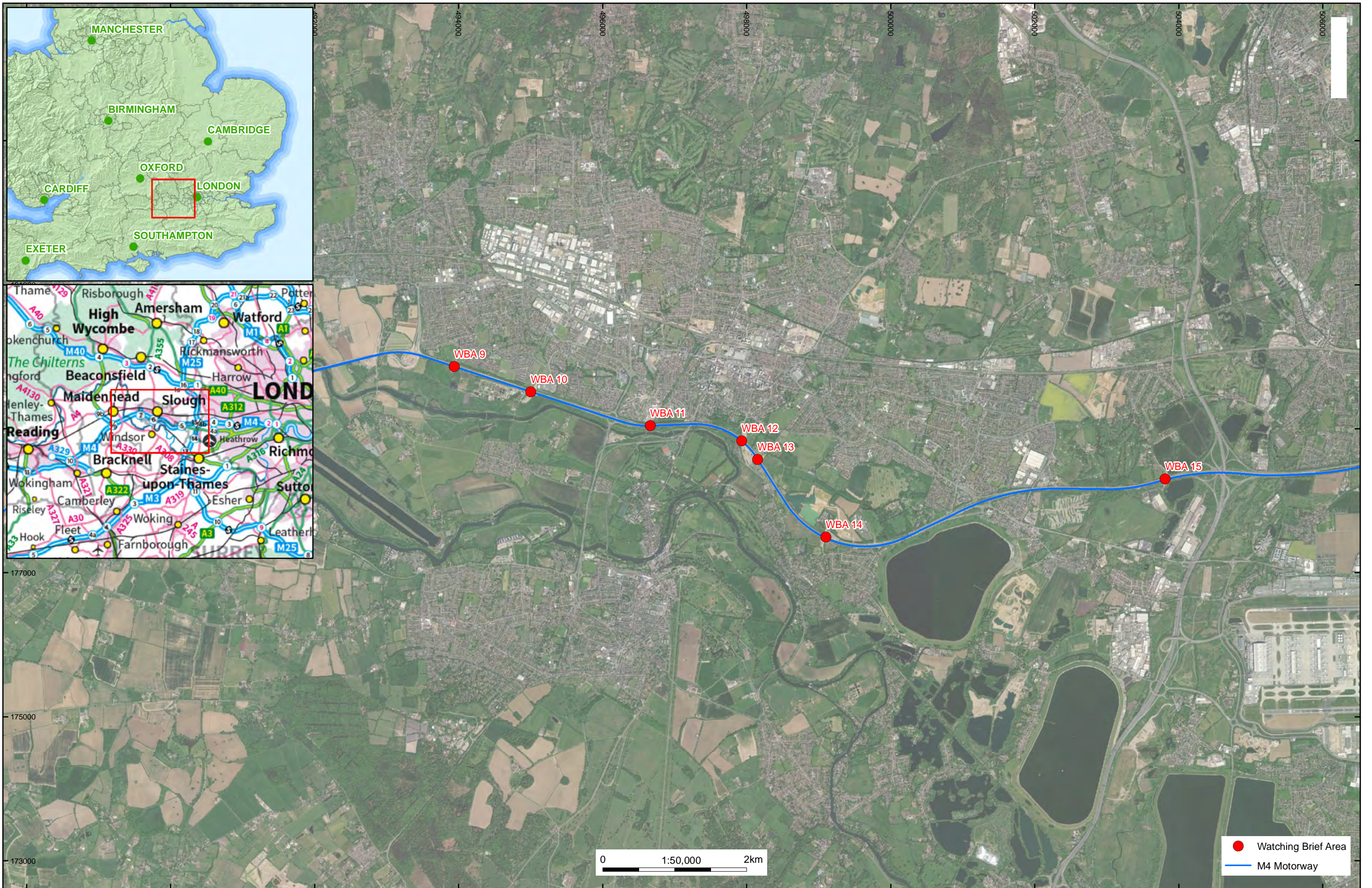
Figure 1: Watching briefs in West Berkshire



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Figure 2: Compounds 3 and 4 and Watching briefs in East Berkshire (west)



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Figure 3: Watching briefs in East Berkshire (east)



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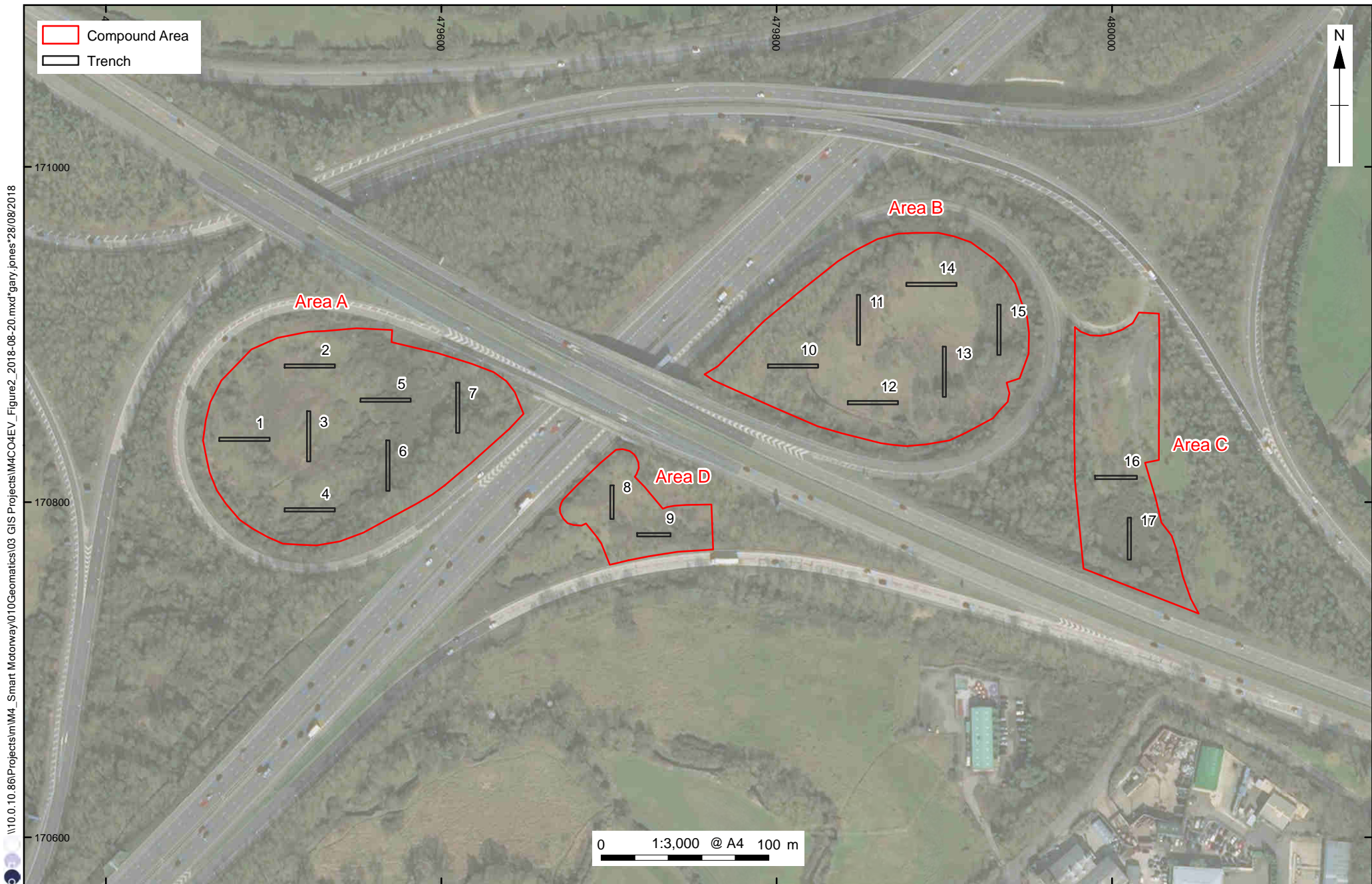
Figure 4: Watching Briefs in Buckinghamshire



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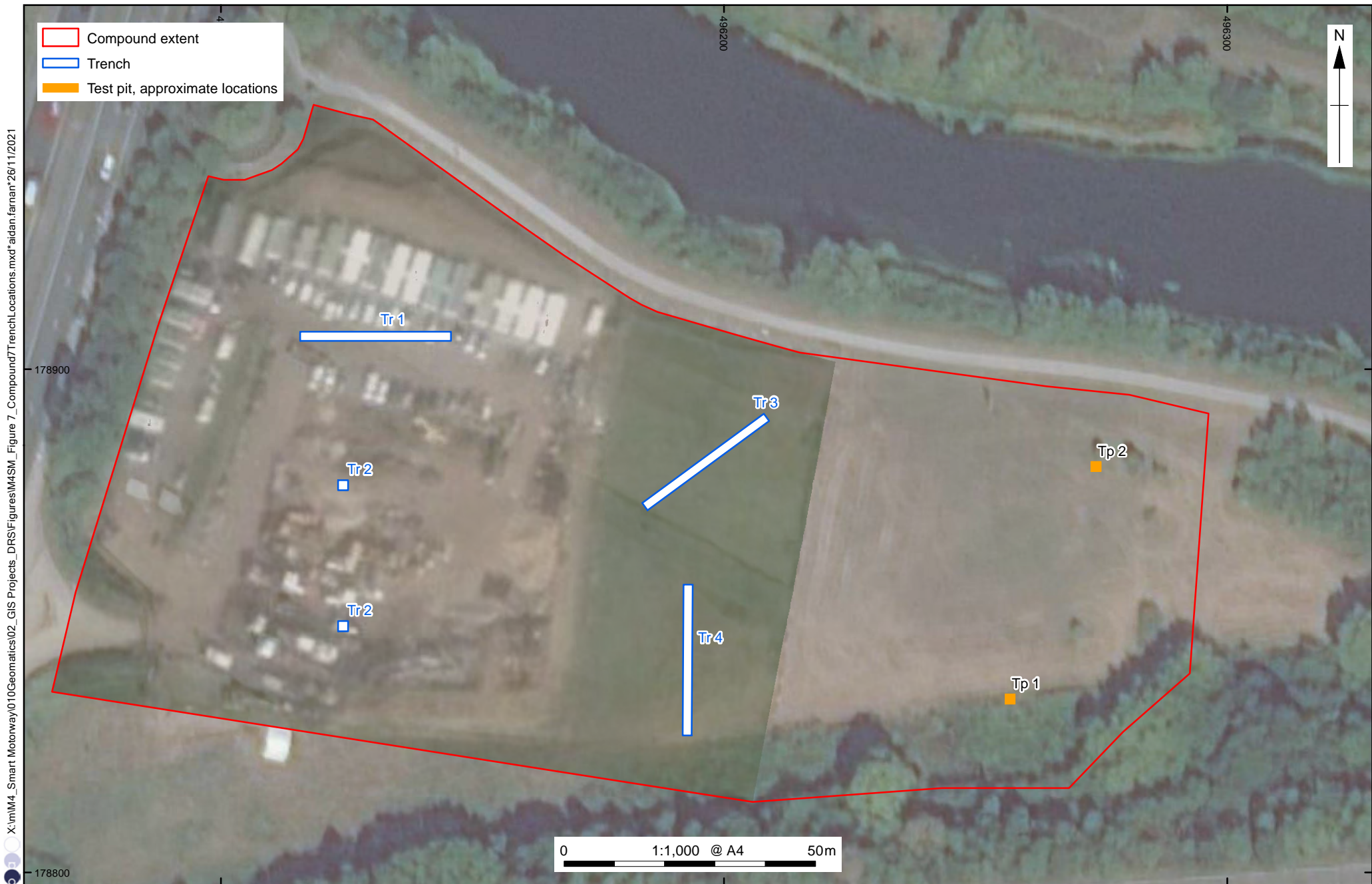
Figure 5: Compounds 7,8 and 9 location



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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 6: Compound 4 trench locations



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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Figure 7: Compound 7 trench locations



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Figure 8: Compound 9 trench locations

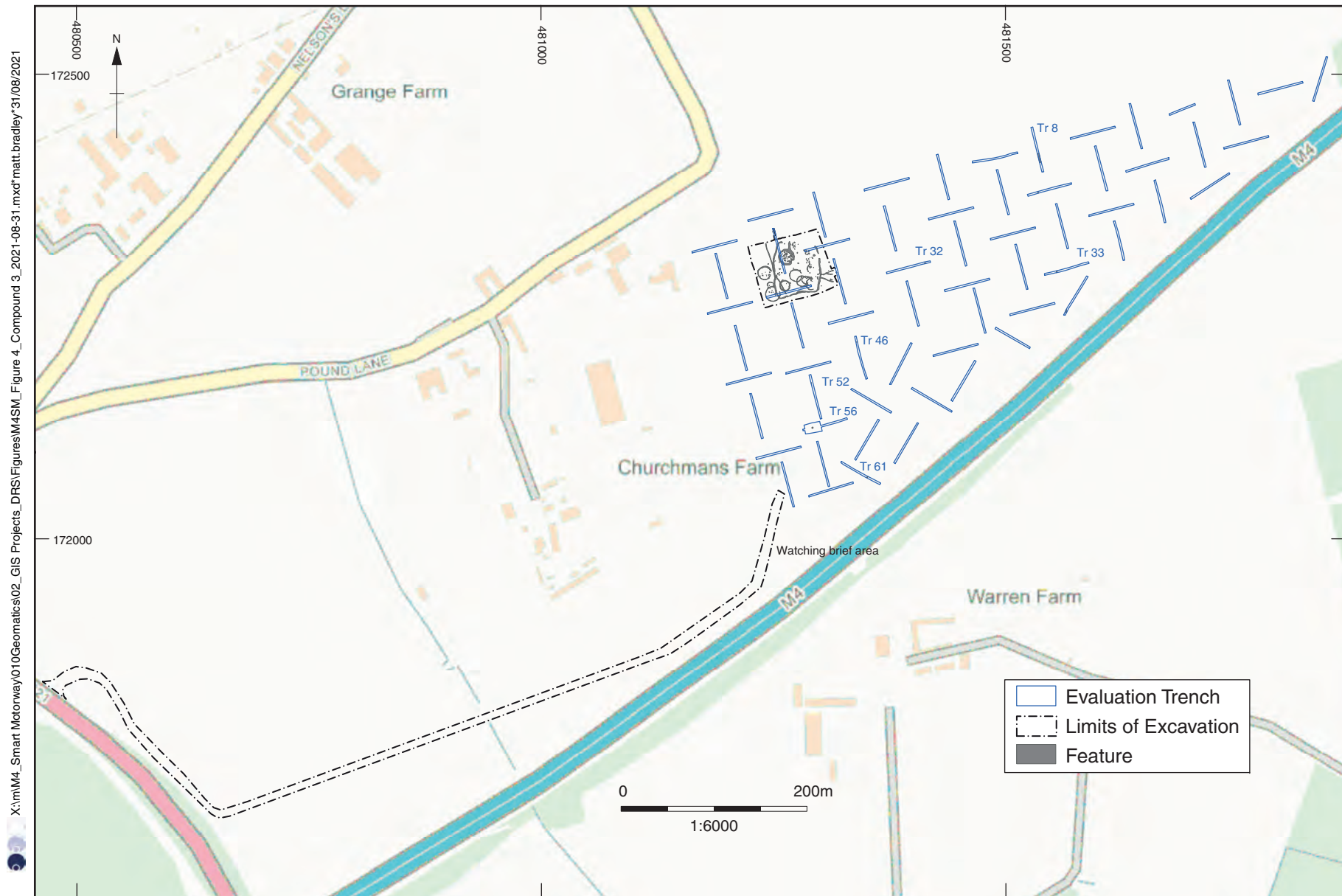


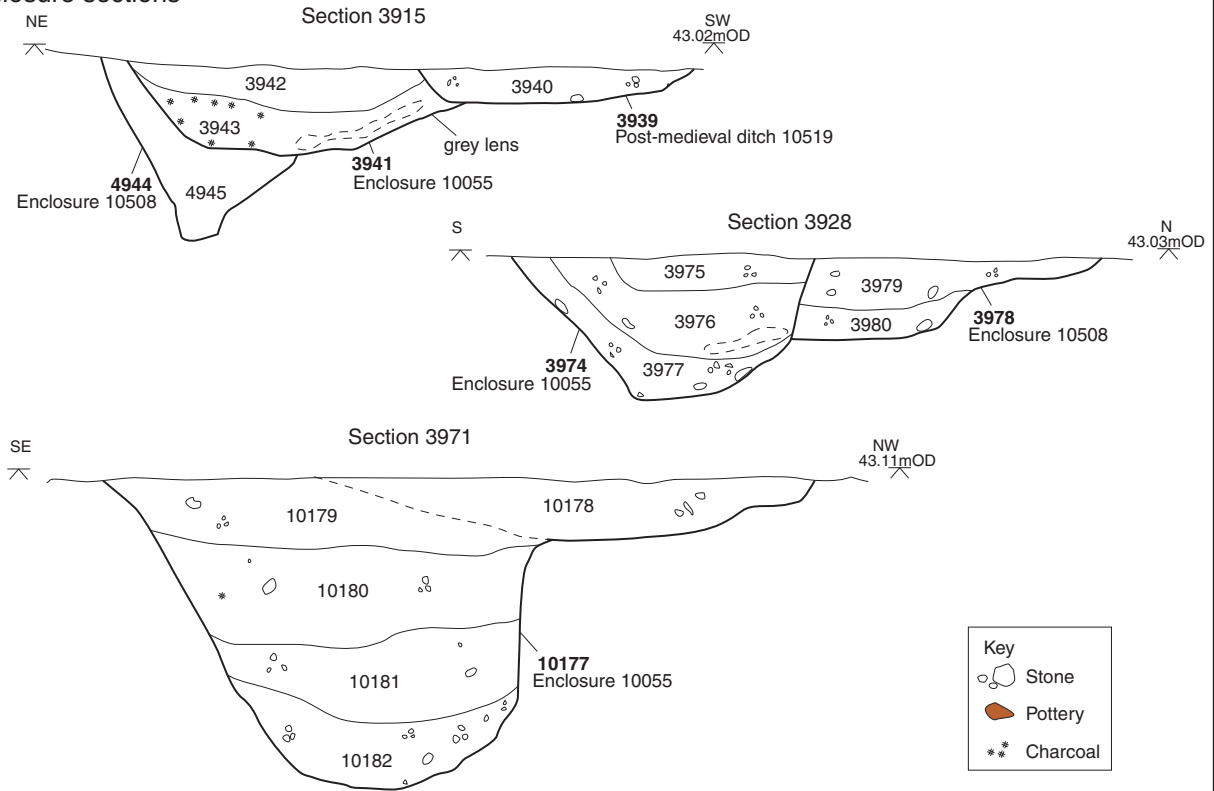
Figure 9: Compound 3: evaluation site outline and watching brief area

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Figure 10: Compound 3 excavation

Enclosure sections



Roundhouse 10501 sections

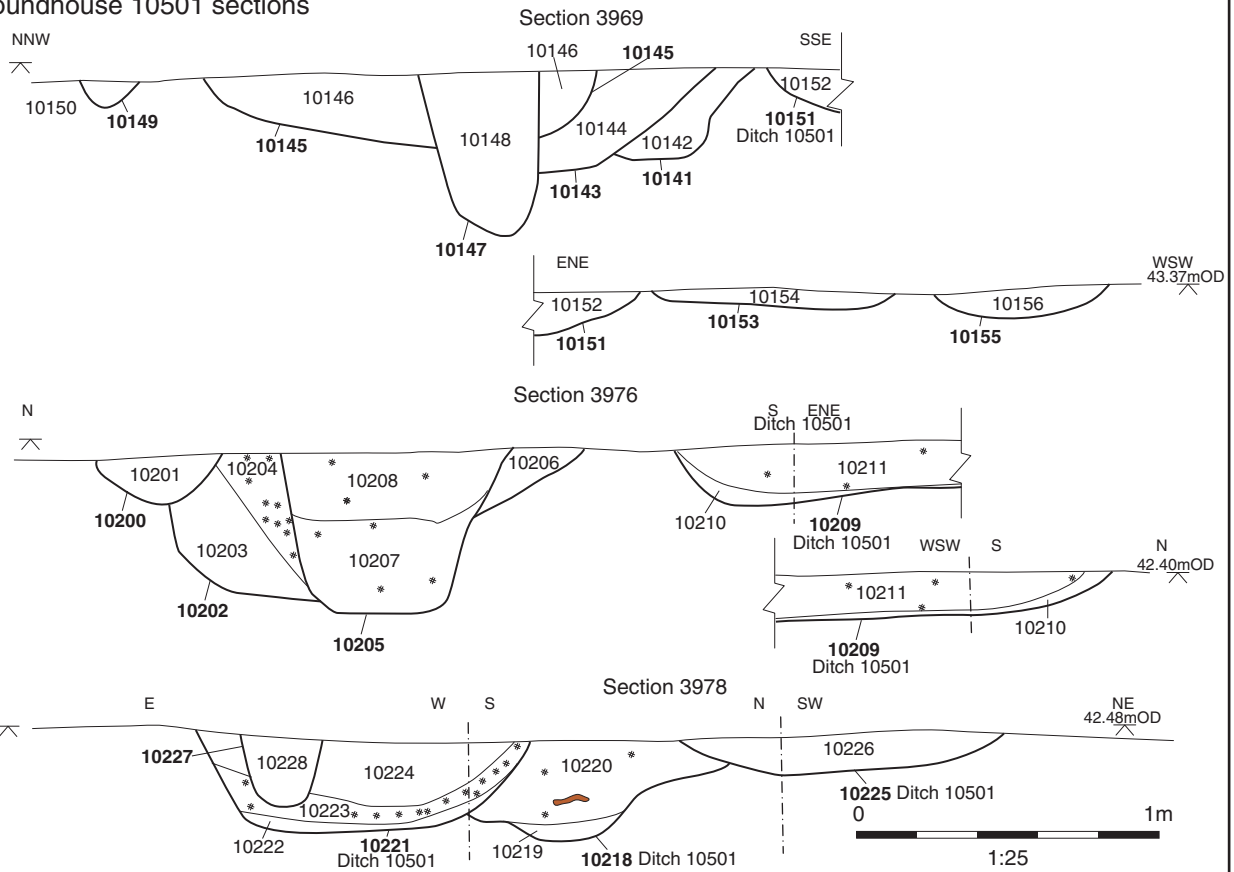


Figure 11: Compound 3 sections

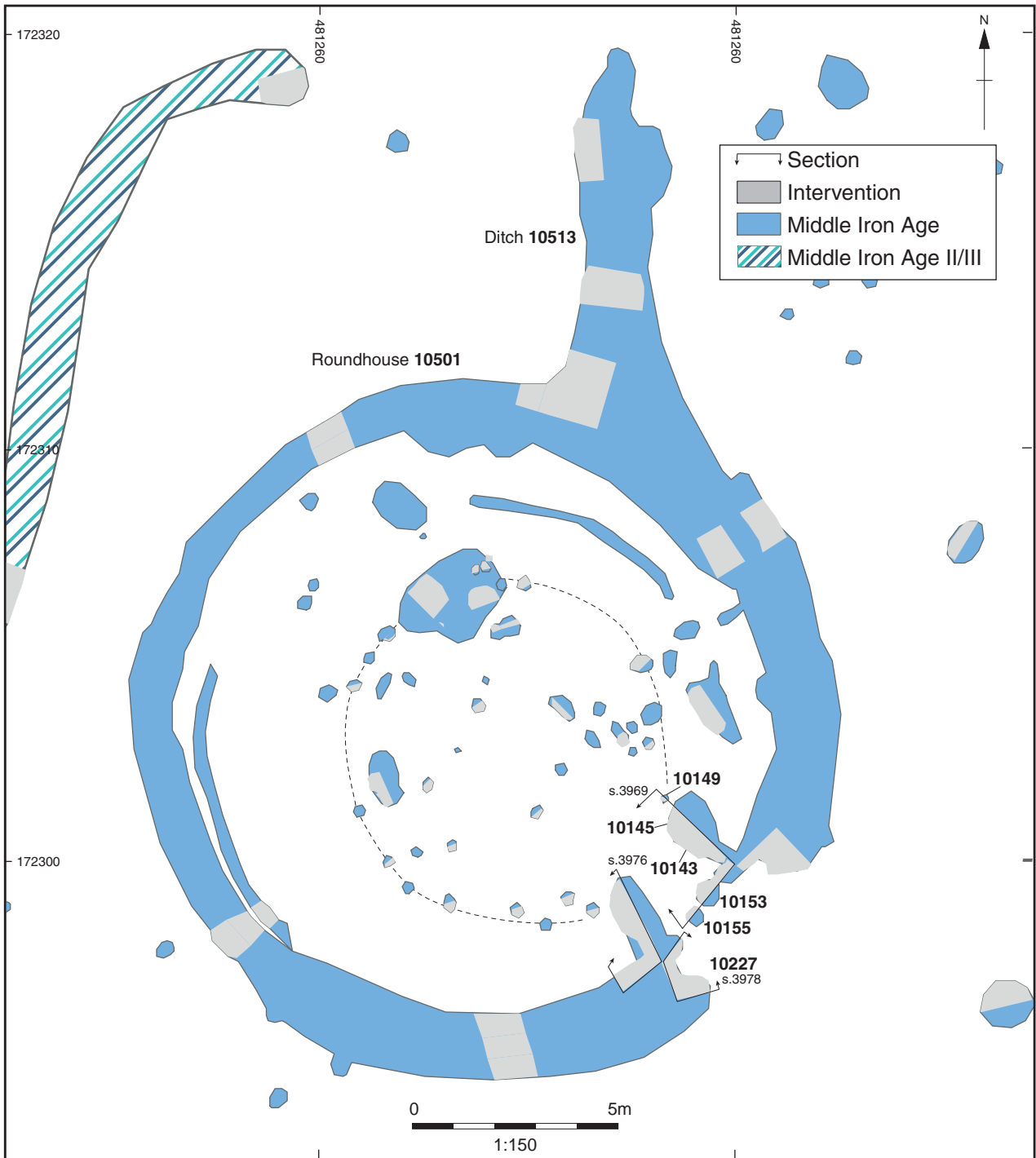
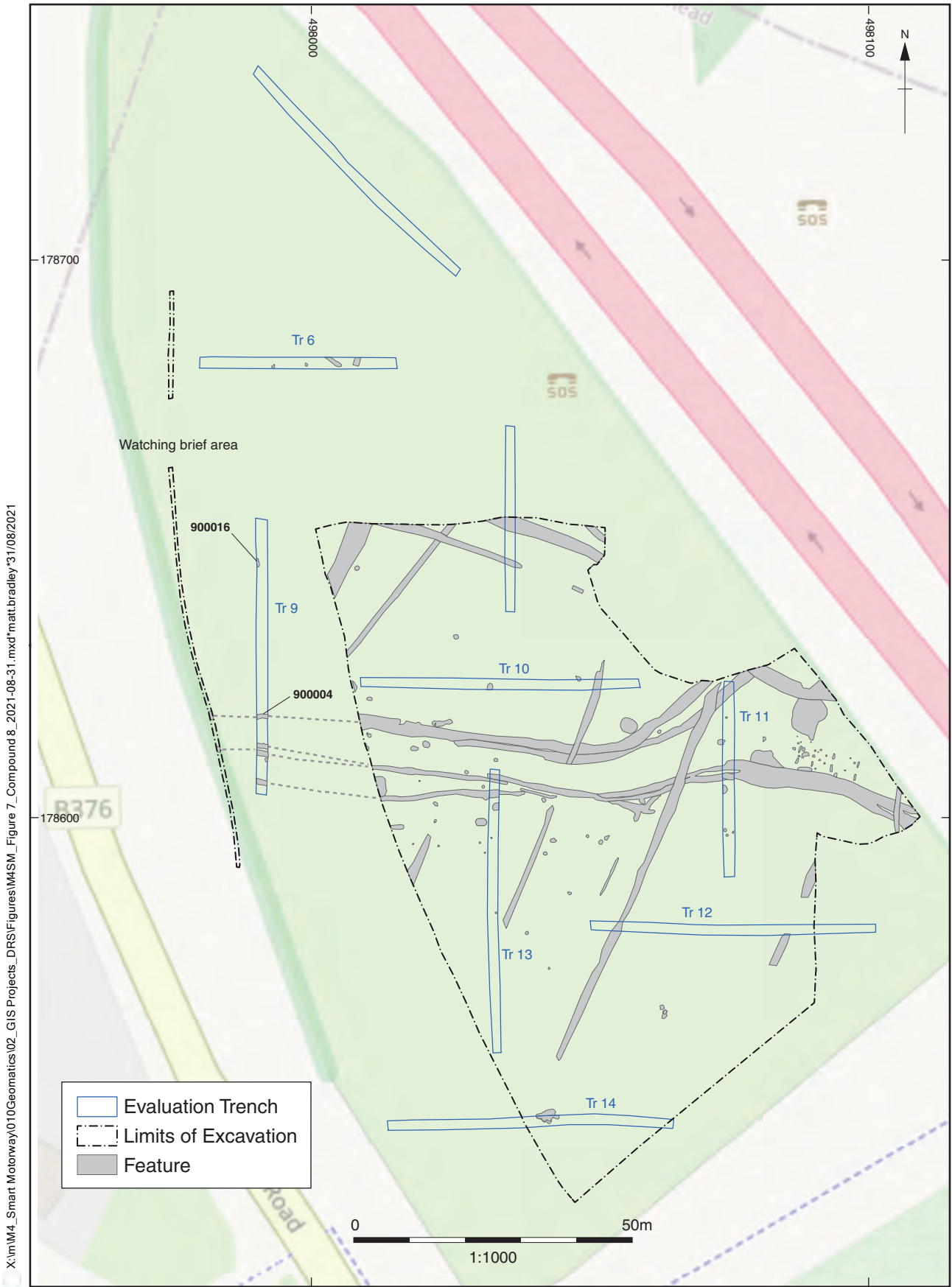


Figure 12: Compound 3: roundhouse 10501



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Figure 13: Compound 8: overview of site with evaluation trenches and excavation area

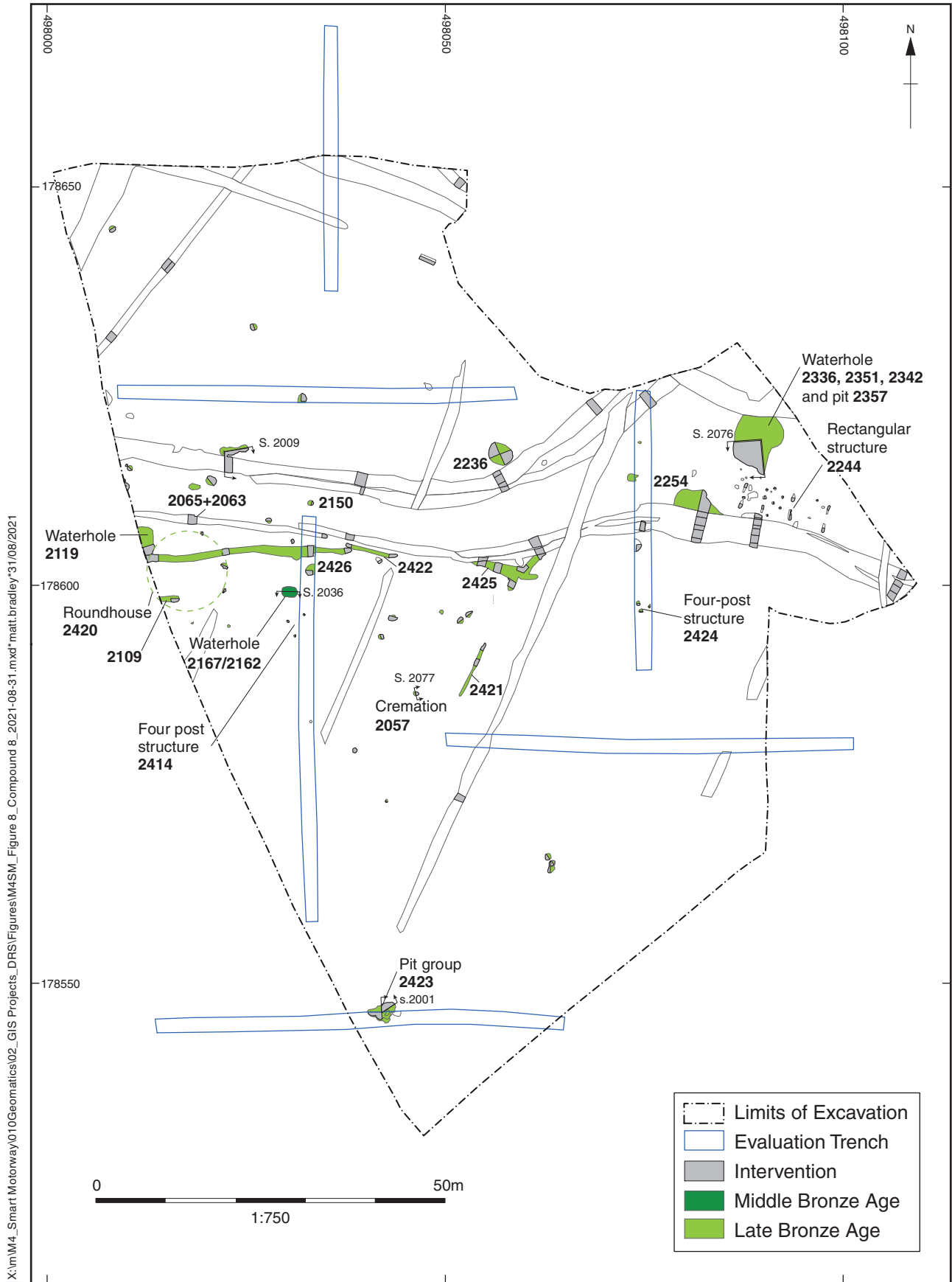


Figure 14: Compound 8: Later Bronze Age features

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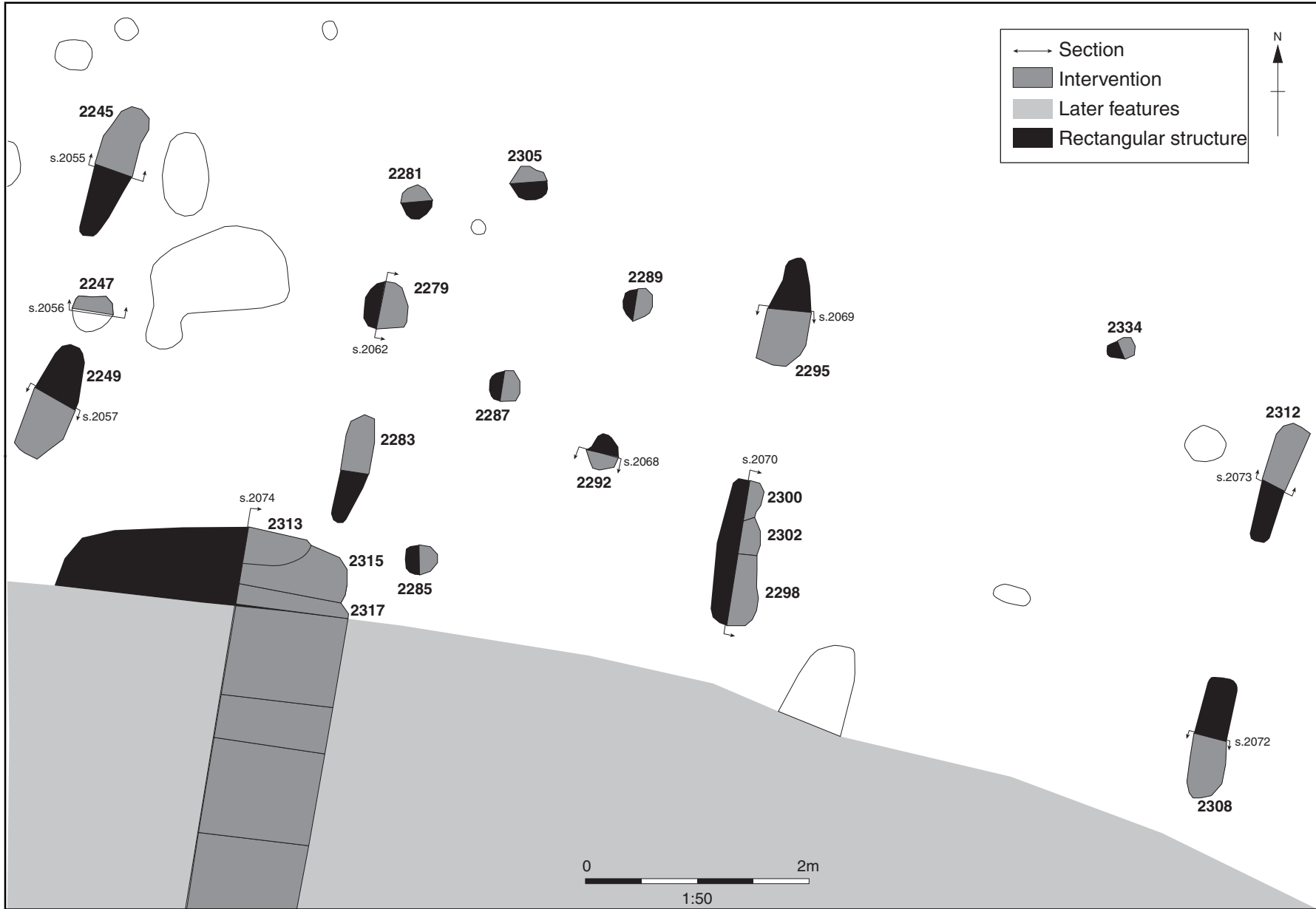


Figure 15: Compound 8: rectangular structure 2244

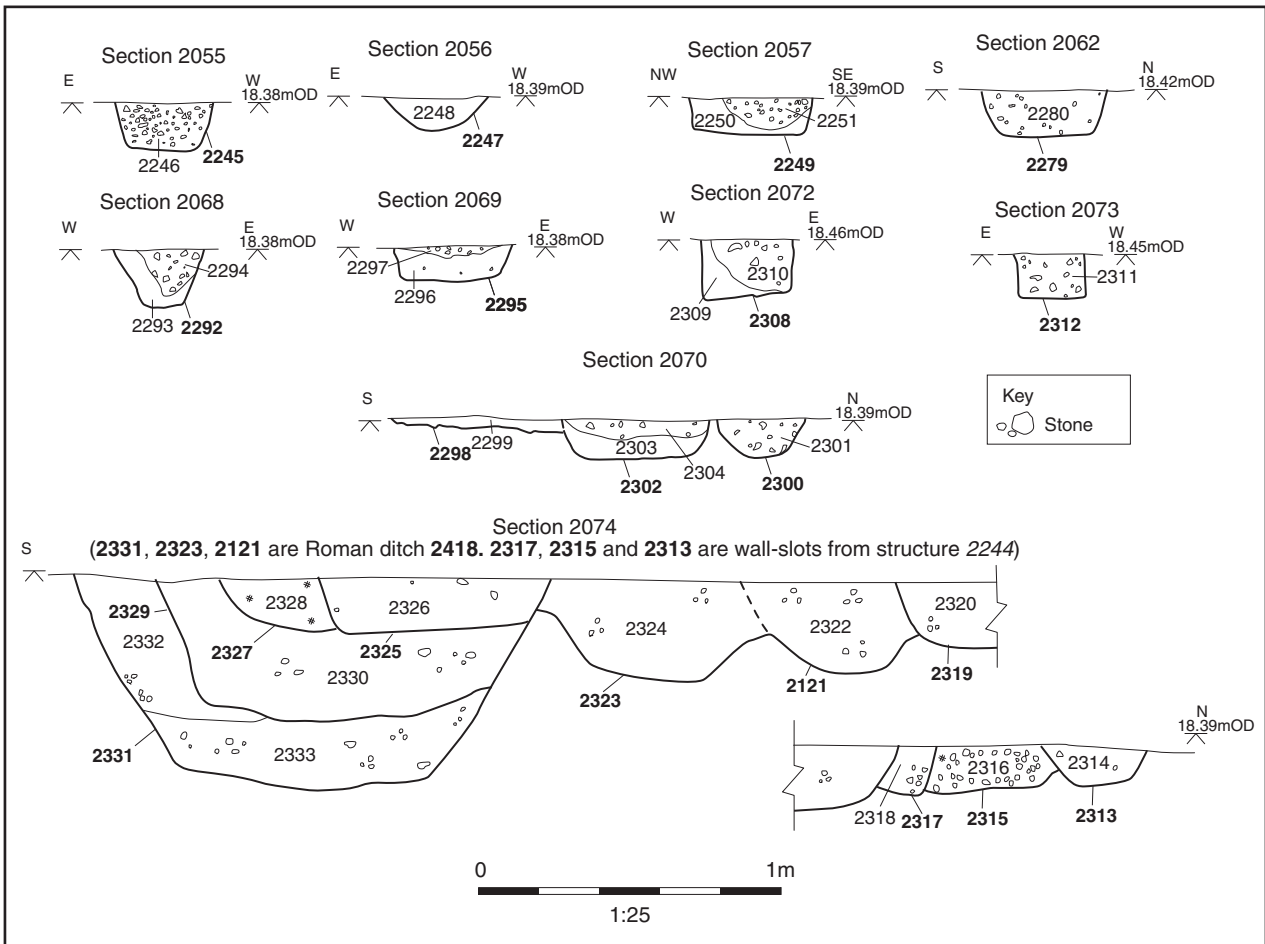


Figure 16: Compound 8: sections of rectangular structure 2244

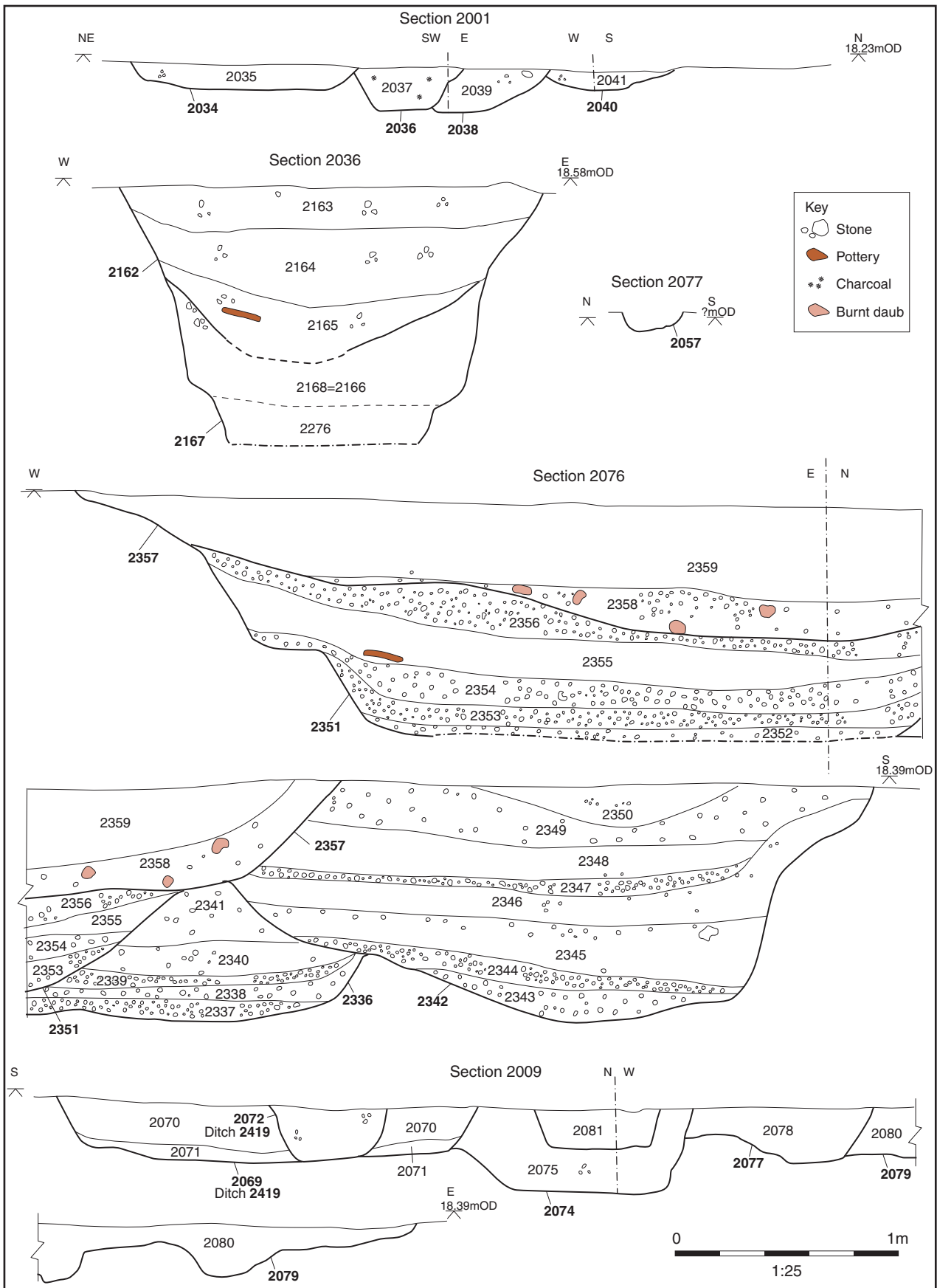


Figure 17: Compound 8: sections of later Bronze Age and Roman features

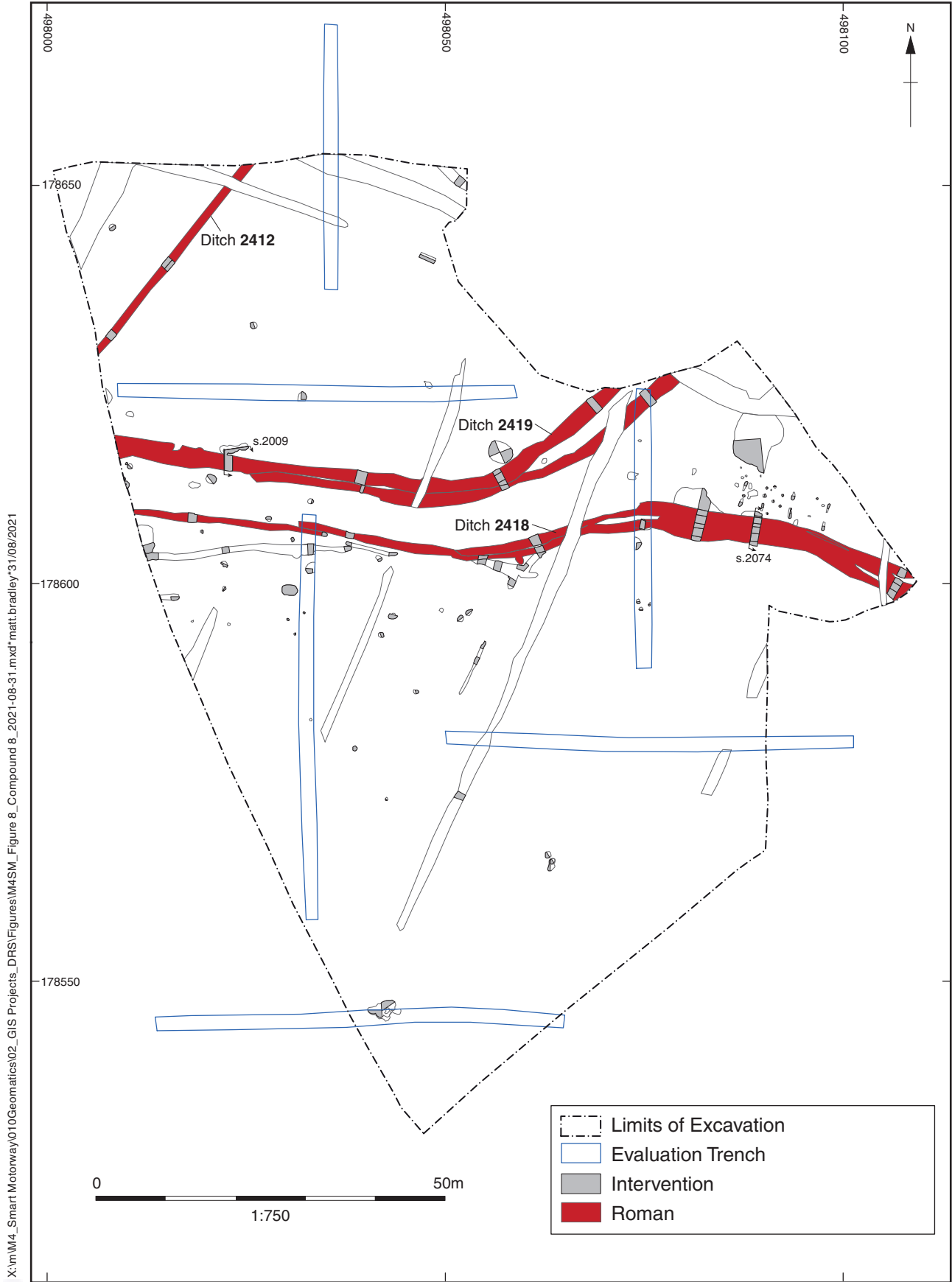


Figure 18: Compound 8: Roman features

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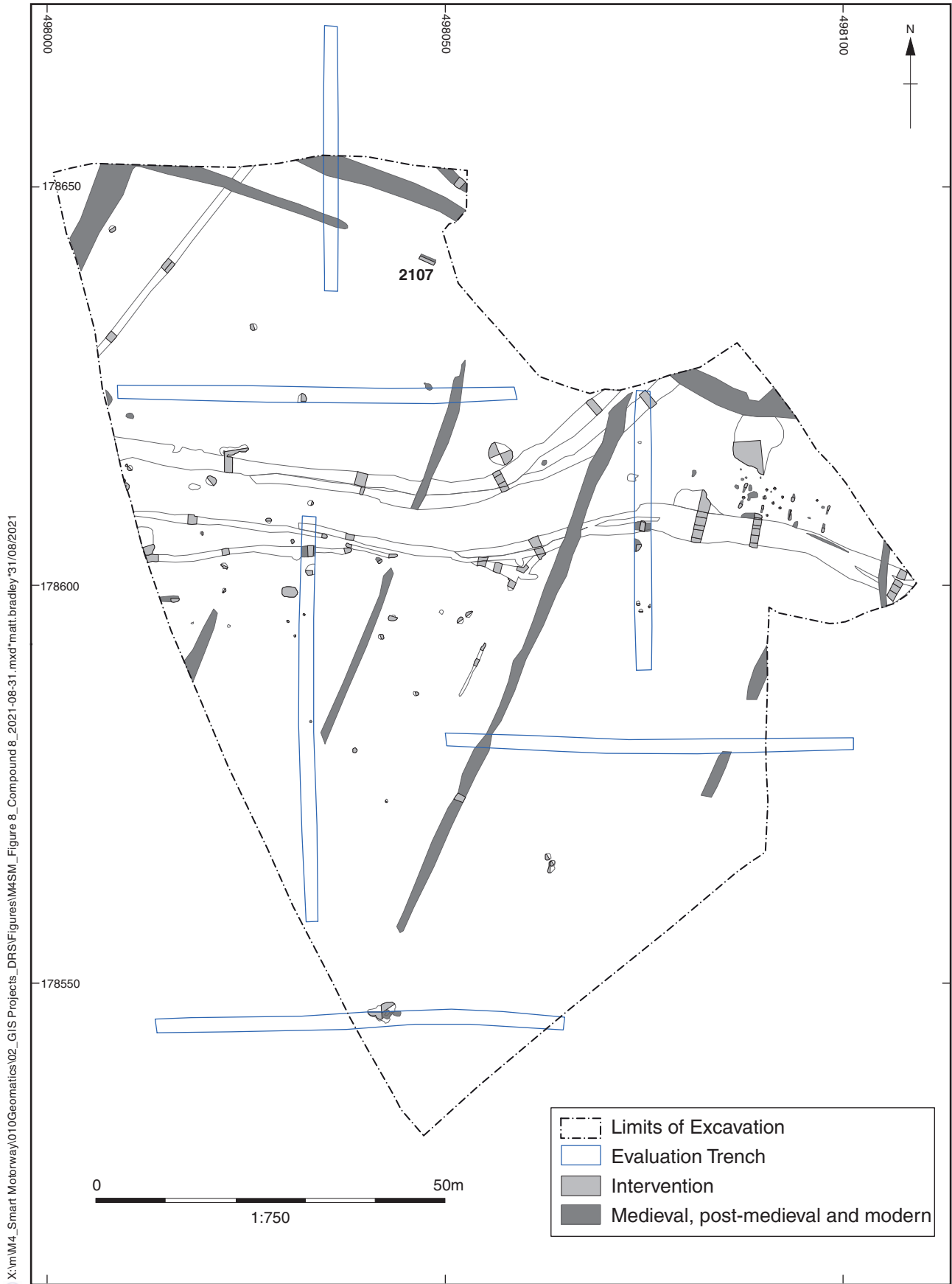


Figure 19: Compound 8: medieval and post-medieval features

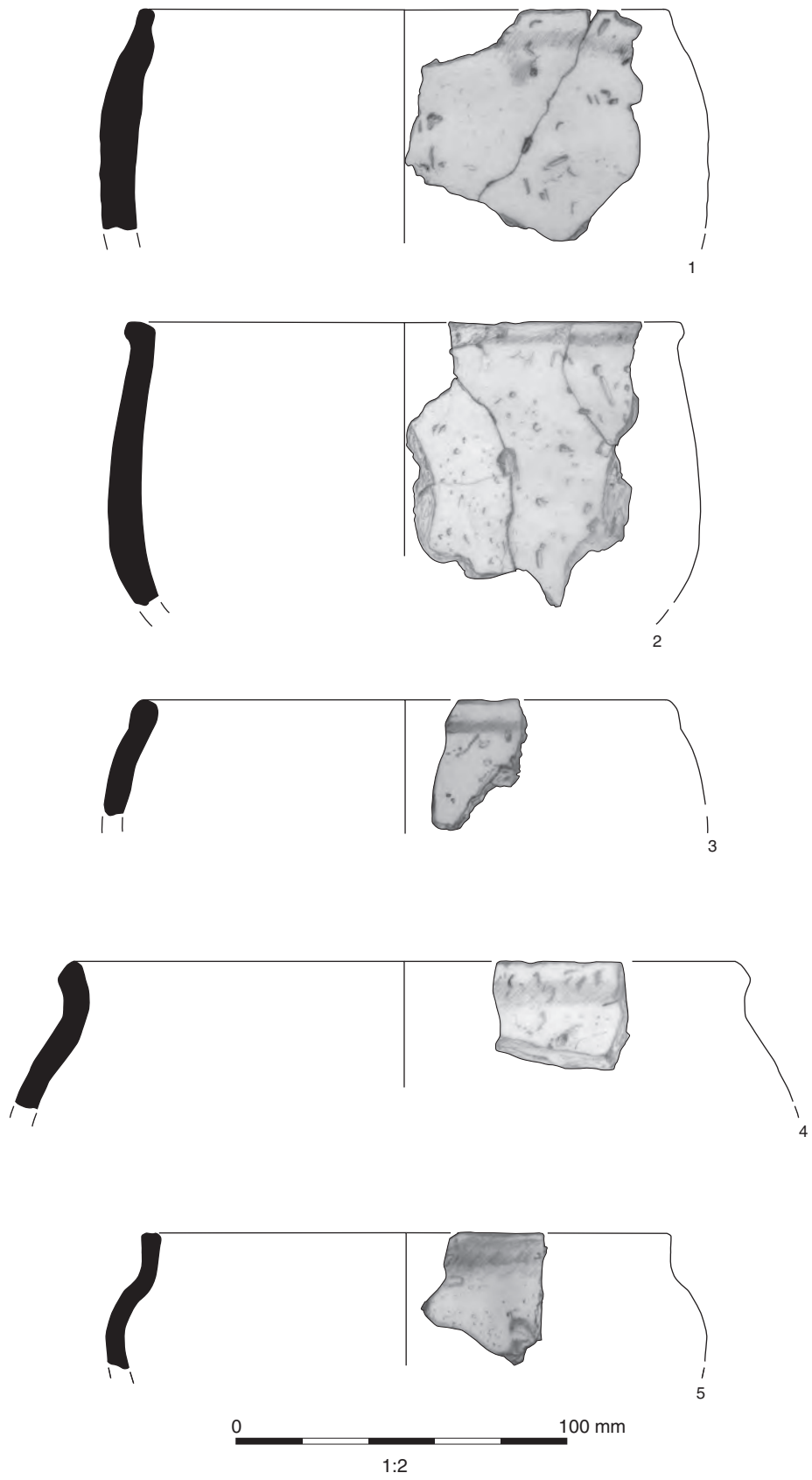


Figure 20: Compound 3: middle Iron Age pottery



Figure 21: Compound 3: saddle quern from pit 10087

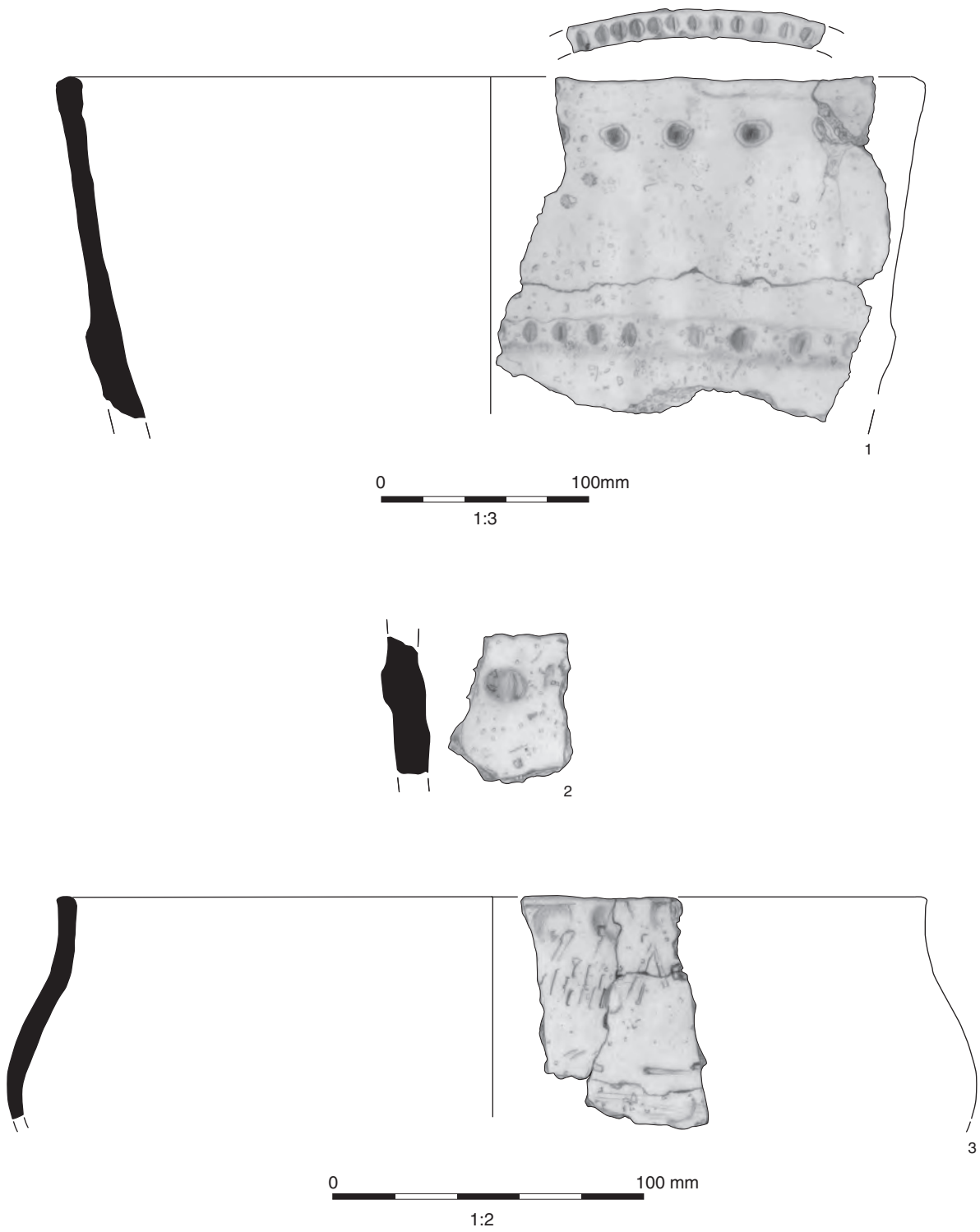


Figure 22: Compound 8: Later Bronze Age pottery

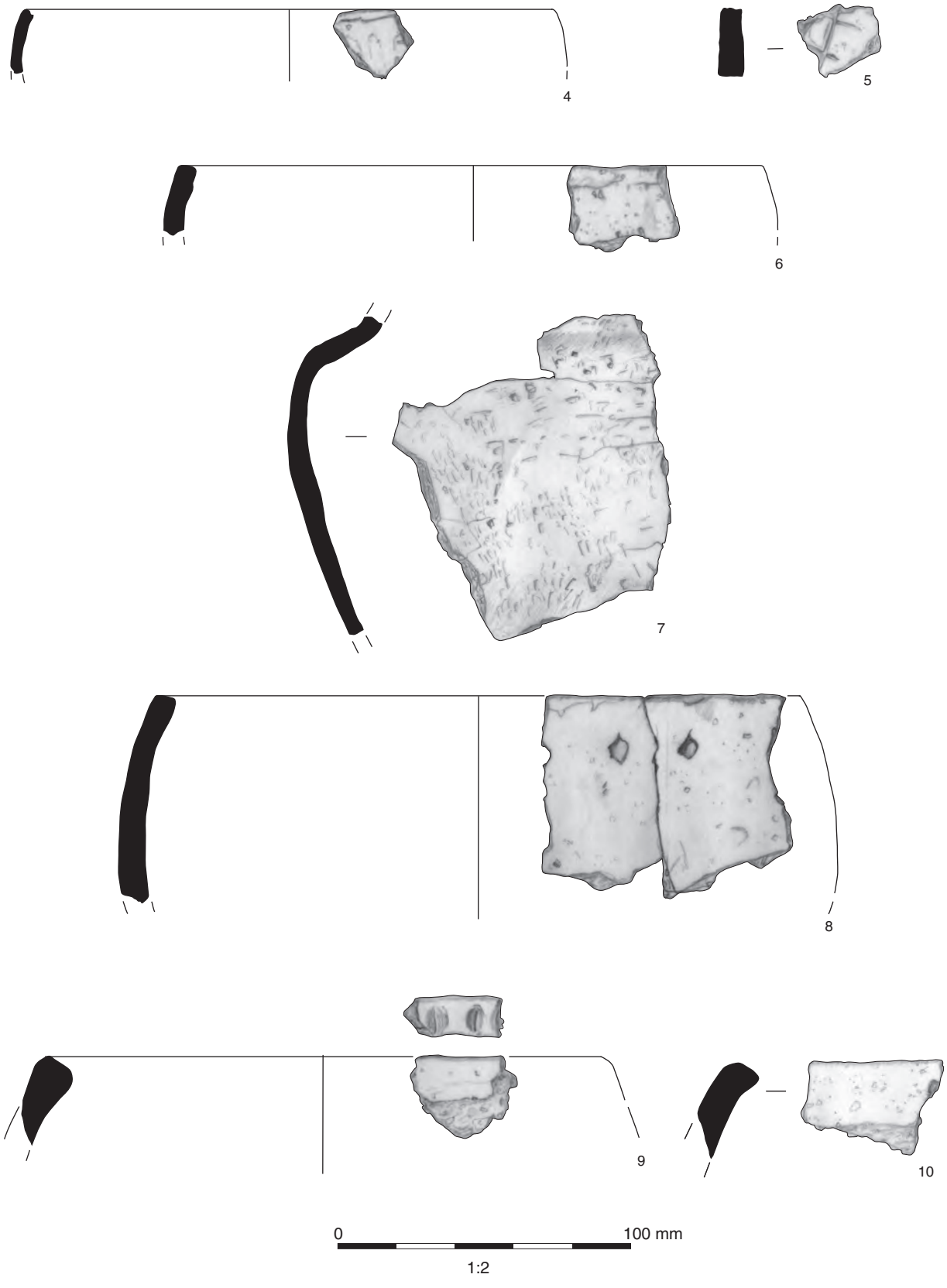


Figure 23: Compound 8: later Bronze Age pottery

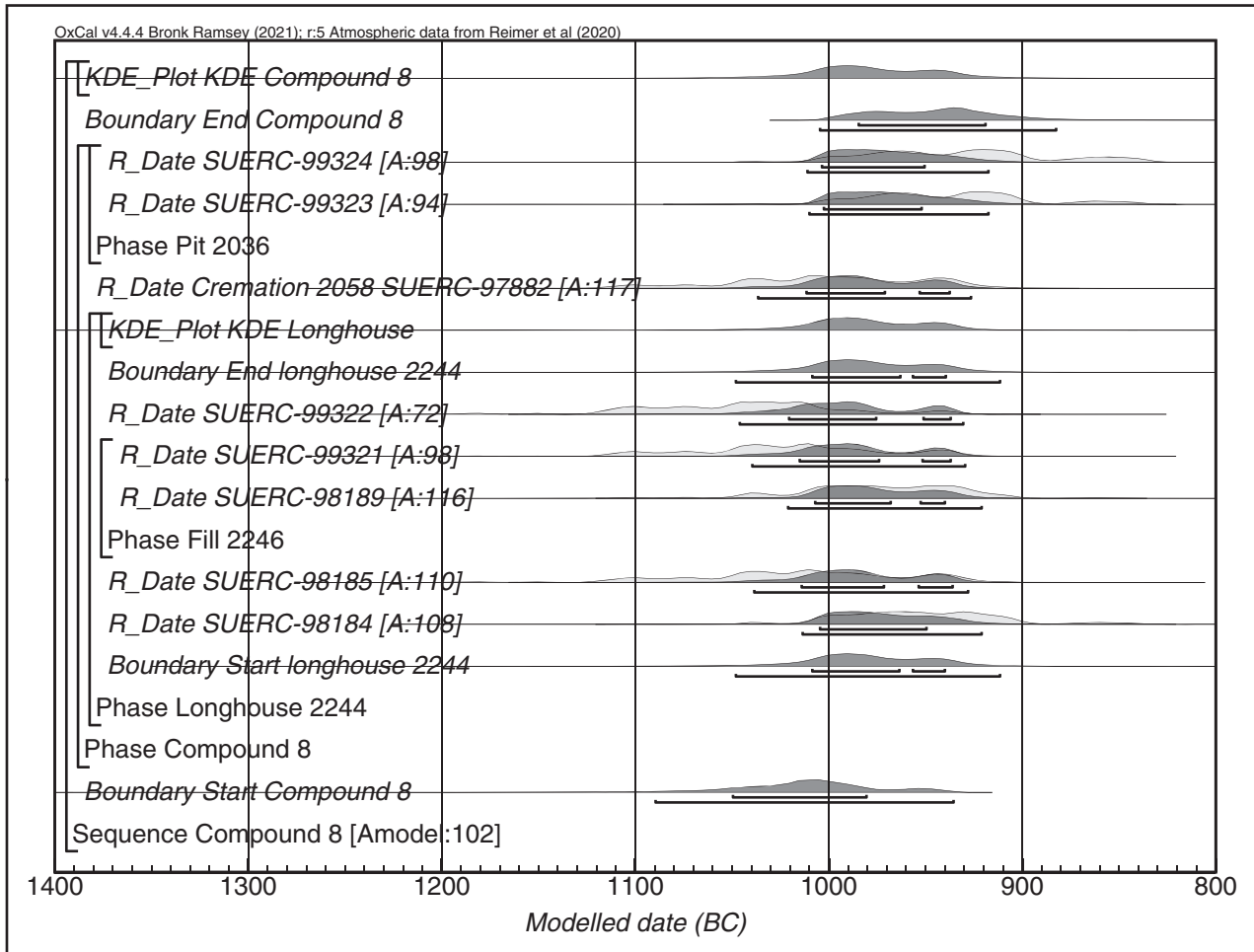


Figure 24: Plot of radiocarbon dates, Compound 8

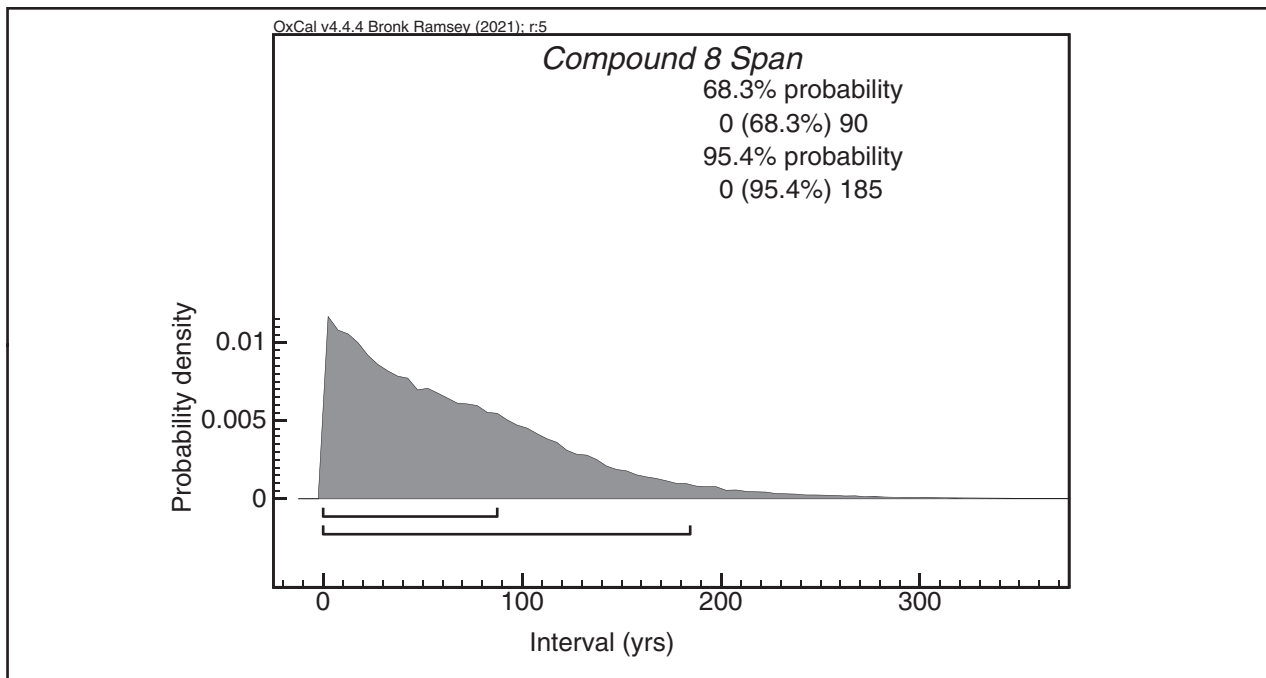


Figure 25: Plot of radiocarbon span of Compound 8

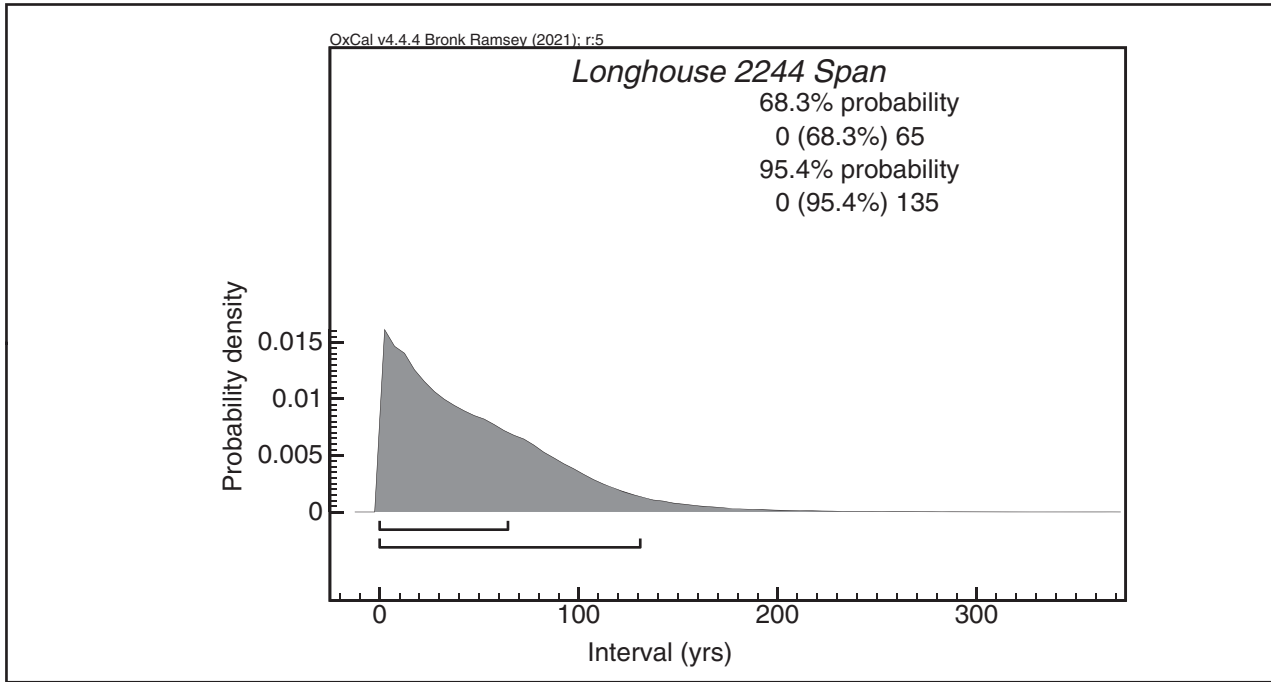


Figure 26: Plot of radiocarbon span of rectangular structure 2244

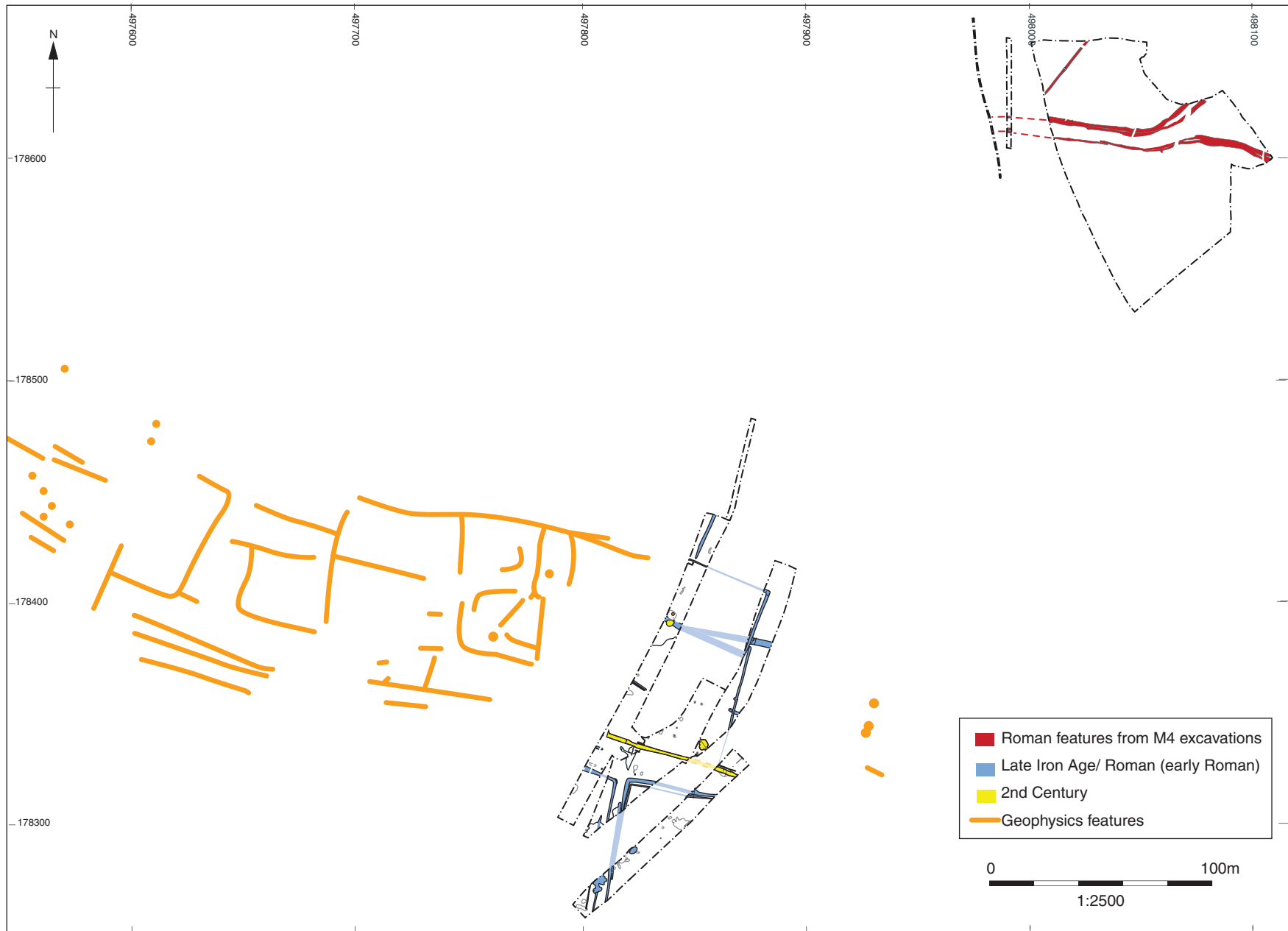


Figure 27: Roman features at Compound 8 and Agar's Plough



Plate 1: Compound 3, Pit 10087 with complete saddle quern



Plate 2: Compound 8, Cattle burial in waterhole 2415

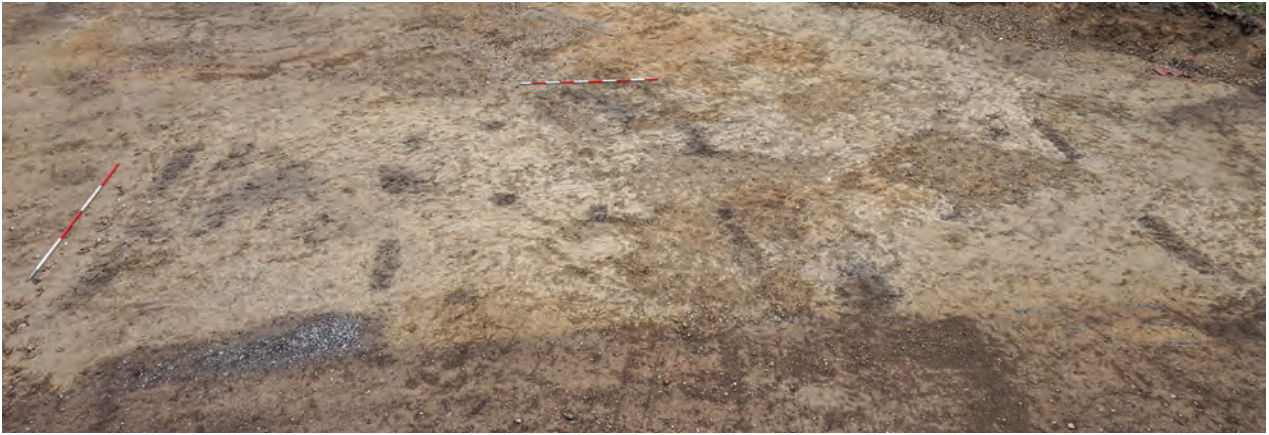


Plate 3: Compound 8, Longhouse 2144 before excavation, looking north



Plate 4: Compound 8, Longhouse 2144 after excavation, looking north



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